



MANUAL | Customer
2105 | 2021-29-04

SAP Enable Now Producer (Cloud Edition)

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1 Introduction


Welcome to Producer, the SAP Enable Now tool that enables you to create web-based learning content that will take the user step by step through the contents of your web or Microsoft Windows application.

2 Settings and System Requirements

The following chapters handle the required settings for recording and editing contents within the Producer as well as for playing back contents using the trainer, library, and book reader functionalities.

2.1 System Requirements

To install and use Producer successfully, your computer must fulfill the following requirements:

Type	Specifications
Operating system	32 & 64 bit version of: <ul style="list-style-type: none">• Microsoft Windows 10 (without tile mode)
Processor	Intel® Core™ i series, at least 1.2 GHz
Memory	A minimum of 4 GB
Monitor	Minimum resolution of 1280x720
Hard drive	Required free space: <ul style="list-style-type: none">• Application files: at least 200 MB of free space• Content files: at least 2 GB of free space, depending on amount/size of workarea content and amount of workareas
Browser	<p>Supported browsers and versions:</p> <ul style="list-style-type: none">• Microsoft Internet Explorer 11• Microsoft Edge 89 (Enablement Assistant Microsoft Edge extension required)• Google Chrome 89 (Enablement Assistant Google Chrome extension required) <div> Caution Starting from SAP Enable Now 2005, the application will work correctly only in combination with the "Enablement Assistant" browser extension. If you have a previous version of the extension, called "SAP Enable Now", installed, you need to deactivate it and install the</div>

Type	Specifications
	new extension instead. For detailed information, please follow this SAP Note .
Soundcard	Any soundcard For production of audio lessons and book pages
Microphone	Any microphone For recording of audio

Scenario	Requirement
SAP Business Suite	SAP GUI Scripting activated (server-side and role-specific)
Java Applications	Java Access Bridge activated
Documentation Generation	Supported versions: <ul style="list-style-type: none"> • Microsoft Office 2010 - 2016 (Word and PowerPoint) • Microsoft Office 365 (Word and PowerPoint desktop only)
ViFlow	ViFlow 5.0

2.2 Authoring Settings

Recording, editing and previewing contents with the SAP Enable Now may need some preparations to your authoring environment. Read the following chapters according to your operating system and recording scenario to make your setup running perfectly.

2.2.1 Required System Settings

A few system settings are necessary for Microsoft Windows operating systems to allow the recording function to flawlessly identify Windows application objects.

If an existing setting does not match the required settings for the application profile, a dialog box will appear to warn you when you start the recording. Facing this warning you should cancel the recording and configure the required settings.

The following chapters describe how to configure the required system settings for each Windows operating system. Also, note the system requirements for Producer.

2.2.1.1 Microsoft Windows 10 - Desktop View

Specify the correct settings for the Microsoft Windows 10 operating system within the *Appearance and Personalization* dialog box.

You can access this dialog in the desktop view by opening *Settings -> Control Panel*. Consider changing the *View by:* option in the upper right corner to *Category*. Select *Appearance and Personalization*.

Set parameters as specified in the table below:

Section/Parameter	Set to
Personalization	
<i>Change the theme</i>	Select <i>Windows</i> as <i>Default Theme</i> .
Display	
<i>Make text and other items larger or smaller -> use these display settings</i>	Set <i>Change the size of text, apps and other items</i> to value <i>100% (Recommended)</i> .
Fonts	
<i>Adjust ClearType text</i>	<ol style="list-style-type: none">1. Deselect the <i>Turn on ClearType</i> option.2. Select <i>Next</i>.3. Select <i>Yes, I want to tune all monitors now</i>.4. Verify the native resolution for your monitor and click on <i>Next</i>.5. The following four pages will provide you with examples of the font display. Select the best version to meet your needs and click on <i>Next</i>.6. Repeat steps for each of your monitors.7. In the last dialog box, select <i>Finish</i> to confirm the changes.

Disabling font smoothing system-wide

In some cases, deactivating the ClearType may not be sufficient for achieving error-free graphic object recognition. If this happens, you can disable the smoothing option for screen fonts system-wide. First, consult your customer advisor before deactivating this option on your own.

The option to disable is *Smooth edges of screen fonts* which is found under *Control panel -> System and Security -> System -> Advanced System Settings -> Settings (Performance)*.

Screen resolution

For the recording of simulations, it is recommended to use a screen resolution, that can be used consistently by all authors. If the content is also to be used on mobile devices, select a screen resolution that fits your screen and the type of mobile device you use. See also *Browser Requirements*.

The screen resolution can be changed in the [Display Settings -> Advanced Display Settings](#). Select your required resolution from the [Resolution](#) dropdown list. By default, the recommended resolution of the operating system should be used.

2.2.2 Settings for Recording

According to your operating system, certain preparations and practices for recording have to be considered.

2.2.2.1 Recording under Microsoft Windows

Microsoft Windows allows you to run an application as a user or administrator. This is done via the command [Run as administrator](#) in an application link's shortcut menu.

To allow applications to be recorded free from errors, you should ensure that the Producer and application to be recorded are called with matching rights.

2.2.2.2 Settings for the SAP Client

If projects are to be recorded using a SAP GUI for Windows client, certain settings need to be applied if the recording is to proceed without a hitch.

2.2.2.2.1 SAP GUI Scripting

The SAP GUI Scripting is necessary for the recording in order that the objects in the SAP GUI window can be properly recognized via the scripting interface from SAP. The SAP GUI Scripting should be activated on the server side so that the object information can be extracted.

In some cases an activation on the client side is necessary (see scenario). If the scripting is activated on both sides, a red/white symbol will appear in the bottom right corner.

The table gives you an overview of the recording scenarios and the necessary SAP GUI Scripting setting:

Scenario	Set to (Client)	Set to (Server)
Profound Recognition (Standard)	Deactivated	Activated
Simple Recognition	Activated	Activated

i Note

NWBC with embedded SAP GUI: For the recording with profound recognition activate the SAP GUI Scripting also on the the client side.

The SAP GUI Scripting on the client side can be set under the [Customize Local Layout -> Options](#) menu:

Area / Setting	Scenario Activated	Scenario Deactivated
Accessibility & Scripting -> Scripting		
<i>Enable Scripting</i>	Activate	Deactivate
<i>Notify when a script attaches to a Running GUI</i>	Off	Disabled
<i>Notify when a script opens a connection</i>	Off	Disabled

i Note

Note that graphical object recognition is not possible when scripting is active. For graphical object recognition, additional requirements are necessary which are not standard. Contact your SAP consultant if you have any questions regarding this topic.

2.2.2.2.2 Settings for SAP GUI

The following settings can be defined from the option *Customize Local Layout*.

Area / Setting	Set to
<i>Theme</i>	Select a theme for the corresponding application profile, such as <i>SAP Signature Theme</i> , <i>SAP Blue Crystal Theme</i>
Visual Design	
<i>Font Settings</i>	Default settings
Interaction Design > Visualization 1	
<i>Cursor Width for Input Fields on Screens</i>	<i>Narrow cursor</i>
Interaction Design > Notifications	
<i>Tooltip Delay</i>	<i>No Tooltip</i>
Local Data	
<i>History</i>	<i>Off</i>

2.2.2.2.3 Settings for Modal Dialogs

The option *Dialog (modal)* is to be activated for optimal recognition of objects on modal dialogs. The setting is located on the *F4 Help* tab of the settings dialog, which can be launched from the *Help -> Settings* menu.

2.2.2.2.4 Font Settings

Position-based objects such as explanation bubbles, interactive surfaces and highlights are dependent on the predefined font properties in SAP; having differing settings can change the layout of the interface. It is important that the settings are the same when recording as well as when playing back the simulations (on users' PCs) to ensure that the objects are always displayed properly.

To adjust the font in your SAP system, go to the font settings in your SAP GUI:

- **Font settings**
You can adjust the settings under *Visual Design -> Font Settings*.

2.2.2.2.5 Page Titles in Page Keys for SAP GUI

In the recording of SAP GUI for Windows it may be possible that advanced system information will be included in the page key (for example: *WA1(1)/000 SAP Easy Access* instead of *SAP Easy Access*). By performing a rerecording or playback a Desktop Assistant content this can result in an incorrect page recognition. To avoid additional information in the page key, the following adjustment in the registry of the operating system should be done:

1. Open the registry editor with the command *regedit* about the *Run...* dialog.
2. Select the entry *HKEY_CURRENT_USER -> SOFTWARE -> SAP -> SAPGUI Front -> SAP Frontend Server -> Administration* in the editor.
3. Create a new *DWORD value* about *Edit -> New*:
Value name: *ShowAdditionalTitleInfo*
Value data: *1*
4. Restart your SAP system so that the registry entry can take effect.
5. Change the value in the registry to *0*. Thus you can deactivate the display of the title information.

i Note

Changes in the registry of the operating system should only be done by administrators.

2.2.2.3 Settings for Microsoft Excel

The following setting is necessary for optimal object recognition for Excel recordings:

Disable the setting *Window* in the menu *Freeze panes*. This prevents incorrect recognition of cell positions.

2.2.2.4 Java Applications

If the target application for the recording is a Java application, it is necessary to activate Java Access Bridge on your system. The Java Access Bridge will be installed with the Java Runtime Environment.

To activate the Java Access Bridge, proceed as follows:

1. Open [Control Panel -> Ease of Access -> Ease of Access Center](#).
2. Select [Use the computer without a display](#) to open the settings.
3. Activate [Enable Java Access Bridge](#) in the section [Other programs installed](#).

2.2.3 Settings for Editing

According to your operating system, certain preparations for editing projects have to be considered.

2.2.3.1 Editing Highlights

In certain cases, it may be possible that highlights for controls are not properly displayed during the recording or the rerecording and therefore cannot be edited. In such instances, it is recommended to activate the option [Show windows content while dragging](#), which is found under [System Properties -> Advanced -> Performance](#).

2.2.4 Playback Settings

Previewing local authored contents will call Microsoft Internet Explorer by default or your default browser if you have activated it in [Preferred Internet Browser](#) in **General Settings**. To preview your contents created on your local machine you have to enable Internet Explorer's ability to run local active contents. No more settings are needed in this case.

If you edit and preview contents on a network share or on the Manager, check necessary settings for your browser as given within the chapter **Learner Settings**.

Enable playback of local contents as follows:

1. Open Microsoft Internet Explorer.
2. Navigate to [Tools -> Internet Options](#).
3. Select the Tab [Advanced](#) and scroll to the section [Security](#).
4. Enable setting [Allow active content to run in files on My Computer*](#).

2.3 Learner Settings

A few changes are required to the settings of your browser to work perfectly with SAP Enable Now functionalities.

Independently of your preferred browser the playback functionalities require the following settings:

Requirement	Why?
Enabled JavaScript	All functionalities are based on the use of JavaScript. You must enable it.
Deactivated pop-up blocker	No matter which pop-up blocker you use, you must disable the blocking of pop-ups for the location you load your contents from. Read browser-specific chapters to find instructions how to disable built-in pop-up blocker functionalities.
Activated cookies	The attributes and settings for displaying and executing library, trainer, and book reader are stored in cookies. You should therefore activate cookies in your browser to ensure that these functionalities run accurately.

➤ Recommendation

It may be that Flash contents are displayed incorrectly. In this case uninstall and reinstall the Flash plugin (do not do update only).

2.3.1 Browser Requirements

Consider the following requirements to ensure that the trainer, library and book reader functionalities work without errors, thereby ensuring that contents are played back successfully.

Browser	Version	Operating system
Microsoft Internet Explorer	11	Windows 10
Microsoft Edge	89	Windows 10
Mozilla Firefox	87	Windows 10 or Mac OS X 11.x
Google Chrome	89	Windows 10

Supported mobile platforms

Content playback has been tested for the system built-in browsers of the following mobile device platforms. Keep in mind that playback on mobile devices usually requires an online connection to published contents (Manager or shared network storage).

i Note

The playback on mobile devices is supported for tablets.

Platform	OS Version	Browser
Apple iOS	14	Safari Mobile
Google Android	8	Stock Browser (AOSP) (with deactivated Desktop View)

2.3.2 Settings for Microsoft Internet Explorer

To enjoy a flawless experience of the trainer, library and book reader functions, you may have to enable additional security settings in Microsoft Internet Explorer.

Note that your configuration requirements are highly dependent on the location you are playing your contents from. This is due to the zone model in Internet Explorer (see the next chapter for more details). However, all functions will run almost perfectly using the Internet Explorer default settings.

2.3.2.1 Basic Settings

Note

The settings in this chapter are based on Microsoft Internet Explorer's **default settings** and **default security levels**. If you use a custom security level, read the *Custom Setup* chapter to ensure your settings match the requirements.

Playback of contents located on the Internet/intranet

1. To apply Internet Explorer Security Settings, open Internet Explorer and navigate to the *Internet Options* command in the *Tools* menu.
2. Select the *Security* tab and select:
 - *Local Intranet*, if your content is in your corporate network.
 - *Trusted Sites*, if your content is on the Internet.
3. Select *Custom level...* to open the *Security Settings* dialog box. Enable the settings shown below and select *OK* to save your changes.
4. If your content is on the Internet, select *Sites* and add the domain your content is located at to the list.

Caution

To avoid browser security issues, we strongly recommend that you modify these settings in *Trusted Sites* security zone and not in *Internet* security zone.

Contents located on your intranet (Default security level: *Medium-low*)

Section/Setting	Set to	Why?
ActiveX controls and plug-ins		
<i>Display video and animation on a webpage that does not use external media player</i>	Enable	Play back videos and animations embedded in book pages and quizzes directly with the browser, without loading an installed media player.

Contents located on the Internet (Default security level: *Medium-high*)

Section/Setting	Set to	Why?
ActiveX controls and plug-ins		
<i>Display video and animation on a webpage that does not use external media player</i>	Enable	Playback videos and animations embedded in book pages and quizzes directly with the browser, without loading an installed media player.
Miscellaneous		
<i>Allow script-initiated windows without size or position constraints</i>	Enable	Display simulation modes in trainer and book pages in book reader with correctly positioned control elements.

Playback of local contents

If your contents are stored on a local hard drive or if your contents were delivered on a CD/DVD, you must allow active contents to be run locally.

1. Open Internet Explorer and navigate to the *Internet Options* command in the *Tools* menu.
2. Select the *Advanced* tab and scroll to the *Security* section. Enable the settings as described in the following table.

Section/Setting	Why?
<i>Allow active content to run in files on My Computer*</i>	Playback contents from your local hard drives. This is especially important if you want to preview your authored contents from Producer or Instant Producer.
<i>Allow active content from CDs to run on My Computer*</i>	Playback published contents on CD/DVD.

Advanced settings

Please make sure you have also specified the following settings:

1. Open Internet Explorer and navigate to the *Internet Options* command in the *Tools* menu.
2. Select the *Advanced* tab and enable the settings as described in the following table.

Section/Setting	Why?
Security	
<i>Enable native XMLHTTP support</i>	Ensures flawless video playback.

Common settings

- **Configure Internet Explorer's pop-up blocker**

You need to turn off the pop-up blocker to display simulations in the trainer. You can access the relevant option by choosing [Tools -> Pop-up blocker](#).

Alternatively, you can input the corresponding URL in the pages that are enabled for pop-ups, in the [Pop-up blocker settings](#).

- **Print the stop page**

To print the stop page of the trainer correctly, you must allow background elements to be printed.

To do this, display the menu bar by selecting the ALT key, then select [File -> Page Setup](#) and activate the [Print background colors and images](#) setting.

2.3.2.2 Custom Settings

Using a custom configuration that has been modified by you or your company's network policy might result in problems when playing back contents. Check that your security settings match the settings in the following table and check that the additional settings (listed below the table) are configured correctly.

> Recommendation

- Note the dependencies given to different content types and the necessary settings.
- Ensure that you configure these settings for the correct zone (where your contents are located).

How to apply settings

1. To apply Internet Explorer Security Settings, open Internet Explorer and navigate to the [Internet Options](#) command in the [Tools](#) menu.
2. Select the according tab and apply settings as given in the table below.

For security settings

1. Select the Tab [Security](#) and select:
 1. [Local Intranet](#), if your content is located in your corporate network
 2. [Trusted Sites](#), if your content is located in the internet.
2. Select [Custom level...](#) to open the Security Settings dialog box. Enable the settings shown below and click [OK](#) to save your changes.
3. If your content is in the internet, click now on [Sites](#) and add the domain your content is located at to the list.

Caution

To avoid browser security issues, we highly recommend to modify these settings in security zone [Trusted Sites](#) and not in security zone [Internet](#).

Settings overview

To avoid display errors, column headers are displayed with a numeric icon that represents one of the following functions/content types:

(1) – library

(2) - demo, test and practice mode

(3) - concurrent mode

(4) - book pages

(5) - quizzes

Tab	Section/Setting	Set to	(1)	(2)	(3)	(4)	(5)
General							
	Tab -> Settings						
	<i>Always open pop-ups in a new window (When a pop-up is encountered)</i>						
Security							
	ActiveX controls and plug-ins						
	<i>Binary and script behavior</i>	Enable					
	<i>Display video and animation on a webpage that does not use external media player</i>	Enable					
	Miscellaneous						
	<i>Allow script-initiated windows without size or position constraints</i>	Enable					
	<i>Submit non-encrypted form data</i>	Enable					
	Scripting						
	<i>Active scripting</i>	Enable					
Advanced							
	Multimedia						
	<i>Play sounds in webpages</i>	Enable					
	<i>Enable native XMLHTTP support</i>	Enable					

2.3.2.3 Internet Explorer's Zone Model

Security settings are divided into specific zones in Internet Explorer. Internet Explorer distinguishes between four zones: *Internet*, *Local Intranet*, *Trusted sites* and *Restricted sites*. It is possible to configure the settings in detail for the permitted actions within each zone. In corporate networks, it is generally the administrator who configures these settings in accordance with the company policy. Otherwise, users may also define the settings themselves.

A document is assigned to a specific zone based on two characteristics:

- Path / URL for documents:
The paths/URLs for documents can be configured in Internet Explorer for each of the four zones (*Internet*, *Local Intranet*, *Trusted sites* and *Restricted sites*). All other paths/URLs are automatically allocated to the zone *Internet*.
- The file's source (when downloading via the Windows file system):
When a document is downloaded from an external source, the zone that the file was in upon downloading is automatically allocated to the file. In this case, Internet Explorer's security settings for the zone (*ZoneID*) detected in the file will apply.

Caution

To ensure that everything runs smoothly, it is recommended that you verify that the security zone settings for the server as well as for the published contents and the trainer on the end user's side allow the contents to be played back without any problems.

2.3.3 Settings for Mozilla Firefox

The following settings are required for a flawless playback experience in Mozilla Firefox.

Changes in the settings dialog

Select the *Settings* item in the *Tools* menu in the open browser. Now go to the *Content* item in the settings dialog to see the required options.

Setting	Set to
<i>Block pop-up windows</i>	Deactivate
<i>Activate JavaScript</i>	Activate
<i>Advanced JavaScript settings</i>	Select the <i>Advanced</i> button to open <i>Advanced JavaScript settings</i> . Activate the following options: <ol style="list-style-type: none">1. <i>Position window before or after other windows</i>2. <i>Hide status bar</i>3. <i>Change status bar text</i>

Settings using about:config

Additional browser configuration settings are available to you in Firefox. You can access these settings by entering [about:config](#) in the address bar and confirming with [Enter](#).

Enter setting name into [Search](#) field. A setting can be activated by double-clicking on it. It is then displayed in bold text and the value [true](#) is set.

The following settings are to be set to the value [true](#):

Setting	What does it do?
dom.allow_scripts_to_close_windows	This setting allows browser windows to be closed.
signed.applets.codebase_principal_support	This setting displays browser windows in fullscreen mode.
dom.disable_window_open_feature.resizable	This setting prevents the size of an open browser window from being changed.
security.fileuri.strict_origin_policy	This setting allows links to be executed if an HTML page is launched from a local drive.

Printing the stop page

To print the stop page of the trainer correctly you have to allow the print of background elements. Activate the setting [Print background \(Colors and Images\)](#) which is to be found on the page setup dialog under [File -> Page setup](#).

i Note

- Caused by the settings that have been activated, you will face a security message when starting the library or a content in the trainer. Confirm this message with [Allow](#).

Activate the option [Remember this decision](#) so that the security message will not be displayed each time the library starts.

- The default bubble audio effects in simulations and in the book reader actions are in WAV format. A Windows Media Player plugin is required in order to be able to play back the files in Firefox.

You will find further information on the subject at: <https://addons.mozilla.org/en-US/firefox/browse/type:7>

2.3.4 Settings for Google Chrome

The following settings are required for a flawless playback experience in Google Chrome.

i Note

The security model of Google Chrome prevents the playback of content from a file system. Content can only be played back from a Web server.

Changing the settings

Choose the [Customize and control Google Chrome](#) button in the open browser. Choose the [Settings](#) menu entry. Scroll to the bottom of the screen, choose [Show advanced settings...](#) and in the [Privacy](#) category, choose the [Content settings...](#) button.

Setting	Set to
Cookies	Allow local data to be set
JavaScript	Allow all sites to run JavaScript
Pop-ups	Allow all sites to show pop-ups

2.3.5 Settings for Safari

The following settings are required for a flawless playback experience in Safari.

Playback settings

Open the browser's settings dialog using the [Edit -> Preferences](#) menu. In this menu, select the [Security](#) area and apply the following settings:

Section/Setting	Set to
Security	
Activate JavaScript	Activate
Block pop-up windows	Deactivate
Privacy	
Block cookies	From third parties and advertisers

Printing the stop page (OS X only)

To print the stop page of the trainer correctly you have to allow the print of background elements. Activate the option [Print background](#) in print dialog.

2.3.6 Settings on iPad

Specific browser settings are required for trouble-free display on an iPad. Tap [Settings > Safari](#) to change settings:

Section/Setting	Set to
Privacy	
Accept Cookies	Always or From visited
Security	
Block Pop-ups	Disable

i Note

To use the trainer, library and book reader functions on an iPad, you need an active Internet connection with access to a central server hosting the published content.

Playback performance relies on connection speed. If the connection is too slow, images might not be loaded in time.

The iPad does not support Adobe Flash and therefore book elements containing flash animations are not displayed.

2.3.7 Settings on Android Devices

Specific settings are required for trouble-free display on an Android device.

Section/Setting	Set to
Keyboard Settings	
Predictive text (Name depends on device) Avoids an automatic input of text in a text field.	Disable

2.3.8 Settings for e-Mails

When using the [Send Content](#) function of the library it is required that the e-Mail program uses UTF-8 character encoding. This prevents incorrect display of the e-Mail text in a specific language.

Microsoft Outlook

For Microsoft Outlook UTF-8 can be activated in the [Outlook Options](#):

Section / Setting	Set to
Advanced -> International options	
Allow UTF-8 support for the mailto: protocol	Activate

3 Simulation Recording

You can record the processes of your web and Microsoft Windows applications. In the following chapters, the procedures for recording and rerecording of simulations are explained.


3.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

3.2 Recording Settings

In the *Settings* dialog box under the category *Authoring Settings -> Recording - General* you can specify settings for the recording. The settings can be opened in the *Tools -> Settings...*  menu.

› Recommendation

Adapt the recording settings before starting with the recording to specify default settings for all recordings.

In the recording settings, you can specify the following:

- Recording area and size
- Profile change for application changes
- Recognition method
- Recording mode

For more information, see the chapter *Recording - General*.

3.3 Recording a Simulation

The following section describes the procedure for recording simulations with the Producer.

i Note


For recordings in the browser, use Microsoft Internet Explorer as the recording application profiles are intended for this browser.

Recording modes

The Producer offers different recording types:

Type	Definition
Quick Recording	This recording mode allows you to make a fast recording of an application. No information is read from objects.
Recording	This recording mode allows you to make a complex recording of an application, and read information from objects. The recordings can be used for rerecording and for converting Desktop Assistant projects.



Default recording mode

You can configure the default recording mode in the [Settings](#)  dialog box. In the category [Authoring Settings](#) -> [Recording - General](#), choose the mode in the [Recording Mode](#) setting. See also the chapter [Recording - General](#).

3.3.1 Creating a Simulation Project

Create a project for your simulation content. For further information, see the chapter [Creating a Content Object](#).

To create a project, proceed as follows:

- In the [Explorer](#), select [New Object](#) .
An overview of all objects opens.
- Select [Simulation](#) .
The [New Project](#) dialog box opens.
- Adapt the following settings:
 - [Name](#):
Enter a project name.
The default name is the object type with an ID.
 - [Language](#):
Select a language for the project. The automatically created bubble texts are generated in this language.
 - [Project Type](#):
The [Standard - Simulation](#) type is selected.
You can change the type in the dropdown box.
 - [Use Audio](#):
This option lets you record a project with audio. You can record audio, you can assign audio files, and you can convert bubble text to Text-to-Speech. The following settings appear:
 - [Output format](#):
Defines the audio format for playing back a project.
 - [Editing format](#):
Defines the audio format for editing a project.

You can change the format in the [Change Audio Format...](#) dialog box ([Audio](#) menu).

- Choose [OK](#) to create the project.

The project opens in the project editor. You can now record your content. Read the following chapters about this subject.


3.3.2 Starting the Recording

To start the recording, proceed as follows:

i Note

The available settings depend on the active recording mode. Not all settings are displayed in the dialog boxes.

1. Starting the recording


1. Open the application to be recorded.
Choose the application page where you want to start recording and prepare the application as required.
2. Select the [Recording](#)  button in the project editor.
The [Select Window and Profile](#) dialog box opens.

2. Choosing the window and profile

1. [Choose Window:](#)
Select the application window that you want to record from the list. The selected window appears in the foreground.
2. [Choose Profile:](#)
This setting selects the application profile for recording the application automatically. If you want to use another profile, you can change it using the dropdown box.
If both recording modes are activated, you can select [Quick Recording](#) instead of a profile.

i Note


If the application you want to record has been started with administrator privileges, then it is necessary to allow the Producer to run with administrator privileges as well. You can do it during the recording by pressing the [Restart as Administrator](#) button which is shown at the bottom of [Select Window and Profile](#) dialog.

3. [Record Screenshot Video:](#)
When you use the [Quick Recording](#), you are able to record a screenshot video of your process.
During recording, all your actions are saved as frames. Afterwards, you can generate a video.
4. [Associate with Selected Window:](#)
Activate this setting if you always want to use the profile for the selected application window.
5. [Record Audio:](#)
Activate this setting if you want to record an audio during the recording of the simulation.
See also the chapter [Recording Audio](#).
The setting is displayed if the project was created with the option [Use Audio](#).
6. Select [Continue](#)  .
The [Define Recording Area](#) dialog box opens.

i Note

If a suitable application profile could not be identified, then the default profile is used. Note that in this case, the recognition accuracy of the interactions and controls in the application window might be limited, depending on the application.

3. Choosing the recording area

1. *Select Region or Active Window:*
Specify if you want to record a region with a predefined size or the exact application window.
2. **Region settings**
 - *Choose Size:*
In the dropdown box you can select a predefined size for the region.
 - *Define Width and Height:*
Displays the current size.
You can specify a size for the region. The dropdown box changes to the entry *Custom*.
 - *Fit Application Window:*
Activate the setting to automatically change the window size to the specified region.
3. Start the recording using the *Record*  button.
Select the *Cancel* button if you want to cancel the recording.

Now the recording starts. The recording bar or the systray icon is displayed , depending on the recording mode.

Diagnosis for profile

Any problems with the recording settings are displayed in the diagnosis box. Depending on the exact problem identified, recording may not be possible or object recognition may be restricted.

- Select *Cancel* to resolve the problems. Then restart the recording.
- Select *Continue* > to proceed with the recording.

3.3.3 Executing Quick Recording

To record an application using quick recording, proceed as follows:

1. Navigate through the application screens required for the simulation. Your actions will be recorded automatically.
2. **Pausing the recording**
Press the *Pause* key to pause the quick recording. If you are recording an audio, then this will also be paused.
3. Select *Continue* to resume the quick recording. The recording is continued from the exact point at which it was paused.
4. **Changing the application**
You can change the application during recording if required.
Click on the new application to select the application. Continue with the recording.

5. Stopping the recording

Press the *End* key to finish the quick recording.







Afterwards, the project editor is displayed.

> Recommendation

When recording audio, speak your text before selecting the corresponding control.



3.3.4 Executing Recording with Profile

To record an application, proceed as follows:



1. **Navigate through the application as needed for the simulation.** Your actions will be recorded automatically. Execute the actions slowly so that the Producer can correctly record the individual actions. The basis of recording is the recognition of objects and controls. Algorithms are used to try to recognize each object that you click on in an application. When an object is recognized, a corresponding macro (for example, *Input Text*  or *Mouse Action* ) is generated.
2. **Pausing the recording**
The recording can be interrupted using the *Pause*  button in the recording bar. If you record an audio, also the audio recording is paused.
3. Recording can be resumed using the *Record*  button. The recording is picked up at the exact point at which it was interrupted.
4. **Changing the application**
You can change the application during recording if required by your process cycle. Click on the new application in order to select the application. Continue with the recording.
5. **Undo an action**
If an error has been made during the recording, it is now possible to undo this action. By selecting *Undo* , the macro created for the action is deleted, then you can simply proceed with your recording as desired. Note that the *Undo* function will only work with the last action made. You cannot delete multiple actions.
6. In some instances, it may be necessary to manually reset the data entered in the application or change back to a previous application. To do so, simply pause the recording, make the necessary changes and then proceed with the recording.
7. **Stopping the recording**
To end the recording of a project, select *Stop*  in the recording bar.

The recording bar will be closed.

3.3.4.1 Inserting Additional Macros

You can influence the design of your simulations even while recording is in progress. You have the opportunity to insert an additional screenshot in the form of a *Screen*  macro or an *Explanation*  macro.

To do this, proceed as follows:

1. Open the menu *Insert* of the recording bar.
2. Select the *Insert Explanation* or the *Insert Screenshot* button to insert the corresponding macro.
 - **Inserting an explanation** 
Selecting the *Insert Explanation* function inserts an *Explanation* macro for the current step.
An explanation can draw attention to a specific situation. Insertion while recording is in progress makes it easier for you to take immediate account of specific content and not have to look it up at a later date.
 - **Inserting a screenshot** 
The *Insert Screenshot* (Ctrl+Shift+b) function allows you, while recording is in progress, to manually set up an additional screenshot for the application page currently being displayed without having to take any action in the application. This sets up a step with a *Screen* macro.
You can use this screenshot for additional information between actions or else separately to draw attention to particular functions on the application page.
3. Continue as usual with your recording.
4. Upon completion of the recording you can continue editing the macros as appropriate.

These functions can also be used in combination by you inserting a screenshot and then, superimposed on it, an explanation in order to clarify a particular fact.

If you have minimized the recording bar, you can invoke these functions via the icon's context menu in the taskbar.

3.3.4.2 Recording a Hotspot

It may happen during recording that one control cannot clearly be recognized. In this eventuality, a *Hotspot* is recorded.

A *Hotspot* defines an area for a control in respect of an unrecognized control at the point that has been clicked.

During recording a *Mouse Action* macro or an *Input Text* macro with standard parameters is created. This does not involve any object information being read out of the application.

Recognition of the *Hotspot* allows the recording to proceed without interruption and post-editing can then be carried out in the macro editor and in the step view.

There is no visible difference between a recorded *Hotspot* macro and a regular control. You can see, if a macro is a *Hotspot* in the *Rerecord* subcategory of the macro editor. A *Mouse Action* macro has the value `WINHotspotArea` and an *Input Text* macro has the value `WINHotspotEdit`.

i Note

Note that recorded *Hotspots* will affect a possible rerecording of a project. As the Producer does not save any object information for the control, the *Hotspot* itself is rerecorded during rerecording even if there is no control at this point.

In this regard consult the section on *Interactive Rerecording*.

i Note

Before creating a *Hotspot* the Producer first performs a graphical object recognition. It is therefore possible that the size used will not be the one defined for the *Hotspot* but the size of an object area identified during recognition.

3.3.5 Recording Scenarios

There are different settings and requirements for your recording scenario. See the following chapters for more information.

3.3.5.1 Recording in Browser Window

Recording in a browser allows you to distinguish whether the displayed browser content or the browser content and browser interface are to be recorded.

i Note

For recording with Mozilla Firefox, the [Quick Recording](#) mode is recommended.

Recording in Google Chrome and Microsoft Edge

You can record content in Google Chrome and Microsoft Edge. To support correct object and page recognition, you have to install a browser extension. Activate the option [Install browser extension](#) during installation of the Producer. The extension can be uninstalled from the [Extensions](#) settings of Google Chrome or Microsoft Edge.

i Note

After uninstalling the extension in Google Chrome, it cannot be installed again with the Producer installer. Google Chrome blocks the installation. You can install the extension from the Chrome Web Store. Search for [Enablement Assistant](#).

Selecting the recording area

When starting recording, select the following in the [Define Recording Area](#) window:

- **Recording the browser content**

You can record the browser content, for example, a web page or an application. The browser's user interface is not recorded and is therefore not visible in the screenshot.


1. Select the [Browser Content Area](#) option.
2. Specify the area size in the [Choose Size](#) setting.

- **Recording the browser content and browser user interface**

You can record the browser content and the browser user interface. This allows you to record menus and browser dialog boxes as well.

- Select the [Active Window](#) option.

> Recommendation

The [Browser Content Area](#) or [Active Window](#) option can be predefined in [Settings](#)  under [Authoring Settings -> Recording - General](#). Activate the required option in the [Area](#) setting.

i Note

Since SAP Enable Now 2011, Producer supports display scaling values higher than 100%. You need to **restart** the Producer after you have changed the display zoom settings.

Multi-monitor configuration is **not** supported. Producer needs to run on the same monitor where you have set the desired scaling.

The zoom settings used for the recording are saved in the project and are shown during the rerecording if the values do not match. The recommended [Zoom](#) setting of the browser is 100%. You do not need to change browser zoom settings, because browsers automatically take over these settings.

> Recommendation

The are maximum DPI scaling factors for specific screen resolutions that SAP Enable Now supports:

Screen resolution height in px	DPI scaling
720	100%
>720	125%
1080	150%
1440	200%
3840	225%

The DPI scaling limit is 225%. Higher scaling can still be used and most UI elements, such as text or dialog size, will scale above 225%. However, some UI elements, such as icons, will not be scaled above 225%.

3.3.5.2 Recording of Microsoft Excel

For the recording of Microsoft Excel there are several recommendations to support correct object recognition:

Preparations

Open only one workbook in Excel.

Recording an Excel cell

To record a cell entry, proceed as follows:

1. Select a cell with a left mouse click.
2. Enter the values.
3. Confirm with `Enter` or `Tab` key.
4. Click in the next cell or on a control.

Repeat these steps for each needed cell entry.

Excel shortcuts

The following shortcuts can be used during recording:

Shortcut	Description
Enter	Completes a cell entry from the cell or the Formula Bar, and selects the cell below (by default).
Shift + Enter	Completes a cell entry and selects the cell above. This is recorded as Enter.
Tab	Moves one cell to the right in a worksheet.
Shift + Tab	Moves to the previous cell in a worksheet or the previous option in a dialog box. This is recorded as Tab.

Rerecording Excel

For the rerecording of Excel use the *interactive rerecording type*. This allows you to execute the actions manually.


If at any point during interactive Rerecording the application is not in the desired state for the next step, proceed as follows:

1. Click on [Show Control](#).
2. Navigate to the next step while holding the `Ctrl` key.
3. Record the correct step without holding `Ctrl`.

No Rerecording will take place while `Ctrl` is pressed. This is useful when menus disappear after a click to show the control in the previous step.

3.3.5.3 Recording for Mobile Devices

For the recording of content for playback on mobile devices, the following settings are recommended:

- **Screen size**
For the playback of simulations on mobile devices a screen size of 1024 x 724 is recommended.
Define the size for recording in the central configuration dialog box (menu [Tools -> Settings...](#) ): [Authoring Settings -> Recording - General -> Size](#).
- **Screen resolution**
For an optimized recording in combination with the defined screen size, change the screen resolution of your workstation.
- **Content texts**
Adapt the texts of the [Recording Dictionary](#) to create a mobile dictionary. For example, change the wording `Click...` to `Touch...`.
See also the chapter [Dictionary Editor](#).

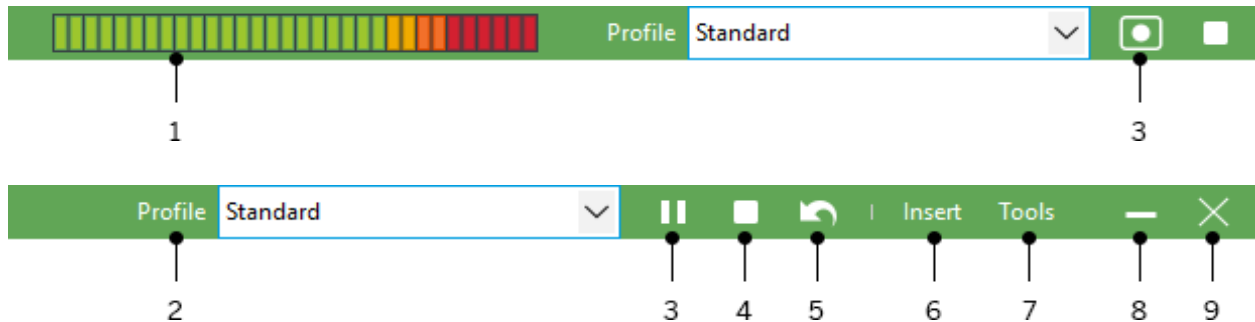
To create simulations for mobile applications see the chapter [Creating iPad Simulations](#).

3.3.6 Recording Bar for Recording


The recording bar appears when you start the recording. It includes the following sections and controls:

Buttons and menus

The buttons let you control the recording.







Button / Menu	Explanation
(1) <i>Level Meter</i>	The <i>Level Meter</i> is displayed when recording a simulation with audio. The control indicates the recording of the audio.
(2) <i>Profile</i>	The dropdown box contains the list of applications for which an automatic application profile exists. If the application is detected automatically, the correct application profile is selected automatically and shown in the list. You can also use this box to switch between application profiles manually.
(3) <i>Record</i>	Select this button to begin recording the process. Afterwards, the button changes to <i>Pause</i> .
(3) <i>Pause</i>	Select this button to interrupt the recording. This is useful when changing applications. Afterwards, the button changes to <i>Record</i> .
(4) <i>Stop</i>	Select this button to end the recording and to close the recording bar.
(5) <i>Undo</i>	Select this button to reset the previous action of your process. Note that this applies only to the last action. You cannot delete multiple actions.
(6) Menu Insert	
<i>Insert Explanation</i>	Select this button to insert an <i>Explanation</i> . For more about the <i>Insert Explanation</i> button, see the chapter <i>Inserting Additional Macros</i> .
<i>Insert Screenshot</i>	Select this button to insert a <i>Screenshot</i> . For more about the <i>Insert Screenshot</i> button, see the chapter <i>Inserting Additional Macros</i> .
(7) Menu Tools	

Button / Menu	Explanation
<i>Execute Mouse Actions</i>	Select this button to specify whether a control is to be recorded and executed in the application or whether this is to be recorded without an action. Recording controls without executing actions is recommended if a number of controls on a page are to be recorded and explained without leaving the application page. The button has to be deactivated to do this.
<i>Choose Application</i>	Select this button to reselect an application for recording or to switch to another application. Afterwards, select the required application.
<i>Settings</i>	Select this button to open the <i>Recording - General</i> page in the <i>Settings</i> dialog box. You can also open the settings in the <i>Tools -> Settings...</i> menu  .
(8) <i>Minimize</i>	Select this button to minimize the recording bar; an icon will appear in the system tray instead. You can control the recording using the context menu. By selecting this icon, the recording bar will return to its original size.
(9) <i>Close</i>	Select this button to close the recording bar. The recording will be stopped.




Status section

The status section shows you whether an action is required or if the Producer is working on a recording in the background. Supporting icons and text messages are also displayed.

Icon	Explanation	Icon	Explanation
 Record	<p>This status is shown, if your recording is running and you need to perform an action.</p> <p>After an action has been performed, the status also shows the detected control (<i>Name</i>, <i>Type</i>, <i>Value</i>, and <i>Subtype</i>).</p>	 Pause	<p>This status is shown when you pause the recording.</p>
 Busy	<p>This status is shown if your action is executed in the background.</p> <p>Note: Wait for the green <i>Record</i> status, to execute the next action.</p>	 Note	<p>This status is shown when you need to perform an action. For example, selecting an application.</p>

3.3.7 Systray Controls

The systray bar for the quick recording contains the following controls:

Button	Explanation
 <i>Pause</i>	Select <i>Pause</i> to pause the recording. With the <code>Pause</code> key recording can be paused.
 <i>Record</i>	Select <i>Record</i> to continue recording the process. With the <code>Pause</code> key recording can be continued.
 <i>Stop</i>	Select <i>Stop</i> to end the recording. With the <code>End</code> key recording can be stopped.

> Recommendation

It is recommended to use the key functions to avoid the recording of the context menu.

3.4 Rerecording a Simulation

When using various applications, companies often encounter a variety of problems when creating the corresponding training material.

The applications are often used across locations in different countries and language regions and therefore consist of multiple language versions. However, the processes and operations when using the applications in the various language versions are more or less identical.

Therefore, it is necessary that companies have consistent training material explaining a particular process available in the relevant languages in which the task is to be carried out.

Another problem lies in the new versions of an application and the changes to its interface that come part and parcel with these newer versions. This requires a fast and simple update of the existing training material to be able to describe processes according to the current version of the relevant application.

Problem definition

The following problems arise:

- **Localization:** The goal is to create a language variant for the corresponding project based on a target application in a different language.
- **Program update:** The goal is to update the project based on a new version of the target application.

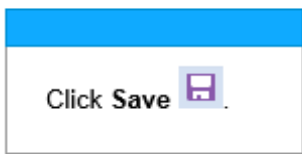
Troubleshooting in the Producer

The Producer offers the possibility of rerecording. With this method, it is possible to rerecord a project in a different language as well as update the screenshots so that they correspond to new versions of the application. This process is executed automatically by the Producer and has the advantage that a project does not have to be manually recorded once again by the author.

Rerecording thus greatly simplifies coherent creation and updating of training material, thereby drastically reducing the amount of effort needed when making a revised version.

3.4.1 Project Changes

The following overview shows you the information saved in the macros after a project has been recorded:




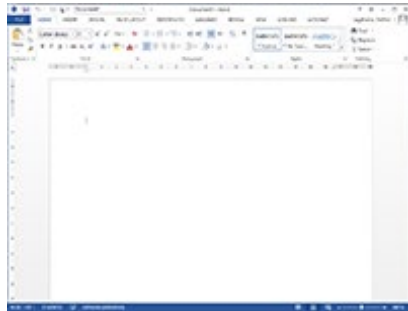
1. Automatically generated instruction text
2. Object Name / Identifier
3. Object Image / Graphic



4. Screenshot of application page

This information has to be customized to update or localize a project. The corresponding changes can be automated by using rerecording:

Area	Example	Description
Automatically generated instruction texts	Click ...	The instructions generated while recording have to be customized according to the target application, for example, translated into a different language.

Area	Example	Description
Identifier of the recognized objects / <i>Object Name</i>	Save	Rerecording automatically modifies the recognized objects' identifiers.
Generated graphics / <i>Object Image</i>		Rerecording automatically customizes the graphics of the objects contained in the bubble texts.
Generated screenshots		Rerecording automatically localizes the application page screenshots into a different language or a new version of the target application.
Manually edited instruction texts	This function applies your inputs to the system.	Manually edited texts cannot be automatically translated with rerecording. These texts will be exported in translation templates in XLIFF or Microsoft Word format, translated externally and then re-imported.

3.4.2 Rerecording Functionality

During the original recording of an application, the Producer creates a macro for each executed action. This way, a project contains a sequence of macros, which, when put together, describe the process.

When rerecording takes place, the Producer repeats this process in the recorded application. Here, rerecording is going through a project macro by macro, and each action is executed and recorded once again in the corresponding application.

This process is usually automatic and, depending on the settings actions, can also be executed manually. This way the user can select a control during the rerecording process and thus has the option of changing the recording process. To recognize and execute the recorded control of an action during rerecording, the Producer compares the object parameters such as position, identifier and size.

Manual intervention by the author is necessary in some cases, if for example there is too much of a difference between a control and the originally recorded object following a program update or if there are process changes as a result of new or remote process steps. An action can also be executed manually if it was previously defined for a control. This allows the user to select a control during rerecording and optionally influence the rerecording process.

Translating a project

When the language of a project is changed using rerecording, the project will be translated into one of the project languages available in the Producer. Here, the automatically generated bubble texts of the macros are replaced by text segments in the previously specified new project language. The original screenshots are updated with screenshots from the other language version of the application.

However, projects also usually contain individually inserted texts. With the help of translation files, the text segments can be customized before rerecording.

i Note

If only the texts of the bubbles are to be translated into a different language, without rerecording the project, this can be done by using the [Automated Translation](#) function.

Automatic translation makes sense if an application is only available in one language but is needed in a number of different languages.

Updating a project

When updating a project for a new version of an application, the corresponding screenshots of the interface and buttons are rerecorded. The relevant bubble texts can be kept or updated as required.

3.4.3 Preparations for Rerecording

Before being able to start rerecording, a number of preparations must be made.

i Note

Rerecording the projects with branches is not possible. A project will go through the rerecording process macro by macro in a linear fashion. However, branches provide multiple options for the path of a project which the Producer cannot automatically follow. Branches should therefore only be integrated into a project after rerecording.

To be able to rerecord projects with branches, consult the *Rerecording of Projects with Branches* section.

Rerecording Settings

In the [Settings...](#)  under the category [Authoring Settings](#) -> [Rerecording](#) you can define specific settings for the rerecording. For further information, see the chapter *Rerecording*.

3.4.3.1 Preparing the Application for Rerecording

Before starting the rerecording, some preparations are necessary in the application to be rerecorded so that the rerecording can be carried out in accordance with the originally recorded project:

- To localize a project, select the application in the desired language.
- Open the application page containing the first step and ensure that the same status as in the original recording is available (for example, same tree structure).
- Make sure that the dates and entries correspond to the system of the original recording. It might be advisable to log off and log on to the system in order to reset existing values. If a project needs to be localized the entries for the recording should be adjusted to the particular language.

- When using dynamic pages, make sure that the state is according to the original recording. Open and close the application to remove all changes.
- When localizing a project, make sure that the design of the application (for example, SAP GUI) is the same as in the recording.
- To be able to rerecord a process, this should be repeated multiple times in the application, for example, creating bill of materials or routings in SAP. Creating alternative recordings usually results in a divergent process. If necessary, the created macro must be deleted or the material copied in order to enable a new recording.

i Note

Macros may be deleted when working in the test system only.

- When rerecording SAP applications ensure that you are only logged on to one SAP system. If applicable, first close all the sessions that are not required for the rerecording.

3.4.3.2 Selecting the Control Interactively

During the rerecording process a control can be selected interactively instead of automatically by the Producer. This can be useful if the control is located at a different position in the application or a different control is to be chosen for rerecording.

This option should be applied to controls which were often not recognized during previous rerecording attempts. This way, the Producer does not have to look for them first.

During rerecording the Producer stops at the corresponding macro. You can now select the matching control. Consult the *Executing the Rerecording* section as well.

Activating the option

To be able to interactively select a control when rerecording, activate the *Interactive* setting in the corresponding macro for the control. This can be done in the subcategory *Rerecord* of the macro editor.

It is also possible to use the *Interactive* setting when switching between applications during rerecording. This way a recording can be stopped in order to select the application.

Activate the *Interactive* setting for the first executable macro of the new application.


i Note

An application change must be carried out during the rerecording process as the Producer cannot automatically select an application.


3.4.4 Starting the Rerecording

Rerecording can start once the necessary preparation is complete. To start rerecording, proceed as follows:

1. Starting the rerecording

1. Open the application to be rerecorded. Modify the application as necessary as described in the preparation for rerecording.
2. Open the project to be rerecorded in the project editor of the Producer.
3. Select *Rerecord Application*  in the project editor.
The *Rerecord Project* dialog box opens.

2. Defining the project

1. *Name:*
Specifies the name of the project. This is recommended if you duplicate the project.
2. *Language:*
Specifies a new language for the project. All of the project languages available in Producer can be selected from a drop-down menu.
3. *Duplicate Project:*
Selecting this option duplicates the project before rerecording begins. The rerecording is performed in the duplicated project.
The project needs to be duplicated because the rerecording is based on the original project that is overwritten during rerecording.
4. Select *Continue*  .
The *Select Window and Profile* dialog box opens.

3. Choosing the window and profile

1. *Choose Window:*
The recorded window and profile is selected automatically.
If not, select the application that should be rerecorded from the list. The selected application appears in the foreground.
2. *Choose Profile:*
This setting selects the application profile for recording the application automatically. If you want to use another profile, you can change it using the dropdown box.
If you want to use another profile, you can change it using the dropdown box.

Note

If the application you want to rerecord has been started with administrator privileges, then it is necessary to allow the Producer to run with administrator privileges as well. You can do it during the recording by pressing the *Restart as Administrator* button which is shown at the bottom of *Select Window and Profile* dialog.

3. *Associate with Selected Window:*
Activate this setting, if you always want to use the profile for the selected window.
4. *Revise Input Values:*
If you select this option, you can modify the text box inputs or selections you have made in drop-down lists after you have applied settings in a dialog. This allows you, for example, to modify inputs for your selected language or application version. The dialog is displayed after the relevant rerecording type has started.
5. *Interactive Mode:*
The option defines how you can intervene for unrecognized controls.
For further information, refer to the chapter *Rerecording Types*.

Now the rerecording bar opens and appears at the upper edge of the screen.

Diagnosis for profile

Any problems with the recording settings are displayed in the diagnosis box. Due to the problems specified, recording may not be possible or object recognition may be restricted.

- Choose [Cancel](#) to resolve the problems. Then restart the recording.
- Choose [Continue](#) > to proceed with the recording.



3.4.4.1 Rerecording Types

In the start dialog box, you can choose between an appropriate type for the rerecording by using the option [Interactive Mode](#). The types define what to do when dealing with unrecognized controls.

- **Automatic**
With this recording method, an unrecognized control is recorded as a [Hotspot](#).
It is also possible to define how the method will deal with a recorded Hotspot. That means that this recorded [Hotspot](#) can be edited with an editor or else use the wizard for the rerecording.
Deactivate the option [Interactive Mode](#) to start the automatic mode.
- **Interactive**
This recording method can be used to edit unrecognized controls as a [Hotspot](#) directly in the application. This involves opening an editor which makes it possible to position and edit the range of the object area and the bubble.
During interactive rerecording each control found is to be confirmed by pressing the `Enter` key to resume rerecording.
The interactive rerecording still serves as a fallback method in a situation where a conflict occurs during automatic rerecording. In a conflict situation, the mode is changed to interactive mode and after the conflict situation was resolved it is changed to automatic mode again.
Activate the option [Interactive Mode](#) to start the interactive mode.

3.4.4.2 Partial Rerecording

In addition to the normal rerecording you can also launch rerecording from a specific step or for specific, selected steps. This allows projects to be partially recorded and it is thus not necessary to rerecord the entire project.

-  **Rerecord Selected Steps**
This selection allows you to rerecord several related project steps. This is useful, for example, if a partial update of associated projects is required as a result of changes within an application.
Before starting to rerecord, highlight the desired steps in the thumbnail view. Then select the option [Rerecord Selected Steps](#).
-  **Rerecord from Current Step**
This selection allows you to start rerecording from a specific step. This setting is useful if you are only supposed to rerecord from a particular section of a project. The step must be selected in the Producer thumbnail view prior to rerecording. Then select the option [Rerecord from Current Step](#).

3.4.5 Executing the Rerecording

Once the rerecording has been started, the Producer executes it automatically:

1. When rerecording a project, the Producer goes through the macros from the original recording step by step. The actions of the individual macros are executed in the application and recorded. While this is happening, the recording bar is displayed in red, showing the recording and thereby the recognition and execution of the controls.
2. According to the type selected in the start dialog box the rerecording is accomplished as described in the respective chapters:
 - [Automatic Rerecording](#)
 - [Interactive Rerecording](#)
3. Now record the project as described in the particular subchapters.
4. If rerecording was executed successfully, a dialog box appears. Confirm it with [OK](#).

Note

If an action was incorrectly executed during rerecording it is advisable to terminate the rerecording and use the selection [Rerecord from Current Step](#) to resume rerecording the remainder of the project from this step.

The rerecording bar will be closed.

3.4.5.1 Automatic Rerecording


When rerecording in automatic mode every step is recorded automatically by Producer. An intervention by the user is only necessary if a conflict situation occurs. In this event the rerecording changes into interactive mode and after the conflict situation was resolved it changes back to automatic mode.


If a conflict situation occurs during rerecording, you are informed by means of an explanation bubble. Such a conflict can be:

- A control device does not match the originally recorded control device
- A control device could not be identified
- The [Interactive](#) option was activated for a macro

In addition to the occurring conflict situation the bubble text informs you how to resolve it.


Conflict approach

If one of these cases occurs, the automatic mode changes into interactive mode. By selecting the [Show Control](#)  function in the recording bar the designated control device can be recorded interactively. Select it in order to do so.

If a control device matches the originally recorded one you can also confirm it under [Accept Control](#) .

Control device was set interactive

If the macro setting *Interactive* is applied in the subcategory *Rerecord* before the rerecording takes place, the Producer stops at this point and changes to interactive mode. Now the object can be edited. After confirming *Accept control device* in the recording bar, the rerecording is resumed.


This procedure is also executed if the interactive rerecording was activated in order to rerecord *Hotspots*. The particular *Hotspot handling* setting can be defined in the area *Authoring Settings -> Rerecording* in the *Settings*  dialog box.

3.4.5.2 Interactive Rerecording

The interactive rerecording allows checking the control devices which need to be rerecorded and to influence them directly during the recording process. Furthermore, steps can be rerecorded, deleted or skipped.

Using the interactive rerecording makes sense when many modifications need to be made, several objects were recorded as *Hotspot* or major alterations were introduced to the application with regard to the original tutorial.

Accomplishing interactive rerecording


Interactive rerecording stops at every object and displays it including its mark and bubble during the process. Now you can edit the object or, if it is correct, resume rerecording directly. Confirm the object via the *Accept Control*  button in the recording bar. As a result, the rerecording is resumed.


Conflict approach

If a conflict situation occurs during rerecording, you are informed by means of an explanation bubble. Such a conflict can be:

- A control device does not match the originally recorded control device
- A control device could not be identified
- The *Interactive* option was activated for a macro

In addition to the occurring conflict situation the bubble text informs you how to resolve it.

By selecting the *Show Control*  function in the recording bar the designated control device can be recorded interactively. Select it in order to do this.

If a control device matches the originally recorded one you can also confirm it under *Accept Control* .

3.4.5.3 Editing in Interactive Mode

If an object is rerecorded interactively, it appears within a selection frame and with the corresponding bubble. The selection frame can be moved within the application, adjusted in size via the handles and positioned above the control. The bubble can also be moved to the designated position; a click in the bubble allows editing the particular bubble text.

It is possible to navigate in the target application during interactive rerecording in order to select a certain page or to make required adjustments in the application.

Confirm the designated adjustments when completed under *Accept Control* in order to resume rerecording.

- *Show Control:*
If a control is not displayed correctly you can directly rerecord it via the *Show Control* function. Select the function and click on the control.
- *Step Preview:*
The *Step Preview* displays the originally recorded step so that it can be reproduced and the object adjusted accordingly.

Further functions

The *Tools* and *Insert* menus allow you to select further functions for editing the tutorial during rerecording:

- *Insert Explanation (Insert):*
This button allows you to add an *Explanation* macro during rerecording. After clicking the button, select the position for the bubble, then define the explanation text and confirm it with *Ok*.
- *Delete Control (Tools):*
This function offers the opportunity to delete the currently selected object. Then the rerecording is resumed using the following object in the tutorial.
- *Skip Control (Tools):*
This function allows skipping a recorded control if it does not need to be taken into account for the rerecording and thus remains unmodified.

i Note

The bubble displayed in interactive mode corresponds to the *Bubble Type* setting in the *Authoring Settings -> Rerecording -> Interactive Mode* section of the *Settings*. It can be either the *Demo* or the *Practice* bubble.


3.4.5.4 Recording Additional Steps

While rerecording is in progress you can use recording to record additional steps and add them to your project. This is useful, for example, for creating additional inputs in a form.

To record additional steps, you need to run rerecording in interactive mode. Subsequently, rerecording comes to a halt at each step to be rerecorded with the control that has been found requiring confirmation. This enables you to edit the control that has been found as well as access the recording bar functions and launch automated recording.

Newly recorded steps are inserted in front of the current step to be rerecorded at which automated recording was started. This is necessary so that once inputs have been committed rerecording means that they are displayed on their respective screenshots in subsequent steps.

To record additional steps, proceed as follows:

1. If you arrive at a step before which you would like to insert other steps, start the recording at this stop. In order to do so select the *Record Control*  button at the menu *Insert* in the recording bar.
2. Record the designated control devices in the same way as during regular recording. Refer to the chapter on *Executing the Recording with Profile*.

3. If you would like to resume rerecording afterwards press the `ESC` key. The rerecording is resumed at the step where you started the recording.

i Note

Do not confirm the step in front of which you would like to record additional steps by pressing on the `Enter` key. Start recording directly as otherwise rerecording will continue.

3.4.5.5 Changing the Application

If a change of application takes place in a project, a particular procedure is required in order to accomplish the change during rerecording. This procedure applies to the automatic mode as well as to the interactive mode.

At the point of the application change the rerecording displays a note window to inform you that the application does not match. Now proceed as follows to accomplish the change of application:

1. Select *Choose* in the note window.
The *Choose Application* dialog is opened.
2. Select the required application from the *Running Applications* list.
3. Select *Choose*.

Afterwards, the rerecording continues with the required application.

3.4.5.6 Rerecording of Projects with Branches

Rerecording the projects with branches is not possible. A project will go through the rerecording process macro by macro in a linear fashion. However, branches do provide a number of options for progression, which is why some controls of a branch cannot be found during rerecording.

As a general rule, branches should therefore only be integrated into the corresponding project after rerecording.

If a project with branches exists, it is necessary to partially execute the rerecording of a project. This entails the corresponding project being split up in order to be able to rerecord steps that run linear to one another. Here, only the corresponding step with the branch will need to be edited. See also the chapter *Partial Rerecording*.

When working with branches, it is necessary to remove them after rerecording so that they can be reattached.

3.4.5.7 Key Functions for Rerecording

During rerecording different actions can be performed using key functions. They depend on the particular type:

Automatic mode

Keys	Definition
Pause	With the <code>Pause</code> key rerecording can be paused.
Esc	With the <code>Esc</code> key rerecording can be cancelled.

Interactive mode

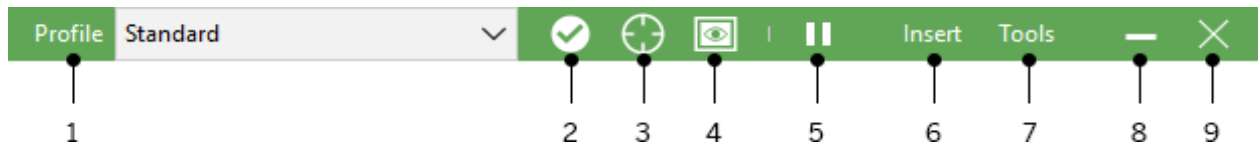
Keys	Definition
Enter	With this key you can confirm a displayed control device and continue rerecording.
Ctrl + Enter	With this key you can confirm a displayed control device and continue rerecording if the bubble is displayed in edit view.
Ctrl	With a pressed <code>Ctrl</code> key you can navigate freely in the application without an action being recorded. This is useful for instance for selecting lists, in order to open them and record the selection.
Esc	Terminates recording if further steps are inserted via the recording function.

3.4.6 Recording Bar for Rerecording


The rerecording bar appears when you start the rerecording. It includes the following sections and controls:

Buttons and menus

The buttons let you control the recording.







Button	Explanation
<i>(1) Profile</i>	The dropdown box displays the automatically detected application profile. The profile cannot be changed.
<i>(1) Accept Control</i>	Select this button to confirm a control during rerecording in interactive mode and to rerecord it.
<i>(2) Show Control</i>	Select this button to directly rerecord a control that is not displayed correctly. Select the function and click the control.
<i>(3) Step Preview</i>	Select this button to open a step preview. The step preview displays the originally recorded step. This lets it be replicated and the object is customized accordingly.
<i>(4) Rerecord</i>	Select this button to begin rerecording the process. Afterwards, the button changes to <i>Pause</i> .
<i>(5) Pause</i>	Select this button to interrupt the rerecording. This is useful when changing applications. Afterwards, the button changes to <i>Rerecord</i> .
(6) Menu Insert	
<i>Record Control</i>	Select this button to start recording. This allows you to record additional steps during rerecording. These are inserted in front of the current step. The <code>ESC</code> key ends the recording mode and rerecording continues. This function is available during interactive rerecording.
<i>Insert Explanation</i>	Select this button to insert an <i>Explanation</i> .
(7) Menu Tools	
<i>Delete Control</i>	Select this button to delete the currently selected object. Rerecording then resumes using the next object in the project.

Button	Explanation
<i>Skip Control</i>	Select this button to skip a recorded control if it does not need to be included for rerecording. It remains unmodified in the project.
<i>Choose Application</i>	Select this button to reselect an application for recording or to switch to another application. Afterwards, select the required application.
<i>Settings</i>	Select this button to open the <i>Recording - General</i> page in the <i>Settings</i> dialog box. You can also open the settings in the <i>Tools -> Settings...</i> menu  .
<i>(8) Minimize</i>	Select this button to minimize the rerecording bar; an icon will appear in the system tray instead. You can control the rerecording using the context menu. By selecting this icon, the rerecording bar will return to its original size.
<i>(9) Close</i>	Select this button to close the rerecording bar. The rerecording will be stopped.

Status section

The status section shows you whether an action is required or if the Producer is working on a rerecording in the background. Supporting icons and text messages are also displayed.

Icon	Explanation	Icon	Explanation
 Preview Mode	<p>This status is shown, if your rerecording is running and you need to perform an action.</p> <p>After an action has been performed, the status also shows the detected control (<i>Name</i>, <i>Type</i>, <i>Value</i>, and <i>Subtype</i>).</p>	 Pause	<p>This status is shown when you pause the rerecording.</p>
 Busy	<p>This status is shown, if your action is executed in the background.</p> <p>Note: Wait for the status of the <i>Preview Mode</i> to turn green, to execute an action.</p>	 Note	<p>The status is shown, if you need to perform an action. For example, selecting an application.</p>

3.5 Recording an eCATT File

When recording a simulation, you can create an eCATT file ([eCATT.xml](#)). eCATT (extended Computer Aided Test Tool) files are used for importing data into test automation software.


An eCATT file can be created when recording an SAP system with SAP GUI. This file allows you to use a recorded process for an automated test with eCATT in the live system.

For further information on using eCATT, read the specific eCATT documentation.

Prerequisites

The recording of eCATT is supported for SAP GUI for Windows. Make sure to record SAP GUI as stand-alone and not as embedded (for example, SAP NWBC) application.

Activating eCATT generation

eCATT files are generated in addition to the simulation modes. To generate the files, you have to activate the eCATT setting in the central configuration dialog box ([Tools -> Settings...](#) ) under [Producer -> Save -> Standard](#).

Recording an eCATT file

To record an eCATT file, use the project type [Simulation](#). The information required for the eCATT file is collected during recording. The eCATT file is generated when the project is saved.

If a project is rerecorded, the eCATT file information is updated.

When a workarea is published, eCATT files are not exported because the files are not required for content playback.

Handling an eCATT file



Once the project has been saved, the eCATT file is generated and stored in the project folder. eCATT objects are displayed in the object structure of the [Explorer](#).

The eCATT file is stored in the project folder. Open the project folder by using the [Open Folder](#) menu entry in the context menu of the project.

You can import the [eCATT.xml](#) into your eCATT system and test the recorded process.

i Note

eCATT files use always the file name [eCATT.xml](#). If you want to use and store multiple files in a folder, rename the files using different names.

4 Simulation Editing

Once a simulation has been recorded it can be edited in numerous ways. For example, so as to enhance the didactic benefit of the projects and promote a more diverse presentation of the content.

In addition to deleting and adding content in the form of steps or recording macros, and completing documentation macros, the content of macros themselves can be changed and parameterized.

> Recommendation

Take care at all times when editing that the changes you make do not compromise the consistency of the project in relation to teaching material that has yet to be added.

4.1 Training Available



Simulation editing is available as interactive training in the SAP Enable Now Info Center.



[Enable Now](#)





Audio recording and editing is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)


4.2 Simulation Modes

The following modes can be generated for simulation projects:

Mode Name / Icon	Description
 Demo mode	The demo mode plays the recorded process as demonstration and displays explanations for the executed actions. User action: no action required. Example use case: teaching a new process
 Practice mode	The practice mode expects the user to act within the simulated environment in the same way as with the live application. The mode will only move to the next step


Mode Name / Icon	Description
	<p>after the user has followed the instructions in the correct order shown in the bubbles.</p> <p>User action: executes actions displayed in instructions</p> <p>Example use case: execute a process with support</p>
 <p>Test mode</p>	<p>The test mode does not display any instructions in the bubbles. Users have to find their own way through the application without any help.</p> <p>User action: executes actions unaided</p> <p>Based on: practice mode</p> <p>Example use case: test of users' knowledge of a process</p>
 <p>Concurrent mode</p>	<p>The concurrent mode is based on the demo mode and is played back with an additional smaller browser window next to the live application. This supports the user by offering help during the live process.</p> <p>User action: executes process in live application and clicks to continue to next step</p> <p>Based on: demo mode</p> <p>Example use case: supporting daily work</p>
 <p>Guided Presentation mode</p>	<p>The guided presentation mode plays the recorded process like a simulation and executes the actions automatically. Each action has to be confirmed by the user.</p> <p>No bubbles are displayed, and the control bar is hidden.</p> <p>User action: confirms executed action</p> <p>Based on: demo mode</p> <p>Example use case: presentation of a process to an audience</p>
 <p>Free Presentation mode</p>	<p>The free presentation mode expects the presenter to act in the simulated environment in the same way as in the live application. Input fields are filled out automatically.</p> <p>No bubbles are displayed, and the control bar is hidden.</p> <p>User action: executes actions unaided</p> <p>Based on: demo mode</p> <p>Example use case: presentation of a process to an audience</p>

Activating the modes

You can specify the modes that you want to generate for your projects in the [Settings](#)  dialog box. The mode settings are available under [Producer -> Save](#).

By default the guided presentation mode and the free presentation mode are deactivated. You can define the modes globally or on project-specific basis.

Mode configuration

Each mode can be configured for playback individually. The settings are available in the [Playback Settings](#) of the [Settings](#)  dialog box. See also the chapter [Settings of trainer, book reader, library and Modes](#).


4.2.1 Playing a Mode

You can play a simulation mode to preview the content of your project. The simulation is played back in trainer.

- **Project editor**
Select [Play Mode](#) in the toolbar to play the active editing mode.

> Recommendation

If you start the playback of a simulation from the project editor to check it, you can follow the progress of the playback by looking at the thumbnail view. This simplifies the localization of errors since it provides direct, visual identification of the corresponding macro and thus facilitates the user's orientation within the project.

- **Explorer**
Select a mode of your project and select [Play](#)  in object editor.

4.2.2 Mouse Simulation

You can simulate mouse movements and actions while playing back simulations in the trainer. This enables a greater emphasis to be given to actions, for displaying single and double clicks visually, for example. You will see the mouse simulation displayed in demo mode and concurrent mode.

Activating mouse simulation

The mouse simulation is activated in the [Settings](#)  dialog box from the [Show Mouse](#) option. You will find this in the [Playback Settings -> General](#) area.

Changing the mouse pointer

In the [Visual properties](#) area of the [Playback Settings -> trainer](#) settings you can apply the [Big mouse pointers](#) setting for defining the mouse pointer. This option defines, that the big mouse pointers will be shown for the visualization of a simulation.



4.3 Customizing Simulation Pages

You can design the pages in your simulations any way you want. This can be useful if the screenshots of the recording do not take up the entire screen area or if you are using imported pages. The pages design is based on the book page design so that you can use the book page styles available in your workarea.

You can find the respective settings under *Playback Settings -> General -> Page Style* in the *Settings*  dialog box.


You can create the design as the default design for your workarea or for a specific project. A specific project can be used as template for other projects.

Settings

- *Style:*
Specifies the page design. You can select a book style from the dropdown box.
The setting also affects the book page objects inserted in a simulation.
- *Center Background Image:*
Centers the background image or the simulation screenshot. If the option is deactivated, the image is positioned in the upper left corner.
- *Page Color:*
Specifies the color of the page. Select the color preview to open the *Color Selection* dialog box. If you do not want to use any color, select *Transparent* .
- *Background Color:*
Specifies the color of the background. Select the color preview to open the *Color Selection* dialog box. If you do not want to use any color, select *Transparent* .
- *Border:*
Specifies the thickness of the page border in pixels. If no border is to be displayed, set the value to 0 (zero).
- *Border Color:*
Specifies the color of the page border. Select the color preview to open the *Color Selection* dialog box.
- *Border Style:*
Specifies the style of the page border that you can select from the dropdown box.

4.4 Editing Highlights and Bubbles

You can enhance interaction macros with highlights and bubbles. The highlights outline the recording control and the bubbles display text with instructions, tips, etc.

The highlights and bubbles can be edited from the *Step view*. For example, you can choose a macro from the thumbnail view, such as *Mouse Action*. Then in the step view, the highlights and bubbles for the recorded control will be displayed on the screenshot for the macro *Screen* .

There are options on the toolbar that allow you to switch between demo and concurrent modes to display the bubbles. This allows the bubbles to be viewed and edited for the respective mode.


4.4.1 Properties of Highlights

Main differentiations for the use of highlights are:

- **Standard Highlight**
The highlight is generally used for the visualization of actions and explanations.
- **Help Highlight**
The highlight is used in case the user asks for help during playback of a test mode.

In accordance to the use the settings can be set individually.

Settings in central configurations

The settings can be set globally or project specific in the [Settings](#)  dialog box in the area [Playback Settings](#) -> [General](#) -> [Highlights](#).

- [Border](#):
Specifies the thickness of the project highlight frame in pixels. Pixel widths available are from [1](#) to [10](#).
- [Color](#):
Specifies the color of the highlight border. The color may be entered directly as an RGB value in HEX format or selected from out of the [Color Picker](#) dialog box.
- [Help Color](#):
Specifies the highlight color used in practice or test mode in case the user is asking for help. The highlight will be used to show areas of correct action.
- [Form Structure Color for Correct Answer](#):
Specifies the highlight color used in practice or test mode in case that the user is asking for help. The highlight will be used to show areas of correct actions in a form structure.
- [Type](#):
This option defines the form of the highlights used in the simulation.
 - [Rectangle](#)
 - [Ellipse](#)
 - [Underline](#)

i Note

The highlight types [Ellipse](#) and [Underline](#) are only displayed during playback. In step view and in documentation the highlights always use the type [Rectangle](#).

- [Effect / Help Effect](#):
This option defines the kind of effect used for highlights.
 - [Show](#)
 - [Animate](#)
 - [Pulsate](#)
 - [Frame Flashing](#)
 - [Focus Zoom](#)

4.4.2 Positioning Highlights and Bubbles

In the step view you can change the size and positioning of the bubbles and highlights as follows:

Changing the position

1. Select an object in the step view.
2. A red line will appear around the object. Select the object again, this time holding the mouse button down.
3. With the mouse button still pressed, drag the object to the desired position.
4. Release the mouse button and the object is now positioned.

Changing the size

1. Select an object in the step view.
2. Dots appear around the object so that you can change its size. Select one of the dots and hold the mouse button down.
3. With the mouse button still pressed, drag the dot inwards or outwards to the desired size.
4. Release the mouse button to set the new size.

Changing the bubble alignment

1. Select an object in the step view.
2. A square will appear at the spike of the bubble, which you can use to turn the object. With bubbles that do not have a spike, the square will appear in the middle of the bubble. Select the dot and hold the mouse button down.
3. With the mouse button still pressed, pull the dot away from the bubble until you have reached the desired position. Pull the dot towards the middle of the bubble if you wish to hide the tip.
4. Release the mouse button to set the new position.

4.4.3 Editing Bubble Text

Bubble text for the macros for each mode can be directly edited in the bubble or in the macro editor.

- **Editing in the step view**
Double-click on a bubble and an HTML editor will appear with various options for editing the content. For more information on the HTML editor, refer to the *HTML Editor* section. Edit your text as desired and click on *OK* to confirm your changes.
- **Editing in the macro editor**
Changes can be made in the macro editor using the two options *Demo Text* and *Practice Text*. Click on the respective text field and the HTML editor will appear. You can now edit the text.

i Note

Note that when changes are made to the text, this text can no longer be automatically translated into another language (*Automated Translation* and rerecording). All customized text must be manually translated or exported into a translation template to be translated externally.


4.5 Audio in Simulations

The Producer supports several ways to integrate audio into simulations and to enrich the information. This allows information to be presented using visual and audio material, thus stimulating more of the learner's senses. This facilitates increased awareness and superior assimilation of the content.

Note

Audio files in simulations are only played back for the demo mode.

Prerequisite

A special audio project is required to use audio in simulations. You can either define this when setting up the project by selecting the parameter [Use Audio](#), or you can convert the project later on from the menu [Project -> Convert to Audio Project](#) .

Creating audio

Audio files for simulations can be created in the following ways:

- Importing of audio files
- Recording of spoken texts
- Conversion of Text to Speech

The audio editor (in the project editor of the Producer) allows you to create and edit audio files.

Refer to the section on [Audio Editor](#).

If an audio file is available in a step, you will see an audio icon in the step's thumbnail view.

Functions in the menus

In the [Audio](#) menu, there are several functions for editing audio. Refer to the relevant sections for further information. The menu is only available for an audio project.

Supported file formats

The following audio file formats are supported:

- Import of audio files
 - Sound file - [wav](#)
 - AVI sound file - [avi](#)
 - MP3 Sound file - [mp3](#)
- Editing of audio in project
 - Sound file - [wav](#)

4.5.1 Convert to Audio Project

Menu item *Convert to Audio Project* in the *Projects* menu creates an audio project out of a regular project. This allows you to convert a project to an audio project at a later date if you have not done so when creating the project. Consequently, this menu item is also only displayed in projects without audio.

Note

Once a project has been converted into an audio project, this step cannot be undone.

To convert a project, proceed as follows:

1. Select *Project -> Convert to Audio Project...*
The *Select Audio Format* dialog box is opened.
2. The settings in the dialog box are required to specify the properties of the audio project or its audio files:
 - *Editing format:*
Specifies the audio format in which the project is created and edited.
 - *Output format:*
Specifies the audio format in which the project is generated.
3. Select *Ok*.

Afterwards, the project is converted into an audio project. This saves the project file as a WRP file. You also have audio editing functions at your disposal.

4.5.2 Importing Audio

Importing audio files allows you to easily integrate audio files into a simulation.


Note

By importing an audio file, the existing audio of a step will be overwritten.

Proceed as follows to import an audio file:

Note

During import, the audio files are converted into the editing format *WAV* with the default audio format.

1. Select the step for which you want to import an audio file.
2. In Audio Editor, click the button *Import Audio File...* 
The *Choose File* dialog box opens.
Alternatively you can use the *Audio* menu.
3. Select the file.
4. Click *Open* to insert the file.

4.5.3 Recording Audio

Audio recording allows you to narrate your own texts with the microphone. The texts can be played back as explanations for the relevant steps.

There are two ways to record an audio:

- During the recording of a simulation
- During the editing of a simulation

Requirement

For audio recording, a microphone is necessary. Connect this first before starting to record.

Audio recording during recording of a simulation




During the recording of a simulation you are able to record an audio directly. When starting the recording of a simulation the *Select Application* dialog includes a setting *Record Audio*. Activate the setting, to execute the recording.

See also the chapter *Starting the Recording*.

The recording of audio is only possible during the recording and not for the rerecording of a simulation.

Audio recording during editing of a simulation

Proceed as follows to execute the recording:

1. Select *Record Audio...* . The recording dialog opens.
Alternatively you can use the *Audio* menu.
2. Select *Start Recording* .
3. Read out your text.
During the recording, a sound level meter shows the volume. You also see the spoken text as an audio track.
4. Select *End Recording* . The recording dialog box closes.

For more information, refer to the *Recording Dialog Box* chapter.

i Note

During the recording of an audio file, the existing audio of a step will be overwritten.

Read out the full text for your recording because it is not possible to record the text in sections. Any unwanted parts can be cut out afterwards. If you are not satisfied with the outcome, record the text again.

> Recommendation

If the recording contains background noise, then it is recommended that you edit the audio file with the dynamic editor to improve the sound.

4.5.4 Using Text-to-Speech

The Text-to-Speech functionality converts written text into digitized speech. This makes it possible to play back simulation's bubble texts in spoken form. During the conversion process, the simulation macro's bubble text is converted into an audio file. The actual bubble continues to be displayed when playing the simulation back in the trainer so that the two formats provide mutual support.

The default quality for Text-to-Speech is: [22kHz](#), [16bit](#), [Mono](#).

4.5.4.1 Supported Text-to-Speech Voices

The Producer supports voices for Microsoft Windows 10 Text-to-Speech and Google Cloud Text-to-Speech.

Microsoft Windows 10 Text-to-Speech

You can use Microsoft Windows 10 voices to generate Text-to-Speech audio. For downloading voices see [How to download Text-to-Speech languages for Windows 10](#).

Default Windows system voice

For the option [Default Windows system voice](#) in the voice selection Producer uses the Text-to-Speech voice available on your operating system. If you want to use a different voice, you need to change Text-to-Speech settings of your operating system. In Microsoft Windows [Control Panel](#) open [Speech Recognition -> Text to Speech](#) to change the voice in the [Speech Properties](#).

Google Cloud Text-to-Speech

The Google Cloud Text-to-Speech voices can be used to generate Text-to-Speech audio. To use Google Cloud Text-to-Speech the following preparations are required:

1. A Google Cloud Platform account is required.
2. Enable the API by creating an API key:
 1. Go to [APIs & Services -> Credentials](#).
 2. Select [Create credentials -> API key](#).
 3. Copy the API key to use it for connecting with Google Cloud Platform.

i Note

Google Cloud Text-to-Speech is a product of Google Cloud. Further information is available on [Google Cloud](#).

Further information is available in the Google Cloud Text-to-Speech [documentation](#).

4.5.4.2 Generating Text to Speech

We recommend that you convert text to speech after a project has been edited. If a step contains several macros (for example, several steps are connected), then the texts will be read out one after the other in the order in which

the macros are arranged.

If the bubble texts of a simulation are already converted into text to speech, they are available when you open the editor.

To generate Text-to-Speech audio proceed as follows:

1. Explorer

1. Select a simulation project or a group with simulation projects.

2. Project editor

1. Open a simulation project.
2. Select all required steps.

3. Go to *Tools -> Text-to-Speech- > Generate Text-to-Speech...* menu.

Another option is to go to *Audio -> Generate Text-to-Speech Audio...* to open the same dialog.

4. The *Text-to-Speech* dialog box is opened.

5. *Generate Text-to-Speech audio for:*

1. *All Steps*

Converts all steps to Text-to-Speech.

2. *Steps Without Audio*

Converts all steps without audio to Text-to-Speech and keeps available audio files.

3. *Selected Steps*

Converts only selected steps to Text-to-Speech

6. *Cleanup Text-to-Speech Override Macros*

If you already have *Text-to-Speech Override Macros* in the simulation project and the override text matches the bubble text, then this function allows to clean it up. Such *Text-to-Speech Override Macros* will be deleted.

7. *Automatically Convert Non-Audio Projects**

This setting is available when you open the Text-to-Speech menu from the Explorer. Activate it to convert your project to an audio project for the Text-to-Speech functionality to take effect.

8. *Configure Text-to-Speech Services*

In this section you can choose between *Windows Text-to-Speech* and *Google Text-to-Speech*. You can also choose to *Show only language specific voices in voice selection*, in this case you will see only the voices available for your current Producer language. To use *Google Text-to-Speech* service configure the following parameters:

1. *API URL*

Select or enter a URL for the Google Cloud Text-to-Speech API.


2. *API Key*

Enter the API Key of your Google account.

9. Confirm your settings and now you can select the *Voice for your language*, choose its pitch and speed, and preview the generated audio.

10. Select *Generate and Close* to finish.

The Text-to-Speech conversion starts. Simulations projects will be converted into audio projects.

Afterwards, an audio icon  can be seen for every step. The active text type for demo mode or practice mode is used for the audio.

› Recommendation

The link of the beta release of Google Cloud Text-to-Speech should be used for tests only. The beta release can contain further voices and features that are not available in the final release.


i Note

If a step contains several macros, the individual actions and associated spoken texts will run asynchronously in relation to one another. This is because the texts are converted into an audio file and are not linked to the actions. Therefore we recommend use one macro per step.


4.5.5 Text-to-Speech Override

The *Text-to-Speech Override* allows you to enter an alternative text for simulation steps. This text will be used for Text-to-Speech audio instead of the original steps text.

To configure text for Text-to-Speech Override proceed as follows:

1. Open the *Text-to-Speech* Override editor using the *Edit Text-to-Speech...*  button for each step. Refer to the chapter *Text-to-Speech Dialog Box* for more details.
2. Insert a text in the text field or edit the available text.
3. Specify the duration of the silence to be inserted at the beginning of the audio file.
4. Choose the voice, its pitch and speed and preview the audio.
5. Confirm the input. The dialog box is closed and the audio file is generated.

To restore default text:

1. Open the *Text-to-Speech* Override editor using the *Edit Text-to-Speech...*  button for for your selected step. You will see a *Note* saying that a Text-to-Speech override macro is used.
2. Select *Use default*. The text in the text field changes to the original.
3. Confirm the input. The dialog box is closed and the audio file is generated.

4.5.6 Editing Audio


The audio track can be edited in various ways to optimize the output. There are different functions available in the audio editor.


For more information, refer to the *Audio Editor* chapter.

4.5.6.1 Inserting a Silence

This function inserts a silence with a defined length into a specific part of your audio.

The silence will be inserted at the position of the red marker. If an area is marked, it will be overwritten with silence completely.

1. Select the point of the audio track with the marker for the beginning of the silence.
2. Select the *Insert Silence...*  button.
3. Define a value in milliseconds in the editing dialog. Only positive integer values can be used.
4. Confirm the dialog with *OK*.

If an area should be converted into silence, mark the relevant area on the audio track. Select the *Insert Silence...*  button and silence will be included immediately.


4.5.6.2 Normalizing Audio

The function *Normalize* allows you to equalize the volume of all audio files and thereby make audio files with different properties consistent. The amplitude of an audio track will be increased consistently.

> Recommendation

If the amplitude has big differences in the highs and lows due to normalization, it is recommended that you edit the dynamic of the audio with the dynamic editor.


Normalization can be applied to the entire audio track or a particular area.

1. Select an audio track and go to the audio editor.
2. Highlight the area you want to normalize.
3. Select the *Normalize...*  button.

4.5.6.3 Trimming Audio

The *Trim Audio* function allows you to cut an audio track down to a specific part. Unnecessary parts can be deleted to reduce the playback time and the size of the audio file.



To trim an audio track, proceed as follows:

1. Mark the area of the audio track that you want to keep.
2. Select the *Trim*  button in the toolbar.
The parts left and right of the highlight will be removed.

4.5.6.4 Fading Audio

Using the functions *Fade In* and *Fade Out*, you can fade a part of the audio track from mute to full volume or the other way around. This makes the audio track much more effective and ensures smooth transitions. In general, it is recommended that you use fading at the beginning and at the end of an audio track.


To use fading for an audio track, proceed as follows:

1. Mark an area of the audio track, to define the position and length.
2. Select the *Fade In*  or *Fade Out*  button in the toolbar.


4.5.7 Audio Menu

The *Audio* menu contains functions for the editing of an audio file. It is only available, if the opened project is an audio project.


4.5.7.1 Play Audio

The *Play Audio*  command plays the audio of the current step.


4.5.7.2 Stop Audio

The *Stop Audio*  command stops the playback of an audio.


4.5.7.3 Record Audio

The *Record Audio*  command records an audio for the current step.


4.5.7.4 Pause Audio

The *Pause Audio*  command pauses the playback of an audio.

4.5.7.5 Repeat Audio

The *Repeat Audio*  command switches loop mode for the playback of an audio on and off.

4.5.7.6 Import Audio File...

Audio files can be imported into Producer by using the *Import Audio File...*  command. The audio file is imported into the selected step. If no step is selected or no step exists in the project, a new step is created automatically. Formats supported when importing audio files are *WAV*, *AVI* and *MP3*.

i Note

During import, the audio files are converted into the editing format [WAV](#) with the default audio format.

If an audio file was imported into a step, this is indicated by an icon.

i Note

Importing an audio file overwrites the existing audio of a step.

4.5.7.7 Import Audio Again

If an audio file is already imported into Producer, this action can be repeated without selecting the file in the import dialog again. This is helpful if changes already made to the audio track did not work out as expected and the audio track needs to be restored or the audio file was edited with an external editor and the changes need to be applied to the project.

i Note

Importing an audio file overwrites the existing audio of a step.

4.5.7.8 Export all Audio Files...

The audio track of a project can be exported from Producer as a file in WAV format for other purposes. All usual sampling rates for audio files in this format are available.

4.5.7.9 Delete Audio

With the [Delete Audio](#)  command existing audio file of a step can be deleted.

4.5.7.10 Change Audio Format...

The [Change Audio Format...](#) command allows you to change the editing format and the output format of the audio files for the current project. The standard format shows [default](#) in the entry and a changed format shows [current](#).

Editing Format

The internal audio format of a project which is used for editing can be changed at any time. All usual sampling rates for work with digital audio in mono or stereo are available. Existing audio tracks are automatically converted into the new format. This procedure is time intensive and can take several minutes.


i Note

When changing the project from a higher to a lower sampling rate, the sound quality decreases. As soon as the project is saved, the changes cannot be undone anymore.

Output Format

With the option the output format for generating a simulation can be defined.



4.5.7.11 Generate Text-to-Speech

With the *Generate Text-to-Speech*  command the bubble texts of a step can be converted from text to speech.

4.6 Form Structure

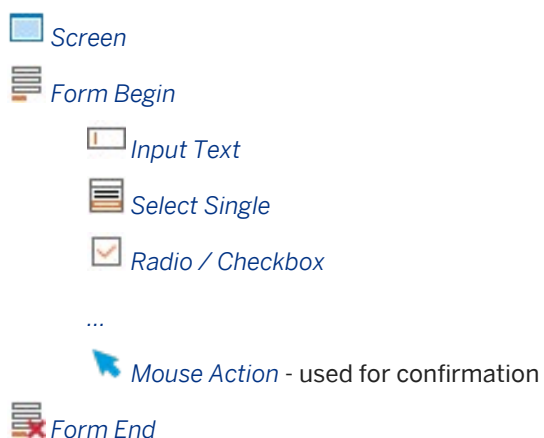
The *Form Structure* function allows you to display forms realistically in practice mode or test mode. While a simulation is in progress, the user can fill in the interactions contained within the form structure in an individually chosen sequence and then confirm the inputs as a whole. This does not display a confirmation immediately after an action has been inputted but only once all actions have been performed.

A *Form Structure* is made up as follows:

- It is positioned under a *Screen*  macro.
- It has a start and end macro.
- The associated interactions are to be found between the two *Form Structure* macros.
- A *Mouse Action*  can be used as confirmation action.



At least two interactions should generally be available for a *Form Structure*.

Example Structure





4.6.1 Creating a Form Structure

After recording a project, you can create a *Form Structure* in it:

1. For the *Form Structure* the *Screen*  macros are to be combined in a step with the associated actions contained in the form. This is required as the *Form Structure* cannot be created in a way that spans steps.
 1. Select the *Screen*  macros belonging to the steps whose interactions are to be used for the *Form Structure*.
 2. Select *Tools -> Bulk Changes -> Merge Selected Screens*.
The first macro *Screen* is retained and the others that are highlighted are deleted. The previous steps' macros are arranged in the merged step. Now create the *Form Structure*.

i Note

A *Mouse Action*  macro is required as the last macro of a form structure in order to be able to complete the form correctly. For example, this can be an *OK* or dialog box *Save* button enabling the form inputs to be confirmed.

2. Select the *Screen* macro of the merged step.
3. Select *Insert Structure Macro -> Create Form Structure* .


In the thumbnail view, you will now see that all of the step macros are incorporated within the *Form Structure* macros.

Documentation macros contained within a step are also integrated into the form structure. But these do not affect the sequence of the simulation and the function of the form structure as they are only used for creating documentation.

4.6.2 Bubbles in Form Structure

The bubble texts are presented in summary form in the *Form Structure* for the practice mode. This provides you with an overview that illustrates how to fill out a form and the linkages between the inputs.

In demo mode and concurrent mode the bubbles are displayed side by side as the processes are played back as a simulation meaning that there are no inputs by the user.

The appearance of the bubbles can be edited in the *Form End*  macro. The individual texts accompanying the actions can be changed within the respective macros, as before.




4.6.3 Removing a Form Structure

If a *Form Structure* is no longer required in a project, it can be removed. Only the start and end macros of the *Form Structure* are deleted in the process; the remaining macros in the step are retained.

i Note

Do not remove the macros for the *Form Structure* using the *Delete* command to avoid errors in the project. Always remove the *Form Structure* using the corresponding functionality.


This is how to remove the form structure:

1. Select the *Form Begin*  or *Form End*  macro.
2. Select *Remove Form Structure*  in the macro editor.

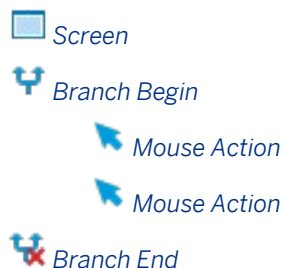
4.7 Branches

Using branches will allow the user to digress from the sequential path within a simulation. This gives the user much more flexibility and portrays a more realistic process workflow. Two or more branches can be added to a simulation so that the user has a choice of where to go to next.

A branch consists of several macros:

- A branch is positioned under the *Screen*  macro.
- It needs a start and an end macro.
- Between the start and end macro, there are two macros that contain actions leading to different workflows.

Example Structure





i Note

Projects with branches cannot be rerecorded. During rerecording a project will run through in a linear manner but branches can operate in a number of different ways that cannot automatically be followed.

It is recommended to duplicate a project as backup, before creating the branch. The duplicate can be used for rerecording.


4.7.1 Creating a Branch

Once a project has been recorded, you can create a branch for it. To do so, proceed as follows:


1. *Screen*  macros are combined into one step in which their corresponding actions should serve as buttons for the branches. This is important so that the buttons can be displayed properly on the page.
 1. Select the *Screen*  macros for the step for which the macros should be used for the branch. When doing so, make sure that these actions are located on the same application page.

2. Select *Tools -> Bulk Changes -> Merge Selected Screens*.

The first macro *Screen* will remain and all the other highlighted macros will be deleted. The macros for the existing step will then be merged into the step accordingly.

2. Select the macro *Screen* for the merged step.
 3. Select *Insert Structure Macro -> Create Branch* .
- The *Edit Branch* dialog box is opened.

4. For each action macro of the step specify a jump target. The order of the selection list corresponds with the order of the macros in the project.
Select *Ok*.

From the thumbnail view, you can see that all the macros for the step are integrated into the macros for the branch. All macros that have been assigned a branch target will have an arrow . When the mouse moves over the arrow, the corresponding step will be highlighted in blue in the thumbnail view and the name of the step will be displayed in a tool tip.


4.7.2 Editing a Branch

Editing a branch target

If you would like to change the target of your branch at a later time, you can open the editing dialog box by clicking on the button *Edit Branch* in the macro editor. Change the target for the respective actions and confirm the changes by selecting *OK*.

Bubbles in a branch

At the end of a mode, a summary of all the bubble text is displayed in one bubble within a branch. This serves as an overview of all the possible target steps. The individual text blocks are separated with an `or` to make it easier to differentiate between the different targets.

The bubble's appearance can be edited in the macro *Branch End* . To do so, from the macro editor, set the *Layout Selection* to *Advanced layout*. The individual text blocks for the actions can be changed in the respective macro.


4.7.3 Removing a Branch

If a branch is no longer needed in a project, it can be removed. Only the starting and ending macros of the branch are deleted. The other macros will remain in the step.

Note

Do not remove the macros for the branch by using the *Delete* command - this could cause errors in the project itself. Always remove a branch in accordance with its functionality.

To remove a branch, proceed as follows:

1. Select the macro *Branch Begin*  or *Branch End* .
2. Select *Remove Branch*  in the macro editor.

4.7.4 Branches in Documentation

Branches will also be displayed as such in the documentation. A subheading will be inserted to indicate that there is a branch. Underneath the subheadings, there are additional actions which have been allocated links for the respective steps.

Branches appear in Word, PDF and HTML generated formats. Branches are displayed in the following types of documentation: [standard documentation](#) and [work documents](#).

4.8 Bulk Changes

The [Tools -> Bulk Changes](#) menu contains automated functions for editing a number of macros in a simulation project.

4.8.1 Setting the Bubble Duration

The [Tools -> Bulk Changes -> Set Bubble Duration...](#) function sets the display duration for all the bubbles to the value entered in the dialog box using an adjustable display duration. Prior changes made in the macro editor to the duration of bubbles will be overwritten.

Use the [Include Explanation](#) parameter to set whether or not the defined bubble duration should also be used for inserted [Explanation](#) macros or just for the bubbles of the interactions. If this parameter is activated, the [Explanation](#) macros will also be shown with the defined bubble duration.

This parameter should be deactivated if individual times are to be used for the [Explanation](#) macros. This is necessary if the respective macros contain longer texts and thus require more time for processing.

4.8.2 Merging Screens


The merging screens functions allow you to merge the [Screen](#) macros of your simulation projects. This can be used to be able to create a form structure or branches or to create the size of a project.

There are the following merge functions available in the [Tools -> Bulk Changes](#) menu:

- **Merge Selected Screens**
The function merges all selected [Screen](#) macros within a step. The first screenshot is kept and all other selected [Screen](#) macros are deleted. All the related macros are merged in a single step.
- **Merge Screens**
The function merges all [Screen](#) macros automatically within a step. This involves merging sequential steps with identical screenshots, for example, the same application page and it's status, into one step. The initial [Screen](#) macro is retained and the following [Screen](#) macros deleted. Subsequent macros are inserted in the project within the step according to the sequence in which they occur.

Graphical matching and tolerance

The [Screen](#) macros are merged by graphically matching the screenshots. The Producer compares individual screenshot pixels to recognize differences. This includes differences that are already small, such as for example a drop-down menu that is open on one screenshot and not on another. This menu occupies a particular area on the screenshot which differs from the one with which it is being compared by a certain percentage.

The degree of percentage match for merging screenshots is defined by the tolerance. This value can be changed in the [Settings](#)  dialog box using the [Merge Screen Tolerance](#) which can be found under [Authoring Settings -> Recording](#). Increasing the value raises the tolerance threshold. The standard value is 0.4 %, resulting in screenshots that differ by 0.4% or less being merged.

Note

After the function has been executed, check whether the [Screen](#) macros have been merged correctly and that no necessary screenshots have been deleted. It may be necessary to undo the merge and repeating the merge with a different tolerance.

Specifying a tolerance

The optimal tolerance may differ from one application to the next. We therefore recommend that you test different application values for different projects. This can be carried out for example by a master author who then communicates the value identified as being optimal to the authors. When testing you should now ensure that screenshots that differ only slightly, for example an open drop-down menu, are not merged. The tolerance threshold should therefore be modified one small step at a time. (Example: increase 0.4% to 0.5%).

We recommend selecting a value greater than 0.0%. With this tolerance, screenshots exhibiting only small differences, such as small animations or rollover effects, which are typically ignored when comparing screenshots, are not merged.



4.8.3 Anonymizing the Screen Area

If a simulation screenshot contains information that should not be displayed to the users (for example, passwords, file paths, or data), you can anonymize these areas by means of a color, pixelation, or blurring. You can do this for a single screenshot or for a number of screenshots in a project.

Note

The anonymization is done on the screenshot file and cannot be changed after the project is saved and closed.

To anonymize the screenshot areas of a simulation, proceed as follows:

1. If you have one macro:
 1. Select a [Screen](#)  macro.
 2. Select [Anonymize Screen Area...](#) in the macro editor.
2. If you have a number of macros:
 1. Select all [Screen](#)  macros that show the same area.
 2. Select [Tools -> Bulk Changes -> Anonymize Screen Area...](#)
3. A dialog box that displays the screenshot or the first screenshot of the selection opens.
Position the selection border on the control or area you want to anonymize.

4. In the dropdown box in the toolbar you can select these editing options:
 - *Average Fill Color:*
Uses the average color of the selection on the screenshot.
 - *Edge Fill Color:*
Uses the edge colors of the selection on the screenshot.
 - *Custom Fill Color:*
Allows you to select a color for your selection. Select the color field in the toolbar to open the color selection dialog box.
 - *Pixelate and Blur:*
Allows you to specify a pixelation or blurring for your selection.
Use the *Pixelation Radius* slider in the toolbar to change the pixelation radius for the selection in pixel.
Use the *Blur Strength* slider in the toolbar to change the blur strength for the selection in percent.
5. Select *Confirm Selection* ✓ .
Select *Cancel Selection* ✕ if you want to discard the changes.

The dialog box closes and the screen area is anonymized.

4.9 Adding a Step

You are able to add new steps in your project. The steps can be used to add further macros.

The *Insert -> Add Step* + function inserts a new empty step. The step is inserted behind the currently selected step in the thumbnail view.

4.10 Extending the Content

4.10.1 Importing Images

You can use the *Import Images* function to import image files into your project. The images can be used, for example, to enhance your project contents with visual information or as an introduction for various sections within a project.

When an image is imported into the Producer, a step and the macro *Imported Page* are automatically created.

To import an image, proceed as follows:

1. Select the step into which images should be inserted.
2. Select *Tools -> Import-> Import Images...*
A dialog box appears.
3. Select the desired image or images. Select *Open*.
4. A dialog box with the following settings appears:
 - *Width* and *Height*:
Enter the desired width and height for your image.

- *Display Duration:*
This option allows you to define how long an image is visible in the simulation. This image setting can also be adjusted later in the macro editor.
- *Import as Screen Macro:*
When this option is activated, the image is inserted as a *Screen* macro instead of an *Imported Page*.
Note: This option must be activated if you would like to create branches for your step.
- *Resample Images:*
This option adjusts the image file to the defined width and height. When this option is deactivated, the file will be imported in its original size.
- *Insert Mouse Action:*
When this option is activated, a *Mouse Action* macro will also be inserted into the step.

5. Select *OK* to import the image.

The image is imported into the project.

i Note

If you insert the images as *Screen* macro, the projects cannot be rerecorded. As the images cannot be skipped during rerecording, this leads to errors in the recording process. You should therefore perform a rerecording before importing the images.

4.10.2 Importing Microsoft PowerPoint Slides

In addition to the regular steps, you can import slides from a Microsoft PowerPoint document into a project. For example, these can be used as supporting information for the content to introduce different sections of a project.

The PowerPoint slides are converted into images when they are imported into the Producer. One step and one *Screen* macro are created for each slide and placed in it.

Proceed as follows, to import PowerPoint slides:

1. Open the PowerPoint file, from which you would like to import the slides into your project, in PowerPoint.
2. Select the step after which the PowerPoint slides are to be placed.
3. Select *Tools -> Import -> Import PowerPoint Slides...*
4. You can now apply settings for displaying the slides. Select *OK*.
 - *Width and Height:*
Enter the desired width and height of your slides.
 - *Display Duration:*
The display duration specifies for how long a slide is visible before the next one is displayed. You can also amend this later for each individual slide in the macro editor.
 - *Import as Screen Macro:*
When you activate this setting, the PowerPoint slides are inserted as *Screen* macro rather than as *Imported Pages*. This is necessary if, for example, branches are to be created for an imported slide.

i Note

If you insert the PowerPoint slides as *Screen* macro, the project cannot be rerecorded. As the slides cannot be skipped during rerecording, this leads to errors in the recording process. You should therefore perform a rerecording before importing the slides.

5. A dialog box is displayed which requires you to select the slides to be inserted. Switch to Microsoft PowerPoint and select the slides to be imported in your PowerPoint file's slide outline.

i Note

Do not close the dialog box until after the slides have been selected because it is the dialog that starts the import process.

6. Select *OK*.

The PowerPoint slides are inserted into the project.

4.11 Intro and End Pages

The intro page shows an introduction to the learner at the beginning of a simulation. It is also possible to start the simulation at a specific step and to guide the learners through this chosen step. At the end of a simulation, the end page shows a text or a summary for the test mode result.

The intro and end pages can be used for the demo, practice and test mode as alternatives to the general start and stop pages for simulations.

Intro Page macros

Several macros are available to define an intro page. The macros can be inserted via the *Insert -> Insert Special Macro* menu. More information can be found in the macro overview chapter. The following macros have to be inserted in this structure:




Intro Page




Intro Page Start Link

Parameters of the End Page

To define the behavior of the end page, use the associated parameters in the *Simulation End*  macro. For more information, refer to the *Simulation End* chapter.

Hide the start and stop pages



To use only the intro and end pages for a simulation, the start and stop pages should be deactivated in *Playback Settings -> trainer* in the *Settings*  dialog box. Disable the *Show start page* and *Show stop page* settings in the *Visual properties* subcategory.

4.12 Link Actions for trainer and book reader

To control the trainer or book reader instead of the control bar via objects or bubbles, actions can be defined as link targets. These are universally valid and make it possible, for example, to jump between book pages and chapters independently of their name. They are selected in the link dialog box.

If you want to use these types of navigations for book pages, we recommend inserting the objects in a template for book pages. These are available by default for an entire book.

Specifying a link action

1. You can specify the link target in accordance with your objects as follows:
 - **Via the HTML Editor**
Mark the text to be linked and open the *Link* dialog box by selecting *Insert Object*  -> *Insert Link...*
 - **For book page objects**
Select *Edit link...*  in the *Link* to setting to open the *Link* dialog.
For some objects, this setting is found in the *Link* area.
2. Select *Actions* in the *Link* dialog box.
3. You can then specify the link action using the dropdown box.
4. Select *Ok* to confirm the dialog box.

Overview of actions

- *Exit*
- *Show help*
- *Play simulation*
- *Pause simulation*
- *Next step*
- *Previous step*
- *Next book page*
- *Previous book page*
- *Next chapter*
- *Previous chapter*
- *First book page*
- *Last book page*
- *Show index*
- *Show search*
- *Activate audio*
- *Deactivate audio*
- *Play/stop audio*
- *Stop complete audio* – (if several audio objects are contained)
- *Mute complete audio* – (if several audio objects are contained)
- *Unmute complete audio* – (if several audio objects are contained)




- [Mute](#)
- [Unmute](#)


The other actions offered correspond to those mentioned but have an outdated form and are thus offered to be downward compatible.

4.13 Creating iPad Simulations

With the Producer it is possible to create simple simulations of iPad apps. For that, create screenshots on your iPad, import them into the Producer and edit the simulation project.

To create an iPad simulation, proceed as follows:

1. Open your iPad app.
2. Press the [On/Off](#) button and the [Home](#) button of your iPad at once to create a screenshot.
Repeat this for each process step.
3. The screenshots are saved in the [Photos](#) folder of the device.
4. Save the images on your PC to import them into the Producer.
Do not import the images from the iPad directly.
5. Open the Producer.
6. Create a [Simulation](#)  project using the [New Object...](#)  toolbar button.
The empty project opens in the project editor.
7. Select [Tools -> Import -> Import Images...](#) 
The import dialog box will appear.
8. Select the images and select [Open](#).
9. You can now edit your image if desired. See also the chapter [Import images](#).
The important options of this dialog box are:
 - [Import as Screen](#):
Activate this option, to insert the images as [Screen](#) macros.
 - [Insert Mouse Action Macro](#):
With this option, a [Mouse Action](#) macro will be inserted in the step additionally.
10. Confirm the changes by selecting [OK](#).
Afterwards the images will be imported.

The images will be inserted in the order as sorted in the folder. Each image will be inserted as [Screen](#)  macro in a step with a [Mouse Action](#) macro.

Afterwards position the highlight about the control on the screenshot and insert a text into the bubble.

Inserting additional macros



Further macros can be inserted about the [Insert Interaction](#) toolbar. The macros also contain text modules of the [Recording Dictionary](#).

4.13.1 Creating Object Image and Object Name


The object name and object image of an app control can be created manually and inserted into a bubble text. This allows you to add this information to a text.

For the object name insert a text into the *Object Name* parameter.

To create an object image from the screenshot, proceed as follows:

1. Position the highlight of a *Mouse Action* macro about the control on the screenshot.
2. Select *Update Object Image*  in the macro editor.
A dialog box for the editing of the object image opens.
3. Adapt the object image position, if needed.
4. Select *Confirm Selection* , to create the object image.
The dialog box closes and the object image is inserted into the *Object Image* parameter.

Now you can insert the object image and object name into a bubble as placeholder:

1. Select a text field of a bubble.
The HTML editor opens.
2. Select *Insert Object* .
3. In the menu select the entry *Insert Placeholder...*
A dialog box with placeholders opens.
4. Select one of the placeholders:
 - *Macro: Object Image*
 - *Macro: Object Name*
5. Select *Insert*.

4.14 Macro Parameters for Simulation Macros

Each macro contains parameters, which define the design and the behavior for different use case like rerecording, playback and documentation. You are able to adapt these parameters for a selected macro in the macro editor.

The following section gives you an overview about the available parameters. Further information about a macro and specific macro parameters is available in the macro descriptions.

Note

The available settings are specific for each macro.

4.14.1 General Parameters

In the macros, there are the following general parameters:

- *Comment:*
You can enter a general comment to assist editing in the *Comment* field. This is displayed in the thumbnail

view in place of the macro text.

You can amend the displayed comment as follows:


- Comment preceded by '*+*': Comment is appended to the macro text in brackets
- Comment preceded by '***': Comment is inserted in brackets in front of the macro text
- Comment preceded by '*/*': The comment is not displayed, only the macro text
- *Use Text from* (Interaction macro):
Specifies the text type used. This allows you to use different texts for demo mode and practice mode or to use the same text for both modes.
 - *Both Modes*
 - *Demo Mode*
 - *Practice Mode*
- *Demo Text / Practice Text* (Interaction macro):
Contains the text for the macro to be displayed for a specific mode.
- *Text*:
Contains the text for the macro to be displayed during playback. For some macros the parameter is mode-specific.
- *Object Name* (Interaction macro):
Contains the name of the recorded control.
The parameter is used in all interaction macros and is shown in the bubble text.
- *Object Image* (Interaction macro):
Contains the icon or an image of the recorded control.
The parameter is used in all interaction macros and is shown in the bubble text.


Editing object name and object image

It may be necessary to edit the name or the image of the parameters. For example:

- If a control in an application has changed but it is not worth rerecording a project.
- If changes have been made to the highlights on a screenshot.

Any change to the parameters is automatically incorporated in the bubble texts.


- **Editing an object name**
Change the name by entering a new name.
- **Editing an object image**
Select the *Update Object Image*  function in the macro editor. An editing window appears in which you can make the necessary changes to the icon. Drag the highlight to the desired position and confirm.

You can also use the *Replace Image...*  function to insert an image. The button opens an option menu with functions for creating or inserting an icon. Select the appropriate method.

4.14.2 Subcategory: Bubble

The parameters of the [Demo Bubble](#) and [Practice Bubble](#) subcategories are used for the display of the action macro's bubbles.

The settings provide the possibility to define different appearances for the bubble in the different modes.

- [Style:](#)
Here you can choose which bubble style you would like to use. The bubble styles are saved in the [Resources](#) .
- [Width/Height:](#)
Specifies the size of the bubble in pixels.
- [Orientation:](#)
Here you can specify in which direction the tip of your bubble should be pointing. If you choose the option [Center](#) – the bubble will have no point and it will be positioned in the middle of the chosen area.
- [Display Duration:](#)
Specifies, how long a bubble is visible during playback. The setting is defined in seconds.
- [Translate Manually:](#)
The option [Translate Manually](#) option ensures that customized bubble content is not replaced by text automatically generated by [Automated Translation](#) or a rerecording. The options are activated as soon as the contents of a bubble is edited manually. In this case the contents can be exported by using [Export Translatable](#) (menu [Tools](#) -> [Localization](#)) in order to be translated manually by a translator.

4.14.3 Subcategory: Simulation

The subcategory [Simulation](#) contains parameters that specify the display of content during playback:


- [Highlight in Demo / Practice:](#)
Specifies, that the highlight for the control is displayed during playback. The setting is available for demo mode and practice mode.
- [Bubble in Demo / Practice:](#)
Specifies, that the bubble with the explanation is displayed during playback. The setting is available for demo mode and practice mode.
- [In Mode:](#)
Specifies, for which of the modes the object should be displayed during playback.

4.14.4 Subcategory: Documentation

The macro parameters required for documentation creation are found in the subcategory [Documentation](#).

- [Show in Documentation:](#)
Specifies, whether this macro is to be taken into consideration during the creation of documentation. Disabling this parameter makes it possible to hide certain, specific actions described by macros in the documentation.

Screen macro

For the *Screen*  macros, there are the following parameters:

- *Show in Process:*
Specifies to show the step in the process flow of a documentation.
- *As Heading in Documentation:*
Specifies to use the *Screen Title* as heading in the documentation.
- *Image Size:*
Specifies the size of the screenshot in percentage.
- *Screenshot Position / Size:*
Shows the position and size of the screenshot.
- *Border Width:*
Puts a border at your defined pixel width around the screenshot. The standard color is white and can be changed in *Documentation Settings*.

Interaction macros

For the interaction macros, there are the following parameters:

- *Highlight Position / Size:*
Shows the position and size of the highlight.

> Recommendation

Use the *Document Highlight* function to change the marker position.

- *Marker Orientation:*
Specifies the orientation of the marker on the screenshot. It is recommended to adapt the markers, if the screenshot displays more than one marker.

4.14.5 Subcategory: Rerecord

The subcategory *Rerecord* contains parameters that are required for a rerecording.

- *Interactive:*
The option *Interactive* means that when a recording is being repeated, the rerecording will stop at this macro and manual recording of the macro will resume. Automatic rerecording will continue thereafter. This option is particularly important at those points in the project where it is known that the desired object for the action to be recorded is to be found in another position or a different object for the recording must be selected.

i Note

Do not change the parameters of the *Object Type*, *Click Position*, *Recognition Method* and *Object Key* manually to allow a correct rerecording.

4.14.6 Subcategory: Control

The parameters describing how a control is displayed and executed in the project can be defined in the [Control](#) subcategory.

- [Position and Size](#):
The parameter defines how a control is orientated in the screen view in relation to the upper left-hand corner as well as the width and height of the control. For editing the parameters select the [Edit](#) button to open an editing dialog box.

Various individual parameters are available for the different interactions:

- **Macro Text Input:**
The color and text design of the [Text input](#) macro can be defined. It can also be defined whether the text entry is to be portrayed as a password.
 - [All Values](#):
If control is a drop-down box is included, all of the drop-down box's options are saved in the parameter [All Values](#). The chosen entry is flagged with an asterisk {*}. While the project is being edited, the value can be changed by assigning the flag to the corresponding entry.
- **Macro Mouse Action:**
For the [Mouse Action](#) macro it is possible to define both the cursor type and the state of the button when it is clicked.
- **Macro Checkbox:**
For the [Checkbox](#) macro it is possible to define both the cursor type and the type of checkbox, whether the latter is to be used as a radio button.

4.14.7 Subcategory: Advanced

The subcategory [Advanced](#) contains the parameter:

- [Jump Target](#):
Displays the selected jump target after the creation of a branch. You can select another target from the drop-down list.

4.15 Simulation Macros












For simulation projects, there are the following macro types:

- Special Macros
- Interactions
- Page Macros
- Quiz Items - see Quiz chapter
- Documentation Macros - see Documentation chapter

The macros can be inserted by using the toolbar of the project editor.

4.15.1 Special Macros

The following section describes special macros, which can be inserted into simulations.

Icon	Name
	Simulation Start
	Simulation End
	Intro Page
	Intro Page Start Link
	Imported Page
	Form Structure
	Branches
	Jump to Step
	Mode Change Start
	Mode Change End
	Text-to-Speech Override

In the following chapters, you will find further information about the special macros.

4.15.1.1 Simulation Start





This macro is required for the initialization of the simulation in the trainer. It is located at the beginning of a project. When using the recording, this macro is inserted automatically.

Score

The parameters *Maximum Score* and *Required Score* specify the points for the test mode. The values are calculated from the number of single actions (always 3 points) and the percentages that have been entered in the *Explorer* for the project. Use *Update* to automatic calculate and actualize the score.

Task description

A task may be displayed in a separate browser popup window in practice mode and test mode. This can be created in the *Task Description* subcategory and activated for the mode in question.

The *Generate Values for Task Description* option is used to insert the values from the *Input Text*  and *Select Single*  macros into the task. This is of use, for example, so as to have the necessary data available when creating a user or logging in.

The position of the task description window on the screen is set by the parameter *Orientation*. In addition a background color for the window can be selected via *Background*.

4.15.1.2 Simulation End



This macro is used by the trainer to end the simulation correctly. It is located at the end of a project. When using the recording, this macro is inserted automatically.

- *Pause (seconds):*
The parameter defines the display duration of the last step during the playback of the simulation.

Settings of the End Page

Once a simulation is completed, an end page with a summary appears as well as the button to restart the simulation.

The end page uses the preset that is defined in the *Intro Page* macro.

The following parameters can be defined:

- *Show End Page:*
The parameter defines that the end page will be shown during playback.

- *Title End:*
The title will be shown for the relevant mode.
Modes: demo mode, practice mode, test mode
- *Description End:*
The description will be shown for the relevant mode.
Modes: demo mode, practice mode, test mode passed, test mode failed

For further information, refer also to the chapter *Intro and End Pages*.

4.15.1.3 Intro Page



The macro specifies that an intro page is shown in the simulation. It has to be included in the first step after the *Simulation Start* and the *Intro Page Start Link* macro.

Parameters of the macro

The following parameters are available:

- *Title:*
The parameter defines the title for the relevant mode.
Modes: demo mode, practice mode, test mode
- *Description:*
The parameter defines the description for the relevant mode.
Modes: demo mode, practice mode, test mode
- *Preset:*
The parameter defines the design of the start and end page. The available presets are part of the *Configuration/Style* resources.
- *Page Size (Advanced Layout):*
The parameter defines the page width and height in pixels.

For further information, refer also to the chapter *Intro and End Pages*.

4.15.1.4 Intro Page Start Link



The macro defines a start link for the intro page. This makes it possible to jump to different steps in a complex simulation and to guide the learners. The link has to be included in the first step after the *Simulation Start* macro and before the *Intro Page Start Link* macro. To create several links, insert an *Intro Page Start Link* macro for each link.

Parameters of the macro

The following parameters are available:

- *Description:*
The parameter defines a description for the start link.
- *Link Text:*
The parameter defines a text for the start link.
- *Target Step:*
The parameter defines a target for the start link. A step can be chosen from the drop-down-box.

For further information, refer also to the chapter *Intro and End Pages*.

4.15.1.5 Jump to Step



This macro allows you to jump to a specific step in the simulation. The macro can be used to create alternative paths in a simulation.

Parameters of the macro

The following parameters are available:

- *Jump Target:*
Specifies the step for the jump. Select a step from the drop-down list.

4.15.1.6 Mode Change

The change of mode makes it possible, at a specific step, to switch to another mode while a mode is being played back. If the step was completed it switches back to the original mode. For example, while a demo mode is in progress, a step can be displayed as a test mode. This allows users to take an active part while viewing the simulation.

Macros of a mode change

There are two macros for the mode change available:



Mode Change Start

This macro forces a mode change when playing back the simulation in a certain mode.



Mode Change End


This macro terminates the mode change and changes back to the initial mode.

Note

A mode change can only be used within a step. Ensure that the [Mode Change Start](#) and [Mode Change End](#) macros are within the same step.

Creating a mode change

To create a mode change, proceed as follows:

1. Select the [Screen](#)  macro for the step with the mode change.
2. Insert the [Mode Change Start](#) macro using the [Insert Special Macro](#) toolbar.
3. Select the [Mode Change Start](#) macro.
4. Specify the target mode in the macro editor.
5. Select the last macro of the step.
6. Insert the [Mode Change End](#) macro using the [Insert Special Macro](#) toolbar.

Removing a mode change

To remove a mode change for a step, delete the [Mode Change Start](#) macro and the [Mode Change End](#) macro.

4.15.1.7 Text-to-Speech Override










You can use the [Text-to-Speech Override](#) macro to replace the prescribed spoken text for a step with a text of your own.

Insert the [Text-to-Speech Override](#) macro in a step once you have converted the associated spoken text. The macro contains the bubble text as default spoken text. You can now change the text in accordance with your own ideas. Would you like to restore the original bubble text in the text box, then you can use the control [Insert Text from Bubble](#) to overwrite the current text with that.

4.15.2 Interactions

Interactions are used for the recording, display and control of the simulation contents. They portray all the usual actions that a user can carry out in an application.

Icon	Name
	Screen
	Explanation
	Mouse Action
	Key Stroke
	Input Text
	Select Single
	Radio / Checkbox

In the following chapters, you will find further information about the interactions.

i Note

Keep in mind that, when inserting interactions manually, no object information is saved. If a new recording is to be made, the object is to be manually defined in its sequence or skipped. These can also not be used for Desktop Assistant projects. It is generally only recommended to create actions during a recording.

4.15.2.1 Screen




The *Screen* macro contains the recorded screenshot of the application. The macro always marks the beginning of each step, followed by the recorded actions. When using the recording, this macro is created together with every new step as soon as an action is executed.

Parameters of the macro

The following parameters are available:

- *Screen Title:*
Contains the recorded screen title of the application.
- *Page:*
Contains the recorded screenshot image of the application.

> Recommendation

If you want to edit the screenshot for the *Screen* macro, it is possible to open it in an external image editor. To do this, select *Page -> Replace Image*  *-> External Editor...*

4.15.2.2 Explanation



The *Explanation* macro allows you to add further information to your project content.

The macro can be inserted during recording or rerecording or from the toolbar in project editor.





Parameters of the macro

The following parameters are available:

- *Use Demo Bubble for Practice:*
To reduce editing time, activate the option to use the same text and settings of the demo mode for the bubble in practice mode.
- *Show Control (Simulation):*
Use the parameter to show navigation controls within a bubble. When activated, the simulation pauses and resumes when the *Next* button of the bubble is selected.
The setting is recommended, if the bubble contains a long text to allow the user to read the text completely.

Type icon

A *Type (Icon)* can be assigned to the bubble, which can be selected from four different types. Each type is represented by an icon:

Type	Icon
<i>Info</i>	
<i>Remark</i>	
<i>Tip</i>	
<i>Warning</i>	

The icons are also added to the documentation generated for a project. The images of the icons are located in the resources *trainer Style* and *Documentation Style*. You can replace these with your own images.

4.15.2.3 Mouse Action



The *Mouse Action* macro simulates a mouse action on a button or a link.

Parameters of the macro

The following parameters are available:

- *Hotkey:*
If the action can also be activated by a keyboard shortcut, then the corresponding key combination may be entered in *Hotkey*. The key names are separated by spaces, for example: `ctrl k`.
- *Action:*
Specifies, what type of action is to be carried out with the mouse. The action is set during recording.
- *Ctrl, Alt, Shift:*
Specifies a key used for performing the action. The parameter is set during recording.

4.15.2.4 Key Stroke



The *Key Stroke* macro simulates a keystroke or a keyboard combination. The macro can require the user to press a key or combination of keys to continue the simulation.

Parameters of the macro

The following parameters are available:

- *Hotkey*:
Specifies the keyboard shortcut. The key names are separated by spaces, for example: `ctrl k`.

Defining a hotkey

To define a hotkey, proceed as follows:

1. Select the *Hotkey* parameter.
2. Click on the *Edit* button.
A dialog opens.
3. Press the key or the keyboard combination, which should be inserted.
The text field is filled automatically.
4. Confirm the dialog with *OK*.

The key or keyboard combination is entered in *Hotkey*.

4.15.2.5 Input Text



The *Input Text* macro simulates text being entered into a specific text field.

Parameters of the macro

The following parameters are available:

- *Input Text*:
Contains the value entered during the recording.
- *End Value*:
Supports the inputting of text in multiline text boxes. Whereas only single line texts can be entered using the *Input Text* parameter, the *End Value* parameter generates wordwraps, thus displaying the complete text in the text input box.
- *Confirm with*:
Specifies the manner in which the entry is to be confirmed. Three options are available: *Confirm with Tab*, *Confirm with Enter* and *Confirm with Button*. More than one option may be selected.
If the option *Confirm with Button* has been selected, then it also needs to be assigned an object position. It is also possible to select an entry without confirming it *Enter*, *Tab*, *Button*. In this case, the three confirmation options must be disabled.

i Note

If the *Confirmation* parameter for inputting a text is altered or an input is read out without being confirmed, then the instruction in the practice bubble for confirming the input is to be aligned manually.

- *Set Focus (Simulation):*
Specifies whether the focus is automatically set on the corresponding input field within the simulation page during playback, or if the users should define this themselves, which actually corresponds to the behavior of a live application.

Using a regular expression

A *Regular Expression* is an exactly defined search pattern for which a match is sought (pattern matching). When using a regular expression with an input field, the value entered during a simulation does not need to match exactly the value that was originally recorded. The value needs instead to correspond to a value described by the regular expression and is thus valid. The regular expression must be JavaScript compliant. Examples:

```
any input: /. */
not case-sensitive input: /input/i
valid alternatives: /^kg$|^kilogram$|^kilogramme$/
five-digit number: /^[0-9]{5} $/
four-digit number with 2 decimal places: /^[0-9]{4}[,\.\.]{1}[0-9]{2} $/
date: /^[0-9]{1,2}(-|/|\.)[0-9]{1,2}(-|/|\.)([0-9]{4} $|[0-9]{2} $)/
currency: /^-?[0-9]+$|^(-?[0-9]+)?[,\.\.]{1}[-0-9]{1,2} $/
e-mail address: /.+@\[?[a-zA-Z0-9-\.\.]+\.[\.[a-zA-Z]{2,4}|[0-9]{1,3})\]?/
```

4.15.2.6 Select Single



The *Select Single* macro simulates the selection of a list box or a selection list.

Parameters of the macro

The following parameters are available:

- *Selected Index:*
Contains the index number of the selected value.
- *Selected Value:*
Contains the value selected during the recording.

4.15.2.7 Radio / Checkbox



The *Radio / Checkbox* macro simulates the activation of a radio button or a checkbox.

Parameters of the macro









The following parameters are available:

- *Selected Value:*
Contains the value selected during the recording.

4.15.3 Page Macros

Page macros can be inserted into simulations, which will allow you to create simulations with greater flexibility. These can be positioned directly on screenshots, images, PowerPoint slides and book pages and can be activated for being displayed in a specific mode. In this way, simulations can be easily enriched with additional information, reference material and visual aids.

The following section describes page macros, which can be inserted into simulations.

Icon	Name
	Arrow
	Shape
	Highlight
	Text Pop-Up
	Image
	Icon Link
	Text Link
	Book Page

In the following chapters, you will find further information about the page macros.

i Note

Note that page macros cannot be used for documentation and can only be used for playing simulations. The only macro that can be used in combination with documentation is [Book Page Link](#), which appears as a graphic image.

4.15.3.1 Arrow



The [Arrow](#) object is customizable. It creates a path for which you can choose from a variety of arrow heads. The arrow's length, position and direction can be modified as desired.

Positioning a path point





There are path points at the beginning and end of an arrow that allow you to adjust its length and direction. Select one of the points and drag and drop it to the desired position on the book page.





Defining an arrow

An arrow object can be customized as follows:

- [Color](#):
Specifies the arrow's color. Select the color preview to open the [Color Selection](#) dialog box.
- [Thickness](#):
Specifies the arrow's thickness. The value is given in pixels.
- [Arrow Head 1 & 2](#):
Specifies the arrow's head for each side of the arrow.

There are several types:

Design	Name
	None
	Standard
	Triangle - Hollow
	Triangle - Filled

Design	Name
	<i>Diamond – Hollow</i>
	<i>Diamond – Filled</i>
	<i>Circle - Hollow</i>
	<i>Circle - Filled</i>

- *Advanced (Advanced Layout):*

Specifies the width and the length of the arrow heads in relation to the arrow's thickness. Enter a value between 2 and 20.

The value defines how many times the length of the thickness should be expanded (for example, value 3 = 3x the arrow's thickness).

4.15.3.2 Shape




The *Shape* object displays a variety of shapes to choose from for the purpose of enhancing the visualization of learning content, process flows and sequences. Shape objects can be used in a variety of ways and can contain text.

To insert a shape, select *Insert Shape*. A palette is opened in which you can select a shape type and a orientation.

For more information, refer to the section on *Shapes Overview*. You can change the type with the *Type and Orientation* parameter.

Design

- *Shape Color:*

Specifies the shapes' color. Select the color preview to open the *Color Selection* dialog box. Select *Transparent* , if you do not want to use any color.

- *Shape Value:*

Specifies the shape's character. Values between 0 and 100 can be entered here. The outcome will vary depending on the type of shape selected. For example, you can change the width of an arrow or smooth the corners of a square.

Note that this setting is not available for all shapes. For more information, refer to the section on *Shapes Overview*.

You will find descriptions on additional settings under the section on *Editing Parameters*.

Effects

Under *Effects*, there is a variety of settings that allow you to define the behavior and design of a shape.


- *Gradient*
 - *Shape Color (Gradient)*
 - *Border Color (Gradient)*
- *Design Roll-Over*
 - *Shape color*
 - *Shape Color (Gradient)*
 - *Border color*
 - *Border Color (Gradient)*
- *Design Click*
 - *Shape color*
 - *Shape Color (Gradient)*
 - *Border color*
 - *Border Color (Gradient)*

4.15.3.3 Highlight



This macro makes it possible to locate an additional highlight on a screenshot. The highlight is independent of a bubble and can be used to support an explanation. As only one highlight can ever be used for a macro, whereas it may be necessary for a number of highlight frames to describe a situation, this macro can be used in addition to the already existing highlight frame.

Inserting and positioning a highlight

1. From the Thumbnail View, highlight the macro *Page* to which you would like to add your highlight.
2. Then click on *Insert -> Insert Page Macro -> Highlight*.
The default position for the highlight macro is directly under the macro *Screen*  to ensure that it is displayed throughout the entire duration of the step's recording. If the highlight should be displayed with a particular macro, you can simply drag the highlight in front of the desired macro.
3. From the step view, you can now position (drag & drop) the highlight on the screenshot. To adjust the size of the highlight, click on one of the frame's points and with the left mouse button pressed, drag the frame to the desired size. Release the mouse button to confirm the changes.

Macro options

- *Display in Mode:*
You can use the various options to define the mode in which the highlight is to be displayed.

- *Hide Highlight:*
Activate this parameter if you want to hide the highlight in the simulation.
This setting has no impact on the highlight being displayed in the documentation if the parameter *Show in Documentation* is activated.
- *Object Name:*
You can use this parameter to specify a name for the object. If you have two *Highlight* macros in a step, you will need to change the name. In the event of highlight sharing the same name, only the second one in the sequence will be displayed.
- *Show in Documentation:*
If you activate this parameter, the highlight you have created will be displayed in the documentation.
- *Highlight Color:*
Defines the color of the highlight border.
- *Highlight Position (Documentation):*
Defines the position (left, top) and the size (width, height) of the highlight on the screenshot in pixel.

4.15.3.4 Text Pop-Up



This function inserts a text pop-up which can be opened by a button. You can insert any text you like in this box as well as an image.

The text pop-up can be formatted using the *Text Pop-Up Position* subcategory to adjust its size and position.

Defining type and title

- *Type:*
Different types, differentiated by a corresponding icon, can be defined for displaying the textbox. Using different types enables you to highlight the text box content and present it more clearly to the user.
The following types are available and can be selected using the parameter *Type*:
 - *Standard*
 - *More Info*
 - *Tip*
- *Title:*
You can use the parameter *Title* to specify a title for the text box. If you do not want to display a title, you should leave the field blank. The default setting for the *Standard* type is no title whereas placeholders are displayed for the other types.

Further options

- *Show on Roll-Over:*
This option allows you to define whether a text pop-up should appear when the mouse cursor rolls over the icon. When the mouse cursor rolls out of the icon, the text pop-up will hide again. The text pop-up behaves in the same way as a tooltip.

- *Fade In/Out:*
This parameter defines whether the text pop-up is displayed or hidden with a fading in effect when being opened or closed. Deactivate the setting if you wish to avoid this effect.
- *Hide Text Pop-Up in Editor:*
The default setting is for the text pop-up to be displayed in the book page editor. Activate the parameter to hide it for editing. If you would like to reinstate the text pop-up in the view, deactivate the setting.

4.15.3.5 Image



This object allows you to insert an image file to your book page.

Inserting an image

To insert an image, proceed as follows:

1. Select Insert Image in toolbar.
The *Insert Image from Workarea* dialog box opens.
2. Select an image in your workarea structure.
or
Use *Insert File...* to import an image.
3. Select *Ok*.

You can use *Replace Image*  to change the image file.

See the chapter *Supported File Formats on Book Pages* for supported file formats.

Parameters of the object

The following parameters are available:

- *Image Roll-Over:*
You can use the *Image Roll-Over* option to insert an image that is shown when the mouse is moved over it.
- *Image Click:*
You can use the *Image Click* option to insert an image that is shown when the image is clicked on.
- *Keep Aspect Ratio:*
If this parameter is activated, the aspect ratio is retained when scaling an image. Deactivate this parameter if you want to be free to change the size of an image.
- *Zoom:*
The *Zoom* option allows you to zoom in and out of images on the book page. An icon will be inserted onto the image. By clicking on the icon, the image will be shown in its original size. This allows you to insert an image into the book page and save space when scaling it.

4.15.3.6 Icon Link



The *Icon Link* allows you to link content found in the work area or to create a link to an external source, such as a website. An icon will then be inserted, to which a link can then be assigned. The icon is customizable. You can insert an image as well as a tooltip for the target link.

The design of the icon is based on the *Style* selected for the simulation that can be defined in the central configuration dialog in *Authoring Settings -> General-> Page style*.

Defining an icon

The look of the icon will depend on what book style has been chosen, which can be defined in the *Style* settings. For your defined target link, from the option *Type*, you can choose what kind of icon you would like to use:


- *Demo Mode*
- *Practice Mode*
- *Test Mode*
- *Concurrent Mode*
- *Quiz*
- *Book page*
- *Book*
- *Document*

Alternatively, your own icon can be inserted using the option *Image*. It is recommended that you use your own icon when linking to an external source or when the icon should not have the same look as the book style itself.

4.15.3.7 Text Link



Text Link is a text field to which you can add texts and links. The entire surface area is actually a button that can easily be linked to an external Internet page or an object from the workarea. This allows you to display additional information if desired.

1. To create a link, go to the *Insert link...*  function.
2. A dialog will then open in which you can specify a link or select an object from the workarea.
A link to a web page or similar is to be entered in the text field under *Available*. This should be in the format *http:// www...*
3. Confirm your entry by clicking on *OK*.

When launched, the linked page is automatically opened in a new browser window. If you would like to open the page in the same window, you need to deactivate the setting *Open in a new window*.


If the linked page or object from the Workarea is opened in a new window, you can define properties for displaying the browser window that has been opened.

4.15.3.8 Book Page



An existing book page can be inserted into a simulation with a link using the *Book Page* macro. Changes made to the book page also affect the link in the simulation.

Insert a book page as follows:

1. Use the toolbar to insert the *Book Page* macro into the project. You can select this macro from the drop-down list for the book page objects.
When the macro is inserted, a new step is automatically created.
2. You can then link the book page you want using the *Book Page* parameter. Select *Edit Link...*  to open the *Edit Link* dialog box where you can select the book page.
3. You can activate the book page for the mode you want under *Simulation*.

Keep in mind that the objects available on the book page cannot be edited. It is only possible to add additional objects within the project editor or to edit the book page directly in the book page editor.

5 Desktop Assistant

The Desktop Assistant is an EPSS solution which is available at the end of the learning process to provide your users direct support in your enterprise application. If previously learned processes or process steps are no longer sufficiently front of mind, the user can request support as and when required and have himself prompted within the live application or obtain explanations on areas of the application user interface that are relevant to the process or especially prone to error. This optional assistance boosts your user's confidence in using the application and gradually ensures optimal performance in handling the process. It also enables your users to execute seldom used processes with the greatest possible accuracy, for example when having to stand in for someone without notice.

The Desktop Assistant runs discreetly in the background in your application and indicates by means of an icon in the information area whether there is information available on the application page in question. Should he need to, the user can use this icon to launch the support and return it to the standby state when the need no longer exists.

The degree of support available here is very variable. The content can accompany the user in detail through established processes, explain entire application interfaces specific to a particular process and object and prevent departures from predefined processes. If there are process-related simulations available, these too are offered to the user to give him the opportunity to have knowledge of process routines or steps demonstrated to him in the simulation environment or to work through them without affecting the live application.

5.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

5.2 General

Desktop Assistant types

The following Desktop Assistant types can be created:



Desktop Assistant

Displays a content library to provide users context-specific content.

See the chapter *Desktop Assistant*.



Context Help

Displays context-specific information to explain the use of controls.

See the chapter *Context Help*.



Guided Tour

Displays process-specific information to explain a process step by step.

See the chapter *Guided Tour*.

Creating Desktop Assistant projects

Desktop Assistant projects (context help and guided tour) can be created in two ways:

- **Using existing simulations**
You can convert projects by using prerecorded simulations. Using this method can reduce the effort of creating a project, because application pages and their corresponding objects do not have to be manually rerecorded.
See the chapter *Converting Simulations*.
- **Manual creation**
Creating projects manually offers you the opportunity of providing an application with EPSS support individually and independently of pre-existing simulations. You can identify the objects required for your processes on each application page and assign them help texts.

5.3 Prerequisites for Target Applications

The Producer ensures the creation and the playback of Desktop Assistant content for specific applications. Detailed information is available in the Product Availability Matrix (PAM) of SAP Enable Now.

Desktop Assistant for SAP applications

The following recommendations are necessary for the recording and playback of a Desktop Assistant for SAP applications:

- Consider the *Settings for the SAP Client* for the recording and playback.
- When recording SAP applications, make sure that you have only opened one SAP session. First, close all the sessions that you do not need for the recording.
- The playback of content requires the corresponding GUI Theme (such as SAP Tradeshow) used for the recording.

The support of additional applications has to be verified previous according to the technical feasibility. Contact your SAP account manager for the necessary support.

Caution

Desktop Assistant content does not support multi-monitor environments. Therefore, when creating content, make sure that the Producer and your target application are both situated on the screen registered on the system as the main monitor.

Note

SAP NetWeaver - Update

When updating SAP NetWeaver (including SAP_Basis), note that the release versions can include different page key information for specific objects. This can result in a partial mismatch of your content during playback.

Once the SAP NetWeaver update is finished, play back your content and check your content matching. Update the missing objects or replace the page key attributes with regular expressions, if required.

Playback in Google Chrome or Microsoft Edge

You are able to playback a Desktop Assistant in Google Chrome or Microsoft Edge. The Desktop Assistant has to be recorded in Microsoft Internet Explorer.

To support correct page recognition you have to install a browser extension. During installation of the Desktop Assistant, activate the option *Install browser extension*. The extension can be uninstalled from the *Extensions* settings of the browser.

Note

After uninstalling the extension in Google Chrome, it cannot be installed again with the Desktop Assistant installer. Google Chrome blocks the installation. You can install the extension from the Chrome Web Store. Search for *Enablement Assistant*.

5.4 Desktop Assistant

The Desktop Assistant lets you generate a context-based content delivery. The Desktop Assistant combines different content types and can be thought of as a content library.

The required contexts of the application pages are saved automatically when a project is recorded. The Desktop Assistant uses them to assign content during playback.

5.4.1 Desktop Assistant Components

The Desktop Assistant has the following main components that are used during playback:


- **Sidebar**
The sidebar is a navigation bar and is used to start the main functions of the Desktop Assistant.
- **Main window**
The main window shows the available contents for a specific page context.
During playback of a guided tour, the window shows the step list.

- **Book window**

The book window shows the book (used with book reader), which was opened from the content window. During playback of the book, the main window and content window are hidden.

If there is no content available for a context, the list is empty and a hint is shown. If the user changes from a page with an available context to a page without an available context, the Desktop Assistant shows the content of the page with the last available context.

Activating components and functions

The components and functions of the Desktop Assistant can be displayed or hidden by using the settings (menu *Tools -> Settings...* ) under the *Desktop Assistant: Playback Settings -> Desktop Assistant*.

5.4.1.1 Sidebar

The sidebar of the Desktop Assistant contains the following controls:

- *Content:*
Indicates if content is available. Allows the user to open the main window.
- *Search:*
Allows the user to open the search in the main window or in the library.
- *External Search:*
Allows the user to search on an external URL.
- *Request Content:*
Allows the user to open an e-mail window for requesting content.
- *Add Sticky Note:*
Allows the user to insert a sticky note for an application and to enter individual information.
- *Instant Help:*
Allows the user to activate the available contents of the context help for the current context. The control is enabled by default.
- *Start Recording:*
Allows the user to record a process in the current application.
- *Exit:*
Finishes the playback and closes the Desktop Assistant.

5.4.1.2 Main Window

The main window displays the available content for a context and allows the user to select and start content.

The main window contains the following tabs and functions:

Content

The *Content* tab displays the available content for the current context.

When selecting a content entry, the available modes and documentation for the selected content as well as the description text will be displayed. You can start or open a content object. A [Back](#) control allows you to go back to the content list.

Search

The [Search](#) tab allows users to search specific content for a description and short description.

Info

The [Info](#) tab allows you to provide general information about the Desktop Assistant for the user. The information is always available and is not context-specific.

The tab uses the text of the Desktop Assistant's root group.

User Area

The [User Area](#) tab contains the recorded processes as documents. The documents can be opened, shared or deleted. Further processes can be recorded.

With mouseover within a document, the following controls are displayed:

- [Rename Document:](#)
Allows the user to rename the selected document.
- [Open Document:](#)
Allows the user to open the selected document.

The footer of the tab contains the following controls:

- [Record Document:](#)
Allows the user to record a new document.
- [Share Documents:](#)
Allows the user to share the selected documents by sending an e-mail.
- [Delete Documents:](#)
Allows the user to delete the selected documents

Settings

The [Settings](#) tab displays settings for specifying the displayed content.

The [Settings](#) tab includes the following entries:

- [Show Hidden Help:](#)
Allows the user to reset hidden help elements which were set to hidden during playback.
- **Roles**
Contains settings for displaying role-specific content.
 - [Select All:](#)
The user is only allowed to display content for his or her own role.
 - [Show Content Without Roles:](#)
Allows the user to display content with no role assigned.
 - [Change Role:](#)
Allows the user to specify the roles for which content is shown.




Further functions

Further functions of the main window:

- [Share Content:](#)
Allows the user to share specific content with other users. A menu opens to copy the link or the share the link via e-mail.
- [Help:](#)
Allows the user to open a help window with information about the Desktop Assistant.
- [Close:](#)
Allows the user to close the main window. The main window can be reopened by using the sidebar.

5.4.2 Creating a Desktop Assistant













To create a Desktop Assistant, consider the following process:

- 1 Desktop Assistant content**
Create your Desktop Assistant content, for example, guided tours, simulations or book pages.
- 2 Playback settings**
Set the relevant settings for the Desktop Assistant playback in the [Settings](#)  dialog box. Configure the windows and sidebar.
See the chapter *Desktop Assistant Playback Settings*.
- 3 Desktop Assistant**
Create a Desktop Assistant by using a Desktop Assistant object  or a group .
See the chapter *Creating a Desktop Assistant Object*.
See the chapter *Creating a Desktop Assistant Group*.
- 4 Configuration**
Configure and generate the Desktop Assistant.
See the chapter *Creating a Desktop Assistant Object*.

To create a Desktop Assistant, you first need to perform various preparation steps before configuring and generating the mode.

5.4.2.1 Desktop Assistant Content

In the Desktop Assistant, you can include the following content types:

Category	Icon	Content type	Category	Icon	Content type
Simulation			Documentation		
		Demo mode			All types and formats DOC, PDF, HTML, PPT
		Test mode	Other content		
		Practice mode			Books
		Concurrent mode			Book pages
Desktop Assistant projects					Text units
		Guided tour			Groups
		Context help			Media objects

Creating content

Create a group in the content tree of the *Explorer*. It is also possible to use the root group of the complete tree with different sub groups. Include the required content in the group. The order of the content is not relevant for the display in the Desktop Assistant, as the content is displayed according to context. Additional groups allow you to structure the content in the tree.

If you do not want to show a specific content object, hide the object in the tree.

For some content objects, it is required to record a context to use them in the Desktop Assistant. For further information, see the chapter *Recording a Context*.

➤ Recommendation



Add a description or a short description for your content objects. It will be shown in the Desktop Assistant details view during playback. If there is no description, then a default text "Start your preferred content below" is shown.

5.4.2.2 Creating a Desktop Assistant Object

You can use a dedicated Desktop Assistant object to generate a Desktop Assistant. With this object, you can reference available content for specific use cases. Each Desktop Assistant object has individual settings and can be filtered. This is recommended to specify different Desktop Assistant content and configurations.

Generating the Desktop Assistant

To generate a Desktop Assistant using a *Desktop Assistant Object* , proceed as follows:

1. In the *Explorer*, select *New Object* .
An overview of all objects opens.
2. Select *Desktop Assistant* .
The *New Desktop Assistant Object* dialog box opens.
3. Adapt the following settings:
 1. *Name*:
Enter a Desktop Assistant name.
The default name is the object type with an ID.
 2. *Language*:
Select the language of your content.
 3. *Select Group*:
Select the group with your Desktop Assistant content.
 4. *Use Filter*:
Allows you to select a filter to be applied to the content.
4. Select *OK* to create the object.
5. The *Desktop Assistant Configuration* dialog box is opened. The dialog box shows the available content types of the group.
Select your desired contents.
6. Select *OK* to generate the Desktop Assistant.

The content is inserted into the Desktop Assistant object as references.

Adding and removing content

You are able to add further objects to the Desktop Assistant object or to remove available objects.

We recommend adding the content as references to use the content for other publications too. Copy and paste the object into the Desktop Assistant object and select *As Reference* in the opened dialog box.

Afterwards, select *Generate Desktop Assistant*  to generate the content again.



The structure of the content is not relevant for the display in the Desktop Assistant, as the content is displayed according to a context. Additional groups allow you to structure the content in the tree.

5.4.2.3 Creating a Desktop Assistant Group

You can use an available group with content to generate your Desktop Assistant. This is recommended, if a content structure is only used for a specific Desktop Assistant.

Generating the Desktop Assistant

To generate a Desktop Assistant by using a [Desktop Assistant group](#) , proceed as follows:

1. Select a group  with your Desktop Assistant content.
2. Select [Generate Desktop Assistant](#)  in the object editor.

i Note

If you are using contents from another workarea and have removed some objects locally, then a Generate Desktop Assistant dialog box opens. It reminds you that locally removed objects are not considered for the Desktop Assistant generation. Select Cancel to go back and reload the missing objects from server, or Continue to proceed with the generation.

For more information on using content from another workarea, see the [Manager Manual](#), Reuse content from other workareas chapter).

3. The [Desktop Assistant Configuration](#) dialog box is opened. The dialog box shows the available content types of the group.
Select your desired contents.
4. Select [OK](#) to generate the Desktop Assistant.

The content is inserted into the Desktop Assistant object as references.







Adding and removing content

You are able to add further objects to the Desktop Assistant group or to remove available objects. Afterwards, select [Generate Desktop Assistant](#) to generate the content again.

The structure of the content is not relevant for the display in the Desktop Assistant, as the content is displayed according to a context. Additional groups allow you to structure the content in the tree.

5.4.2.4 Desktop Assistant Object and Group

The Desktop Assistant has the following characteristics:

Type	Description
Icon	 <p>Desktop Assistant object</p>
	 <p>Desktop Assistant group</p>
Individual files	Contains the DNT file for playback.
Basic properties	<p>The object editor contains the following parameters:</p> <ul style="list-style-type: none"> • <i>Name:</i> Specifies the name of the Desktop Assistant. • <i>Language:</i> Specifies the language of the Desktop Assistant. • <i>Use Filter</i> (Desktop Assistant object only): Specifies if a filter is applied to the content. • <i>Start Link: Desktop Assistant:</i> Generates a link to the DNT file for starting the content. • <i>Desktop Assistant Configuration</i> (Desktop Assistant object only): Contains the specified configuration of the Desktop Assistant. The field cannot be edited.
Object functions	<p>The object editor contains the following controls:</p> <ul style="list-style-type: none"> •  <i>New...</i> Creates a new content object in the Desktop Assistant structure. •  <i>Generate Desktop Assistant:</i> Generates the Desktop Assistant. The <i>Desktop Assistant Configuration</i> dialog box is opened. •  <i>Play</i> /  <i>Stop Desktop Assistant:</i> Starts and stops the playback of the Desktop Assistant.

5.4.3 Editing the Desktop Assistant

There are different settings and functions available in the Desktop Assistant for editing and optimizing content for your use cases.

5.4.3.1 Recording a Context

Beside projects you can also add other objects to a Desktop Assistant. Objects in a Desktop Assistant must have context information. The context information for projects is added during recording and for other objects, each context has to be recorded individually. The context can be an application with the current application page and is stored in the *Context* parameter.

A context can be recorded for the following objects:



Groups



Text Units



Media Objects





Books



Book Pages

Recording a context

To record a context, proceed as follows:

1. Open the application at your required application page.
2. Select an object in the content tree of the Producer.
3. Select *Record Context*  in the object editor.
4. The *Select Window and Profile* dialog box opens. You can define the following parameters:
 - *Choose Window:*
Select the target application window for the recording.
 - *Choose Profile:*
Shows the application profile for the target application window.
 - *Associate with Selected Window:*
Specifies, that the profile is always used for the target application window.
5. Select *Record* .


The context of the selected window is recorded and the context information is inserted into the *Context: Desktop Assistant* parameter of the object.

5.4.3.1.1 Editing a Context

You can use more than one context information for an object. This gives you more flexibility in using content for different application windows or applications.

Editing a Context

To edit a context, proceed as follows:

1. Select an object in the content tree with an available context.
2. Select *Record Context*  in the object editor.
3. Afterwards, a dialog box is displayed.

Select one of the options and confirm with *Ok*:

- *Add Context:*
Select this option to add the context to an available context.
The *Select Window and Profile* dialog box is displayed to start the recording.
- *Update Context:*
Select this option to update a recorded context with a new version.
The *Update Context* dialog box is displayed, with all available contexts. Select a context to record.
- *Replace All Contexts:*
Select this option to remove all available contexts and to insert a new context.
- *Delete Context:*
Select this option to remove an available context.
The *Delete Context* dialog box is displayed, with all available contexts. Select a context to delete.

Update / Delete Context dialog box

When updating or deleting a context, a dialog box is opened. The dialog box displays all available contexts of an object.

- *Select Profile:*
The dropdown box contains all profiles, which are used for recording the contexts. Select a profile to display the correspondent contexts.
- *Available Contexts:*
The field displays the available contexts for a selected profile. Select a context to display the detailed information.
- *Context Details:*
The field displays the details of a selected context.
- *Update* or *Delete:*
Select the control to update or to delete a selected context.
When updating a context, the *Select Window and Profile* dialog box is displayed to start the recording.

5.4.3.2 Excluding Project Pages

The Desktop Assistant uses all included content objects to match them with a context. In some cases, it is necessary to hide a project for a specific context. In projects, you can exclude a page key from the context recognition of the Desktop Assistant.

To do this, activate the option *Exclude from Desktop Assistant* of the *Screen*  macros:


- In Desktop Assistant projects, the option is located in the subcategory [Key](#).
- In simulation projects, the option is located in the subcategory [Rerecord](#).

5.4.3.3 Requesting Content

When using the Desktop Assistant, users require specific content. A function is available that allows users to send a message to the author to specify their needs.


Content can be requested using the [Request Content](#) button in the sidebar. If no content is found, the link for requesting content is displayed in the main window.

Settings

The following settings are available in [Settings](#)  under [Desktop Assistant: Playback Settings](#) -> [Desktop Assistant](#) - > [Desktop Assistant - Sidebar](#):

- [Request Content Type](#):
Specify a type for requesting content:
 - [E-Mail](#):
Allows you to send a request with an e-mail.
 - [URL](#):
Allows you to open a contact form to enter a request.
- [E-Mail](#):
Insert a recipient e-mail address.
- [URL](#):
Insert a URL, for example to open a contact form.
- [URL Parameters](#):
You can specify the application name and the executable as parameters for the URL. The default is `application=&executable=`.
- [Position: 'Request Content' Control](#):
Specify the position of the [Request Content](#) button in the sidebar.

Texts

The e-mail contains a standard text, which is located in the [Playback Dictionary](#)  of the [Desktop Assistant](#). You can change the text as required by using the dictionary editor.


The texts have the IDs [MAIL_SUBJECT](#), [MAIL_HEADER](#), [MAIL_FOOTER](#), [MAIL_DATA](#) and [MAIL_TOOLTIP](#).

5.4.3.4 Searching Content

The user can search for additional content that is not available in the content list. There are two search types:

- Search in published content of the Desktop Assistant
- Search by using an external URL

Search settings

The following settings are available in [Settings](#)  under [Desktop Assistant: Playback Settings -> Desktop Assistant -> Desktop Assistant - Sidebar](#):

- [Search Type](#):
Specify a search type:
 - [library](#):
Opens the library for searching in the library content.
 - [Desktop Assistant Group](#):
Shows the [Search](#) tab in the main window for searching in the Desktop Assistant content.
- [Search Group](#):
Specify a group of your workarea.
- [Position: 'Search' Control](#):
Specify the position of the [Search](#) button in the sidebar.

External search settings

The following settings are available in the central configuration dialog box under [Desktop Assistant: Playback Settings -> Desktop Assistant -> Desktop Assistant - Sidebar](#):

- [Position: 'External Search' Control](#):
Activate the external search and specify the position of the [External Search](#) button in the sidebar.
- [URL](#):
Allows you to specify a URL for the external search. Enter the URL in the following structure:
`https://www.google.com/#q=`
`https://www.bing.com/search?q=`
`https://search.yahoo.com/search?p=`
`https://www.wolframalpha.com/input/?i=`

Note

Do not delete or change = of the URL parameter.

- [Provide Context Information](#):
Provides additional context information of the user with the search URL during search. The context information is used for search. Activate the setting if your specified search can use the context information. The provided context information is specified in the [Context Information](#) parameter.
- [Context Information](#):
Specifies the context information if the setting [Provide Context Information](#) has been activated. The following context information can be provided:
 - EXE of the current application: `&executable=`
 - Page key of the current application page: `&pagekey=`

i Note

Do not change the structure of the context information string.

5.4.3.5 Recording Content

A user can record his or her own process during playback of the Desktop Assistant. The process can be saved as a Microsoft Word document or as video. The content can be used to share information about a process with other users via e-mail.

The Microsoft Word document is saved in the local cache folder of the user and the video is stored in a specified folder. The recording is executed as a quick recording.




Activating recording


The following settings are available in *Settings*  under *Desktop Assistant: Playback Settings -> Desktop Assistant - > Desktop Assistant - Sidebar*:

- *Position: 'Recording' Control:*
Activate the recording and specify the position of the *Recording* button in the sidebar.
- *Allow Video Recording:*
Activate video as output format.
- *Video Recordings Folder:*
Specify a folder for storing the video files. The default folder is: %userprofile%\Videos\Desktop Assistant Videos
Video recordings are not stored in the Desktop Assistant cache folder because of the file size.

Recording a document

A process can be recorded using the *Start Recording* button in the sidebar or the *User Area* of the main window.

1. A dialog box with the output formats is displayed.
Select an output format.
2. The *Recording Area* dialog box is opened:
 - Select *Region* or *Full Screen*:
Specify if you want to record a region with a predefined size or the exact application window.
 - *Choose Size* (Region):
In the dropdown box, you can select a predefined size for the region.
3. Start the recording using the *Record*  button.
If you want to cancel the recording, select *Cancel*.
4. Now the recording starts.
Navigate through the application screens required for the process.
5. **Pausing the recording**
The recording can be interrupted using the *Pause*  button in the systray icon. If you are recording an audio, then the audio recording is also paused.
Resume the recording by using the *Record*  button. The recording is continued from the exact point at which it was paused.

6. **Stopping the recording**
Select [Stop](#)  in the systray icon to end the recording.
7. The [Generate Document](#) dialog box is opened:
 - [Name:](#)
Enter a project name.
8. Select [OK](#) to generate the content.

Afterwards, the generated document or video is available in the [User Area](#) view.

5.4.3.6 Using Roles

You can manage and display your content for your users by using specific roles. These roles are used to filter the content that is available to users.


Defining roles

Each object has a parameter [Roles](#). The parameter is available in the object editor of the [Explorer](#).

To define a role, proceed as follows:

1. Select an object.
2. Go to the [Roles](#) parameter of the object editor (in [Advanced layout](#)).
3. Insert a role name into the multi-line edit field.
4. You can add further roles separated by a comma.

Activating roles

Roles can be activated with the setting [Consider Roles](#). The setting is available in [Settings](#)  under [Desktop Assistant: Playback Settings -> Desktop Assistant](#) in the subcategory [Desktop Assistant - Controls and Behavior](#).

Now, the main window of the Desktop Assistant includes a tab entry for roles in the settings tab.

5.4.3.7 Using Sticky Notes

Sticky notes allow the user to insert additional notes for an application and to enter individual information. A sticky note is only displayed for the user who inserted it and not for other users. The text of the sticky note is saved in the local cache of the user.

The sidebar of the Desktop Assistant includes a control for adding sticky notes. When inserting a sticky note, the bubble with an editing toolbar is displayed. The user can enter and edit the text or can delete an available sticky note.


Note

It is only possible to insert one sticky note for a screen.

Activating sticky notes

Sticky notes can be activated with the setting *Position: 'Add Sticky Note' Control*. The setting is available in *Settings*  under *Desktop Assistant: Playback Settings -> Desktop Assistant* in the subcategory *Desktop Assistant - Sidebar*.

Sticky note bubble

The sticky note uses the bubble style *Sticky Note*. The bubble style is available in the *Bubble Style*  resource.

5.4.3.8 Updating Profile Information

When the Producer is updated to a higher version, the application profile resources are also updated. Desktop Assistant content contain profile information from the application profiles, which can be outdated and can influence whether objects are correctly recognized.

It is recommended to update the profile information of a project. A dialog box shows a hint, if the profile information is outdated.

The dialog box contains the following buttons:

- Select *Continue* to update the project.
- Select *Cancel* to discard the update.

Recommendation

Archive the project before updating, in order to keep the original status.


Alternatively, create a new project by using the current application profile and keep the older project.

5.4.3.9 Using Content Categories

You can use content categories to sort your content in the main window of the Desktop Assistant. You can assign content categories to your content objects. During playback of the Desktop Assistant, the content is structured in dropdown lists with the corresponding content categories.




There are default content categories that are translated in multiple languages. You can use the defaults or you can create your own content categories.

Activating content categories

Content categories can be activated with the setting *Consider Content Categories*. The setting is available in the *Settings...*  under *Desktop Assistant: Playback Settings -> Desktop Assistant* in the subcategory *Desktop Assistant - Controls and Behavior*.

Now the content in the main window is structured by using the assigned content categories.

Content categories resource

Content categories are saved as a *Content Categories*  resource in the *Adaptable Resources*  of the resource tree. This resource includes all content categories. To open the editing dialog box, choose the *Edit Content Categories...*  button in the object editor.

The resource allows you to use content categories consistently in different workareas and you can also handle the resource in an authoring environment with a Manager workarea.


5.4.3.9.1 Managing Content Categories

Content categories are managed in the *Content Categories* dialog box. To open this dialog box, choose *Tools -> Manage Content Categories...*  in the menu.

In the *Content Categories* dialog box, you can create, rename, and delete content categories.

Creating content categories

To create a content category, proceed as follows:

1. Select the *Add*  button.
A dialog box opens.
2. Enter the name of the content category.
3. Confirm with *OK*.


The new content category is displayed in the list.

> Recommendation

The content category name entered is used in all languages during playback. To translate the name, see the chapter *Translating Content Category Names*.

Renaming content categories

To rename a content category, proceed as follows:

1. Select the *Rename*  button.
A dialog box opens.
2. Change the name of the content category.
3. Confirm with *OK*.

The content category is displayed with the new name.

i Note

You only can rename content categories that are created by authors. The standard content categories cannot be renamed.

i Note

When renaming a master tag that has been assigned to content objects you have the following options:

Master and All References


Renames the master tag and all assignments in the content objects.

Master Only

Renames the master tag only. For the assignments a new author tag with the previous name of the master tag is created.

Removing content categories

To remove a content category, proceed as follows:

1. Select the content category in the list.
2. Select the [Remove](#)  button.

Once you have edited your content categories, close the dialog box by clicking [OK](#).

i Note

When removing a master tag that has been assigned to content objects you have the following options:

Master and All References


Removes the master tag and all assignments in the content objects.

Master Only

Removes the master tag only. For the assignments a new author tag with the name of the master tag is created.

Replacing content categories


To replace a content category with another content category, proceed as follows:

1. Select the content category in the list.
2. Select the [Replace](#)  button.
The Replace Content Category dialog box is opened. The selected content category is displayed in the [Replace](#) field.
3. Select the content category in the [With](#) dropdown box.
4. Select [OK](#).

The content category in all objects are replaced with the replace content category.

Changing author content categories to master tags

You can change your created author content categories to master content categories. Proceed as follows:

1. Select the author content category in the list.
2. Select the [Change to Master](#)  button.

The tag is displayed with *Master Content Category* type and icon.



5.4.3.9.2 Translating Content Category Names

The default content categories are translated into multiple languages. In the *Explorer* and *Content Categories* dialog box, only the text keys of the categories are shown. During playback of the Desktop Assistant the categories are displayed in the current content language.

You can translate your created content categories in your required languages. Proceed as follows:

i Note


The content category name entered is used as a text key in the translation files of the *Content Categories* resource. Make sure, that the text key of the content category is entered as one string without spaces. You can use an underscore or a hyphen to connect words. See also the text files of the resource for examples.

1. Select the *Content Categories*  resource in the *Explorer*.
2. Use the secondary mouse button to open the context menu.
3. Select the *Open Folder*  menu entry.
4. The resource folder contains translation files for each language.
Open the translation file of your required language in a text editing program.
An overview of the languages and language codes is available in the chapter *Content Languages Overview*.
5. Enter the text key and the translated name of the content category. Separate the text key and the name with a tab stop.
For example: `business_process Business Processes`
6. Save and close the file.
7. Restart the Producer.

When playing back the Desktop Assistant the content category is displayed with the translation.

5.4.3.9.3 Assigning Content Categories

You can assign your created content categories to the objects within your tree structure. Proceed as follows:

1. Select an object in the tree structure.
2. Select the button *Edit...*  next to the parameter *Content Categories* in the object editor.
A dialog box opens.
3. You can assign one or more content categories to the object. To do so, select the corresponding checkbox.
4. Select *OK* to close the dialog box.

Used content categories

In the *Manage Content Categories* dialog box, you can see whether a content category is assigned and how often. A number is displayed in the *References* column of the content categories list.

5.4.3.10 Desktop Assistant on Running Web Assistant

While the Desktop Assistant is used for desktop applications, for example, SAP GUI for Windows, Web Assistant is often used in parallel for web-based applications, for example, SAP S/4HANA. To improve the user experience when using both playback components, the Desktop Assistant recognizes an application with an opened Web Assistant and therefore the available context-sensitive help. The Desktop Assistant is minimized automatically and shows a message for the user. After the user changes to an application without Web Assistant the Desktop Assistant is shown again.

To activate hiding of the Desktop Assistant, proceed as follows:

1. Open the *Settings...* and go to *Desktop Assistant: Playback Settings -> Desktop Assistant -> Desktop Assistant - Content and Behavior*.
2. Activate the option *Hide Desktop Assistant on Running Web Assistant*.
3. Activate or deactivate the option *Show Web Assistant Message*.

5.4.3.11 Web Assistant Mode Additional Editing Options

If you have activated *Web Assistant Mode* for the Desktop Assistant projects, you have the following additional options for guided tours and context help in macro editor:

1. *Title*:
Specify a tile title for the Web Assistant mode. Default is empty.
2. *Tile Icon*:
Choose a specific tile icon from the dropdown. Same icons as in original Web Assistant projects are supported.
3. *Bubble size*:
Define the size of bubbles for playback. Default for regular bubbles is *S*. Default for freestanding bubbles that are attached to the help panel is *M*.

Hotspot size:

Choose the size of the hotspot for the Web Assistant playback mode. This parameter is not relevant for guided tour steps as it only applies for circle and icon hotspots

5.5 Context Help

The context help helps users to work with an application by offering help descriptions of issues and functionality independently of process. The information can be presented in relation to different contexts, thus providing specific information the user can access individually.

The context help thereby enables the user to orientate himself quickly in complex application interfaces and use the explanations to refresh and apply what he has learnt.

Furthermore, presenting context-related information makes it possible to highlight frequently occurring problems, explain changes in the application or emphasize information that is important for the process.

Use cases

A context help lends itself for example to the following use cases:

- For information about system changes on an object or an application page, for example during maintenance work.
- For fading in additional problem-related explanations for individual objects, for example in order to prevent incorrect inputs by providing notes and explanations for the objects in question.

Context help in Desktop Assistant

Context help projects can be used in a Desktop Assistant and are displayed as *Instant Help*.

5.5.1 Context Types

The context help recognizes three context types. These can be used in combination but can also be used individually in a project. This allows all sorts of information to be presented in different circumstances, thus providing users with the necessary specific information.

A context refers to a specific issue in an application so as to describe it and support the user with the appropriate context-related information.

Application Context



This context offers general information about the application as well as more in-depth information or links. The application context underpins the context help and serves to recognize the displayed application and call corresponding learning content.

This context can also be used on its own.

The macros for the application context are held in the second step of a project.



Screen Context



Describes an application page in greater detail. This can be for example: describe its use in general terms, draw attention to problem areas or else highlight changes in the event of a new version.

Object Context



Defines a specific object. This can be a *Mouse Action*  macro for example or an *Input Text*  macro. This enables the function of the object to be described, points out things worthy of note or else elucidate relationships with other objects.

5.5.2 Creating a Context Help



Creating a context help manually enables you to assign context information to an application individually and independently of pre-existing simulations. You can record the macros required for your processes on each application page and create the help texts.

In a project the different context types build on one another, i.e. the application is defined first, then the page and finally the object, thus proceeding from the general to the specific. The recording of the respective contexts behaves accordingly. An object requires all three macros of context information whereas an application context can also stand in its own right.

5.5.2.1 Creating a Context Help Project

Create a project for your context help content. For more information, see the chapter *Creating a Content Object*.

To create a project, proceed as follows:

1. In the *Explorer*, select *New Object* .
An overview of all objects opens.
2. Select *Context Help* .
The *New Project* dialog box opens.
3. Adapt the following settings:
 1. *Name:*
Enter a project name.
The default name is the object type with an ID.
 2. *Language:*
Select a language for the project. The automatically created bubble texts are generated in this language.
 3. *Project Type:*
The *Desktop Assistant - Context Help* type is selected.
You can change the type in the dropdown box.
4. Choose *OK* to create the project.


The project opens in the project editor. Now, you can record your content. Read the following chapters to find out more about this subject.

5.5.2.2 Recording an Application Context

Recording the application context determines the application and the interface to be used for reading the object information. This is the basis of a context help to assign the help content that is available for an application. This also provides general information about an application.


The application context for an application can only be set up once in a project as it must only be defined once. But a number of corresponding application contexts can be created for multiple applications that are recorded.

Record an application context as follows:

1. Select the [Record Application](#)  function in the toolbar.
2. The [Choose Application](#) dialog box appears:
 1. Select the target application window for the recording.
 2. Select [Choose](#).
3. A dialog box appears that displays the EXE name for the program.
 - [Display Name](#):
You can define a name for the display during playback.
4. Select [OK](#) to confirm and finish recording.
Select [Next](#) to confirm and record another application.

The application context recording is now available in the second step in the project editor.


> Recommendation

If you want to create an explanation for a specific context, use the [Insert Explanation](#)  function. For more information, see the section on [Inserting an Explanation](#).

5.5.2.3 Recording a Screen Context

A screen context can be recorded several times in a project and spread over several steps. This may be useful, for example, if you want to record and sort numerous objects on a screen. If you record a screen context you will also automatically record an associated application context, if one does not already exist.

Record a screen context as follows:

1. Select the [Record Screen](#)  function in the toolbar.
2. A settings dialog box appears where you can select an application.
In the dialog box you can define the following:
 - [Choose Window](#):
Here you can select the target application windows for the recording.
 - [Profiles](#):
Shows the application profile for the target application window.
 - [Associate with Selected Window](#):
Specifies that the profile is always used for the target application window. Select [Choose](#).
3. Afterwards, a dialog box appears where you can change the [Screen Title](#) for the screen context.
4. Confirm the dialog box and complete the recording by selecting [OK](#).

The screen context recording is now available in a new step in the project editor.


5.5.2.4 Recording an Object Context

If you record an object context, you also automatically record an associated application and screen context, if they do not already exist. Record an object context as follows:

1. Starting the recording

1. Select the *Record Object*  function in the toolbar.
The *Select Window and Profile* dialog box opens.

2. Choosing the window and profile



1. *Choose Window:*
Select the application window that you want to record from the list. The selected window appears in the foreground.
2. *Choose Profile:*
This setting selects the application profile for recording the application automatically. If you want to use another profile, you can change it using the drop-down box.
3. *Associate with Selected Window:*
Activate this setting, if you always want to use the profile for the selected application window.
4. Start the recording using the *Record*  button.
Select *Cancel*, if you want to cancel the recording.

i Note

If a suitable application profile could not be identified, then the default profile is used. Note that in this case, the recognition accuracy of the interactions and controls in the application window might be limited, depending on the application.

3. Recording the object

The recording starts and the recording bar is displayed.

1. A dialog box appears for selecting a screen context. You have the following options:
 - The *New Screen* option creates a new screen context in a new step.
 - You can select a prerecorded screen context, which you can add the object context to after recording.
2. Confirm your selection by selecting *OK*.
3. Select an object to record the control.
or
Select *Insert Explanation*  in the recording bar.
4. After an object is selected an object bubble and an editor toolbar appears.
You can edit the text and the bubble position.
5. Confirm the editor toolbar by selecting *Apply*.
or
Select *Cancel* to discard the object.
6. Record another object or insert an explanation.
7. To end the recording, select *Stop*  in the recording bar.

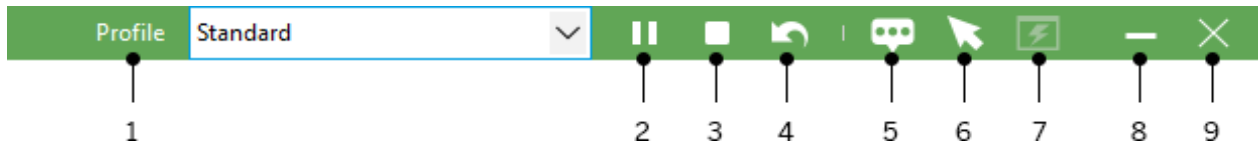
The recording bar closes and the recorded process is now available in the project editor.

5.5.2.5 Recording Bar

The recording bar appears when you start the recording. It includes the following sections and controls:

Buttons

The buttons let you control the recording.







Button	Explanation
(1) <i>Profile</i>	The dropdown box contains a list of available application profiles. If the application is detected automatically, the correct application profile is selected automatically and shown in the list. You can also use this box to switch between application profiles manually.
(2) <i>Record</i>	Select this button to begin the recording. Afterwards, the button changes to <i>Pause</i> .
(2) <i>Pause</i>	Select this button to interrupt the recording. This is useful when changing applications. When you are done, the button changes to <i>Record</i> .
(3) <i>Stop</i>	Select this button to end the recording and to close the recording bar.
(4) <i>Undo</i>	Select this button to reset the previous action of your process. Note that this applies only to the last action. You cannot delete multiple actions.
(5) <i>Insert Explanation</i>	Select this button to insert an <i>Explanation</i> instead of recording a control.
(6) <i>Execute Mouse Action</i>	Select this button to specify, whether a control is to be recorded and executed in the application or whether this is to be recorded without an action. Recording controls without executing actions is recommended, if a number of controls on a page are to be recorded and explained without leaving the application page. The button has to be deactivated to do this.

Button	Explanation
<i>(7) Choose Application</i>	Select this button to reselect an application for recording or to switch to another application. Afterwards, select the required application.
<i>(8) Minimize</i>	Select this button to minimize the recording bar; an icon will appear in the system tray instead. You can control the recording using the context menu. By selecting this icon, the recording bar will return to its original size.
<i>(9) Close</i>	Select this button to close the recording bar. The recording will be stopped.

Status section

The status section shows you whether an action is required or if the Producer is working on a recording in the background. Supporting icons and text messages are also displayed.

Icon	Explanation	Icon	Explanation
 Record	This status is shown, if the recording is running and the user needs to perform an action. After an action has been performed, the status also shows the edit mode.	 Pause	This status is shown, if the user pauses the recording.
 Busy	This status is shown, if a user action is executed in the background. Note: Wait for the <i>Record</i> status to turn green, to execute the next action.	 No Control	This status is shown when the user selects an area that is not recognized as a control.

5.5.2.6 Key Functions for Recording


During recording different actions can be performed using key functions:

Keys	Definition
Ctrl	With a pressed <code>Ctrl</code> key you can navigate freely in the application without an action being recorded. This is useful for instance for selecting lists, in order to open them and record the selection.
Esc	With the <code>Esc</code> key recording can be cancelled.

5.5.3 Form for a Screen

The form allows you to display all form actions in one bubble and not a bubble for each action.

A form is located in a project step and is structured as follows:


- *Screen*  macro
- *Action* macro 1
- *Action* macro 2
- *Action* macro 3

5.5.3.1 Creating a Form

To create a form, proceed as follows:

1. Combine the macros of the form in one step. This is necessary because the form cannot be created in a way that spans multiple steps.
 - Move all interaction macros into the step with the first action of the form. Arrange the actions in the required order in the relevant structure.
 - Delete the unused steps and screens.
2. For the form screen, select the setting *Form Mode* in the subcategory *Advanced (Advanced Layout)*.

Form structure settings

There are general settings available for defining the display of the form bubble. The following settings are available in *Settings*  under *Desktop Assistant: Playback Settings -> General -> Form Bubble*:

- *Style*
- *Alignment*
- *Position*
- *Width*
- *Height*

5.6 Guided Tour

The guided tour offers user support in carrying out predefined processes in an application. Users are guided through the process step-by-step with instructions, making it possible for them to carry out the displayed actions properly right in the live application. The instructions are collocated with the objects to be used.



Sample applications

A guided tour is suited, for example, to be used as follows:

- To train new employees (beginners) to learn the required processes on existing systems.
- To introduce a new system for users or to learn new business processes.
- To learn about or reference business processes that have been in use for a long time or are rarely used.
- The changes in the process when the system is changed.

Structure of a guided tour

A guided tour has the following project structure:

- The subcategory *Tour End*, which is found in the macro *Guided Tour Style* , specifies the information that should be displayed at the end of the process.
- Every step contains a macro *Guided Tour Step*  that defines each individual step.
- Every action macro contains a subcategory *Next Guided Tour Step* that specifies the course of the process.

5.6.1 Creating a Guided Tour



You can record your process or update an existing process independent of existing simulations by manually creating a guided tour.

The recording is similar to the recording of simulations. You follow the process step-by-step and thus record the entire sequence.

5.6.1.1 Creating a Guided Tour Project

Create a project for the content of your guided tour. For further information, see the chapter *Creating a Content Object*.

To create a project, proceed as follows:


1. In the *Explorer*, select *New Object* .
An overview of all objects opens.
2. Select *Guided Tour* .
The *New Project* dialog box opens.
3. Adapt the following settings:
 1. *Name*:
Enter a project name.
The default name is the object type with an ID.
 2. *Language*:
Select a language for the project. The automatically created bubble texts are generated in this language.
 3. *Project Type*:
The *Desktop Assistant - Guided Tour* type is selected.
You can change the type in the dropdown box.
4. Select *OK* to create the project.

The project opens in the project editor. Now, you can record your content. Read the following chapters to find out more about this subject.


5.6.1.2 Recording a Guided Tour

To record a guided tour, proceed as follows:

1. Starting the recording

1. Open the application to be recorded.
Choose the application page where you want to start recording and prepare the application as required.
2. Select *Record Guided Tour Step*  in the project editor.
The *Select Window and Profile* dialog box opens.

2. Choosing the window and profile



1. **Choose Window:**
Select the application window that you want to record from the list. The selected window appears in the foreground.
2. **Choose Profile:**
This setting selects the application profile for recording the application automatically. If you want to use another profile, you can change it using the drop-down box.
3. **Associate with Selected Window:**
Activate this setting, if you always want to use the profile for the selected application window.
4. Start the recording using the **Record**  button.
Select **Cancel**, if you want to cancel the recording.

i Note

If a suitable application profile could not be identified, the Producer uses the default profile. Note that in this case, the recognition accuracy of the interactions and controls in the application window might be limited, depending on the application.

3. Recording the process

The recording starts and the recording bar is displayed.

1. Select an object to record the control.
or
Select **Insert Explanation**  in the recording bar.
2. After an object is selected, an object bubble and an editor toolbar appears.
You can edit the text and the bubble position.
3. Confirm the editor toolbar by selecting **Apply**.
or
Select **Cancel** to discard the object.
4. Record another object or insert an explanation.
5. To end the recording, select **Stop**  in the recording bar.

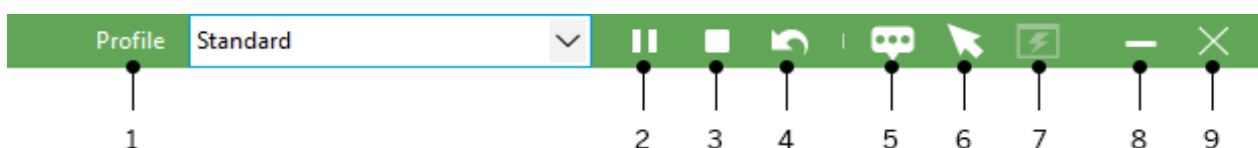
The recording bar closes and the recorded process is now available in the project editor.

5.6.1.3 Recording Bar

The recording bar appears when you start the recording. It includes the following sections and controls:

Buttons





The buttons let you control the recording.



Button	Explanation
(1) <i>Profile</i>	The dropdown box contains a list of available application profiles. If the application is detected automatically, the correct application profile is selected automatically and shown in the list. You can also use this box to switch between application profiles manually.
(2) <i>Record</i>	Select this button to begin the recording. Afterwards, the button changes to <i>Pause</i> .
(2) <i>Pause</i>	Select this button to interrupt the recording. This is useful when changing applications. When you are done, the button changes to <i>Record</i> .
(3) <i>Stop</i>	Select this button to end the recording and to close the recording bar.
(4) <i>Undo</i>	Select this button to reset the previous action of your process. Note that this applies only to the last action. You cannot delete multiple actions.
(5) <i>Insert Explanation</i>	Select this button to insert an <i>Explanation</i> instead of recording a control.
(6) <i>Execute Mouse Action</i>	Select this button to specify, whether a control is to be recorded and executed in the application or whether this is to be recorded without an action. Recording controls without executing actions is recommended, if a number of controls on a page are to be recorded and explained without leaving the application page. The button has to be deactivated to do this.
(7) <i>Choose Application</i>	Select this button to reselect an application for recording or to switch to another application. Afterwards, select the required application.
(8) <i>Minimize</i>	Select this button to minimize the recording bar; an icon will appear in the system tray instead. You can control the recording using the context menu. By selecting this icon, the recording bar will return to its original size.
(9) <i>Close</i>	Select this button to close the recording bar. The recording will be stopped.

Status section

The status section shows you whether an action is required or if the Producer is working on a recording in the background. Supporting icons and text messages are also displayed.

Icon	Explanation	Icon	Explanation
 Record	<p>This status is shown, if the recording is running and the user needs to perform an action.</p> <p>After an action has been performed, the status also shows the edit mode.</p>	 Pause	<p>This status is shown, if the user pauses the recording.</p>
 Busy	<p>This status is shown, if a user action is executed in the background.</p> <p>Note: Wait for the Record status to turn green, to execute the next action.</p>	 No Control	<p>This status is shown when the user selects an area that is not recognized as a control.</p>

5.6.1.4 Key Functions for Recording

During recording different actions can be performed using key functions:

Keys	Definition
Ctrl	<p>With a pressed <code>Ctrl</code> key you can navigate freely in the application without an action being recorded.</p> <p>This is useful for instance for selecting lists, in order to open them and record the selection.</p>
Esc	<p>With the <code>Esc</code> key recording can be cancelled.</p>

5.6.2 Subcategory: Next Guided Tour Step

The subcategory [Next Guided Tour Step](#) is located in the interaction macros and defines the process flow based on the process steps. The subcategory contains the following settings:

- [Action:](#)
Specifies the action that triggers a jump to the next guided tour step.
- [Next Step:](#)
Specifies the step that the guided tour jumps to.
- [Alternative Step 1-3:](#)
Defines alternative guided tour steps for the tour sequence.



If the guided tour cannot jump to a defined guided tour step because the application page is not available, then the guided tour jumps to the specified alternative steps - one after the other. If no application page is found, the guided tour terminates.

5.6.3 Branches in a Guided Tour

Branches allow the user to digress from the sequential path within a guided tour. This gives the user much more flexibility and portrays a more realistic process workflow, which means that the user has a choice of where to go to next.

During playback, the branch actions of the step are displayed as sub steps with radio buttons in the step list. Once you have selected an action, the sub-steps of the branch process are displayed.

A branch is located in a step of a guided tour and is structured as follows:

- *Guided Tour Step*  macro
- *Screen*  macro
- *Action* macro 1 with individual *Next Step*
- *Action* macro 2 with individual *Next Step*
- *Action* macro 3... or further objects

Note

Branches are only recommended for use in a guided tour because they support a process. They do not explain a single object, unlike in the context help.

5.6.3.1 Creating a Branch

Combine the macros of the branch in one step. This is necessary because the branch cannot be created in a way that spans multiple steps.



To create a branch, proceed as follows:

1. Move all required action macros into one step with the same screen.
2. Delete the unused steps, guided tour steps and screens.
3. For every branch action, set the *Next Step* with the required next step of the guided tour branch. As a result, the steps are displayed in the guided tour window after you select a branch action.
4. Correct the numbering in the last steps of the guided tour to match the new order.

5.6.4 Form in a Guided Tour


The form allows the user to fill in an on-screen form in an individually chosen sequence and then confirm all data entries. During playback, the form step is displayed as a standard step in the step list. Once the step is selected, a bubble is displayed that includes all the form actions.

A form is located in a guided tour step and is structured as follows:

- [Guided Tour Step](#)  macro
- [Screen](#)  macro
- [Action](#) macro 1 with individual [Next Step](#)
- [Action](#) macro 2 with individual [Next Step](#)
- [Action](#) macro 3... or further objects

5.6.4.1 Creating a Form

To create a form, proceed as follows:

1. Combine the macros of the form in one step. This is necessary because the form cannot be created in a way that spans multiple steps.
 - Move all interaction macros into the step with the first action of the form. Arrange the actions in the required order in the relevant guided tour structure.
 - Delete the unused steps and screens.
 - For the last action of the form, set the [Next Step](#) setting in the process. As a result, the steps of the project are displayed in the guided tour window.
For the other actions of the form, deactivate the setting [Next Step](#) (green Button ).
2. For the form screen, select the setting [Form Mode](#) in the subcategory [Advanced \(Advanced Layout\)](#).
3. Correct the numbering in the last steps of the guided tour to match the new order.

Form structure settings

There are general settings available for defining the display of the form bubble. The following settings are available in the central configuration dialog box (menu [Tools -> Settings...](#)) under [Desktop Assistant: Playback Settings -> General -> Form Bubble](#):


- [Style](#)
- [Alignment](#)
- [Position](#)
- [Width](#)
- [Height](#)

5.7 Object Bubble

The object bubble displays specific information about an object in a dedicated bubble. This bubble is used for both the context help and guided tour.

Depending on the setting the bubbles are displayed in miniature with a question mark (see also [Desktop Assistant: Mini Icons](#)) and open as soon as they are clicked. In this way the bubbles do not obscure the application interface. Furthermore, the button in the header area can be used to minimize the bubbles again after they have been called.




But the object bubble is also used as a bubble for an inserted [Explanation](#)  macro. This bubble is displayed on the application depending on its position and settings and offers alternative page or object related information.

When used inside the guided tour, the object bubble also contains an [OK](#) button to confirm actions and go to the next tour step.

Design and position


The object bubble design is predefined in the central settings. This is where changes to the way information is displayed can be made. The bubble position is specified by the position of the object and the orientation setting. These can be changed in the respective object's macro editor in the [Object Bubble](#) subcategory or in the [Advanced](#) subcategory for an [Explanation](#) macro.

5.7.1 Settings for Object Bubbles

In the settings, you can configure the appearance and functionality of object bubbles. The settings are available in the [Settings](#)  dialog box under [Desktop Assistant: Playback Settings -> General -> Object Bubble](#). These settings are either project-specific or generic, depending on the selection.

5.7.2 Variants of the Object Bubble


Used for type: Context help

There are different display variants, which can be used for the object bubble. The variants can be defined in the [Display Variant](#) setting of the [Context Help Style](#)  macro or for an interaction macro.

- [Icon:](#)
Displays an icon on the control. The user can open the bubble with a click or via a mouseover on the icon.
- [Tooltip:](#)
No icon or bubble is displayed. The user can open the bubble via mouseover on the control.
- [Bubble:](#)
Displays the opened bubble on the control.

5.7.3 Subcategory: Object Bubble

Each action macro has a subcategory *Object Bubble* in the macro editor. The settings in the subcategory define the style and behavior of the object bubble for the macro.

For an *Explanation*  macro the settings are located in the *Advanced* subcategory.

The following settings are available:

- *Style:*
Defines the bubble style resource for displaying the object bubble.
- *Mini Icon Type (Context Help):*
Defines a type for the mini icon of the object. The mini icons are a resource type of the *Adaptable Resources*.
- *Width / Height:*
Defines the width and height of the object bubble in pixels.
If the amount of text exceeds the available space, the height is scaled automatically.
- *Orientation:*
Defines the orientation of the object bubble relative to the referenced object.
- *Offset:*
Defines the offset in pixels in which the object bubble is displayed to the object.
- *Minimized (Context Help):*
Defines if the object bubble is displayed minimized when the page is loaded.
- *Minimizable:*
Specifies whether the bubble can be minimized during playback. If this option is activated, a *Minimize* button is displayed in the bubble header.
- *Hide Option (Context Help):*
Specifies whether the bubble can be deactivated by the users. If this options is activated, a setting will appear in the object bubble which allows the users to hide information that they no longer need.
- *Show 'Next' Button (Guided Tour):*
Defines, that the *Go to Next Step* button is shown in the object bubble.

5.7.4 Hiding an Object Bubble


Used for type: Context help

For object bubbles, you can display an option for hiding bubbles and their highlights. This allows users to hide any information they do not need.

Displaying the Hide Option in a bubble

In order to make this option visible to the user in the object bubble, select *Hide Option*. You can specify this individually for a macro or for the entire project:

- *For an Object Bubble:*
To specify the settings for a specific macro, choose *Object Context* and then go to the *Object Bubble* area in the macro editor. Activate the setting *Hide Option*.

- *For all Object Bubbles:*
To specify the setting for all macros, open the [Settings](#)  dialog box under [Desktop Assistant: Playback Settings](#) -> [General](#) -> [Object Bubble](#). Activate the setting [Hide Option](#).

Allowing the user to display bubbles

If a user hides one or more object bubbles during playback and then wants to display the information again, there is the option [Show Hidden Help](#). The option is available in the context menu from the taskbar in the Desktop Assistant and in [Settings](#) of the Desktop Assistant.

5.7.5 Desktop Assistant Mini Icons

Used for type: Context help

When the object bubble is minimized, a small bubble with a question mark is displayed. You can change the mini bubble by using a content-specific icon. This allows you to display specific information.




> Recommendation

Use [Icon](#) or [Tooltip](#) as [Display Variant](#) to show the icon instead of the bubble.

Mini Icon Style

The default mini icons are stored as [Desktop Assistant: Mini Icon](#) resource in the [Adaptable Resources](#). The resource contains 12 different icons.

The icons can be adapted in the [Style Editor](#) (menu [Tools](#) -> [Customization](#) -> [Edit Styles Resources...](#) ). You can change the colors and symbols of the icons. See also [Desktop Assistant Mini Icons](#).

Mini Icon Settings

A mini bubble can be defined for each action macro and [Explanation](#) macro with the setting [Mini Icon Type](#). The setting is located in the subcategory [Object Bubble](#) of the macro editor and for an [Explanation](#) in the subcategory [Advanced](#).

5.8 Converting Simulations

You can use your simulation projects to convert them to Desktop Assistant projects. During conversion a simulation project is adjusted to correspond to the necessary macros and project structure:

Conversion in a context help



When converting a simulation into a context help, the screen and action macros are merged and arranged based on their page affiliation. The application, page and object contexts are automatically created by using the recorded context information.

The advantage of converting simulations into a context help is that it is possible to use controls that have already been recorded and which are familiar to the user from the simulations as object contexts. An additional benefit is that no objects that are required for a process are lost in a manual recording as they already exist in a simulation.

Conversion in a guided tour



When converting a simulation into a guided tour, the screen and action macros are arranged based on their structure in the simulation project.



The guided tour is created on the basis of existing process simulations. The object bubbles are always displayed for a step when the guided tour is running.




To convert a simulation in a guide tour, it is recommended to use projects where the *Screen* macros were not merged. Every action should have a separate step. The bubbles are thus displayed one after another for every action in the tour sequence.

5.8.1 Generating a Desktop Assistant Project


To convert a simulation into a Desktop Assistant project, proceed as follows:



i Note

During a conversion, only *Screen*  macros, action macros, and *Explanation*  macros will be converted. Manually inserted PowerPoint slides, quiz items, documentation macros and so on will not be considered.

1. Open a *Simulation* project  in the project editor.
2. Select *Generate Desktop Assistant Project*  in the toolbar.
A dialog box is opened.
3. Specify the following settings:
 - *Project Title:*
Enter a name for the project. The name of the simulation project is included by default.
 - *Convert Hotspot to Explanation:*
Specifies that macros with recorded hotspots will be converted to *Explanations*  macros. If the option is deactivated, the macros will be removed.

i Note

Explanations  depend on position and do not use any object information to recognize a control within the application. With dynamic application objects, *Explanations* do not change dynamically either. It is recommended that you use *Explanations* for static objects in an application only.

- *Guided Tour*:
Specifies that a *Guided Tour*  project will be created. With deactivated option, a *Context Help*  project will be generated.
 - *Interactive Mode*:
Specifies that a guided tour is converted with interactive mode.
During playback, the user has to navigate in the object bubble to the next step manually. No page recognition is done.
4. Select *OK* to convert the project.

Afterwards, the project is created and opens in the project editor. Now you can edit the project.

Branches of a simulation

For a guided tour, the branches of a simulation will be converted into the required structure. When converting a context help, the branches will be ignored.

Quick recording

A simulation that has been recorded using quick recording can be converted in a guided tour with interactive mode. When opening the dialog box to convert a project, the *Guided Tour* and *Interactive Mode* settings are activated by default and cannot be changed.



5.8.2 Post-Processing after Converting

To customize and design a project according to the specific requirements, manual editing is possible after automatic conversion of a simulation.

Necessary customization



The following post editing will be required as a result of the technical specifics of the recorded application:

- If page keys were recorded with a regular expression, these page key attributes have to be customized as otherwise the Desktop Assistant cannot display the associated application pages. The *Replace Key Page Attribute* function is available for this purpose. Selecting this option, displays a dialog allowing you to select all the page key attributes. Now select the attribute with a regular expression and select *Next*. With the option *Regular Expression* enabled, the selected page key attribute will be converted accordingly, so that the Desktop Assistant will be able to interpret it. Select *Replace* to customize the regular expression.
- For an application with dynamic page keys the page key has to be edited manually, so that the recording's page key is not used in the project. For this purpose, the page key can be rerecorded using the function *Update Screen*.
- Context helps are strongly dependent on the differentiation of the application pages' page keys. In applications, such as Microsoft Word or Outlook, this differentiation may not be sufficiently clear because the

application only has one view and a process does not therefore take place on several application pages. To be able to differentiate the pages exactly, other controls have to be added to the context help using the [Record Page Specifier](#)  function. To do this, select the [Screen Context](#)  macro on which the desired control is displayed. Now click on the function [Record Page Specifier](#), select the desired control and confirm with [Ok](#).

Further customization


The following post processing can be performed:

- Additional application page objects can be recorded manually for a context help to explain objects of an application page in further detail.
- To provide users with additional information general notes can be created that will be faded in while a project is in progress. This is accomplished using the [Record Explanation](#)  function, which can be selected in the macro editor after selecting the [Screen Context](#)  macro.
- As regards visual presentation layout changes and position changes can be applied to the highlights and bubbles. As the bubbles are inserted directly at the clicked position, it is recommended standard practice to review them to ensure an optimal view.
- As the text modules are adopted directly from the simulations, they should be reviewed for use in the project and modified if so required. For example, this is necessary in process orientated descriptions such as [Click on Next](#), to obtain generic information in a context help.

5.9 Editing Content

Various functions for configuring how your content is displayed, its functionality and design are available to you in the project editor. These can be called when selecting a macro by using the macro editor or the context menu.

5.9.1 Inserting an Explanation

You can insert additional information into your content and use it in a variety of different ways with the [Explanation](#)  macro. This information can relate, for example, to an application or page. System-wide explanations can also be used for generally valid information.


System-wide explanations are applicable to all applications and processes. They make it possible to communicate general information quickly and directly to users, for example, information about upcoming work on a server.


Displaying explanations

An explanation is displayed as follows depending on the Desktop Assistant type and the position in the project:

- Explanations in the first step can be used system-wide
- Explanations under the application context are displayed for the respective application
- Context help: explanations in the step of a context help are displayed for an entire page
- Guided tour: explanations in the first step of a guided tour are displayed as start bubble - a confirmation button for the start of the process is displayed
- Guided tour: explanations in the step of a guided tour are displayed for a process step

Inserting an explanation

The explanation is to be inserted as follows for the application context and the [Style](#)  macro:



1. Select the macro for which the explanation is to be inserted.
2. Select [Insert Explanation](#)  in the header of the macro editor.
3. The explanation bubble is inserted in the step and you can now enter a text and position the bubble.


Note

When using an explanation within the application context of a context help, the bubble is always visible in the Desktop Assistant for a displayed [Inline Help](#). The explanation has to be minimized or hidden by the user.

Adding an explanation for screen context

The explanation is to be added as follows for the page context:

1. Select a [Screen Context](#)  for which the explanation is to be displayed.
2. Select [Record Explanation](#)  in the header line of the macro editor.
3. Now define where the explanation is to be located by clicking in the application. You will be prompted by a note on the cursor.
4. A dialog will then appear in which you can enter the explanatory text. Then confirm this by selecting [OK](#).

The recorded [Explanation](#)  macro can then be further edited in the macro editor to customize the macro's appearance and functionality if so required.

5.9.2 Editing Bubbles

Bubbles are edited in the step view. You can change the bubble text and the size and position of the bubble here.

There are two buttons on the toolbar that can be used to switch between the view of the bubble for the current macro and the bubbles for all macros in the step.

Note

The highlights of the actions cannot be changed because they are linked to the recorded control. Changes can produce errors in the display for the playback.

5.9.2.1 Editing Bubble Texts

Bubble texts for the Desktop Assistant macros can be edited right on the bubble or in the macro editor in the respective mode.

- **Editing in the step view**
Double-click on a bubble and an HTML editor will appear with various options for editing the content. For more information on the HTML editor, refer to the HTML Editor section of the document. Edit your text as desired and click on [OK](#) to confirm your changes.

- **Editing in the macro editor**

Texts can be edited in the macro editor in the *Text* parameter. Click on the respective text field and the HTML editor will appear. You can now edit the text.

5.9.2.2 Positioning Bubbles

You can change the size and position of bubbles in the step view as follows:

Positioning the bubbles

1. Select the object you would like to edit.
2. A red line will appear around the object. Select the object again, this time holding the mouse button down
3. With the mouse button still pressed, drag the object to the desired position.
4. Release the mouse button and the object is now positioned.

Changing bubble alignments

1. Select the object you would like to edit.
2. A square will appear at the tip of the bubble, which you can use to turn the object. With bubbles that do not have a tip, the square will appear in the middle of the bubble. Select the dot and hold the mouse button down.
3. With the mouse button still pressed, pull the dot away from the bubble and until you have reached the desired position. Pull the dot towards the middle of the bubble if you wish to hide the tip.
4. Release the mouse button to set the new position.

5.9.3 Recording a Page Specifier



Page Specifiers are used to define additional information for a page. This is useful if there is only a small difference between two pages. For example, with the macro you can specify a special control, which is only visible on one of the pages.

The macro contains no content information.

Note

Page specifiers are supported for context help projects. Do not use page specifiers for guided tour projects.

To create a *Page Specifier*, proceed as follows:

1. Select a *Screen Context*  where you want to add the *Page Specifier*.
2. Select *Record Page Specifier*  in the header line of the macro editor.
The *Choose Application* dialog box opens.
3. Select the application from the list and select *Choose*.
4. Select the object, which you want to use as an additional specifier. You will be prompted by a note on the cursor.
5. A dialog box appears in which you can define the parameters of the page specifier.
Object-specific parameters are:

- [Object Name](#)
 - [Object Image](#)
 - [Input Text](#)
 - [Selected Value](#)
6. Confirm the dialog box by selecting [OK](#), if you would like to complete the recording.
Select [Next](#) to record another object.

Excluding or including a screen

For the recorded [Page Specifier](#), you can specify, whether the content for the recognized application page should be displayed or excluded. Activate the setting [Exclude Screen](#), if the content should be hidden. In the thumbnail view a minus for excluding the screen or a plus for displaying the screen is displayed.

> Recommendation

When having two similar screens in a project, then it is recommended, to add one page specifier for excluding the screen and another page specifier for displaying the screen.



5.9.4 Conditions for Input Fields

Conditions allow you to display not only context-specific information but also information when a specific text is entered in a text field. If the condition does not match, a bubble with information is shown. You can also jump to a specific step.


A condition can be defined for an [Input Text](#)  macro. Each macro can have one condition.

5.9.4.1 Creating a Condition

To create a condition, proceed as follows:

1. Select an [Input Text](#)  macro.
2. Open the settings subcategory [Condition](#) in macro editor.
3. Edit the condition parameters:
 1. [Condition Pattern](#):
Select a condition pattern from the dropdown list.
Activate the parameter by selecting the green control .
 2. [Condition Value](#):
Enter a text or a number based on the selected pattern.
 3. [Condition Text](#):
Enter a text. The text is shown, if the condition does not match.
You can enter further information for the user about the expected input value.

When a macro contains a condition an icon  is displayed in thumbnail view. The condition control shows the specified parameters.

To remove an available condition, deactivate the green control  of the [Condition Pattern](#) parameter.

Condition pattern

The *Condition Pattern* parameter contains the following entries:

- *Is equal to*
- *Is not equal to*
- *Is greater than*
- *Is greater than or equal to*
- *Is less than*
- *Is less than or equal to*
- *Minimum number of characters*
- *Maximum number of characters*
- *Number of characters equal to*
- *Regular expression*


Further parameters

The *Condition* subcategory contains the following additional parameters:

- *Jump Target* (use for guided tour, visible in advanced layout):
Select a step from the dropdown list. The playback jumps to the specified step if the condition matches.
- *Case Sensitive*:
Activate this setting to make the condition case-sensitive.
- *Ignore on Page Load* (use for context help):
Specifies that the condition is not checked on page load. The condition is checked when using a corresponding control. This avoids the need to display the condition bubble directly.
- *Bubble Style*:
Specifies which bubble style resource is to be used for displaying the condition text.
- *Highlight Color*:
Specifies which highlight color is to be used for highlighting the control.

5.9.5 Updating Content

For possible process changes and extensions in the Desktop Assistant projects automatic updating of the content is available during playback in the Desktop Assistant. This presupposes that the projects are held centrally on a server or file-share.

The parameter *Update Frequency* is available to you in the section *Desktop Assistant: Playback Settings -> General -> Advanced* of the *Settings*  dialog box. This is located in the *Advanced* subcategory visible when selecting the option *Show More*. The value is specified in minutes

Save the projects to your relevant storage location for update purposes. The content will be updated automatically with the specified frequency during playback. Once it has been automatically updated, the projects will restart.

The update frequency should not be set at too high a value, to avoid unnecessary server queries. An optimal value is between 3-6 hours or every 24 hours. This depends on the anticipated changes.

In a Desktop Assistant added objects are displayed with a star (🌟) in the content list.

i Note



Bear in mind with automatic updating of a guided tour that if it happens to be running when it is updated, the guided tour will then start again from the beginning. Guided tour updates should therefore be undertaken in the evening or at weekends, when low usage levels can be expected.

5.9.6 Merging Projects

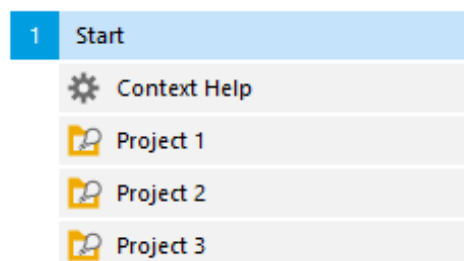
Several Desktop Assistant projects can be integrated into a single project so that you can use content from various projects.


The advantage of this is that content can be accessed quickly and directly and additional projects do not need to be loaded as the Desktop Assistant can only ever play back one project. Already existing objects also do not have to be recorded twice. It is not apparent to the user when playing back the project whether he is dealing with multiple projects.

Integrate projects using the following procedure:

1. Create a new project to add the different projects to with the [New Project](#)  function.
You can also open an existing project from within the project editor.
2. In the [Edit](#) menu select the [Include Desktop Assistant Projects](#) function.
3. You can now select the project to be inserted from within the open dialog box. Do so by clicking on the [Edit](#)  button. This will open a dialog box displaying all the projects within the workarea using the [Desktop Assistant](#) type. Select the desired project and click on [Ok](#).
4. Then confirm the dialog by clicking on [OK](#) if you would like to insert the project or click on [Next](#) to insert the project and select another project.

The projects themselves are linked by the act of inserting them. A macro displaying the link will appear in the first step. Linking the projects means that changes made in the original project are also incorporated in the link and thus also displayed in the project.



The way in which the content is displayed reflects the project from which the projects are being called as the [Style](#)  macro is located by default within the first step. Any customization should therefore also be applied in this macro. If you have created a new project, then the act of inserting the project automatically creates the [Style](#) macro.

When playing back the content the Desktop Assistant reads out the context information, starting with the first step. With multiple occurrences of content of one context type, such as for example the same screen contexts, the

Desktop Assistant displays the first context to be read out. If one context that is the same is not to be preferred over another, the macro with the currently used context is to be relegated to a step further back in the content.

5.10 Administrating the Context

Context Administration includes functions for the administration of the context information and context files. The following functions are available in the *Tools -> Context Administration* menu in the *Explorer*:

- *Replace or Append Executables...*
- *Replace Page Key Attributes...*
- *Search and Replace Parameter...*

Best practices

There are best practices for editing the content and changing page keys:

- First, finish the entire content production before changing the page keys. This will help you to get a better overview about the page keys to be changed and it also reduces the effort.
- We recommend having one responsible author for page key editing. For example, for a package of coherent content to be delivered to one Desktop Assistant target group.
- We recommend creating a backup of the content before editing the page keys.

5.10.1 Replacing or Appending Executables

The function allows you to replace an executable with a different executable or to append an executable with an additional name. This is required, if an application uses different executables or different applications need to be supported for the Desktop Assistant content.

To do so, proceed as follows:

1. Select a content structure or an object in the *Explorer*.
OR
Open a project in the project editor.
2. Select *Tools -> Context Administration -> Replace or Append Executables...*
3. A dialog box opens, which contains the following parameters:
 1. *Executables*:
The drop-down box displays the available executables of the selected contents.
Select the executable that you want to replace or append.
 2. *New Executables*:
Enter one or more executable names into the text field.
Use a semicolon ' ; ' or a comma ' , ' (for example: `name1.exe, name2.exe` or `name1.exe; name2.exe`) to separate multiple executables. Do not enter a space before or after the semicolon or comma.
4. Select *Append* or *Replace*.

The executable names are replaced or appended. The dialog box opens again where you can adapt further executables. Select [Close](#) to close the dialog box.

To remove an executable, leave the [New Executable](#) field empty and click on [Replace](#).

5.10.2 Replacing Page Key Attributes

When an application is being recorded, page information that is not universally applicable is sometimes generated. This means that the page information exists only during the recording but is no longer up-to-date when a user plays back the recording, for example, material numbers or information associated with user roles. During playback of a Desktop Assistant, the content with a specific key cannot be displayed as it does not match the current application page.

To make content generically available for all users, you need to replace the information in the page keys with a static text or a regular expression. Regular expressions allow you to replace static texts of page keys with variable attributes.

Replacing page key attributes

The [Replace Page Key Attributes](#) function allows you to customize the page information of your content. To replace a page key attribute, proceed like this:

i Note

When adapting several projects with the same page key, remember that the page keys need to be the same. This is especially important for displaying all the available content when playing back a Desktop Assistant.

1. Select an object or group in the [Explorer](#).
or
Open a project in the project editor.
2. Select [Tools -> Context Administration -> Replace Page Key Attributes...](#)
The [Replace Page Key Attributes](#) dialog box opens.
3. **Parameter**
The [Parameter](#) dropdown box contains all attribute parameters of the page keys.
Select a page key parameter.
4. **Show Page Keys**
Select [Show Page Keys](#) to display all available page keys of the selected parameter.
The [Page Key Values](#) dialog box opens and you can keep it open in parallel.
5. **Preset**
The [Preset](#) dropdown box contains presets based on common use cases for neutralizing or replacing the page keys.
Select a preset for the page key that you want to replace.
6. You have to add a value for some presets, for example, [Number of Digits](#) or [Value to Find](#). When selecting the preset, an additional text field is displayed.
7. Select [Preview](#) to display the found attributes and the replacement version.
All found attributes are listed in the preview field.

8. Preview table

The preview table shows the *Found Attribute* of the page keys for the selected preset as well as the *Project Name* and *Project UID* of the corresponding projects. The attributes that will be changed are highlighted in yellow.

In the *Apply* column of the preview table you can select the attributes to be replaced.

9. Select *Replace* to replace the specified attributes wherever they occur.

The page keys are replaced for the preset.

The changes are visible in the *Page Key Values* dialog box when selecting *Show Page Keys*. All attributes have a regular expression and are highlighted in blue. The recorded value is shown in the *Original Value* column of the dialog box.

You can replace further attributes or close the dialog box.

Best practices

Before you start to edit, we recommend analyzing the page keys in the *Page Key Value* dialog box to get an overview of the page keys to be changed. In most cases, there are dynamic values that differ for each end user when playing back the Desktop Assistant.

For example:

- Names, such as the name of the author who did the recording
- Numbers, such as a specific purchase order ID
- Date and time, such as the date or time when a stock list was generated

5.10.2.1 Presets for Replacing Page Keys

The following presets are available for replacing page key attributes:

Preset	Description	Examples
<i>Neutralize All Numbers</i>	<p>Use this preset if your page keys contain numbers and should be neutralized.</p> <p>Note: This is a generic preset and should be used carefully. Use this preset after you have used more specific presets (for example, date and time) and you are sure that all numbers can be ignored.</p> <p>Result: During Desktop Assistant playback, all numbers will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code>\d+</code></p>	<p>Change Correct Maintenance <i>70007340</i>: Central Header Hit List <i>2</i> Entries Quantity Contract <i>1719</i>: Selection List for Reference Document <i>A37(1)/200</i> SAP Easy Access - User menu for Testuser HR LT Central HR Stock/Requirements List as of <i>11:05</i> hrs</p>

Preset	Description	Examples
	Regular expression for the replacement: \d+	
Neutralize All Values	<p>Use this preset to neutralize all values of a selected page key attribute.</p> <p>Note: This is a generic preset and should be used carefully. Use this preset if you are sure that all values can be ignored.</p> <p>Result: During Desktop Assistant playback, all values will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: .* Regular expression for the replacement: *</p>	All values, for example, Email addresses, Microsoft Office titles, numbers, and so on, will be neutralized and have no effect on the Desktop Assistant playback.
Neutralize Any Number with at Least X Digits	<p>Use this preset if your page keys contain numbers that are dynamic and should be neutralized. All values with a minimum number of digits will be replaced. Enter a number of digits, for example, 3.</p> <p>Result: During Desktop Assistant playback, all numbers greater than or equal to the number of digits specified during replacement will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: \d{VALUE,} Regular expression for the replacement: \d+</p>	Change Corrective Maintenance 70007340 : Central Header Change Long text on task 0000200013980002 Language EN Display Material Document 500011273 : Overview
Neutralize Any Number with X Digits	<p>Use this preset if your page keys contain numbers that are dynamic and should be neutralized. All values with the exact number of digits will be replaced. Enter a number of digits, for example, 3.</p> <p>Result: During Desktop Assistant playback, all numbers equal to the</p>	Change Corrective Maintenance 70007340 : Central Header Change Corrective Maintenance 70007340 : Operation Overview Change Preventive Maintenance 70002737 : Central Header

Preset	Description	Examples
	<p>number of digits specified during replacement will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code>\b\d{VALUE,}\b</code> Regular expression for the replacement: <code>\d+</code></p>	
<i>Neutralize Currency</i>	<p>Use this preset if your page keys contain currency information that is dynamic and should be neutralized. Currency abbreviations such as EUR or USD have to be neutralized after replacing the currency by using the <i>Neutralize Specific Value</i> preset.</p> <p>Result: During Desktop Assistant playback, all currency information will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code>\d+(\. \,)\d{2,3}((\.\,)\d{2,3})*(\s?[A-Z]{3}\b) (\s?[^A-z0-9]{1}))?</code> Regular expression for the replacement: <code>\d+(\. \,)\d{2,3}((\.\,)\d{2,3})*(\s?[A-Z]{3}\b) (\s?[^A-z0-9]{1}))?</code></p>	<p>Approve Shopping Cart 10000194 with Value 5.304,00 EUR - IBM Lotus Notes</p> <p>Shopping Cart with Value 5.304,00€</p> <p>Zatwierdzenie koszyka zakupów 10000212 o wartości 106,08 USD</p>
<i>Neutralize Date</i>	<p>Use this preset if your page keys contain date information that is dynamic and should be neutralized.</p> <p>Result: During Desktop Assistant playback, all date information will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code>\d{1,4}[\.\- \/]\d{1,2}[\.\- \/]\d{1,4}/</code> Regular expression for the replacement: <code>\d{1,4}[\.\- \/]\d{1,2}[\.\- \/]\d{1,4}/</code></p>	<p>Stock/Requirements List 03/04/02</p> <p>Stock/Requirements List 04-07-2011</p> <p>Stock/Requirements List 15.06.2009</p>

Preset	Description	Examples
<i>Neutralize Email Address</i>	<p>Use this preset if your page keys contain mail addresses that are dynamic and should be neutralized.</p> <p>Result: During Desktop Assistant playback, all mail addresses will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code>[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}</code> Regular expression for the replacement: <code>[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}</code></p>	<p>Goods Receipt Other - john.smith@company.com</p> <p>Goods Receipt Outbound Delivery 70101178 - smith@company.com</p> <p>Goods Receipt Purchase Order 4500000357 - smith@company.int.com</p>
<i>Neutralize Microsoft Office Title</i>	<p>Use this preset if your page keys contain specific Microsoft Office document titles that should be neutralized.</p> <p>Result: During Desktop Assistant playback, the Microsoft Office title will be checked for the terms <i>Word</i>, <i>Excel</i>, <i>OneNote</i> and <i>PowerPoint</i>.</p> <p>Technical information: Regular expression for the search: <code>.*Word, .*Excel, .*OneNote, .*PowerPoint</code> Regular expression for the replacement: <i>Word, Excel, OneNote, PowerPoint</i></p>	<p><i>Doc1.docx</i> - Word</p> <p><i>Page_Keys.doc</i> - Microsoft Word</p> <p><i>Page_Keys.xls</i> - Microsoft Excel</p> <p><i>DesktopAssistant.xlsx</i> - Excel</p>
<i>Neutralize Microsoft Outlook (Calendar) Title</i>	<p>Use this preset if your page keys contain specific Microsoft Outlook Calendar titles that should be neutralized.</p> <p>Result: During Desktop Assistant playback, the Microsoft Outlook Calendar title will be checked for the terms <i>Calendar</i> and <i>Outlook</i> only.</p> <p>Technical information: Regular expression for the search: <code>Calendar.*Outlook</code> Regular expression for the</p>	<p>Calendar - john.smith@sap.com - Outlook</p> <p>Calendar - john.doe@sap.com - Microsoft Outlook</p>

Preset	Description	Examples
	replacement: <i>Calendar.*Outlook</i>	
<i>Neutralize Microsoft Outlook (Inbox) Title</i>	<p>Use this preset if your page keys contain specific Microsoft Outlook Inbox titles that should be neutralized.</p> <p>Result: During Desktop Assistant playback, the Microsoft Outlook Inbox title will be checked for the terms <i>Inbox</i> and <i>Outlook</i> only.</p> <p>Technical information: Regular expression for the search: <i>Inbox.*Outlook</i> Regular expression for the replacement: <i>Inbox.*Outlook</i></p>	<p>Inbox - <i>john.smith@sap.com</i> - Outlook</p> <p>Inbox - <i>john.doe@sap.com</i> - Microsoft Outlook</p>
<i>Neutralize SAP GUI System Name</i>	<p>Use this preset if the page keys contain SAP GUI system names that should be neutralized.</p> <p>Result: During Desktop Assistant playback, the SAP GUI system names will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <i>[A-Z0-9]{2,3}(\d\)\d{3}s</i> Regular expression for the replacement: <i>.*</i></p>	<p><i>ERD(1)/110</i> Display Purchase Req. 10010586</p> <p><i>UI2(2)/110</i> SAP Easy Access</p> <p><i>YE2(3)/100</i> Delete source lists</p>
<i>Neutralize Specific Value</i>	<p>Use this preset if your page keys contain specific values that should be neutralized, for example, personal data. Enter the value that you want to neutralize.</p> <p>Result: During Desktop Assistant playback, the specific values will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <i>VALUE</i> Regular expression for the replacement: <i>.*</i></p>	<p>Goods Receipt Other - <i>John Smith</i></p> <p>Purchase Order 45000000357 - <i>John Doe</i></p>

Preset	Description	Examples
<i>Neutralize Time</i>	<p>Use this preset if your page keys contain time information that is dynamic and should be neutralized. Language-dependent time information abbreviations such as 'hrs' may have to be neutralized after replacing the time with a different preset.</p> <p>Result: During Desktop Assistant playback, all time information will be ignored for the page key match.</p> <p>Technical information: Regular expression for the search: <code><[01]?[0-9][2][0-3]:[0-5][0-9]</code> Regular expression for the replacement: <code>\([01]?[0-9][2][0-3]:[0-5][0-9]</code></p>	<p>Stock/Requirements List as of <i>11:05</i> hrs</p> <p>Stock/Requirements List as of <i>17:51</i> hrs</p>
<i>Replace Specific Value</i>	<p>Use this preset to replace a specific value by another value, for example, a system name or number was changed due to an application update. Enter the value you want to search for and enter the replacement value.</p> <p>Result: During Desktop Assistant playback, the new value will be used for the page key match.</p> <p>Technical information: Regular expression for the search: <code>VALUE</code> Regular expression for the replacement: <code>NEWVALUE</code></p>	

5.10.2.2 Restoring Page Key Attributes

When you change a page key, the original attribute is saved. This lets you undo your changes.

To restore a page key attribute, proceed as like this:

1. Select *Restore*.
The *Restore Page Key Values* dialog box is opened.

The dialog box shows all page keys that have been edited. The *Replaced Value* column shows the changed page keys, the *Original Values* column shows the recorded value

2. **Restore all page keys**

Select *Restore All* to restore all values.

3. **Restore specific page keys**

Select one or more page keys from the list and select *Restore Selection*.


5.10.2.3 Advanced Mode for Replacing Page Keys

You can use further options for editing page key attributes if the presets do not fulfill your requirements.

> Recommendation

We recommend using the *Standard Mode* preset to replace page keys. The presets have been created based on the most common uses cases. For cases in which the presets are not sufficient, you can use the *Advanced Mode*, which has additional options.

To replace a page key attribute by using the advanced layout, proceed like this:

1. Select *Advanced Mode*  to display the advanced options.
2. Change the settings as required:
 - *Parameter:*
The dropdown box contains all attributes parameters of the page keys.
Select a page key parameter.
 - *Search Value:*
Select the attribute of the page key parameter you want to replace. The dropdown box displays all the available attributes for the selected parameter.
You can enter an attribute in the field.
 - *Search as Regular Expression:*
Activate this option to use regular expressions.
 - *Replace Value:*
Insert the attribute to be used in the page key.
You can enter an attribute in the field.
 - *Replace with Regular Expression:*
Activate this option to use regular expressions.
3. Select *Preview* to display the found attributes and the replacement version.
All found attributes are listed in the preview field. If a regular expression is used for the replacement, an icon is also displayed.
4. Select *Replace* to replace the defined attributes wherever they occur.

You can replace further attributes or you can close the dialog box.

5.10.2.4 General Regular Expression Examples (Advanced)

Examples of regular expressions:

Regular Expression	Description
.	any character except newline
.+	at least one character
.{5}	at least 5 characters
.*	0 or any number of characters
\w \d \s	word, digit, whitespace
\W \D \S	not word, digit, whitespace
[abc]	either of a , b , or c
[^abc]	not a , b , or c
[a-g]	character between a and g
Anchors	
^abc\$	start / end of the string
\b	word boundary
Escaped characters	
\. * \\	escaped special characters
\t \n \r	tab, linefeed, carriage return
\u00A9	unicode escaped ©
Groups & Lookaround	
(abc)	capture group
\1	reference to group #1
(?:abc)	non-capturing group
(?=abc)	positive lookahead
(?!abc)	negative lookahead
Quantifiers & Alternation	

Regular Expression	Description
<code>a* a+ a?</code>	0 or more, 1 or more, 0 or 1
<code>a{5} a{2,}</code>	exactly five , two or more
<code>a{1,3}</code>	between one and three
<code>a+? a{2,}??</code>	match as few as possible
<code>ab cd</code>	match ab or cd

5.10.2.5 Examples of Customizing Page Key Values (Advanced)

1) Replace a string with another string



Sample page key values

ERD(1)/110 Business Workplace of PU RC 00 Auth Test User

ERD(1)/110 Business Workplace of PU RC 10 Auth Test User

ERD(1)/110 Create Purchase Requisition

ERD(1)/110 Decision Step in Workflow

Expected Search Result	Search Value	Regular Expression
All page key values containing "ERD(1)/110" will be listed.	<code>ERD (1) / 110</code>	No
Expected Replace Result	Replace Value	Regular Expression
During playback, any page key value that contains "ERD(2)/220" will be treated as correct. The rest of the page key value (for example, "Create Purchase Requisition") still has to match exactly.	<code>ERD (2) / 220</code>	No



Example of a replaced page key value

ERD(2)/220 Create Purchase Requisition

2) Neutralize any string following a specific string



Sample page key values

Goods Receipt Purchase Order - John Smith

Expected Search Result	Search Value	Regular Expression
All page key values equal to "Goods Receipt Purchase Order - John Smith" will be listed.	Goods Receipt Purchase Order - John Smith	No
Expected Replace Result	Replace Value	Regular Expression
During playback, any string containing at least one character following the string "Goods Receipt Purchase Order -" will be treated as correct. Please be aware that absolutely everything (not just "John Smith") will be treated as correct. Thus, the regular expression ".+" should be used carefully. Otherwise, the matching result might become too fuzzy.	Goods Receipt Purchase Order - .+)	Yes



Example for a replaced page key value

Goods Receipt Purchase Order - .+

3) Neutralize any string preceding a specific string



Sample page key values

Document1 – Microsoft Word

Document2 – Microsoft Word

Replace Page Key Values – Microsoft Word

SAP Enable Now – Microsoft Word

Expected Search Result	Search Value	Regular Expression
All page key values containing at least one character preceding the string "– Microsoft Word" will be listed.	.+ – Microsoft Word	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any string containing at least one character preceding the string "– Microsoft Word" will be treated as correct.	.+ – Microsoft Word	Yes



Example of a replaced page key value

.+ – Microsoft Word

4) Neutralize any number preceding a specific string.



Sample page key values

Acct Assignment Cat. **1 Entry**

BOM Usage **9 Entries**

Commodity codes **32 Entries**

Condition Type **20 Entries**

Cost Center **500 Entries**

Distribution Channel **6 Entries**

Expected Search Result	Search Value	Regular Expression
All page key values containing a number with at least 1 digit will be listed. The number must precede the string "Entry" or "Entries".	<code>\d+ (Entry Entries)</code>	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any number containing at least 1 digit will be treated as correct. The number must precede the string "Entry" or "Entries". The rest of the page key value (for example, "Acct Assignment Cat.") still has to match exactly.	<code>\d+ (Entry Entries)</code>	Yes



Example of a replaced page key value

Acct Assignment Cat. `\d+ (Entry|Entries)`

5) Neutralize any number following a specific string



Sample page key values

Goods Receipt Purchase Order **4500000515** - Change

Goods Receipt Purchase Order **4500000535** - Display

Goods Receipt Purchase Order **4500000685** - Change

Goods Receipt Purchase Order **4500000752** - Display

Expected Search Result	Search Value	Regular Expression
All page key values containing a number with at least 1 digit will be listed. The	<code>Goods Receipt Purchase Order</code> <code>\d+</code>	Yes

Expected Search Result	Search Value	Regular Expression
number must follow the string "Goods Receipt Purchase Order".		
Expected Replace Result	Replace Value	Regular Expression
During playback, any number containing at least 1 digit will be treated as correct. The number must follow the string "Goods Receipt Purchase Order". The rest of the page key value (for example "Change" or "Display") still has to match exactly.	Goods Receipt Purchase Order \d+	Yes



Example of a replaced page key value

Goods Receipt Purchase Order \d+ - Change

6) Neutralize any number between two specific strings



Sample page key values

Hit List 1 Entry

Hit List 2 Entries

Hit List 56 Entries

Expected Search Result	Search Value	Regular Expression
All page key values containing a number with at least 1 digit will be listed. The number must follow the string "Hit List" and it must precede the string "Entry" or "Entries".	Hit List \d+ (Entry Entries)	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any number containing at least 1 digit will be treated as correct. The number must follow the string "Hit List" and it must precede the string "Entry" or "Entries".	Hit List \d+ (Entry Entries)	Yes



Example of a replaced page key value

Hit List \d+ (Entry|Entries)

7) Neutralize any number that contains at least 5 digits



Sample page key values

Change Long text on task: **00002000103980002** Language EN

Change Long text on task: **00002000103980004** Language EN

Goods Receipt Outbound Delivery **70101178** - John Smith

Goods Receipt Outbound Delivery **70101180** - John Smith

Goods Receipt Purchase Order **4500000515** - John Smith

Goods Receipt Purchase Order **4500000535** - John Smith

Expected Search Result	Search Value	Regular Expression
All page key values containing a number with at least 5 digits will be listed. The position of the number within the value does not matter.	<code>\d{5,}</code>	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any number will be treated as correct. The rest of the page key value (for example "Goods Receipt Outbound Delivery") still has to match exactly.	<code>\d+</code>	Yes



Example of a replaced page key value

Goods Receipt Purchase Order **\d+** - John Smith

8) Neutralize any number in brackets following a specific string



Sample page key values

Account Number of Vendor or Creditor **(1)**

Account Number of Vendor or Creditor **(2)**

Account Number of Vendor or Creditor **(5)**

Account Number of Vendor or Creditor **(12)**

Expected Search Result	Search Value	Regular Expression
All page key values containing a number in brackets with at least 1 digit will be listed. The number must follow the string "Account Number of Vendor or Creditor".	Account Number of Vendor or Creditor <code>\(\d+\)</code>	Yes
Expected Replace Result	Replace Value	Regular Expression

Expected Search Result	Search Value	Regular Expression
During playback, any number in brackets will be treated as correct. The rest of the page key value ("Account Number of Vendor or Creditor") still has to match exactly.	Account Number of Vendor or Creditor <code>\(\d+\)</code>	Yes



Example of a replaced page key value
Account Number of Vendor or Creditor `\(\d+\)`

9) Neutralize a specific number only



Sample page key values

Create Purchase Requisition: Item **00010**

Goods Receipt Outbound Delivery: Item **00010**

Stock/Requirements List: Item **00010**

Do not search for:

Change Long text on task: 00002**00010**3980002 Language EN

Change Long text on task: 00002**00010**3980004 Language EN

Purchase Order 45000**00010** - John Smith

Expected Search Result	Search Value	Regular Expression
All page key values containing the exact number sequence "00010" will be listed (for example "Create Purchase Requisition: Item 00010"). Any other numbers where "00010" is just a part of the entire number will not be listed (for example, "Change Long text on task: 00002000103980002 Language EN").	<code>\b00010\b</code>	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any number will be treated as correct. The rest of the page key value (for example, "Create Purchase Requisition: Item") still has to match exactly.	<code>\d+</code>	Yes



Example of a replaced page key value
Create Purchase Requisition: Item `\d+`

10) Neutralize the time



Sample page key values

Stock/Requirements List as of **11:05** hrs

Stock/Requirements List as of **11:55** hrs

Stock/Requirements List as of **17:41** hrs

Stock/Requirements List as of **14:53** hrs

Expected Search Result	Search Value	Regular Expression
All page key values containing exactly one specified time with the format [any number]:[any number] (for example, 11:05) will be listed.	<code>\d+:\d+</code>	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any time with the format [any number]:[any number] (for example, 11:05) will be treated as correct. The rest of the page key value (for example, "Stock/Requirements List as of") still has to match exactly.	<code>\d+:\d+</code>	Yes



Example of a replaced page key value

Stock/Requirements List as of `\d+:\d+` hrs

11) Neutralize the date



Sample page key values

Purchase Orders for Period **05.02.2015** to **10.03.2015**

Purchase Orders for Period **15.04.2015** to **16.04.2015**

Purchase Orders for Period **01.10.2015** to **22.10.2015**

Purchase Orders for Period **23.12.2015** to **26.12.2015**

Expected Search Result	Search Value	Regular Expression
All page key values containing exactly one date with the format [exactly 2 digits].[exactly 2 digits].[exactly 4 digits] (for example, 05.02.2015) will be listed.	<code>\d{2}\.\d{2}\.\d{4}</code>	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any date with the	<code>\d{2}\.\d{2}\.\d{4}</code>	Yes

Expected Search Result	Search Value	Regular Expression
format [exactly 2 digits].[exactly 2 digits].[exactly 4 digits (for example, 17.03.2020) will be treated as correct.		



Example of a replaced page key value

Purchase Orders for Period \d{2}\.\d{2}\.\d{4} to \d{2}\.\d{2}\.\d{4}

12) Neutralize any number and any string following a specific string



Sample page key values

Purchase Order **70101178** - John Smith

Purchase Order **70101180** - John Smith

Purchase Order **70101182** - John Smith

Purchase Order **4500000357** - John Doe

Purchase Order **4500000515** - John Doe

Purchase Order **4500000535** - John Doe

Expected Search Result	Search Value	Regular Expression
All page key values containing a number with at least 1 digit and any string following "-" will be listed. The number must follow the string "Purchase Order".	Purchase Order \d+ - .*	Yes
Expected Replace Result	Replace Value	Regular Expression
During playback, any number containing at least 1 digit <u>and</u> any string following "-" will be treated as correct. The number must follow the string "Purchase Order".	Purchase Order \d+ - .*	Yes



Example of a replaced page key value

Purchase Order \d+ - .*

5.10.3 Searching and Replacing Parameters

The function [Search and Replace](#) allows you to replace a specific attribute in the context parameters of the content.

To do so, proceed as follows:

1. Select [Tools -> Context Administration -> Search and Replace...](#)
2. A dialog box opens, which contains the following parameters:
 - o [Search](#): Specify the entry that should be searched.

- *Replace by*: Specify the entry that should be replaced.

3. Select *Ok*.

Afterwards, the search entry is replaced.

5.11 Playing Back Content

The basic prerequisite for playing back Desktop Assistant content is that the SAP Enable Now Desktop Assistant component must be installed on the operating system. Read the information on the following pages to find out how to start Desktop Assistant content.

5.11.1 Desktop Assistant Preview





At any time during the creation process, you can preview content playback and so check for errors or necessary improvements. Proceed as follows:

Preview started in project editor - Desktop Assistant project

For playback, proceed as follows:

i Note

The preview is controlled by the Producer. Therefore, the Desktop Assistant component and its control functions are not available in the preview.






1. Open a Desktop Assistant project  /  in the project editor.
2. Select *Play*  in the toolbar.
3. Open the target application and go to the required application page.
The Desktop Assistant displays the corresponding help content.
4. To stop the playback, go to the project editor.
5. Select *Stop*  in the toolbar.


Preview started in explorer - Desktop Assistant project

For playback, proceed as follows:

i Note

An installation of the Desktop Assistant component is required for playback.

1. Select a Desktop Assistant project  /  in the explorer.
2. Expand the project entry to display the generated project mode.
3. Select the mode icon .
4. Select *Play*  in the object editor.
5. The Desktop Assistant icon  will now appear in the task bar.





6. Open the target application and go to the required application page.
The Desktop Assistant displays the corresponding help content.
7. To stop the playback, open the context menu of the Desktop Assistant icon .
8. Select *Exit*.

Preview of the Desktop Assistant

For playback, proceed as follows:

Note

The preview is controlled by the Producer. Therefore the Desktop Assistant component and its control functions are not available in the preview.

1. Select a *Desktop Assistant Object*  or a *Desktop Assistant*  group in the tree of the explorer.
2. Select *Play Desktop Assistant*  in the object editor.
3. Open the target application and go to the required application page.
The Desktop Assistant displays the corresponding help content.
4. To stop the playback, go to the explorer.
5. Select *Stop Desktop Assistant*  in the object editor.

5.11.2 Desktop Assistant Project Playback





Desktop Assistant projects can be started from the library or the Desktop Assistant.

Note

For the playback it is required to publish the workarea. See also the chapter *Publishing Desktop Assistant Content*.

Playback from library


To start a project using the library, proceed as follows:

1. Open the library.
2. Select a Desktop Assistant project  /  in the tree structure.
3. You can launch the content by clicking on the corresponding button  in the header area of the overview.
4. The browser dialog box for downloading files and shows you a file with the file extension **.dnt*.
5. Click on *Open*.
6. The Desktop Assistant icon  will now appear in the task bar info area.
7. Open the corresponding target application. The Desktop Assistant will now display help objects at the relevant points defined in the application.

Playback from Desktop Assistant

To start a project using the Desktop Assistant, proceed as follows:



1. Start the Desktop Assistant.
2. The Desktop Assistant icon  will now appear in the task bar info area.

3. Open the corresponding target application. The Desktop Assistant will now display supporting help objects at the relevant points defined in the application.
4. **Guided tour**
 1. Select a guided tour  in the tree structure of the main window.
 2. Click the mode button in the content window.
5. **Context help**
 1. Activate the option *Show Instant Help* in the main window.
 2. Select a mini bubble on the screen.

5.11.3 Using the DNT File

For general use, a Desktop Assistant can be executed using the DNT file of the object folder. It is recommended that you store the published workarea on a Web server and link to the DNT file from an intranet page. The user can start the Desktop Assistant by clicking the link.


Desktop Assistant projects

A Desktop Assistant project (context help, guided tour) can be played back using the DNT file (*.dnt) of the Desktop Assistant project  / .

The path for launching a DNT file from a server should be provided as follows:


`http://<server>/[...]/workarea/project/project_id/project.dnt`

- **Start Link:**

The property is available for a project mode  in the *Explorer* and contains the link of the DNT file.

You can generate a start link for a URL or folder of the publication. See also the chapter *Defining a Start Link*.

Desktop Assistant

The Desktop Assistant can be played back using the DNT file (*.dnt) of the *Desktop Assistant Object* . Note that for playback you need to generate the Desktop Assistant.

The path for launching a DNT file from a server should be provided as follows:

`http://<server>/[...]/workarea/group/group_id/group.dnt`

For further information, see the chapter *Publishing Desktop Assistant Content*.

- **Start Link: Desktop Assistant:**

The property is available for a Desktop Assistant object in the *Explorer* and contains the link of the DNT file.

You can generate a start link for a URL or folder of the publication. See also the chapter *Defining a Start Link*.

5.11.4 Desktop Assistant Cache

The Desktop Assistant offers a cache functionality to store resources and content locally for Desktop Assistant playback. This avoids a load latency when starting content and allows content to be played back without network connection.

Cache folder

When the Desktop Assistant cache is used, a folder with a generated ID as the name is created and is stored in the following folder:

```
%localappdata%/NavigatorCache
```

The cache folder stores the resources and the used Desktop Assistant content. The folder content is updated automatically every time content is stored or changed.

Cache settings

The settings for the cache are available in the [Settings](#)  dialog box under: [Desktop Assistant: Playback Settings](#) -> [Desktop Assistant](#) in the subcategory [Cache](#).

- [Use Caching](#):
Activates the cache functionality.
- [Folder Location](#):
Specifies the location of the cache folder [NavigatorCache](#). The default location is [%localappdata%](#).
You can specify an individual folder for the cache. If the specified folder is not available or if the field is empty, the default folder is used.

Note

The name of the cache folder [NavigatorCache](#) cannot be changed.

5.11.5 Playback from the Manager

Manager can be used to save Desktop Assistant content to a web server, allowing them to be edited and published centrally. Once the author has published the content in Manager or Producer users can start the content from the learner view or launch them from the library. The learner view is a component of the Manager in which learning content is made available to learners.

Desktop Assistant on the Manager

For the playback of Desktop Assistant content from a Manager the following requirements are necessary:

- **SSO**
An activated single sign on (SSO) is necessary for the playback of assigned content. Import the active directory of the user and activate SSO afterwards.

5.11.6 Displaying the Guided Tour

During playback of a guided tour for each step a bubble is displayed next to the required object. A step list allows the user to get an overview of the complete guided tour and to jump to a specific step. A step preview shows the user a screenshot of the step.

The sequence of a guided tour is as follows:

1. Open the application with the application page where you want the process to start. Make any necessary settings ahead of time.
2. Start the guided tour.
3. Select the application so that the guided tour can recognize it.
The bubble for the current step appears.
4. Carry out the process in the application as shown by the guided tour. Completed actions are indicated by a check mark in the step list.
 - If text is entered, it must be confirmed via the object bubble by clicking [OK](#) to complete the entry.
5. Select Show / Hide Step List to display a list of all steps.
6. After the process is complete, you can end the guided tour by selecting [Quit](#) in the step list.

The process can be performed again by selecting [Restart](#). The check marks are reset and you can navigate to the beginning of your process in the application. The object bubble is then displayed for the first step.

› Recommendation






If a tour step could not be found, this is indicated by an icon. Here, we recommend selecting the application page again so that page identification is reinitiated or switching to the correct application page.

› Recommendation

To make effective use of a guided tour, you should always play it back from the beginning and not start in the middle of the process.

Icons of the step list

The step list shows all steps of a guided tour with the following icons:

	Step
	Current step
	Step completed
	Explanation
	Optional step
	Branch step



Step not found

5.11.6.1 Dealing with Non-Standard Behavior

When a guided tour is played back, situations can sometimes occur which prevent a process from being carried out. In this case, the Desktop Assistant provides information about the problem and how it can be solved. These situations are:

- The necessary application is not open
- The application is on the wrong page
- The necessary control is not available

You can then switch to the necessary application page and continue with the process or skip the step. The guided tour can also be terminated.

5.11.7 Desktop Assistant Tracking


To evaluate the adoption of the target application it is important to know how often the Desktop Assistant and its content has been started and shared with other users. The consumption of Desktop Assistant content can be evaluated, and a graphical report can be accessed and exported from within the SAP Enable Now Manager. You can get an idea of what is the most used content and how often it is used in daily work. The result might lead to improvements to encourage adoption – either by improving the product trainings or the application processes itself.

i Note

The Desktop Assistant content has to be started from SAP Enable Now Manager to track the usage.

Activating the Desktop Assistant Tracking

To activate the tracking for Desktop Assistant, proceed as follows:

1. Open the [Settings](#)  dialog box.
2. Go to [Desktop Assistant Playback Settings](#) -> [General](#) -> [Advanced](#).
3. Activate the [Desktop Assistant Tracking](#) setting.













Showing the Desktop Assistant Usage Report

To show the tracked data for the Desktop Assistant, proceed as follows:

1. Open SAP Enable Now Manager with your Desktop Assistant content.
2. Open [Learning Reports](#) -> [Desktop Assistant Usage Reports](#).

5.12 Desktop Assistant Macros

Fundamentally, there are the following macros for the Desktop Assistant projects:

Icon	Name
	Context Help Style
	Guided Tour Style
	Application Context
	Screen Context
	Guided Tour Step
	Mouse Action
	Input Text
	Select Single
	Radio / Checkbox
	Explanation
	Page Specifier See Recording a Page Specifier
	Include Desktop Assistant Project See Merging Projects

5.12.1 Context Help Style



Used for type: Context help

The *Context Help Style* defines how the context help is displayed during playback. The macro is located in the first step of a project.

The following settings are available:

- *Display Variant:*
The setting defines the variants for the object bubble. See also *Variants of the Object Bubble*.
The following variants are available in the drop-down list:
 - *Icon*
 - *Tooltip*
 - *Bubble*
- *Mini Icons Style:*
Specifies a style resource for the mini bubbles of the object bubbles.
- *Highlights:*
Specifies whether highlights are displayed for the objects.

5.12.2 Guided Tour Style



Used for type: Guided tour

The *Guided Tour Style* defines how the guided tour is displayed during playback. The macro is located in the first step of a project.

The following settings are available:

- *Bubble Style:*
Specifies the bubble style for displaying the object bubble. All available bubbles of the workarea are displayed in the dropdown list.
- *Mini Icons Style:*
Specifies a style resource for the mini bubbles of the object bubbles.
- *Highlights:*
Specifies whether highlights are displayed for the objects.
- *Start from Arbitrary Step:*
Specifies that the guided tour is started from an arbitrary step and not from the beginning.
- *Focus Layer:*
Displays a gray layer to highlight the required control of the current step.

- *Restricted Mode:*
Specifies that only the current action can be executed. The other controls of the application page are blocked. The setting can be used if *Focus Layer* has been activated.
- *Interactive Mode:*
Specifies that the user has to navigate in the object bubble to the next step. No page recognition is done during playback.
- *Start Automatically:*
Specifies that this guided tour will be started automatically when Desktop Assistant is open, and the page key matches the current user screen for the first time. After that, the tour can be started manually from the Desktop Assistant.

Guided Tour Window

The style and positioning of the window used for the guided tour can be customized in this area.

This area contains the following settings:

- *Style:*
Specifies the style for displaying the window.
- *Alignment:*
Specifies the alignment of the window of the screen. Activate the *Free* option, to specify a *Position*.
- *Position:*
Specifies the position of the window on the screen. The values are specified in pixels and relate to the upper left-hand corner of the screen.
- *Size:*
Specifies the width and height of the window in pixels. If the amount of text to be displayed exceeds the area available in the window, a scrollbar appears automatically.

Tour End

The subcategory *Tour End* contains the information that is displayed at the end of a completed guided tour.

- *End Window:*
Specifies that a window is shown at the end of the guided tour. The window allows the user to close the guided tour manually. If this option is deactivated, the window is not shown and the guided tour closes automatically.
- *Text:*
You can enter the text to be displayed in the bubble in the text box. The text box is preset with a default text.
- *Next Project:*
You can select a project that is started after the completion of the current tour. The new tour starts immediately and no end bubble is displayed.

Advanced

- *Source:*
If a project was converted from a simulation, the parameter indicates the UID of the original project.

5.12.3 Application Context



The *Application Context* macro defines the application recorded for the Desktop Assistant project. The macro is always placed in the second step.



Macro parameters

The macro contains the following parameters:

- *Display Name:*
Defines the title which will be displayed during playback.
- *Program:*
Contains the name of the program as used by the operating system. The parameter can contain multiple entries separated by a semicolon.

Further functions

At the top of the macro editor, you will find the following functions for macros:

-  *Record Compatible Application:*
This function allows you to record an additional application. The executable name will be saved in the *Program* parameter.
-  *Insert Explanation:*
This function allows you to insert an *Explanation* macro with information about the application.

5.12.4 Screen Context



The *Screen Context* macro defines the application page.





Macro parameters

The macro contains the following parameters:

- *Screen Title:*
Contains the name of the application window.
- *Screenshot (Screen):*
Contains the screenshot of the recorded screen.
- *Exclude from Desktop Assistant (Key):*
Specifies that the page key will not be considered for the context recognition process in the Desktop Assistant.
- *Activate Form:*
Specifies that the step is a form. All actions of the step are displayed in one bubble during playback.

Further functions

At the top of the macro editor, you will find the following functions for macros:

-  *Update Screen:*
This function allows you to update the recorded screen.
-  *Record Page Specifier:*
This function allows you to record a page specifier for the screen. See also the chapter *Recording a Page Specifier*.
-  *Record Object:*
This function allows you to record an object for the screen.
-  *Insert Explanation:*
This function allows you to insert an *Explanation* macro with information about the application.

5.12.5 Guided Tour Step



Used for type: guided tour

The *Guided Tour Step* macro defines the individual steps for the guided tour. This macro can be used to define the tour sequence. This macro is found at the beginning of a step.

The name of the guided tour step is defined in the *Name* field. This can be selected in the *Next Step* macro.

5.12.6 Explanation







The *Explanation* macro allows you to add further information to your project content.

The macro can be inserted during recording or from the macro editor. See also the chapter *Inserting an Explanation*.

Parameters of the macro

The following parameters are available:

- *Text:*
Contains the bubble text.
- *Type (Icon):*
A *Type (Icon)* can be assigned to the bubble, which can be selected from four different types. Each type is represented by an icon:

Type	Icon
<i>Info</i>	
<i>Remark</i>	
<i>Tip</i>	
<i>Warning</i>	

- *Force Display* (Context help):
Specifies, that the macro content is always displayed as instant help, even if instant help is disabled during playback of the Desktop Assistant.
- *Focus Layer* (Guided tour):
Displays a gray layer to highlight the explanation.

5.12.7 Properties of the Interaction Macros

The macros for interactions are:



Mouse Action



Input Text



Select Single




Radio / Checkbox

The interaction macros contain the following properties, which are used for the playback of a Desktop Assistant project:

General


- *Object Name:*
Contains the recorded name of the object. You can change the text in the parameter.

- *Object Image:*
Contains the recorded icon of the object. You can change the image by clicking on [Replace Image](#) .
- *Input Text:*
Contains the input value of a text field. You can change the value in the parameter.
- *Text:*
Contains the bubble text of the object. The bubble text is a text module from the dictionaries and can contain the object name, object image and input text.

Guided Tour

- *Optional:*
This option specifies whether the step is optional for the user in a guided tour.
During playback a different icon will be shown in the step list. If the control is not visible on the page or if the page is wrong the step will be skipped.
- *Focus Layer:*
Displays a gray layer to highlight the required control of the current step.

Context Help

- *Display Variant (Advanced Layout):*
The setting defines the variants for the object bubble. See also *Context Help Style*.
The following variants are available in the drop-down list:
 - *Global:*
Uses the setting from *Context Help Style*  macro.
 - *Icon*
 - *Tooltip*
 - *Bubble*

Subcategories

- *Object Bubble:*
Contains settings for the style and the behavior of the object bubble.
See also *Subcategory: Object Bubble*.
- *Highlights:*
Contains settings for the style of the highlight.

> Recommendation

The highlights of the macros are deactivated by default. To activate the highlights, use the setting [Show Highlight](#).

- *Next Step (Guided Tour):*
Contains settings for jumping to the next guided tour step.
See also *Subcategory: Next Guided Tour Step*.

Further functions

At the top of the macro editor, you will find the following functions for macros:

- *Update Object* :
This function allows you to update the object.

6 Quizzes

Quizzes help to focus on the users' main tasks as well as evaluate their acquired knowledge and improve it. The learning experience is enhanced by the high degree of interactivity and scope of multimedia enrichment in the quiz items. Direct feedback and evaluation of responses maximize the learning effect and help to pinpoint and plug existing gaps in knowledge in an entertaining way as well as confirm correct answers.

6.1 Training Available




This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

6.2 Quizzes in Projects

The following section explains how to create a quiz in a project and how to integrate quiz items into a process simulation.

A quiz can be created for a project with the type *Simulation* . The individual quiz items in projects can contain various media files including pictures, audio files and video files, thus allowing for a more interesting and more layered design. The results can be analyzed automatically.


Presentation of a quiz

In the Producer, a quiz can be created and used in different ways:

- **Stand-alone project**
Used to refresh knowledge or to examine a complete step
- **Help for process simulation**
Used to examine the displayed process or parts of it

6.2.1 Settings for Quizzes

Several quiz settings can be adjusted in the *Settings* dialog box which define the way the quiz is presented and proceeds in projects.

Open the dialog box via the menu [Tools -> Settings...](#)  and select [Playback Settings -> General -> Quiz](#). The settings will be defined for all projects, the settings can also be fine-tuned [Project Overrides](#) within a project.

General settings

- [Allow to Skip Quiz](#):
This setting lets you skip a quiz item without having to enter an answer. If this setting is deactivated, every quiz item must be answered in order to proceed on to the next one.
- [In Mode](#):
If quiz items are to be integrated into a simulation, it is necessary to activate the view in the corresponding mode. Activate the desired mode.
- [Page Size](#):
Specifies the width and height of the quiz page in pixel. The size is used for the quiz style of the trainer style.
- [Time Limit for Complete Quiz \(Seconds\)](#):
A time can be set in this parameter inside of which a full quiz must be answered. When a time limit has been set, a clock appears showing the remaining time.
It is recommended to use this setting within a stand-alone quiz and it should not be used for quizzes inserted into simulations. To read more on setting individual time limits for a quiz item, go to the [Options subcategory](#).




Feedback settings

After confirming a response, the learner can be shown a notice stating whether or not the quiz was answered correctly or incorrectly.

- [Show Feedback](#):
When this parameter is set, the following feedback entries are shown.
- [Show Feedback as Popup](#):
When this parameter is set, a corresponding feedback box is shown as a pop-up window in the foreground.
- [Show Correct Answers](#):
When this parameter is set, in addition to [Quiz Failed](#) being shown, the correct answer will also be shown when an incorrect answer has been entered.
- [Quiz Passed](#):
The feedback text entered is shown when a quiz has been solved correctly.
- [Quiz Failed](#):
The feedback text entered is shown when a quiz has been solved incorrectly.
- [Quiz Timeout](#):
The feedback text entered is shown when the time limit for answering the quiz or quiz item has expired. A value for this must be defined in the [Time Limit for Complete Quiz \(Seconds\)](#) or [Time Limit \(Seconds\)](#) parameter.

6.2.2 Creating a Quiz Project

To create a quiz project, proceed as follows:

1. In the *Explorer*, select *New Object*  .
An overview of all objects opens.
2. Select *Quiz*  .
The *New Project* dialog box opens. For more information, see the chapter *Creating a Content Object*
3. Adapt the following settings:
 1. *Name:*
Enter a project name.
The default name is the object type with an ID.
 2. *Template:*
Select a *Quiz Template*.
Choose *Change...* to open the selection dialog box and select a template from the workarea. Select *No template* to create an object without template.
If a template has already been used, the template is selected by default.
 3. *Language:*
Select a language for the project.
 4. *Project Type:*
The *Standard - Quiz* type is selected.
You can change the type in the dropdown box.
4. Choose *OK* to create the project.
The project opens in the project editor.
The macros *Simulation Start* and *Simulation End* are created by default. Both macros are required for playback.
5. Add steps for the quiz items.
Select the menu *Insert -> Add Step*  . Place the steps between the steps of the *Simulation Start* and *Simulation End* macros.
6. Insert the quiz items.
Select a quiz item from the *Insert Quiz Item* toolbar.
You can insert one or more quiz items in each step. This lets you sort your quiz items by theme or insert a *Quiz Section*.
7. Edit your quiz items.
You can find more information about this in the following sections and in the *Quiz Items* section.




i Note

The score parameters in the *Simulation Start* macro do not affect the points of the quiz items and can be ignored.

> Recommendation

By using a quiz in an LMS, you can stop the playback after a certain step and then restart it. In order to ensure that the quiz works properly, you need to create a separate step for each quiz item. If you add several quiz items to one step, once the playback has been stopped, all quiz items must be answered again.

> Recommendation

Activate the *Allow to Skip Quiz* option while editing a quiz project in the *Settings*  dialog box. The setting allows you to skip quiz items during playback without answering the questions.


6.2.2.1 Integrating a Quiz in a Simulation


As well as being able to create a quiz, you can also integrate individual quiz items into available simulations. For example, this can be useful if you want to ask questions relating to functions and processes directly after they are shown, thereby improving user knowledge.

i Note

First insert the quiz items into fully edited simulations for which rerecording is not planned or was already carried out. This is necessary as the Producer goes through the individual steps macro by macro when rerecording and the quiz items cannot be skipped.

To integrate a quiz into a simulation, proceed as follows:

1. Insert a new step:
 1. To do this, select the step after which the new step should be placed.
 2. Then go to the menu *Insert -> Add Step*  and insert the new step.
2. Now create your quiz items by selecting the corresponding quiz item from the menu *Insert -> Insert Quiz Item*.

It is recommended that you insert multiple quiz items into a step. To finish, a [Quiz Evaluation](#)  can be inserted into the step as the last macro. In doing so you also avoid unnecessary complexity from having too many steps integrated into the existing simulation.

3. Now insert the corresponding quiz items. More information on this can be found in the following sections and in the *Quiz Items* section.

To display the quizzes in the trainer it is necessary to activate the corresponding mode in which the quizzes are to be shown. For more on this, see the *Central Settings for Quizzes* section.

6.2.2.2 Quiz Section





By selecting the [Quiz Section](#) macro, the display of the quiz items can be modified individually for each step. This makes sense in terms of depicting the quiz items incorporated in the quiz section in any desired sequence or else displaying only one randomly selected quiz item.

A requirement for a [Quiz Section](#) is that multiple quiz items be contained in a step. A [Quiz Section](#) that spans multiple steps is not possible.

To create a [Quiz Section](#), continue as follows:

1. Select a step to create a [Quiz Section](#) for all of the quiz items contained in the step.

In order to set up the [Quiz Section](#) for particular quiz items only in a step, select the quiz item which is located in front of the start point of the desired quiz items. All successive quiz items within the step are then incorporated in the [Quiz Section](#).

2. Enter the [Quiz Section](#) macro via the menu *Insert -> Insert Quiz Item*. Following your selection, the [Quiz Section Begin](#)  macro is now inserted and the following quiz items indented. The quiz section is terminated by the [Quiz Section End](#)  macro.
3. Making this selection lets you change the order and display of the quiz items contained within the [Quiz Section](#) macro. You can choose from the two following types:
 - [Random choice](#):
The effect of the [Random choice](#) option is that only one, randomly selected, quiz item is shown in each case for the entire duration of the quiz section.
[Points](#): Enter the point value on which the individual quiz items should be based.
 - [Shuffle quizzes \(all\)](#):
This will display all the quiz items that have been selected in random order.
 - [Shuffle quizzes \(number\)](#):
This will display a specific number of quiz items that have been selected in random order.
[Number](#): This specifies the number of quiz items to display.
4. Once you have set up a random choice you can define a general point value for it in the [Points](#) parameter of the [Quiz Section Begin](#) macro. Each quiz item within the selection is then evaluated against this points score.

Deleting the Quiz Section

If a quiz section is no longer required in a [Quiz Section](#), you have the option of removing it should you wish to do so. Here, only the start and end macros of the [Quiz Section](#) are deleted. The quiz items remain intact.

You should proceed as follows:

1. Select the [Quiz Section Begin](#) or [Quiz Section End](#) macro.
2. Select [Remove Quiz Section](#)  in the macro editor.

6.2.2.3 Quiz Evaluation



Once the tasks have been completed, the [Quiz Evaluation](#) macro is available for evaluating a quiz. As an option, this can be inserted in the last step of the project or at any point within a step and thus be used for evaluating completely autonomous quiz projects or quiz within simulations.

It should be borne in mind here that a [Quiz Evaluation](#) returns an evaluation of all the preceding quiz items. If a number of [Quiz Evaluation](#) macros are located within a project, the current quiz evaluation provides an overview of all the quiz items from the last [Quiz Evaluation](#) macro.

The following settings can be selected for the [Quiz Evaluation](#):

- [Required Result](#):
The [Required Result](#) defines a value which must be reached in order to pass the quiz. This is denoted as a percentage value.

Evaluation format

You can determine the degree of detail in the evaluation by means of the [Format](#) setting. The following options are available:

- [Compact Detailed Feedback](#):
The table additionally shows the solutions to all of the quiz items. The detailed feedback can be opened and closed to view all information.
- [Extended Detailed Feedback](#):
The table additionally shows the solutions to all of the quiz items.
- [Extended Short Feedback](#):
A table containing the title of the relevant quiz item, the result and the points score achieved is also displayed.
- [Total Score Only](#):
An evaluation of the possible points achievable and the number of points actually achieved are displayed.

Feedback

[Feedback](#) can be put in place in each case to confirm the existence/non existence of the quiz item. This is shown beneath the general points evaluation.

The following settings are available for this:

- [Show Feedback:](#)
When this parameter is set, the following feedback entries are shown in the [Quiz Evaluation](#).
- [Quiz Passed:](#)
The inputted feedback text is displayed if the required result was achieved.
- [Quiz Failed:](#)
The inputted feedback text is displayed if the required result was not achieved.

6.2.3 Quiz Templates





Quiz templates are a special type of book page, which define a layout and general objects for creating quiz content. Templates are useful for saving time and for ensuring consistency when creating objects. Furthermore, they provide flexibility when creating a quiz layout.

6.2.3.1 Customizing a Quiz Template

The Info Center of SAP Enable Now provides templates that you can use for your content. You also can use the templates to customize your own templates. For more information, see the [Content Templates -> Quiz Templates](#) section.

To customize a template, proceed as follows:

1. Download the template from the Info Center.
2. Import the DKP file in your Producer.
3. Open [Quiz Template](#)  book page in the book page editor.
4. **Page**
The [Page](#) uses the default [Book Style](#)  of the workarea. You can select another style in the [Style](#) setting.
The default page size is 1024x672.
5. **Objects**
Customize the available objects that are used for the structure and the design of the template. It is recommended that you change the following:
 - The position of the objects
 - The text formatting of the objects
 - The design of the objects
6. **Quiz Item Template**
Customize the [Quiz Item Template](#) object. The settings of the object influence the design of the quiz item.
See also [Adapting the Quiz Item Template](#).
7. Save the book page.

i Note

Do not change the object names. If you change a name, the quiz cannot be played back correctly. The object names are used to assign functionality to an object.

See also *Elements of a Quiz Template*.

Images

The images used for the objects are added as assets to the book page. You can replace the images. Make sure that you adapt the assets in the controls afterwards.

6.2.3.2 Elements of a Quiz Template

To create a quiz template you have to assign a specific quiz function (for example: task, next quiz, time limit) to a book page object. To assign a quiz function to a book page enter the function's name into the name field of the book page object.



Example

Shape ☐ Advanced Layout

Name

next_enabled


Type and Orientation

Rounded Rectangle

> Recommendation

We recommend to use the following basic objects for your quiz templates: [Text](#), [Image](#), and [Shape](#).

The following functions and name values can be used for a quiz template:

Type	Function / Name Value	Description
General		
	Quiz Item Template quiz_element	Is used for the  Quiz Item Template object and is a placeholder for the quiz content. Specifies the design of the quiz items.
	Title title	Contains the title text of the quiz.
	Task task	Contains the task text of the quiz.

Type	Function / Name Value	Description
	Next control: disabled <i>next_disabled</i>	Disabled button for showing the next quiz or feedback.
	Next control: enabled <i>next_enabled</i>	Enabled button for showing the next quiz or feedback. The button shows a <i>Next</i> tooltip. This text is taken from the playback dictionary <i>Standard</i> and will be displayed in the current project language.
	Quiz Evaluation <i>quiz_evaluation</i>	Contains the evaluation of a quiz. i Note The object is a placeholder for the position and size of the evaluation. The evaluation style cannot be changed in the template, as it uses the default trainer configurations.
Feedback		
		For quizzes there are two feedback types: <ul style="list-style-type: none"> • Feedback displayed on page • Feedback displayed as popup
Feedback on page:		
	Feedback text: correct <i>feedback_correct</i>	Contains the feedback text for a correct answer.
	Feedback text: wrong <i>feedback_wrong</i>	Contains the feedback text for a wrong answer.
	Feedback text: timeout <i>feedback_timeout</i>	Contains the feedback text displayed if the time limit is exceeded.
	Feedback icon: correct <i>feedback_passed_icon</i>	Specifies an icon for displaying feedback for a correct answer.
	Feedback icon: wrong <i>feedback_failed_icon</i>	Specifies an icon for displaying feedback for a correct answer or a

Type	Function / Name Value	Description
		time out.
Feedback as popup:		
	Feedback popup: correct <i>feedback_correct_popup</i>	Contains the feedback text for a correct answer (popup).
	Feedback popup: wrong <i>feedback_wrong_popup</i>	Contains the feedback text for a wrong answer (popup).
	Feedback popup: timeout <i>feedback_timeout_popup</i>	Contains the feedback text if the time limit is exceeded (popup).
	Feedback icon: correct <i>feedback_correct_icon</i>	Specifies an icon for displaying feedback for a correct answer.
	Feedback icon: wrong <i>feedback_wrong_icon</i>	Specifies an icon for displaying feedback for a correct answer or a time out.
Media		
	Media popup <i>media</i>	Contains the media file of the quiz.
	Media control: show <i>media_open</i>	Specifies a button for showing the media popup.
	Media control: hide <i>media_close</i>	Specifies a button for hiding the media popup.
	Media preview <i>media_preview</i>	Specifies an image as preview for the media file.
Status		
	Points <i>points</i>	Shows the points of the quiz.
	Number <i>number</i>	Shows the number of the quiz.
	Time limit	Shows the time limit for the current quiz item.

Type	Function / Name Value	Description
	countdown	
	Global time limit countdown_global	Shows the time limit for the current quiz items.

6.2.3.3 Adapting the Quiz Item Template

The [Quiz Item Template](#) is a book page object, which is used as placeholder for the quiz items in a quiz template. In the object, you can define the design of the quiz item controls.

The object contains the following setting subsections:


- [Design Controls:](#)
Contains general settings for the controls of the quiz items.
- The following subcategories contain additional settings specific for a quiz item.
 - [Design Multiple Choice:](#)
 - [Design Fill in the Blanks:](#)
 - [Design Fill in the Fields:](#)
 - [Design Matching:](#)
 - [Design Connection:](#)
 - [Design Sorting:](#)
 - [Design Slide Control:](#)
 - [Design Grid:](#)
- [Design:](#)
Contains settings for the text and the general design of the object (for example background color).

> Recommendation

Test your changes using an example quiz to see the settings. Create an example quiz with all required quiz items.

6.2.3.4 Selecting a Quiz Template

A quiz item can be selected as follows:

- **In settings dialog box**
 1. Open the settings dialog box using the [Tools -> Settings](#)  menu.
 2. Select the section [Playback Settings -> General -> Quiz](#).
 3. Go to the [Template](#) setting and select the customized [Quiz Template](#).
 4. Confirm the dialog box with [OK](#).
- **For each quiz item**
 1. Open a project with a quiz.

2. Select a quiz item.
3. Open the macro editor.
4. Go to the *Template* setting and select the customized quiz template.

6.2.4 Editing the Quiz Items

You can set additional properties of a quiz item individually. For an overview and description of the functionality of quiz types, see the *Quiz Items* reference pages. The individual quiz items are described in more detail in their corresponding chapters.

Pay attention to similarly described settings and approaches when creating quiz items so that the corresponding functionality can be defined.

i Note

In case the inputs of a quiz item are incomplete or faulty, an error message will be displayed when starting the simulation. When closing the trainer, appropriate corrections may be taken.
Incomplete or faulty quiz items will be skipped while playing the simulation.

There are a number of general settings for the quiz items which can be found in the setting subcategories of the quiz items. These settings can be used to personally design your quizzes.

Further information is available in the following chapters.

6.2.4.1 General Quiz Item Parameters

Once you have created a quiz item you will be able to edit or add content to it.

When setting up quiz items it is necessary to set a question as well as the number of points required. You can also name the quiz item.

- *Template:*
In the parameter you can select a quiz template for the quiz item.
See also the chapter *Quiz Templates*.

i Note

If no template is selected, the active *trainer Style* is used.

- *Points:*
This parameter allows you to set the point value required to have achieved a correctly answered quiz item. 1 is set as the minimum default value for this.
This way, you have the option of dividing your quiz items into different levels of difficulty.
- *Title:*
Enter a name for your quiz item. For example, it can be a subject area or a description of the quiz item. The name is displayed during playback of the project in the top section of the tasks.
- *Task:*
In the field enter a task for the quiz item.

Instead of entering a question, you can enter a media file as a question. For example, this can be a PowerPoint slide. To read more on this, see the [Show Instead of Task](#) setting in the Subcategory [Media](#).

6.2.4.2 Subcategory Media

In the subcategory [Media](#) the [Media File](#) parameter can be used to insert a file for visual or acoustic display or support of task-setting. This can be a picture, video or audio file.

To the right of the tasks section there is a media area for the [Media File](#) where it is placed after being inserted.

i Note

Note that for some media types corresponding plug-ins are required on the user's workstation.

i Note

Since video and audio files cannot be integrated into a Microsoft Word document, [Media Files](#) are not produced with everything else when creating a documentation.

Advanced Settings

- [Width, Height:](#)

Use the [Width](#) and [Height](#) settings to change the format of the [Media File](#) after inserting a picture file.

i Note

For an image, enter the width and height to display the image with the correct size.

- [Show Instead of Task:](#)

Upon activating the [Show Instead of Task](#) setting the inserted [Media File](#) is shown instead of the task. Use this setting if you wish to have the quiz tasks shown as PowerPoint slides.

The [Show Instead of Task](#) setting cannot be adjusted in the [Puzzle](#) quiz items. This is because a media file in the form of a picture file is already used for the display of the tasks for both of these quiz items.

6.2.4.3 Subcategory Options

In the [Options](#) subcategory, you have the choice of setting a [Time Limit \(Seconds\)](#) for every quiz item. You can use this parameter to set a specific time within which the quiz item is to be answered.

This can be done individually for each quiz item or for the entire project via the central configuration dialog box.

i Note

If the [Time Limit](#) has been exceeded when answering a quiz item, the quiz item will be deemed to be incorrectly answered on evaluation.

When a time limit has been set, a clock appears while a project is playing, showing the remaining time. If a time limit has been defined in the central configuration dialog box for the entire project, an additional second clock will appear.


i Note

If you set a time in the central configuration dialog box for the entire project, then the combined individual times of each of your quiz items should not surpass the value for the entire project.

There are additional individual quiz items settings available in the subcategory [Options](#). See the corresponding sections in the overview section for the quiz items.

6.2.4.4 Subcategory Feedback

After confirming an answer of a quiz item, you can have a dialog display whether or not the quiz was correctly answered. In this case, the [Show Feedback](#) parameter must be selected.

When the feedback setting is activated, the feedback texts defined in the [Settings](#)  dialog box are shown accordingly.

However, you can also define individual feedback texts for a quiz item, which would be shown instead of the general settings. The following text fields can be used for this and can be shown by making changes to the advanced settings:


- [Quiz Passed:](#)
This text is shown when the quiz has been answered correctly.
- [Quiz Failed:](#)
This text is shown when the quiz has been answered incorrectly.
- [Quiz Timeout:](#)
This text is shown when the time for answering the quiz has elapsed. In this case, a value for the [Time Limit \(Seconds\)](#) parameter must be defined.

6.2.5 Quiz Playback



Playing back the quiz should be done by using the test mode. This is necessary to hide the trainer bar and to prevent navigating with the arrow keys so that a step is not skipped unintentionally.

When displaying the mode in the library the other modes can be hidden or deactivated before the generation in the [Save](#) settings.

If quiz items have been inserted into a simulation, then the modes in which the quizzes are to be shown should be selected in the [Settings](#)  dialog box.

6.2.6 Quiz Documentation

Quiz items can also be generated as documentation, which can be a useful aid to your simulations. The quiz items are mostly designed as tables, which should be filled out as required. In accordance with the document's format, drop-down lists and drag & drop objects are displayed as general lists. Therefore, with the documentation format, it is more convenient to fill information in on the computer or on a print-out.

For generating a quiz documentation see also the *quiz settings* in [Documentation Settings](#).

Subcategory documentation

In quiz items, there are the following settings for documentation:

- [Show Title in Documentation](#):
Specifies to show the title of a quiz in a generated documentation.

Documentation types

A quiz documentation can be generated for the single document types [Standard Document](#), [Training Document](#) and [Work Document](#).

6.3 Quizzes on Book Pages

The following section explains how to create a quiz on a book page. Quiz items on book pages can be uniquely customized, as each object can be edited individually. The quiz items can be combined with additional book page objects and contents.

Use case

The main use case for quizzes on book pages is to provide questions for adaptive learning. The quizzes can help learners to show a learning path for further lessons. There is no result tracking, as the quizzes are general content objects.

Quiz items on book pages can be used as stand-alone book content or as additional book content.

i Note

Quiz items on book pages do not support tracking (for example, SCORM 2004). If you want to use quizzes in combination with an LMS, then create quizzes in projects.

Components of a quiz

Your quiz should have the following recommended quiz components:

- **Quiz item**
This book page object specifies a particular quiz.
It is recommended that you use one quiz item per book page.
- **Task**
A task explains to the user what needs to be done.

- **Confirmation button**
A control confirms the quiz answer and shows feedback for the learner.
- **Feedback texts**
The feedback texts are used to show how well the user performed the task.

6.3.1 Creating a Quiz on a Book Page





This chapter explains how to create a book page with a quiz item and insert general objects.

› Recommendation

If you always want to use a specific structure and object types for your quizzes, we recommend that you insert them in a book page template. More information is available in the section *Templates for Book Pages*.

1. Creating a book page

To create a book page, proceed as follows:

1. Select a Book  or a Group  in the workarea structure to insert the book page.
2. Select *New Object*  in the toolbar.
An overview of all objects opens.
3. Select *Book Page* .
The *New Book Page* dialog box opens.
4. Adapt the following settings:
 1. *Name:*
Enter an object name.
The default name is the object type with an ID.
 2. *Language:*
Select a language from the dropdown box.
 3. *Template:*
Select a template.
Choose *Change...* to open the selection dialog box and select a template from the workarea. Select *No template* to create an object without a template.
If a template has already been used, that template is selected by default.
See the chapter *Templates for Content Objects*.
5. Choose *OK* to create the book page.

The book page is opened in the book page editor.

2. Inserting a quiz item

To insert a quiz item, proceed as follows.

1. Select a quiz item from the dropdown box in the toolbar.
The quiz item is inserted.
2. Position the object on your book page.

3. Design your quiz item.
Adapt the parameters of the *Design Controls* section.
4. Now specify the question and answers as described in the *Quiz Items* section.

3. Inserting a task

Create a task for your quiz. A task provides an introduction or describes what the learner needs to do.

To insert a task, proceed as follows.

1. Insert a *Text Field*. Select the object from the toolbar.
2. Enter a task text.

You can also use an image or a media file to create a task.

4. Inserting feedback

Define the feedback for the learner as described in the *Configuring Feedback* section.

Further Information

Detailed information about book pages and book page objects is available in the *Books and Book Pages* section.

6.3.2 Configuring the Feedback

You can create feedback for your quiz. This feedback is shown after a quiz item has been answered. The feedback informs the learner whether the quiz item was correctly answered and can be a text field, an image or a media file.

› Recommendation

If you always want to use specific feedback, then we recommend that you insert the feedback in a book page template for your quizzes. Further information is available in the section *Creating a Book Page Template*.

Feedback is used as follows:

1. Learner solves a quiz.
2. Learner selects a confirmation control to check the quiz
3. Quiz shows feedback for the learner.

To create feedback for your quiz, proceed as follows:

1. Creating a confirmation button

Create an object to confirm the quiz:

1. Insert a *Shape* or *Active Area* object. Select the object in the toolbar.
2. Design the object by using the object parameters.
3. Define a *Check* action for the confirmation click:
 1. Open the *Actions* subcategory in the object editor.
 2. Activate the *On Click* action
 3. Select your quiz item.

4. Select the *Check* action for the quiz item.

After confirming a quiz, the user sees feedback.

2. Creating feedback information

Feedback tells your learners if an answer is right or wrong.

Create *Text Fields* for the feedback information:

1. Insert two *Text Field* objects for the feedback. Select the object in the toolbar.
 1. Insert a *Text Field* for the correct answer.
Enter a feedback text.
 2. Insert a *Text Field* for the wrong answer.
Enter a feedback text.
2. Select *Hide* parameter for each object.
This allows you to display the corresponding text.
3. Design the quiz objects by using the object parameters.

3. Assigning feedback actions

Now define actions to show the required feedback text:

1. Select your quiz item.
2. Open the *Actions* subcategory in the object editor.
3. **Correct answer**
 1. Activate the *On Correct Answer* action
 2. Select the *Text Field* for the correct answer.
 3. Select the *Show* action.
4. **Wrong answer**
 1. Activate the *On Wrong Answer* action
 2. Select the *Text Field* for the wrong answer.
 3. Select the *Show* action.

Further Information

Detailed information about actions for book page objects is available in the section *Object Actions*.

6.3.3 Actions and Behaviors of Quiz Items

Quiz item actions

Actions allow you to show information for the learner based on the status of the quiz. Select a quiz item and open the subcategory *Actions* of the object editor, to edit the actions.

The following actions are available:

Action	Description
<i>On Ready</i>	Specifies the action to be executed when the quiz is ready. You can use this action to display a message that the quiz was answered by the user.
<i>On Not Ready</i>	Specifies the action to be executed when the quiz is not ready. You can use this action to display a message that the quiz was not answered by the user.
<i>On Correct Answer</i>	Specifies the action to be executed when the quiz is answered correctly. You can use this action to display feedback for the correct answer.
<i>On Wrong Answer</i>	Specifies the action to be executed when the quiz is answered incorrectly. You can use this action to display feedback for the wrong answer.
<i>On Skip</i>	Specifies the action to be executed when the quiz is skipped. You can use this action to display a message that the quiz was skipped by the user.

Quiz item behaviors

If a quiz item is selected by an action (for example, in a confirmation button), the following behaviors are available:

Action	Description
<i>Check</i>	Checks the answer of the quiz item. You can use this behavior to check the answer of the user and to display feedback.
<i>Reset</i>	Resets an answered quiz item to the default status. You can use this behavior, if a quiz was answered incorrectly and needs to be answered again.
<i>Enable</i>	Enables the quiz to allow changes. You can use this behavior to allow the user to change the answer.
<i>Disable</i>	Disables a quiz to prevent changes. You can use this behavior to prevent the user from changing the answer.


6.4 Quiz Items

There is a wide range of quiz items, which can be used to create interesting, multi-layered and at the same time comprehensive quizzes.

The quiz items must be created and edited individually. When using quiz items, the main focus is on learner interaction – answering a quiz using text input boxes, dropdown boxes or moving objects using drag & drop.

Quiz items are an optional group of items to be input manually. The following quiz items are available:

Icon	Name
	Multiple Choice
	Fill in the Fields
	Fill in the Blanks
	Matching
	Connection
	Sorting
	Slide Control
	Grid
	Puzzle
	Hotspot
	Quiz Section

Icon	Name
	Quiz Evaluation

In the following chapters, you will find further information about the quiz items.

6.4.1 Multiple Choice



Using the *Multiple Choice* quiz item, you have the option of creating a question with one answer or multiple answers. The quiz can be solved by selecting the correct answer.

Here, you have a number of design options available, for example, whether or not to create a question that is answerable with just one correct answer, with multiple answers or with apparent multiple answers.

To create a *Multiple Choice* quiz item, proceed as follows:

1. First enter the individual answering options into the *Answer x* parameter.
2. Then specify the correct answer using the *Answer Correct* parameter. You can activate this parameter for a number of answers as well.
If you flag more than one answer as being correct, the possible selections are displayed as checkboxes or alternatively as radio buttons.

Settings

Further settings can be chosen for this quiz item in the *Options* subcategory.

- *Shuffle Solutions:*
When the *Shuffle Solutions* setting has been activated the answers entered are mixed individually.
- *Force Multiple Choice:*
Enable this parameter if you do not immediately want to show the user that there is only one correct answer for a question for which there is only one possible response. This converts the input fields manually from *radio button* type to the *checkbox* type.

Quiz item on book page

For a *Multiple Choice* quiz item on a book page, further settings are available:

- *Design Controls* and *Design* (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.2 Fill in the Fields



With the *Fill in the Fields* quiz item you can define a question with multiple answers. These answers should be entered as text inputs.

The answer has to exactly match the string entered by the author as being the correct answer - if so much as one character is wrong then the answer is deemed to have been incorrectly answered.

To create the quiz item, continue as follows:

1. You can use the *Answer x* parameter to set one or more answers for this quiz item.
2. The *Input Type* parameter allows the display type to be defined with which the answers are to be input.

Overview of the types with descriptions and examples:

Type	Description
<i>Text</i>	The answer can be entered in any way desired.
<i>Text (case sensitive)</i>	The answer must be entered with the same capitalization as in the predefined answer.
<i>Integer</i>	The answer must be entered as a whole number. Here, mathematical characters may also be used. For example: 1, 1-3, <4
<i>Floating point number</i>	The answer must be entered as a floating point number where the dots can be defined as commas or dots. Mathematical signs may also be used here. For example: 1.1; 1-3.4; <4, 2
<i>Regular Expression</i>	The answer must be entered as a mathematical string. For example: (^term\$)
<i>Comma separated list</i>	The answer must be entered as a list separated with commas. For example: Answer1, Answer2, Answer3 The answer can be entered in any way desired. Only one answer can be selected from the list. If identical answers are contained in the list, each answer may only be entered once.
<i>Comma separated list (case sensitive)</i>	The answer must be entered with the same capitalization as in the predefined answer.

i Note

When creating the quiz item, the answers entered and the type selection should match functionally in order to allow an error-free entry.

Quiz item on book page

For a *Fill in the Fields* quiz item on a book page, further settings are available:

- *Design Controls* and *Design* (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.3 Fill in the Blanks



With the *Fill in the Blanks* quiz item you can set a quiz that has text containing gaps to be filled in where words should be.

To create one of these gap texts, proceed as follows:

1. Enter a text you wish to create as a gap text.
2. Define the gaps.
Here you should enter 3 underscores as placeholders for the text that is to be entered.
Corresponding to the *Interaction* type selected, the necessary input and selection options will be created in this position in the text.
For example: This is my___text.
3. Select an *Interaction* in which the answers are to be entered:
 - *Text Input*
 - *Text Input (case sensitive)*
 - *Dropdown List*
 - *Drag & Drop*
4. Enter the answers.
The order of the answers must correspond to the order of the defined gaps in the text. Accordingly, *Answer 1* refers to the first gap, *Answer 2* to the second, and so on.
5. There are differences when entering answers, depending on the type selected:
 - When working with a *Text Input*, insert an answer in the answer field.
You can also add a number of possible values for an answer. Separate the answers by using a comma.
For example: Answer1, Answer2
 - For *Dropdown List* and *Drag & Drop* options, it is necessary to define alternative answers for selection.
That is why a number of possible answers are to be inserted in the response field. The answers are separated using a comma and the correct answer should be marked with an asterisk (*) before it.

i Note

To use a decimal value as answer, for example 1, 5, add a backslash to escape the comma.

For example: 1, 1\, 5, 2, 3, 4

i Note

Make sure that the number of defined gaps matches the number of answers.

Settings

- *Shuffle Solutions:*

Activate this setting to mix answers for the *Drag & Drop* and *Dropdown List* types into the corresponding selection for a gap.

- *Use Answer 1 Only:*

The use of just one answer list is possible in connection with the *Dropdown List* and *Drag & Drop* types if only one list with possible answers is to be made available for the entire *Fill in the Blanks*, to which the answers must be allocated accordingly. The correct answers are marked with an asterisk (*). Each answer can only be used once for a gap.

Quiz item on book page

For a *Fill in the Blanks* quiz item on a book page, further settings are available:

- *Design Controls* and *Design* (Subcategories):

The subcategories contain parameters to specify the appearance of the quiz item.

6.4.4 Matching



You can create a quiz item in which texts or pictures must be matched to one another using the *Matching* quiz item.

To create this quiz item, proceed as follows:

1. Set up how the answers are to be matched. Select an *Interaction*:

- *Drop-Down List:*

All available answers are listed out and must be chosen according to the question.

- *Drag & Drop:*

All answers are available as fields in any order and are to be matched to the questions.

2. Now define the matches. Here, a *Question* must be entered and the matching answer must be defined in the *Answer* field.


To do this, you must enter the corresponding question / answer text into the text fields.

i Note

Make sure that the number of questions is equal to the number of answers and that an answer has been allocated to each question.

Matching pictures

Alternatively, you can add pictures to texts. This means that either the question and answer both contain pictures or only one of the two do. This can be done by inserting pictures using the HTML editor. You should proceed as follows:

1. You may only use the drag & drop function for matching up pictures. Set up this functionality in the [Type](#) section.
2. In the HTML editor of one of the questions or answers go to [Insert Object](#)  -> [Insert Image File...](#)
3. Open the folder containing the picture you wish to insert and select the picture file. Confirm this with [Open](#).
4. In addition to the inserted picture you can also add text.
5. Repeat steps 2 and 3 accordingly for the next questions / answers of the quiz item.

i Note

Do not use picture files that are too large ([height](#), [width](#)) for [Matching](#) so that they display correctly and do not have to be cropped.

> Recommendation

Where there is an association between an image question and text response, the height of the text field in question aligns with that of the associated image. With images of different height, this results in different text field heights, which betrays the correct allocation of the answers.

To align the text fields, you can modify the height of the text fields by using spaces ([Return](#) key).

Quiz item on book page

For a [Matching](#) quiz item on a book page, further settings are available:

- [Design Controls](#) and [Design](#) (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.5 Connection



This quiz item allows you to establish connections between questions and answers in text or image form. This involves creating a line to highlight the assignment of a selected answer to a question.

To create a connection, select a question by clicking on it with the mouse. Then use the mouse again to specify the appropriate answer.

The following is required to create a quiz item [Connection](#):

- Define the content to be connected. You can use both texts and images for this purpose.

Enter a [Question](#) in the appropriate field and it a corresponding [Answer](#).


i Note

Ensure that the number of questions matches the number of answers and that an answer is assigned to each question.

When playing back the project, questions are presented in sequence and the answers out of sequence.

Inserting images

To define images as a question or answer, proceed as follows:

1. In the HTML editor corresponding to a question or answer, go to the function [Insert Object](#)  -> [Insert Image File...](#)
2. Call up the folder containing the image to be inserted and select the image file. Confirm this by clicking on [Open](#).
3. You can now insert an additional text in the text box to accompany the inserted image.
4. Repeat steps 2 and 3 for the other questions and answers in the quiz item.

i Note

Take care when Inserting images that you do not use image files that are too big (height, width) so that they can be displayed correctly when arranging the objects and do not have to be wrapped.

Quiz item on book page

For a [Connection](#) quiz item on a book page, further settings are available:

- [Design Controls](#) and [Design](#) (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.6 Sorting



Text responses can be sorted into the correct order using the [Sorting](#) quiz item. This quiz item can be used, for example, to ask questions about the order in which a process must be carried out where the individual steps must be sorted.

To create a quiz item for sorting answers, proceed as follows:

1. Use the [Interaction](#) option to select how the possible answers are to be displayed
 - [Drop Down List](#):
All of the defined answers are displayed and should be selected accordingly.
 - [Drag & Drop](#):
All answers are positioned as fields in any order and are to be sorted into the correct order.

2. Select an *Alignment* in which the answer fields are to be sorted. *Vertical* and *Horizontal* can be chosen here.
3. Set the answers. Enter these into the answer fields in the correct order. These answers will be mixed up on generation of the quiz.

Depending on the number of answers, a corresponding drop down list or drag & drop field is created.

Quiz item on book page

For a *Sorting* quiz item on a book page, further settings are available:

- *Design Controls* and *Design* (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.7 Slide Control



In a *Slide Control* quiz, you can define a range of numbers and answer value within this range. During playback, the learner has to choose an answer using the slide control.

To create a slide control quiz, proceed as follows:

1. Enter a numerical range for your slider in the *Range* parameter. Enter the start and end values as whole numbers separated by a hyphen.
For example: 5–20
Only one start and one end value can be defined. Additional values, for example, 2-5-9 are not permitted.
2. Enter the *Answer* as a whole number.
For example: 7
You can only define one number as the *Answer*. It is not possible to select more than one number or define a number range for the answer.

i Note

Make sure that you only use integers. Using alternative numerical values or words is not permitted.

Quiz item on book page

For a *Slide Control* quiz item on a book page, further settings are available:

- *Start Value*:
Specifies a value, which is used as start position for the slider.
- *Design Controls* and *Design* (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.

6.4.8 Grid



You can create tables in which questions and answers are placed opposite one another using the [Grid](#) quiz item. The questions can be answered by ticking one of the possible answer options.

To create a [Grid](#) quiz item, you must create a table with rows and columns. To do so, proceed as follows:

1. Set the possible answers in the [Possible Answers](#) section. The number of answers defines the number of columns. These are then displayed horizontally in the head of the table.
When entering the answers, they must be separated by commas.
For example: `File, Edit, View, Insert`
2. Formulate the questions for the quiz item in the [Question x](#) parameter. These are then ordered vertically in the left rows.
3. You can define the answers in the [Position of Correct Answer](#) field. Here, a number value must be entered, which refers back to an answer from the [Possible Answers](#) parameter.
For example, if you defined three answers and want one of your questions to have Answer 2 as the correct answer, then enter 2 into the answer field of the corresponding question.

Settings

- [Shuffle Solutions](#):
Activate this parameter to show the [Possible Answers](#) in any order. If this setting has been deactivated, the entries made under possible responses are shown in the same order in which they were input in the text field.

Quiz item on book page

For a [Grid](#) quiz item on a book page, further settings are available:

- [Design Controls](#) and [Design](#) (Subcategories):
The subcategories contain parameters to specify the appearance of the quiz item.


6.4.9 Puzzle



The [Puzzle](#) quiz item lets you create a puzzle from a picture file. The task is to reassemble the original picture correctly.

Here, an uploaded picture is divided and the separate parts are mixed randomly. The degree of fragmentation can be set individually. The user can then use drag&drop to arrange the image components in the correct layout and thus generate the original image.

The following shows you how to go about creating a [Puzzle](#) quiz item:

1. Insert a picture file via the [Image](#) parameter.
The file can be inserted using the [Replace Image](#)  command.

i Note

Note that quiz puzzles do not contain [Media File](#) parameters. The [Media File](#) area is used to display the [Help Image](#) and is therefore not available for use in other media files.

2. After inserting the picture, the puzzle must be fragmented:

- *Pieces Horizontal:*
The numerical value entered defines the number of parts into which the original image is subdivided horizontally.
- *Pieces Vertical:*
The numerical value entered defines the number of parts into which the original image is subdivided vertically.

i Note

If, when fragmenting the puzzle, two optically identical fields are found, it may be the case that it cannot be recognized which picture belongs to which field. For this reason, the different puzzle parts should be fragmented in such a way as no identical parts appear.

Alternatively, it is possible to use an image processing program prior to this to change an optically identical picture by inserting a different-colored point, the size of a single pixel, into the picture.

3. The composition of the puzzle can be set using the *Interaction* selection. A difference is discerned between the following two modes:
 - *Arrange in One Field*
 - *Arrange in Second Field*
4. This selection allows you to determine whether the user works directly within the parts of the puzzle shown or is shown a second, empty field into which he drags the parts of the puzzle.

i Note

Note that the *Puzzle* quiz item is not produced as well on generation of the documentation as the option of doing puzzles is not possible in the corresponding document format.

Further options

- *Show Help Image:*
The original picture can be shown next to the puzzle by using the *Show Help Image* parameter. This parameter is activated in the initial setup.

Quiz item on book page

For a *Puzzle* quiz item on a book page, further settings are available:

- *Fields Side by Side* (*Options* subcategory):
Specifies, the source field and the answer field are positioned side by side instead of below each other. The parameter is used for the *Interaction* type *Arrange in Second Field*.
- *Design* (Subcategory):
The subcategory contains parameters to specify the appearance of the quiz item.

Help Image




For a *Puzzle* on a book page you can insert a help image as additional book page object. Use the *Image* object, to insert an image.

6.4.10 Hotspot




With the *Hotspot* quiz item, a quiz can be created in which a pre-defined area on a picture must be specified by selecting it.

To create *Hotspot* quiz item in a project, proceed as follows:

1. Use the *Image* parameter to insert the corresponding picture file within whose area a section must be selected by the user.
The file can be inserted using the *Replace Image*  command.
2. After inserting the picture, it is necessary to define an area for selection. This area can only be defined in the shape of a rectangle.
Select the *Define Hotspot*  function in the header of the macro editor.
3. After selecting the *Define Hotspot* button a window will open in which the inserted picture will display. In it, you will find a red selection box whose size and position can be changed so that the picture section can be set.
4. Now close the window with the *Confirm Selection*  button.

Quiz item on book page

To create a *Hotspot* quiz item on a book page, proceed as follows:

1. Use the *Image* parameter to insert the required picture file.
You can insert the file by using the *Replace Image*  command.
2. Define an area for the hotspot selection.
The highlight in the image box shows the current hotspot area. You can move the hotspot by drag and drop to another position and change the size by using the pointers on the highlighted border.

For a *Hotspot* on a book page, further settings are available:

- *Hotspot: Left, Top:*
Specifies the position of the hotspot area.
- *Hotspot: Width, Height*
Specifies the size of the hotspot area.
- *Pin* (Subcategory):
The subcategory *Pin* offers parameters to define an individual pin to select the hotspot. You can insert an image.
The image can also be a sprite image. This is an image file that combines many icons into one file. Using the *Sprite* parameters, you can define the image area of the pin on the file so that only this selection is shown.
- *Design* (Subcategory):
The subcategory contains parameters to specify the appearance of the quiz item.

7 Books and Book Pages

Books and book pages are used to provide information, helps, tutorials and more by using multimedia elements. They make it possible to incorporate simulations and different media files, but also conventional documents and links to further information.

Using different objects and media presents you with many and various opportunities for presenting and communicating information. Moreover, the book page design as well can be individually edited and customized to the content to be communicated.

7.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

7.2 General

A book page is an HTML page on which different content can be filed in different forms and accessed.

It can accommodate various buttons for launching simulations and opening documents that can then be linked within a workarea. Media files for audio and video formats can also be integrated and can be presented using appropriate playback applications. But information in traditional form, as an image or text, can also be created on a book page.

A number of book pages can be combined in a book. A book can thus be understood as a type of group. Once a book has been created, it can be displayed in the book reader, which the learner can use to flick through the pages and launch and work through content.

Easy to create, diverse applications

Book pages make it possible to create courses on a particular step quickly by inserting objects on the book page and linking them to content.

In this way you can amalgamate the content of a number of simulations by combining different modes and documents. However, because of the diverse ways of presenting information on book pages, it is not absolutely necessary to integrate simulations into a book page. You can also design a book page using simple texts or video files and thus provide these to the learner in addition to the individual simulations or else integrate them entirely independently as an extension of the step.




Didactic benefit

Books and book pages promote independent learning and a stronger engagement with the facts as learners are able to use and discover the content individually. They allow the student to work with the content that is relevant to him and ensure variety due to different information formats.

7.3 Creating a Book

Create a book to structure your book pages. For more information, see the chapter *Creating a Content Object*.

Proceed as follows:


1. In the *Explorer* select *New Object* .
An overview of all objects opens.
2. Select *New Object*  in the toolbar.
An overview of all objects opens.
3. Select *Book* .
The *New Book* dialog box opens.
4. Adapt the following settings:
 1. *Name*:
Enter an object name.
The default name is the object type with an ID.
 2. *Language*:
Select a language from the dropdown box.
 3. *Template*:
Select a template.
Choose *Change...* to open a selection dialog box and select a template from the workarea. Select *No template* to create an object without a template.
If a template has already been used, that template is selected by default.
See the chapter *Templates for Content Objects*.
5. Choose *OK* to create the object.

The book is inserted into the structure. You can now insert book pages into your book.


To structure your book, you can insert further books or groups into your book to create subchapters. For correct tracking of books, we recommend that you use groups for subchapters.

7.3.1 Defining a Book Page as Content Page

You can create a page containing introductory information or a table of contents for a book. Users can access the page at any time in the book reader, the page can be defined as a content page for the book. The book page can then be launched directly in the book reader using a button in the control bar.

To specify a *Content Page*, select your book in the *Explorer*. Then go to *Content Page* in the object editor's subcategory *book reader* and select the *Edit Link...*  option. You can now specify your book page in the open dialog. Confirm this by clicking on *OK*.

7.3.2 Subcategory book reader

The subcategory *book reader* provides settings to specify the functionality of the book reader's control bar. This allows you to customize them to your book's individual requirements and hide any functions you do not want. Select a book  in the explorer and open the subcategory in the object editor.

> Recommendation

You can create objects on your book page to control the book. For example, to go to the next and the previous page. This allows you to hide the buttons in the control bar.

The following settings are available:

- *Hide Book Panel:*
Activate this option to hide the book panel.
- *Open Book Directly:*
If this option is activated the book will open in the book reader as soon as it is selected in the tree structure in the library. If the option is deactivated, the book reader is started by selecting the *Open Book* button in the content view of the library.
- *Hide Audio Controls:*
Activate this option to hide the buttons for controlling the audio and volume.
- *Hide Navigation Controls:*
Activate this option to hide the buttons for navigating through the book pages.
- *Hide Play/Pause Control:*
Activate this option to hide the buttons for pausing and starting the playback.
- *Hide Index Page Control:*
Activate this option to hide the button for opening a content page.
- *Hide Search Button:*
Activate this option to hide the button for opening the search dialog box.
- *Hide Table of Contents Control:*
Activate this option to hide the table of contents dropdown menu.
- *Hide Progress Control:*
Activate this option to hide the progress bar for displaying how the user is progressing in the book.


7.3.3 Alternative Navigations on Book Pages

Actions can be used to allow navigation on book pages independently of the control bar of the book reader. These are universal properties and allow the user to jump between book pages and units.

If you would like to use such navigations, it is recommended that the objects be inserted into a book page template. By doing so, they can be used for the entire book and ensure consistency.

Actions as link targets

To enter a link target, proceed as follows:

1. Insert a book page object.
For example: *Image*, *Active Area*.
2. Select the parameter *Link -> Link to...*
3. Select *Edit Link...* . The editing dialog box appears.
4. Select *Actions* button.
5. Select the desired action from the *Actions* drop-down list.
For example: *Next book page*, *Play audio*

More information about link actions can be found under *Link Actions for trainer and book reader*.

Object actions of the page object

To specify an object action for a *page* object, proceed as follows:

1. Insert a book page object, for example *Image* or *Active Area*.
2. Under subcategory *Actions*, choose an action.
For example: *On Click*, *On Show*
3. Select the *page* object from the first drop-down list.
4. Select a behavior from the second drop-down list.
For example: *Next*, *Share*.

More information about actions can be found under *Object Actions*.

Disabling the book navigation

For a book page you can specify, that the book reader control bar is deactivated. This allows you, to specify required content. After completing the content, navigation can be enabled.





When selecting the *page* object for an object action, the following behaviors are available:

- *Disable Book Navigation:*
Disables the navigation of the control bar and other navigation controls on the book page.
- *Enable Book Navigation:*
Enables the navigation of the control bar and navigation controls.

7.4 Creating a Book Page

Create a book page for your book or as single book page. For more information, see the chapter *Creating a Content Object*.

Proceed as follows:

1. Select a *Book*  or a *Group*  in the workarea structure to insert the book page.
2. Select *New Object*  in the toolbar.
An overview of all objects opens.
3. Select *Book Page* .
The *New Book Page* dialog box opens.
4. Adapt the following settings:

1. *Name:*
Enter an object name.
The default name is the object type with an ID.
2. *Language:*
Select a language from the dropdown box.
3. *Template:*
Select a template.
Choose *Change...* to open a selection dialog box and select a template from the workarea. Select *No template* to create an object without a template.
If a template has already been used, that template is selected by default.
See the chapter *Templates for Content Objects*.
5. Choose *OK* to create the object.

The book page opens in the book editor. Now, you can insert your content. Read the following chapters on this subject.

7.4.1 Specifying the Design


After creating the book page, it is opened in the book page editor using the default style. You can use the *Style* parameter to select the design you want in the object editor and customize it accordingly.

A style defines the background design, the design of the buttons for the linked learning content as well as the appearance of the text box. Selecting a different skin therefore changes all of these objects. Before you select a skin, it is advisable to insert some objects to be able to assess the overall design.

Customizing the background

You can customize the chosen background design as you like. You can use an available skin as a template which can then be edited once it has been selected.

Various settings are available to you in the book page editor for displaying the book page:

- *Image:*
This parameter can be used to define an individual background image which replaces the image of the skin that has been set.
- *Width* and *Height:*
Specifies the book page's width and height. The values are stated in pixels.
- *Page Color (Design):*
Specifies the book page's background color. It is recommended that you enter a value in this field if you choose not to use an image for the book page's background or if you use an image that does not cover the entire book page itself.
When using the *Page Color*, activate the *Image* setting without selecting an image. This is necessary to hide the page image or color of the book page style.
- *Background Color (Design):*
Specifies the color of the outer surface surrounding the book page. Select the color preview to open the *Color Selection* dialog box. Select *Transparent* , if you do not want to use any color.

- *Border Width (Design):*
Specifies the width of the border for the book page. The value is defined in pixels. If no border is to be displayed, the value is to be set to 0.
- *Border Color (Design):*
Specifies the color of the book page's border. Select the color preview to open the *Color Selection* dialog box. Ensure that you have previously specified a width for the border so that it is actually displayed.
- *Border Style (Design):*
Specifies the style of the book page's border that you can select from the dropdown box.

You can call up the design parameters at any time while a book page is being created and amend them by selecting the background.

7.4.2 Table of Contents for Book Pages

A book page can have a table of contents faded in, which is displayed on the book page background independently of the book reader.

The table of contents is constructed from a bar displaying the groups or book pages belonging to the first sub level. The other groups and book pages can be launched from an option menu that is faded in using the button on the right-hand side of the book page. Clicking on a group name opens a menu displaying the group content.

The table of contents on the book pages can be used as an alternative to the table of contents in the book reader. This is accomplished by deactivating the book reader table of contents.

› Recommendation

The width of the table of contents is restricted to the width of the book page. That is why when setting up the groups it is recommended that short names or chapter numbers be issued, so that as many groups as possible can be displayed on the bar.

Settings

A book page's table of contents can be defined using the *Table of Contents* subcategory. This offers you the following functionality:

- *Show:*
This function can be used to activate the table of contents for the book page.

i Note

The table of contents must be defined for each individual book page. If all of the book pages of a book are to receive a table of contents, then it is advisable to define the table of contents for one book page and then use this book page as a copy template when creating new book pages.

- *Position:*
The table of contents bar can be faded in directly above the book page or in the window header. Use this parameter to select the appropriate position.
- *Menu Structure:*
These options can be used to define the way in which the content is displayed in the menu.

- *Flat structure:*
The groups and book pages are displayed in a flat structure such that all groups and book pages are displayed on one level.
- *Indented contents:*
The contents of a group are shown indented relative to the group itself. This improves clarity within a complex content structure.

7.4.3 Hiding a Book Page in Table of Contents

You can hide a book page in the table of contents of the control bar. This allows you to show only the main pages in the table of contents and to hide additional information.

The book page is not numbered in the table of contents and is not counted in the book page progress bar. The user can navigate to the book page. Afterwards, the book page is shown in the table of contents.

Proceed as follows:

1. Select a book page in *Explorer*.
2. Activate the option *Hide in Table of Contents* in object editor.

7.4.4 Further Properties of a Book Page

Show Navigation Arrows

Instead of using the command bar to scroll through the book pages, you can do so using the buttons either side of the book page. This makes it possible to work more intuitively with the book.

To display the buttons, activate the *Show Navigation Arrows* option for the book page in the book page editor.

Display Duration

This option allows you to determine the duration that a book page should be displayed in the book reader. Once the time has elapsed, the book reader will automatically jump to the next book page. This feature allows you to play books as a slide show or an automatic presentation. The value can be set in seconds.


7.4.5 Merging Book Pages

Merging book pages allows content from a different book page to be added to the content of the currently selected book page. This is sensible, for example, when applying recurring elements or to have a structure available created using construction lines.

When merging book pages, the desired objects are inserted on the book page, but with the added book page continuing to have its own separate existence.

This is how you add the content of a one book page to another book page:

1. In the book page editor, open the book page to which the content is to be added.

2. Select the [Merge Book Pages](#)  option in the toolbar.
3. A dialog will now be displayed with the overview of the Workarea structure in which you can determine the book page of your choice. The book page currently open will be shown grayed out in this structure. Click on the book page and then on [OK](#) to confirm.
4. In the next step, you will be presented with a dialog displaying the objects belonging to the chosen book page. By making a selection in the selection boxes you can determine which objects you would like to apply to the open book page. Confirm your selection by clicking on [OK](#).

The objects are now inserted on the book page in the place in which they were located in the selected book page. The objects also receive the book page style of the book page to which they were added.

7.4.6 Page Sound




The [Page Sound](#) parameter enables background music or an audio commentary to be inserted in a book page. The learner can start the audio file in the book reader in the control bar.

For information on how to add and edit an audio file, refer to the section on [Editing Audio](#).

7.4.6.1 Adding Audio to Book Pages

You can insert audio as [Page Sound](#) to your book pages by using the [Add Audio](#) dialog box. See also [Add Audio Dialog Box](#).

To record audio for your book pages, proceed as follows:

1. Select [Add Audio](#)  in the toolbar to open the [Add Audio](#) dialog box.
2. Select a book page from the page list.
3. Select [Start Recording](#) .
4. Speak your audio text.
5. Select [End Recording](#) .
6. Select the next book page and record your next audio text.
7. Once you have recorded all your audio texts, select [OK](#) to close the dialog box.

Alternatively, you can insert text to speech in the [Add Audio](#) dialog box. Open the [Text-to-Speech](#) dialog box by selecting [Edit Text-to-Speech...](#) .

7.4.6.2 Importing Audio

Importing audio files allows you to easily integrate audio files into a simulation.


i Note

By importing an audio file, the existing audio of a step will be overwritten.

Proceed as follows to import an audio file:

i Note

During import the audio files are converted into the editing format **WAV** with the default audio format.

1. Select the book page for which you want to import an audio file.
2. In **Page Sound** parameter, select **Import Audio File...** .
There are two options:
 - **Insert Audio File...**
 - **Insert Audio from Workarea...**
3. A dialog box opens. Select the file.
4. Select **OK** to insert the file.

7.4.6.3 Recording Audio




Audio recording allows you to narrate your own texts with the microphone.

Requirement

For audio recording, a microphone is necessary. Connect this first before starting to record.

Recording audio

Proceed as follows to execute the recording:

1. Select **Record Audio...** . The audio editor and the recording dialog box opens.
2. Select **Start Recording** .
3. Read out your text.
During the recording, a sound level meter shows the volume. You also see the spoken text as an audio track.
4. Select **End Recording** .
5. Select **Ok** to close recording dialog box.

For more information, refer to the **Recording Dialog Box** chapter.

i Note

During the recording of an audio file, the existing audio of a book page will be overwritten.

Read out the full text for your recording because it is not possible to record the text in sections. Any unwanted parts can be cut out afterwards. If you are not satisfied with the outcome, record the text again.

> Recommendation


If the recording contains background noise, then it is recommended that you edit the audio file with the dynamic editor to improve the sound.

7.4.6.4 Generating Text-to-Speech

We recommend that you convert text to speech after a project has been edited. Steps should be converted individually. If a step contains several macros (for example, several steps are connected), then the texts will be read out one after the other in the order in which the macros are arranged.

If the bubble texts of a simulation are already converted into text to speech, they are available when you open the editor.

Proceed as follows to convert text to speech:

1. Open the Text-to-Speech editor using the [Edit Text-to-Speech...](#)  button for each step.
Refer to the chapter *Text-to-Speech Dialog Box*.
2. Insert a text in the text field or edit the available text.
3. Define the duration of the silence to be inserted at the beginning of the audio file.
4. Confirm the input with [Generate and Close](#). The dialog box is closed and the audio file generated.

Note

If a step contains several macros, the individual actions and associated spoken texts will run asynchronously in relation to one another. This is because the texts are converted into an audio file and are not linked to the actions. It is therefore advisable to only use one macro per step.

Note

Text-to-Speech generation is not available in the web-based Book Page Editor.

7.4.6.5 Subtitles for Text-to-Speech

For the Text-to-Speech audio of your book pages, you are able to display subtitles. The subtitle is displayed in the footer of the book reader and shows your Text-to-Speech text.

Subtitle settings

The following settings are available in [Settings](#)  under [Playback Settings -> book reader -> Visual properties](#):

- [Show subtitles](#):
Activate the option to show subtitles for Text-to-Speech.
- **Design of the subtitles**
For the subtitle textbox you can specify the design with the following settings:
 - [Font family](#)
 - [Font size](#)
 - [Text color](#)
 - [Alignment](#)
 - [Background color](#)

7.4.7 Templates for Book Pages







Book page templates are special types of book pages, which define a layout and general objects for creating book page content. Templates are useful for saving time and for ensuring uniformity for newly created objects in a complex book and to support the content creation of many authors.

7.4.7.1 Creating a Book Page Template

You should create a template before creating a book. This ensures consistency and avoids the need to make changes afterwards. For further information, see the chapter *Creating a Content Object*.

To create a book page template, proceed as follows:

1. Select your template group  in the workarea structure to insert the book page template.
2. Select *New Object*  in the toolbar.
An overview of all objects opens.
3. Select *Book Page* .
The *New Book Page* dialog box opens.
4. Adapt the following settings:
 1. *Name:*
Enter an object name.
The default name is the object type with an ID.
 2. *Language:*
Select a language from the dropdown box.
5. Select *OK* to create the object.
The book page is opened in the book editor.
6. Select a *Book Style* in the *Style* parameter.
7. Create your standard elements of the template.
8. Select *Save* and close the book page.
9. Open the *Explorer*.
10. Select *Book Page Template*  as *Subtype* for the created book page.
The icon of the object changes and displays the template type.

Note

An existing template cannot be used to create a new template. Always create a template without using other templates.

Tips for creating templates

- Create a group for your templates. Set the group to hidden, in order to hide it during content playback.
- Lock the position of your objects, if you want to prevent objects from being changed accidentally.

- Use guides to create a layout grid.
- Define [Text Styles](#) for the content, to ensure consistency and straightforward adaptation.
- Insert the layout and design relevant objects.




7.4.7.2 Defining a Book Page Template

You can use a book page template to create your book page content. There are different ways to activate a template for a book page:

- Define a default template for creating new book pages
- Select a template when creating a new book page
- Set a template in an existing book page

Select a default template

You can select a default template, which is always used for creating new book pages. This can be done as follows:

1. Open the area [Producer -> Templates](#) in the [Settings](#)  dialog box.
2. In the [Book Page](#) parameter, select [Edit Link...](#) .
The object selection dialog box opens.
3. Select the [Book Page Template](#)  and select [OK](#).
4. Confirm your changes in the [Settings](#) dialog box with [Apply](#).
5. Select [OK](#) to close the dialog box.

When creating a new book page, the template is set by default. Further information is available in the chapter [Templates for Content Objects](#).

Select a template for a new book page

When creating a book page, you can set a template in the [New Book Page](#) dialog box. If a template has been defined as standard, you can select an alternative template for an individual page. For further information, see the chapter [Creating a Book Page](#).

Set a template in a book page

The [Page](#) object of a book page contains the setting [Template](#), which displays the activated template. If you want to use another template, select the book page from the dropdown box. The property only displays book pages with the subtype [Book Page Template](#).

7.4.7.3 Using a Book Page Template

The objects of an active book page template have the following characteristics:

- they are inherited from the template
- they use the properties as default (green button deactivated)
- they are highlighted in blue in the objects list

- they are positioned on the layers behind the objects of the created book page
- they cannot be deleted - the objects are hidden automatically

Changing and resetting objects

The template objects use the defined properties by default, if the template is used for a general book page. You can change the template objects for your content as required.

To change an object, you have to select the specific property by activating the green control in front of the property name.

If you have changed objects, you can reset your changes by choosing the [Reset Template Objects](#) in the [Edit](#) menu. Once reset, the parameters are unspecified (green control deactivated) and the default template is used.

i Note

Changed objects keep their status even when objects are changed in the template. Click on [Reset Template Objects](#) to change the objects in the book page to the current status of the template.

Tips for using templates

- If you do not need an object on a book page, hide the object by using the [Hide](#) property in the object editor.
- We recommend that you keep the template objects when the template is used as a book page because the objects define a layout.

7.5 Book Page Objects

The following section will give you an overview on the variety of objects available for enhancing your book pages. The properties and editing options are described here in detail.





Different objects offer the opportunity to provide the learner with information. You can insert these using the toolbar and edit them accordingly.


























They offer you the following objects:

The following section will give you an overview on the variety of objects available for enhancing your book pages. The properties and editing options are described here in detail.

Different objects offer the opportunity to provide the learner with information. You can insert these using the toolbar and edit them accordingly.

They offer you the following objects:

Icon	Name	Icon	Name
	Arrow		Demo Mode Link
	Shape		Practice Mode Links

Icon	Name	Icon	Name
	Bubble		Test Mode Link
	Image		Concurrent Mode Link
	Text Box		Guided Presentation Mode Link
	Placeholder		Free Presentation Mode Link
	Active Area		Quiz Link
	Text Pop-Up		Book Page Link
	BPM Object		Book Link
	Connection		Document Link
	Time Control		QR Code
	Object Visibility		Video Object
	Animation		Audio Object
	Counter		HTML Document
	Collector		

For further information to the objects, read the corresponding sections.

Inserting an object

Proceed as follows, to insert an object:

1. Select an object type from the toolbar.
A popup with all objects of a type opens.
2. Select an object.
The object is inserted on the page. Some objects will be inserted on the status bar.
3. Edit the inserted object.
For further information, see the chapter of each object.

7.5.1 Arrow



The [Arrow](#) object is customizable. It creates a path for which you can choose from a variety of arrow heads. The arrow's length, position and direction can be modified as desired.



Positioning a path point







There are path points at the beginning and end of an arrow that allow you to adjust its length and direction. Select one of the points and drag and drop it to the desired position on the book page.

Defining an arrow

An arrow object can be customized as follows:

- [Color](#):
Specifies the arrow's color. Select the color preview to open the [Color Selection](#) dialog box.
- [Thickness](#):
Specifies the arrow's thickness. The value is given in pixels.
- [Arrow Head 1 & 2](#):
Specifies the arrow's head for each side of the arrow.
There are several types:

Design	Name
	None
	Standard

Design	Name
	<i>Triangle - Hollow</i>
	<i>Triangle - Filled</i>
	<i>Diamond – Hollow</i>
	<i>Diamond – Filled</i>
	<i>Circle - Hollow</i>
	<i>Circle - Filled</i>

- Advanced (Advanced Layout):**
 Specifies the width and the length of the arrow heads in relation to the arrow's thickness. Enter a value between 2 and 20.
 The value defines how many times the length of the thickness should be expanded (for example, value 3 = 3x the arrow's thickness).


7.5.2 Shape



The *Shape* object displays a variety of shapes to choose from for the purpose of enhancing the visualization of learning content, process flows and sequences. Shape objects can be used in a variety of ways and can contain text.

To insert a shape, select *Insert Shape*. A palette is opened in which you can select a shape type and a orientation. For more information, refer to the section on *Shapes Overview*. You can change the type with the *Type and Orientation* parameter.

Design

- **Shape Color:**
Specifies the shapes' color. Select the color preview to open the *Color Selection* dialog box. Select *Transparent* , if you do not want to use any color.
- **Shape Value:**
Specifies the shape's character. Values between 0 and 100 can be entered here. The outcome will vary depending on the type of shape selected. For example, you can change the width of an arrow or smooth the corners of a square.
Note that this setting is not available for all shapes. For more information, refer to the section on *Shapes Overview*.

You will find descriptions on additional settings under the section on *Editing Parameters*.

Effects

Under *Effects*, there is a variety of settings that allow you to define the behavior and design of a shape.

- **Gradient**
 - *Shape Color (Gradient)*
 - *Border Color (Gradient)*
- **Design Roll-Over**
 - *Shape color*
 - *Shape Color (Gradient)*
 - *Border color*
 - *Border Color (Gradient)*
- **Design Click**
 - *Shape color*
 - *Shape Color (Gradient)*
 - *Border color*
 - *Border Color (Gradient)*

7.5.3 Shapes Overview

This section will give you an overview of the shapes that are available in the Producer and includes a list of shapes for which the *Orientation* and/or *Shape Value* can be defined.

	Shape	Direction / Shape Value
Arrows		
	Arrow	
	Arrow (one direction)	Left, Right, Up, Down Arrow thickness
	Chevron	Left, Right, Up, Down

	Shape	Direction / Shape Value
	Pentagon	Left, Right, Up, Down
	Arrow (two directions)	Left Right, Up Down Shape thickness
	Arrow (two directions kinked)	Left Up, Right Up, Left Down, Right Down Shape thickness
	Triple Arrow	Shape thickness
	Quad Arrow	Shape thickness
	Notched Arrow	Left, Right, Up, Down Shape thickness
Stars		
	4-Point Star	Shape thickness
	5-Point Star	Shape thickness
	6-Point Star	Shape thickness
	7-Point Star	Shape thickness
	8-Point Star	Shape thickness
	9-Point Star	Shape thickness
	10-Point Star	Shape thickness
	12-Point Star	Shape thickness
Triangles		
	Isosceles Triangle	Left, Right, Up, Down
	Triangle	Left, Right, Up, Down
Rectangles		
	Rectangle	Corner radius
	Rounded Rectangle	
	Parallelogram	Left, Right, Up, Down

	Shape	Direction / Shape Value
		Shape thickness
	Trapezoid	Left, Right, Up, Down Shape thickness
Polygons		
	Hexagon	Horizontal, Vertical
	Diamond	
	Regular Pentagon	Left, Right, Up, Down
	Heptagon	
	Octagon	
	Decagon	
	Dodecagon	
Miscellaneous		
	Ellipse	
	Plus	Shape thickness
	Lightning	

7.5.4 Bubble



Bubbles are ideal for adding visually-appealing textual content to your projects. Similar to those used in the simulations, these bubbles also have a tip on them to point to a specific item on the page.

Creating bubbles

To create a bubble, select the option *Insert Bubble*. The following options will appear:

- *Text:*
Select the text field to open the HTML editor, where you can enter and format your text for the bubble.

- **Style:**
Here you can choose which bubble style you would like to use. To edit your bubble, go to the menu [Tools](#) and open the editing dialog box for your bubble style.
- **Alignment:**
Here you can specify in which direction the tip of your bubble should be pointing. If you choose the option [Center](#) – the bubble will have no point and it will be positioned in the middle of the chosen area.
- **Title:**
This text field allows you to enter a title for the bubble. When using titles, it is recommended that you also enable the option [Movable](#), which inserts a title bar at the top of your object.
- **Movable:**
When this option is enabled, the bubble can be repositioned on the book page during playback. An additional title bar will appear in the object that allows you to move the bubble per Drag & Drop. After it's been repositioned, the bubble will be displayed normally with no arrow markers.
- **Closable:**
When this option is enabled, the bubble can be closed while the book page is playing. An [X](#) icon will appear in the corner of the bubble for you to click on.
Under [Actions](#), you can also manually add the icon [Restore](#) so you can quickly redisplay the bubble.

Manually changing text bubble alignments

A square will appear at the top of the bubble, which you can use to manually turn the object. With centrally-aligned bubbles that do not have a tip, the square will appear in the middle of the bubble. Select the square and hold the mouse button down. With the mouse button still pressed, pull the dot away from the bubble and to the desired position. Release the mouse button to set the new position.

7.5.5 Image



This object allows you to insert an image file to your book page.

Inserting an image

To insert an image, proceed as follows:

1. Select **Insert Image** in toolbar.
The [Insert Image from Workarea](#) dialog box opens.
2. Select an image in your workarea structure.
or
Use [Insert File...](#) to import an image.
3. Select [Ok](#).

You can use [Replace Image](#)  to change the image file.

See the chapter [Supported File Formats on Book Pages](#) for supported file formats.

Parameters of the object

The following parameters are available:

- *Image Roll-Over:*
You can use the *Image Roll-Over* option to insert an image that is shown when the mouse is moved over it.
- *Image Click:*
You can use the *Image Click* option to insert an image that is shown when the image is clicked on.
- *Keep Aspect Ratio:*
If this parameter is activated, the aspect ratio is retained when scaling an image. Deactivate this parameter if you want to be free to change the size of an image.
- *Zoom:*
The *Zoom* option allows you to zoom in and out of images on the book page. An icon will be inserted onto the image. By clicking on the icon, the image will be shown in its original size. This allows you to insert an image into the book page and save space when scaling it.

7.5.6 Text Box



The *Insert Text Box* is a field in which you can enter pure text. The size of this field can be varied to accommodate longer texts.

Example, you can use the text field to provide general or introductory information about a step.

7.5.7 Placeholder



The *Placeholder* inserts a variable in order to dynamically allocate content to a specific location. For example: book page title, descriptions, page number, etc. The placeholder object makes it easier to keep the layout consistent throughout the project.

To use placeholders, it is recommended that you insert them into templates so that they will be available in all of your book pages. For example, the page number can be integrated into all of the book pages in the same position.

Once an object has been inserted, choose the desired option from the *Placeholder* selection list. The respective content will then be displayed in the text field.

You can choose from the following placeholders:

- *Book title*
- *Book description*
- *Book page title*
- *Book page description*
- *Chapter title*
- *Chapter description*

- *Page number*
- *Page count*
- *Text-to-Speech text*


> Recommendation

A *Text-to-Speech text* placeholder can be used, to provide a closed caption for an audio with text to speech.

7.5.8 Active Area



The *Active Area* is a text field in which you can insert a text or image. The entire area constitutes a button that can be linked with an external web page or object from the Workarea. This allows further information, for example, to be shown.

To create a link, go to the *Link to...*  function. A dialog will then open in which you can specify a link or select an object from the Workarea. A link to a web page or similar is to be entered in the text field under *Available*. This should be in the format `http://www...`. Confirm your entry by clicking on *OK*.

When launched, the linked page is automatically opened in a new browser window. If you would like to open the page in the same window, you need to deactivate the setting *Open in a new window*.

If the linked page or object from the Workarea is opened in a new window, you can define properties for displaying the browser window that has been opened.

Effects for active areas

Under *Effects*, you will find a list of settings that allow you to add dynamic effects to active surfaces in order to improve its usability. The following actions can be defined:

- *Design Roll-Over*
- *Design Click*

Once one of these options has been enabled, additional settings will appear. The following settings can be defined to change the object's properties:

- *Background color*
- *Font color*
- *Border color*

7.5.9 Text Pop-Up



This function inserts a text pop-up which can be opened by a button. You can insert any text you like in this box as well as an image.

The text pop-up can be formatted using the *Text Pop-Up Position* subcategory to adjust its size and position.

Defining type and title

- *Type:*
Different types, differentiated by a corresponding icon, can be defined for displaying the textbox. Using different types enables you to highlight the text box content and present it more clearly to the user. The following types are available and can be selected using the parameter *Type*:
 - *Standard*
 - *More Info*
 - *Tip*
- *Title:*
You can use the parameter *Title* to specify a title for the text box. If you do not want to display a title, you should leave the field blank. The default setting for the *Standard* type is no title whereas placeholders are displayed for the other types.

Further options

- *Show on Roll-Over:*
This option allows you to define whether a text pop-up should appear when the mouse cursor rolls over the icon. When the mouse cursor rolls out of the icon, the text pop-up will hide again. The text pop-up behaves in the same way as a tooltip.
- *Fade In/Out:*
This parameter defines whether the text pop-up is displayed or hidden with a fading in effect when being opened or closed. Deactivate the setting if you wish to avoid this effect.
- *Hide Text Pop-Up in Editor:*
The default setting is for the text pop-up to be displayed in the book page editor. Activate the parameter to hide it for editing. If you would like to reinstate the text pop-up in the view, deactivate the setting.

7.5.10 Linking Content from the Workarea




You can link simulation modes, books and book pages you have created from your workarea on your book page. You also can integrate different documents. For example, these can be Word or PowerPoint documents you have generated or else files in Excel or PDF format inserted in the workarea.

For a quiz any simulation mode containing only quiz items can be selected. As a rule, the recommended mode is Test mode as it does not allow the user to influence the process in any way.

Linking the content

Proceed as follows, to insert a link:

1. In the toolbar, select the relevant type which you would like to link to content. A button is then created on your book page.
2. Select the [Edit Link...](#)  button (subcategory [Link](#)) adjacent to the [Link](#) to parameter in the object editor.
3. A dialog displaying the Workarea structure will then open. Only the learning content corresponding to the type of button you have inserted can be selected from this dialog. Specify the learning content you want by clicking on it and click on [OK](#) to confirm.

The object is now linked to the button and can be selected and opened when viewing the book page.

Note

If a button is not linked, a note icon will appear on the button. Create the link as desired. This icon is only visible from the book page editor screen.

Customizing an icon

Icons for inserted objects automatically have the same Style appearance that was defined for the book page itself. It is, however, possible to customize an icon with your own image. To do so, click on the option [Image](#). This can be an existing image file or a screenshot that has not yet been created.

You can also define an object's icon to be used as default on all the book pages. To do so, go to [Book Page Initialization](#) and insert the icon.

7.5.11 Video Object



The [Video](#) object displays inserted video files on a book page in an embedded player window. The object supports common video formats (see chapter [Supported File Formats on Book Pages](#)).


Note

To insert and view videos, authors and users need the relevant playback applications for the required formats to be installed on their workstations. These applications can be downloaded from the websites of the relevant manufacturers. Consult your administrator if required.

Further information on formats is available in the chapter [Requirements for Video Formats](#).

Inserting a video

To insert a video in your book page, proceed as follows:

1. Select [Insert Media Objects -> Insert Video](#) in the toolbar.
2. Select [Edit Link...](#)  for the [Source](#) parameter in the object editor.
The [Source](#) dialog box is opened.
 1. Select [Insert File...](#)
 2. Select the file from your directory. Select [Open](#).
 3. Select [OK](#).

The video is now displayed on your book page and can be played back. The file has been copied into the book page folder.

i Note

A page with the current settings is displayed by default for inserted media objects. This is only visible for editing and is hidden during playback.

Alternative source

The object supports a wide range of video formats within HTML 5 as well as further video plugins. The [Alternative Source](#) parameters allow you to insert additional files in different formats for a [Video](#) object. The alternatives are used to display a video, if a format cannot be played back due to a missing plugin or unsupported browser.

Further settings

- [Show Control:](#)
Displays the control bar.
- [Start Automatically:](#)
Activate this parameter to playback the video automatically after the book page has been opened. If this setting has been deactivated, the learner needs to start the media file manually.
- [Hide Download Button:](#)
Activate this parameter to hide the download button in the control bar of the media player in Google Chrome.
- [Repeat:](#)
Activate this parameter to start the video again after playback.

7.5.12 Audio Object




The [Audio](#) object plays back audio files on a book page.

i Note

The [Audio](#) object itself does not have a control option; it is only responsible for playing audio files. It is an empty object that is not visible on the book page. You can learn how to create controls for the [Audio](#) object in the relevant chapter.

Inserting an audio

To insert an audio file in your book page, proceed as follows:

1. Select [Insert Audio](#) in the toolbar.
2. Select [Edit Link...](#)  for the [Source](#) parameter in the object editor.
3. Select [Insert File...](#) in the dialog box.
4. Select the file from your directory and select [Open](#).
5. Confirm the dialog box with [OK](#).

The audio file is now displayed on your book page and can be played back. The file is copied into the book page folder.

i Note

A page with the current settings is displayed by default for inserted media objects. This is only visible for editing and is hidden during playback.

Further settings


- *Sound channel:*
This parameter determines which channel is used for sound.
- *Volume:*
This parameter defines the default value of the volume (0-100).
- *Start automatically:*
Activate this parameter if you want file playback to be started automatically after the book page has been opened. If this setting is deactivated, the learner needs to start the media file manually.
- *Repeat:*
Activate this parameter if you want the object to start again after playback.

7.5.13 HTML Document



The object embeds HTML documents in an IFrame on the book page.

Insert a HTML document in your book page as follows:

1. Select *Insert HTML Document* in the toolbar.
2. Select *Edit Link...*  of the *Source* parameter in the object editor.
3. Insert the *Link* of the desired HTML document.
4. Select *OK*.

The HTML document is now displayed on your book page.

i Note

It is not possible to link to a local page, because of browser restrictions.

For linking a *HTML Document* object with a project of the workarea use the following link form:

For example: `project!PR_B9F988F508BF12AA:standard.html`

7.5.14 QR Code



The object allows you to generate a QR code for a text or a URL and to display the QR code on the book page. This can be used to start specific content on a mobile device or to open a web page with further information.

The object has the following specific parameters:

- *QR Code Data:*
Enter your data to generate the QR code. The data can be a text or a URL.
- *Open Link on Click:*
Opens the link when clicking the QR code. You can use the option if you entered a URL as *QR Code Data*.
- *Open in New Window:*
Opens the link in a new browser window. The option is shown if *Open Link on Click* has been activated.

7.6 Object Parameters

Various parameters are available for the inserted objects, which you can use to edit the design and positioning of individual and multiple objects. The parameters can be edited in the object editor for a selected object.

i Note

Not all parameters are supported for each object. These chapters give you a general overview of the available parameters.


7.6.1 Editing Parameters

There are various parameters available in the object editor for editing objects. These depend on the object in question:

General

- *Name:*
A name is automatically allocated to each object when it is inserted into the book. The name is customizable and its purpose is for internal use. The name will appear in the list of objects and when actions are assigned to it.
- *Text:*
Enter a text that should be displayed for the object.
- *Hide:*
The parameter defines whether an object is to be displayed or not. Should you not wish to display an object on the page then the parameter is to be deactivated. The parameter can also be used, to hide an object and to show it by using actions.
A hidden object is displayed transparently in the editing view.

Design

- *Background Color:*
This value can be used to define an object's background color. Select the color preview to open the *Color Selection* dialog box. Select *Transparent* , if you do not want to use any color.

- **Border:**
Defines the width of the border. The value is defined in pixels. If no border is to be displayed, the value is to be set to *0*.
- **Border Color:**
This parameter determines the color of an object's border. Select the color preview to open the *Color Selection* dialog box. Ensure that you have previously specified a width for the border so that it is actually displayed.
- **Padding:**
The parameter *Padding* defines the internal spacing between the border and the text or image. The value is defined in pixels.
- **Scrolling Text (text field, active area):**
When this setting is enabled, text that is inserted will be displayed as scrolling text on the book page. The scroll movement goes from right to left.

Formatting texts (Area: Design)

- **Font:**
The *Parameter* identifies the text font. The default setting for this is *Arial*.
- **Font Size:**
This parameter defines the font size. The value is defined in pixels.
- **Font Color:**
This value can be used to define an object's text color. Select the color preview to open the *Color Selection* dialog box.
- **Alignment:**
This parameter determines the alignment of the text in the text field. The default setting for this is *Start*.
- **Vertical Orientation:**
This setting defines the vertical orientation of text. The text orientation is set by default to *Top*.

7.6.2 Size and Position

The subcategory *Size and Position* offers various functions for positioning an object, modifying its size and defining its behavior:

- **Left / Top:**
Defines the position, measured from the left-hand edge of the book page to the left-hand edge of the object as well as from the upper edge of the book page to the upper edge of the object.
An object can be precisely positioned on the book page by altering the values. The values are defined in pixels.
- **Width / Height:**
These values specify the selected object's dimensions and can be customized accordingly. The values are defined in pixels.
- **Lock Position:**
This setting can be used to prevent objects from being dragged and dropped on the book page. This requires the setting to be activated.
- **Layer:**
Specifies the level on which an object is located on the book page. The background constitutes level 0, all succeeding objects increase incrementally from one. The assignment of a level to an object is determined by

the sequence in which the objects were inserted on the page.

You can move an object in the object list to the desired level. This depicts how the objects are arranged on the layers.

7.6.3 Object Shadow

To give your objects an additional effect and contrast you can insert a shadow. Shadows are supported for a large number of objects (for example: *Image*, *Text Box*, *Active Area*) and can be defined in the object editor.

The following parameters are available in the subcategory *Shadow*:


- *Show Shadow*:
Activates the shadow for the object. Then you can edit the shadow properties below:
- *Shadow Color*:
Specifies the color of the shadow. Select the color preview to open the *Color Selection* dialog box.
- *Shadow Opacity*:
Specifies the opacity of the shadow in percent.
- *Shadow Blur*:
Specifies the blur radius of the shadow in pixels. If the value is set to *0*, no blur is displayed.
- *Shadow Spread*:
Extends the size of the shadow in pixels. The default value is *0*.
- *Shadow Horizontal / Shadow Vertical*:
Specifies the horizontal and vertical position of the shadow. The position is defined in pixels.

7.6.4 Link Parameters

For some of the objects, for example, *Active Area*, *Shape*, and *Image*, you can specify a link to another object from the workarea, you can select an action, or you can specify a link to an external target.

Link properties

In the subcategory *Link* you can specify the link. There are the following parameters:

- *Link to*:
Specify the link for the object.
To create a link, go to the *Edit Link...*  function. A dialog box is opened in which you can specify a link or select an object from the workarea.
 - *Current Object*:
You can select a sub object from the current object.
 - *Workarea*:
You can select an object from the workarea. For simulation projects, you can select a mode and a step.
 - *Actions*:
You can select an action for controlling the book reader.

- *Free:*

You can specify a link to a web page or similar.

- *Tooltip:*
Enter a tooltip for the object displayed when the object is touched with the mouse.
- *Open in New Window:*
Use this parameter to open a link target in a new browser window.
If the linked page or object from the workarea is opened in a new window then you can define properties dictating the appearance of the open browser window.
- *Enforce Download of Linked Content (Manager):*
Enforces the download of the linked content if the content is saved in Manager. The setting can be used for downloading documents, images, or DKP files. If the setting is deactivated, the content is shown in the browser window.

New window properties

If the link destination is opened in a new window, you can specify the way it is displayed. The following parameters can be set in subcategory *New Window Properties*:

- **Position**
The values *Top* and *Left* are used to determine the distance of the new window from the top and left-hand margin of the screen area. The values are stated in pixels.
- **Size**
The values *Width* and *Height* are used to define the size of the new window. The values are stated in pixels.
The parameter *Full screen* defines whether the window is to be opened in full screen view. This requires the setting to be activated.
The parameter *Resizable* defines whether the window can be scaled or whether the defined size is to be retained. Scaling requires the parameter to be activated.
- **Layout**
You can display the following elements of the browser window in the new window. To do so, activate the relevant setting:
 - *Location bar*
 - *Menu bar*
 - *Scroll bars*
 - *Status bar*
 - *Tool bar*

7.6.5 Show in Documentation

The subcategory *Documentation* allows you to export your book pages as documentation.

- *Show in Documentation:*
Specifies if the object is displayed in the documentation. Deactivate the option to hide an object in the documentation.
This option is activated by default.

Hidden objects with this activated option are also displayed in the documentation. Deactivate the option, if required.

7.6.6 Status Bar of Control Objects

Some book page objects are used to control media files or other objects and do not have an influence on the design. The controls are placed outside of the book page in the status bar. The control objects are placed in a row with the icons.

The following objects are placed outside of the book page:

- [Audio Object](#)
- [Time Control](#)
- [Object Visibility](#)
- [Counter](#)
- [Collector](#)


Position of the status bar

The position of the status bar in the book page editor can be defined in the object editor of the page object. Using the parameter [Status Bar Position](#), you can choose either [Top](#) or [Bottom](#).


7.7 Editing Objects

Various functions are available for the inserted objects, which you can use to edit the design and position of individual objects and multiple objects.

7.7.1 Inserting an Image

The option [Replace Image](#)  of an [Image](#) parameter allows you to insert images in an [Image](#) or [Page](#) object. The following options are available:

- [Replace with screenshot of window:](#)
By moving the mouse over the screen display, specific areas will be recognized and outlined in red. Click on the mouse button to select the desired outlined area.
- [Replace with screenshot of object:](#)
By moving the mouse over the screen display, specific objects will be recognized and outlined in red. Click on the mouse button to select the outlined object.
- [Replace with screenshot of area:](#)
With the mouse, pull the red frame over the desired area and release the mouse button.

After selecting the area, an editing window will appear where you can make adjustments as needed. To complete the process, click on [Confirm Selection](#) . The dialog box will close and the screenshot will be inserted into the HTML editor.

- [Replace with image file...](#)

A dialog box will open from which you can select an image from a data medium of your choice. Select the desired image and click on [Open](#) (in the Editor) to insert the image.

- [Replace with image from workarea...](#)

A dialog box will open, displaying the contents of the workarea. Select the desired image and click on [OK](#) (in the Editor).

7.7.2 Grouping Objects

The grouping of objects allows you to group multiple objects. A [Group](#) object is created, which can be used for animations or to move multiple objects as one object. The group object is also displayed in the object list.

The following buttons are in the toolbar:



[Group Objects](#)



[Ungroup Objects](#)


To group objects, proceed as follows:

1. Select all required objects for the group.
You can use the `Ctrl` key to select multiple objects.
2. Select [Group Objects](#).

To ungroup objects, proceed as follows:

1. Select the group object.
2. Select [Ungroup Objects](#).

7.7.3 Duplicating an Object

You can use the [Duplicate](#)  function to duplicate an inserted object. Settings and shortcuts activated in this object are retained and can be reused.

Select the object and select [Duplicate](#) in the toolbar. The duplicate is placed directly above the object and can then be positioned and edited on the book page.

7.7.4 Using Guides

Guides can be used to allow elements to be positioned and aligned with precision. You can use them, for example, to create design grids by drawing the guides on an empty book page then using this as a template for creating the remaining book pages of your book.

Guides can be drawn both horizontally and vertically. The following buttons are available in the tool bar for inserting the guides



Once a guide has been inserted, the sizing handle can be used to move it on the book page using drag&drop. Clicking on the sizing handle displays the guide. If another object is selected, the guide is deselected.

An object is aligned with the guide by moving it on the book page. When it is on a level with the guide, the line appears gray and the object is automatically positioned level with it.

i Note

In order to ensure that objects are properly aligned when dragging & dropping, you can activate the Snap-in-place options for objects from the central configuration dialog. The settings can be found under [Application -> Book Page Editor](#).

7.7.5 Aligning Objects

If you have positioned a number of objects on your book page, you can arrange these on one line. The following functions are available to you here as a result of which the objects can be arranged on the edge in question:



These functions require a reference object to be selected on which the other objects will align themselves. Select the reference object and then click on the objects to be aligned while holding the **Ctrl** key depressed. You can then select the desired action in the toolbar.

7.7.6 Resizing Objects

To obtain uniform objects, you can align their dimensions with those of a reference object:



Same Width



Same Height



Same Size

To this end, select a reference object with which the other objects will align themselves. Select the reference object and then click on the objects to be aligned while holding the *Ctrl* key depressed. You can then select the desired action in the toolbar.

7.7.7 Arranging Objects

The same spacing can be assigned to objects to arrange them in a consistent horizontal or vertical plane. To do so you must first align the objects horizontally or vertically on one line.

Select at least three objects to be arranged. This is required as two reference objects define a spacing with which other objects align themselves.

Select the objects by clicking on them or draw a selection mask by clicking and holding the mouse button. Then click on the button of the function you want.

Arrange objects horizontally



Equal Horizontal Distribution:

The spacing between the first object and the second is used as a template for subsequent objects and customized.



Distribute Horizontally:

The first and last object retain their position. The objects in between share the space so as to maintain equal horizontal spacing.

Arrange objects vertically



Equal Vertical Distribution:

The spacing between the first object and the second is used as a template for subsequent objects and customized.



Distribute Vertically:

The first and last object retain their position. The objects in between share the space so as to maintain equal vertical spacing.

7.7.8 Changing the Level of Objects

If an object is concealed by another object in the view, you can modify the level of the object in question. Select the desired object and then click on one of the options.

If you would like to change an object's level by one position, select the following functions:



Forward One Level



Backward One Level

If you would like to place the object on the first or last level of all of the objects, then select the following function:



In the Foreground



In the Background

Alternatively, you can move an object in the object list to the desired level. This depicts how the objects are arranged on the layers.

7.8 Actions and Effects on Book Pages

Incorporating multimedia and interactive elements by adding actions and effects will turn your book pages into a didactically enhanced learning environment. You can choose from a wide variety of special effects to highlight specific steps and objects that are sure to capture and retain the learner's attention. By doing so, you will help your users better focus on the important items that should be learned, and you will simultaneously promote sustainable learning by creating and fostering an enjoyable, interactive learning environment in which the user can explore, discover and retain new information.

Object actions can be used to add interactive effects to individual objects. These actions can be triggered manually by the user or can be configured to run automatically. In addition, with special object actions, you can use actions to define and control certain effects.

7.8.1 Object Actions

You can define actions for book page objects in order to trigger the behavior of an entire book's or a book page's display, such as having objects automatically appear on the book page or jumping to the next page. Object actions give authors greater flexibility in creating interactive content.

The actions can be defined in the object editor, in which you will find an area that is also called Actions. Specific actions are displayed for each object that can be used in conjunction with them in book pages.

The components of an object action

An object action consists of an executable action, an object that should be affected via this action, and the behavior to be triggered. The available actions and behaviors depend on the type of object and can be used in a variety of ways. You will find more information on this step below (see *Overview of the Actions and Behaviors*).

The following is an example of how to insert an action into an *Image* object:

On Click > Text > Show

When the user clicks on the image, the *Text* object that was selected will appear.

Multiple behaviors assigned to one action

You can assign as many behaviors to one individual action as you would like. To trigger multiple behaviors, simply click on the plus icon next to the dropdown box. This allows you, for example, to fade objects in and out. You can remove a behavior by clicking on the minus icon next to the dropdown box.

The following section will give you an overview of the variety of object actions that are available for enhancing your book pages and will describe specific use cases.

7.8.1.1 Fading Objects In and Out

A fade over effect can be used to naturally and smoothly fade objects in and out. The following actions can be assigned to certain types of objects, in order to obtain the desired effect:

- *Animate In*
- *Animate Out*
- *Animate Toggle*

or

- *Fade In*
- *Fade Out*
- *Fade Toggle*

Depending on the object the subcategory *Animation* or *Fade In / Fade Out* might also be available.

i Note

For *Animate In* or *Fade In* actions the assigned object has to be set to *Hide*.

Subcategory Animation

The subcategory *Animation* contains the following parameters:

- *Show Effect:*
Defines the effect type for showing the object.
 - *Fade In*
 - *Fly In - From Left*
 - *Fly In - From Right*
 - *Fly In - From Top*
 - *Fly In - From Bottom*
 - *Zoom In*
 - *Bounce In*
- *Hide Effect:*
Defines the effect type for hiding the object.
 - *Fade Out*
 - *Fly Out - To Left*
 - *Fly Out - To Right*
 - *Fly Out - To Top*
 - *Fly Out - To Bottom*
 - *Zoom Out*
 - *Bounce Out*
- *Duration: Show Effect:*
Determines the length of the show effect. The value is defined in seconds.
- *Duration: Hide Effect:*
Determines the length of the hide effect. The value is defined in seconds.

Subcategory Fade In / Fade Out

The subcategory *Fade In / Fade Out* contains the following parameters:

- *Fade In/Out:*
Specifies that a fade-in effect is displayed for fade-in/out. The effect is not displayed when the setting is deactivated.
- *Fade In Duration:*
Determines the length of the fade-in. The value is defined in seconds.
- *Fade Out Duration:*
Determines the length of the fade-out. The value is defined in seconds.

7.8.1.2 Controlling Audio with Actions

Actions can be assigned to individual buttons in order to control an *Audio* object. You can customize the functions to suit your specific needs. For example, you can define objects, for example, an image or a text field, to be used as a button. When the user clicks on the image or text button, you can define the button in such a way so that the corresponding audio file will automatically play.

› Recommendation

In the case where an *Audio* object should be controlled via a button, we recommend that you disable the *Audio* object's setting *Start automatically*. This will allow the user to interact with the learning content and start the audio at the appropriate/desired time (for example, by clicking on a play button). Moreover, you should give your objects unique names upon inserting them into your book pages in order to create transparency and facilitate selecting and assigning them when creating your learning content.

For more information, refer to the section *Overview of the Actions and Behaviors*.

Control actions

To create an object to control an audio file, such as an image, proceed as follows:

1. Insert and position your *Image* object to be used for the button. (More detailed information on objects is provided in a further section in this document.)
2. From the subcategory *Actions*, you can define the specific actions that your *Image* object should execute.
 1. From the first dropdown list, select the *Audio* object that should be used for the action, for example, *On Click*. This will automatically create a link to the *Audio* object.
 2. From the second dropdown list, you can define the behavior, for example, *Play*. You will find a variety of audio behaviors listed here.
3. You can now repeat these steps for any additional buttons that you would like to add.

Actions in an Audio object

Under the subcategory *Actions*, *Audio* objects can be used in combination with various object actions to control the audio file.

For example, a button can be defined to switch back and forth between two different actions by clicking on it in order to control the audio file, just like with the standard *mute/unmute* or *play/pause* buttons. This changeover can be defined by inserting a second *Image* object and positioning this on top of the original image and then defining the image to fade in and out accordingly. The following is an example of how to create an Audio object for *play/pause*:

- *On play*
 - > image "pause" > show
 - > image "play" > fade out
- *On pause*
 - > image "play" > show
 - > image "Pause" > fade out

To display or minimize the full list of behaviors to choose from for an action, click on the *plus* and *minus* icons and the list will appear.

7.8.1.3 Overview of the Actions and Behaviors

The list gives you an overview about common used types of actions and behaviors. The available types and also further types depend on the used and linked elements.

Actions

Action	Description
<i>On Click</i>	Describes the action that should be carried out when the object is clicked on.
<i>On Mouse Roll-Over</i>	Describes the action that should be carried out when the object is moused over.
<i>On Mouse Roll-Out</i>	Describes the action that should be carried out when the mouse rolls out of the object.
<i>On Show</i>	Describes the action that should be carried out when the object appears.
<i>On Hide</i>	Describes the action that should be carried out when the object disappears.
<i>On Visible</i>	Describes the action that should be carried out when the object is visible after fade in.
<i>On Hidden</i>	Describes the action that should be carried out when the object is hidden after fade out.
<i>On Play</i>	Describes the action that should be carried out when the object is playing.
<i>On Pause</i>	Describes the action that should be carried out when the object is paused.
<i>On Stop</i>	Describes the action that should be carried out when the object is stopped.
<i>On Finish</i>	Describes the action that should be carried out after the object has played.
<i>On Mute</i>	Describes the action that should be carried out when the sound is deactivated.
<i>On Unmute</i>	Describes the action that should be carried out when the sound is activated.
<i>On Volume Change</i>	Describes the action that should be carried out when the volume is changed.

Behaviors

Behavior	Object
<i>Show</i>	Shows the specified object after an action is executed.
<i>Hide</i>	Hides the specified object after an action is executed.
<i>Toggle</i>	Shows/hides the specified object after an action is executed.
<i>Fade In</i>	Fades in the specified object after an action is executed.
<i>Fade Out</i>	Fades out the specified object after an action is executed.
<i>Fade Toggle</i>	Toggles the fade in/ fade out of the specified object after an action is executed.
<i>View Link</i>	Views the link target of the specified object after an action is executed.

7.8.2 Animation Objects

Action objects can be used to add special effects and animation to your learning content to create motivating and interactive presentations for the learners. The action objects are found in the book page editor. Besides the basic actions that are available, you can define more complex actions for an object. You can influence an action's behavior by configuring its settings to suit your individual needs. The objects in this case are "blank", only serving as a definition for the actions and do not contain any content, such as text or images.

➤ Recommendation

Before creating an action object, you should become familiar with how actions work so that you can take advantage of their versatility.

Modifying objects and their behaviors

The following action objects are available in the book page editor:

- *Animation*
- *Time Control*
- *Object Visibility*
- *Counter*
- *Collector*

7.8.2.1 Use Cases

Action objects can be used in combination with additional book page objects, giving you a wide variety of use cases and plenty of room for your own creativity. The following examples will give you an idea of how action objects can be used:

Animation

Animations can be used to creatively highlight specific pieces of information. For example:

- To attract the learner's focus to a certain image, this image can be defined so that its size automatically increases when the book page is displayed.
- Several objects can be grouped together and displayed in a smaller format to save space. The user can then individually click on the images to zoom in on them. In this way, the user can concentrate more on each individual image and the respective learning material as needed.
- Mouse rollovers and rollouts can be used to add effects to text and important information to enhance the learning experience. The original state of the text will then be automatically restored.

Time Control

The *Time Control* allows you to define how long the action should take place:

- You can use the Time control with images to create an automatic slide show in which the images automatically fade in and out.
- You can sequentially start various animations to create complex processes and visualizations.
- The gradual fading in and out of text allows you to optimally visualize a sequence of information. Such animated text is perfect for accompanying audio text, for example.

Object Visibility

The *Object Visibility* is ideal for sequentially selecting multiple objects. For example:

- To create image galleries on book pages - the user can then click through the gallery at his own pace.
- For visualizing process workflows in which individual steps can be selected.

7.8.2.2 Considerations for the Creation

When working with action objects, we recommend that you take the following guidelines into consideration prior to starting the creation process in order to be able to fully take advantage of their versatile functionality:

- Before you begin, we suggest creating a storyboard to help you optimally plan which behaviors should be assigned to which actions and how the users should interact with them.
- Do not go overboard with the number of effects per page. Try to limit the number so that the important information is highlighted, while simultaneously ensuring a transparent and user-friendly look and feel to each page. Simple effects, such as clicking on objects and automatically having content fade in and out can prove to be quite useful enhancements to your learning content as long as the page is not cluttered with so many animations and interactive elements that it would overwhelm the user.

- Always make sure you assign unique names to your objects (under the setting *Name*). This will make it easier for you when selecting objects and actions so that you can quickly find the one you are looking for.
- When inserting animations, make sure you know which level the objects are on in order to avoid accidentally hiding them. On the other hand, when this technique is intentionally used, you can easily hide specific objects.
- Animations that are used repeatedly throughout your book can be predefined on a book page template to save you time when creating a new book page with the same animation.

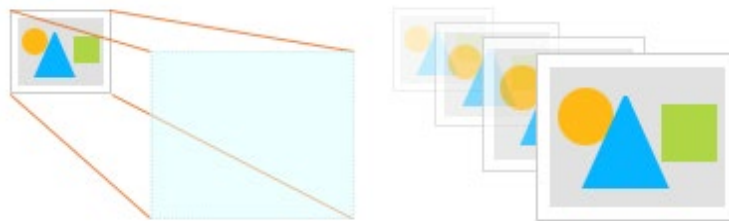
7.8.2.3 Animation



Animation objects allow you to change the position and size of your animations. The *Animation* object defines the final size and position for the animation. To adjust the animation's size, the *Animation* object can be proportionally scaled in height.

Structure of an animation

The following explains how an animation works:



- **Initial State**
The object to be animated (for example, an *Image*) is created with the same size and position as its initial state.
- **Final State**
When the animation is activated, the object will change to the size and position of the *Animation* object (red rectangle).

Creating an animation

The following is an example of how to create an animation:

1. Create an *Image* object and position it as desired to serve as the initial position.
2. Insert an *Animation* object (from the toolbar) and define its properties:
 1. Move the *Animation* object to the desired final position and adjust the frame size. If the object should be the same size as the image, you can enter the exact dimensions under *Position*.
 2. *Name*:
Enter a unique name for the object to facilitate allocating actions at a later time.
 3. *Target Object*:
Select the *Image* object as the *Target Object*.

4. *Duration*:

Here you can define how long the animation should run. The value is calculated in seconds.

3. The animation can be interactively triggered by the user or defined to run automatically by assigning actions to the animation.

For each action, you have to select the *Animation* object from the first dropdown list, and the behavior *Start* from the second dropdown list.

For example:

- *Action on Click* – the user clicks on an Image or Text object to start the animation
- *Action after Loading* – the animation automatically plays when a book page is opened
- *Action after Timeout* – a *Time control* object can be used so that the animation will automatically play after a defined period of time

Once you have created your animation, you can test it out by clicking on the Preview button in the book page editor.

Stopping an animation

In addition to the behavior *Start*, you can also define the animation to automatically stop. Simply select the behavior *Stop* from the list. For example, you can add start and stop buttons to your animation by inserting and defining *Image* objects.

Additional options

- *Easing*:
Easing effects the time duration of an object, allowing the animation a more effective and smoother transition. Easing can take place at the beginning, at the end or both. There are three types to distinguish between:
 - *Quadratic*
 - *Cubic*
 - *Sine*
- *Show Debug Information*:
This setting allows an object's status information to be displayed while the book page is playing. This will display additional information on the object's action while it is being executed in test mode to give you more control over the action.
- *On Start (under Actions)*:
When an animation starts, another action can be triggered simultaneously. For example, an additional animation can start, an audio file can play or a *Text* object can be displayed. This allows you to create relationships between the objects and learning content can be sequentially structured if desired.
- *On Stop (under Actions)*:
An action can be defined to be executed when an animation stops. In contrast to the option Action after animation, this allows you to stop the animation at any time, thereby changing a button's behavior, for example, a button can be defined to continue the animation.
- *On Finish (under Actions)*:
Once an action has been completed, another action can be triggered, such as other animations or automatically jumping to the next page.
To do so, select the desired object and the action to be allocated to it under *Settings*.

i Note

When using images with transparency, clicking on the transparent area will trigger the animation. To prevent undesired actions from being performed by the user, we recommend using images without any transparency.

> Recommendation

If you would like to re-use an animation that you have already created, you can copy and insert the respective objects collectively in groups. The objects are automatically recreated and allocated without requiring any additional post-editing work required.

7.8.2.4 Time Control



A *Time Control* object allows you to precisely time your actions. Images can automatically fade in and out or animations can be combined to create sequences.



To set up a *Time Control*:

1. First create the object that you would like to start off with. This could be an animation, an *Image* object or a similar object.
2. From the toolbar, insert the *Time Control* object.
3. Next, define the time intervals and the corresponding actions.

To obtain a clear overview of your animation projects, we recommend that you arrange your objects and actions according to their time control settings in chronological order.

1. *Time*:

In this field, you can enter the length of time during which the action should be carried out. The value is calculated in seconds.

i Note

Time values are not automatically combined. If you would like to have multiple actions begin simultaneously, you have to manually summarize and enter the time values, for example, *20, 40, 60,...*

2. *On Timeout*:

In this field, you can select the action that should be triggered once the defined period of time has run out.

For example: *Image -> Show, Animation -> Start*

4. In order to start a Time control, an action has to be triggered by the user. This can be a button, for example, that starts a series of images. For this example: *Actions -> Action on Click -> Time Control -> Action Start*.

7.8.2.5 Object Visibility



With the help of the [Object Visibility](#), you can fade objects in and out, one following another, which can be triggered by user actions. This allows the user, for example, to click through a series of images in any preferred order.



To create an [Object Visibility](#):

1. Create your [Image](#) objects and position them as desired.
2. Set all images to [hidden](#) except for the first one that should appear. This allows images to fade in one by one.
3. From the toolbar, insert the [Object Visibility](#) and define its properties:
 1. [Name](#):
Enter a unique name here so that you can easily identify your [Object Visibility](#) when selecting it from the list at a later time.
 2. [Object 1-10](#):
Select the objects in the order in which they should appear, from 1-10.
4. Next, successively select the [Image](#) objects in order to assign the [Object Visibility](#) to the images. Under [Actions](#), you have to define an action for each individual image in order for it to be able to switch to the next image, for example, [Action on Click](#). From the first dropdown list, choose the [Object Visibility](#) and from the second dropdown list, select [Activate 1-10](#) for each object.

Once you have created your [Object Visibility](#), you can test it out by clicking on the [Preview](#) button from the book page editor.

Additional options

- [Fade In/Out](#):
This setting allows you to define a smooth transition effect for objects when they fade in and out.
- [Show Debug Information](#):
This setting allows an object's status information to be displayed while the book page is playing. This will display additional information on the object's action while it is being executed in test mode to give you more control over the action.

7.8.2.6 Counter



The *Counter* object allows you to specify a sequence of different actions. One or more objects can be used to trigger the actions of the *Counter*. With each action on a triggering object the *Counter* counts up and executes the specified actions. For the triggering object, you can specify, how many actions are required.

For example, you can use the object to display a different image every time you click on a button.

To create a *Counter*, proceed as follows:

i Note

The following instructions are only an example of how to use of the *Counter* object.



1. Insert Image objects

1. Create your *Image* objects.
See also *Image*.
2. Position the images as required.
3. Set all images to *hidden*. This allows the images to fade in.

2. Insert the Counter object

1. Insert the *Counter* object from the toolbar.
The object is inserted in the status bar.
2. Specify the parameters for each count:
 1. *Count*:
Enter the number of clicks required to show the object.
 2. *On Count*:
Select an *Image* object from the first drop-down list.
Select a behavior from the second drop-down list, for example, *Animate In*.

> Recommendation

To hide the previously shown *Image* object, you can specify also an *Animate Out* behavior for the object in the *On Count* parameter.

3. Start the Counter

1. Insert an object from the toolbar, for example, a *Shape*.
2. Design and position the object as required.
3. Open the *Actions* subcategory.
4. Specify an action parameter, for example, *On Click*.
 1. Select the *Counter* object from the first drop-down list.
 2. Select *Count Up* from the second drop-down list.

> Recommendation

You can assign the *Count Up* action to one or more objects.

Resetting the counter

You can allow the user to reset the current status of the *Counter* to the initial status. First, create a reset control and then specify which objects are hidden for the used *Images* objects.

To create a reset control and a behavior for all required objects, proceed as follows:

1. Insert an object as a reset control.
2. Select the object.
Specify the *Reset* action:
 1. Open the *Actions* subcategory.
 2. Activate the *On Click* parameter.
 3. Select the *Counter* object from the first drop-down list.
 4. Select *Reset* from the second drop-down list.
3. Select the *Counter* object.
Specify the *Reset* behavior:
 1. Activate the *On Reset* parameter.
 2. Select the *Image* object from the first drop-down list.
 3. Select *Animate Out* from the second drop-down list.
 4. Repeat this for all required objects.

7.8.2.7 Collector



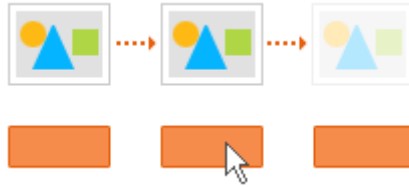
The *Collector* object allows you to specify a sequence of different actions. You can use different objects to trigger the actions of the *Collector*. When executing an action on an triggering object the *Collector* executes the specified actions. One object can only be used once to trigger specified actions of the *Collector*. Afterwards, another object can be used to trigger the next actions.

For example, you can use the object to display an image when you click on an assigned control.

To create a *Collector*, proceed as follows:

i Note

The following instructions are only an example of how to use of the *Collector* object.



1. Insert Image objects

1. Create your *Image* objects.
See also *Image*.
2. Position the images as required.
3. Set all images to *hidden*. This allows the images to fade in.

2. Insert the Collector object

1. Insert the *Collector* object from the toolbar.
The object is inserted in the status bar.
2. Specify the parameters for each count:
 1. *Count*:
Enter the number of clicks required to show the object.
 2. *On Count*:
Select an *Image* object from the first drop-down list.
Select a behavior from the second drop-down list., for example, *Animate In*.

> Recommendation

To hide the previously shown *Image* object, you can specify also an *Animate Out* behavior for object in the *On Count* parameter.

3. Insert a button

1. Insert an object from the toolbar, for example, a *Shape*.
2. Design and position the object as desired.
3. Open the *Actions* subcategory.
4. Specify an action parameter, for example, *On Click*.
 1. Select the *Collector* object from the first drop-down list.
 2. Select *Flag 1 - 10* from the second drop-down list.

Using Flags

The *Flag* specifies, that the *Collector* is started for a specific action. Specify for a different *Flag* from 1 to 10 each *On Click* action.

Please note, that the number of the *Flag* does not indicate a specific *On Count* action. The *On Click* action of the objects can be executed in any order.

If you click on an object, the *On Count* action with the specified number of clicks (for example, first click) is executed. Afterwards the object with the specific *Flag* is deactivated. Click on another object to execute the next *On Count* action (for example, second click).

You can use the same *Flag* (for example, *Flag 1*) for different objects. If an action has been used for a *Flag*, the other objects with the same *Flag* are deactivated.

The use of the *Flags* allows you to create complex combinations and conditions to show or hide objects.

Resetting the collector

You can create a reset control, to allow the user to reset the current status of the *Collector* to the initial status.



To create a reset control and a behavior for all required objects, proceed as follows:

1. Insert an object as a reset control.
2. Select the object.
Specify the *Reset* behavior:
 1. Open the *Actions* subcategory.
 2. Activate the *On Click* parameter.
 3. Select the *Collector* object from the first drop-down list.
 4. Select *Reset* from the second drop-down list.
3. Select the *Collector* object.
Specify the *Reset* behavior:
 1. Activate the *On Reset* parameter.
 2. Select the *Image* object from the first drop-down list.
 3. Select *Animate Out* from the second drop-down list.
 4. Repeat this for all required objects.

Additional options




- *Show Debug Information:*
This setting allows an object's status information to be displayed while the book page is playing. This will display additional information on the object's action while it is being executed in test mode to give you more control over the action.

7.9 Templates for Content Objects

You can insert the content of objects into a book page template in order to use text units  and simulation projects  as well as media objects in books. This supports a separation between content and design and simplifies the production for a large number of content objects. During playback, the properties of the text units or projects with modes are inserted automatically by the book reader. Each object is displayed as a single book page, which shows the created content.

Creating a template

Proceed as follows to insert text units or projects into a book page:

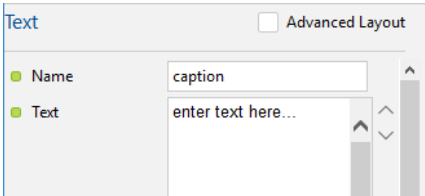
1. Create a book using the [New Book](#)  toolbar entry.
2. Insert the content objects, for example, projects, into the book with the required structure. You can also use both types in a book.
3. Create a book page using the [New Book Page](#)  toolbar entry. To use it as a template, we recommend that you save the book page in a separate template group in the workarea structure.
4. Open the book page in the book page editor.
5. Insert an empty [Text Box](#) object as placeholder for the content properties of the object. The property displayed by each text box must be specified in the [Name](#) parameter of the text box, see below.
 1. **Projects**
 You can insert a mode link in the template to use a specific project mode by default.
 Insert the [Mode Link](#) object for the required mode and specify the use of the mode in the [Name](#) parameter of the object.
 2. **Media object**
 You can insert the media content in the template to allow users to start or to open the content.
 Insert a [Text Box](#) object and specify the required media type in the [Name](#) parameter of the object.
6. Save the book page.
7. Open the [Settings](#)  dialog box in the section [Playback Settings -> book reader -> Templates](#). Specify the settings and confirm with [OK](#).

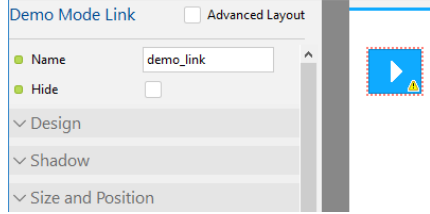
Playback settings

For each type of content object there are two playback settings:

- [Show <object> Properties](#)
 Activate this setting to display the content of the content object.
- [Template for <object>](#)
 Select your created book page template for the content object.

Name entries

Value	Description	Example
caption	Name	
shortdesc	Short Description	
description	Description	
Project		

Value	Description	Example
demo_link	Demo Mode	
uebung_link	Practice Mode	
test_link	Test Mode	
praxis_link	Concurrent Mode	
Media object		
video	Video Object	
audio	Audio Object	
image	Image Object	
doc	Document Object	
file	File Object	

7.10 Modeling Business Processes

You can create models for business processes using the [BPM Object](#). The versatility of creation supports complex models at several process levels.

A [BPM Object](#) represents a process step here while the combination of several [BPM Objects](#) represents the entire process. You can use the [Connection](#) object to combine process steps in the form of arrows and visualize their sequence.

7.10.1 Creating Processes

If you want to create a process manually, proceed as follows:

Structure of a process step

A process is comprised of [BPM Objects](#) that are connected with arrows. You can use text boxes to insert the actions and information necessary for a process step via the arrows.

- **Process step:**
Indicates the name of the process step and is displayed in the main field of the object.
- **Role:**
Indicates the role or function for the process step and is displayed in the lower field of the object.
- **Annotation:**
Additional *Annotations* for a process step can be entered in the respective field. The annotation is displayed by clicking the icon in the object.
Icon: *Bubble*
- **Link to:**
A link to another book page to access more in-depth information. For example, a process can be created as an overview with more in-depth process steps on other book pages.
Icon: *Arrow*
- **Attachment:**
Documents, projects, book pages or files can be linked by the attachment. Up to 10 attachments can be defined. When opened via the icon, a menu is displayed with all attachments and the selected attachment then opened in a new window.
Icon: *Paper clip*
The option *Open link in new window* allows you to define whether the attachment should open in the same or in a new window. The window's appearance can be defined under *New Window Properties*.

The content that is displayed via an icon can be accessed by clicking the icon.

› Recommendation

The icons used for the *BPM Object* are found in the respective book page style. If you want to use icons other than the standard icons, they are to be replaced in the respective folder. Make sure to keep the names and size of the icons.

Design of a process step

- **Text Style Role:**
The design of the text and background for the role can be set in the *Text Style Role* area.
- **Design:**
The background color of the field for the process name and the border of the entire object can be changed in the area *Design*.

7.10.2 Connecting Objects

The inserted *BPM Objects* can be connected using a *Connection* object and the process direction shown using arrows. A path can be created with an arrow here. This can be either a simple line or a complex structure with several path items.

Defining an arrow

An arrow object can be customized as follows:

- **Color:**
Specifies the arrow's color. Select the color preview to open the [Color Selection](#) dialog box.
- **Thickness:**
Specifies the arrow's thickness. The value is given in pixels.
- **Arrow Head 1 & 2:**
Specifies the arrow's head for each side of the arrow.

Positioning a path point

There are path points at the beginning and end of an arrow that allow you to adjust its length and direction. Select one of the points and drag and drop it to the desired position on the book page.

Creating complex paths

Process structures do not usually just go in a straight line but are much more complex. You can use the [Connection](#) object to create paths with several path points and corners. Keep in mind that the paths can only be aligned horizontally or vertically here. The number of path points is also limited to 10.

Inserting a path point:

1. Press and hold the `Shift` key.
2. Select the mouse on the point where you want to add the new point.
3. Drag this point to the position you want.

Removing a path point:

1. Press and hold the `Alt` key.
2. Select the mouse on the point where you want to remove the point.
Keep in mind that only points at the end or beginning may be removed.

7.11 Importing Images as Book Pages

When creating backgrounds for your book pages, you can save time by importing images into the Producer to use as a new book page.

To import your images, proceed as follows:

1. Select [Tools -> Import-> Images as Book Pages...](#) in the [Explorer](#).
A dialog box is opened.
2. Select the images you want to import and select [Open](#). You can select more than one image at a time. A separate book page will be created for each image selected.
3. A dialog box with the following settings appears:
 - [Insert as Image Object:](#)
Here you can decide whether the image should be inserted as an image object on the book page or directly as an image on the book page's background.
 - [Orientation: Left/Top:](#)
This defines the position of the image on the book page if you chose to insert the image as an object.

- *Size: Width/Height:*
This defines the image's size. If the image has not been defined as an object, then this setting can be used to adjust the image's size on the book page's background.
- *Resample Images:*
This option will adjust the image file to the defined width and height. When this option is deactivated, the file will be imported in its original size.
- *Keep Aspect Ratio:*
This option will retain the image's aspect ratio and adjusts itself to the width of the image accordingly. This option ensures that the images are not proportionally distorted.
- *Add to Current Book:*
If a book is selected to be imported from the *Explorer*, this option allows you to define whether the new book page should be inserted into the book. When this option is deactivated, the book page will be inserted as a stand-alone object at the end of the object tree.

4. Select *OK*.

The book page with the image will then be created and inserted into the *Explorer*. The book page's name will be the same as the image title.

7.12 Importing Microsoft PowerPoint Slides as Book

In order to be able to use Microsoft PowerPoint presentations in a more versatile way, the slides can be converted in book pages in the Producer. This allows you to complement the slides with other objects, such as media files. The conversion is performed using the *PowerPoint as Book...* function.

Importing a PowerPoint file

To import a PowerPoint as a book, proceed as follows:

1. You can use the *Explorer* to import your PowerPoint slides as a book.
If you would like to incorporate these slides directly into an existing book, first select the book.
2. Select *Tools -> Import -> PowerPoint as Book...*
The settings dialog box appears.
3. Select an *Import Method* and select *OK*.
 - *Import all slides from PowerPoint file:*
Allows you to specify a PowerPoint file in the *File Name* parameter.
 - *Import selected slides from PowerPoint file:*
Allows you to select PowerPoint slides in an open file.
4. Select *OK*.
5. Open your presentation and select the slides to be imported. Select *OK* in the dialog box displayed in the Producer.

The slides are now imported into the workarea and converted into image files. Each slide is created as an individual book page. All the book pages are then consolidated into a book. The book is named using the name of the PowerPoint file and the book pages are named using the name of the corresponding slides.


You can add additional book pages to the book after it has been created, add additional content to the book pages, or simply retain the presentation in its existing form.

Settings of the dialog box

The dialog box for the import contains the following settings:

- *Book Title:*
Specifies the title of the book. The title of the PowerPoint file is used by default.
- *Slide Size:*
Specifies the size of the PowerPoint slides. The original size of the slides is selected. You can select a different size or enter a size by using the option *User defined*.
- *Language:*
Specifies the language of the content. Select the language from the drop-down list.
- *Book Description:*
Specifies the description of the book. You can enter a text.
- *Keywords:*
Specifies keywords for the book. You can enter keywords.
- *Notes as Book Page Description:*
Specifies whether the slide notes are inserted into the book page descriptions.
- *Notes as Text-to-Speech Text:*
Specifies whether the slide notes are inserted as text for Text-to-Speech.
- *Record Audio After Import:*
Once the PowerPoint slides have been imported, the book is opened in the book page editor. The *Add Audio* dialog box opens where you can record audio. See also the *Add Audio Dialog Box* chapter.
- *Add to Current Book:*
This option is available if you select a book from the tree structure. Select this option if you want to incorporate the PowerPoint slides into the book.

7.13 Global Settings for Book Pages

The standard settings for creating and editing book pages can be specified in the *Settings...*  dialog box. There are the following setting categories:

- *Templates (Producer):*
Templates can be defined for books and book pages and can be used when inserting new objects. Once the template has been created, you can define its settings here under *Templates*.
- *Book Page Editor (Authoring Settings):*
Here you can define the settings for the grid and grid lines in the book page editor as well as its behavior when positioning objects.
- *Book Page Initialization (Authoring Settings):*
Default settings can be defined here for book page objects. In this way, the book page objects are assigned values that are automatically allocated to them upon creation.

- [Book Page Fallback Defaults \(Playback Settings\)](#):

The fallback default settings can be configured here for book page objects. The Producer uses these values when the respective setting is deactivated for a object.

› Recommendation

To only snap-in objects when necessary, you can temporarily activate this snap-in behavior by holding down the `Ctrl` key. The snap-in function overall is to be deactivated in the settings beforehand and the desired snap-in options activated.

Furthermore, you can define settings for the playback of books and book pages with the book reader:

- [book reader \(Playback Settings\)](#)

7.14 Books and Book Page View

For the book pages view it is necessary to distinguish whether these pages were inserted in a book or placed individually. An individual book page is opened in the library view whereas a book is presented in the book reader. After they are selected, modes linked on a book page are opened in the trainer.

i Note

If you have inserted media files in a book page, then the corresponding playback application needs to be installed on the users' workstations so that these files can be displayed.

Books view

Books that have been created are displayed in the book reader. This enables selection of, and scrolling within, pages. Once a book page has been called, objects in it can then be launched or opened so that they can be worked through.

When a book is called in the library it is launched directly in the book reader.

Book pages view

Individual book pages are not viewed in the book reader as this is intended for scrolling through a number of pages. If you select an individual book page in the library it will be displayed directly in the learning content view.

7.14.1 Preview in the Book Page Editor



The [Preview](#) function exists in order to be able to view and use a book page during editing in the book page editor in the same way it is displayed to the student. If you select this in the toolbar, you will be able to test your book page's objects. These will then behave in the same way as they do when being presented in the library or book reader.





































In order to be able then to resume editing the objects, deactivate the button.

7.15 Supported File Formats on Book Pages

Media plug-in	Supported file formats
Audio, Page Sound	*.mp3, *.wav
Video	*.avi, *.m4v, *.mov, *.mp4, *.mpeg, *.mpg, *.qt, *.rm, *.wmv
Image	*.gif, *.jpg, *.png, *.bmp, *.jpeg, *.svg
Document	*.doc, *.docx, *.rtf, *.ppt, *.pptx, *.xls, *.xlsx, *.pdf, *.html, *.htm

7.15.1 Requirements for Video Formats

The table gives you an overview of the supported video formats of SAP Enable Now and the possible operating systems and browsers:

Formats		Windows 10		Apple	Android
Format	Codec	Desktop	Mobile	Safari / Webkit	Webkit
mp4	h264				
	mpeg4				
avi	xvid				
	h264				
mpg	mpeg2				
wmv	wmv3				
	vc1				
mov					
qt					



Supported



Unsupported

8 Text Units

The *Text Unit* structure object makes it possible for you to integrate text components into your structure. Using different types, a text unit offers various options for incorporating additional information and content into your structure and using them for various output formats.

In its structure, the text unit object is slightly based on the topic object of the DITA method for representing information structures. It provides a set of types to primarily target possible needs in structural creation and administration of didactic content. Nevertheless, it can be used as well to store project related or procedural information within the workarea.

Integration in the explorer

The text unit object can be integrated anywhere in the tree structure, keeping in mind the possibilities of other structure objects. Similar to the *Group* object, any structure object can be stored below a text unit.

8.1 Training Available












This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

8.2 Text Unit Types

Changing the type of a text unit changes the symbol the object is displayed by in the tree view of the *Explorer*. The following types are available.

Icon	Type	Icon	Type
	<i>General</i>		<i>Defect</i>
	<i>Concept</i>		<i>Subsystem</i>

Icon	Type	Icon	Type
	<i>Task</i>		<i>Component</i>
	<i>Reference</i>		<i>Function</i>
	<i>Problem</i>		<i>Requirement</i>
	<i>Job</i>		<i>Glossary</i> See also <i>Glossary of Terms</i>
			<i>Translation Info</i> See also <i>Mass Translation of a Content Structure</i>

8.3 Structure

Unlike, for example, projects, a text unit does not have any individual object content. Information is displayed solely in the areas shown in *Explorer: Title, Short Description* and *Description* and structurally by selecting a *Document Type*. The functions of the HTML editor are available for making entries in the areas *Short Description* and *Description*.

You can structure your information more systematically because there is a distinction made between the input areas *Short Description* and *Description*. If you use the optional *Short Description* box, you can improve user orientation within the information structure with much shorter texts that summarize the topic. The *Short Description* can be used here exclusively for orientation purposes (example A) or simultaneously function as a thematic introduction with a smooth transition to the detailed *Description* (example B).

	Example A	Example B
Title	Formatting in documents	Formatting in documents
Short description	This chapter shows you how formatting is applied to document areas and paragraphs.	It's happened to everyone. An important document has to be read quickly and its content captured. However, the document is poorly formatted or not formatted at all - logical correlations disappear because there are no paragraphs or headings while a lack of visual information in the body text makes

	Example A	Example B
		comprehension difficult for the brain.
Description	You can use formatting to systematically highlight the main content of your document for the reader and structure the document so that it is easier to read and capture.	Well-formatted documents are easier to read and their message is clearer for the reader. But what do you need to keep in mind if you want to format and structure a document so that it is easy to read? The projects shown in this area...

8.4 Content-Based Separation Through Typification

The advantage of differentiating among different types of text units is that contents can be represented flexible but consistent by the content-based logic of the available types. However, you may freely determine the content specifications for a type different than the type name proposes but you should ensure to maintain a logic that you applied once for a type to each object of that type in the workarea. This allows you to combine several types in each structure level achieving parallel information layers to be added for example to a project.

Example

A group "Formatting documents" might have the following types providing different information layers for different use cases.

Type	Input field	Text
General	Title	Formatting in documents
	Short description	It's happened to everyone. An important document has to be read quickly and its content captured. However, the document is poorly formatted or not formatted at all - logical correlations disappear because there are no paragraphs or headings while a lack of visual information in the body text makes comprehension difficult for the brain.
	Description	Well-formatted documents are easier to read and their message is clearer for the reader. But what do you need to keep in mind if you want to format and structure a document so that it is easy to read? The projects shown

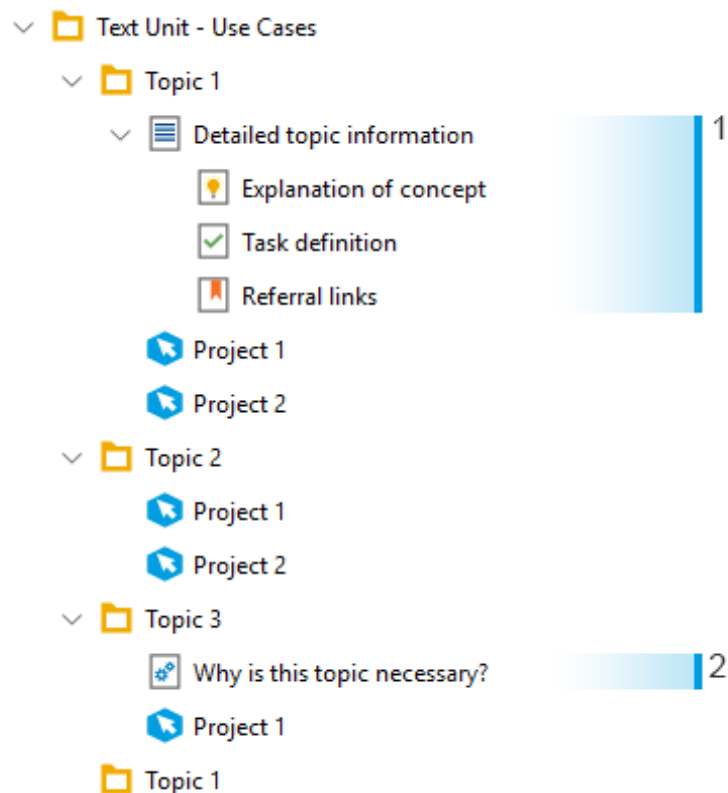
Type	Input field	Text
		in this area...
Task	Title	Formatting in documents
	Short description	Create a formatted, easy to read document.
	Description	Create a document that uses the formatting described and is thus very easy to read. The document has to be at least 20 pages long with 30 chapters. Pay special attention to creating header levels to maintain a well-structured content overview.
Concept	Title	Formatting in documents
	Short description	On today's job market, being able to format documents is a must.
	Description	In an increasingly digitalized working world, employees who were not previously affected are now being required to create structured documents This affects the building superintendent who has to design notices for the bulletin board as well as the carpenter who wants to present his work.
Reference	Title	Formatting in documents
	Short description	A lot of information has already been published about formatting.
	Description	<p>Formatting documents has already been discussed and analyzed in many places. In the following section, you can find a selection of recommended books and websites:</p> <ul style="list-style-type: none"> • ... • ...

8.5 Sample Applications

You may adapt the use of text units and their types individually to your structure and your content model. Here are some examples of using text units:

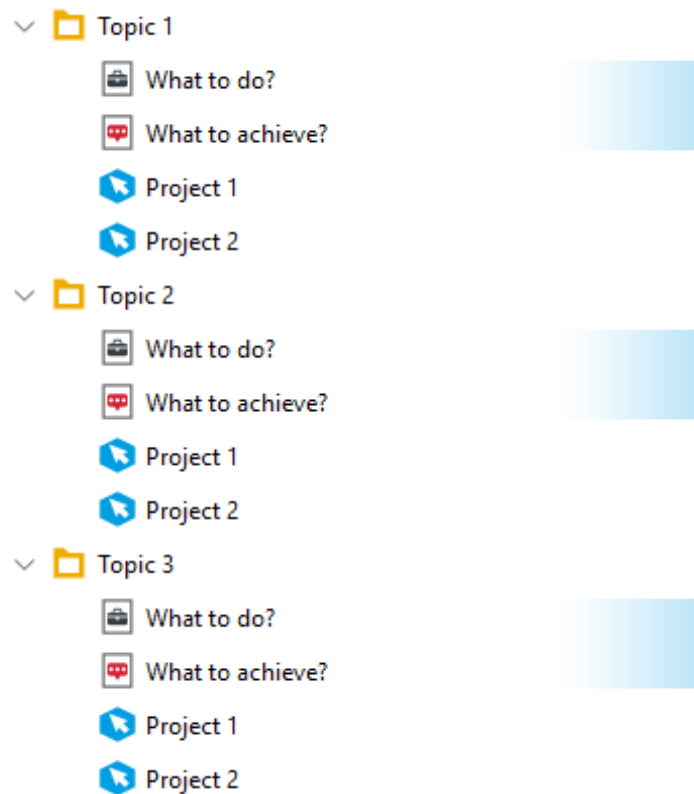
Additional information levels

You can use text units to provide your learners with additional extensive information in the form of comments (2) or several chapters of extended documentation (1) for the structure display in the trainer. This makes it possible for you to convey processes and process-relevant knowledge/understanding without having to make extensive changes to project contents.



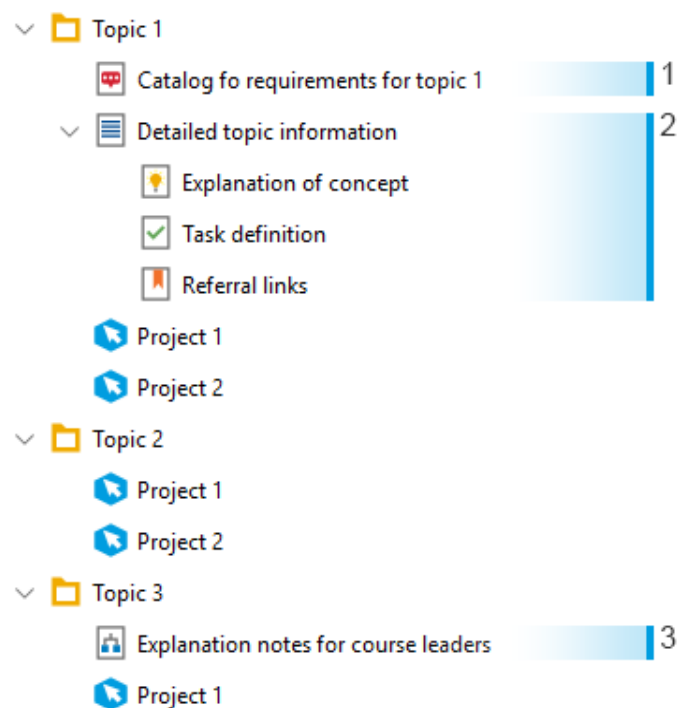
Separating information levels

You can create an additional level in your structure of dynamic learning content that, even though it follows the structural model, is independent content-wise and displays different information for another target group. This way, your structure can contain, for example, the didactic content for your learners as well as instructions and information for other groups of people. After all content is complete, you can publish the learning content as usual but also simultaneously generate a document about the steps to be followed, send it to all department heads in your organization, thus making it possible for them to answer individual questions.



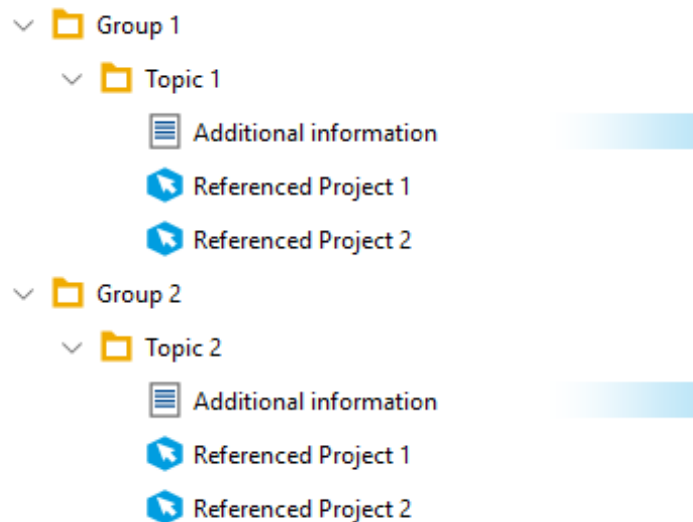
Combining information levels

The two previous examples can also be combined to show or update additional information for learners (2) and other target groups (1) in a structure.



Customizing referenced content

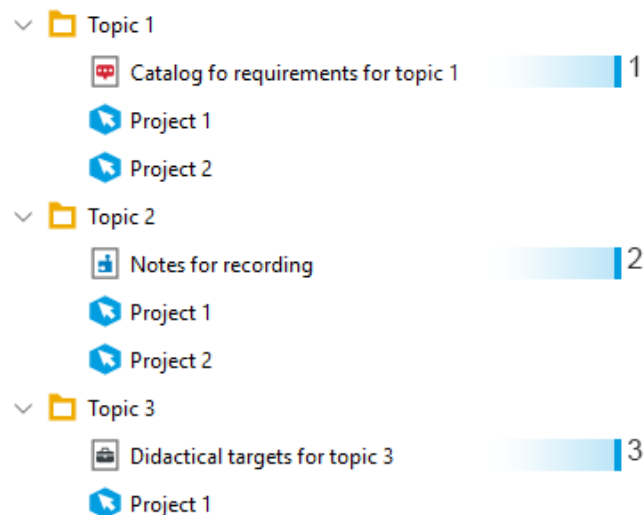
Referencing makes it possible for you to always use the same object in different branch structures. The advantage here is that content only has to be updated once. If you now, however, want to address different learning groups using different branch structures, you have to clear the previous reference to import different descriptions or instructions into the original references. Using text units makes it possible to add branch-specific instructions and problems without having to dispense with the convenient added value of object referencing.



Object/topic-related display of information




Text units can also be used for additional object or branch-related information by means of additional documentation types when creating the learning content. You can find three examples of how to use text units as "notes" in the following section.

1. Exact definition of requirements for the recording at the respective location
2. Instructions for dealing with the respective component
3. Goals agreed in the curriculum



8.6 Creating a Text Unit

To create a text unit, proceed as follows:

1. In the *Explorer* select *New Object* .
An overview of all objects opens.
2. Select *Text Unit* .
The *New Text Unit* dialog box opens.
3. Adapt the following settings:
 1. *Name:*
Enter a text unit name.
The default name is the object type with an ID.
 2. *Language:*
Select the language for the text unit.
 3. *Document Type:*
Select a type and icon for the text unit. For example: *Glossary* 
4. Select *OK* to create the text unit.

The text unit is inserted into the structure. Now, you can edit the *Description* and *Short Description* of the object.

9 Documentation

Documentation are used to provide the content of simulations, quizzes, books / book pages and text units in a printable format. There are different formats and document types.

The supported formats for the documentation generation are:



Microsoft Word,



PDF,



HTML, and



Microsoft PowerPoint

9.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

9.2 Requirements for Documentation

The following requirements are necessary for creating documentation in these formats: Microsoft Word, Microsoft PowerPoint format and PDF.

Microsoft Office version


The following versions of Microsoft Office are supported: Microsoft Office 2010 - 2016 and Microsoft Office 365.

i Note

In some situations, the generation of a Microsoft Word document leads to the error message: *You have modified styles, building blocks, or other content that is stored in template.dot*. This message is caused by a COM Add-In. Deactivate your Add-Ins in Microsoft Word and generate the document again.

File formats

The default file formats for generating documentation are DOCX and PPTX.

If you want to create the documents in the DOC and PPT format, then activate the option *Use old Office formats*. The setting is available in the *Settings*  dialog box under *Producer -> General*.

The templates have the format DOT and POT. See also *Documentation Templates*.



PDF documents are generated by using Microsoft Word. In Microsoft Word 2010 / 2013 / 2016 the [Save as PDF](#) function is integrated by default.

9.3 Documentation Settings




The structure of a document follows a predefined model. To individually customize a document, you can define the structure and content to be inserted. There are numerous configuration parameters that influence the appearance of documents specific for each type and format (based on fragments).

Managing documentation settings

The documentation settings are a resource type. This means you can manage individual settings and use them in different workareas.

The documentation settings are summarized in the area [Documentation Settings](#) of the [Settings](#)  dialog box. Alternatively, the settings can be configured by choosing [Resources -> Documentation Settings](#)  in the [Explorer](#) menu.

In addition to the standard settings, you can create further settings by duplicating an existing setting and using it as a base type:




1. Open the [Documentation Settings](#)  section of the resource tree.
2. Select a documentation type to be used as a base type. For example:  - [Standard Document](#).
3. Select [Duplicate...](#)  in the object editor.
A settings dialog box opens.
4. Enter a name for the setting.
5. Select [OK](#) to create the new setting.

Note

The [Standard Documentation](#) setting cannot be deleted because it is the basic setting resource of the Producer.

9.3.1 Basic Settings

The main settings for documentation are:

- [Base Type](#):
Specifies the base type for the selected settings. This is defined when the documentation is created and cannot be changed afterwards.
- [Name](#):
Specifies the name of the selected settings.
- [Template](#):
Specifies the documentation template used to generate the document. Choose [Edit Link...](#)  to select a template from the [Documentation Style](#)  resource.
- [HTML Template](#):
Specifies the documentation template used to generate the HTML document. Choose [Edit Link...](#)  to select

a template from the [Documentation Style](#)  resource.

The setting is only available for the hands-on guide.

› Recommendation

To show the resources in the selection dialog box, select [Filter Tree](#) -> [Show Resources](#).

- [Style](#):
Specifies the documentation style used to generate the document. Select a style resource from the list.
- [Text Style](#):
Specifies the text style used to generate the document. Select a style resource from the list.

› Recommendation

The workarea contains one default text style for all content types. You can duplicate the default text style and optimize the style configurations for the documentation. Afterwards, activate the text style in the [Text Style](#) setting.

See also [Text Style Editor](#).

i Note



Text styles are not supported for Microsoft PowerPoint documents. The text can be formatted in the template.

See also [Editing a PowerPoint Template](#).

9.3.2 Fragments

The fragments specify the basic structure of the document. There are different fragments for single documents and compound document:

- [Title](#) (Single Document):
Inserts the title of the project.
 - [Show Cover Page](#) (PowerPoint):
Inserts a cover page with the title of the project.
- [Description](#) (Single Document):
Inserts the description of the project.
- [Short Description](#) (Single Document):
Inserts the short description of the project.
- [Process Flow](#) (Single Document):
Inserts the process flow for the project.
- [Table of Contents](#):
Inserts a table of content. A drop-down list appears here where you can specify the depth of the table of contents.
- **Content**
 - [Project Content](#) (Single Document):
This fragment inserts the content of the project.

- [Content](#) (Compound Document):
This fragment inserts the content of the selected structure.
- [Book Page](#):
This function inserts a book page in the documentation. Choose [Edit Link...](#)  to select a book page.
- [Text Unit](#):
This function inserts a text unit in the documentation. Choose [Edit Link...](#)  to select a text unit.
- [Revision History](#) (Single Document):
This selection defines where the content from the [Revision Entry](#) macro is placed. The relevant macro has to be inserted into the project beforehand.
- [Input Values](#) (Single Document):
This selection defines where the content from the [Input Values](#) macro is placed. The relevant macro has to be inserted into the project beforehand.
- [Blank Line & Break](#):
This fragment makes it possible to separate fragments using spacing and thus provide considerably more structure.
 - [Page Break](#)
 - [Small Blank Line](#)
 - [Medium Blank Line](#)
 - [Large Blank Line](#)
- [Glossary](#):
This fragment inserts a table of glossary descriptions of all used glossary entries of the content.
For creating glossaries, see the chapter *Glossary of Terms*.
- [None](#):
Defines an empty fragment.

i Note

For Microsoft PowerPoint only the fragments [Description](#), [Title](#), [Project Content](#), [Book Page](#) and [Text Unit](#) can be inserted.

9.3.3 Settings of the Subcategories

Settings for specifying the selected content can be made in the various areas. Not all areas are available for all documentation types.

- [Action Table](#):
Includes settings for the structure of the action table. See the relevant chapter.
Only BPP Document, Audit & Compliance Document
- [Screenshots](#):
Includes settings for the size, style and quality of screenshots.
- [Markers](#):
Includes settings for the style of highlights and arrows.

- *Numbering:*
Includes settings for the structure and style of numberings.
- *Project Content:*
Includes settings for specifying project content.
- *Included Objects:*
Includes settings for specifying content included as fragments.
- *Quiz:*
Includes settings for the display of quiz items.
Only Standard Document, Training, Document, Work Document
- *Revision History:*
Includes settings for specifying *Revision Entry* macros as revision history.
- *Input Values:*
Includes display settings for input values of interactions.

9.3.4 Subcategory: Quiz

The quiz settings are available for the documentation types *Standard Document*, *Training Document* and *Work Document*.


- *Show Quiz:*
The setting specifies if quiz items are displayed in a documentation.
- *Include Solutions:*
This setting allows you to generate the solutions for the quiz items. This means you can differentiate between a document intended for the examiner with all the correct answers and a document for the person being examined without any of the answers.

9.3.5 Subcategory: Action Table

Specific settings can be defined for the documentation types BPP and Audit & Compliance document. There is an additional subcategory called *Action Table* available with the relevant settings.

Defining the action table

The structure and content of the table can be defined to insert the explanations of the actions. A total of 5 columns can be defined as follows:

- *Hide Screenshots:*
The *Hide Screenshots* option allows you to set up the screenshots display in the *Screen*  macros.
If the option is activated you are provided with a screenshot and a table below containing all available actions of the step.
If the option is deactivated, a serial table containing the actions is displayed. The single steps are numbered consecutively.

- *Action Table:*
This option specifies whether the actions are displayed as a table or as text only using a step by step approach.
- *Table Width:*
Defines the width of the action table in pixels.
- *Column 1 - 5: Content:*
Defines the column for the information extracted from the macro and displayed in the documentation. When a table is generated, the column name will be displayed in the relevant project language based on the content dictionary.

The column can also have a title allocated to it, which can be entered manually in the document.

Content	Explanation
<i>Hide Column</i>	Hides the column.
<i>Numbering</i>	Creates sequential numbering for the actions.
<i>Text from Demo Bubble / Practice Bubble</i>	Texts from the <i>Demo</i> or <i>Practice</i> bubbles of the actions
<i>Object name</i>	Contains the object names of the actions.
<i>Value</i>	Contains the entered value from the macros.
<i>ROC</i>	Contains the ROC value defined for the entry macros.
<i>Description</i>	Contains the description defined for the entry macros.
<i>Result, OK, Comment, Reference</i>	Empty columns for manual creation of contents.

- *Column 1 - 5: Width (%):*
Defines the width of the column as a percentage of the total width of the table.

9.3.6 Compound Document Settings

For the compound document, you can specify the content types that have to be considered for the document generation. There are the following settings:

Groups

- *Include Groups:*
Specifies that the group content is displayed in the document.
- *Show Description:*
Specifies that the group descriptions are displayed in the document.

Text Units

- *Include Text Units:*
Specifies that the text unit content is displayed in the document.

- *Show Title:*
Specifies that the group titles are displayed in the document.

Projects

- *Include Projects:*
Specifies that the project content is displayed in the document.
- *Documentation Type:*
Specifies the documentation type used. The content and structure for single documents corresponds to the specified *Documentation Settings* for a document type.

Books

- *Include Books:*
Specifies that the book content is displayed in the document.
- *Show Book Description:*
Specifies that the book descriptions are displayed in the document.

Book Pages

- *Include Book Pages:*
Specifies that the book page content is displayed in the document.
- *Show Book Page Description:*
Specifies that the book page descriptions are displayed in the document.
- *Book Page Format:*
Specifies the format for displaying the book pages:
 - *Book Page as Image:*
Includes the images of the book pages in the document.
 - *Book Page as Text:*
Includes the texts of the book pages in the document.
- *Maximum Image Width:*
Specifies the maximum width of the images if the book pages are included as images. By default, the images are scaled to the width of the template layout.
- *Links:*
Specifies that links of book page objects are inserted into the document.
- *Background Image:*
Specifies that the background images of book page objects are displayed on the book page image.
- *Refresh Preview Images:*
Specifies that the book page images are refreshed before including the images in the document. This is helpful for displaying the latest changes of the book pages in the images.

Output Options

- *Include Hidden Objects:*
When this option is enabled, hidden documents are added to the compound document. When this option is disabled, hidden documents are ignored and do not appear in the documentation.

- *Show Short Description:*

Shows the short description for groups, books, book pages, and text units. For projects, the short description is activated in the documentation settings of a document type.

9.3.7 Customizing Documentation Naming



The object names of generated documents are by default the names of the relevant document types. Duplicated documentation settings use the defined name of the resource and do not have different content languages. You can change document naming and add different languages. This can be done in the entity file of a documentation setting resource. The entity file is an xml file that is available for each object in the workarea folder structure. It contains general attributes for object administration.

Adapting the entity.xml

Proceed as follows to adapt the file:

i Note

To customize naming in the *entity.xml*, you should have basic knowledge of editing XML files.

1. Open the *Documentation Settings* tree in the *Resources -> Adaptable Resources*  in the *Explorer*.
2. Select the required resources or duplicated resources; click the right mouse button to open the context menu.
3. Click on the menu entry *Open Folder* .
4. Open *entity.xml* in an editing program, for example notepad.
5. Edit the file and enter your new naming.
6. Save and close the file.
7. Restart the Producer.

Now you can generate your documents with the new naming.

XML structure

Example of the XML structure:

i Note

Only change the attributes mentioned here; otherwise errors may occur in resource administration.

Syntax



```
<?xml version="1.0" encoding="UTF-8"?>
<doc_settings created_by="author_name" creation_time="date_time" caption="work_doc"
version="resource_version" sub_type="document_type"
cwa_recommended_sync_mode="synchronization">
  <Language name="1031">
    <Text name="work_doc">Arbeitsdokument</Text>
  </Language>
  <Language name="1033">
    <Text name="work_doc">Work Document</Text>
  </Language>
  ...
</doc_setting>
```

For each language, insert these attributes:

```
<Language name="language code">
  <Text name="caption name">Document name</Text>
</Language>
```

An overview of the content languages and required language codes is available in the chapter [Content Languages Overview](#).

9.3.8 Documentation for Right-to-Left Languages

An additional [Documentation Style \(Right-to-Left\)](#) resource is available for creating documentation for content with right-to-left languages. The resource is similar to the standard [Documentation Style](#)  but includes right-to-left adaptations in the templates. Further adaptations to templates can be performed individually. The resource is located in the [Adaptable Resources](#)  tree of the [Explorer](#).

The following documentation formats are supported for right-to-left languages:



- Microsoft Word
- PDF
- Microsoft PowerPoint
- HTML

Requirements

To edit documentation in Microsoft Word / PowerPoint, you need to activate a right-to-left language under [Editing Language](#) and [Keyboard Layout](#) in Microsoft Office.

Note that in some situations, the activated right-to-left editing language can influence the direction of the table of contents. If this is the case, you need to change the table of contents manually. Alternatively, remove the right-to-left editing language and generate the documentation again.

Activation

The resource *Documentation Style (Right-to-Left)* can be set individually for each document in the *Documentation Settings*. The documentation settings are available in the *Documentation Settings* area of the *Settings*  dialog box and in the *Resources -> Documentation Settings*  area of the *Explorer*. Further information is available in the chapter *Managing Templates*.

9.4 Editing Single Documents


As preparation for generating a single document the simulation project can be edited on different ways. Read the following chapters for further information.

9.4.1 Subcategory: Documentation

The macro parameters required for documentation creation are found in the subcategory *Documentation*.

- *Show in Documentation:*
Specifies, whether this macro is to be taken into consideration during the creation of documentation.
Disabling this parameter makes it possible to hide certain, specific actions described by macros in the documentation.

Screen macro

For the *Screen*  macros, there are the following parameters:

- *Show in Process:*
Specifies to show the step in the process flow of a documentation.
- *As Heading in Documentation:*
Specifies to use the *Screen Title* as heading in the documentation.
- *Image Size:*
Specifies the size of the screenshot in percentage.
- *Screenshot Position / Size:*
Shows the position and size of the screenshot.
- *Border Width:*
Puts a border at your defined pixel width around the screenshot. The standard color is white and can be changed in *Documentation Settings*.

Interaction macros

For the interaction macros, there are the following parameters:


- *Highlight Position / Size:*
Shows the position and size of the highlight.



> Recommendation

Use the [Document Highlight](#) function to change the marker position.

- [Marker Orientation](#):
Specifies the orientation of the marker on the screenshot. It is recommended to adapt the markers, if the screenshot displays more than one marker.


9.4.2 Cropping Screenshots

The upper portion of the macro editor provides additional commands for the [Screen](#)  macro to edit the screenshot.



- [Manual Crop \(Documentation\)](#) :
This command makes it possible to define a section of the screenshot for use in the documentation instead of using the entire screenshot. This entails opening a dialog window in which the section can be defined using a selection frame.
- [Auto Crop \(Documentation\)](#) :
This command can be used to crop a screenshot automatically for the documentation. This entails setting up the range of the selected control as a crop with a defined distance separating it from the associated highlight. This distance can be set up in the central configuration dialog under [Authoring Settings -> Auto Crop](#). You have the option to retain this crop when rerecording an application. Be mindful of the setting [Keep Crop](#) in the [Parameter](#) dialog for rerecording.

i Note

While rerecording a project, you can retain the crop you have applied. To do so, activate the [Keep Crop](#) option when starting the rerecording. Pay attention in this regard to the section [rerecording](#).

- [Uncrop \(Documentation\)](#) :
If a section of the screenshot was manually or automatically cropped, this function allows the crop to be removed again.

> Recommendation

If you would like to automatically crop all of the screenshots in a project or remove the crops that have been applied, then note the [Auto Crop all Screens](#)  and [Uncrop all Screens](#)  functions in the [Tools -> Automation](#) menu.

9.4.3 Documentation Macros

Documentation macros enable the compilation of extensive process documentation in addition to the recorded simulation. These macros are available to document the recorded project accordingly and to supplement the content relevant to the documentation, as well as to structure the content.

Icon	Name
	Header Information
	Partial Screenshot
	Note
	Description
	Heading
	Document Highlight
	Arrow
	Page Break
	Document Properties
	Revision Entry
	Input Values
	Logon Values

In the following chapters, you will find further information about the documentation macros.

9.4.3.1 Header Information



The *Header Information* macro allows you to insert a title as well as a description in the documentation.

The macro can be used for single documents to create a document title without numbering. It is recommended to hide the project title in the documentation settings.

Parameters of the macro

The following parameters are available:

- *Title:*
You can enter a title. The title uses the text style *Title* in the Microsoft Word document.
- *Description:*
You can enter a description. The description can contain a subtitle or additional text and is formatted with the text style *Paragraph* in Microsoft Word.

9.4.3.2 Transaction Code



The *Transaction Code* refers specifically to recording SAP applications and is created when you select a transaction in SAP.

When you generate documentation, a table with details of the transaction code and the menu path is created.

Parameters of the macro

The following parameters are available:

- *Transaction Code:*
Contains the recorded transaction code.
- *SAP Menu Path:*
You can enter a SAP menu path for the transaction to be able to find it in the SAP system menu.

9.4.3.3 Partial Screenshot



The *Partial Screenshot* macro allows you to create a screenshot of a specific area of the current screenshot. The partial screenshot can be used, to show an area of an application page in detail.



Parameters of the macro

The following parameters are available:


- **Title:**
You can enter a title for the partial screenshot.
When no caption has been entered, a consecutive image numbering system will be used in the documentation.
- **Screenshot:**
Contains the partial screenshot image.
- **Show Actions:**
Allows you to show the recorded actions as highlights on the screenshot. The parameter hides the actions on the screenshot of the **Screen** macro.
With activated parameter you can use the partial screenshot instead of the **Page** macro for your documentation.

Creating a partial screenshot

To create a partial screenshot, proceed as follows:

1. Select a **Screen**  macro in the thumbnail view.
2. Insert the **Partial Screenshot** macro using the **Insert Documentation Macro** toolbar.
An editing window with the screenshot is opened.
3. Define the screenshot area.
Adjust the selection border by moving the anchor points.
4. Select **Confirm Selection**  to insert the screenshot.

Editing the partial screenshot

To edit a partial screenshot, select **Manual Crop**  in the object editor. Afterwards, the editing window with the screenshot of the **Screen** macro will be opened. You can change the selection border in the editor window.

9.4.3.4 Note



The **Note** macro allows you to insert important information with a highlighting icon in the documentation.





Parameters of the macro

The following parameters are available:

- **Text:**
Contains the note text for the macro.

Type icon

A **Type (Icon)** can be assigned to the note, which can be selected from four different types. Each type is represented by an icon:

Type	Icon
<i>Info</i>	
<i>Remark</i>	
<i>Tip</i>	
<i>Warning</i>	

The images of the icons are located in the resources *trainer Style* and *Documentation Style*. You can replace these with your own images.

Creating a note

To create a note, proceed as follows:

1. Select a macro in the thumbnail view.
The *Note* will be inserted after the selected macro
2. Insert the *Note* macro using the *Insert Documentation Macro* toolbar.
A dialog box is opened.
3. Select a *Type (Icon)* and enter a *Text*.
4. Select *Ok* to insert the macro.

9.4.3.5 Description



The *Description* macro allows you to insert additional information in the documentation.

Parameters of the macro

The following parameters are available:

- *Text*:
Contains the description text for the macro.
- *Reset Global Index Counter*:
Defines, that the numbering of the text start with '1'. Deactivate the option to use the numbering of all macros

in the step consecutive.

Creating a description

To create a description, proceed as follows:

1. Select a macro in the thumbnail view.
The *Description* will be inserted after the selected macro.
2. Insert the *Description* macro using the *Insert Documentation Macro* toolbar.
A dialog box is opened.
3. Enter a *Text*.
4. Select *Ok* to insert the macro.

9.4.3.6 Heading



The *Heading* macro allows you to insert a heading in the documentation.

The macro can be used for single documents to create an individual document title or to insert an additional title in the project structure.

› Recommendation

Use this macro for single documents to create an additional heading. The macro is not recommended for compound document as the headings are based on the complete content structure.

Parameters of the macro

The following parameters are available:

- *Title:*
You can enter a title.
- *Format Template:*
Defines format template and heading level of the title. You can enter a value between 'h1' - 'h9'.

Creating a heading

To create a description, proceed as follows:

1. Select a macro in the thumbnail view.
The *Heading* will be inserted after the selected macro.
2. Insert the *Description* macro using the *Insert Documentation Macro* toolbar.
A dialog box is opened.
3. Enter a *Text*.
4. Select *Ok* to insert the macro.

9.4.3.7 Document Highlight



The *Document Highlight* macro allows to highlight a specific area on the screenshot.

Parameters of the macro

The following parameters are available:

- *Text:*
You can enter additional information to the highlight. The text is sequential numbered in the step.

Creating a highlight

To create a highlight, proceed as follows:

1. Select a *Screen* macro in the thumbnail view.
2. Insert the *Document Highlight* macro using the *Insert Documentation Macro* toolbar.
An editing window with the screenshot is opened.
3. Define the highlight area.
Adjust the selection border by moving the anchor points.
4. Select *Confirm Selection* ✓ to insert the highlight.

Editing the highlight

To edit a highlight select *Edit* in the object editor. Afterwards, the editing window with the screenshot of the *Page* macro will be opened. You can change the selection border in the editor window.

9.4.3.8 Arrow



The *arrow* macro allows to mark a specific point on the screenshot.


Parameters of the macro

The following parameters are available:

- *Text:*
You can enter additional information to the arrow. An arrow icon is inserted in front of the text in the document.
- *Arrow Color:*
Specifies the color of the arrow.
- *Orientation:*
Specifies the orientation of the arrow. You can select an orientation from the drop-down list.

Creating an arrow

To create an arrow, proceed as follows:

1. Select a [Screen](#) macro in the thumbnail view.
2. Insert the [Arrow](#) macro using the [Insert Documentation Macro](#) toolbar.
An editing window with the screenshot is opened.
3. Define the position and size of the arrow:
 1. Move the arrow by using drag&drop.
 2. Change the orientation by using the \mathbb{R} key
 3. Adjust the selection border by moving the anchor points.
4. Select [Confirm Selection](#)  to insert the arrow.

Editing the arrow

To edit an arrow select [Edit](#) in the object editor. Afterwards, the editing window with the screenshot of the [Page](#) macro will be opened. You can change the selection border as well as the orientation in the editor window.

9.4.3.9 Page Break



The [Page Break](#) macro inserts a page break in the documentation. This allows you to specify a page break at a specific position in the project structure.

9.4.3.10 Document Properties



The [Document Properties](#) macro assigns contents to field functions of a Microsoft Word document. This involves defining document properties and inserting these as field functions in the template.

Parameters of the macro

The following parameters are available:

- [Name](#):
Contains the field function of the template.
- [Value](#):
Contains the content for the field function to be displayed in the document.

Defining a field function in Microsoft Word

A field function in Microsoft Word is defined as follows:

1. Open the template where you want to insert the field function.
2. Open the [File -> Info](#) page.
3. Click on [Properties -> Advanced Properties](#) to open the properties dialog box.
 1. Navigate to the [Custom](#) tab.
 2. Insert the property into the [Name](#) field and the corresponding content into the [Value](#) field. You can use the same entry.
The content will be replaced by the macro.
 3. Click on [Add](#).
 4. Confirm the dialog box with [OK](#).
4. Then insert the field function into the template under [Insert -> Quick Parts -> Field...](#)
 1. Select the entry [DocProperty](#) as the [Object Name](#).
 2. Select your defined field function as the [Field Property](#).
5. Now save your template.

i Note

If you insert the [Document Properties](#) macro for a BPP or Audit & Compliance document in your project, the field functions which are contained in the particular templates are read automatically and displayed in the macro editor. See also the chapter [Process Documents](#).

9.4.3.11 Revision Entry



The [Revision Entry](#) macro allows you to document modifications in processes. For each modification a macro can be created and grouped below one another.


All revision entries are created as revision history table in the documentation.

Parameters of the macro

The following parameters are available:

- [Revision Date](#):
Indicates the date of the revision.
- [Change](#):
Contains a description of the revision.
- [Changed by](#):
Indicates the author of the revision.
- [Revision ID](#):
Contains a reference number of the revision.

Documentation settings

The revision history can be activated as fragment in [Documentation Settings](#) . In the subcategory [Revision History](#), there are further settings:

- [Hide in Project Content](#):
Defines, that the revision history only inserted as fragment.
Deactivate the setting to display the revision history at the position as it is inserted in the project.
- [Sorting](#):
Defines the sort order of the table, if several revision entries have been created.

9.4.3.12 Input Values




The [Input Values](#) macro creates a table including all available entries of the [Input Text](#) macros in a project. As a result, they can, for example, be clearly subdivided at the beginning of a document to make them directly available in a work process.

Parameters of the macro

The following parameters are available:

- [Show Object Name](#):
Inserts the content of the object name parameters as column in the table.
- [Show Value](#):
Inserts the content of the value parameters as column in the table.
- [Show Bubble Text](#):
Inserts the content of the bubble text parameters as column in the table.
- [Show ROC](#):
Inserts the content of the ROC parameters as column in the table.
- [Show Description](#):
Inserts the content of the description parameters as column in the table.

Input values as fragment

Instead of this macro, you can also insert the input values as fragment in [Documentation Settings](#) . In the subcategory [Input Values](#) you can specify the content.

9.4.3.13 Logon Values



The *Logon Values* macro allows creating a table including the necessary data requested by a process to log on to the particular system.

Parameters of the macro

The following parameters are available:

- *User ID:*
Defines the ID of the user.
- *Role:*
Defines the role of the user, for example, administrator, learner.
- *Application:*
Defines the application or system to log on to.
- *View:*
Defines the corresponding application page or view, which has to be selected for the process.


9.4.4 Process Flow

The process flow provides a visualized overview of the recorded project, its steps and sequence. It clearly shows the most important components of a step in a brief overview.

The process flow helps orient learners about which action steps take place at what point in the process when working with a document.

The process flow can be generated for Word documentation and, if needs be, can also be edited at a later date. A process flow is not generated for the *Job Help* Word file because this already contains a tabular overview of the working steps.

Design of the process flow





Each step is shown in its own individual field in the process flow. These show the step name, the screenshot of the *Screen*  macro as well as the *Object Name* of the action.

If a action does not have an *Object Name*, the Producer will automatically insert the relevant *Object Image*.

The individual fields of the steps are linked to one another with arrows, which make clear the progression. Should there be a page break, a bending arrow is inserted instead of a straight one.

i Note

The picture files in the *Object Image* are not scaled when being shown in the process flow. For this reason you should make sure that these pictures are not too large. Here, it is recommended that you enter a *Object Name* so that it is shown in place of the *Object Images* in the process flow.

The start and end macro of the *Form Structure*  or from *Branches*  as well as the *Simulation Start*  and *Simulation End*  macros are not shown, but only the steps.

Documentation macros contained within a project are also not inserted into the process flow, as they are only used in the design of the documentation and are not relevant to the process as a whole.


Settings for the process flow

The process flow can be shown individually for the documentation of a project. The setting is made in the central configuration dialog as a *Basic Settings and Fragments* for the respective documentation type. You can determine the position for the process flow here.

Every step of a project is shown in a process flow. Steps can also be individually deactivated for output if they are not to be displayed in the process flow.

In this case, select the corresponding *Screen* macro. Then deactivate the *Show in Process* setting in the subcategory *Documentation* of the macro editor.

Picture files of the arrows

The arrows of the process flow can be found in the resource *Documentation Style* . Both the straight arrow (*arrow.bmp*) and the curved arrow (*arrow-long.bmp*) are located in the resource folder.

These graphics can also be replaced with own pictures. You should ensure that the names and sizes of the picture files remain the same.

9.4.5 Heading Levels

When generating a master document, the project and group structure in the *Explorer* is transferred to the document and displayed as headings and a table of contents.

In order to render the numbering of the various headings correctly, the outline level of the project and step titles is to be defined for each project before being generated as a single document. To this end, a *Heading Level* is defined. The required level is to be decided from the level of the project in the *Explorer's* tree structure.

This value needs to be stipulated as the Producer does not differentiate the level at which the project resides nor whether it is located in a main or sub folder when issuing single documents. Moreover, it is possible that only certain projects are issued and that the heading levels vary as a result. This may be the case, for example, if only the projects in a subordinate group folder are considered. The *Heading Levels* can make this explicit.

Depending on the *Heading Level*, the project and step titles are assigned to the relevant heading template in the Microsoft Word template when a document is issued. These are predefined for the various numberings and outline levels.

Note

When generating a compound document the heading level is set automatically based on the content structure.

9.4.5.1 Setting the Heading Level

Heading levels for a single document

The *Heading Level* is to be defined in the *Documentation Settings*  in the area *Project Content* with the *Heading Level* parameter.

In a single document the structure is created with the project title and its steps. This yields a two-tier outline structure.

To define a structure with the project title on the first heading level and its steps on the second level requires the heading setting to be set to *1*. The value *1* is to be used as a matter of course if a single document is not intended for inclusion in a master document.



Example

```
1 Project name
1.1 Step name
1.2 Step name
1.3 ...
```

> Recommendation

If the project title should use the *Title* formatting of Microsoft Word without a numbering, then change the *Heading Level* to *0*.

Heading levels for a master document

When generating a master document, the Producer issues the group and project structure from *Explorer*. A three-tier outline structure is formed comprising the group, project and step titles.

Before work can be begun on generating the master document, the group and project structure needs to be defined in the *Explorer*. This is crucial for the layout of the master document.

The heading levels given to the single documents can be inferred from the structure.



Example

```
1 Group name
1.1 Project name
1.1.1 Step name
1.1.2 Step name
1.1.3 ...
1.2 Project name
1.2.1 Step name
1.2.2 ...
```

Each project envisaged for the master document is then issued as a single document. Define the relevant *Heading Level* for each project before proceeding with generation.

- A project that is assigned to a group located on the first level is to be found on the second level. So, that the headings in the single document began at that level, the setting must be set to [2](#).
- If a project that resides within a subgroup in the [Explorer](#) is to be issued, then the [Heading Level](#) should be set to [3](#). The numbering then starts on level [3](#).
- For greater project or group depth, the [Heading Level](#) setting needs to be increased accordingly by the appropriate depth.
- If a project is not assigned to any group or if it resides at main folder level, then the [Heading Level](#) is to be set to [1](#).

i Note

The headings are capped at 9 in the document templates as only nine levels of numbering can be set up in Word. The highest setting for a [Heading Level](#) should therefore be 8. That means that the project titles receive a level 8 number and the steps, level 9. Therefore, ensure that your project structure has a depth not exceeding eight levels.

9.4.6 Process Documents

In the Producer different documentation types are available for process documents according to certain criteria. These documents are:

BPP document



The BPP document (Business Process Procedure) allows generating files of recorded projects for a more detailed description and demonstration of business processes.

Audit and Compliance document



The document supports the verification and compliance of certified working processes.

Generating documentations

The documentation types BPP and Audit & Compliance documents can be generated in Word, PDF and HTML formats. In order to create one of these documents a certain procedure is required. This should be done as follows:


1. Set up configurations in the documentation settings for the type.
2. Insert macros for the documentation type.
3. Edit inserted documentation macros.
4. Define [ROC](#) value and [Description](#) in the interactions.
5. Generate the documentation.

Documentation macros

Predefined documentation macros can be inserted for the documentation types BPP and Audit & Compliance documentation. This is done in the *Insert -> Insert Documentation Macro -> Insert BPP Macros* or *Insert Audit and Compliance Macros* menu. The macros are inserted automatically during the first and last step.

The documentation macros are predefined default settings and can be customized after insertion.

9.4.6.1 BPP Macros Structure

In order to create a BPP document the particular BPP macros can be inserted in the project via the *Insert -> Insert Documentation Macro -> Insert BPP Macros*  function.

The structure of the BPP macros is as follows:



Macro *Document Properties*



Macro *Revision Entry*



Macros *Description* with titles.

1. Overview (1st level title)
2. Purpose (2nd level title)
3. Business process overview (2nd level title)
4. Input data (2nd level title)



Macro *Input Values*




Macro *Description* with title *Procedural Steps* (1st level) for the actual cycle.

The process follows afterwards.

Title and text for scenarios associated with the process: *Results / Related Scenarios*
(in the last step)

In the macros with titles the titles and texts can be modified or texts can be added.

9.4.6.2 Audit and Compliance Macros Structure

In order to create an Audit and Compliance document the particular Audit and Compliance macros can be inserted in the project via the *Insert -> Insert Documentation Macro -> Insert Audit and Compliance Macros*  function.

The structure of the Audit and Compliance macros is as follows:



Macro *Document Properties*



Macro *Revision Entry*



Macro *Page Break*



Macros *Description* with titles (1st level title). Explanations can be inserted.

1. Purpose
2. Scope
3. References
4. Definitions
5. Document contents
6. Steps

In the macros with titles the titles and texts can be modified or texts can be added.

9.4.6.3 Predefined Document Properties



The *Document Properties* macro allows allocating predefined variables of a document template to a particular content.

The predefined variables define the macro when the *BPP* or *Audit & Compliance* macros are inserted automatically.

The template for the particular document type within the Producer contains the following variables:

BPP document properties

Name	Value
<i>_bpp_id</i>	ID
<i>_bpp_owner</i>	Author
<i>_bpp_status</i>	State
<i>_bpp_description</i>	Description

Audit and Compliance document properties

Name	Value
_ac_title	Title
_ac_docnumber	Document number
_ac_versionnumber	Version number
_ac_effectivedate	Effective date
_ac_requestedby	Requesting person requested by
_ac_approvedby	Approving person approved by

Assigning contents to variables

In the *Document Properties* macro, the field *Name* and the field *Value* are available for a variable. Insert the content that is to be generated into the *Value* field.




i Note

When generating a HTML document, the variables of the *Document Properties* macro cannot be executed in HTML as these field functions are Microsoft Word specific.

i Note

The *Document Properties* can only be output for single documents as they relate to the corresponding document templates. Avoid the use of this macro in a master document for this reason.

9.4.6.4 Settings in Interaction Macros


For some simulation macros, which require an entry or a selection from the user additional information for the action tables of the BPP and Audit and Compliance documents can be added. These settings can be found in the *Documentation* subcategory of the macro editor for the *Input Text* , *Select Single*  and *Radio/Checkbox*  macros.

In order to display the *Description* and the *ROC* value in the action table a column has to be defined for it in the central settings.

The following settings are available:






- *ROC (Required/Optional/Conditional):*
The value defines the necessity of an action, whether it is required (R), optional (O) or conditioned by something (C). The particular type can be selected in the choice box of the option and the character R, O or C is displayed accordingly in the table.
- *Description:*
Additional information about a macro can be provided in the description field.

9.5 Generating Single Documents

After a process has been recorded you can generate a documentation. At least one [Screen](#)  macro and one interaction should be available for this purpose for capturing a result in the document.

You also have the option of designing your documentation using documentation macros. This allows you to incorporate additional information.

To create a single document, proceed as follows:

1. In the Project Editor, open the project for which you would like to create a single document.
2. If you want to generate a Word document, you should first define a [Headings Level](#) for organizing the headings. This is to be set up in the documentation settings under [Documentation Settings](#)  -> [Project Content](#).
3. Commence generation by means of the [Documentation](#) menu or in the toolbar by means of the corresponding document type button:
 - [Generate Word Document](#)  :
There are various document types available for Word documents. Select from the menu the type you would like to create.
 - [Generate PDF Document](#)  :
There are various document types available for PDF documents. Select from the menu the type you would like to create.
 - [Generate HTML Document](#)  :
There are various document types available for HTML documents. Select from the menu the type you would like to create.
 - [Generate PowerPoint Document](#) 

The generated document is now displayed in the corresponding project in the [Explorer](#) and can be launched from that location.

> Recommendation

Various settings can be made which affect the document display when the individual document is created. You can find more information in the section on configuring the individual document.

i Note

In some situations, the generation of a Microsoft Word document leads to the error message: *You have modified styles, building blocks, or other content that is stored in template.dot*. This message is caused by a COM Add-In. Deactivate your Add-Ins in Word and generate the document again.

9.5.1 Types of Single Documents

There are different document types available for Word, PDF and HTML documents. The types are:

Standard



This document is not intended for a special use case and shows all project information (such as step names, actions, advice, screenshots) and documentation macros that are not special prepared.

Job-Help



The document supplies a short and clearly structured project overview with step names and actions to be carried out. The document does not contain any screenshots, documentation or *Explanation* macros and is thus ideally suited for practical use of an application.

Training Document



When generating a training manual, all relevant project information, including documentation macros (for example, step name, actions, notes, screenshots...), will be automatically exported and formatted accordingly. This type of documentation is ideal for supplementing training materials for learning processes.

Test Sheet



This document adds a table that is suitable for testing the user's experience. It is possible to make an inquiry about actions, inputs and the expected results of the respective step. Also, the tutor has additional fields for evaluation of the deliverables.

Work Document



This document supports the editing of projects and gives an overview about project details, its execution and content. To do so, steps, screenshots, scores, task description, notes and the project language are read out.

Process Guide



This document explains processes in a clear and simplified manner. Its user-friendly and visually appealing layout makes it easy for the users to follow. There are three columns which display the following information:

- *What to do* – Text in demo bubble
- *What to see* – screenshot with highlights
- *What to say* – explanations, macros for notes and tips, etc.

Hands-On Guide



This document explains processes with a focus on the screenshots. It allows the users to follow the instructions on the screen. There are two columns which display the following information:

- *Explanation* – texts of bubbles and explanations
- *Screenshot* – images of screen macro

BPP Document



The BPP document (Business Process Procedure) allows you to use recorded projects for describing and illustrating business processes in greater detail. A unique macro structure is created with specific instructions for the documentation's properties, modifications, headings, and descriptions. It is also possible to create a customized table to illustrate the process steps.

Audit & Compliance Document



The purpose of this document is to verify and ensure compliancy with certifications and audits. Its "generic" format can be customized to meet your specific requirements. A unique macro structure is created with specific instructions for the documentation's properties, modifications, headings and descriptions. It is also possible to create a customized table to illustrate the process steps.

9.6 Compound Document

A compound document summarizes all of the content from one workarea into one document. Whereas a centralized document only contains content from projects and groups, a compound document also includes the following possibilities:



- Groups
- Text units
- Projects
- Books
- Book pages

i Note

When generating documentation, note that not all types of objects can be exported into the documentation. Audio, video and animated objects cannot be used in this case.

9.6.1 Generating the Compound Document

To create a compound document, proceed as follows:

1. Make any adjustments in the documentation settings of the *Compound Document Settings* for your documentation.
2. Select the start object of the content structure - group or book.
3. Go to [Documentation -> Generate Compound Document...](#) 
4. A dialog box with the following settings will appear.
 - [Start from:](#)
This defines the starting point for generating the document. The selected object will be displayed here. You can select a different object by clicking on [Edit Link...](#) .
 - [Use Settings:](#)
This defines the resource of the documentation settings.
 - [Generate as:](#)
This defines the format for your document: [HTML Document](#), [Word Document](#) or [PDF Document](#)
5. Select [Ok](#).

The documentation is generated.

Note

The heading level is automatically set in the document based on the structure level and the single documents for projects are generated independently. The heading level option therefore does not have any effect.

9.7 Master Document

The various documents in the entire workarea or a specific selection of them can be merged into a master document. This document is generated from within the [Explorer](#) and can be created in Word or PDF format.



Preparations for creating a master document

The following preparations must be made for creating a master document:

- Before you generate the master document, make sure you have created your individual documents with the right header level so that the outline of the documents in the master document can be properly displayed.
- If you want to insert the documents into the master document without descriptions and titles, this information must be deactivated already when you generate the individual documents.
- You can deactivate documents that you do not want to include in the master document using filters or the [Hide](#) function.

9.7.1 Generating the Master Document

To create a master document, proceed as follows:

1. You can create a master document for either the entire workarea or an individual selection. To do this, the respective group is to be selected in the tree structure or defined in the dialog for creating the master document
 - To create a master document for the entire workarea, the *Content*  group at the top of the tree structure of the *Explorer* must be selected.
 - To create a master document for a special group, this is to be selected in the tree structure. Then only the individual documents within the group are included.
2. Select the *Documentation -> Generate Master Document...*  menu.
3. A dialog opens where you can define your master document. Make the settings you want. You can find explanations about the dialog in the section on settings for the master document.
4. Select *Ok*.


The document is generated.

After creation, the master document is inserted at the bottom of the tree structure and can be opened from there.

See the respective section for information on displaying the master document in Word.

9.7.2 Settings for the Master Document

The following settings can be made in the dialog for generating a master document.

- *Starts from:*
This selection determines the point in the tree structure starting at which the documents are to be output to the master document. This lets you create a master document for a specific group. The object selected in the tree structure is automatically displayed in the setting.
If another starting point is to be selected, this can be done using *Edit link...*  A dialog box opens where an object can be defined in the tree structure. Select *Ok*.
- *Type:*
This selection determines the documentation type for the master document.
- *Format:*
This selection defines the format the master document is to be created in: Word, PDF or both formats
- *Insert individual documents:*
Which content is to be output to the master document can be defined in this area.
 - *Projects*
 - *Other Documents:*
The setting adds Word documents imported to the workarea to the master document.
 - *Insert Hidden Objects:*
The setting adds documents from hidden objects.
- *Include Titles and Descriptions:*
Whether titles and descriptions are to be output for the content can be defined in this area. They are not

included if this option is deactivated. With the exception of the project, the title and the description are always inserted together for other objects because fragments can be defined for projects.

- [Project title](#)
- [Project description](#)
- [Group](#)
- [Book](#)
- [Book Page](#)
- [Text Unit](#)

i Note

If you do not want to insert [Titles](#) and [Descriptions](#), these must be deactivated already when the individual documents are created. For more information, see also the sections on [Basic Settings and Fragments](#).

9.7.3 Displaying the Master Document in Microsoft Word

Once the master document has been opened in Microsoft Word, it is displayed with its cover page, table of contents and linked single documents.

Displaying single documents

When generating the master document, the single documents are not attached directly but shown as a link. You can have these shown in the master document:

1. Select the [Outline view](#) to be able to continue editing the document.
2. Activate the [Show Document](#) option in the toolbar.
3. Select [Collapse Subdocuments](#).

Attaching single documents

The presentation of displayed single documents is not stored in the master document. You will get the links back when you reopen the document. Further editing steps are required in order to obtain a complete document incorporating the single documents.

i Note

It is recommended that you only proceed with incorporation once the editing of your master document has been fully completed and it is ready for publication. This will avoid duplication of effort in the event of any additions where you will have to repeat these steps.



1. Activate the [Outline view](#) and click the [Collapse Subdocuments](#) button (see above).
2. You will find a document icon in front of each single document. Click on it to select the associated single document. This process will only ever allow you to select one document.
3. Now click on the [Remove sub document](#) button in the toolbar. The document has now been incorporated.
4. Repeat items 2 and 3 for each additional single document. You can then switch to the [Print preview](#) (or another view).

i Note

After adding the subdocuments, update the table of contents.

After the single documents have been incorporated, you should resave the document so that the original Master Document is still available.

9.8 Documentation Templates

Documentation templates are used to generate Microsoft Word, PDF and Microsoft PowerPoint documents. The templates are stored in the [Documentation Style](#)  resource in the [Adaptable Resources](#)  section of the [Explorer](#). The resource [Documentation Style \(Right-to-Left\)](#) contains the same templates with support for right-to-left languages.

The following file formats are supported:

- [.dot](#) (default) and [.dotx](#) for Microsoft Word and PDF documents
- [.pot](#) (default) and [.potx](#) for Microsoft PowerPoint documents
- [.html](#) for HTML documents

A workarea includes the following standard templates:

File Format	Document Name
Microsoft Word / PDF	Single Document
	Single Document with Title
	Master Document
	BPP Document
	A&C Document
Microsoft PowerPoint	Power Point (4:3)
	Power Point (16:9)
HTML	HTML Document
	Responsive HTML Document (Hands-On Guide only)



9.8.1 Managing Templates

Selecting a documentation template

- **Single document, Compound document**

The templates can be individually set for every documentation type on the relevant settings page.

To select the documentation templates, proceed as follows:



1. Select the *Edit Link...*  button next to the *Template* setting.
A dialog appears that shows the workarea structure.
2. Select a template from the *Documentation Style*  resource.
3. Select *OK*.

- **Master document**

You can configure the template for a master document in the settings dialog box when generating a master document.

Integrating a template

To insert a documentation template into a workarea, proceed as follows:



1. Select the *Documentation Style*  resource in the *Explorer*.
2. Select *Insert File...*  in the object editor.
The file selection dialog box is opened.
3. Select the required file.
4. Select *Open*.


The template will now be integrated in the *Documentation Style* and can be used for generating documentation.

Copying a template

If you want to create your own template, it is recommended that you use an existing standard template as a preset.

To do so, proceed as follows:

1. Open the context menu of a *Documentation Style*  resource.
2. Select *Open Folder*  to open the *docstyle* folder.
3. Open the *dot* folder.
4. Copy the needed template to a separate folder and rename it.


Once you have adapted a template, import the file by using the *Insert File...*  function in *Explorer*.

i Note

Do not paste the file directly into the *dot* folder, because the file will not be recognized by the resource structure.

9.8.2 Editing a Microsoft Word Template

For Microsoft Word templates you can edit the layout and the text styles.

Go in to the folder of your copied `.dotx` file. Open the template in Word by right-clicking the file and clicking [Open](#)  in the context menu.

Note that changes in the page setup could affect the complete layout. We recommend that you test templates after creating them.

Edit background

The background of a template is defined using the [Header & Footer](#) view. Double click the header or footer area to change the view. You can then change the images and texts of the header and footer area.

Edit text styles

Text styles of the content use the same style defined in the text style editor. In the document templates, we recommend that you only adapt the template-specific styles, for example, header and footer texts.

i Note

For the headings there are parameter, which are used from the template: numbering of heading, page break of heading 1.

You are able to change this in the template.

The used default text styles are:

- Numberings of headings
- `_Cover_Subtitle`
- `_Cover_Title`
- `_Title_Header`
- Footer

> Recommendation

If you want to adapt a Word template for a document type, it is recommended that you adapt all templates to have a consistent design in all documentation.

9.8.3 Editing a Microsoft PowerPoint Template

PowerPoint templates are generally used to create documentation for simulations. When a document is generated, the content is inserted with the project title on the top, the bubble texts on one side and the screenshot on the other side of a slide.

Customizing a template

Open your template in Microsoft PowerPoint. A PowerPoint template can be adapted in the [Slide Master](#) view. Select the view in the [View](#) tab.

You can customize the following parts of the template:

- design slide master
- layout pages

i Note

The layouts in the template are supported with version 9.5 of the Producer. If you are using a customized template of an older version, replace it with a newer template.

Design slide master

The design slide master contains the basic design of the template used for all layouts. It is the first page in the structure.

You can adapt:

- *Background*
- *Footer*

Layout pages

The layouts contain different placeholders, which define the position and the size of the included content as well as the formatting of the text. They are subpages of the design slide master.

You can adapt:

- *Cover page background:*
You can change the position and formatting of the title as well as the background.
- *Position and size of placeholders:*
You can change the position and formatting of the placeholders for title, text and image.

To change a text formatting highlight the texts in the text field. You can then change the *Font* settings in the *Home* tab.


i Note





Do not delete a layout or placeholders of a layout to insert the content correctly.

9.8.4 Explanation Icons

The explanation icons are used for explanation macro types in a simulation. To customize images, replace the default images with your own images.

The images have the size 80x80 pixels and are in BMP format.



You can adapt the explanation icons of the simulation playback in the *trainer Style*  additionally.

Type	Icon
<i>Info</i>	
<i>Remark</i>	
<i>Tip</i>	
<i>Warning</i>	

Replacing an image

This is necessary to assign the correct image file to the active explanation type.

To replace an explanation image in a workarea, proceed as follows:

1. Select the icon file in the *Documentation Style*  resource of the *Explorer*.
2. Select the *Replace File...*  button in the object editor.
3. This opens the file selection dialog box. Select the required file.
4. Select on *Open*.

The icon is now integrated into the *Documentation Style* and can be used for generating documentation.

10 Content Languages and Translation

The learning content is often used across locations in different countries and language regions and therefore consists of multiple language versions. Therefore, consistent training material must be available in the relevant languages. The following chapters explain how the content can be used in different languages and how to handle translations.

10.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)



10.2 Content Languages and Dictionaries

Each object in the workarea has an active content language. It is used to specify the included content's language and to define the language for the interfaces of the trainer, library and book reader. For projects, the language attribute defines the language of the text modules. Furthermore, when using filters you can define a language in your search criteria. Each content language of the Producer is defined in the dictionaries.

You can select a content language when creating a content object using the [Language](#) parameter. The active language of an object is displayed in the object editor.

Dictionary resources

The dictionaries are text resources of the workarea containing the content languages. The resource files are located in the resource structure in the [Explorer](#). There are two main dictionary types:

- **Playback Dictionary** 
The dictionary contains runtime texts for playback. These texts are the start & stop pages, the user interface texts for the trainer bar, the book reader bar, the library and for the Desktop Assistant.
 - [Desktop Assistant](#) - includes the texts for Desktop Assistant projects
 - [Standard \(Simulation\)](#) - includes the texts for simulation projects and books
- **Recording Dictionary** 
The dictionary contains the text modules of the content languages for the projects and documentation.
 - [Simulation](#) - simulation projects and documentation
 - [Desktop Assistant](#) - Desktop Assistant projects

For the information on adapting dictionary texts, refer to the [Dictionary Editor](#) section.

View content language in tree

In the tree structure of the [Explorer](#), you can show the content language of each object. This allows you to see the language and sort the objects. There are two functions in the [View](#) menu:

- [Show Language](#) - displays the language code
- [Show Language Icons](#) - displays the flag icon of the language

10.2.1 Generating Texts in Projects



During the recording or rerecording (only simulation) of a project, texts modules in different content languages are inserted into the projects and thereby generate project content automatically. The text modules are part of the content glossaries for simulation and Desktop Assistant.

For simulation projects there are different texts for the demo mode and the practice mode. The texts in demo mode contain explanations to complement the simulation being demonstrated. The texts in Practice mode contain clear instructions for users on what they should do to continue with the simulation.

For Desktop Assistant projects there are one basic text type.

Translating text modules

When text modules are translated, the texts of a content language are replaced by those of the new language. Text modules can be translated as follows:

-  **Automated translation**
With this function, you can change the content language of a project.
For further information, see the *Automated Translation... (Project Editor)* section.
-  **Rerecording** (only simulations)
With this function, you can change the content language and also record the application with the appropriate language automatically.
For further information, see the *Rerecording a Simulation* section.

Translate manually option

The [Translate Manually](#) option indicates if the texts of macros with text modules have been changed. These texts will not be replaced with another language during rerecording or automatic translation. When you export a translation template, the texts are also exported.

The setting is available in interactions ([Demo Bubble](#) and [Practice Bubble](#) subcategory of the macro editor).

If a text needs to be translated, you can set the option [Translate Manually](#).

10.2.2 Content Languages Overview

The following table gives an overview about the available content languages:

Language Code	Language
ar-SA	Arabic
bg	Bulgarian
cs	Czech
da	Danish
de-CH	German (Swiss)
de-DE	German
el	Greek
en-GB	English (United Kingdom)
en-US	English (United States)
es-ES	Spanish
es-CO	Spanish (Colombian)
et	Estonian
fi	Finnish
fr-CA	French (Canada)
fr-FR	French
he	Hebrew
hi	Hindi
hr-HR	Croatian
hu	Hungarian
id	Indonesian
it-IT	Italian
ja	Japanese
kk	Kazakh
ko	Korean
lt	Lithuanian

Language Code	Language
lv	Latvian
ms-MY	Malay
nb	Norwegian
nl-NL	Dutch
pl	Polish
pt-BR	Portuguese (Brazil)
pt-PT	Portuguese
ro	Romanian
ru	Russian
sk	Slovak
sl	Slovenian
sr-SP	Serbian
sv-SE	Swedish
th	Thai
tr	Turkish
uk	Ukrainian
vi	Vietnamese
zh-CN	Chinese (Simplified)
zh-TW	Chinese (Traditional)

10.3 Translating Learning Content

The Producer offers different possibilities for translating content. The main difference is between the translation of text modules and the translation of manually created texts:


- **Translation templates** – used for manually created texts of all content types
- **Machine translation** - used for the translation of texts of all content types

- **Automated translation** – used for the translation of text modules in simulation and Desktop Assistant projects
- **Rerecording** – used for the translation of text modules in simulation projects and to record the interface in the new target language

For further information, see the relevant sections.

Preparing for translation



The following steps are recommended as preparation for translation:

- Translation should be done after creating and editing the source content, to ensure that all of the texts that need to be translated can be edited fully.
- Duplicate a content object before translating it, to ensure that the original content is not overwritten.
- If you want to translate a project, first use the [Automated Translation](#)  function to translate the text modules.

10.4 Localizing Simulation Projects

The [Tools -> Localization](#) menu contains functions for executing an automated translation and version change for simulation projects.

10.4.1 Revise Input Values (Project Editor)


The [Revise Input Values...](#)  function allows the text box entries or choices made in the project to be revised prior to a project being automatically translated or rerecorded. The text stored in each [Input Text](#)  macro and the selected entries from list boxes are all listed in a dialog box and can be edited.

This function is useful if, because of the target language, entries need to be adapted or an existing piece of data cannot be deleted after the original recording without additional effort.

> Recommendation


For the rerecording, the project values can be revised directly via the parameter dialog box when starting rerecording.

10.4.2 Modify Project Language (Project Editor)

The [Modify Project Language...](#)  function allows you to switch a project to another project language. The project language determines in which language the text templates for the automatic generation of the bubble texts will be used.

10.4.3 Automated Translation (Project Editor)

In some cases, it is not necessary to record the whole project again if only the contents of the bubbles need to be translated into a different target language.

The command [Automated Translation...](#)  replaces the text modules inserted automatically into the bubbles of the interactions with text modules of a different language offered by Producer.

In the dialog that appears the desired target language can be chosen.

Selecting [OK](#) replaces all text modules with the text modules of the new target language.

The [Automated Translation](#) does not replace the contents of a bubble if the options [Interactive Translate manually](#) in the subcategory [Bubble](#) of the macro editor are activated. These options are activated automatically if either the text of bubble was changed manually or was altered by the function [Search & Replace Bubble Content](#). However, it also can be activated or deactivated manually at any time.

10.4.4 Automated Translation All (Explorer)

The [Automated Translation All...](#) allows you to translate one or more projects in a number of languages. The projects are duplicated for each language, to keep the original project. The text modules of the interaction bubbles are replaced with text modules for the selected languages.

Translate the projects as follows:

1. Select a project or group with projects in the [Explorer](#).
2. Select [Tools -> Localization -> Automated Translation All...](#) menu.
A dialog box opens.
3. Select the languages for translation.
4. Select [OK](#).

The projects are duplicated and translated.

The automated translation does not replace the contents of a bubble if the option [Translate manually](#) is activated the subcategory [Bubble](#) of the macro editor. This option is activated automatically if the bubble text was changed manually or was altered by the function [Search & Replace Bubble Content](#). The [Translate manually](#) option can also be activated or deactivated manually at any time.

10.5 Translating Using Translation Templates

The Producer provides the option of creating translation files, to enable you to translate the texts of your content objects. All translatable texts are exported in a suitable format for translation. After translation the texts can be imported to the content objects.

Translation file formats

Translation files simplify the translation process, as all texts can be accessed and edited directly. There are two translation file formats that can be used:

- **Microsoft Word**

Translation can take place in the Microsoft Word documents without any problems since the texts can be edited directly without a translation program.

The translation file contains the texts as well as the identifying descriptions of the content objects. The identifying descriptions are formatted in red and allocate a text to the corresponding content object. This should not be changed.

The available texts can be replaced by using the translated texts. Delete the original text and replace it with the required translation.

- **XLIFF 1.2**

XLIFF (XML Localization Interchange File Format) is an XML-based format developed for generating texts for translation from an application. This format is used especially for translation with the help of translation programs.

The translation file contains the texts as well as the identifying descriptions of the content objects. To translate texts using an XLIFF file, import the file to a suitable translation program.

Translatable content

The following content objects and properties can be exported for translation:

- **All content objects**
 - Title
 - Description
 - Short description
 - Keywords
- **Projects**
 - Texts of the project objects
- **Book pages**
 - Texts of the book page objects

10.5.1 Exporting Translation Files

Translation files can be exported from the *Explorer*, as well as for individual content in the project editor or book editor.

To export a translation file, proceed as follows:

1. Duplicate the source object.
2. Select *Tools -> Localization -> Export Translation File...*
The *Export Translation File* dialog box is opened.
3. Modify the settings in the dialog box. See the chapter *Settings for the Translation Export*.
4. Select *OK*.
A dialog box shows the export process.
5. Afterwards, a dialog box appears where you can open the exported files or the target folder.

The translation file is exported and uses the object or group as the file name. The texts in the translation file can now be translated into the required languages.

10.5.2 Settings for the Translation Export

For exporting translation files, the following settings are available in the [Export Translation File](#) dialog box:

- [Format:](#)

Specifies the format of the translation files:

- [XLIFF 1.2](#)
- [Microsoft Word](#)

- [Structure:](#)

Specifies the export starting point in the tree. The objects below this point are exported.

- [Subtree](#)
- [All \(including "Unsorted"\)](#)
- [Current object](#)
- [Export as One File:](#)

Combines the texts in one translation file, instead of exporting several translation files for each content object. You can use this setting to reduce the number of translation files.
- [Only Object Properties:](#)

Exports the name, description, and short description of the objects. No project or book page content will be exported.
- [Include Control Names:](#)

Exports the control names of the action macros. This allows you to translate the control names if no rerecording is used.
- [Include Generated Project Texts:](#)

Exports the generated project texts. This is useful for translators to see the context of the complete text.
- [Target Folder:](#)

Specifies the target folder for storing the translation files. Select [Browse](#) to choose a folder.
- [Export Objects with Status:](#)

Exports only objects with an assigned SAP Enable Now Manager status. This allows you to translate content in an authoring workflow.
- [Change Status of Exported Objects:](#)

Changes the status of exported objects to another status. Thus, you can mark the objects as exported and you exclude the objects for another translation export.

10.5.3 Importing Translation Files

Once translation is completed, you can import the translated texts to the designated object or structure.

Importing a translation file for one object

To import a translation file, proceed as follows:

1. Open the project explorer.

You also can open a specific project in the project editor or a book page in the book editor.

2. Select *Tools -> Localization -> Import Translation File...*
The *Import Translation File* dialog box is opened.
3. Choose the translation file:
 1. Select *Browse*.
The *Select File* dialog box is opened.
 2. Choose your translation file with the UID of the object.
 3. Select *Open*.
4. Select *Ok* to import the translations

The texts are imported and replace the original content of the object.

Importing translation files for multiple objects

To import multiple translation files, proceed as follows:

1. Open the project explorer.
2. Select *Tools -> Localization -> Import All Translations...*
The *Import Translation File* dialog box is opened.
3. Choose a folder with translations files:
 1. Select *Browse*.
The *Select File* dialog box is opened.
 2. Choose your folder with all translation files.
 3. Select *Open*.
4. Select *Ok* to import the translations.

The texts are imported and replace the original content of all objects.

10.5.4 Settings for the Translation Import

For exporting translation files, the following settings are available in the *Export Translation File* dialog box:

- *Translation File:*
Specifies a translation file for the import when importing one translation file. Select *Browse* to choose a file.
- *Target Folder:*
Specifies a folder with translation files when importing a number of translation files. Select *Browse* to choose a folder.
- *Duplicate Objects:*
Duplicates the objects for the target languages automatically before importing the translated texts. See also the chapter *Mass Translation of a Content Structure*.
- *Update Status of Imported Objects:*
Changes the status of imported objects to another SAP Enable Now Manager status. This lets you mark the objects as translated.
- *Target Language (Microsoft Word only):*
Specifies the target language for duplicated objects when importing translation files in Microsoft Word format. This is required as the translations files do not have an indicator of the translated language.

Enter the language code for your target language, for example, `de-DE`. See also the chapter *Content Languages Overview*.

10.5.5 Mass Translation of a Content Structure

For a large number of contents that have to be translated in different languages, you can export translation files without duplicating the source objects. The target objects will be duplicated for each language when importing the translations. The texts of duplicated objects will be updated with changed translations.

Exporting the translation files

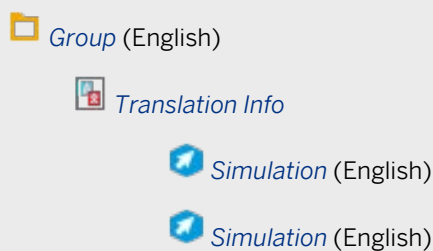
To export the translation files, proceed as follows:

1. Select a content structure in the tree.
2. Insert a *Text Unit* with the type *Translation Info* as first sub-object. The text unit is used to indicate the root object for duplicating the tree during import.
3. Select *Tools -> Localization -> Export Translation File...*
The *Export Translation File* dialog box is opened.
4. Modify the settings in the dialog box. See the chapter *Settings for the Translation Export*.
5. Select *OK*.
A dialog box shows the export process.
6. Afterwards, a dialog box appears, where you can open the exported translatable files or the destination folder.

The translation file is exported and uses the object or group as the file name. The texts in the translation file can now be translated into the required languages.

Example Structure

A source structure is as follows:



Importing the translation files

To import the translation files, proceed as follows:

1. Select the content structure for the exported translation files in the tree.
2. Select *Tools -> Localization -> Import All Translations...*
The *Import Translation File* dialog box is opened.
3. Choose the *Target Folder* with translations files.
4. Select the *Duplicate Objects* setting.
5. Select *Ok* to import the translations.

The target objects are duplicated and the translations are imported. The texts of available objects are updated.



Example Structure

A translated structure is duplicated as follows:



Group (English)



Translation Info



Simulation (English)



Simulation (English)



Group (German)



Translation Info



Simulation (German)



Simulation (German)

10.6 Machine Translation (Explorer)

You can translate the content structures by using the *Machine Translation* tool in Producer.

Translatable content

The following content objects and properties can be machine translated:

- **All content objects properties**
 - Title
 - Description
 - Short description
 - Keywords
- **Projects**
 - Texts of the project objects
 - Control names
- **Book pages**
 - Texts of the book page objects.

10.6.1 Prerequisites

To use *Machine Translation* functionality, you need an SAP Translation Hub license. SAP Translation Hub is a service that runs in the Neo environment and allows you to translate the texts by using a repository of SAP-approved translations and terminology as well as machine translation.

You can find information about the SAP Translation Hub in [SAP Help Portal](#) and about subscription model in [SAP Store](#).

For details about the license agreement see the [SAP Cloud Platform Agreement](#).

You will also need access data for the Document Translation Service. For details about the service see [SAP Help Portal](#).

You can find a [tutorial on getting started with Document Translation Service](#) on SAP Blogs and a [tutorial on how to create server instance for Document Translation](#) on SAP Tutorials.

i Note

See SAP Translation Hub documentation for the limitations on the translated [document size](#) and [supported languages](#).

The translation service is trained mainly on the SAP texts and terminology, therefore, we recommend to test the functionality on sample texts before productive usage.

10.6.2 Process

To use the *Machine Translation* function for your content:

1. Make sure to have a *Translation Information* object as the first object in the structure.
2. Select a group you want to translate in the *Explorer*.
3. Select *Tools -> Localization -> Machine Translation*.
4. A *Machine Translation: Authorization* dialog box opens. Here you need to provide the details to connect to the document translation service. You can save the password by selecting the relevant checkbox, and the data you have provided will be saved for the next times. Select *OK*.
5. Select the languages for translation. For each language that you choose, a duplicate structure will be created. If you have already translated a structure, then it will be updated.

Note: new objects are always added to the bottom of the translated structure! Make sure to check the translated structure and adjust the sequence of objects.

There are the following additional options:

- *Only Object Properties*
If you select this option, then only the properties of your objects will be translated. The content of book pages, texts and controls of projects will be taken over in the original language.
- *Include Control Names*
Select this option to machine translate the control names in your projects.
- *Include Generated Project Texts*
Select this option to include automatically generated texts in projects into the translation.

6. Select *OK*.

The content is duplicated and translated.

i Note

If you delete an object from the structure and repeat the machine translation, this object will not be deleted in the target language. You need to maintain it manually.

10.7 Dictionary Editor

You can customize predefined bubble text modules and the texts used in the trainer; the Producer allows you opportunity to edit these text files individually. That means that you can use terminology or sentences specific to your own texts, which conform to your company's corporate language, or you can set up an additional project language, which is not included as standard in the Producer.

The [Edit Dictionary](#) dialog box is available to you for editing the texts. That means that direct access to the text files is not necessary.

You can use the dialog box to edit the following texts:

- **Playback texts**

These are the texts for the user interface of the trainer bar, the book reader bar and the library as well as for the Desktop Assistant.

Resource: [Playback Dictionaries](#) 

- **Recording texts**

These are the content languages for the texts of the projects and documentation.

Resource: [Recording Dictionaries](#) 

Open dialog

You can open the [Edit Dictionary](#) dialog box using the resources in the [Explorer](#) and thereby access the required text files directly. To do this, select the corresponding dictionary and then click on the [Open Dictionary](#) button in the object editor.

Once the dialog box has been opened, the texts are automatically loaded from the relevant text file. By default, the dialog box is opened with the dictionary in the active Producer language.

10.7.1 Structure and Functions

The basic parts of the dictionary editor are:

- **Toolbar**

The toolbar includes the functions for editing the dictionary texts.

- **Text list**

The text list displays the dictionary texts with IDs, states and values.

The dictionary editor includes several functions for managing texts:

- [New:](#)

Creates a new dictionary entry.

- [Save:](#)

Saves the changes of an edited dictionary.

- [Import as Excel File:](#)

Imports an Excel file of the texts into the dictionary.

- [Export as Excel File:](#)

Exports the texts of a dictionary into an Excel file for external translation. All languages are exported.

- *Cut, Copy, Paste:*
With these functions, you can edit the texts of a dictionary.
- *Undo, Redo:*
With these functions, you can switch between editing states.
- *Search:*
With this function, you can search for an entry in the dictionary.
Selecting the button opens a dialog box where you can enter a search value and search criteria.
- *Filter:*
With the function, you can filter the entries of a dictionary.
Selecting the button opens a dialog box where you can enter filter values and criteria.
To display the complete list again, remove the entries in the filter dialog box.
- *New Language:*
Creates a new dictionary language.
- *Language List:*
With the language list, you can switch between the languages of a dictionary. The selected language is shown in the text list.

10.7.2 Setting up a Dictionary

To edit the texts, first create a new dictionary. This involves copying the standard dictionary, which you use as a template for editing the texts and IDs.

i Note

You cannot change the texts in the standard dictionaries of the workarea. Always set up a new dictionary.

1. Select the appropriate dictionary group in the *Explorer* resources.
2. Select *New Dictionary* in the object editor.
3. Enter a name in the dialog box. Select *OK*.
The *Standard* dictionary will now be copied.

10.7.3 Editing an Entry

To customize the texts, open your dictionary in the *Edit Dictionary* dialog box. You can edit the text in the dialog as follows:

i Note

The text IDs cannot be changed as they are used to assign the texts in the content or user interface.

Caution

Do not change any variables or scripts contained in texts. These are used for allocating or formatting applicable content. Changes can cause implementation errors.

Placeholders for assigning object names and object images can be found in square brackets [] in the text modules.

The variables are indicated by an @ sign or in curly brackets {...}. HTML / CSS scripts have diamond brackets <...>.

1. Double-click on the line of the text you want to edit.
2. The editing dialog box opens and contains the following areas:
 - *Language of translation template:*
The upper field displays the original text.
You can view this text in another language by clicking on the *Other...* button.
 - *Target language (Value):*
Enter your text in the *Target language* field.
 - *State:*
Specify the *State* of your text. This allows you to manage texts for editing and translation.
The following statuses are possible: *new*, *needs-translation*, *translated*, *needs-review*, *needs-fix*, *final*
The standard texts have the status *final*.
 - *Comment:*
Enter a comment needed for editing a particular text.
3. Select *Close*.

The text is replaced in the dictionary.

10.7.4 Creating a New Entry

In addition to using existing texts, you can also add further IDs for new texts, thus enlarging the recording dictionary. These entries allow you to insert the texts using placeholders in your content. For further information, refer to the chapter *Inserting a placeholder* in the Producer manual.

Set up new IDs as follows:

1. Select *New* in the toolbar.
The *Edit* dialog box is opened.
2. Enter a name in the *ID* field. You can only enter an ID that does not already exist.
3. Use the setting *Add to all languages* to specify whether you want to add the new entry only in the chosen content language or in all content languages to the dictionaries.
To ensure consistency between content languages, the setting should be retained.
4. Select *OK*.

Once the dialog box has been closed, the editing dialog box for the text opens. Now enter your text. Read the section on editing texts.

For the IDs, you can then enter the texts in the other content languages you are using. To do so, select the language you want from the drop-down list.

10.7.5 Creating a New Language

If you would like to add an additional language to those provided by the Producer, you can do so using the [New Language](#) function.

Creating a new language

1. Select [New Language](#) in the toolbar.
The [New Language](#) dialog box is opened.
2. Enter the following values:
 - [Language:](#)
Select the new language you would like to set up from the list. In this list you will find an overview of different languages with their associated flags.
 - [Copy from:](#)
Select which project language you want to use as a template for your new language. This is required to assign the texts to the corresponding IDs.
3. Select [OK](#).

A text file in the [Dictionary](#) for the new language is created.

Translating a new language


You can now amend the texts or export them as an Excel file to have them translated into the corresponding language by a translator. Once the Excel file has been translated, you can reimport it. The [Export Excel](#) and [Import Excel](#) functions in the toolbar to allow you to do this.

10.7.6 Activating a Dictionary

The dictionary resources for simulation and books can be activated as follows:

Activating the Playback Dictionary

The created [Playback Dictionary](#) can be activated using the [Playback Settings](#) in the Producer.

1. Open [Tools -> Settings...](#)  menu.
2. Select the section [Playback Settings -> trainer - Global -> Visual properties](#).
3. Select your created dictionary in the [Playback Dictionary](#) setting.
4. Select [OK](#).

The [trainer - Global](#) section activates the dictionary for the whole trainer. It is also possible to select an individual dictionary for the book reader, library or a simulation mode on the relevant settings page.

Activating the Recording Dictionary

The created [Recording Dictionary](#) can be activated using the [Playback Settings](#) in the Producer.

1. Select the dictionary resource in the resource tree of the [Explorer](#).

2. Select [Set as Default](#) in the object editor.
The resource name is now displayed in bold.

10.8 Spell Checker

The spell checker enables automatic correction of the texts contained in the HTML editor. The text is checked according to which project language is set. This requires a spell checker, accessed by the Producer, to be installed in Microsoft Word in the relevant language.

In the same way as is familiar from Microsoft Word, a misspelled word is underlined with a red wavy line. You can now either correct the spelling or else select the correct spelling by right clicking to call up the context menu.

Activating spell checker

There is an option available to you in the [Settings](#)  dialog box for activating the spell checker. This option is located in the [Producer -> General](#) category.

The [Default Language for Spell-Check](#) option can be used to define a language to be used if there is no language package available in Microsoft Office for a language being used in a project.

11 Publication

You can publish a workarea to give your learners the files required for playing back the course content. Besides the content to be published, a workarea contains files, which are not required for playing back after publication and which unnecessarily increase the size of the published workarea. For this reason, a copy containing only the files required for playing is created in a target directory that you need to specify whenever you publish a workarea.

Publishing can be in different formats and be stored directly on a server or a file share. In addition to this, you can specify rules for publication to avoid the need to reenter details when republishing.

11.1 Training Available



Publishing content is available as interactive training in the SAP Enable Now Info Center.



[Enable Now](#)







Publishing SCORM/AICC is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

11.2 Publication Types

A variety of publication types are available for publishing workarea or individual objects. These are:

Type	Description
 Standard	This is the standard format for publishing workarea. This creates HTML and JavaScript files in a folder structure, which can be played back using the trainer. Incremental publishing is available for the Standard format; this enables adding, removing and updating of objects in the published content.
 EXE (Executable)	The formats are for executable files and support direct execution of content. The whole workarea is stored in a file and this facilitates an exchange of files. You can define a filename for this format.


Type	Description
 SLC (SAP Learning Content)	
 Documents	The type lets you export all the documents available in a workarea to a folder and thus deposit directly on a file system. You can publish the documents into a folder structure or all files in one folder with the names of the content objects as file names.
 SCORM	See the chapter <i>Publishing SCORM/AICC</i> .
 SAP Learning Solution (SCORM)	See the chapter <i>Publishing SCORM/AICC</i> .
 SuccessFactors Learning (SCORM)	See the chapter <i>Publishing SCORM/AICC</i> .
 AICC	See the chapter <i>Publishing SCORM/AICC</i> .

i Note

For the playback of published content in SLC format an installation of the SLC Player is required. The SLC Player is the playback component for SLC files.

11.3 Publishing Individual Objects


It is not always necessary to publish the entire workarea. You can also output individual objects. To publish an object, proceed as follows:

1. Select an object in the tree structure.
2. Select *Publish Selected Object...*  in the object editor.

3. A dialog box now opens where you can specify the *Type* and the *Target Folder/Target File*.

More information on the settings is available in the chapter *Publishing Settings*.

Other functions in the dialog box:

- *Show Objects for Publishing:*
Shows all dependent content and resource objects. After you click the button, all objects are listed in the box above.
- *Save as Publishing Rule:*
Select this option to save the defined settings for further publishing. The settings are stored as a *Publishing Rule*  resource.

4. Select *OK*.

After publishing is completed, a dialog box opens, where you can *Start* the publication or *Open* the target folder. Select *Close* to finish publishing.

11.4 Preparations for the Publishing

The following chapters give you an overview about preparations for the publishing.

Note

For learning content to be played in the browser, the PC concerned must be capable of certain settings. For information on these, read *Learner Settings* in this manual.

11.4.1 Tree Structure for Publishing

Before publishing a workarea, the content's tree structure must be defined in the same way as it should be used for the publication. Besides the ability to move and categorize objects within the structure, you can also use the Filter and the function *Hide* to more precisely define the content to be published. This will allow you to hide any content that should not be published.

To read more on how to use the *Filter*, refer to the section on *Filters and Search in the Workarea*.

Note

Make sure that the filtered and hidden objects will not be needed for displaying your learning content. For example, linked projects or a group for managing image objects should be made visible before publishing your content.

11.4.2 Using Start Links

The *Start Link* function provides you with an easy way of generating a link to learning content or the library. The *Start Link* can then be attached to a webpage, for example, which can be used to launch learning content. This is necessary if a workarea was published on a web server or file share.

The *Start Link* can be defined for all objects available in the *Explorer*. If you link a group, the library is opened when

the group is launched to display the associated content. An object's *Start Link* is displayed in the object editor's *Start Link* parameter when an object is selected.

i Note

Use the *Desktop Assistant Prefix* setting in the publishing settings to publish Desktop Assistant content to a web server. This option assigns the workarea storage location to the content so that the Desktop Assistant can find and launch the content when called.

General settings

When selecting the workarea in the *Explorer* tree structure, a general rule can be defined in the *Start Links* subcategory which is then used for creating all start links.

- *Prefix:*
The prefix defines a general URL or path preceding the *Start Link*. This can be the link to a web page, for example.
- *Use Prefix:*
Activating this option uses the defined prefix to generate the start link.
- *Use Dialog Box:*
With this option activated, a dialog box for defining the link is opened when you select *Copy Start Link* function in an object's context menu. If the option is deactivated, the link is copied directly and generated using the general criteria previously defined.


Selecting an object's start link

To copy the *Start Link* for an object, right click in the *Explorer* tree structure to open the context menu for this object. Now select the *Copy Start Link...* function.

- If prior to this the *Use Dialog Box* option was deactivated, the *Start Link* will be copied directly.
- If prior to this the *Use Dialog Box* option was activated, a dialog box will open in which you can define the prefix. The link is then copied by clicking on *Copy*.

The copy of the *Start Link* can now be inserted in the desired file and made available to users.


11.5 Publishing Rules

Publishing rules make it easier to publish a workaround multiple times because you only need to make entries once. The rules can be created and edited in the *Edit Publishing Rules*  dialog box.

For publishing SCORM or AICC see also the chapter *Publishing SCORM/AICC*.

11.5.1 Creating Publishing Rules


To create publishing rules, proceed as follows:







1. Open the *Edit Publishing Rules* dialog box by choosing *Workarea -> Publish -> Edit Publishing Rules...*  in the menu.
The dialog box lists all the existing publishing rules of the workarea.
2. To create a publication rule, use one of the following buttons:
 - *Add:*
Creates a new publishing rule.
A new publishing rule has a standard name in the *Name* field. After you click *OK*, the name is changed for the resource.
 - *Duplicate:*
Creates a publishing rule using an existing resource.
3. When selecting a publishing rule from the list, you see the parameters on the right-hand side of the dialog box. Now you can edit the publishing parameters explained in the chapter *Publishing Settings*.
 - *Name:*
Defines the name of the publishing rule. The name is used as the display name of the resource.
 - *Generate Rule Name:*
Generates a name. The name includes the defined root object and target folder/target file.
4. After you have finished your modifications, click one of the following buttons:
 - *Publish:*
Saves the created publishing rule and executes publishing.
 - *Close:*
Saves the created publishing rule and closes the dialog box.

The publishing rules created can be executed by selecting the rule set name in the *Workarea -> Publish* menu. Alternatively select the resource and click on *Publish*  in the object editor.

11.5.2 Publishing Settings

The following settings are available for publishing a workarea or specific content:

- *Type:*
Specifies the publication format for the workarea.
See the chapter *Publication Types*.
- *Start from:*
Specifies the starting point in the content tree structure from which you want to publish content. This enables you to publish a specific group or the whole content.
Use the *Edit Link...*  option to change the root object. A dialog box in which you can specify an object in the tree structure opens. Confirm this by choosing *OK*.
- *Use Filter:*
You can select an existing filter to be applied to the publication.
See the chapter *Filters in the Workarea*.
- *Include Dependent Objects:*
Specifies, that all dependent content and resource objects are published.



- **Target Folder / Target File:**
Specifies the storage location in which you want the workarea to be published or the folder and file name for an EXE / SLC file. Use the [Search for folder](#)  button to select a folder as the storage location.
- **Clean Up Target Folder:**
If this setting is activated, the target folder is always cleaned up before publishing. This setting is only available for the [Standard](#)  type.
- **Desktop Assistant Prefix:**
This option lets you define the location of the workarea for the Desktop Assistant content. The prefix is necessary for playback from a web server or a file share.
See the chapter *Publishing Desktop Assistant Content*.
- **HTTP Port:**
You can specify an HTTP port for the internal playback server. Do not enter a value if you want to use automatic port numbers. This setting is only available for the [Executable](#)  and [SLC](#)  types.
- **Use Microsoft Internet Explorer:**
You can choose between Microsoft Internet Explorer and your system's default browser for playback of content. This setting is only available for the [Executable](#)  and [SLC](#)  types.

i Note

The settings [Include Dependent Objects](#) and [Clean Up Target Folder](#) are mandatory for creating a publishing rule.

Settings and Styles

In the [Settings and Styles](#) subcategory, you can specify resources for the content playback:

- **Use Workarea Configuration:**
This option lets you see existing configuration of the current workarea. Select a [Configurations](#)  resource.
 - **Configurations:**
Select a [Configurations](#)  resource or multiple resources from your workarea for your publication.
Select [Add](#) to open the selection dialog box. Double-click a resource to specify the default configuration.
The default configuration is used during playback. Another resource has to be selected for the playback with the URL parameter `?style=`.
- **Playback Settings:**
Specifies the playback settings for playing back simulations and books or book pages. If you use different settings, you can activate the required resource.
- **Desktop Assistant: Playback Settings:**
Specifies the playback settings for playing back Desktop Assistant content. If you use different settings, you can activate the required resource.
- **Text Styles:**
Specifies the text styles of the created content. If you use different styles, you can activate the required resource.
- **Text Styles for Web Assistant:**
Specifies the text styles for playback of Web Assistant.

Project Modes

In the [Project Modes](#) subcategory, you can specify settings for the project modes:

- *Filter Project Modes:*
Lets you specify the project modes required for your publication.
- *Include Mode:*
For each project mode, a setting is displayed. Select the modes for publishing.

11.5.3 Publishing Desktop Assistant Content

The ability to launch Desktop Assistant content from a web server or file-share requires you to specify the location where the workarea is held when publishing. The *Desktop Assistant Prefix* text field is available to you when publishing content. Enter the URL and workarea name in this field.


Web server example: `http://yourwebserver/[...]/Workarea`

File-Share example: `...\Workarea\index.html`

i Note

Note that following publication the workarea storage location is to be retained with the Desktop Assistant content as otherwise the defined prefix will no longer match the storage location. If you would like to file a workarea in a different location, then it needs to be republished with a modified prefix.

11.5.4 Publishing Documents




Publishing documents allows you to store all the documentation files from your workarea in a folder. To do this, select *Documents*  as the publishing type in the publishing rules.

Besides the general *Publishing Settings*, there are further settings available in the *Include Formats* section:

- **Document format:**
Activate the required document format to publish all available documents with the format:
 - *Word / PowerPoint Documents*
 - *HTML Documents*
 - *PDF Documents*
- *External Documents:*
In general, only generated documents are published. Activate the setting if you also want to publish imported documents.
- *Flat Structure:*
Specifies that all documents are stored in the main folder. A content object name and the content type are generated for each document. The document name starts with the content name. For example: *projectname - documenttype.docx*
HTML documents and master documents cannot be published in a flat structure.
 - *Sort by Type:*
Specifies that the generated document name starts with the document type when a flat structure is published. For example: *documenttype - projectname.docx*

11.5.5 Multifile for Optimized Playback

A multifile can be created when publishing content. The multifile collects all relevant playback files from the published content and resources, and stored in the publication. This allows the content to be started faster and is recommended when storing content on a Web server or a file share.

The generated multifile depends on the content you want to publish and can be used for the publishing types *Standard* , *Executable*  and *SLC* . Select the required multifile setting:

- *Pack Structure:*
Includes the workarea structure information in the multifile.
- *Pack Resources:*
Includes the resource information in the multifile.
- *Pack Projects:*
Includes the project information in the multifile.
- *Pack Book Pages:*
Includes the book page information in the multifile.

The required multifile information depends on your content. In general, you can use all the settings. The following overview shows you different use cases for activating or deactivating a setting:

i Note

Desktop Assistant projects

In some cases, a multifile for a large workarea with Desktop Assistant projects cannot be loaded. Deactivate the *Pack Projects* setting, to not generate the multifile.

Setting	Status	Content
<i>Pack Projects</i>	Activate	<ul style="list-style-type: none">• Simulation projects are published.• Desktop Assistant projects are published.
<i>Pack Projects</i>	Deactivate	<ul style="list-style-type: none">• Simulation projects are not published.• Projects are started from another workarea.
<i>Pack Book Pages</i>	Activate	<ul style="list-style-type: none">• Book pages are published.
<i>Pack Book Pages</i>	Deactivate	<ul style="list-style-type: none">• Book pages are not published.
<i>Pack Structure</i>	Activate	<ul style="list-style-type: none">• A complex structure is published.
<i>Pack Structure</i>	Deactivate	<ul style="list-style-type: none">• Only one object or a small number of objects are published.
<i>Pack Resources</i>	Activate	<ul style="list-style-type: none">• A large number of resources are used for the content.
<i>Pack Resources</i>	Deactivate	<ul style="list-style-type: none">• Fewer resources are used for the content.




11.5.6 Publishing Rules Resource



Created publication rules are stored as resources in the resource tree. This allows you to create general rules for a content project and use the resources in an authoring environment. You can also export the resources as an archive, which can be imported into another workarea.

Functions in the object editor

The following functions are available in the object editor for a selected resource:

- *Edit Publishing Rule*  :
Opens the *Edit Publishing Rules* dialog to change the rule settings.
- *Publish*  :
Executes the publishing with the defined rule settings.
- *Open Target Folder*  :
Opens the folder with the published content.

11.5.7 Publishing by Using Command Line

You can use the command line to publish your content directly by using predefined publishing rules. This allows you to publish content in an automated process.

Prerequisite

Create publishing rules to specify the content structure, the publishing format and the publishing location. For further information, see chapter *Publishing Rules*.

For the publishing you can use a virtual machine with a running Producer. In the Task Scheduler of Microsoft Windows, you can specify how to execute the publishing.

i Note

Make sure, to keep the session open during publishing.

Command

The command for the command line is as follows:

Syntax

```
producer.exe -wa "<wa_path>" -deploy:<deploy_id_list> -migrate:enforce
```



Example

```
producer.exe -wa "C:\Producer Workarea\Workarea Name" -
deploy:5428446A6D128082,5B4BEA8BF1A43EBA12 -migrate:enforce
```

- **wa**
Specifies the folder of your local workarea with the content and publishing rules for your publishing.
- **deploy**
Specifies the ID of the publishing rule. You are able to define a number of publishing rules separated by a comma or a semicolon.
The ID can be read out from the object or the folder of the publishing rule:
 - **Object**
Select menu [View -> Show UUIDs](#) to display the UUID next to the name of the publishing rule resource.
 - **Folder**
The workarea folder has the UUID as name. Select a publishing rule in the resource tree, open the context menu and click on [Open Folder](#).
- **migrate:enforce (optional)**
Specifies, that a workarea of an outdated version will be migrated automatically. This is required, if the workarea was used in an older Producer version.

i Note

When using a workarea with a Manager connection, the write permissions of the resources are required for the migration. For further information, see chapter Manager Workarea.

Usage

- If no Producer is running, the Producer will be opened and closed automatically.
- If Producer is running, the workarea cannot be changed by the command. Open the workarea of your command.
If Producer is closed, the workarea is selected automatically.

11.6 Publishing SCORM/AICC

Producer supports the publishing of workareas to [SCORM](#) and [AICC](#) for the import into a corresponding Learning Management System (LMS). To find out which standard your LMS supports and which conditions must be met, ask the person in your IT department who is responsible for administering your system.

SCORM Publishing

To import learning contents into LMS with SCORM, a compliant IMS manifest can be produced or exported from Producer. In addition to the SCORM file, a ZIP archive of the contents and the corresponding resources for direct import into the LMS is created.

The following formats are supported:

- [SCORM 1.2](#)
- [SCORM 2004 3rd Edition](#)

- [SCORM 2004 4rd Edition](#)
- [SAVE 1.0 \(SCORM 1.2\)](#)

AICC Publishing

To import learning contents into LMS with AICC, the files [lms.au](#), [lms.crs](#), [lms.cst](#) and [lms.des](#) are all stored in the parent directory of the workarea. Under certain circumstances, they need to be adapted to the target system.

The Producer supports the AICC HACP format - the format AICC PENS is not supported.

Publishing process

The following process is recommended for the publishing of SCORM or AICC:

1. Create and structure the content.
2. Adapt settings in the central configuration dialog.
3. Adapt the settings in the publishing rule.
4. Publish the workarea.

After the publishing, the ZIP file or the workarea folder with the included format-specific files can be imported into LMS.

Note


Note that Desktop Assistant content cannot be used in LMS.

11.6.1 Preparation

To make the export possible, some preparations have to be made.

Content Structure


To export a SCORM file, the output structure of the contents needs to be defined in exactly the way it is supposed to be displayed in LMS later on. It is possible to export multiple groups and projects, books with book pages and projects, as well as single projects.

The workarea content exports depend on the group selection. If you want to export all the content in a workarea, select the [Content](#)  group and then start the export. If you only want to export a specific group, only select this group. Furthermore, the structure can be influenced by filter or with the [Hide](#) option to filter or hide content objects that are not wanted.


Note

Note that correct tracking is only possible, if unused contents and modes are set to hidden.

Recommendations

Make sure that a text for the [Task Description](#) is entered for the Test mode. It can be edited in the macro [Simulation Start](#)  of the project.

11.6.2 Central Configuration

The settings can be found in the *Playback Settings* of the *Settings* dialog box. Open the dialog box about the *Tools -> Settings...*  menu. The settings can be set globally for the trainer and individually for each simulation mode.

The following setting areas are relevant for the export:

- *Tracking (General)*
- *Tracking (SCORM)*
- *Tracking (AICC)*
- *New window properties*

11.6.2.1 Tracking (General)

The *Tracking (General)* area contains general settings for tracking. The activation of the SCORM or AICC backend for the communication interface can be done in the option *Tracking backend*. The following entries define the tracking backend and have to be set globally in the *trainer* settings:

- *SCORM (automatic)*
- *SCORM 1.2*
- *SCORM 2004*
- *AICC*

11.6.2.2 Tracking (SCORM)

The *Tracking (SCORM)* area contains detailed settings for SCORM tracking:

- *Progress and result tracking:*
Activates tracking of the status of the learning progress to calculate the results. Specify whether you want to keep progress or calculated results only or both values.
 - *none*
 - *only progress*
 - *progress as result*
 - *result and progress*
 - *result and progress - incomplete when failed*
- *Send success status:*
Specifies when the information about a successful performed action is sent to LMS.
 - *never*
 - *based on score*
 - *when completed*

- *Resume simulation:*
Defines whether a simulation can be resumed after closing. Optionally a warning can be displayed when the user tries to resume a completed simulation since this might reset the result.
 - *Yes*
 - *No*
 - *Show warning, if completed*

i Note

The option *Show warning, if completed* is only supported for SCORM 1.2. When using SCORM 2004 no message is displayed.

- *Result type:*
Specifies the form in which the result is transferred to LMS. Decide whether your LMS expects point-based or percentage-based results.
 - *Points*
 - *Percentage*
- *Score precision:*
Specifies the decimal places for the result. The standard value is two decimal places (for example, 0.95).
- *Commit data only once:*
Transfers the results to LMS only when a simulation is exited. Use this setting to reduce the network traffic.
- *Track objective data:*
Generates SCORM objectives for the subunits of the library or a book.
- *Allow restart of simulations:*
Defines whether a restart button is shown on the stop page of a simulation.
The option should be deactivated if LMS does not support internal content playback.

i Note

Note that the display of objective data differs from the used LMS and cannot be shown in every system.

11.6.2.3 Tracking (AICC)

The *Tracking (AICC)* area contains detailed settings for AICC tracking:

- *Progress and result tracking:*
Activates tracking of the status of the learning progress to calculate the results. Specify whether you want to keep progress or calculated results only or both values.
 - *none*
 - *only progress*
 - *progress as result*
 - *result and progress*
- *Send success status:*
Specifies when the information about a successful performed action is sent to the LMS.
 - *never*

- *based on score*
 - *when completed*
- *Resume simulation:*
Defines whether a simulation can be resumed after closing. Optionally a warning can be displayed when the user tries to resume a completed simulation since this might reset the result.
 - *Yes*
 - *No*
 - *Show warning, if completed*
- *Cross-domain support:*
Defines the support for cross-domains for AICC tracking.
 - *disabled*
 - *Flash*
- *Allow restart of simulation:*
Defines whether a restart button is shown on the stop page of a simulation.
The option should be deactivated if LMS does not support internal content playback.

11.6.2.4 New Window Properties

The option *Fullscreen* in the *New Window Properties* must be always deactivated and disabled to prevent the preview of a separate window. The browser window is regulated by the corresponding LMS. This selection ensures smooth communication between the content and LMS.

The deactivation of the fullscreen should be done for the project modes and the book reader individually about the appropriate setting pages.

i Note

Note that the *Fullscreen* parameter should always be deactivated for the SCORM export to enable trouble-free communication with LMS.

11.6.2.5 Tracking Settings Recommendations (SCORM)

For tracking of learning content in LMS, the SCORM specification uses a learning object as a sharable content object (SCO). Only the SCO communicates with LMS, which means it sends status and score information and requests data.

The following learning contents are distinguished for the SCO of a Producer workarea:

- project mode
- book with book pages
- book with book pages including links to the project modes

To define the tracking of the content's completion there are different settings necessary for the learning contents:

i Note

The following settings are recommendations for the use of learning contents in a LMS. Depending on the LMS in use, other setting combinations may achieve the expected tracking result.

- **Global settings - trainer**

The following settings should be defined in the global settings of the trainer:

- [Tracking backend](#)
- [Commit data only once](#)

- **Completion of content**

A book is completed if all contained book pages and project modes have been completed.

To exclude a project mode from tracking, set the option [Progress and result tracking](#) to *none* in the specific mode settings. The setting also allows you to define whether the result or completion should be tracked.

- **Start linked mode in new window**

The modes of a project can be linked on a book page with the book page object [Mode Link](#). For the object, the option [Open Link in new Window](#) needs to be activated. During playback, the mode starts in a new window and not in the window of the book page.



- **Tracking of objective datas**

With the in the central configuration dialog activated option [Track objective datas](#) detailed tracking information will be send to the LMS additionally to the SCO tracking data. The setting can be used for groups and books with included contents.

i Note

Note that the objective data cannot be displayed in every LMS.

11.6.3 Publishing Rules for SCORM/AICC

After the preparation of the content and the adaptation of the settings in the central configuration dialog, the workarea and the LMS files can be published - see the chapters [Publishing Rules](#). For [SCORM](#)  and [AICC](#)  there are further settings in the publishing rules.

11.6.3.1 SCORM Settings

The subcategory [SCORM](#) includes the following settings for the [SCORM](#)  publishing:

Version

Various format versions are available for the output of a SCORM file; you can select them from the [Version](#) dropdown menu for the export process. When you select a version, the IMS manifest of the corresponding format is generated to reflect the requirements. The versions are:

- [SCORM 1.2](#)
- [SCORM 2004 3rd Edition](#)
- [SCORM 2004 4rd Edition](#)
- [SAVE 1.0 \(SCORM 1.2\)](#)

SAVE 1.0 settings

Activate the version [SAVE 1.0 \(SCORM 1.2\)](#) to produce meta information in the IMS Manifest in accordance with the SAVE 1.0 specifications. See also the chapter *Using SAVE 1.0*.

Further options for SAVE 1.0 are:

- [Copyright:](#)
Indicates in the IMS Manifest's meta information whether the learning content is covered by copyright.
- [Version:](#)
Indicates in the IMS Manifest's meta information the version of the issued content.

XML schema files

In some cases, LMS may need XML schema definitions, to be integrated into the SCORM packet. These contain SCORM-specific structure definitions for XML documents and require correctly formatted files to work properly.

- [Include XML Schemas:](#)
All XML schema files are added to the SCORM packet.
- [Insert XML Schema Locations:](#)
Attributes are integrated into the IMS Manifest file as a reference to the XML schema files.

Start Parameters

In the generated manifest file, each simulation is given its own URL from which it can then be accessed.

In LMS, a simulation is sometimes opened using the query string of the URL. Here, corresponding attributes are necessary. The selected [Start parameters](#) can be used to set which attributes are to be considered when entering the starting URL. These are entered in the IMS manifest according to the selection.

- [Only "href" attribute:](#)
Standard setting for SCORM export.

One of the following settings should be used if a simulation cannot be accessed with the standard setting.

- ["href" and "parameters" attributes:](#)
A parameter attribute is also inserted which contains the query string. This starts with a question mark "?".
- ["href" and "parameters" without "?":](#)
A parameter attribute is also inserted which contains the query string.

Book Display

The option allows you to enable the publishing of books and book pages.

The available options define the structure for representation in LMS. This gives you the ability to reduce complex books to a specific structural level, or display the whole book as an object. This setting has no influence on the book structure in the book reader.

- [Ignore books:](#)
This selection does not export the books available in the workarea into the SCORM manifest.
- [Show only books:](#)
This section displays the books as book objects in LMS.
- [Show books and direct sub objects:](#)
This option displays the books in LMS on two levels, namely a book and its subordinate objects on the first level.

- *Show books and all sub objects:*

This selection displays the complete structure of the books with all subordinate objects.

Further settings

- *Include Documentation:*

This option allows you to export the generated documentation. Imported documents are always exported. Do not deactivate the setting, if a documentation is linked in your content. The link will be broken.


Note

Note that documentation and imported files cannot be tracked in LMS.

- *Persistent Organization IDs:*

This option allows you to create persistent organization IDs to create different versions of the same course in the LMS during publishing. Deactivate the option to create globally unique IDs.

11.6.3.2 SCORM for SAP Learning Solution

The settings in the subcategory *SAP Learning Solution* of the publishing rule for *SAP Learning Solution*  are used for the connection and login with the SAP Learning Solution system.

General Settings

- *Learning Net Type:*

Defines an ID for the publication. The ID is used in the SAP Learning Solution backend for the identification of the learning net and different versions.

- *Generate:*

The button allows you to generate a new ID for the learning net type. The ID has to be added after the publishing in the SAP Learning Solution backend.

- *Repository URL:*

Defines the URL of the master repository of the SAP Learning Solution system.

- *Content Path:*

Defines the path for the content upload, relative to the repository URL. If it does not exist, the path will be created automatically.

Without Load Balancing

With deactivated parameter *Load Balancing* the following parameter for connecting the SAP Learning Solution are available:

- *Application Server*
- *System Number*
- *Router*

With Load Balancing

With activated parameter *Load Balancing* the following parameter for connecting the SAP Learning Solution are available:

- *Message Server*
- *System ID*
- *Group*
- *Router*

Secure Network Communication (SNC)

For the use of the Secure Network Communication there are the following settings:


- *Secure Network Communication:*
Defines, if the Secure Network Communication is used.
- *No Single Sign-On:*
Defines, that the Secure Network Communication is used without Single Sign-On. It is required to specify a user and a password during the publishing.
- *SNC Name:*
Defines the identification prefix for the backend system.
- *Quality of Protection (QoP):* Defines the protection level for the Secure Network Communication.
 - *Authentication only*
 - *Integrity protection*
 - *Privacy protection*
 - *Default of backend system*
 - *Maximum security settings available*

Further information about the Secure Network Communication is available in the [SAP Help Portal](#).

11.6.3.3 SCORM for SAP SuccessFactors Learning

i Note

For publishing content to SAP SuccessFactors Learning the version Q3 2015 or higher is required.

The settings in the subcategory *SuccessFactors Learning* of the publishing rule for *SuccessFactors Learning*  are used for the connection and login with the SAP SuccessFactors LMS.

- *LMS URL:*
Defines the URL of the SAP SuccessFactors Learning Management System.
- *Launch URL Prefix:*
Defines the launch URL prefix for the course content.
- *Company ID:*
Defines the company ID for the OAuth authorization to the SAP SuccessFactors Learning Management System.

11.6.3.4 AICC Settings

The subcategory *AICC* includes the following settings for the *AICC*  publishing:

- *File Prefix:*
Defines the prefix of the server for the AICC package that is inserted into the *lms.au* file.
- *AICC Creator:*
Defines the creator of the AICC package.

The information about whether a file name prefix or an AICC Creator needs to be specified should be requested from the responsible system administrator of the target LMS.

11.6.4 Using SAVE 1.0

SAVE 1.0 (**SCORM**-Anwendung in der Versicherungswirtschaft - Using SCORM in the Insurance Industry) is a recommendation for defining universal meta information and variables in the IMS Manifest. These specifications are an extension of the SCORM 1.2 standard.

i Note

Note that SAVE 1.0 can only be used for the SCORM 1.2 standard and not for SCORM 2004.

The purpose of meta information defined using SAVE 1.0 is to define learning content issued in a SCORM package in greater detail. The following parameters can be defined in the Producer:

Meta information	Description
<code>title</code>	Object name.
<code>description</code>	Object description - also used for associated modes.
<code>keyword</code>	Defined object search words - these are also used for associated modes.
<code>version</code>	Version of the resources issued - the value can be amended manually.
<code>copyright</code>	Definition of a copyright for the issued content. The required information in the IMS Manifest is <i>Yes</i> or <i>No</i> .

The meta information `title`, `description`, `keyword` for an object can be defined in *Explorer*; the meta information `version` and `copyright` are available as options in the publishing rules for SCORM.

i Note

When using the SAVE 1.0 standard you need to make sure that this is supported by the LMS you are using.

11.7 Generating a Video



Video is an additional format for simulation playback in demo mode. This allows you to use the simulation in a portable format and to publish it on media platforms.

Videos can be created for simulation projects with or without audio in the AVI and MP4 formats. The video includes all playback resources.

A video does not display the trainer bar because the video can be controlled by using the player's playback window.


Video types

For videos, there are the following types:

 Simulation Video	The simulation video shows your actions as simulated mouse with highlights and explanations.
 Screencast Video	<p>The screencast video shows all your actions as realistic videos instead of simulating the actions. No highlights and bubbles are displayed. When you have recorded a simulation using the quick recording and with the Record Screencast Video option, you can generate a screencast video.</p> <p>For further information, see the chapter <i>Starting the Recording</i>.</p>

Generating a video

To generate a video, proceed as follows:

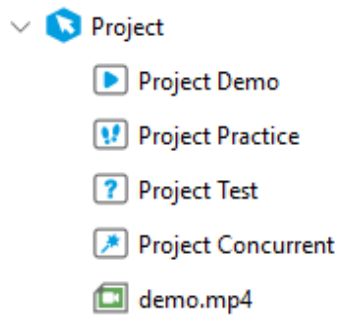
1. Select a simulation project in the tree of the [Explorer](#).
OR
Open a simulation project in the project editor.
2. Select [Tools -> Generate Video...](#) 
The [Generate Video](#) dialog box opens.
3. Select a video type.
The buttons are only available if a screencast has been recorded.
 - [Simulation Video](#)
 - [Screencast Video](#)
4. Change the settings in the dialog box as required.
See also the chapter *Generate Video Dialog Box*.

5. Select [Generate Video](#) to generate the video.

Video generation starts and a progress bar displays the status.

6. Afterwards, a dialog box is displayed. The dialog box allows you to play back the video or to open the folder.

The video is stored in the project structure as [demo.avi/mp4](#) or [screencast.avi/mp4](#). You can open the project folder by using the [Open Folder](#)  button in the object editor.

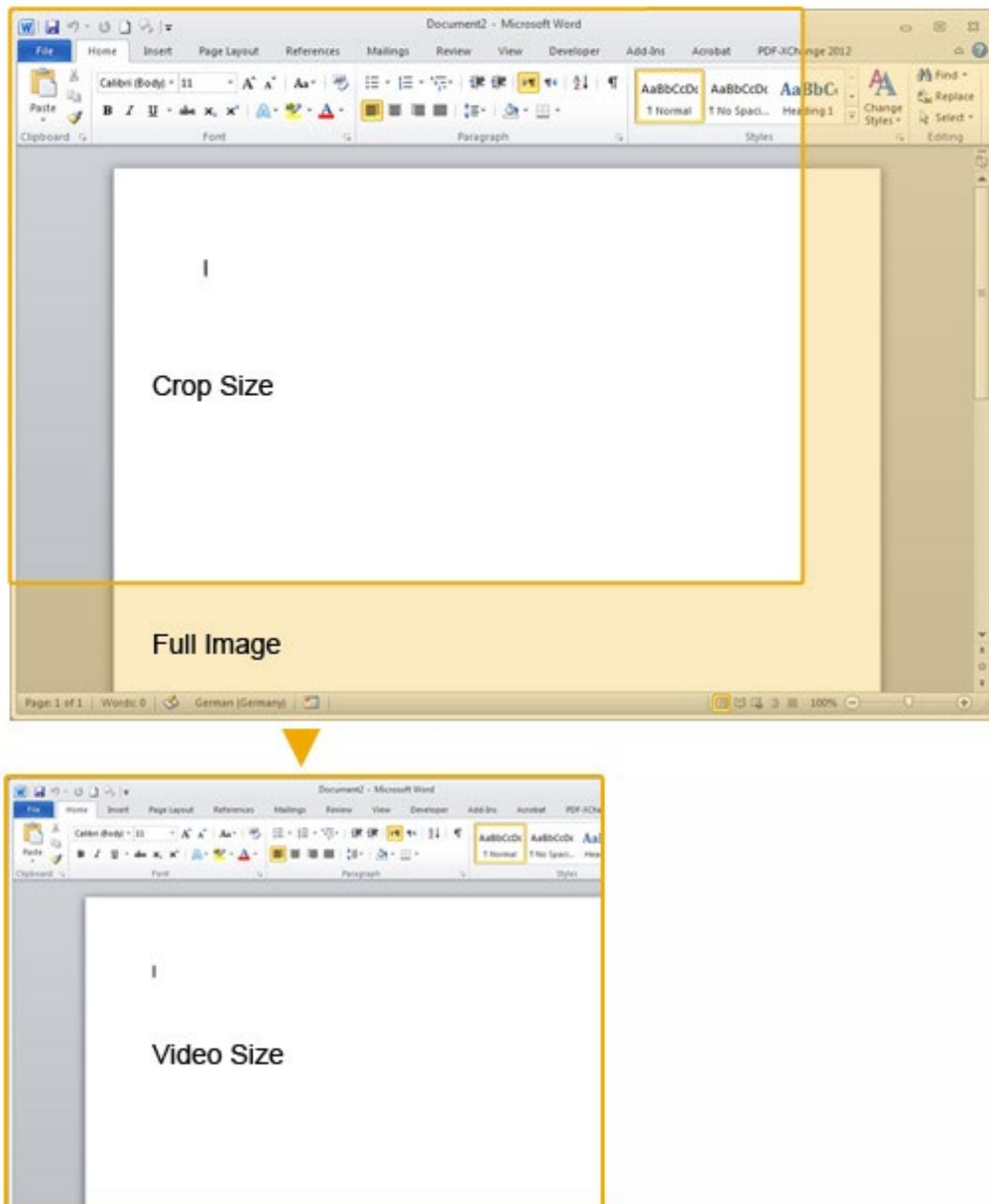


Deleting screencast frames

While recording a simulation, all actions are stored as detailed frames to generate the video. The frames are stored in the project and increase the size of the project. You can delete the frames if you do not want to generate any more screencast videos. Select [Tools -> Delete Screencast Frames](#).

11.7.1 Crop Size and Video Size


The image shows you the use of the *Crop Size* and the *Video Size* for the video generation:



The full image is kept in the generated video. During playback of the video the focus moves to the position of the current highlight and bubble.

The video size can be smaller as the crop size - the image is scaled.

11.7.2 Generate Video Dialog Box

The [Generate Video](#) dialog box is used to generate video for simulation projects. The dialog box contains settings and commands for video generation and video preview and can be opened by using the [Tools -> Generate Video...](#)  menu.

The dialog box has the following areas:

Preview

This area displays a preview of the current frame for video generation. When the dialog box is opened, the image displays the first frame.

Video Settings

The area contains the following settings for video generation:







- [Presets:](#)
Contains different formats to allow a video generation regarding specific use cases.
- [Video Codec:](#)
Displays the active codec for video generation. The codec defines the format of the video.
 - [Settings...:](#)
Opens a dialog box to configure the active codec. The dropdown list displays all installed codecs. Only compatible codecs are displayed.
- [Crop Size:](#)
Specifies the size of the displayed image area of the simulation pages in pixels. Select a percentage value to change the size.
 - [Custom Size...:](#)
The option allows you to enter an individual crop size. The text fields are activated.
 - [Show... / Hide:](#)
Opens a window for resizing the video manually.
Changing the size of the window also changes the image. Once you have finished resized, close the window to apply the changes.
- [Video Size:](#)
Specifies the size of the video in pixels and scales the images. Select a percentage value to change the size.
 - [Custom Size...:](#)
The option allows you to enter an individual size of the video. The text fields are activated.
- [Frame Rate](#) (Frames per seconds):
Specifies the number of images displayed in one second. The initial value is 30.
Note that a high frame rate leads to a longer generation time and a larger file size.
- [Audio Format:](#)
Displays the active output format of the audio. The active audio format can be changed in the [Change Audio Format](#) dialog box.

Progress

The area contains information about the generation process.

Buttons

The bottom of the dialog box contains the following buttons and button statuses:

Icon	Description
	<p><i>Reload:</i></p> <p>Reloads the project after video generation was canceled. This allows you to change the settings and start generation again.</p> <p>A reload can be necessary, if changed settings are not applied correctly.</p>
	<p><i>Generate:</i></p> <p>Starts video generation.</p>
	<p><i>Pause:</i></p> <p>Pauses video generation.</p>
	<p><i>Continue:</i></p> <p>Continue video generation from the paused status with the current settings.</p>
	<p><i>Cancel:</i></p> <p>Cancels video generation. You can reload the project afterwards.</p> <p>Closes the <i>Generate Video</i> dialog box after video generation was canceled.</p>
	<p><i>Finish:</i></p> <p>Closes the <i>Generate Video</i> dialog box after video generation was finished successfully.</p>

11.8 Creating a Context-Sensitive Help File

In order to use the context-sensitive help file, you first have to define which specific information you would like to add to the help file. Linking information according to its contents allows users to quickly and easily search for and find the specific information they need for any given situation within the application. For example, the current “transaction” (TCODE) or the “mandant” (MANDT).

Once the context-sensitive help file has been created, it can be integrated directly into the help menu in your SAP system. The learners can then access this help file and its contents at any time.

Supported applications

The following applications are supported for the implementation of a context-sensitive help:

Application	Version	Parameter
SAP GUI for HTML	Dependent on specific SAP kernel versions	Client, Dynpro, Transaction
SAP GUI for Windows	Dependent on specific SAP kernel versions	TCODE, DBSYS, DYNPRO, PROGRAM

Further information about the implementation of the context-sensitive help in the applications are available in the accordant installation guides.

11.8.1 Context Configuration

During the recording, the Producer analyzes the existing SAP environment and extracts the relevant context information from the system. This information is then displayed in the [Context](#) setting.

Note

For the use of further context parameters contact your SAP consultant.

The contextual information is entered under the [Context](#) setting which can be opened by clicking on the button [Advanced Layout](#) of the object editor in [Explorer](#). The individual pieces of information contain a description of the type and its corresponding value, linked via an equal sign (PARAMETER=VALUE).

Editing the context

Additional information can be entered in the field, separated with a comma. For example:

TCODE=SBWP,MANDT=906,DYNPRO=SAPLSINWP

Multiple context parameters will be separated with a vertical bar:

TCODE=SU01|SE80|SE63

Wild cards can also be defined for any contextual information. Wildcards accelerate and facilitate searching for specific content within the help file. Example of a wildcard:

TCODE=SU*

i Note

The language of the context information depends on the language of learning content and is defined automatically.

11.8.2 Exporting a Context File

Once the contextual information has been defined and the workarea has been published, the context file can be generated in the Producer. All the object information used for the help file content is entered into a [context.html](#) file.

To export a context file, proceed as follows:

1. Select the root group of the content or a specific sub-group in the [Explorer](#).
2. Choose [Workarea -> Publish -> Export Context File...](#)
3. The settings dialog box opens:
 - o Enter the [Target Folder](#) for storing the file.
 - o Enter the [Workarea URL](#) of the published workarea with the included content, for example [http://server/workarea.](#)
 - o Select a mode or the complete project in the [Mode](#) setting. The selected mode is started with the relevant context-sensitive information.
4. Select [OK](#).
5. The parameter dialog box opens and displays the available context parameters. Select the parameters that you want to include in the context file.
6. Select [OK](#) to export the file.

i Note

If a Webserver requires administrator permissions, then it is not possible to write directly to the target folder. Export the [context.html](#) to a local folder and then copy the file to the target folder.

Manager workarea of a Manager

The [context.html](#) can also be exported for the Manager workarea of a Manager. In the URL setting, enter the workarea location in this format: [http://server/manager/wa/workarea_name/~tag/published](#). Specify published content of the workarea by adding `~tag/published`.

To access the content of the Manager workarea, users need to log on.

11.8.3 Testing a Context File

The function [Test Context File](#) allows you to test a created context file. To do so, proceed as follows:

1. Start the function with the [Tools -> Context Administration -> Test Context File...](#) menu entry.
2. Choose the context file in the opened dialog box.
3. Select [OK](#).

4. The next dialog box shows the available context information of the context file.
Enter the test values.
5. Select *OK*.

Afterwards, the preview page opens and shows the available contents for the defined values.

11.9 Use Cases for Publishing

There are different settings and requirements regarding your use cases for publishing and using content. See the following chapters for further information.

11.9.1 Publication on a Server

To publish your content on a Web server (for example, Apache or IIS), the entire published workarea is copied to the specified location on the server or the content is published directly into the target directory of the specified server.

Opening the library

To open a library belonging to a particular workarea, call up the published content.



Example

```
http://<yourwebserver>/[...]/workarea/index.html
```

```
http://<yourwebserver>/[...]/deployment.exe
```

Starting an object

To start an individual content object, call the object directly.



Example

- **Simulation**

```
http://<yourwebserver>/[...]/workarea/index.html?show=project!PR_6FFA2A8FC6E5AAB5:demo
```

Use for a mode: demo, uebung (practice), test, praxis (concurrent), presentation or guided
Starts the simulation mode in the trainer.

- **Desktop Assistant**

```
http://<yourwebserver>/[...]/workarea/project/PR_E6E2A661CC71AB92/project.dnt
```

Starts the Desktop Assistant content in the Desktop Assistant by using the *dnt* file.

- **Group**

```
http://<yourwebserver>/[...]/workarea/index.html?library=library.txt&show=group!GR_E503495E904892B4
```

Opens the group content in the library.

- **Book**

`http://<yourwebserver>/[...]/workarea/index.html?library=library.txt&show=book!BO_329F30366A3DD19B`

Opens the book in the book reader.

- **Book Page**

`http://<yourwebserver>/[...]/workarea/index.html?show=slide!SL_D41C25D36B3716A2`

Opens the book page in the book reader.

- **Text Unit**

`http://<yourwebserver>/[...]/workarea/index.html?library=library.txt&show=cdoc!CD_553B6BB3C5C1A4A4`

Opens the text unit content in the library.

Playback Desktop Assistant content by using HTTPS

If Desktop Assistant content is stored on a server, then these can be accessed using a Hypertext Transfer Protocol Secure (HTTPS). Noted that HTTPS protocols use certificates to show their trustworthiness and are stored in the browser so that applications can be opened correctly. If a certificate is not deposited as trustworthy in the browser, with the call of a Desktop Assistant a certificate error is displayed. Using this note you can continue to load or close the Desktop Assistant content.

In order to avoid certificate errors from the outset, the specific certificate for the HTTPS protocol must be installed as trustworthy in the browser. This can be done under *Tools -> Internet Options -> Contents -> Certificates* in the tab *Trusted Root Certification Authorities*. The installation should be carried out by an administrator.

11.9.2 Publication on an Intranet Share

When you publish your content on the file share of an Intranet server, the entire published workarea is copied to a specified location on the server or the content is published directly into the target directory of the specified server.

Opening the library

To open a library belonging to a particular workarea, open the published content.



Example

`\\<yourserver>\<example_share>\[...]\workarea\index.html`

`\\<yourserver>\<example_share>\[...]\deployment.exe`

Starting an object

To start an individual content object, call the object directly.

Example

- **Simulation**

```
\\<yourserver>\<example_share>\[...]\workarea\index.html?show=project!PR_6FFA2A8FC6E5AAB5:demo
```

Use for a mode: demo, uebung (practice), test, praxis (concurrent), presentation or guided

Starts the simulation mode in the trainer.

- **Desktop Assistant**

```
\\<yourserver>\<example_share>\[...]\workarea\project\PR_E6E2A661CC71AB92\project.dnt
```

Starts the Desktop Assistant content in the Desktop Assistant by using the *dnt* file.

- **Group**

```
\\<yourserver>\<example_share>\[...]\workarea\index.html?library=library.txt&show=group!GR_E503495E904892B4
```

Opens the group content in the library.

- **Book**

```
\\<yourserver>\<example_share>\[...]\workarea\index.html?library=library.txt&show=book!BO_329F30366A3DD19B
```

Opens the book in the book reader.

- **Book Page**

```
\\<yourserver>\<example_share>\[...]\workarea\index.html?show=slide!SL_D41C25D36B3716A2
```

Opens the book page in the book reader.

- **Text Unit**

```
\\<yourserver>\<example_share>\[...]\workarea\index.html?library=library.txt&show=doc!CD_553B6BB3C5C1A4A4
```

Opens the text unit content in the library.

Note


If an anti-virus software is active when you access an Intranet share, scanning all the files required for simulation playback (as the files are opened) can result in a considerable delay between opening a simulation and the starting the simulation. It is therefore recommended that you always publish simulations on a Web server, wherever possible.

11.9.3 Publishing for Mobile Devices

The following settings are recommended when publishing content for mobile devices:

- **trainer style**

Use the *trainer Style (Medium)* for your content. The size of the style and buttons is optimized for mobile devices.

Activate the style in the central configuration dialog box (menu *Tools -> Settings...* ): *Playback Settings -> trainer - Global / Content type -> Visual properties -> Style*.

- **Publishing format**

Use the [Standard](#) or [SLC](#) format for your publishing.

You can set the format in the publishing settings, when publishing content or creating a publishing rule.

- [Standard](#) - Publish on a server and link to content.
- [SLC](#) - Use SAP Mobile Documents for playback.

i Note

Check the browser requirements when playing back content on mobile devices. See the chapter [Browser Requirements](#).

11.10 Content Accessibility

This chapter contains various information for authors about creating content with SAP Enable Now to support people with special needs by using the content.

User groups

Accessibility support for your content is particularly important for the following groups of users:

1. Those who use a screen reader program
2. Screen magnifier users
3. Users with visual impairments who do not use any electronic assistive technologies
4. Users with motor impairments

Accessibility support is implemented in specific ways, depending on the available technology. Detailed information about accessibility is included in the dedicated documentation for the UI technologies and applications.

i Note

SAP does not itself provide the user with any of the assistive technology (for example, screen readers, screen magnifiers, and dedicated hardware resources) required for working in accessibility mode.

The declarations about accessibility in the SAP disclaimers apply in particular to all accessibility documentation.









Main topics






The document includes these main topics:

- **Content creation**
Recommendations for authors on how to create accessible content.
- **Content playback**
Information about the playback of content, for example configuration and use of keyboard shortcuts.

11.10.1 Accessibility Features

SAP Enable Now supports the following accessibility features for the content playback:

Area	Type	Status
Simulation Content		
	Keyboard navigation in content Navigating in the content by using the keyboard.	
	Keyboard navigation in trainer Navigating the trainer UI by using the keyboard.	
	Screen reader Using a screen reader.	
	Text-to-Speech Creating content with Text-to-Speech.	
	Text sizes Using content with different text sizes.	
	High contrast Using a high contrast theme for UI and Content.	
Book Pages		
	Keyboard navigation in content Navigating the content by using the keyboard.	
	Keyboard navigation in book reader Navigating in the book reader UI by using the keyboard.	
	Screen reader Using the screen reader.	
	Text-to-Speech Creating content with Text-to-Speech.	
	Text sizes Using content with different text	

Area	Type	Status
	sizes.	
	High contrast Using a high contrast theme for UI and Content.	
library		
	Keyboard navigation Navigating in the content by using the keyboard.	
	Screen reader Using the screen reader.	
Desktop Assistant		
	Keyboard navigation Navigating the content by using the keyboard.	
	Screen reader Using the screen reader.	



Supported



Partially Supported

11.10.2 Creating Accessible Content

In SAP Enable Now you can create content based on the requirements for accessibility.

Book pages

These are the parameters and features for creating accessible content for book pages:

- Alternative Text**
 You can enter a short description of what is shown on the image that is used by screen readers.
 The parameter is available for the *Image*, *Hotspot*, and *Puzzle* objects.
- Tooltip**
 You can enter a tooltip text for objects that let you enter a link. You will find the parameter in the *Link* section.
- Tooltip for links in HTML editor**
 You can enter a tooltip text for linked texts in HTML editor. You will find the parameter in the *Insert Link* dialog box.

- **Tab Index**

Specifies whether the object can be focused when navigating with the Tab key. The objects are focused based on the order of the objects in the book page. To specify an individual order, enter a tab index. For example, if an object has the tab index 2, the object will be focused before the object with tab index 3. To exclude an object from keyboard navigation, enter '-1'.

Simulations

These are the parameters and features for creating accessible content for simulations:

- **Tooltip for links in HTML editor**

You can enter a tooltip text for linked texts in HTML editor. You will find the parameter in the [Insert Link](#) dialog box.

- **Alternative Text**

You can enter a short description about what is shown on the image that is used by screen readers. The parameter is available for the [Image](#) object and the quiz items.

- **Alternative text in Microsoft Word documentation**

When generating documentation about a simulation project, the title of the screenshot is used as the [Alternative Text](#) in Microsoft Word. You can enter a description in the [Title](#) parameter of the [Screen](#) macro to describe the image.

Styles

The default settings and styles for the playback may not be compliant with accessibility requirements. You can configure own settings and styles to support compliance requirements. For example, you can create [Text Styles](#) with a bigger text size, or a trainer Style with an optimized color contrast.

The settings and styles are managed within the [Resources -> Adaptable Resources](#) area of the workarea. These resources are available:

- [Authoring Settings](#)
- [Playback Settings](#)
- [Desktop Assistant: Authoring Settings](#)
- [Desktop Assistant: Playback Settings](#)
- [Text Style](#)
- [trainer Style](#)
- [Desktop Assistant: Style](#)
- [Desktop Assistant: Mini Icons](#)
- [Documentation Style](#)
- [Bubble Styles](#)
- [Border Styles](#)
- [Color Palette](#)

For more information about the customization of styles, see the Customization Guide.

Book page template

Book page templates are special types of book pages that define a layout and general objects for creating book page content. Templates save time and ensure consistency of newly created objects in a complex book and support the content creation of many authors. Templates can help users to navigate and to find content easily.

For more information about creating book page templates, see the Producer Manual.

11.10.3 Keyboard Shortcuts - library, trainer, book reader


These are the keyboard shortcuts for using the library, trainer, or book reader:

i Note

Enter the keys in lower case.

UI Element	Action	Keyboard Shortcut
<i>Play</i>	Starts the simulation playback.	Space
<i>Pause</i>	Pauses the simulation playback.	Space
<i>Stop</i>	Stopes the content playback.	
<i>Back</i>	Jumps to the previous simulation page or book page.	Left
<i>Next</i>	Jumps to the next simulation page or book page.	Right
<i>Feedback</i>	Opens the feedback dialog box.	Ctrl + F1
<i>Show Highlight</i>	Shows the highlight.	
<i>Set Focus to Bar</i>	Moves the focus to the trainer bar.	Ctrl + F2
<i>Set Focus to Panel</i>	Moves the focus to the side panel.	SHIFT + F2
<i>Set Focus to Content</i>	Moves the focus to the content area.	F2

Changing the keyboard shortcuts

You can specify the keyboard shortcuts in the [Settings](#)  dialog box under *Playback Settings -> trainer - Global -> Function Keys*. You can also specify the keyboard shortcuts for the *book reader*, *library*, or individual modes.

11.10.4 Keyboard Shortcuts - Desktop Assistant

These are the keyboard shortcuts for using the Desktop Assistant:

UI Element	Action	Keyboard Shortcut
<i>Minimize</i>	Minimizes the main window.	Ctrl + F12
<i>Abort</i>	Aborts the Desktop Assistant.	Ctrl + Alt + a
<i>Restart</i>	Restarts the Desktop Assistant.	Ctrl + Alt + r
<i>Select Next Tab</i>	Selects the next tab in the main window.	Ctrl + Alt + End
<i>Go to Next Screen</i>	Navigates to the next screen for a selected project.	Ctrl + Alt + Right
<i>Go Back</i>	Navigates back to the previous screen for a selected project.	Ctrl + Alt + Left
<i>Start Desktop Assistant Project</i>	Starts a selected project.	Ctrl + Alt + n
<i>Execute Step</i>	Executes a step in a guided tour.	Ctrl + Alt + Space
<i>Start Demo Mode</i>	Starts the demo mode for a selected project.	Ctrl + d
<i>Start Practice Mode</i>	Starts the practice mode for a selected project.	Ctrl + p
<i>Start Test Mode</i>	Starts the test mode for a selected project.	Ctrl + t
<i>Start Concurrent Mode</i>	Starts the concurrent mode for a selected project.	Ctrl + c
<i>Start Book</i>	Starts a selected book.	Ctrl + b
<i>Open in library</i>	Opens a group in the library.	Ctrl + g
<i>Select Next Entry</i>	Selects the next entry in the current window.	Ctrl + Alt + Page Down
<i>Select Previous Entry</i>	Selects the previous entry in the current window.	Ctrl + Alt + Page up
<i>Show Warning Dialog</i>	Shows the warning dialog box of the Desktop Assistant.	Ctrl + Alt + w

UI Element	Action	Keyboard Shortcut
<i>Toggle Context Recognition</i>	Toggles the context recognition of the Desktop Assistant.	Ctrl + Alt + s
<i>Toggle Standby Mode</i>	Toggles the standby mode of the Desktop Assistant.	Ctrl + F11
<i>Copy Link</i>	Copies the link of the selected content.	Ctrl + Alt + f
<i>Share Via E-Mail</i>	Opens the dialog box for sharing content of the selected entity via e-mail.	Ctrl + Alt + i
<i>Start Default Content</i>	Starts a simulation mode or a document that has been specified as the default content.	Ctrl + Alt + j
<i>Show Desktop Assistant Help</i>	Opens the Desktop Assistant help.	Ctrl + Alt + h
<i>Request Content</i>	Opens the dialog box for requesting content for an application page.	Ctrl + Alt + k
<i>Search Content</i>	Opens the search depending on the search type selected.	Ctrl + Alt + m
<i>Show Hidden Help Elements</i>	Shows hidden help elements.	Ctrl + Alt + o
<i>Show / Hide Sidebar</i>	Toggles the visibility of the sidebar.	Ctrl + Alt + u
Maximize Content Window	Maximizes the content window.	Ctrl + Alt + Home

Changing the keyboard shortcuts

You can specify the keyboard shortcuts in the [Settings](#)  dialog box under [Desktop Assistant: Playback Settings](#) -> [Desktop Assistant](#) -> [Function Keys](#).

12 Workarea and Administration

The following chapters give you an introduction to the workarea and the server workarea as well as to the editing and administration of resources and contents.

12.1 Training Available



This content is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

12.2 Workarea

The workarea is the base directory for working with the Producer. It contains all the necessary files for creating and playing back learning content as well as the actual files of the learning content that has been created.

Producing learning content always requires one workarea to be selected.

The Producer automatically creates all the relevant data and directories when a new workarea is set up. These files deposited in the workarea are available via the *Explorer's* tree structure, which can be used to organize, edit and replace them. The files for creating and playing back learning content are filed as resources. The learning content is created as projects and book pages and organized in groups and books.

When selecting the workarea within the tree structure, the path to the relevant folder is displayed on the right in the object editor. If a server workarea was set up on a server, then this path will be displayed there as well.

i Note

So that contents can be created and played back free from errors, no alteration to files and the workarea directory structure is permitted.

The following sections will give you an overview of the workarea, how it is presented and used in the *Explorer* and with what objects and how it is set up in the folder structure.







i Note













The workarea contains a mechanism that prevents multiple users in the same network from opening and using the same workarea.





If multiple users are to use a common structure for their projects, the use of a server workarea should be considered.




12.2.1 Structure and Objects

The objects contained within the workarea are displayed in the Producer in the *Explorer* tree structure. This is broken down into the following areas and content:

Main Level	Level 1	Level 2	Level 3
 <p>Workarea The topmost entry in the tree structure shows the local and server workarea selection.</p>			
 <p>Resources List of all of the resources available in a workarea for organization and editing.</p>			
	 <p><i>Resource Group</i></p>		
		 <p><i>Resource</i></p>	
 <p>Content The <i>Content</i> group is the base group with all of the workarea's available learning content.</p>			
	 <p><i>Group</i></p>		

Main Level	Level 1	Level 2	Level 3
	 <i>Subtype: Desktop Assistant</i>		
		Project: Standard  <i>Simulation</i>  <i>Quiz</i>	
			      <i>Modes</i>     <i>Documents</i>
		Project: Desktop Assistant  <i>Context Help</i>  <i>Guided Tour</i>	
			 <i>Mode</i>
		Project: Web Assistant	



Main Level	Level 1	Level 2	Level 3
		 <i>Context Help</i>  <i>Guided Tour</i>	
	 <i>Book</i>		
		 <i>Book Page</i>  <i>Subtype: Book Page Template</i>  <i>Subtype: Quiz Template</i>	
	 <i>Text Unit</i>		
	   <i>Master Document, Compound Document</i>		
	 <i>Media Object</i>		


Main Level	Level 1	Level 2	Level 3
 <p>Shortcuts</p> <p>These objects are shortcuts to objects filed in another location within a tree structure which allow these objects to be launched directly.</p>			
 <p>Unsorted</p> <p><i>Unsorted</i> are where workarea objects that are not assigned to any base group are filed.</p>			
 <p>Local Trash</p> <p>Contains the locally deleted objects.</p>			

12.2.2 Refreshing Workarea and Objects

To reduce the loading time of the workarea the structure is not reloaded permanently. With the refresh functions, you are able to refresh the structure or individual objects manually to the current status. This can be done before uploading a structure to the server workarea or after the checkout of sub-structures.

The following functions are available:

Function	Menu / Button	Description	Example Use Case
<i>Refresh Workarea</i> 	Button in toolbar or Menu <i>Workarea</i>	Refreshes the workarea structure.	After changes in structure.
<i>Refresh Workarea and All Objects</i> 	Menu <i>Workarea</i>	Refreshes the workarea structure and the object references.	After changes in structure and editing of many objects.

Function	Menu / Button	Description	Example Use Case
Refresh Object 	Object -> Context Menu	Refreshes the object references.	After change of screenshots in interactions of simulations.

12.2.3 Adapting the Workarea Structure Externally

Independent to the editing and structuring of content objects in the [Explorer](#) you can edit the workarea structure in an exported CSV file. This can be done, for example, as preparation for a content project to create a first structure of the objects or to have an overview of a complex content structure for a cleanup.

The functions [Export Structure](#) and [Import Structure](#) are available in the menu [Tools -> Workarea Structure](#).

The editing in the CSV file can be done for all content objects:

- Group
- Project
- Book
- Book page
- Text unit
- Media object
- Desktop Assistant object.

The following actions can be executed for an object:

- **Update:**
The action changes an available object.
Can be used to insert further object information, for example, Keywords, Tags, or to change the position of an object in the structure.
- **Add:**
The action creates a new object.
Can be used to add further objects or object structure with initial attributes, for example, name, language.
- **Delete:**
The action deletes an object and moves it to [Unsorted](#).
Can be used for a cleanup of a structure.

12.2.3.1 Editing a Structure

The export and import of a workarea structure can be done with the following steps.

Consider the following recommendations to allow correct editing:

- before editing, export a new workarea structure with the up-to-date objects
- do not move any objects in the [Explorer](#) in the meantime
- do not edit any object attributes in the [Explorer](#) in the meantime

1. Export of a workarea structure

To export a structure, proceed as follows:

1. Select the root group of a structure or sub-structure.
2. Click on the menu entry *Tools -> Workarea Structure -> Export Structure...*
A dialog box opens.
3. Select a folder as target directory.
4. Enter a *File Name*.
5. Select *Save* to export the structure.

2. Editing of the CSV file

Edit the workarea structure and the object information in the CSV file as needed and update, delete or add your objects.

For further information about the structure and attributes of the CSV file see, the *Structure of the CSV File* chapter.

3. Import of a workarea structure

To import or reimport a structure, proceed as follows:

1. Select the root group of a structure or sub-structure.
2. Select *Tools -> Workarea Structure -> Import Structure...*
A dialog box opens.
3. Select a CSV file with the needed structure.
4. Select *Open* to import the structure.
5. A dialog box with the actions to be executed opens.
Select *Yes* to import the file.
Select *No* to cancel and to change the CSV file.

i Note

When adding new objects, do not enter a UID. The UID will be created during import.

> Recommendation

When adding new objects, it is recommended to specify the object type, the name and the language.

12.2.3.2 Structure of the CSV File

The CSV file includes the following columns:

- **Action**
Contains the action which is executed during import.
Possible values:
 - *update* - also default if no value is set
 - *add*

- *delete*
- **UID**

Contains the UID of an object.

Do not change the UID to avoid an incorrect assignment.

When creating a new object, the field has to be empty. The UID will be generated during the creation of an object.
- **Class**

Contains the object type.

Possible values:

 - *group* (group)
 - *project* (project)
 - *book* (book)
 - *slide* (book page)
 - *cdoc* (text unit)
 - *media* (media object)
 - *da* (Desktop Assistant object)
- **Caption**

Contains the name of an object. The position in the column visualizes the position in the structure.

Insert a further column to create deeper structure. Leave the column headers empty.
- **Template**

Contains the UID of a template object.

When creating a new object, the UID for a template can be inserted.
- **StartLink**

Contains the link for playing back the content object.
- **Description**

Contains the description of an object in HTML format.
- **ShortDesc**

Contains the short description of an object in HTML format.
- **Keywords**

Contains the keywords of an object.
- **Hidden**

Defines the visibility of an object.

Possible values:

 - *FALSE* (object is visible)
 - *TRUE* (object is hidden)
- **Language**

Defines the language of an object.

For possible values, see *Content Languages Overview* chapter.
- **categories (Tags)**

Contains the tags of an object.
- **content_categories**

Contains the content categories of an object.

- **Roles**
Contains the roles of an object.
- **modification_time**
Contains the modification time of an object.
- **creation_time**
Contains the creation time of an object.
- **sub_type**
Contains the sub type of an object.
- **macroset**
Contains the used macroset of an object.
- **doc_type**
Contains the document type on a text unit.
- **da_stark_link**
Contains the link for playing back the Desktop Assistant.
- **Web Assistant properties**
Contain properties of the Web Assistant projects. The properties use *h4_* in the property name.
- **SAP Solution Manager properties**
Contain properties of the SAP Solution Manager groups. The properties use *sm_* in the property name.
- **ARIS® properties**
Contain properties of the ARIS® groups. The properties use *aris_* in the property name.

In the rows, the objects are ordered according to their position in the *Explorer*.

12.2.3.3 Exporting a Reference List

Exports an overview of the existing references on the workarea into a CSV file. The objects are listed in the order in which they appear on the workarea. In addition to this, the superordinate reference and the UID are displayed.

To export a reference list, proceed as follows:

1. Select *Tools -> Workarea Structure -> Export Reference List...*
A dialog box is opened.
2. Select a folder as target directory.
3. Insert a *File Name*.
4. Select *Save* to export the reference list.

Structure of the CSV file



The CSV file includes the following columns:

- *Referenced Object:*
Contains the objects of the workarea.
- *Referenced by:*
Contains the referenced object.
- *UID:*
Contains the UID for the objects.

12.2.4 Cleaning up the Workarea

The Producer uses a local trash to store locally deleted content objects of the local workarea. This allows the author to see all deleted content objects and to restore content objects if required.

Consider the following:


- Content objects in the trash are read-only. The object parameters cannot be edited.
- If you have multiple references of a content object, then a deleted reference is not moved to the trash. Only the last deleted reference of a content object is displayed in trash.
- Imported or generated files of a content object, for example, images  or documents , are deleted directly. The files are not moved to the trash.

Local Trash tree



The *Local Trash* tree is displayed in the *Explorer* after a content object has been deleted. The tree contains all locally deleted content objects.

The tree displays the following function in object editor:


-  *Empty Trash:*
Use the control to delete all content objects in the trash from the workarea permanently.

> Recommendation


You can show and hide the trash tree in *Explorer* with *View -> Show Trash*.


Object in trash

A deleted content object displays the following functions in object editor:

-  *Restore:*
Use the control to restore a content object from the trash to the original position in the tree.

i Note

If you restore a content object without a parent object in the tree, then the content object is moved to *Unsorted* .

-  *Delete:*
Use the control to delete the content object from the workarea permanently.

Working with the server

The trash is used for the local workarea only. When using a server workarea, deleted content objects are displayed in the *Explorer* of the server.

When deleting a content object in Producer, there are the following scenarios:

- **Deleting local objects:**
Delete will move the object to *Local Trash*.


- **Deleting centrally managed objects with a managed parent:**
[Delete on Server](#) will delete the object locally and move it to [Trash](#) on server.
[Remove Locally](#) will delete the object locally, but leave it in the local structure with an empty cloud icon. The object is moved to [Unsorted](#) on server.
- **Deleting centrally managed objects with a local parent or with no parent:**
[Delete on Server](#) will delete the object locally and move it to [Trash](#) on server.
[Remove Locally](#) will delete the object locally and not show it in the local structure. The object is moved to [Unsorted](#) on server.
- **Deleting centrally managed root folder:**
 Centrally managed root folder can only be removed locally. You can create a local root folder or check out the central root again.

If a content object has been deleted by another author in the server workarea, the local instance of the content object in your local workarea will be moved into your local trash.

12.2.5 Opening the Workarea Folder

The [Workarea -> Administration -> Open Base Directory](#) function opens the workarea's base directory in Microsoft Windows Explorer. The workarea folder contains the folders of the content objects and the resources as well as the components of trainer needed to directly playback offline content.

12.3 Resources

The [Resources](#)  area is where you have access to all the workarea files and settings you need for creating and playing back learning content. These are broken down into resource groups, each with their own individual resources.


You can use the structure to apply settings for individual resources and to save resources to a server workarea.








> Recommendation





You can show and hide the resource tree in [Explorer](#) with [View -> Show Resources](#).




12.3.1 Resource Overview

The table provides you with an overview of the standard resources available in the workarea:


Resource	Description
 Adaptable Resources	Contains adaptable resources of styles and settings. See Adaptable Resources for further information.

Resource	Description
 Application Profiles	Contains the application profiles for recording the applications.
 Book Styles	Contains the design of the background and the controls for book pages.
 Bubble Styles	<p>Contains the various bubble designs.</p> <p>The Edit Bubble Styles... button in the object editor can be used to launch the bubble style editor for editing the bubbles.</p>
 Configurations	<p>This resource contains the configuration files for the content authoring and playback.</p> <p>If additional resources were added, the resource to be used can be defined via the Set as Default function.</p>
 Documentation Settings	<p>Contains the settings for the generation of documentation of all types.</p> <p>You will receive the following functions when you select a resource:</p> <ul style="list-style-type: none"> • Open Settings - Opens the selected setting resource in the central configuration dialog.
 Filters	<p>Contains the created filter definitions. The resource type is visible after a filter is defined.</p> <p>You will receive the following functions when you select the resource group:</p> <ul style="list-style-type: none"> • New Filter - Opens the Edit Filter dialog for the creation of a new filter. <p>If you select a resource, you will receive the following functions:</p> <ul style="list-style-type: none"> • New Filter - Opens the Edit Filter dialog for the editing of the selected filter. • Apply Filter - Activates the filter or search for the content tree.
 	This resource contains the help files for the library, trainer and book reader in the available languages.









Resource	Description
Help	
 Macrosets	<p>Contains the macroset files. These are:</p> <ul style="list-style-type: none"> • Desktop Assistant • Standard (Simulation and Quiz) • Web Assistant
 Playback Dictionaries	<p>This resource contains text blocks that can be used in a content's playback. Here we differentiate between:</p> <ul style="list-style-type: none"> • Standard - library, trainer and book reader • Desktop Assistant <p>You will receive the following functions when you select the resource group:</p> <ul style="list-style-type: none"> • New Dictionary - Setting up a new dictionary. This causes the original folder to be copied, as a result of which the standard texts can be transferred into the new ones. <p>You will receive the following functions when you select the resources:</p> <ul style="list-style-type: none"> • Open Dictionary - Opens the dialog for customizing the texts.
 Publishing Rules	<p>Contains the publishing rules for the publishing of content. The resource type is visible after a publishing rule is defined.</p> <p>See also the chapter <i>Publishing Rules Resource</i>.</p> <p>You will receive the following functions when you select the resources:</p> <ul style="list-style-type: none"> • Edit Publishing Rule - Opens the dialog for editing the publishing rules. • Publish • Open Target Folder
 Recording Dictionaries	<p>The dictionary contains the bubble text modules for the project types. These can be edited using the Edit Dictionary dialog.</p> <p>Here we differentiate between:</p> <ul style="list-style-type: none"> • Simulation • Desktop Assistant <p>You will receive the following functions when you select the resource group:</p>

Resource	Description
	<ul style="list-style-type: none"> New Dictionary - Setting up a new dictionary. This causes the original folder to be copied, as a result of which the standard texts can be transferred into the new ones. <p>If you select a resource, you will receive the following functions:</p> <ul style="list-style-type: none"> Open Dictionary - Opens the dialog for customizing the texts. Set as Default - If a number of resources are available, this allows you to determine which one is to be used.
 Playback Application Profiles	Contains the application profiles for playing back the Desktop Assistant.
 Scripts	The Scripts resource contains all the scripts that activate special functions.
 trainer	<p>Contains the trainer configuration files.</p> <p>Which trainer version is to be used can be defined in the object editor using the Set as Default function.</p>

12.3.2 Adaptable Resources













The [Adaptable Resources](#)  are part of the workarea resource tree and are located on top of the resource structure. They contain customizable resources such as styles, templates and settings.

The standard resources of the [Adaptable Resources](#) including the following:

-  [Authoring Settings](#)
-  [Playback Settings](#)
-  [Desktop Assistant: Authoring Settings](#)
-  [Desktop Assistant: Playback Settings](#)
-  [Book Style Flat](#)
-  [Border Styles](#)
-  [Bubble Styles](#)
-  [Color Palette](#) (if created)

-  [Content Categories](#)
-  [Desktop Assistant Style](#) (different styles)
-  [Desktop Assistant: Mini Icons](#)
-  [Documentation Style](#)
-  [Documentation Style \(HTML\)](#)
-  [Documentation Style \(Right-to-Left\)](#)
-  [Master Tags](#) (if created)
-  [Text Styles](#) (different styles)
-  [Text Styles: Web Assistant](#)
-  [trainer Style](#) (different styles)

Customizing adaptable resources

Resource	Customizing
 Styles	Customize the resources in style editor. Open the style editor by using the Edit Style Resources...  control. See also <i>Style Editor</i> .
 Text Styles	Customize the resources in text style editor. Open the text style editor by using the Edit Text Styles...  control. See also <i>Text Style Editor</i> .
 Color Palette	Customize the resources in color palette editor. Open the editor by using the Edit Color Palette...  control. See also <i>Color Palette</i> .
 Settings	Customize the resources in settings dialog box. Open the dialog box by using the Open Settings...  control. See also <i>Settings Dialog Box</i> .
 Master Tags	Customize the resources in master tags dialog box. Open the dialog box by using the Manage Master Tags...  control.
 Content Categories	Customize the resources in content categories dialog box. Open the dialog box by using the Manage Content Categories...  control.

12.3.3 Managing Resources

You can import and update resources or manage them in the server workarea:

i Note

The first version of newly created or uploaded resources is always published automatically. All further versions need to be published manually by the authors.

Importing resources

In addition to the existing resources, you can import additional resources into the workarea as an archive.

To import resources, proceed as follows:

1. Select *Workarea -> Import Archive...* menu.
2. Select your archive file in the open dialog box. Select *Open*.
3. You then see the files contained in the archive displayed in a dialog box. You can now select which content is to be imported into your workarea. Select *OK* to import the selected resources.
4. The import is displayed by a progress dialog box. After completion, confirm this with *OK*.

The imported resource is now available in the relevant resource group in the resource overview. Some resources need to be activated so that they can be used as the default. See also the *Resource Overview*.


i Note

Since SAP Enable Now 2105 new and imported resources are not automatically kept for offline editing anymore. After they are saved to server, master authors can directly work on them. You can still manually keep the necessary resources for offline editing through context menu.

Duplicating resources

In addition to the standard resources, you can create further resources by duplicating an existing resource and using it as a base type.

To duplicate resources, proceed as follows:

1. Open a resource section of the resource tree.
2. Select a resource type to be used as a base type.
3. Select *Duplicate...*  in the object editor.
4. A settings dialog box opens. Enter a name for the resource.
5. Select *OK* to create the new resource.

Updating resources

If you have installed a new version of the Producer, you will need to migrate the standard installation resources. Also pay attention here to the chapter in the [Upgrade Guide](#) for migrating workareas.

Server workarea

When using a server workarea, resources can be managed via the tree structure to make them available to all authors. Individual authors can then download the resources for their own local workarea. A local workarea's resources can also be transferred to the server workarea and exchanged.

This is done by using the context menu when selecting a corresponding resource group or by means of the [Server Workarea](#) menu.

12.3.4 Copy Over a Bubble Style

The [Copy Over](#) function for a bubble style can be used, to replace a used bubble style with another resource. A case can be, to update an outdated bubble with a new created resource. Thus, not each bubble must be changed in the whole content.

To copy over a bubble, proceed as follows:

1. Select the source bubble in the resource tree, which should override the old bubble.
2. Select [Copy Over...](#) in object editor.
3. In the opened dialog box, adapt the following parameters:
 - [Copy "Bubble Name" over:](#)
Select the bubble style, that should be overridden.
 - [Name:](#)
Insert a name for the bubble.
The general name form is: [Old Name \(New Name\)](#)
4. Select [Ok](#), to execute the override.

To restore a changed standard bubble style, use the [Update Resources](#) function.

12.3.5 Replacing Bubble Styles

The replacing of bubble styles allows you to change the bubbles of a project easily and not to edit each macro individually. The function can be used for simulation and Desktop Assistant projects.

The replacing of the bubble style does not influence the content of a project.

To replace a bubble style, proceed as follows:

1. Select a project or a content tree in the [Explorer](#).
or
Open a project in the project editor.
2. Select [Tools -> Replace Bubble Styles...](#)
3. A setting dialog box opens. Adapt the following settings:
 - [Starts from \(Explorer\):](#)
This selection determines the point in the tree structure starting at which the bubble styles should be replaced. This lets you replace the bubble styles for a specific group. The object selected in the tree

structure is automatically displayed in the setting.

If another starting point is to be selected, this can be done using [Edit link...](#) 

- [Only selected Macros \(Project Editor\)](#):

With this setting only the bubble styles of the before selected macros will be replaced.

The setting will be displayed, if the dialog was opened in the project editor for a specific project.

- **Subcategories**

The dialog contains subcategories for the project types and modes.

- [Demo Mode \(Simulation\)](#)
- [Practice Mode \(Simulation\)](#)
- [Desktop Assistant](#)

- **Settings**


Each subcategory contains settings, to define the specific content.

- [Set Action Bubbles](#):
Select a bubble style from the drop-down box.
- [Set Explanation Bubbles](#):
Select a bubble style from the drop-down box.
- [Use Fallback](#):
Activate the setting, to use the fallback bubble style.

4. Select [OK](#), to replace the bubble styles.

12.4 Content

Various objects for creating content are available in the Producer. Each of these objects in the tree structure is a reference to the actual object in the particular workarea folder. This enables individually specific organization and use of the objects in the local and server workarea. You can refer to, or create a shortcut to, an object multiple times as well as manage its structure accordingly in conjunction with a server workarea.

The [Content](#)  group is the highest learning content group and is created automatically when setting up a workarea. This is where all the learning content is filed. Furthermore, the structure contained in the group is used for presentation in the library.

This group can be amended via [Group options](#) in the context menu with each available group capable of being defined as the root group. This is necessary when using a server workarea so that the corresponding root group can be set up locally.

Note

Bear in mind that only objects contained in the root group are displayed in the library. Shortcuts and unsorted objects are not available in the library.

Root group in the server workarea

The root group of a server workarea cannot be changed.

It is therefore necessary, when working with a server workarea, to define the root group locally:

1. Select the [Check Out Objects...](#) function in the [Server Workarea](#) menu. Define the workarea contents in the open dialog and select [Ok](#).

2. A dialog opens where you can choose to use the server's root group as your local root group.
Select [Yes](#).

The group is now set up as the root group, the previous group is moved down in the structure and becomes a shortcut.

If you selected not to set the server root as local root, the server objects are moved to *Unsorted*. You can still set the server root as you local root through context menu.





Setting a group as root group








To set any group as root group:


1. Select the group you want to have as root group.
2. Open the context menu and go to [Group options -> Set root](#).

12.4.1 Content Objects

The following objects for creating and managing content are available in the Producer:


Process Tutorials and Documentation	
 Simulation	<p>Record your application to create process tutorials and documentation.</p> <p>This content object is a project type and you can edit the project in project editor.</p> <p>Further information: <i>Simulations - Recording, Simulations - Editing</i></p>
 Text Unit	<p>Create and structure text fragments or create glossaries.</p> <p>Further information: <i>Text Units</i></p>
Rapid Learning	
 Quiz	<p>Create a quiz with different types, for example, multiple choice or fill in the fields.</p> <p>This content object is a project type and you can edit the project in project editor.</p> <p>Further information: <i>Quizzes in Projects</i></p>
 Book Page	<p>Create multimedia learning content by using texts, images, animations, videos, audio, and more.</p> <p>You can edit a book page in the book editor.</p> <p>Further information: <i>Creating a Book Page</i></p>

Process Tutorials and Documentation	
In-App Help	
 Desktop Assistant - Context Help	<p>Create context-sensitive help for your application supplied by the Desktop Assistant.</p> <p>This content object is a project type and you can edit the project in project editor.</p> <p>Further information: Context Help</p>
 Desktop Assistant - Guided Tour	<p>Create step-by-step guides for your application processes supplied by the Desktop Assistant.</p> <p>This content object is a project type and you can edit the project in project editor.</p> <p>Further information: Guided Tour</p>
 Web Assistant - Context Help	<p>Create context-sensitive help for your application supplied by Web Assistant.</p> <p>This content object is a project type that you can edit in the project editor.</p> <p>Further information: Web Assistant - Authoring Guide</p>
 Web Assistant - Guided Tour	<p>Create step-by-step guides for your application processes supplied by Web Assistant.</p> <p>This content object is a project type and you can edit the project in project editor.</p> <p>Further information: Web Assistant - Authoring Guide</p>
Content Structuring	
 Group	<p>Use groups to structure your content in the Explorer tree.</p>
 Book	<p>Use books to structure your book pages in the Explorer tree or Book Explorer.</p> <p>Further information: Creating a Book</p>
 Desktop Assistant Object	<p>Create your content and generate your Desktop Assistant.</p> <p>Further information: Desktop Assistant</p>

Process Tutorials and Documentation	
 Media Object	<p>Use media objects to store media files as a content.</p> <p>Further information: <i>Media Objects</i></p>

12.4.2 Creating a Content Object

To create a content object, proceed as follows:

1. Select a group in the workarea structure.
2. Select [New Object](#)  in the toolbar.
An overview of all objects opens.
3. You can create an object based on the type or on a template.
Select an object or a template.
A dialog box for object-specific settings opens.
4. Adapt the settings in the dialog box.
5. Choose [OK](#) to create the object.

The object is inserted into the structure.

Content object settings

For a new content object, there are the following settings:

- [Name:](#)
Enter an object name.
The default name is the object type with an ID.
- [Language:](#)
Select a language from the dropdown box.
- [Template:](#)
Select a template.
Choose [Change...](#) to open a selection dialog box and select a template from the workarea. Select [No template](#) to create an object without a template.
If a template has already been used, that template is selected by default.
See the chapter *Templates for Content Objects*.
- [Save to Server as well:](#)
Select whether the object shall be directly connected to the server workarea or not.

These setting are available for some content objects:






- [Project Type](#) (Projects only):
The project type is selected.
You can change the type in the dropdown box.

- [Use Audio](#) (Simulations only):
This option lets you create an audio project. You can record audio, assign audio files, or convert bubble text to Text-to-Speech. The following settings appear:
 - [Output format](#):
Defines the audio format for playing back a project.
 - [Editing format](#):
Defines the audio format for editing a project. The format can be changed in the [Change Audio Format...](#) dialog box (menu [Audio](#))
- [Document Type](#) (Text units only):
Select a type and icon for the text unit. For example: [Glossary](#)

12.4.3 Media Objects


[Media Objects](#) can be used to insert media content, for example, PDFs, images, or videos, into the workarea. You can use the objects to reference them in other content or to show the objects in the library directly. You also can manage the objects with a server workarea.


You can insert the following media types:

Icon	Type
	Microsoft Word Document
	PDF
	Image
	Video
	Audio

12.4.3.1 Creating a Media Object

To create a media object, proceed as follows:

1. In the [Explorer](#) select [New Object](#) .
- An overview of all objects opens.

2. Select [Media Object](#) .
The [New Media Object](#) dialog box opens.
3. Adapt the following settings:
 1. [Name](#):
Enter a media object name.
The default name is the object type with an ID.
 2. [Language](#):
Select the language for the media object.
 3. [File](#):
Shows the location of the selected file.
 4. [Media Type](#):
Shows the media type of the selected file.
4. Select [OK](#) to insert the media object

The media object is inserted into the structure and shows the icon of the media type inserted. In the object editor, further properties of a media file are displayed, for example, duration for videos or size for images.

12.4.3.2 Converting Files to Media Objects

Media objects have capabilities which imported files do not have. For example, media objects can be tracked or can be used as Web Assistant or Desktop Assistant content. These object types can also be relevant for publications when the export takes all dependent resources and objects including assets not directly used. For example, you have a group with 10 images and you have referenced 2 of them. In this case the whole group will be taken into publication. This happens because files are stored in a group, as opposed to media objects which are independent objects.

You can convert your imported files, for example, images and videos, to media objects in your workarea. The media files will be created as new objects.

Converting the files

To convert files to media objects, proceed as follows:

1. Select a group in the tree structure which you want to convert your imported files from.
2. Open [Tools -> Workarea Structure -> Convert Files to Media Objects...](#)
3. A dialog opens with the following settings:
 1. [Start From](#):
This field is prefilled with the name of the group you have selected in Step 1. If you want to convert files from a different group, select it here.
 2. [Include Images, Audio, Video, Other Files](#):
Specifies file types for the conversion. By default all types of files are selected. Deselect the boxes of types that you do not want to convert to media objects.
 3. [Update references \(Advanced section\)](#):
Specifies that all references of the imported files will be changed to the converted media objects. **Deselect** this option if you do not want references to be updated. **Note, if you choose not to update references, then do not remove the originals. Otherwise the references will be broken.**

4. [Remove converted files \(Advanced section\)](#):

Specifies that the converted files are deleted. By default files will be replaced by media objects and the originals are **deleted fully and are not moved to trash either on Producer or on Manager**. To keep the original files deselect this option.



5. [Collect all Media Objects into \(Advanced section\)](#):

You can select a group to collect the converted media objects. This will create subgroups by media type: [Converted Images](#), [Converted Audio](#), etc.

4. Once you have chosen the settings, select *Ok*.

i Note

Note, that after conversion your original files will be deleted completely and will not be moved to trash either on Producer or on Manager. Deselect the option [Remove converted files](#) in the [Advanced](#) section of the dialog.

Your files have now been converted to media objects are inserted into the structure. They will show the icon of the media type. For example, for images you will see  instead of .

There are further properties of a media object displayed in the object editor, for example, duration for videos or size for images.

i Note

Note, that the functionality to [Update Externally Loaded Files](#) will not work for the converted media objects. This is due to the [Original File](#) property, that now points at the converted object instead of the original source file.

Updating externally loaded files is only available for unconverted files or for *manually created media objects*.

12.4.4 Standard Parameters of Content Objects

For the content objects, there are the following standard parameters:

Parameter	Description
Name	Contains the name under which an object is shown in Explorer , the library and the documentation.
UID	Contains the unique identifier for the selected object and can be accessed in Advanced Layout . It consists of an abbreviation of object type followed by underscore and unique ID of the object. This parameter is non-modifiable.
Language	Specifies the language of the content. Defines the used text modules for projects.
library Autostart	Allows a particular mode, book page or document to be started or opened automatically when selecting an object in the library. This function is useful, for example, if only one mode is to be displayed in the library for a

Parameter	Description
	<p>simulation or else to highlight a particular mode or particular document. When the mode has been terminated or the document closed, the user is free to select the project content as usual.</p> <p>This function can also be defined for groups, for example in order to display a document or book page when selecting the group, the book page is hidden in the library structure.</p>
<i>Short Description</i>	<p>Allows you, to edit a short information for the content object. The text is used in the library, for the Desktop Assistant or when generating a documentation.</p> <p>For the editing the HTML editor is opened, when clicking into the edit field.</p>
<i>Description</i>	<p>Allows you, to edit a descriptive text for the content object. The text is used in the library, for the Desktop Assistant or when generating a documentation.</p> <p>For the editing the HTML editor is opened, when clicking into the edit field.</p>
<i>Hide</i>	<p>Allows you, to hide an object in the library. It can also be used to hide objects when generating a documentation or when publishing a workarea.</p>
<i>Start Link</i>	<p>Contains a link, which can be used to start the playback of the specific content object.</p>
<i>Tags</i>	<p>Allows you, to define tags used for the creation of filters.</p>
<i>Keywords</i>	<p>Allows you, to specify keywords for an object. The learners can use these to search for specific learning content in the library or in the book reader.</p> <p>To define a number of search terms separate them by a semicolon (for example: search_term1;search_term2).</p>
<i>Context</i>	<p>Contains the recorded context of an application and application page. The context is used for Desktop Assistant content.</p>
<i>Roles</i>	<p>Allows you, to define roles used for the filtering of content during playback</p>
<i>Duplication Source</i>	<p>Contains a link to the source object used for the duplication.</p>

Parameter	Description
<i>Duplication Master</i>	Contains a link to the original duplicated object, if an object has been duplicated from a duplicated object.
<i>Imported UID</i>	Contains the UID of the original object if the content has been imported.

12.4.5 Individual Parameters of Content Objects

For the content objects, there are the following individual parameters:

Parameter	Description
Group	
<i>Subtype</i>	<p>Contains subtypes for a group which will be used for different content scenarios. The subtypes is set automatically.</p> <p>For further information about the types, see the SAP Solution Manager integration guide and the ARIS® integration guide on the SAP Help Portal.</p>
Project (Simulation)	
<i>LMS</i> (Subcategory)	<p>To evaluate the learning success in Test mode within an LMS (Learning Management System), the <i>Maximum Score</i> and the <i>Required Score</i> can be specified in <i>Explorer</i> for the project.</p> <p>To do this, enter the corresponding percentages for the project concerned in the subcategory <i>LMS</i> of the object editor. The project must be selected in the tree structure. The preset values are <i>100</i> and <i>80</i>. The values entered are used later on by the <i>Simulation Start</i> macro to calculate the numeric values for the <i>Maximum Score</i> and the <i>Required Score</i> for the project.</p>
Book	
<i>Subtype</i>	Allows you to specify a book page as book page template.
<i>Book Style</i>	Allows you to specify a <i>Book Style</i> resource for the complete book.
Book Page	

Parameter	Description
Preview	Displays a thumbnail view of a created book page.
Text Unit	
Document Type	Allows you to specify the type of the text unit.

12.4.6 Templates for Content Objects


Templates can be made for objects that are created for workareas in [Explorer](#). The templates are useful for saving time as well as for ensuring uniformity for newly-created objects when more than one author is working on the content.

Templates can be created for the following objects:

- Projects
- Groups
- Book pages
- Books
- Text Units
- Desktop Assistant

Creating a template

To create a template, proceed as follows:

1. Create a new object by selecting [New Object](#)  from the toolbar in the project editor. It is recommended that you save this in a folder in your workarea that is specifically for templates.
A dialog box for object-specific settings opens.
2. Enter a name for the template, for example, `Standard template`.
Choose [OK](#) to create the object.
3. Configure your content object as desired. For example, you can specify the layout for book pages, you can insert default objects in book pages or projects, or you can specify object-specific authoring settings.
4. Save the content object.

Specifying a template for the New Object dialog box

You can use a set of different templates to create new objects by using the [New Object](#) dialog box. This allows you to set up templates for different content types and use cases.

To display a template in the [Template](#) section of the [New Object](#) dialog box, proceed as follows:



1. Select a template in the tree view.
2. Select [Template](#) setting in the object editor.
3. Enter a description text in the [Description](#) setting.

The template is now displayed in the [Template](#) section, and the group is displayed as a title in the [Template](#) section.


Specifying a template in the Settings dialog box

You can use a template to create a new object or it can be specified as a general template for creating new objects, which will then serve as the default settings for the new objects.

To use an existing template, proceed as follows:

- **For an individual object**
Create a new object. In the [New Object](#) dialog box select your template under [Template](#). Select [Change...](#)  to choose a template from your workarea. Select your template from the opened dialog box and select [OK](#).
- **As a general template**
If you would like to use a template for all the objects, open the settings dialog box from the menu [Tools -> Settings...](#)  in the area [Producer -> Templates](#). Select the desired template to be used for the object and select [OK](#).

12.4.7 Duplicating Objects

The [Duplicate](#)  function allows you to duplicate an object or an object structure. Through that, you can use the available content for adaptations and variations and do not change the source object.

To duplicate an object, proceed as follows:

1. **Object in explorer**
 1. Copy an object or a content tree in the [Explorer](#).
 2. Select a group of the content tree.
 3. Paste the copied object.
 4. A dialog box opens.
Select [As Duplicate...](#)
2. **Single project or book page**
 1. Open a project in project editor or a book page in book editor.
 2. Select [Edit -> Duplicate...](#)
3. A dialog box opens.

Adapt the following settings:

- [Name:](#)
With this setting, you can change the name of the duplicate.
Select an option from the dropdown box to edit the name:
 - [Keep Original Name:](#)
Uses the original name of the object and subobjects.
 - [Add Sequential Number:](#)
Adds a sequential number to the original object name of the object and subobjects. For example:
Name (2)
 - [Enter New Name:](#)
Allows you to enter a new name for the object or the root object of a content tree.
 - [Transform Original Name:](#)
Allows you to replace the name or parts of the name for a content tree.

Use *replace by* to enter a name value and a replace value.

Use *Prefix* or *Suffix* to add a name part in front or at the end of the name.

- *Set Language:*

With this setting, you can change the content language of an object.

The setting does not influence the content and no automatic translation is executed.

- *Duplicate subobjects:*

With this setting, you can also duplicate the subobjects of a selected content tree. If the setting is deactivated, the subobjects are created as a reference.

The setting is shown if you select a tree in the *Explorer*.

4. Confirm the dialog box with *OK* to duplicate the object or content tree.

12.4.8 Using References

The physical object of a learning content can be referred to as often as necessary. If changes are made in a reference, these are also contained in the other references.

The opportunity therefore exists to use a particular object for different parts in a project structure. This is the case, for example, if an object is to be offered for different target groups in conjunction with different additional content.

Creating a reference

i Note

Bear in mind that only one reference can be created for an object within a group. Create object references only in different groups.

1. To create a reference, select the desired object in the tree structure.
2. Then, with the right mouse button held down, move the object to the appropriate position using drag&drop.
3. A context menu is opened when you release the mouse button. Select the *Reference* menu option to create the reference.

i Note

If your references contain Microsoft Word documents and you use them to create a master document, this master document will include all the documents referred to. If you wish to block the publication of duplicate documents, then you can hide them while the central document is being published or define the contents by means of filters.

> Recommendation

You can use filters to define the way objects are depicted for different users so that content is not displayed to a user multiple times.


12.4.9 Creating Shortcuts


Shortcuts allow you to access any string within a complex project structure. For example, a project can be filed locally as a reference from the server workarea so that it can quickly be made available for editing.

i Note


As shortcuts refer to an object and are therefore not contained in the base group, they are not displayed in the library.

Creating a shortcut

To create a shortcut, select the desired object and right click on the context menu to open it. Then click on [New Shortcut](#) .

The shortcut is now placed beneath the base group and flagged with a shortcut symbol . If the object is a group or book, then it will be displayed with the associated sub objects.

Deleting a shortcut

To remove a shortcut, select the object with the shortcut symbol and delete it using the **Delete (Del)** key or via the [Edit -> Delete](#)  menu.

Linking a shortcut


To make it easy to link objects, up to five links are displayed in the [Insert link](#) dialog. This way, content used multiple times can be selected quickly and directly.

12.4.10 Unsorted Objects

As the Workarea objects are references, objects may in certain circumstances be displayed in the [Explorer](#) as being unsorted. This will be the case if an object is not assigned to the topmost or to a subordinate group.

Unsorted objects can arise for the following reasons:

- by objects migrating
- when importing archives
- by downloading objects from a server workarea
- by setting a new topmost group


The [Unsorted](#)  are arranged at the bottom of the tree structure.

i Note

Unsorted objects are not displayed in the library. To display them, subordinate the objects to the topmost group.

Inserting unsorted objects in the topmost group

You can assign unsorted objects to the topmost group and thus relocate them to the desired position within the tree structure. This is done by dragging and dropping the object in question.

If you want to assign an object to a specific group or book, then you can do so using the [Append Unsorted](#) . To do so, select an object, open the context menu and click on [Append Unsorted](#). All objects filed as being unsorted, are then assigned to the group or book.

Unsorted objects when using the server workarea

Unsorted objects may appear in a server workarea for a variety of reasons. This is how you deal with a base group in the server workarea:

- Unsorted objects may occur when using a server workarea if an object is downloaded without the referenced objects.
You can now also check out the referenced objects. These will then be located within the base group in their actual position.
- Unsorted objects can also occur if a server workarea has changed. This is then to be reallocated accordingly.
- It is not possible to use multiple topmost groups in a workarea. When downloading additional topmost groups, these are set as unsorted objects.
When using a server workarea, always create a new workarea.

12.4.11 Replacing Content

In some cases, you are required to keep the UID of a content object but to use a different content. For example, a simulation is linked and the link contains the UID. To change the content of the simulation you can replace the content with the content of another project.

You can replace the content of each object in the workarea with the content of an object of the same type. For example, the content of a project can be replaced with the content of another project. You can also replace the content and structure of a group or book.

i Note

After you replace the content, it is not possible to change the content back to the previous status by using undo.
You can use [Revert Object](#) to change the object back to a previous version.

To replace content, proceed as follows:

1. Select the object in the tree whose content you want to replace.
2. Select [Edit -> Replace Content...](#)
The [Select Source Object](#) dialog box is opened.
3. Select the object with the required content.
4. Select [OK](#).

The content of the object is replaced. If you have selected a group or book the structure is replaced also.

12.4.12 Generating All Content

The function generates all project modes and preview images of the book pages in the current workarea. This is especially important for migrated workareas or for a large number of imported content objects.

Open the dialog box in the [Explorer](#) from the [Workarea -> Generate All Content...](#) menu. The following settings can be configured:




- [Structure:](#)
Defines the structure for generating the content.


- [Subtree](#) – a selected subtree
- [Root Group](#) – the complete content structure
- [All \(including “Unsorted”\)](#) – the complete content structure and the unsorted objects
- [Content filter:](#)
Defines specific content to be generated.
 - [Project Modes](#)
 - [Book Page Previews](#)
- [Update files for library:](#)
Specifies that the library files are updated to include the generated modes for display in the content structure.

Confirm the dialog box with [OK](#) to generate the contents.

12.4.13 Reducing the File Size of the Content

The table contains tips for reducing the file size of the content:

Recommendation	Explanation	Function
Reduce screen resolution (Simulation)	Reduce the recording screen resolution (1024 x 768 is usually sufficient).	Settings  : Authoring Settings -> Recording - General -> Size See also chapter <i>Recording - General</i>
Merge identical Screenshots (Simulation, Documentation)	Merge Screen macros in a project.	Project Editor: Tools -> Bulk Changes -> Merge Screens See also chapter <i>Merge Screens</i>
Publish content (Simulation)	Publishing the content will automatically remove all files not required for playback.	Explorer: Menu Workarea -> Publish -> Publish Content... See also chapter Publishing a Workarea
Cropping the screenshots for documents (Documentation)	Use auto crop to reduce the screenshot size for documents.	Project Editor: Tools -> Bulk Changes -> Auto Crop all Screenshots  See also chapter <i>Auto Crop all Screenshots</i>
Reduce the color depth for documents (Documentation)	Reduce the color depth for documentation screenshots. Besides RGB quality, you can also choose Indexed Color or Grayscale .	Settings  : Documentation Settings -> Documentation Type -> Screenshots • Quality in Word/PDF

Recommendation	Explanation	Function
		documentation <ul style="list-style-type: none"> • Quality in HTML documentation See also chapter <i>Settings of the Subcategories</i>
Use referenced content (Books)	<p>Create a media folder in a book. The folder is published with the book but should not be visible to the learner.</p> <p>You can add media files to the media folder at any time. If a large quantity of media files is used, the folder can be divided into images, videos, audio and so on.</p> <p>Insert any media file into a book page by importing it directly from the workarea media folder as a reference to avoid redundant files.</p>	
Check media content size before importing (Books)	Before importing media files into the content folder, check the size of each file and reduce the file size if necessary (by compressing images or using a different video or audio codec).	
Use templates (Books)	To avoid redundancies caused by background images, create a template for each book page.	Settings  : Application -> Templates See also chapter <i>Templates for Content Objects</i> Explorer: New Book Page dialog -> Template See also chapter <i>New Book Page</i>

Example

Steps to reduce the size of documents	Result in KB
Standard project with 20 recorded steps & documentation	4850
+ Merge Screens	4065
+ Merge Screens	2414

Steps to reduce the size of documents	Result in KB
+ Auto Crop	
+ Merge Screens + Auto Crop + Grayscale	1374
+ Merge Screens + Auto Crop + Indexed Color	935

12.5 Server Workarea

A server workarea helps groups of authors to collect and manage workareas centrally. This allows uniform resources to be made available to all authors. It also allows content to be set up centrally and assigned to the respective authors for recording. A server workarea is created using the Manager, which is a server-based productive environment.

Further information about the Manager is available in the manual and the guides for the product.

12.5.1 Menus and Functions of the Server Workarea


If you are connected with a server workarea, these additional settings and functions are available in the Producer:

Server Workarea Menu

In the *Explorer*, there is an additional menu *Server Workarea* display, which contains functions for managing the objects in the local workarea and the server workarea. Specific functions are also available in the context menu of an object as well as in the object editor.

For more information, see the *Server Workarea Menu* chapter.

Settings






There are settings that influence how you work with the server workarea. Open the *Settings...*  dialog box in the *Producer -> Server Workarea* area.

Further information is available in the chapter *Server Workarea*.


Object Icons

After a connection to a server workarea has been made, the objects in the tree structure will have these additional icons:

Icon	Description
------	-------------

Icon	Description
	Object is locked and cannot be edited.
	Write permission is available and object is not edited.
	Object is kept for offline editing and not edited.
	Write permission is available and object is edited.
	Object is server object, but locally not loaded.

Synchronization

To upload and download content and resources, the Producer uses the synchronization between the local workarea and the server workarea. The toolbar of the Explorer contains the button [Synchronize Workarea](#)  to start synchronization.

Further information is available in the chapter *Synchronization of a Server Workarea*.

12.5.2 Reusing Content from Other Workareas

You can reuse content and resources from another workarea to support content alignment between different workareas. This is very helpful for the central management of, for example, templates, styles, or to reuse content in different content scenarios. For this you can use the workarea extensibility functionality which needs to be set up from SAP Enable Now Manager.

Prerequisites

Enable the workarea extensibility functionality and set up an overlay for your workarea.


For information on how to set it up see the chapter *Reuse content from other workareas* in SAP Enable Now Manager Manual.

Fetching an object

Once you have configured the workarea overlay, you can start reusing the content from another workarea. You can recognize inherited content by an orange dot in front of the name.

To edit an object that comes from a workarea overlay, you need to fetch this object to your local workarea.

To fetch an object, proceed as follows:

1. Select the object you want to edit that comes from a workarea overlay.
2. From the context menu or [Server Workarea](#) menu select  [Start Editing](#).

3. The *Fetch inherited objects* dialog opens:
 1. Select *Yes* to fetch the data and to edit the object.
 2. If you want to keep the object untouched and to abort the editing, select *No*.
4. The object is now fetched to your local workarea and becomes part of it. You can edit it.

i Note


The fetched object will not be synchronized with the base workarea anymore. Changes that are done in the base workarea will not take effect in your workarea.

Resetting the content


To reset the changes you have made and return the original object from a base workarea, you need to delete your locally edited object from the Manager interface. Once you delete it, the original object is restored and you see an orange dot in front of the object name again.

12.5.3 Server Workarea Menu


The menu contains commands for the management of objects between the local and the server workarea.

This menu is available only if the local workarea is connected with a server workarea. Use the menu *Workarea -> Administration -> Connect with Server...*  to connect with a server workarea.


12.5.3.1 Check Out Assigned Objects

The *Check Out Assigned Objects*  command allows you to download all objects contained in a server workarea to the local workarea which are assigned to you. However, you don't have to check out the complete structure. When the objects are checked out, you can choose which ones to work on and start editing them manually.


12.5.3.2 Check Out Objects...

The *Check Out Objects...*  command lets all of the objects in a server workarea be downloaded to the local workarea. Selecting the command opens a list containing all the objects in the server workarea. The objects that are not yet located in the local workarea are selected. Once the desired objects have been selected, they can be copied to the local workarea using the *Check Out Objects...* function.


12.5.3.3 Synchronize Workarea...

The *Synchronize Workarea...*  command synchronizes the objects in the local workarea with those in the server workarea.


12.5.3.4 Save to Server



The *Save to Server*  command saves the object currently selected in the explorer to the server workarea.

12.5.3.5 Revert Object...

The *Revert Object...*  command replaces the local version of the object with the most recent version deposited in the server workarea. This requires the write permission for the object.

12.5.3.6 Start Editing

The *Start Editing*  command gets the write permission for the object selected in the explorer from the server workarea and updates the version available in the local workarea. The object can then be edited in the local workarea.

An object for which no write permission is available is indicated by a blue cloud  on the object icon. If you possess the write permission a green pencil  appears on the object icon.


i Note


You can only acquire the write permission for an object if it has not already been checked out by another author from the server workarea into their local workarea.

i Note


If you start editing an object that comes from a *workarea overlay*, the object is fetched to your local workarea and becomes part of it. You can then adjust it. This fetched object will not be synchronized with the base workarea anymore. For more information see *Reusing content from other workareas* section.

12.5.3.7 Finish Editing


The *Finish Editing*  command returns the write permission for the object selected in the explorer to the server workarea and saves the changes made in the local workarea within the server workarea.

The relinquished write permission is then symbolized on the object by a blue cloud .

12.5.3.8 Change Workflow...


The *Change Workflow...*  command allows an object's workflow to be edited. It opens a dialog box that you can use to enter a comment and to assign the object to another user. It is still possible to amend the status, set flags, and publish the object.

12.5.3.9 Keep Object for Offline Editing


The [Keep Object for Offline Editing](#)  command allows you to "pin" a server object to your local workarea. Subsequently, the selected object will not be automatically finished during workarea synchronization before shutting down the application or switching the workarea.

Use this command if you want to start editing an object even without an internet connection. If you haven't started editing the selected object yet, this command automatically allows you to start editing the object.


> Recommendation

To ensure consistency of the content structure as well as to enable other authors to process the content, please remember to release the object after you've finished editing or when you're online again. Use the [Release Object for Online Editing](#)  command to do so.


12.5.3.10 Release Object for Online Editing

The [Release Object for Online Editing](#)  command releases a server object previously kept for offline editing, finishes editing automatically, and saves the modifications, if there are any, to the server. The command appears only for local server objects.

12.5.3.11 Update from Server


The [Update from Server](#)  command updates the object that has just been selected in the explorer with an up-to-date copy of the object from the server workarea.

12.5.3.12 Remove Locally...


The [Remove Locally...](#)  command removes the data (like assets) of the currently selected as well as all objects in the subtree below from your local workarea and excludes the object and sub objects from future server synchronizations. This allows you to keep only objects you need for your authoring work without messing up your structure nor your local hard drive space while keeping the server structure intact. The command appears only for local server objects.


To load the object data back into the local workarea right-click the object and select [Load from Server](#) .

12.5.3.13 Save All Objects to Server...

The [Save All Objects to Server...](#)  command saves a number of local workarea objects to the server workarea. It does so by opening a dialog box in which the available objects can be selected.

12.5.3.14 Start Editing All Objects...


The [Start Editing All Objects...](#)  command checks out the write permission for the objects available in the local workarea. It does so by opening a dialog box displaying the objects contained in the server workarea. You can select these objects and then the objects' write permission is checked out using the [Start Editing](#) button. This involves copying the current versions of the objects to the local workarea.


The objects for which write permission has been checked out are indicated by a green pencil  on the object icon.

i Note


You can only acquire the write permission for an object if it has not already been checked out by another author from the server workarea into their local workarea.

12.5.3.15 Finish Editing All Objects...


The *Finish Editing All Objects...*  command returns the write permission for all objects in the local workarea and saves the changes applied in the local workarea to the server workarea. When you choose this command, a dialog box opens. It displays the objects with local write permission. The write permission for the selected objects can now be saved in the server workarea using *Finish Editing*.

A blue cloud  on the object symbolizes that you've given up your write permission.

12.5.3.16 Change Workflow for All Objects...

The *Change Workflow for All Objects...*  command enables the editing of the workflow for all objects. A dialog box opens in which you can select the objects available in the local workarea. Choose *OK* to open a dialog box in which you can enter a comment along with the user you want to assign the objects to. It is still possible to amend the status, set flags and publish the objects.



12.5.3.17 Keep All Objects for Offline Editing...

The *Keep All Objects for Offline Editing...*  command allows you to "pin" multiple server objects to your local workarea. It opens a dialog box displaying all objects located in the subtree of the currently selected tree object. By using the checkboxes you can select and deselect individual objects. When you choose *OK*, all selected objects are "pinned" to the local workarea. Objects you have not started editing yet, will be automatically started editing.


Subsequently the selected objects will not be automatically finished on workarea synchronization before shutting down the application or switching the workarea. Use this command in case you want to proceed editing multiple objects even without having an internet connection.

› Recommendation


To ensure consistency of the content structure and to enable other authors to process the content, please remember to release the objects when you're finished editing or when you're online again. Use either the *Release*

All Objects for Online Editing...  command to do so or release objects individually by using the *Release Object for Online Editing*  command.

12.5.3.18 Release All Objects for Online Editing...

The *Release All Objects for Online Editing...*  command lets you release multiple server objects previously kept for offline editing. A dialog box that displays all objects kept locally in the subtree of the currently selected tree object opens. By using the checkboxes, you can select and deselect individual objects within the selection. By choosing *OK*, all selected objects will be released to the server. This finishes the editing and the modifications are saved to the server.


12.5.3.19 Update All Objects from Server... (without Synchronization)

The [Update All Objects from Server...](#)  command updates the objects available in the local workarea with an up-to-date copy from the server workarea. It does so by opening a dialog displaying the objects contained in the server workarea which are to be updated. These objects can then be selected and copied to the local workarea using the [Update from Server](#) button.


12.5.3.20 Manage

The menu contains commands for the advanced management of objects in connection with a server workarea.

12.5.3.20.1 Manage Tags...


The [Manage Tags...](#)  command opens a dialog box in which new tags can be created and existing tags can be deleted.

12.5.3.21 Manage Tasks...

The [Manage Tasks...](#)  command opens a dialog box that displays the object tasks. By double clicking a task, you select the object in the explorer and close the dialog box.

When you choose [Filter...](#), you call a dialog box in which you can select various filter criteria for filtering a list. [Reset Filter](#) returns the original state.

12.5.3.22 Work Offline

If you use Manager to launch a server workarea, the [Work Offline](#)  function allows the connection with the Manager to be severed while work is in progress. The connection is intended only for downloading objects and for saving objects on the server. While the connection is severed, entries in the [Server Workarea](#) menu are grayed out.

12.5.3.23 Open Object in Manager

The [Open Object in Manager](#) command opens the currently selected object in Manager interface in a browser window.

12.5.3.24 Open Manager


The *Open Manager* command opens the currently connected workarea in Manager interface in a browser window.

12.6 Synchronizing a Server Workarea

Synchronization supports the communication between the local workarea in the Producer and the server workarea. The contents and resources can be shared easily, available changes and new objects can be checked out or saved to the server, and it only takes one click to start editing.

The following chapters give you an overview of the settings and the use of synchronization, and shows you use cases for your daily work.

12.6.1 Synchronizing a Workarea

You can synchronize of a workarea by using the *Synchronize Workarea*  toolbar button in the *Explorer*. With the click of a button, the Producer synchronizes the server objects in the local workarea with the server workarea regarding available changes. Subsequently local server object modifications are saved centrally and the local workarea is updated with central changes. This means, the synchronization runs in both directions.


> Recommendation

Depending on the number of objects and the available changes in a workarea the synchronization can take a while. The synchronization should be done as preparation of the editing as well as after the editing of a number of objects.

i Note

After the synchronization your changes are visible on the Manager with some minutes delay. This depends on the *Caching Time Range* in your server settings.


Locally changed objects

In a workarea, edited objects are highlighted with a star icon . This shows you whether changes are only available locally.

Synchronizing when closing Producer

When closing the Producer, a dialog box with the buttons *Synchronize* and *Keep Object for Offline Editing* is shown. Clicking the *Synchronize* button triggers the synchronization. This means, available changes are saved to the server and the editing of local edit server objects is finished automatically, except for server objects which have been kept explicitly for offline editing.

When you choose *Keep Object for Offline Editing*, no synchronization takes place. This means local changes and editing information will not be exchanged with the server.




You can predefine this behavior in the *Settings*  in *Producer > Server Workarea*, as well as for the events of switching to another server or the workarea.

12.6.2 Keeping Objects for Offline Editing

Objects can have two states, either they are **local** without connection to a server or they are **connected** to a server. To edit objects with a server connection, objects can be kept for offline editing regardless of the automatic *Finish Editing* on Producer shutdown or workarea switch. This excludes them from the object collection and from being touched by server synchronization.

Keep object for offline editing




This is how you can keep objects for offline editing:

- **Single objects**
 - Select an object in the *Explorer* tree.
 - Select *Keep Object for Offline Editing*  in the upper section of the *Object Editor*. Or use the object's context menu to select this option.
- **Multiple objects**
 - Select the root item of the branch containing the objects.
 - Extend the *Server Bulk Actions*  menu in the upper section of the *Object Editor* and choose *Keep All Objects for Offline Editing...* . Or use the object's context menu -> *More...* to select this option.

A dialog box in which you can select objects opens. Confirm with *OK*.

Release object for online editing

To enable objects synchronization again and for being edited by other authors, offline objects can be released like this:

- **Single objects**
 - Select an object in the *Explorer* tree.
 - Select *Release Object for Online Editing*  in the upper section of the *Object Editor*. Or use the object's context menu to select this option.
- **Multiple objects**
 - Select the root item of the branch containing the objects.
 - Extend the *Server Bulk Actions*  menu in the upper section of the *Object Editor* and choose *Release All Objects for Online Editing...* . Or use the object's context menu -> *More...* to select this option.

A dialog box in which you can select objects opens. Confirm with *OK*.

12.6.3 Additional Synchronization Settings

For each object there are additional settings that specify how the object is handled for other users. In general, the master author uses the settings to provide predefined content or resources for the authors.

The settings are:

- *Must Have:*
 - Activate this setting if the object has to be downloaded automatically.
 - The setting can be used for content objects and resources.



- [Create Shortcut:](#)
Activate this setting if the object has to be added to the users' workareas as a shortcut.
This setting can be used for content objects.

12.6.4 Samples for Using Synchronization

The following samples show you how to use synchronization in different situations.

Download new objects from Manager that are not in a local workarea

Steps to do:

- [Synchronize Workarea](#)  (if your local workarea has only a subtree with all of the content, you will get new objects only for your subtree but not outside your tree)
or,
as an alternative, use the menu [Server Workarea -> Check Out Objects...](#)  (a dialog box shows all new objects and you can select the objects you want to download).

Retrieve all changed objects from Manager (changes of other authors)



Steps to take:

- [Synchronize Workarea](#) 
or,
as an alternative, [Start Editing All Objects...](#)  (and [Finish Editing All Objects...](#) ) for the required subtree.

12.7 Preview library

You can generate a library for your content based on the workarea structure. Only objects that have not been set to [Hidden](#) are included in the library. In the workarea defined filters are also used for the open library. The library is displayed in a new browser window.

There are the following buttons in the toolbar:

-  [Preview library:](#)
Generates a library for the complete workarea tree.
-  [Preview library from Selected Group:](#)
Generates a library for a selected group along with the included content.

12.8 Filters in the Workarea

The ability to set up filters is offered to enable large workareas to be better administered. These can be applied to the tree view in the [Explorer](#), for publishing workareas or for the use in the library by the learners.

A filter is based on one or more properties that you can freely create using conditions and assign to the desired learning content. These kinds of properties can be master tags or tags as well as language or type of objects. If a filter is selected, only those objects are displayed in the tree view that correspond to the filter.

12.8.1 Master Tags and Tags

Tags are terms or strings that are specified by authors for content objects and can be used to create filters. There are two types of tags:



Master tags are created centrally by master authors and are stored as [Adaptable Resources](#) resource. Authors can use the master tags to assign them to their content objects. The type is recommended for globally-used tags for consistent use in filters.

Master tags

For more information, see [Managing Tags](#).






Author tags can be created individually by authors and are stored in assigned content objects only. If the tag is not assigned to a content object, it is not available anymore. The type is recommended for object-specific tags which are used temporarily.

Author Tags

For more information, see [Assigning Tags](#).


12.8.1.1 Managing Tags

Author tags  and master tags  are managed in the [Manage Master Tags](#) dialog box. To open this dialog box, choose [Tools -> Manage Master Tags...](#)  in the menu.

In the [Master Tags](#) dialog box, you can create, rename, and delete master tags and author tags.

Creating master tags


To create a master tag, proceed as follows:

1. Select the [Add](#)  button.
A dialog box opens.
2. Enter the name of the master tag.
3. Confirm with [OK](#).

The new master tag is displayed in the list.

Renaming tags

You can change the name of a master tag. Proceed as follows:

1. Select the [Rename](#)  button.
The [Rename Master Tag](#) dialog box opens.
2. Change the name of the master tag.
3. Confirm with [OK](#).

The tag is displayed with the new name.

Note

When renaming a master tag that has been assigned to content objects you have the following options:

Master and All References


Renames the master tag and all assignments in the content objects.

Master Only

Renames the master tag only. For the assignments a new author tag with the previous name of the master tag is created.

Removing tags

To remove a master tag, proceed as follows:

1. Select the author tag in the list.
2. Select the [Remove](#)  button.

Once you have edited your master tags, close the dialog box by clicking [OK](#).

Note

When removing a master tag that has been assigned to content objects you have the following options:

Master and All References


Removes the master tag and all assignments in the content objects.

Master Only

Removes the master tag only. For the assignments a new author tag with the name of the master tag is created.

Replacing tags

You can replace the assignments of a tag in your content objects with another tag. To replace a master tag or author tag with another tag, proceed as follows:

1. Select the master tag or author tag in the list.
2. Select the [Replace](#)  button.
The [Replace Master Tag](#) dialog box is opened. The selected tag is displayed in the [Replace](#) field.
3. Select a master tag or author tag in the [With](#) dropdown box.
4. Select [OK](#).

The tag in all objects are replaced with the replace tag.

Changing author tags to master tags



You can change your created author tags to master tags. Proceed as follows:

1. Select the author tag in the list.



2. Select the *Change to Master*  button.

The tag is displayed with *Master Tag* type and icon.

12.8.1.2 Master Tags Resource


When you create master tags, a *Master Tags*  resource is created in the *Adaptable Resources*  of the resource tree. This resource includes all master tags.

The resource allows you to use the master tags consistently in different workareas and you can also handle the resource in an authoring environment with a server workarea.


Type	Description
Icon	 <i>Master Tags</i> resource
Basic properties	The object editor contains the following parameters: <ul style="list-style-type: none">• <i>Name:</i> Specifies the name of the resource.• <i>Object Type:</i> Specifies the type of the resource.• <i>Content:</i> Shows the available master tags of the resource.
Object functions	The object editor contains the following control: <ul style="list-style-type: none">•  <i>Edit Master Tags...</i> Opens the <i>Manager Master Tags</i> dialog box.

Merging master tags

In some cases, more than one *Master Tags* resources is available in your workarea. This can happen when different users creating master tags in their local workareas.

To merge *Master Tags* resources, select *Tools -> Merge Master Tags* .


Note

The merged *Master Tags* resource cannot be undone. The merged resources are moved to the *Trash* .

12.8.1.3 Assigning Tags


If you have defined master tags, you can assign them to the objects within your tree structure:

1. Select the object in the tree structure to which you would like to assign a master tag.

2. Select [Edit Tags...](#)  next to the parameter [Tags](#) in the object.
The assignment dialog box is opened.
3. You can now assign one or more master tags to the object. To do so, select the corresponding checkbox.
4. Select [OK](#) to confirm the dialog box.

Creating a tag

You can create additional tags in the [Edit Tags](#) dialog box. This allows you to provide a filter with more complex criteria.

The tags created in this manner are not available in the [Edit Master Tags...](#)  dialog box and are only used for the object.


To do this, enter a tag in the text box and select [Add](#). You can then assign the tag to your object.
If you want to delete the tag from the object, deselect the tag in the dialog and confirm with [OK](#).

Used tags

In the [Manage Master Tags](#) dialog box, you can see whether a tag is assigned and how often. A number is displayed in the [References](#) column of the tags list.

12.8.2 Creating Filters

To create a filter for your workarea, proceed as follows:


1. Select [Filter Tree](#)  -> [New Filter...](#) beside the search field.
The [Edit Filter](#) dialog box opens.
2. Select [New](#).
3. Enter a [Filter Name](#) in the upper text box.
If you do not enter a name, the combination of the filter criteria is inserted for it.
4. You can specify the filter using the dropdown box.
You can find examples in the following section:

- **Selecting properties**

You can select properties which are used to define the filter from the drop-down list on the left:

- [Tag](#):
You can select an existing master tags or tags using the drop-down list on the right.
- [Name](#)
- [Language](#):
You can select a language using the drop-down list on the right.
- [Description](#)
- [Short Description](#)
- [Context](#)
- [Context: Desktop Assistant](#)
- [Roles](#)
- [Keywords](#)
- [UID](#)

- *Duplication Master*
 - *Duplication Source*
 - *Object Type*
 - *Creation Time:*
You can select a date using the calendar on the right.
 - *Modification Time:*
You can select a date using the calendar on the right.
 - **Selecting conditions**
Conditions can be specified to further specify the filter in the drop-down list in the middle:
 - *is* (not for *Description*, *Short Description*)
 - *contains*
 - *begins with* (not for *Description*, *Short Description*)
 - *ends with* (not for *Description*, *Short Description*)
 - *does not contain* (not for *Description*, *Short Description*)
 - *is not* (only for *Creation Time*, *Modification Time*)
 - *is lower* (only for *Creation Time*, *Modification Time*)
 - *is higher* (only for *Creation Time*, *Modification Time*)
 - *is between* (only for *Creation Time*, *Modification Time*)
 - *is not between* (only for *Creation Time*, *Modification Time*)
 - **Entries**
Entries can be made (for example, *Name*, *Description*) to describe the filter in accordance with the properties. These are not saved and must be reentered if the filter is used again.
5. After a filter definition is created, the *and* / *or* buttons are activated that you can use to include other definitions to refine the filter.
- *and:*
All definitions have to correspond to the objects to be displayed.
 - *or:*
One of the definitions has to correspond to the objects to be displayed.
6. Select *OK* to save your filter.

The created filter is now available in the *Filter Tree*  menu in the *Explorer*.

12.8.2.1 library Settings

The *library Settings* define how a filter affects the display of the library and whether the filter is to be displayed in the library or is only intended for editing in the *Explorer*. The settings affect both the local as well as a published workarea.

- *Generate prefiltered library with filter:*
By this setting the library opens in a filtered structure matching the active filter in the *Explorer*. If the setting is deactivated the library displays all content, independent from the active filter.

- *Use filter in unfiltered library:*
By this setting the filter is displayed both in the *Explorer* and in the library. If the setting is deactivated, the filter can only be used in the *Explorer*.
- *Use filter in prefiltered library:*
By this setting the filter is also available for selection in a prefiltered library. In case the filter will not return any matches, it will not be available within selection. By deactivating the setting, only the filter necessary for the prefiltered status can be used.


12.8.2.2 Examples of Filter Definitions

The filter definitions can be combined any way you want. Several typical uses are described in the following section:

- *Language – is – en-US*
Objects are filtered according to their language with this filter. The language code has to be entered in this case.
You can find the language code for your objects in the *Language* field of the object editor.
- *Description – contains – description text*
Objects that contain a specific word or text passage as a description can be filtered out with this filter. (similar to *Name* and *Short description*)
- *Context – contains – context name*
Objects can be filtered using their context information with this filter.
- *Keywords – is not – keyword*
Objects can be filtered using their keywords with this filter. In this case, objects that contain this term are filtered out.
- *Object type – is – project*
Objects can be filtered using their type with this filter. The object types that can be used are:
 - *group* - Group
 - *project* - Project
 - *book* - Book
 - *slide* - Book Page
 - *cdoc* - Text Unit

12.8.3 Filter Resource

Filters are stored in the *Filters* resource type. This means you can use the filters consistently in different workareas and you can also handle the resource in an authoring environment with a server workarea.

The *Filters*  resource is stored in the resource tree of the *Explorer*. The resource is available once a filter has been created.

Functions in the object editor

The following functions are available when selecting the *Filters* resource or a filter definition in the resource tree:

- [New Filter...](#) (Resource group)
Opens the [Edit Filter](#) dialog box, where you can create a new filter.
- [Edit Filter...](#) (Single resource)
Opens the [Edit Filter](#) dialog box where you can edit the selected filter.
- [Apply Filter](#) (Single resource)
Activates the selected filter in the [Explorer](#).

12.9 Searching in the Tree Structure


The search function enables you to perform specific searches for content in the tree structure of the [Explorer](#). The search field is above the content tree.

Searching content

You can enter a search term in the search field. A dropdown box allows you to select a search term from your previous searches. The relevant content is displayed as soon as a search term is entered.

When you select the [Next](#) button or `Enter` key, the tree selection jumps to the next found entry in the tree. To clear a search, choose [Clear](#) in the text field or press the `ESC` key.

Search options

Select the [Search Options](#)  button to display settings, that further specify the content you are searching for:

- [Match Case:](#)
Use this option to search a search term case sensitive.
- [Match Whole Word Only:](#)
Use this option to search for whole words and not for parts of words.
- [Search Mode:](#)
Specify the detail level for your search:
 - [Search Name Only](#)
 - [Search in Visible Attributes](#)
 - [Search Custom Selection of Attributes](#)
 - [Search All Attributes](#)
- [Select Search Attributes...](#)
Show and hide the search attributes to specify the search.
- [Highlight Results:](#)
Highlights the search results in the complete content tree.
- [Filter Results:](#)
Filters the content tree and shows the search results only.
- [Result List:](#)
Shows the search results in the list view.

Search attributes

You can specify the object properties in which you want to search. Select [Search Mode -> Select Search Attributes...](#) to show the available search attributes. The list closes when you select [Select Search Attributes...](#) again.

Select one of the following options and enter a search text:

Option	Search text
<i>Name</i>	Enter an object name.
<i>Description</i>	Enter a word or a sentence to search in the description.
<i>Short Description</i>	Enter a word or a sentence to search in the short description.
<i>Keywords</i>	Enter a keyword from the <i>Keywords</i> parameter.
<i>Object Type</i>	Enter the technical name of a content object: <ul style="list-style-type: none"> ○ group - Group ○ project - Project ○ book - Book ○ slide - Book Page ○ cdoc - Text Unit
<i>UID</i>	Enter the UID of an object.
<i>Language</i>	Enter a language code to search for a language. See <i>Content Languages Overview</i> .
<i>Context</i>	Enter a context parameter.
<i>Context: Desktop Assistant</i>	Enter a context parameter for a Desktop Assistant.
<i>Roles</i>	Enter a role name from the <i>Roles</i> parameter.
<i>Any Other Properties</i>	Use this option to search in the other properties of the objects.

12.10 Glossary of Terms




A glossary of terms allows you to add term definitions to your content. During playback the learners have the ability to select a specific term in a text and afterwards the glossary entry appears in a pop-up window.

The glossary of terms is a group with text units for the term definitions that are applied to the content.

Additionally, you can display the glossary entries in a glossary view in the library. See chapter *Glossary View in library*.

12.10.1 Creating a Glossary

To create a glossary, proceed as follows:

1. Create a group using the [New Group](#)  toolbar entry.
You can use several sub-groups to structure (for example, alphabetic) the content in the [Explorer](#) or for the glossary view in the library.
2. Create the text units using the [New Text Unit](#)  toolbar entry. Insert the text units into the group.
3. Define the glossary entries. Each text unit includes an own term definition:
 - [Name](#): Insert the term. A term can consist of up to four words.
 - [Document Type](#): Select the type [Glossary](#) .
 - [Description](#): Insert the term definition.
4. Afterwards, apply the glossary group to the workarea:
 1. Select the [Tools -> Glossary -> Apply Glossary...](#) menu.
A setting dialog box opens.
 2. Adapt the settings in the dialog according to your needs.
 3. Confirm the dialog with [OK](#).

Settings of the apply glossary dialog box

The settings dialog box contains the following settings:

- [Use Glossary from Group](#):
Defines the glossary group containing the glossary text units.
- [Specific Language Only](#):
Defines, whether the glossary will only be applied to content with a specific content language.
- [Language](#):
Defines the content language for the setting [Specific Language Only](#).
- [Apply Recursively](#):
Defines, whether the glossary is also used for the sub-objects of the selected content structure.
- [Apply to Descriptions / Short Descriptions](#):
Defines, whether the glossary will be applied to the respective object properties.
- [Apply inside Projects / Book Pages](#):
Defines, whether the glossary will be applied to the content of the respective objects.

i Note

Make sure to use a consistent spelling in your content. To display a glossary entry correctly, the spelling of a term in a text has to be equal with the glossary entry.

12.10.2 Removing a Glossary

The applied links of a glossary can be removed from the content or a specific group, when no longer needed or outdated.

To remove a glossary, proceed as follows:


1. Select the group in the *Explorer*.
2. Select *Tools -> Glossary -> Remove Glossary...* menu.
A setting dialog opens.
3. Adapt the settings in the dialog box according to your needs.
4. Confirm the dialog with *Ok*.

Settings of the remove glossary dialog box

The settings dialog box contains the following settings:

- *Use Glossary from Group:*
Defines the glossary group with the contained text units.
- *Specific Language Only:*
Defines, that the glossary will only applied to content with a specific content language.
- *Language:*
Defines the content language for the setting *Specific Language Only*.
- *Apply Recursively:*
Defines, that the glossary is also used for the sub objects of the content structure.
- *Apply to Descriptions / Short Descriptions:*
Defines, that the glossary will be applied to the parameters.
- *Apply inside Projects / Book Pages:*
Defines, that the glossary will be applied to the content of this objects.

12.10.3 Importing a Glossary

For the easy creation of a glossary you can import a list (CSV file) of glossary entries. During the import the Producer creates a text unit with the type *Glossary*  for each glossary entry and inserts the texts contained in the CSV file. Thus, you do not have to create each text unit individually.

The list of glossary texts should be a simple CSV file with the following structure:

- first column: **term**
will be imported into the *Name* parameter
- second column: **term definition**
will be imported into the *Description* parameter

To import the CSV file, proceed as follows:

1. Create a group using the *New Group*  toolbar entry.

2. Select *Tools -> Glossary -> Import Glossary...* menu.
A setting dialog opens.
3. Adapt the settings:
 - *Import into Group:*
Defines the glossary group in which to import the glossary.
 - *Language:*
Defines the content language for the text units.
4. Confirm the dialog with *Ok*.

If you want to apply the glossary, see the chapter *Creating a Glossary*.


12.10.4 Using the Glossary

Glossary view in library

The created glossary can be displayed as glossary view in the library. Via a button in the header bar the learner can open the view. The course structure displays the contained groups of a glossary and the content view displays the content of all text units for a selected group. The glossary root group will not be shown in the content tree of the library.

Learners can use the glossary view to look up specific terms and descriptions, which are part of the learning content.

Activate the glossary view as follows:

1. Open *Tools -> Settings...* 
2. Select the section *Playback Settings -> library -> Glossary*.
3. Select the created glossary in the *Glossary group* setting.
4. Confirm the dialog with *Ok*.

Further settings

- *Use library language (Playback Settings -> library -> Glossary):*
Defines, that only glossary entries with the language of the root group will be shown in the library. Deactivate the option to show the glossary entries of all languages.
If the root group uses the language *Multiple languages* all glossary entries will be shown.

Glossary in documentation

When you generate a documentation, you can define the glossary as fragment to include all used glossary entries as table into the document. All glossary entries are linked in the document and the user can jump to the definition in the glossary table.


See the chapter *Fragments* for further information.

12.10.5 Glossary Styles

A glossary uses different styles for text and bubbles during the playback of content. This is necessary to distinguish this type of content from the general content and to make it clearer to read for the user.

Glossary link


A special text style is available for the display of a glossary link in a text. The style is used automatically after the glossary is applied.

The text style *Glossary Link* can be edited in the text style editor (menu *Tools -> Customization -> Edit Text Styles...* ) and is located in the section *Inline Styles*.

Glossary in trainer

When you play back the library, a simulation or a book, the trainer functionality displays a glossary entry in a window. The style of the window is defined using the current trainer style.

Glossary in a Desktop Assistant

When you play back Desktop Assistant content, you can define an individual bubble in the settings to display a term entry. The *Settings*  under *Desktop Assistant: Playback Settings -> Desktop Assistant -> Glossary Bubble* contains the following settings:

- *Style:*
Defines the appearance of the glossary bubble. Here you can select a bubble style resource from the drop-down list.
- *Size:*
Defines the width and height of the glossary bubble in pixels.

12.11 BPM Import and Export

To structure your business processes in the Producer, you can import BPM structures (built in Business Process Model (BPM) applications) into the workarea. A group and project structure with relevant object names is created in the *Explorer*. A tree based on the structure is available where you can create the required content.

The structures of the following BPM applications can be imported:

- ViFlow
- Nimbus
- ARIS
- Signavio

12.11.1 Training Available



Signavio integration is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

ARIS integration is available as interactive training in the SAP Enable Now Info Center.

[Enable Now](#)

12.11.2 Importing a BPM Structure

Import your BPM structure as follows:

i Note

The import process can differ depending on the BPM application you are using.

1. Create the required process model in your BPM application.
2. Publish this:
 - **ViFlow**
Publish the process model under *Edit -> Publish* from ViFlow. The *structure.xml* is created here as part of the ViFlow web model in the *html* folder.
 - **Nimbus**
Publish the process model as a simplified XML structure (Simplified XML) to add all the process steps to a file.
 - **Signavio**
Publish the process model as BPMN file.
3. Open the Producer.
4. In the *Explorer*, open the *Tools -> Business Process Models* menu and select the corresponding import command for the required structure. The import dialog box opens.
5. Select the published structure file and select *Open*.
6. A settings dialog opens (not for all BPM types). Modify the following settings and confirm with *OK*:
 - *Import type: new structure, update structure*
 - *Create empty projects*

The folder structure is then created in the *Explorer*, where you can edit it and start creating content.

i Note

For Signavio a XML file of the imported structure is inserted in the workarea. The file is used for the export of the Signavio structure. Do not delete the XML file.

12.11.3 Updating a BPM Structure

Updating a BPM structure in the Producer allows you to insert modified or new content from a BPM application into an existing structure. This can be done using the import function by importing the updated structure. See the chapter [Import of a BPM structure](#).

To perform the update, you need to select the import type [Update Structure](#) in the import settings dialog.

The update is recommended for unmodified structures of the Producer, because manually created objects will be moved into [Unsorted](#). In the structure changed objects will be resorted like in the import structure.

12.11.4 Exporting a Structure


Exporting Signavio links

The export Signavio function allows you to export the content structure of a workarea to a BPMN file for use in Signavio. The file includes the links of the groups.

Signavio links can be exported as follows:


1. Open the [Tools -> Business Process Models -> Signavio Export...](#) menu in the [Explorer](#).
2. Enter a [Server Name](#) for the content location. Confirm with [OK](#).
3. Select the target directory and insert a file name.
4. Select [Save](#) to export the file.

12.12 Inserting a File

In addition to the learning content and documentation that has been created, you can insert other files. The [Insert File...](#)  function in the Producer is available to you for this purpose. For example, these files can be Word or PDF files containing additional or general information but images and media files are also possible.

Inserting a file

This is how you insert a file:

1. Select an object in your tree structure of the [Explorer](#).
2. Select [Insert File...](#)  in the object editor.
The [Select external document](#) dialog box is opened.
3. Select a file that you want to insert. Select [Open](#).


The file is inserted in the last place within the object.

After they have been inserted, the files integrated in this way can be selected both in the [Explorer](#) and the library and can also be inserted in book pages.


> Recommendation

Instead of using the function to insert files, you can also drag and drop them to the [Explorer](#). This inserts the file in the currently selected object.

Updating a file

An imported file can be re-imported and updated by selecting [Update File](#) . The Producer accesses the original file location – this is the path that was entered and saved upon importing the file under the setting [Original Path](#). The setting [Last Import](#) displays the date and time that the file was last imported so that you can verify whether the file is up-to-date.

i Note


This option is only displayed if the original file is available. Otherwise, you can import a new file by selecting the option [Replace File...](#) .

Updating multiple files

If you need to update multiple files at once, you can do it with the [Update Externally Loaded Files](#) functionality:

1. Select a group that you want to update files from.
2. Select [Tools -> Workarea Structure -> Update Externally Loaded Files...](#)
3. A dialog opens where you can confirm or change the group to update files from. Select [Ok](#).
4. An information window with the number of successfully updated objects and failed updates is shown. Confirm with [Ok](#).

i Note

Failed updates are quite likely to happen because the original file is not available. If it is the case, you can import a new file by selecting the option [Replace File...](#) .

Your files are now updated.

i Note

The functionality to [Update Externally Loaded Files](#) will not work for converted media objects. For converted files the original file is not available in the [Original Path](#) setting. Only unconverted files or for *manually created media objects* can be updated.

12.13 Reference Counter and Reference View

The reference counter displays all existing object references from a workarea in the [Explorer](#). This allows you to find and manage references for your objects.

- **Structure reference**
Displays how often an object is used in the content structure.

- **Content reference**

Displays how often a content object is linked in other content objects.

Activating the reference counter

To enable the reference counter, select menu [View -> Show Structure Reference Counter](#) or [Show Content Reference Counter](#). A number will appear in front of an object in the tree structure to indicate how often it has been referenced.

Referenced by

The [Referenced by](#) parameter in the object editor shows you the existing references for each selected object. An entry displays the tree path and is linked with the object. You can select a link to jump to the object in the tree. The selected reference is bold marked.

A [structure reference](#) is highlighted in blue and a [content reference](#) is highlighted in green.

The [Dependencies...](#) button opens a dialog box with a list of all existing dependencies for an object within a workarea. See also [Dependencies Dialog Box](#).

12.13.1 Reference Counter

The reference counter shows the number of references for an object. There are two types:

-  **Structure reference counter**

The reference counter displays how often an object is available in the structure. For example, a simulation project that is used multiple times in different parts of the structure.

The physical object of a learning content can be referenced as often as necessary. This means, that each object in the tree is a reference. If changes are made in a reference, the changes are also contained in the other references. See also [Using References](#).

-  **Content reference counter**

The reference counter displays how often an object is linked in the content. For example, an imported image that is used in different content descriptions.

12.13.2 Reference View

The reference view displays the content tree and, next to it, a tree or list of references. You can select an object in the content tree to display the corresponding references.

You can open a reference view from the [Change Workarea View](#) control in the toolbar. There are two views:

- **Object reference tree**

The reference view displays the references in a tree structure. You can see the objects and the position of the objects in the structure.

- **Object reference list**

The reference view displays the references in a list. You can see the objects and you can sort the columns.

> Recommendation

We recommend that you activate only the required reference counter to reduce the displayed references.

12.13.3 Dependencies Dialog Box

The *Dependencies* dialog box displays all existing dependencies for an object within a workarea. This could be other objects, files, and resources. Displaying dependencies will provide you with an overview of existing references, which is useful for publishing purposes and for object management.

The dialog box can be opened from the context menu entry *Dependencies...* for each object. If you activate the menu entry *View -> Show References Counter*, a *Dependencies...* control is displayed in the object editor for the *Referenced by* parameter.

Display type

The following settings allow you to specify the displayed dependencies:

- *Show Dependencies:*
Displays the dependent objects and resources of the object.
For example: Macroset, Bubble Style, linked content.
- *Show Publishing Dependencies:*
Displays the dependent objects and resources of the object for the publishing.
For example: Playback Settings, subobjects.
- *Show Referrers:*
Displays the dependencies in accordance with the individual objects that reference a content or resource.
For example: All dependent projects using the Standard macroset.
- *Show UUIDs:*
Displays the UUIDs of the objects as well as the name.
- *Show Advanced Options:*
Displays further options for showing or hiding dependencies in the list.

Advanced options

If you activate the *Show Advanced Options* setting, the following settings are displayed:

- *Use Options:*
Allows you to specify the displayed information of the list. Further options are enabled.
- *Use Options and Rescan:*
Allows you to specify the displayed information of the list and rescans the dependencies of the object. Further options are enabled.
If outdated dependencies are displayed, we recommend a rescan.
- *Recursive:*
Also displays the corresponding sub-objects for the selected object.
- *References in Structure:*
Displays existing references that have been directly allocated to an object.

- [References by Parameter:](#)
Displays existing references that exist due to certain settings that have been defined.
- [Resources Only:](#)
Displays resources that have been referenced.
- [Resolve Fallback Values:](#)
Displays resources that are specified as fallback.

Using the list

In the dependencies list of the dialog box, you can use the following actions to show a specific object:

- **Jump to object in explorer**
Double-click a list entry to show the object in [Explorer](#).
The object is selected in [Explorer](#) tree.
- **Jump to object in dependencies list**
Press Ctrl and double-click a list entry to show a referenced object in the list. Only possible, if [Show Referrers](#) is activated.
The object is selected in the dependencies list.

12.13.4 Updating the Dependency Cache



The [Tools -> Update Dependency Cache](#) function allows you to update the dependencies of your workarea. This can be necessary after the migration of a workarea or the import of an archive with resources from an older version. The update is executed after you select the menu entry.

12.14 Using Archives

Archives can be used to transport an entire workarea, individual learning content or resources simply and compactly. An archive is saved in the form of a DKP file (*.dkp).

12.14.1 Exporting an Archive

Proceed as follows, to export an archive:

1. Select [Workarea -> Export Archive...](#)  menu.
or
Select an object in the tree and select [Export Archive...](#)  in the context menu.
The [Export Archive](#) dialog box is opened.
2. In the area on the left you will find all of the content and resources located in the workarea. These are selected by default.
To deselect the entire workarea, you need to deactivate the [Workarea](#) option. To deselect the resources or content, deselect the relevant resource folder or topmost group.

3. *Compression type:*
This parameter determines whether the files are to be compressed or not. Compression is recommended to reduce the file size.
4. *Max. size before splitting volumes:*
The technical size limit for a DKP file is 4GB. The drop-down list allows you to define a maximum volume size of the DKP files generated. Once an archive file's maximum size has been reached, a new one will be created automatically. As many archive files will be generated as are required to store the entire Workarea. This allows large workareas to be broken into a number of parts for transport, which can then be spread across a number of DVDs or CDs, for example.
5. *Select references:*
With the options *Select referenced resources* and *Select referenced content* the referenced items are automatically selected for the specific content.
6. Select *OK* to confirm the settings.
7. The dialog box for specifying the destination path and file name will then open. Select a target destination and enter a file name.
8. Select *Save* to create the archive.

12.14.2 Import an Archive

You can insert an archive in the current workarea using *Import Archive*. This may be individual projects or customized resources, for example.

Proceed as follows, to import an archive:

1. Select the *Workarea -> Import Archive...* menu.
The dialog box for selecting the archive.
2. Select the file and select *Open*.
3. The archive content is displayed to you in an overview. You can select whether you would like to import all the archive content or only a part of it.
4. Select *OK* to insert the files in your workarea.

Learning content inserted by importing the archive are filed as unsorted objects and can then be assigned to the project structure.

If the same resources or learning content already exist in the workarea, you are alerted to this and asked whether they are to be overwritten or duplicated.

13 Interface and Components

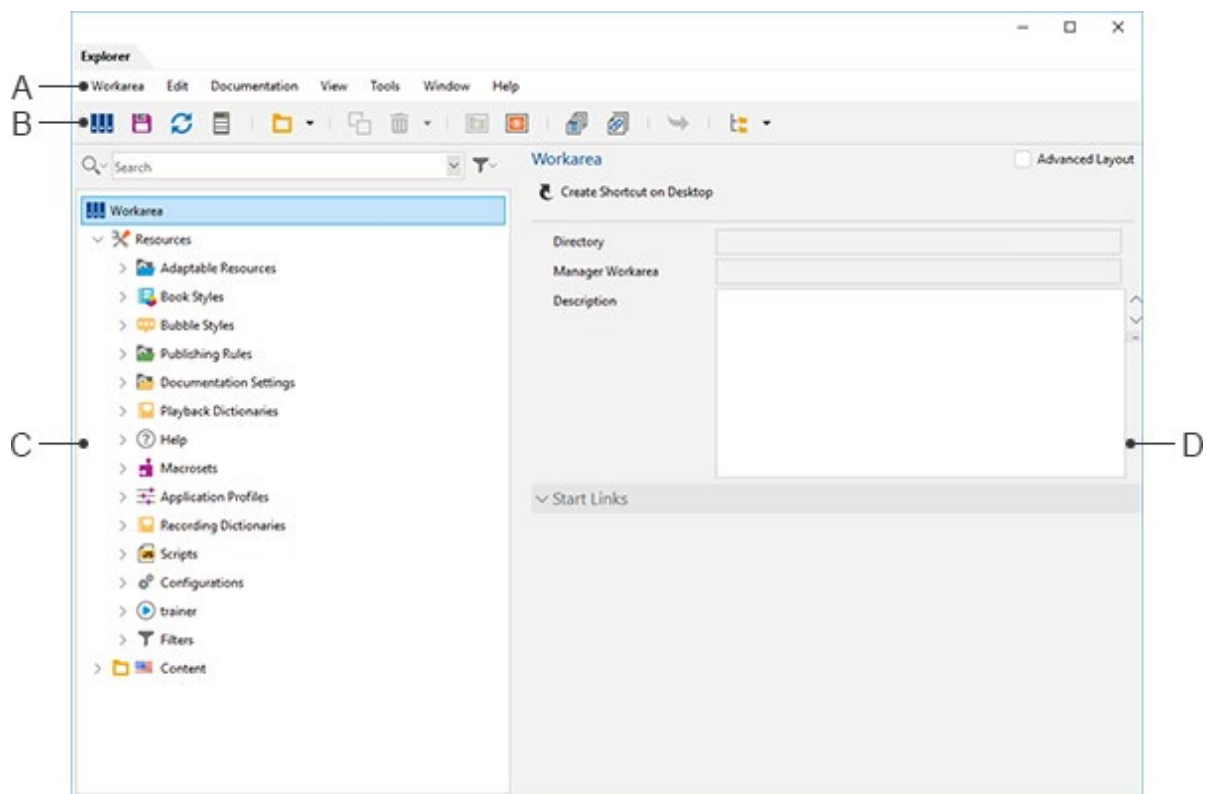
This chapter describes the structure of the Producer. This involves going into the Producer interface's different areas and functions.

The interface of the Producer switches between three main views:

- The *Explorer*, which is used to edit the currently selected workarea.
- The project editor, which is used to edit an open project.
- The book page editor, which is used to edit an open book page.

13.1 Explorer

The *Explorer* serves to organize the content objects and resources in a workarea.



The *Explorer* window is divided into the areas:

- Menus**
Contains the functions of the explorer separated in categories.
- Toolbars**
Contains the most common menu commands to access the functions directly. You can shown and hide toolbars by using the *View* menu.

C. **Tree structure**

Structures the resources and content objects.

D. **Object editor**

Includes the object properties.

The structure built for the workarea within the *Explorer* is also the structure displayed later on in the library of the published workarea.

13.1.1 Tree Structure

The tree structure displays and structures the resources and the content of a selected workarea.

View of the objects

The tree shows all objects with an icon and name.

You are able to show further information by using the *View* menu. The available information is:

- *Unknown References*
- *UIDs*
- *Language*
- *Language Icons*
- *References Counter*

Administration of the objects

The individual objects in the workarea can be edited directly in the tree structure. The following actions are possible:

- Select an object to display the object parameters in object editor.
- *Context menu:*
The context menu of an object provides object specific functions for editing the object.

There are the following ways to move or to create an object in the tree:

- **Drag&drop**
Moves the object from one position in the tree to another.
- **Drag&drop + Shift key**
Creates a duplicate of the object at the dropped position.
- **Drag&drop + Ctrl key + Shift key**
Creates a reference of the object at the dropped position.
- **Drag&drop + right mouse button**
Opens a context menu, which allows you to *move*, *duplicate* or *reference* an object.

i Note

The order of the resources cannot be changed.

The modes of a project cannot be moved to another project.

Using the second tree

Beside the general tree an additional second tree can be shown. It supports you to edit the structure of a complex tree. You can use the second tree to compare parts of the tree or to move or create objects.

Note, that when selecting an object in the second tree, there are no parameters displayed in the object editor.

Always use the default tree.

On the top of the tree there are the following controls:

- [Second Tree - Horizontal](#)
- [Second Tree - Vertical](#)


Activate or deactivate the control to hide or to show the second tree.

13.1.2 Object Editor

The object editor allows you to edit the settings for an object selected in the [Explorer](#). Information on the object as well as the current settings are displayed in the editor. In addition, actions are displayed in the editor's heading that can be used for the selected object.

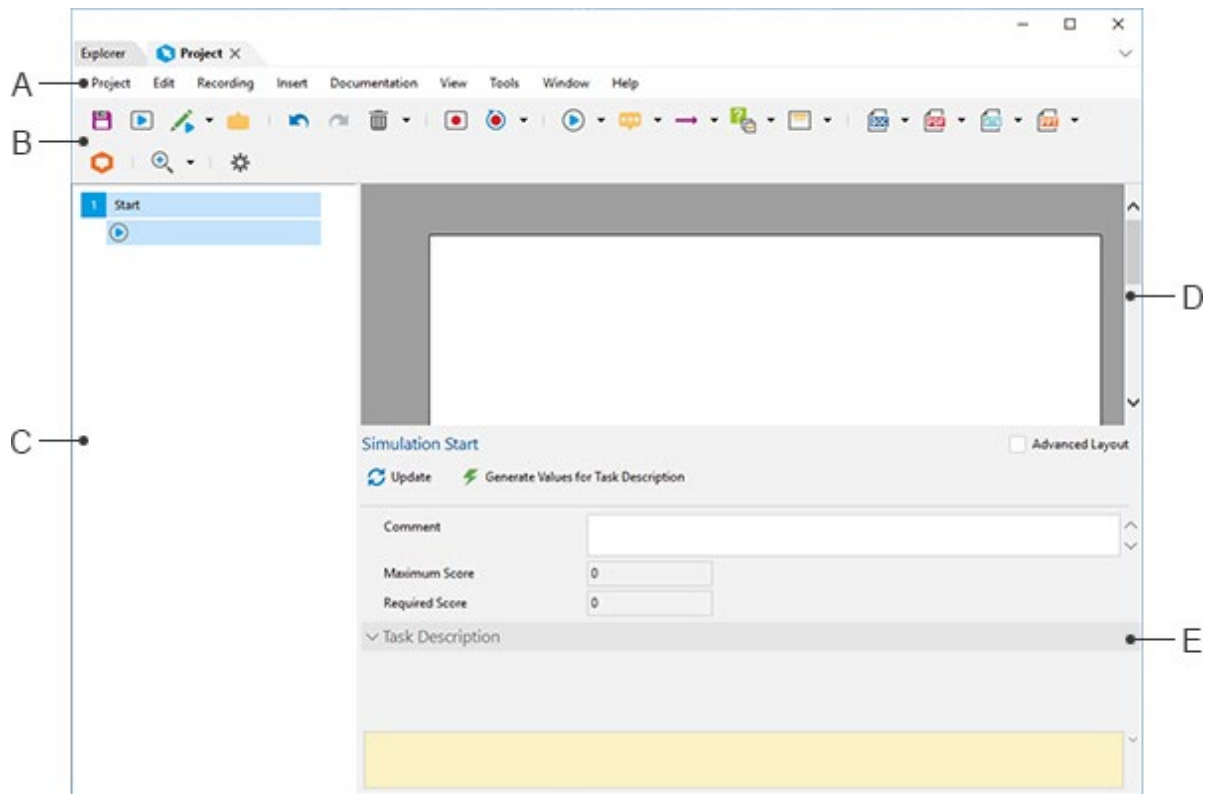
Server actions

For server objects the editor's heading area provides as well the server actions that can be used for the selected object.

In case the selected object is parent to a subtree of objects the additionally displayed item [Server Bulk Actions](#)  provides a menu with corresponding actions to be applied on the currently selected object and its sub objects. All tree operations initially provide a dialog in which you can redefine your object selection.

13.2 Project Editor

The project editor can be used to record, create and edit projects. The project editor displays macros, settings and screenshots as well as specific functions for the editing.



The project editor's main components are:

- A. **Menus**
Contains the functions of the project editor separated in categories.
- B. **Toolbars**
Contains the most common menu commands to access the functions directly. You can shown and hide toolbars by using the [View](#) menu.
- C. **Thumbnail view**
- D. **Step view / documentation view**
- E. **Macro editor**

Navigation in the project editor

An alternative and user-friendly way to navigate in the project editor is by using the mouse's scroll wheel and the keyboard. This facilitates scrolling up and down in the workarea and alternating between objects from the step view. In addition, the keyboard allows you to easily jump between steps and select macros. The following shortcuts can be used:

- **Home**: jumps to the first step
- **End**: jumps to the last step
- **Page Up / Page Down**: alternates between the steps or macros, depending on the currently selected object.

13.2.1 Thumbnail View

The thumbnail view sequentially displays the steps with their screenshots and corresponding macros. When selecting a macro, the corresponding screenshot is displayed in the step view with its highlights and bubbles, and the macros settings are displayed in the macro editor.

Changing the display size

The display size of the screenshots can be adjusted by changing the size of the thumbnail view of by using the mouse wheel with pressed `Ctrl` key.

Changing the order


The order of the macros or the steps can be changed using drag & drop. You can even move one or more macros within a step or all steps as a whole as well as assign new positions to one or more steps in the project.

> Recommendation

Changing the order of steps or macros always results in a subsequent change to the project itself. For this reason you should make sure the project is still a coherent unit.

13.2.2 Steps of a Project

A project uses steps to organize the content in sections. Generally, a step contains a screen and an interaction macro and can contain further macros. All steps are numbered consecutively and have a step name.

Steps are automatically inserted into the project during recording for each new screenshot. You can add further steps by using the menu entry *Insert -> Add Step*  or during recording.

The order of the steps can be changed in the thumbnail view. A step can be previewed in step view.

Basic attributes

A step has the following attributes:

- *Name:*
Contains the name of the step. In general, the name of the application window is entered during recording. You can change the name for your content.
- *Translate Manually:*
Specifies, that the name will be used for translation when exporting a translation file. The parameter is activated when a name has been changed.
You can activate the option manually to translate the name.

Steps in simulation projects

The step names are displayed in the progress display of the trainer during playback in demo mode. You can hide the step names in *Playback Settings*.

- *Show in Progress Display:*
Specifies, that the step is displayed as control in progress display of trainer bar.

- *Jump Target:*
Specifies, that the step can be used as jump target for creating a branch.

i Note

Within a recorded project, the first step has a special status. It generally includes only the *Simulation Start* macro in order to properly initialize the project for playback. For this reason, it is never set as a *Jump Target*.




The step names can also be used as chapter title in a generated documentation. Active the use of the step name in *Documentation Settings*.

13.2.3 Step View

The step view displays the screenshot of the *Screen* macro and the content of the macros for a step. It allows you to edit the size and the position of the highlights and the bubbles directly on the screenshot. You can also add additional macros by using the toolbar.

Step view display

From the step view, different views can be activated to facilitate editing and positioning objects. A variety of options are available from the toolbar:

- The *Modes* button allows you to switch over to selected bubbles for editing purposes, allowing you to preview the bubbles in each of the different modes. This setting will have an effect on the activated preview mode.
 -  *Edit Mode (for each mode)*
- For steps with more than one macro, all bubbles can also be viewed simultaneously. This facilitates positioning bubbles and ensures that other areas in the application are not hidden by the bubbles by accident.
 -  *Show Bubbles for Step*
 -  *Show Bubble for Macro*

Position objects

There are two ways to position objects:


- Via Drag & Drop
- Via a keyboard using the arrow keys

13.2.4 Documentation View

The documentation view is a WYSIWYG editor for editing documentation in simulations. A document is displayed in HTML format so that you can preview the content and structure. This editor allows you to quickly and easily make any necessary changes to your documentation.

The documentation view only displays project content that can be inserted into documentation. Content that is stored in another location other than in the project editor, such as description text, will not be displayed here.

Opening the documentation view

The [Documentation View](#)  can be enabled from the toolbar and used instead of the step view. Alternatively, you can open this from the menu [View -> Components -> Documentation View](#).

Editing documentation

The following editing options are available from the documentation view:

- **Hide macros for output into documentation**
Click on [Hide in Documentation](#) so that the selected macro will not appear in the document. In order to display a hidden macro, click on [Show in Documentation](#).
Note that documentation macros cannot be hidden.
- **Adjusting highlights**
Macro highlights can be changed individually. Such changes have only effect on documentation - the highlights for the simulation remain unchanged.
- **Changing text**
Text that can be edited is highlighted in yellow when the macro is selected. To make modifications to text, double-click on the desired text from the HTML editor.

Note



Editing text in the documentation view can affect the different modes. Only make changes here when you are sure that the changes should also be applied to the other modes.

13.2.5 Macro Editor

The parameters for a macro are displayed in the macro editor and can be directly edited there as well. At the top of the editor, there are additional options for enhancing your macros. Select a macro in thumbnail view to display the settings.

The parameters are divided into subcategories which you can open and close by clicking on the plus and minus symbol. By selecting a parameter, a description will be displayed at the bottom of the macro editor.

Activating a parameter

The green button located in front of each setting indicates whether the setting is active  or inactive . Select the button to activate or deactivate the setting.

Layout selection

A [Layout Selection](#) in the title bar allows you to show and hide detailed settings for a macro. You can choose between [Standard Layout](#) and [Advanced Layout](#). The settings of the [Advanced Layout](#) are recommended for advanced users, who need a detailed set of settings.

In macros that contain text the HTML editor is opened when selecting the text box.

Selecting multiple macros

If you would like to edit a specific setting for a type of macro, it is now possible to select several macros at one time, which will display the common setting to be edited for all the macros at once.

If the settings vary for the selected macros, a note will automatically appear on the screen. From here, you can save the setting, edit it for all the macros or deactivate it. To make changes to the setting, click on the button in front of the name. This will open a menu with the options *Determine joint value* and *Delete values*. Select the desired action and edit the value as desired.


13.2.6 History

The *History* can be viewed as the memory of the Producer. It chronologically documents all actions that are taken, starting with the opening of the project. This allows the user to return to any stage in the editing of the document, going back to the opening or creation of the project. With a click on the *History* list item, it is possible to directly undo or redo one or more actions. To provide the user with a better overview, the actions taken since the document was last saved are marked with a plus. The history is used as the basis for the *Undo* and *Redo* commands in the *Edit* menu.

13.2.7 Project Menu

The *Project* menu contains functions for the administration of a project.

13.2.7.1 Save

The *Save*  function saves the project currently open and displayed. In addition to the saving, the different modes will be generated.

13.2.7.2 Export Archive...

You can use this feature to export an entire project folder from a workarea to an archive file, allowing you to easily move and integrate it into other workareas. The archive file is saved in the **.dkp* format.

13.2.7.3 Publish...

This command allows you to publish an individual project. That means that it is not necessary to issue numerous resources and projects; projects can be distributed individually instead.

For further information, see the chapter *Publishing Individual Objects*.

13.2.7.4 Open Project Directory

This causes Microsoft Windows Explorer to open the folder of the currently active project in the workarea containing the folders for the project files.

13.2.7.5 Duplicate...

The *Duplicate...* function allows you to duplicate the project together with the content it contains and the project configuration.

1. Select the *Duplicate...* function in the *Project* menu.
2. A dialog box is opened in which you can name the duplicate.
3. Select *OK* to create the duplicate.

13.2.7.6 Close





Closes the project, which is currently open and displayed.



If you do not save the project before closing it, a dialog box will appear, prompting you to do so.

13.2.8 Edit Menu

The *Edit* menu contains all the general features that directly manipulate objects.

General functions

Function	Description
 <i>Undo</i>	This command is used to undo, i.e. reverse, an action and can be repeated until the first item in the history has been reached.
 <i>Redo</i>	This command is used to reverse the undo action, and can be repeated until the last item in the history has been reached.
 <i>Cut</i>	The command cuts the selected macro or object and places it in the Windows clipboard. This command can be applied to almost all macros, objects and input fields in explorer and project editor.
 <i>Copy</i>	The command copies the selected macro or object to the Windows clipboard. This command can be applied to

Function	Description
	almost all macros, objects and input fields in explorer and project editor.
 <i>Paste</i>	Executing the <i>Paste</i> command inserts the clipboard content at the insertion point in Producer. Note that clipboard content must be compatible with the location into which it is inserted.
 <i>Delete</i>	This command deletes the object or macro which has just been selected. It can be applied to almost all macros, objects and input fields in explorer and project editor.
<i>Select All</i>	<i>Select All</i> highlights the largest possible selection in the context of the currently active focus in Producer. It can be applied to almost all macros, objects and input fields in explorer, project editor or book page editor.

13.2.8.1 Select Macros by Type...

This command gives you the ability to select all the objects of a specific macro type in the thumbnail view. The dialog shows you all the macros available in the currently accessed course content and shows you a count. When you select a macro type, all objects of this type are selected in the thumbnail view. This gives you the ability to make settings for all macros of one type in the macro editor.

13.2.8.2 Search & Replace Bubble Content...

Words or passages of text in all the bubbles contained in a project can be replaced using the Search & Replace function.

In the field *Search* the term or text string is entered which is to be found within the bubbles of the project; in the field *Replace* by the text string is entered which is to replace the original one.

For more complex tasks, the Search & Replace functionality of Producer can also be used with a regular expression. In order to do so, activate the option *Search & Replace using Regular Expressions*.

After triggering the function by clicking *OK*, an additional dialog informs you how many times the search string was found and replaced.

i Note

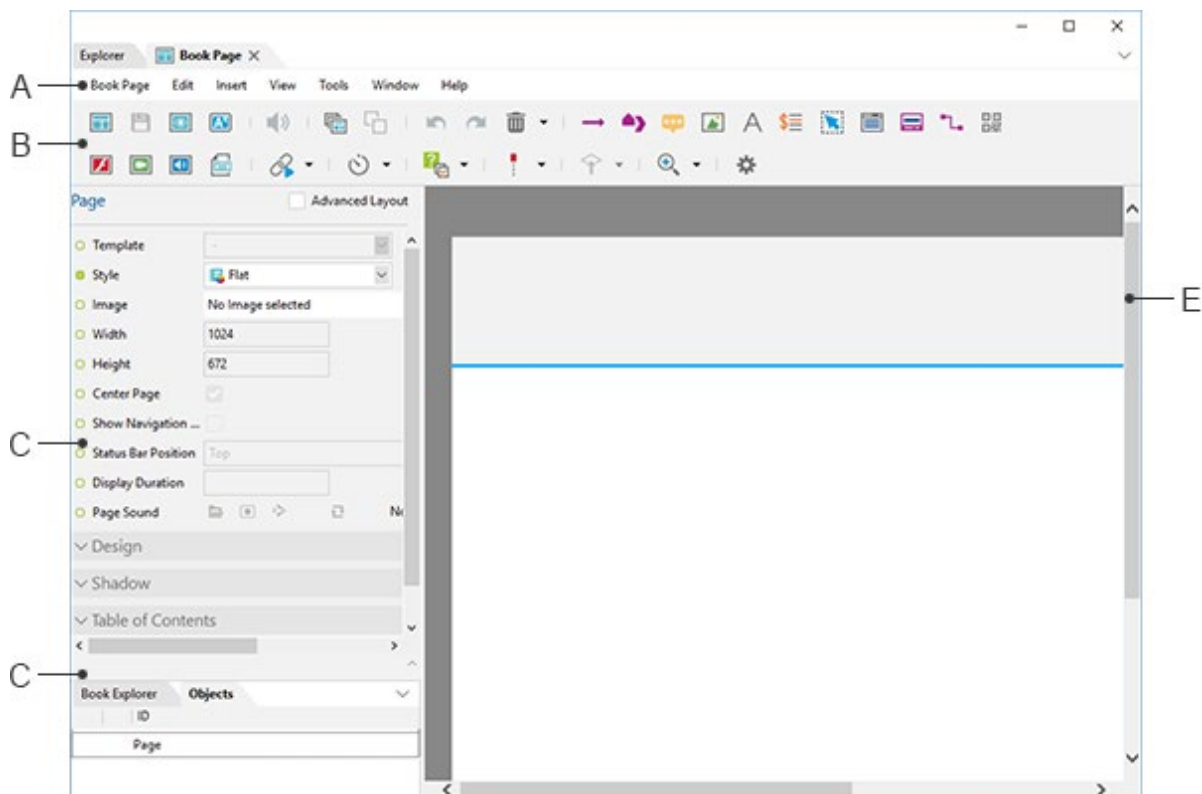
Searches performed by the search engine are case-sensitive.

If the content of a bubble has been modified by the command *Search & Replace*, it is considered to have been edited manually, and the appropriate option is ticked in the subcategory *Rerecord* of the macro. This has an effect on the automated translation and the export of a translatable.

13.3 Book Editor

The book editor is where the book pages are edited. This is where you can define the book pages' design and create the content.

After a book page has been created in the *Explorer*, it is opened in the book editor. You also have the option of opening the book editor in the *Explorer* by double clicking on a book page.



The book editor is broken down into the following areas:

A. Menus

Contains the functions of the book editor separated in categories.

B. Toolbars

In the toolbar you will find a complete object overview from which you can insert the objects. Functionality is also provided for editing the objects and book page. You can show and hide toolbars by using the *View* menu.

C. Object editor

The object editor is where you can define the individual objects' properties. To this end, when you select an object you are offered corresponding parameters that are subdivided into various areas.

D. Object overview

- **Book pages list**

The book pages list shows the book pages and subbooks of a book.

- **Object list**

The object list provides you with an overview of all the objects inserted on the book page.

E. Book page view

The book page view is where the book page is shown for editing. Select the inserted objects to edit them. You can use drag and drop to place the objects in the desired position.

The book view operates on the “what you see is what you get” (WYSIWYG) principle. That means that your book page will be displayed in the book reader or library in the same way you created it.

In order to be able to test the objects, select the *Preview* function in the toolbar. The Producer will then activate the corresponding functionality, such as launching a mode.

13.3.1 Object List

The object list provides you with an overview of all the objects inserted on the book page. You will find the book page's background in the topmost position. Select this entry to edit the background.

The objects that have been inserted are itemized in a list and appear in the same order as they do on the respective level. Selecting an object from the list will highlight this object on the book page. It is now ready to be edited.


Changing an object's level

To position an object on a different level in a book page, simply drag & drop it to the desired position and level.

Hiding objects

From the list of objects, you can define whether objects should be hidden or visible on the book page. This is an important setting to remember to use with actions. An Eye icon is displayed for each object, indicating its current status: *Show* or *Hide*. To change an object's status, click on the desired status icon.

Filtering objects in tree

The *Filter*  function allows you to show and hide objects in the object list. This makes it easier to edit objects for a complex book page. Open the filter menu to activate the objects types to be shown in the object list.

13.3.2 Book Pages List

The book pages list is a component of the book editor and displays the structure of a book with book pages and substructures. This supports the editing of a book and be used for the following actions:

- **Selecting a book page**

Selecting a book page in the structure shows it in the book page view and can be edited. You can scroll with the mouse wheel through the structure to display the pages.

- **Creating a book page**

Select a book to create a new book page. A command is displayed in the book page view. Select it to open the [New Book Page](#) dialog box.

- **Deleting a book page**

A selected book page can be deleted by using the `Del` key.

- **Changing the structure**


The order of book pages or substructures can be changed with drag & drop.

- **Saving a book**

When the book is saved, all changes to all book pages in the book are saved and not just the currently displayed book page.

13.3.3 Add Audio Dialog Box

The [Add Audio](#) dialog box is part of the book page editor and can be used to record audio for book pages. You can access this functionality only in book editor if there are book pages available. It is deactivated for separate book pages that are not part of a book.

The audios will be inserted as [Page Sound](#). The [Add Audio](#) dialog box can be opened using the [Add Audio](#)  toolbar button.

The dialog box has the following settings and functions:

- [Toolbar](#):

The toolbar contains the following functions:

- [Previous Book Page / Next Book Page](#):

Use the buttons to navigate up and down in the page list for selecting a book page.

- [Play Audio / Stop Audio](#):

The [Play Audio](#)  button allows you to play back the text and then make changes afterwards.

With the [Stop Audio](#)  button, you can stop the playback.

- [Delete Audio](#):

Use the button to delete the audio for the current book page.

- [Edit Text-to-Speech](#)

Opens the [Text-to-Speech](#) dialog box for creating audio with Text-to-Speech services.



See also the chapter [Text-to-Speech Dialog Box](#).

- [Generate Text-to-Speech Audio Files](#)

Opens a dialog where you can select for which pages you want to generate Text-to-Speech audio.

You can also configure the voice and Text-to-Speech service parameters here, see the chapter [Text-to-Speech Dialog Box](#) for more information.

- [Start Recording / End Recording](#):

Click [Start Recording](#)  to begin recording and then click [End Recording](#)  to stop recording.

Once the recording is finished, the recording dialog is closed.

- [Volume Level](#):

The [Volume Level](#) displays the current volume of the spoken text during the recording.


- **Pages:**
Displays a list of all book pages of the book. Select a book page to record audio or use the [Previous Book Page](#) / [Next Book Page](#) buttons.
- **Preview:**
Displays a preview of the selected book page.
- **Silence in ms (global setting for all pages):**
The setting defines a silence, which is inserted at the beginning of an audio file before the Text-to-Speech starts. The value is defined in milliseconds. If you do not want any silence at the beginning, then enter the value '0'.
- **Notes:**
Allows you to insert notes for the selected book page. Text for text to speech will also be inserted into the [Notes](#) field.

13.3.4 Book Page Menu

The [Book Page](#) menu combines the basic functions required for editing a book page file.

13.3.4.1 New Book Page

This creates a new book page in the workarea under the item that is currently selected.

After clicking on [New Book Page](#)  from the [Workarea](#) menu or the toolbar, a dialog box will appear. You have the following options:

- **Name:**
Enter a name for your book page in this field. The default setting is the type of object with an ID.
- **Template:**
This option allows you to use an existing book page as a template for a new book page. Using predefined settings from an existing book page will save you loads of time when creating a new book page.
You can select additional [templates](#) by clicking on [Change...](#) A dialog box will appear. Select [template](#) for the current object or the entire workarea. Click on the option [No template](#) if you do not wish to use any templates for your book page.
If a [template](#) has already been used, this template will act as the default and will be automatically selected upon creating a new book page.

> Recommendation

You can make [templates](#) your default setting from the main configuration dialog box. Refer to the section on [Templates for Content Objects](#) for more detailed information.

- **Language:**
Here you can select a content language.
- **Save to server as well:**
If you are using a server workarea, you can use this option to save the new book page directly to the server workarea.

Confirm by clicking on [OK](#) and your book page will be created. The Producer will automatically switch to the project editor.

13.3.4.2 Add Audio...

Opens the [Add Audio](#) dialog box for recording audio for the book pages. See also the chapter *Add Audio Dialog Box*.

13.3.4.3 Save Book Page

The [Save](#)  function saves the book page opened and displayed at that time.

13.3.4.4 Export Archive...

This function enables a book page to be exported from a workarea into an archive file to facilitate the transport of this file and be able to integrate it into other workareas. The archive file is in the **.dkp* format.

Select the [Export Archive...](#) function to create an archive. Then enter a name in the open dialog and select a destination. Confirm the data you have entered by clicking on [Save](#).

i Note

Outputting an archive using this function excludes the workarea's linked modes and documents. Therefore, only use the function for book pages in which you have not created any links.

Alternatively you can use the function *Export Archive...* in the explorer.

13.3.4.5 Publish...

This command allows you to publish an individual book page. That means that it is not necessary to issue numerous resources and book pages; book pages can be distributed individually instead.

For further information, see the chapter *Publishing Individual Objects*.

13.3.4.6 Open Folder

This is used to open the directory of the currently active book page in the workarea, which contains the relevant book page files.

13.3.4.7 Close

Closes the book page opened and displayed at that time in the book page editor.

If a book page has not been backed up before closing it, you will be alerted to the absence of a backup via a dialog.

13.4 View Menu

The [View](#) menu offers various options to configure the display of the program window. This makes it possible to customize the general display of program parts, as well as the display of the various functions.

General

- [JavaScript Console](#)

Explorer

- [Show Unknown References](#)
- [Show UIDs](#)
- [Show Language](#)
- [Show Language Icons](#)
- [Show Reference Counter](#)

Project Editor

- [Layouts](#)
- [Components](#)
- [Floating Windows](#)
- [Zoom](#)
- [Set Preview Mode](#)
- [Set Bubble View](#)

13.4.1 JavaScript Console

This command opens the [JavaScript Console](#) of Producer. A significant portion of the mechanics for recording in Producer is based on JavaScript. The console can help track down problems that may occur in the course of working on a project. In the case of an inquiry, Support may ask you to open the [JavaScript Console](#) and describe its contents. You can also easily copy the contents into a text file. Right-click in the console window and select the command [Copy all](#). The contents are now on the clipboard and can be pasted into a text document.

13.4.2 Layouts

You can choose a layout to organize your standard components in the project editor. Layout changes influence the thumbnail view, the step view and the macro editor. The layouts make it possible for you to change the look of your project editor to fit your needs.

The following layouts are available:

- *Horizontal Layout:*
The components are aligned horizontally.
- *Vertical Layout:*
The components are aligned vertically.
- *Divided Layout - 1:*
The thumbnails and steps are aligned side by side, with the macro editor below it.
- *Divided Layout - 2:*
The thumbnail view is displayed horizontally and the macro editor and the step view appear below next to one another.
- *Divided Layout - 3:*
The thumbnail view is displayed horizontally and the macro editor and the step view appear below next to one another.

13.4.3 Components

From the *View* menu, you can define which components should be made visible in your layout. The following components can be made visible or hidden:

- *Toolbars*
- *Timeline*
- *Thumbnail view*
- The WYSIWYG view is subdivided into two views:
 - *Step View*
 - *Documentation View*
- *Macro Editor*
- *History:*
To display the list, the macro editor must also be made visible.

13.4.4 Floating Windows

The option *Floating Windows* makes it possible to position specific components from the project editor as desired, independent of the main window on the screen, for example, components can be repositioned onto a second monitor. This function allows you to keep the main window free from too much clutter for your work comfort.

To enable this option, go to *View -> Floating Windows* and select the desired components. The selected components will then be displayed in a new window that you can move freely or change its size. When the new window is closed, the components will be automatically displayed in their original location.

The following components can be used in a floating window:






- *Audio Editor*
- *Thumbnail View*
- *Macro Editor*

- [WYSIWYG View](#) (step view, documentation view)

13.4.5 Zoom



The [Zoom](#) functions allow you to zoom into a screen or a page of the edit view. This makes it easier for you to edit and to position objects.

The following functions are available in the editor toolbar:

-  [Zoom In:](#)
Zooms in to the screen.
-  [Zoom Out:](#)
Zooms out of the screen.
-  [Show Selection:](#)
Zooms to display the selected object in the editor view.
-  [Zoom to Fit:](#)
Zooms to display the full screen in the editor view.
-  [Zoom to 100%:](#)
Zooms to display the screen with a size of 100% in the editor view.

13.4.6 Set Preview Mode

The [Set Preview Mode](#) menu determines in which mode the preview of your project starts in the trainer. The following menu entries are available:

-  [Edit Mode](#)
-  [Documentation View](#)

13.4.7 Workarea Details

The submenu [Workarea Details](#) has the following entries:

1. [Show Language](#)
Selecting this function displays the project language abbreviation in the tree structure. This allows you to see at a glance which project is in which project language.
2. [Show Language Icons](#)
Selecting this function displays the project flags in the tree structure. This allows you to see at a glance which project is in which project language.
3. [Show UIDs](#)
Selecting this function displays the corresponding UIDs behind the name for the objects in the workarea. With

projects that share the same name, this allows you to see whether these are references for one object or for different objects.

4. [Show Structure Reference Counter](#)

The structure reference counter displays how often an object is available in the structure. For example, a simulation project that is used multiple times in different parts of the structure

5. [Show Content Reference Counter](#)

The content reference counter displays how often an object is linked in the content. For example, an imported image that is used in different content descriptions.

6. [Show Unknown References](#)

Select this function to display a workarea's [Unknown References](#). In a situation when objects are deleted on the server but the local structure is not yet updated, such objects are shown with a bin icon when you activate this feature.

7. [Show Locally Removed Objects](#)

Selecting this function displays objects which have been removed locally with an empty cloud icon.

8. [Show Resources](#)

Activate this function to see the resources tree in the explorer.

9. [Show Trash](#)

Activate this option to display the local trash tree in the explorer.




13.5 HTML Editor

The HTML editor allows you to create and to edit the text of your content. The text is created in HTML format.








Select a text field to open the HTML editor in a pop-up window.

13.5.1 Functions of the HTML Editor


The HTML editor offers the following functions:

Function	Description
Text styles	
 Paragraph Style	Contains the paragraph and list styles of the Text Styles . Select a style from the dropdown box to specify a style for a selected paragraph.
 Character Style	Contains the character styles of the Text Styles . Select a style from the dropdown box to specify a style for selected text.
	Contains the block styles of the Text Styles .

Function	Description
<i>Block Style</i>	Select a style from the dropdown box to insert a block.
 <i>Table Style</i>	<p>Contains the table styles of the <i>Text Styles</i>.</p> <p>Select a style from the dropdown box to specify a style for a selected table.</p>
Text formatting and structure	
<i>Font Type</i>	<p>Contains a list with all the available fonts that are installed on your PC.</p> <p>Select a font type from the dropdown box to change the font type of a selected text.</p>
<i>Font Size</i>	<p>Contains a list with predefined font sizes.</p> <p>Select a font size from the dropdown box to change the font size of a selected text.</p>
 <i>Bold / Italic / Underlined</i>	<p>Changes the format of a text.</p> <p>Select a button to set or to remove the format of a selected text.</p>
 <i>Font Color</i>	<p>Changes the color of a text.</p> <p>Select the button to open the <i>Color Selection</i> dialog box.</p> <p>Select a color to change the font color of a selected text.</p> <p>See chapter <i>Color Selection Dialog Box</i>.</p>
 <i>Remove Formatting</i>	<p>Resets a text back to its original format.</p> <p>Select the button to reset the format for a selected text.</p>
 <i>Numbered List / Bulleted List</i>	<p>Creates a list of the selected type for a paragraph.</p> <p>The list uses the default styles for bulleted and numbered lists. You can also select a list style from the <i>Paragraph Styles</i>.</p> <p>Select a button to set or to remove the list of a selected text.</p>
 <i>Align Left / Center / Align Right</i>	<p>Changes the alignment for a paragraph.</p> <p>Select a button to set or to remove the alignment of a selected text.</p>


Function	Description
 <i>Outdent / Indent</i>	<p>Increases or decreases the indent for a paragraph.</p> <p>Select a button to indent a selected text. Select a button again to indent the text to the next level.</p>
Edit and insert controls	
 <i>Table Operations</i>	<p>Opens a dropdown menu with functions to edit a table.</p>
 <i>Cell Operations</i>	<p>Opens a dropdown menu with functions to edit cells.</p>
 <i>Show/Hide Outline</i>	<p>Shows the structure of the content as well as of borderless tables for editing.</p>
 <i>Insert Object</i>	<p>Opens a dropdown menu with functions to insert objects in a text, for example, tables, links, placeholders, or images.</p>
Further controls	
 <i>Left to Right / Right to Left</i>	<p>Toggles the text direction for a corresponding language.</p>
 <i>Toggle Background Color</i>	<p>Switches the background color from yellow to grey to view and edit text better with lighter or darker font colors as needed.</p>

13.5.2 Using Tables

You can insert tables into your content. A table uses a table style that can be specified in the *Text Styles* .

Inserting a table

To insert a table, proceed as follows:

1. Select the position for your table in your text.
2. Select *Insert Object*  -> *Insert Table...*
The *Insert Table* dialog box is opened.
3. Specify the following parameters:

1. *Columns:*
Enter the number of columns.
 2. *Rows:*
Enter the number of rows.
 3. *Alignment:*
Select a text alignment:
 - *Auto*
 - *Left*
 - *Center*
 - *Right*
 4. *Width:*
Enter a value and select percent % or pixel *px* as unit.
 5. *Header:*
Select a header type:
 - *No Header*
 - *Header Row*
 - *First Column*
 - *Header Row and First Column*
 6. *Table Style:*
Select a table style. The dropdown box shows the table styles of the *Text Styles*.
4. Select *OK*.



The table is inserted in your text.

13.5.2.1 Editing a Table

To edit a table, there are the following options:

Updating a table

To update the parameters of a table, proceed as follows:

1. Select a table in your text.
2. Select *Table Operations*  -> *Update Table...* 
The *Update Table* dialog box is opened.
3. Edit the following parameters:
 1. *Alignment:*
Select a text alignment.
 2. *Width:*
Enter a value and select percent % or pixel *px* as unit.
 3. *Table Style:*
Select a table style.
4. Select *OK*.

The table is changed.

Changing or removing a table style

To change or to remove a table style, proceed as follows:

1. Select a table in your text.
2. Select the *Table Styles* dropdown box:
 - Select another style to change the style.
 - Select *None* to remove the table style and to keep the text only.



The style of the table is changed.

Deleting a table

To delete a table, proceed as follows:

Note



When deleting a table, the content of the table will also be deleted.

1. Select a table in your text.
2. Select *Edit Table*  -> *Delete Table* .

The table is removed.

Converting a table to text

To convert a table to text, proceed as follows:

1. Select a table in your text.
2. Select *Edit Table*  -> *Convert Table to Text* .






The table is removed and each text of a cell is inserted as paragraph.

13.5.2.2 Editing Rows and Columns

To edit rows and columns, there are the following options:

Inserting a column or row




To insert a column or row, proceed as follows:

1. Select a cell in your table.
2. Select *Cell Operations* .
3. Select a menu entry:
 -  *Insert Column Left*
 -  *Insert Column Right*
 -  *Insert Row Above*
 -  *Insert Row Below*

The column or row is inserted next to the selected cell.

Duplicating a row or column




To duplicate a column or row, proceed as follows:

1. Select a cell in your table.
2. Select *Cell Operations* .
3. Select a menu entry:
 -  *Duplicate Column*
 -  *Duplicate Row*

The column or row is inserted next to the selected cell and contains the text and configuration of the source.

Deleting a column or row

To delete a column or row, proceed as follows:

1. Select a cell in your table.
2. Select *Cell Operations* .
3. Select a menu entry:
 -  *Delete Column*
 -  *Delete Row*



The column or row of the selected cell is deleted.

13.5.2.3 Editing Cells

To edit cells, there are the following options:

Updating a cell



To update the parameters of a cell, proceed as follows:

1. Select a table in your text.
2. Select *Cell Operations*  -> *Update Cell...* 
The *Update Cell* dialog box is opened.
3. Edit the following parameters:
 - *Column Width:*
Enter a value and select percent % or pixel *px* as unit.
 - *Row Height:*
Enter a value and select percent % or pixel *px* as unit.
 - *Cell Background*
Select *Choose Color...* to open the *Color Selection* dialog box. Select *Transparent* to remove the color.
 - *Horizontal Alignment:*
Select a horizontal text alignment.
 - *Vertical Alignment:*
Select a vertical text alignment.
4. Select *OK*.

The cell is changed.

Merging cells



To merge cells, proceed as follows:

1. Select two or more cells of a table.
2. Select *Cell Operations*  -> *Merge Cells* 

The cells are merged to one cell.


Splitting cells

To split a cell, proceed as follows:






1. Select a merged cell of a table.
2. Select *Cell Operations*  -> *Split Cell* .

The merged cell is separated into the original cells.

13.5.3 Inserting Objects

The *Insert Object*  menu allows you to insert additional objects into your text.

You can insert the following objects:



-  Table
-  Link
-  Placeholder
-  Image or screenshot
-  Video

13.5.3.1 Link

You can insert a link into your text or for an object in order to call up a website or an object from your workarea.



Inserting a link

To insert a link, proceed as follows:

1. Select a text or a position in the HTML editor.
2. Select *Insert Object*  -> *Insert Link...*  .
The *Insert Link* dialog box is opened.
3. Select one of the options:
 - *Current Object*
 - *Workarea*
 - *Free*
4. Select an object from the workarea tree.
or
Enter a link in the *Link Target* text field.
5. Enter a tooltip in the *Tooltip* text field, if required.
6. Enter or change the *Display Text*, if required.
7. Confirm with *OK*.



Editing a link

To edit a link, proceed as follows:

1. Select a linked text in the HTML editor.
2. Select *Insert Object*  -> *Edit Link...*  .
The *Insert Link* dialog box is opened with the linked object or the entered link.
3. Edit the link.
4. Confirm with *OK*.



Inserting a link to a step

If you are working within a project, you can insert a link within the project to jump to another step:

1. Select *Insert Object*  -> *Insert Step Link...*  .
A *Select Step* dialog box is opened.
2. Select a step from the dropdown box.
3. Confirm with *OK*.

Removing a link

To remove a link, proceed as follows:

1. Select a linked text in the HTML editor.
2. Select *Insert Object*  -> *Remove Link*  .

13.5.3.2 Placeholder

The placeholder inserts a variable that is dynamically assigned to specific content. This allows you to reuse available content and to change information centrally. The inserted texts can be individually formatted.



The following placeholders can be inserted:

- *Object Type: Name*
- *Object Type: Description*
- *Object Type: Short Description*
- *Macro: Object Image* (within project)
- *Macro: Object Name* (within project)
- *Macro: Hotkey* (within project)
- *Macro: Input Text* (within project)
- *Book Page: Text-to-Speech Text*

You can only insert content from the objects themselves or the objects at the next higher level in the content structure as placeholders in this case.

Inserting a placeholder

To insert a placeholder, proceed as follows:



1. Select *Insert Object*  -> *Insert Placeholder...*  .
The *Select Placeholder* dialog box with the available placeholders is opened.
2. Choose a placeholder.
3. Select *Insert*.

Note

If no content can be assigned to a placeholder, no content is displayed in the HTML editor. In this case, check the selected placeholder and the desired content.

Editing a placeholder

To edit a placeholder, proceed as follows:

1. Select a placeholder in the HTML editor.
2. Select *Insert Object*  -> *Edit Placeholder...*  .
The *Select Placeholder* dialog box is opened with the inserted placeholder.
3. Edit the placeholder.
4. Select *Insert*.

Inserting dictionary texts

Dictionary texts can be inserted from the recording dictionary as placeholders. The texts are displayed in the activated object language.

The placeholders are to be entered manually in the *Placeholder* dialog box. You can find the respective dictionary ID in the dialog box for editing dictionary texts.

A placeholder should be written as follows:

- Pure text: `$L{Glossar-ID}`
- HTML text: `$L%{Glossar-ID}`



Inserting individual content

In addition to the standard placeholders, you can also specify placeholders for specific objects. The respective UID of the object and an exclamation mark are to be added to the displayed placeholder variables in the text box. This should have the following form:

- Standard: `%%{project:.description}`
- Extended: `%%{project!PR_A643332FC37C508E:.description}`




13.5.3.3 Image

You can insert images into your text to extend the content with further information. The following options are available:

-  [Insert Image File...](#)
Allows you to insert an image that will be imported into your workarea.
-  [Insert Image from Workarea...](#)
Allows you to insert an image that is available in your workarea.

Inserting an image

To insert an image, proceed as follows:

1. Select a position in the HTML editor.
2. Select [Insert Object](#)  -> [Insert Image...](#)  or [Insert Image from Workarea](#) .
- **Insert Image from Workarea**
The [Insert Image from Workarea](#) dialog box is opened. Select one of the options:
 - [Current Object](#)
Select an image from the current selected object.
 - [Workarea](#)
Select an image from the workarea tree.
 - [Insert File...](#)
Use the option to import an image into your content object.
- **Insert Image**
The [Insert Image](#) dialog box is opened.
 1. Select an image file.
 2. Select [Open](#).
3. The [Insert Image](#) dialog box is opened.
In the dialog box you can specify how the image is inserted. Change the following settings:
 1. [Source](#):
Shows a preview of the selected image.
You can use the [Replace Image](#) button to select another image.
 2. [Size](#):
Shows the size of the image.
You can change the size in pixel (px) or in percent (%) for [Width](#) and [Height](#).
 3. [Margin](#):
You can enter a margin to add more space between the image and the text field border as well as the other content. You can enter a value in pixels for [Top](#), [Right](#), [Bottom](#), or [Left](#).
 4. [Float](#):
You can specify if the text floats around the image. Select the position of the image in the text, [Left](#) or [Right](#).

5. *Alternative Text:*

You can enter an alternative text, that is shown if no image can be displayed, and is also used for screen readers.

6. *Show Border:*

Select the option to display a border around the image.

7. *Enable Zoom:*

Select the option to allow zooming of the image if the image is smaller than the original size.

4. Select *OK* to insert the image.

Editing an image

To edit an image, proceed as follows:

1. Select an image in the HTML editor.

2. Select *Insert Object*  -> *Edit Image...* 

The *Insert Image* dialog box is opened with the current parameters of the image.

3. Edit the image.

4. Confirm with *OK*.

13.5.3.4 Screenshot

You can create screenshots from various views to insert them into your text. The following options are available for creating a screenshot:

-  *Insert Screenshot of Window:*

Allows you to create a screenshot of an application window.

-  *Insert Screenshot of Object:*

Allows you to create a screenshot of an application object, for example, a toolbar or control.

-  *Insert Screenshot of Area:*

Allows you to create a screenshot of a specific area of your screen. This can be used to create a screenshot of parts of an application or for multiple applications.

Inserting a screenshot

To insert an image, proceed as follows:

1. Select a position in the HTML editor.

2. Select *Insert Object*  -> *Insert Screenshot...* 

- **Insert Screenshot of Window**

By moving the mouse over the screen display, specific areas will be recognized and outlined in red. Select the desired outlined area.

- **Insert Screenshot of Object**


By moving the mouse over the screen display, specific objects will be recognized and outlined in red. Select the outlined object.

- **Insert Screenshot of Area**

With the mouse, pull the red frame over the desired area and release the mouse button.

3. The *Crop Image* window is opened.

The window shows the made screenshot and you can make adjustments as needed.


1. Change the size of the selection border to crop the screenshot.
2. Select *Confirm Selection* .

4. The *Insert Image* dialog box is opened.

In the dialog box, you can specify how the image is inserted. Change the following settings:

1. *Source:*
Shows a preview of the selected image.
You can use the *Replace Image* button to select another image.
 2. *Size:*
Shows the size of the image.
You can change the size in pixel (px) or in percent (%) for *Width* and *Height*.
 3. *Margin:*
You can enter a margin to add more space between the image and the text field border as well as the other content. You can enter a value in pixels for *Top*, *Right*, *Bottom*, or *Left*.
 4. *Float:*
You can specify, if the text floats around the image. Select the position of the image in the text, *Left* or *Right*.
 5. *Alternative Text:*
You can enter an alternative text, that is shown if no image can be displayed, and is also used for screen readers.
 6. *Show Border:*
Select the option to display a border around the image.
 7. *Enable Zoom:*
Select the option to allow zooming of the image if the image is smaller than the original size.
5. Select *OK* to insert the image.

13.5.3.5 Video



The option *Insert Object*  allows you to insert videos from your workarea into your text.

Prerequisite

To use a video, import it into your workarea before inserting the video in your text.

Inserting a video



To insert a video, proceed as follows:

1. Select a position in the HTML editor.
2. Select *Insert Object*  -> *Insert Video...* .
- The *Insert Video* dialog box is opened.
3. Specify the video source.
 1. Select one of the options:

- *Current Object*
Select a video from the current selected object.
 - *Workarea*
Select a video from the workarea tree.
2. Select an object from the workarea tree.
 3. Select *OK*.
4. The *Insert Video* dialog box is opened.
- In the dialog box, you can specify how the video is inserted. Change the following settings:
1. *Source:*
Shows the file of the selected video.
You can use the *Edit Link...* button to select another video.
 2. *Preview Image:*
You can insert an image that is shown as a preview before starting the video.
 3. *Size:*
Shows the size of the video.
You can change the size in pixels (px) or in percent (%) for *Width* and *Height*.
 4. *Margin:*
You can enter a margin to add more space between the video and the text field border as well as the other content. You can enter a value in pixel for *Top*, *Right*, *Bottom*, or *Left*.
 5. *Play Automatically:*
Allows you to start the video automatically after the content has been loaded. Deactivate the option if the user has to start the video manually.
 6. *Show Controls:*
Allows you to show controls for controlling the video.
 7. *Enable Zoom:*
Select the option to allow zooming of the video if the video is smaller than the original size.
5. Select *OK* to insert the video.

Editing an image

To edit a video, proceed as follows:

1. Select a video in the HTML editor.
2. Select *Insert Object*  -> *Edit Video...* 
The *Insert Video* dialog box is opened with the current parameters of the video.
3. Edit the video.
4. Confirm with *OK*.

13.5.4 Pasting Texts and Images

When pasting copied text or images into the HTML editor, in some cases it may be possible that the formatting is displayed incorrectly. The HTML editor is equipped with several options to prevent this from happening. Copy your text or image and click on the right mouse button in the HTML editor. The context menu option *Paste in Format* will appear with the following options:

For inserting text:

- *Formatted Text* – the formatting will be preserved
- *Unformatted Text* - removes any existing formatting

For inserting images:

- *Formatted Text* – the formatting will be preserved
- *Bitmap Image* – inserts the image as a bitmap

› Recommendation

Since the HTML Editor displays text in HTML coding, a new paragraph (`<p> . . . </p>`) will be created by clicking on the `Enter` key, which should normally give you larger line spacing. If, however, you would like to create a line break (`
`), then click on the keys `Shift + Enter`.

13.5.5 Searching for Text Strings

If there are longer and more complex text strings in the HTML editor, there is a text search function to facilitate finding specific text strings. Select *Search text* to open the *Search* dialog box..

Dialog box for searching text

A text field appears where you can enter one or more words to search for. The search function has several options to choose from to quicken the search:


- *Match whole word only:*
If this option is deactivated, possible matches will be shown directly during the search. If this option is activated, the results will be displayed only when the entire word is found in the text.
- *Highlight all matches:*
If this option is activated, all the matches found will be highlighted. If this option is deactivated, only the first match will be highlighted.
- *Match case:*
This defines whether the search should be case sensitive. If this option is activated, the search function will only find exact matches. If this option is deactivated, capital or lowercase letters are irrelevant for the search.

The buttons *Next* and *Previous* allow you to switch between the displayed results. If no matches are found, a message will appear at the bottom of the dialog box.












13.6 Audio Editor

The audio editor is used to create and edit audio files in the project editor or book page editor.


In the project editor, the audio editor can be opened using the menu: *View -> Components*.

In the book page editor, the audio editor can be opened using the *Edit Audio...*  button in the object editor of the *Page* object.




Structure of the audio editor

Area / Icon	Description
Toolbar	In the toolbar of the audio editor, there are several functions for creating and editing an audio file.
	<i>Import Audio File</i>
	<i>Record Audio</i>
	<i>Edit Text to Speech</i>
	Playback functions <i>Play, Pause, Stop, Repeat</i>
	Editing functions <i>Cut, Copy, Insert, Delete</i>
	<i>Insert Silence</i>
	<i>Trim Audio</i>
	<i>Fade In / Fade Out</i>
	<i>Normalize Audio</i>
	<i>Change Dynamics</i>
	Zoom functions <i>Zoom In, Zoom Out, Show Selection, Zoom to Fit</i>
Audio track	The audio track is displayed below the toolbar.

13.6.1 Text-to-Speech Dialog Box

The Text-to-Speech dialog box allows you to create and convert texts into spoken audio files. The editor can be opened using the [Edit Text-to-Speech](#)  button.

The editor includes the following settings and functions:


- **Enter text section:**
 - [Silence:](#)
The setting defines a silence, which is inserted at the beginning of an audio file before the Text-to-Speech starts. The value is defined in milliseconds. If you do not want any silence at the beginning, then enter the value '0'.
 - [Text:](#)
Here you enter the text that you want to generate as an audio file.
In simulation projects, the current bubble text of the step is available in the dialog and can be edited.
When a text is edited, the macro [Text-to-Speech Override](#)  is created automatically.
- **Configure voices section:**
 - [Voice for your language:](#)
The setting defines the voice used for the generation of Text-to-Speech.
You can configure the pitch and speed of your selected voice as well.
 - [Preview Audio/Stop:](#)
The [Preview Audio](#)  button allows you to play back the text and then make changes afterwards.
With the [Stop](#)  button, you can stop the playback.
- **Configure Text-to-Speech Services**

In this section you can choose between [Windows Text-to-Speech](#) and [Google Text-to-Speech](#) and configure the Google service [API URL](#) and [API Key](#) parameters.



You can also choose to [Show only language specific voices in voice selection](#), in this case you will see only the voices available for your current Producer language.

Choose [Generate and Close](#) to convert the text to audio.

13.6.2 Recording Dialog Box

The recording dialog for audio is used for recording spoken text. The dialog can be opened using the [Record Audio...](#)  button.

The editor has the following settings and functions:

- [Volume Level:](#)
The [Volume Level](#) displays the current volume of the spoken text during the recording.
- [Start Recording / End Recording:](#)
Click [Start Recording](#)  to begin recording and then click [End Recording](#)  to stop recording.
Once the recording is finished, the recording dialog is closed.

- **Settings:**
Click [Hide Settings](#) / [Show Settings](#) buttons to hide or show the options for configuring the recording device. Use the [Recording Device](#) dropdown menu to select an available device. Choose the [Configure...](#) button to open a system dialog with further settings for the device.
The book page editor has additional settings for the recording audio in these formats:
 - [Output Format](#)
 - [Editing Format](#)

13.6.3 Dynamic Editor

The dynamic editor allows you to edit the sound and dynamic of an audio file. The dialog can be opened using the [Change Dynamics...](#) button.

The editor has the following settings and functions:

- **Graph:**
The graph is located on the left side of the editor and shows the amplitude level of the audio track. The graph is structured as follows:
 - Path
 - Horizontal axis: input level
 - Vertical axis: output level
- The axes are defined in decibels (dB).
- **Presets:**
The presets enable you to easily set your required dynamic settings. There are default presets available and you can also create your own presets.
 - **Name:**
The text field displays the name of the selected preset. A name can be defined for a new preset.
 - **List:**
The list displays the available presets. When you select a preset, the defined settings are used and the amplitude is modified.
 - **Add:**
Click this button to add a new preset.
 - **Delete:**
Click this button to delete a preset.
 - **Reload Preset:**
Click this button to reload the primary settings of the preset, if the settings have been changed.
- **Performance Detector:**
The performance detector modifies the performance of the amplitude. The values are defined in milliseconds (ms).
 - **Attack Time:**
Defines the time needed to apply the filter to the amplitude.
 - **Release Time:**
Defines the time needed to remove the filter from the amplitude.

- **Gain Processor:**
The Gain Processor modifies the gain of the amplitude. The values are defined in milliseconds (ms).
 - **Attack Time:**
Defines the time needed to apply the filter to the amplitude.
 - **Release Time:**
Defines the time needed to remove the filter from the amplitude.
- **Lookahead:**
Specifies the time that elapses before a filter is used. This means the start area of a filter can be excluded. The value is defined in milliseconds (ms).
- **Play / Stop:**
The **Play** button allows you to play back the audio with the defined settings and make changes afterwards. With the **Stop** button, you can stop the playback.

Editing the path

A linear path shows the primary level. The path can be edited as follows:

- Add a path point by left-clicking on the path
- Delete a path point by right-clicking on the point
- Move a path point by drag and drop

13.6.3.1 Creating and Deleting Presets

In addition to the presets provided, you can create your own presets, to quickly apply frequently used settings. The presets are available for the complete workarea.



To create a preset, proceed as follows:

1. Enter a name in the relevant field.
2. Change the path and enter the values as required.
3. Click on the **Add** button.
The preset is created with the defined values and is available in the list.

To delete a preset, proceed as follows:

1. Select a preset in the list.
2. Click on the **Delete** button.
3. Confirm the dialog that appears.

13.7 Insert Link Dialog Box

The **Insert Link** dialog box is shown, when inserting a link. You can select an object from the workarea or you can enter a link. To open the dialog box, select **Insert Object**  -> **Insert Link...** in the HTML Editor or **Link to** -> **Edit Link...**  for an object parameter.

i Note

If you have linked content from the workarea, then take care when publishing or issuing archives that you issue the object you have linked to as well.

The dialog box contains the following buttons:

- *Current Object:*
Displays the content of the current object. For example, modes and documents of a project.
- *Workarea:*
Displays the content of the workarea.
- *Free:*
You can use this option to define a link to a web page.
- *Shortcut:*
Shows linked content in the tree structure for direct selection. Up to five links are displayed here.
- *Actions:*
You can select actions for controlling the trainer or book reader.
- *Insert File...*
You can insert a file into the content which will be linked.

If you have selected learning content or a link, then confirm the dialog with *OK*. The link destination is now displayed as a link in the bubble.

Importing files

When you select *Current Object* you are given access to the *Insert File...* button. Select this button to import a file into your project. This can be a document or audio file, for example. A link with the file will be established automatically after it has been imported.

You can remove a selected file from the workarea by clicking the *Delete* button.

Open in a new window

The option *Open in new window* allows you to determine whether the object is to be opened in the same project window or a new one. Activating the option opens the link destination in a new window.

Selecting the option activates the *Parameter* button. This button displays a dialog box in which you can define properties for the new window.

Searching and filtering

Performing a search or selecting a filter in the header of the dialog makes it easier to find content in a complex tree structure. The respective content is displayed directly when a keyword is entered. You can also start the search by clicking the *Search* button. The filter list contains filters that have been created for selection. If you want to reset the filters, select (*no filter*).

13.7.1 New Window Options

If you have activated the option *Open in new window* you can use the *Parameters...* button to call a dialog containing options for displaying the window. You have the following options at your disposal:

Position

The values *Top* and *Left* are used to determine the distance of the new window from the top and left hand margin of the screen area. The values are stated in pixels.

Size

The values *Width* and *Height* are used to define the size of the new window. The values are stated in pixels.

The parameter *Fullscreen* defines whether the window is to be opened in full screen view. This requires the setting to be activated.

The parameter *Resizable* defines whether the window can be scaled. This requires the parameter to be activated.

Layout

You can have the following macros of the browser window displayed in the new window by activating the relevant setting:

- *Titlebar*
- *Menubar*
- *Toolbar*
- *Scrollbar*
- *Statusbar*

13.8 Style Editor




The style editor is the component for editing style resources in the Producer. The editor allows an individual adaptation of interfaces for the playback functionalities, contents and bubbles based on style templates.

The dialog box can be opened with the *Tools -> Customization -> Edit Style Resources...*  menu.

The customizable style types for the style editor are:

- **trainer Style**
Includes trainer bar, library, popup window, task window, book reader bar and quiz.
- **Desktop Assistant Style**
Includes windows of the Desktop Assistant and guided tour.
- **Book Styles**
Adaptation of background, buttons and pop-up window.
- **Bubble Styles**
Adaptation of bubbles based on different bubble styles.
- **Border Styles**
Adaptation of borders based on different border styles.

- **Manager Style**
User interface of the Manager – the style has to be implemented in the Manager after creation.
- **Desktop Assistant: Mini Icons**
Adaptation of icons used for mini bubbles of a context help.
- **Avatars**

In the style editor, adapted styles are stored in the *Adaptable Resources*  section of the *Explorer's* resource tree. Bubbles are also stored in the *Bubble Styles*  section and book styles are also stored in the *Book Styles*  section.

The created styles are always used for the current workarea. To use the styles in other workareas, export the resources as an archive file.

13.8.1 Structure and Functions

The basic parts of the style editor are:

- **Style list**
The style list on the top left shows the created styles.
- **Settings page**
The settings page on the bottom left shows the settings for the selected style.
- **Preview**
The preview on the right shows the selected style and the executed changes.

The style editor includes several functions for style management:

- *New...:*
Creates a new style based on a template.
- *Delete:*
Deletes a style from the style list and the resources.
- *Update Preview:*
Updates the style preview to make changed style attributes visible.
- *Save:*
Saves the changes of the currently opened style.
- *Close:*
Closes the style editor.

Style preview

The preview of the style editor shows the selected style in the final status. It allows you to see executed changes directly in the style components. After changing a style attribute, you need to update the preview to make the changes visible in the view.

13.8.2 Creating a New Style

Before you adapt a style, you first need to create a new style in the style editor. This can be done as follows:

1. Click on the [New...](#) button. A dialog box opens with the following settings:
 - [Template](#):
The setting shows the available style templates of the Producer.
 - [Name](#):
The setting defines the name of the style.
 - [Style ID](#):
The Style ID is used internally and cannot be changed afterwards.
2. Confirm your settings with [OK](#).

Once you have created a new style, a style resource will be created in the [Adaptable Resources](#) section of the resources. The style editor shows the style in the preview and in the style list.

13.8.3 Style Attributes

Style editing in the style editor is based on the structured attributes and behaviors that allow resources to be adapted quickly and easily. The attributes are located under [Style Definition](#).

Note

It is not possible to change the size of a complete style or for parts of a style. This is to avoid functional errors.

Colors

The basic adaptable attributes for styles are colors. The colors can be specified as hexadecimal values or using the [Color Selection](#) dialog box. This dialog box can be opened by selecting the color preview of a parameter.

Connected colors

The color attributes with a star (*) are set and changed automatically, when a higher-ranking color is changed. For this behavior, do not specify the attribute. The green button is set to inactive.

This practice allows you to create a well-balanced color style and to reduce the effort for adaptations. Therefore it is recommended that you only change the colors without a star.

This means each color of a default style only needs to be changed once and this change is applied to all other color instances. Other color instances can also be changed but this makes editing much more complex.

Images

In some cases, images are used (mostly for logos). To change an image, you need to consider the size of the original image. The new image should have the same size to fit in the layout. The used image size appears after the attribute name.

The typical file formats for images are GIF, JPG, PNG, BMP. The default images are in PNG format.

Layout types

The settings area has two layout types: [Standard Layout](#) and [Advanced Layout](#). You can change the layout by activating or deactivating the [Advanced Layout](#) option.

The standard layout shows the higher-ranking colors of the style. It is sufficient to only change these colors to get a

complete defined style.

In the advanced layout, there are a lot more colors visible that allow you to specify the used colors in greater detail.

i Note

After adapting the settings, press the [Update Preview](#) button to see the changes.

13.8.4 trainer Style (including library and book reader)

The trainer is the playback component for simulations. The trainer style includes the following components:

- trainer bar
- library window
- popup window
- task window
- book reader bar
- quiz style
- start, stop, load and error page


trainer style templates

The templates for trainer Style in style editor:

- trainer Style (small)
- trainer Style (medium)
- trainer Style (big)

13.8.4.1 Attributes of the trainer Style

This chapter describes the basic settings and sections for adapting the trainer style.

- **Name:**
The setting defines the name of the style.
- **Logo:**
Specifies the logo for the library, control bars and dialog boxes. The size of the logo depends on the selected template.
Select [Replace Image](#)  to change the logo.

> Recommendation

You can hide the logo for the playback in the [Playback Settings](#). The [Show Logo](#) setting is available for the control bar of each playback component.

The first settings are the basic color settings for the trainer style. When you change these colors, the gradation of the other colors changes automatically.

- *Fill color:*
The setting defines the basic fill color. The gradients are set automatically.
- *Active / Selection:*
The setting defines the basic color for active and selected controls and texts.
- *Background color (Advanced layout):*
The setting defines the background color of the library, book reader, and trainer.

› Recommendation

We recommend that you change the basic color settings first, because the settings influence all of the style's other colors. All other settings can be changed afterwards, to adapt the details.

Standard layout


The standard settings sections let you specify the colors for the style's basic components.

- *Application Icon section:*
These settings define the colors of the trainer's application icon. The application icon is used as favicon.
 - *Show Color Bar:*
With this setting, you can show or hide the color bar at the bottom of the header.
- *Dialog windows section:*
These settings define the colors of the dialog boxes.
- *Text colors section:*
These settings define the colors for the texts and the different statuses.
- *Tree / list section:*
These settings define the color of the content tree in the library.
 - *Show Object Icons:*
With this setting, you can show or hide the icons of the content objects in the tree.
- *Buttons icons / text section:*
These settings define the color of the icons and the different statuses.
- *Buttons section:*
These settings define the color of the buttons and the different statuses.


› Recommendation

The *Next* button of an *Explanation* bubble also uses these button configurations. You can change the button in the *Playback Settings -> General*. In the parameter *Explanation Link (Forward)* you can enter a text or a link to an image in your workarea. For example: ``

- *Navigation path buttons section:*
These settings define the color of the breadcrumbs in the library.
- *Start buttons section:*
These settings define the color of the start buttons for the modes or a book in the library.
 - *Multi-color icons:*
With this setting, you can deactivate the use of the default mode icons. Instead, icons with the same color as the text are used.
 - *Use custom icons:*
With this setting, you can specify custom images for the mode and book icons. The size of the icon

depends on the selected template.
Choose [Replace Image](#)  to change a specific icon.

> Recommendation

Insert the PNG image file with black icon and transparent background: 

The icon is colorized with the same color as that of the [Text](#) parameter.

Advanced layout – additional sections

The advanced layout sections and settings let you define parts of the style in detail.

- [library section](#):
These settings define the colors in the area under the library's top bar.
- [Dialog splitter section](#):
These settings define the color of the splitter between the tree and content view in the library.
- [trainer bar section](#):
These settings define the color of the library's and book reader's top and bottom lines.
- [Progress indicator section](#):
These settings define the color of the progress indicator for the trainer and book reader bar.

In addition to the advanced layout sections, there additional settings are available in the standard layout sections.

Color overview

The color overview is an HTML page that includes all options with the corresponding colors in a table. This provides you with an overview for proof of design standards.




To use the color overview, go to the style folder and open the [colors.html](#) file.


13.8.4.2 Explanation Icons

The explanation icons are used for explanation macro types in a simulation. To customize images, replace the default images with your own images.

The images have the size 32x32 pixels and are in GIF format.

You can adapt the explanation icons of the documentation in the [Documentation Style](#) additionally.

Type	Icon
Info	
Remark	
Tip	

Type	Icon
<i>Warning</i>	

Replacing an image

This is necessary to assign the correct image file to the active explanation type.

To replace an explanation image in a workarea, proceed as follows:

1. Select the icon file in the *trainer Style* resource of the *Explorer*.
2. Click on the *Replace file...* button in the object editor.
3. This opens the file selection dialog box. Select the required file.
4. Click on *Open*.

The icon is now integrated into the *trainer Style* and can be used for simulations.

13.8.4.3 Activating the trainer Style

The trainer uses the standard style of the workarea. A different style can be activated by using the *Playback Settings* in the Producer:

1. Open the central configuration dialog using the *Tools -> Settings* menu.
2. Select the section *Playback Settings -> trainer - Global -> Visual properties*.
3. In the *Style* setting, select the created style resource.
4. Confirm the dialog with *OK*.

The *trainer - Global* section activates the style for the whole trainer. It is also possible to select an individual style for the book reader, library or a simulation mode on the relevant settings page.

13.8.5 Desktop Assistant Style

The Desktop Assistant style is used for the playback of Desktop Assistant content. The style includes the image files and colors for the Desktop Assistant windows and the guided tour windows as well as for the sidebar.

13.8.5.1 Attributes of the Desktop Assistant Style

This chapter describes the basic settings and sections for adapting the Desktop Assistant style.

- *Name:*
Specifies the name of the style.

The first settings are the basic color settings for the Desktop Assistant style. When these colors change, the gradation of the other colors changes automatically.

- *Main Color:*
The setting defines the basic fill color. The gradients are set automatically.
- *Text Color:*
The setting defines the basic color of the window texts.
- *Active / Selection:*
The setting defines the basic color of active and selected controls and entries.
- *Text (Selected):*
The setting defines the color of selected text.

Standard layout

The standard settings let you define the components of the windows and sidebar.

- *Sidebar section:*
These settings define the size and the color of the status bar.
There are three sizes: *Small*, *Medium* (default) and *Big*
- *Sidebar Buttons section:*
These settings define the colors of the sidebar's buttons.
- *External Search Icon section:*
In this setting, you can exchange the default icon of the external search with another icon. The icon size is 24 x 24 pixels.
It is recommended that you use a PNG file with a transparent background.
- *Window section:*
These settings define the colors of the windows and window icons.
- *Tabs section:*
These settings define the tab colors.
- *Content section:*
The settings define the colors of the content areas.
- *List section:*
These settings define the colors of the object and step lists.
With the *Inside Borders* setting you can show or hide the borders between the objects and steps.
- *Footer section:*
These settings define the color of the footer and footer buttons.
- *Start Button section:*
These settings define the colors of the button for starting content.
- *Systray Info Popup section:*
These settings define the colors of the system tray's info popup.

Advanced layout – additional sections

The advanced layout sections and settings let you define further style parts in more detail.

- *Sidebar Grip section:*
These settings define the colors of the sidebar's grip.


- *Checkbox section:*
These settings define the checkbox colors.
- *Scroll Bar section:*
These settings define the scroll bar's colors.

In addition to the advanced layout sections, additional settings are available in the standard layout sections.

13.8.5.2 Activating the Desktop Assistant Style

The Desktop Assistant uses the workarea's standard style. A different style can be activated as follows:


Desktop Assistant

1. Open the *Settings* dialog box using the *Tools -> Settings...*  menu.
2. Select the section *Desktop Assistant: Playback Settings -> Desktop Assistant -> Desktop Assistant - Style and Windows*.
3. In the *Style* setting select the created style resource.
4. Choose *OK* to confirm the dialog box.

Guided Tour

1. Open the guided tour project.
2. Select the *Guided Tour Style* macro in the first step.
3. Open the *Guided Tour Window* subcategory in the macro editor.
4. Select the style resource in the *Window Style* option.
If the setting is deactivated, click on the green button.
5. Save the project.

You can define the style as a default of the *Guided Tour Style* macro for each new guided tour project.

1. Open the *Settings* dialog box using the *Tools -> Settings...*  menu.
2. Choose *Desktop Assistant: Authoring Settings -> Macro Initialization -> Guided Tour Style*.
3. In the *Style* setting select the created style resource.
4. Choose *OK* to confirm the dialog box.

13.8.5.3 Desktop Assistant (Web Assistant mode)

This chapter describes the basic settings and sections for adapting the *Desktop Assistant (Web Assistant mode)* style and how to activate it.

To see how the changes will look like, *Update Preview* in the Preview section on the right of the dialog.

With the *Copy* functions in the Preview section you can copy the customized parameters and paste them in the Web Assistant configuration.

Standard layout

The standard settings let you define the components of the windows and sidebar.


- *Name:*
Specifies the name of the style.
- *Web Assistant Theme:*
The setting defines the basic theme. Depending on your choice, the color parameters are adjusted automatically, but you can also customize individual colors using *Customize Colors* function.
- *Preview Background Color:*
This color is only used for the preview area. You can set it to the background color of your target application to test your current theme settings.
- *Sidebar Size:*
Define the size for the Sidebar. The default size is *Medium*.
- *Customize Colors:*
If you want to use the default colors of your selected theme, keep this checkbox deactivated. Activate the checkbox to customize individual colors.
When activated, the following list of customizable elements appears:
 - *Accent Foreground*
This color is used for text and icons of selected elements, such as the hotspot outline color or text and icon color for the mouseover state.
 - *Accent Background*
This is the background color for selected elements and the hotspot fill color. A lighter shade of this color is used for the mouseover state.
 - *Bubble Header Text*
This color is automatically set to the *Accent Foreground* color. The color must be different from *Bubble Header Background* so that the heading of the bubble is visible.
 - *Bubble Header Background*
This color is predefined in the selected theme.
 - *Help Panel Header Text*
This color is predefined in the selected theme.
 - *Icon*
Icon color for the Help Panel and bubble button icons. This color is predefined by the selected theme.
 - *UI Foreground*
Text color for the Help Panel and bubble buttons. This color is predefined by the selected theme.
 - *UI Background*
Background color for the Help Panel and bubble. For bright background colors, choose the Web Assistant theme *Light* to get dark bubble text.
 - *Sidebar section*
These settings define the colors of the sidebar.

Advanced layout

The advanced layout section lets you define further style parts.

- **External Search Icon:**
Activate the checkbox to customize the external search icon in the sidebar.
Choose or upload a PNG image with transparency. Recommended size: 64 x 64 pixels or 256 x 256 pixels. The image is recolored with the sidebar icon colors.

Activating Web Assistant Style for Desktop Assistant

1. Open the [Settings](#) dialog box using the [Tools -> Settings...](#)  menu.
2. Select the section [Desktop Assistant: Playback Settings -> Desktop Assistant](#)
3. Select the option [Use Web Assistant Mode](#).
4. In the [Web Assistant Mode](#) section choose the [Style](#) that you want to apply.
5. Confirm.

For more details on settings, follow the chapter *Desktop Assistant - Web Assistant Mode* of [SAP Enable Now Producer Manual](#).

13.8.6 Book Page Style

You can define specific book page styles to customize books. This can reflect the topic of the content or can have a company design.

The book style can be selected for a book page in the [Style](#) parameter in the book page editor.

The following components are included in the style:

- background
- buttons
- pop-up window



Book style templates

The templates for books in style editor:

- Standard
- Flat

Book style resource

A book style is divided into two resource types:

-  **Adaptable Resources:**
Contains the files used for the customizing of the book style.
-  **Book Styles:**
Contains the files used for the playback of content.

Note

When exporting an archive with the book style, make sure to export both resources.

13.8.6.1 Attributes of the Book Style

This chapter describes the basic settings and sections for adapting the book style.

- *Name:*
Specifies the name of the style.

The first settings are the basic color settings for the book style. When these colors are changed, the other colors will be changed automatically in their gradation.

- *Button border:*
The setting specifies the basic color for the borders of the buttons.
- *Button fill:*
The setting specifies the fill color of the buttons.
- *Multi-color icons:*
The setting specifies the colors of the icons of the buttons. In general, the icons are multi-color icons.
With deactivated setting further parameters are available to define icons with a single color.

The setting areas allow you to define the components of the book page.

- *Page background:*
These settings specify the image of the book page background.
- *Text pop-up - Window:*
These settings specify the colors of the window for the text pop-up.
- *Text pop-up - Button:*
These settings specify the colors of the buttons for the text pop-up.

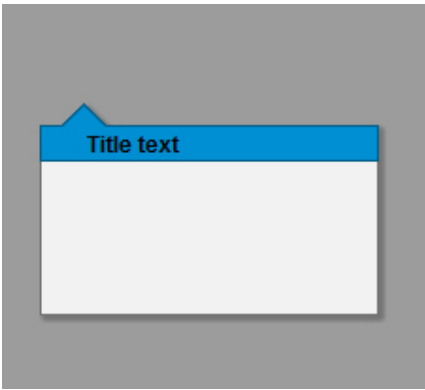
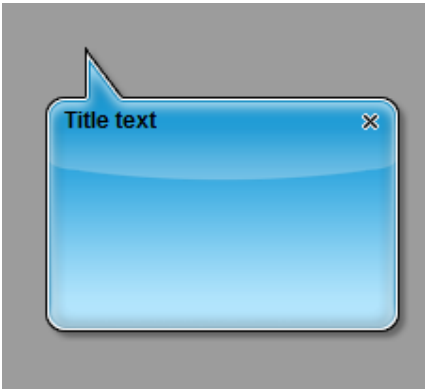
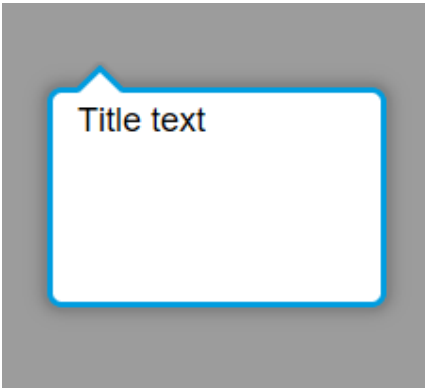
13.8.7 Bubble Styles

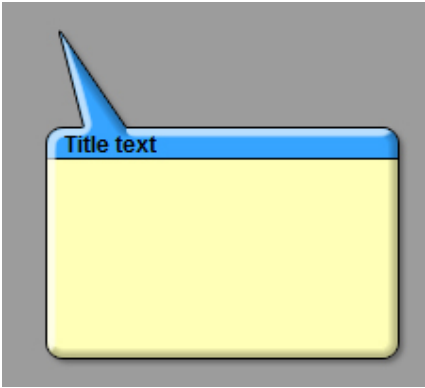
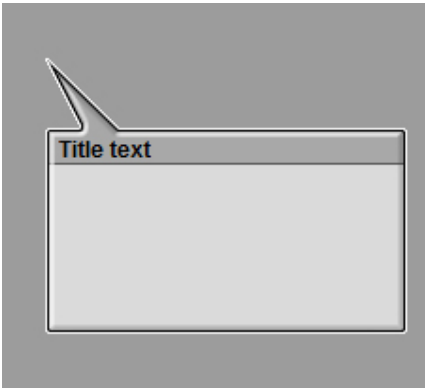
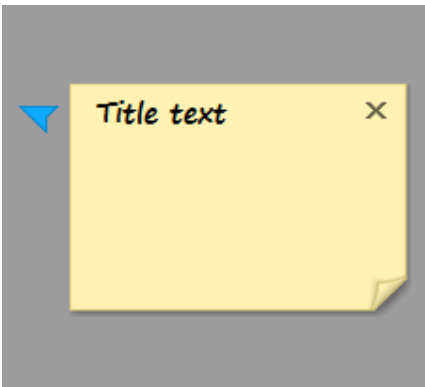
You can define specific bubble styles for the individual customization of simulation or Desktop Assistant content as well as book pages.

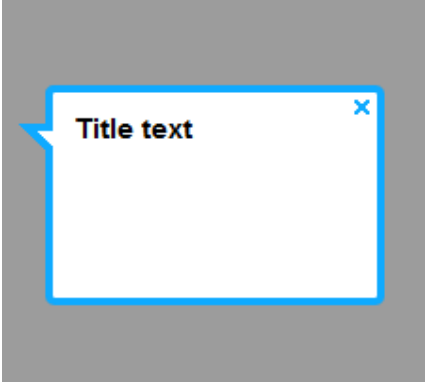
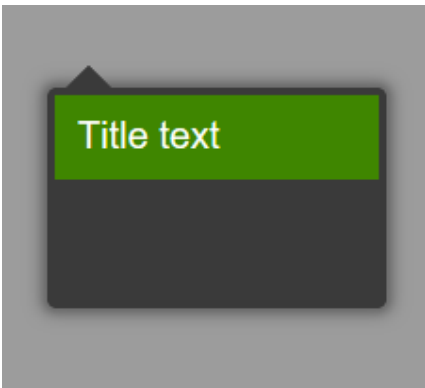
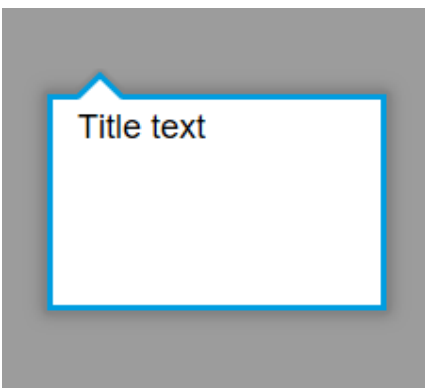
The general structure of bubbles is a text field with a spike and header bar for the feedback bubble.

Bubble templates

The templates for bubbles in the style editor:



Bubble	Preview	Notes
Edge Bar		The template is used for the <i>Blue Sunset</i> bubble style.
Gloss Effect		
Rounded Corners		The template is used for the <i>Blue Ocean</i> and <i>White Island</i> bubble styles.

Bubble	Preview	Notes
Shadow		
Gray		
Sticky Note		The template is used for the <i>Yellow Note</i> bubble style.

Bubble	Preview	Notes
Thick Border		
Big Title Bar		The template is used for the <i>Black Forest</i> bubble style.
Rectangular		The template is used for the <i>White Island</i> bubble style.

Bubble resource

A bubble style is divided into two resource types:

-  *Adaptable Resources:*
Contains the files used for the customizing of the bubble style and for the content editing.
-  *Bubble Styles:*
Contains the files used for the playback of content.

i Note

When exporting an archive with a bubble style, make sure to export both resources.

13.8.7.1 Attributes of the Bubble Styles

The available bubble settings depend on the bubble style and characteristics.

Typical bubble style attributes for defining the main characteristics:

- *Name:*
This setting specifies the name of the style.
- *Border:*
This setting defines the color of the bubble's border.
- *Content fill:*
This setting defines the color of the bubble including the content part.
- *Header fill:*
This setting defines the color of the bubble's header.

Advanced layout – additional sections

The advanced layout sections and settings allow you to define parts of the style in detail.

- *Title text section:*
The settings define the text style for the text in the bubbles title bar.
- *Content text section:*
The settings define the text style for the text of the bubble content.




13.8.8 Border Styles


You can define specific border styles for the objects *Text Box*, *Placeholders* and *Active Area* on book pages, in order to highlight content or to use the boxes as design elements.

The border styles can be selected individually for each object by using the *Border Style* parameter.

Border style templates

The templates for border styles in the style editor:

Border Style	Preview
Decor 1	
Highlighter	
Text Box Shadow	

Border Style	Preview
Warning	

13.8.8.1 Attributes of Border Styles

The available border settings depend on the border style and characteristics.

Typical border style attributes for defining the main characteristics:

- *Name:*
This setting specifies the name of the style.
- *Background color:*
This setting specifies the color of the text box.
- *Fill background:*
This setting activates the specified *Background color* of the text box.

Decor

The style includes the following further parameters:

- *Line color:*
This setting specifies the color of the text box border.

Highlighter

The style includes the following further parameters:

- *Color:*
This setting specifies the color of the highlighter.

Text Box Shadow

The style includes the following further parameters:

- *Shadow:*
These settings specify the shadow of the text box and allow you to change the characteristic.
- *Shadow color:*
This setting specifies the color of the defined *Shadow*.

- [Add Effects \(Advanced Layout\)](#):

These settings activate and specify the color effects in the text box.

Warning

The style includes the following further parameters:

- [Border](#):
This setting specifies the color of the outer border (2px).
- [Inner border](#):
This setting specifies the color of the inner border (1px).
- [Stripe color 1](#):
This setting specifies the first color of the stripes in the top and bottom bar.
- [Stripe color 2](#):
This setting specifies the second color of the stripes in the top and bottom bar.
- [Content fill](#):
This setting specifies the color of the text area.

13.8.9 Manager Style

You can create a Manager style to customize the Manager interface for your company design or specific use cases.

The Manager style must be implemented in the Manager installation.

Application name

For your Manager installation (HANA option) you can customize the application name that is displayed in the Manager UI, in the browser, and in e-mail notifications which are sent when working with the Manager.

To enter your own application name, proceed as follows:

1. Open your Manager.
2. Go to [Administration](#) -> [Server Settings](#).
3. Go to the [GUI](#) settings.
4. Enter your application name in the [Application Name](#) parameter.

13.8.9.1 Attributes of the Manager Style

This chapter describes the basic settings and sections for adapting the Manager style.

- [Name](#):
This setting specifies the name of the style.
- [Logo](#):
This setting specifies the logo image that will be used in the header of the Manager.
The default size is 300 x 48 pixel. For high-resolution a size of 600 x 96 pixel is recommended.

- *Content Background:*
The setting defines the background color of the application screen.
- *Screen Title:*
The setting defines the text color of the title of the application screen.
- *Active / Selection:*
The setting defines the basic color for active and selected controls and texts.
- *Marked Text:*
The setting defines the text color for a selected control, list entry or tree entry.

Standard layout

The standard settings sections allow you to specify the colors for basic components of the Manager style.

- *Application Icon section:*
These settings define the color of the Manager icon.
- *Header section:*
These settings define the color of the background and texts for the header.
- *Menu bar section:*
These settings define the color of the buttons and texts of the menu bar with different statuses.
- *Submenu dropdown section:*
These settings define the color of the menu and texts of the dropdown for the submenu.
- *Buttons section:*
These settings define the color of the buttons and the different statuses.
- *Links and Tabs section:*
These settings define the color of the links and tabs and the different statuses.

Advanced layout – additional sections

The advanced layout sections and settings allow you to define parts of the Manager style in detail.

- *Tree selection:*
These settings define the color for the status of the tree entries.
- *Table selection:*
These settings define the color for the status of the table entries.
- *Dialog windows:*
These settings define the color of the bars and texts for the dialog boxes.

Color overview

The color overview is HTML page that includes all options with the corresponding colors in a table. This provides you with an overview for proof of design standards.

To use the color overview, go to the style folder and open the [colors.html](#) file.

13.8.9.2 Implementing the Manager Style (SQL Option)

The Manager styles that you create are stored in the *Explorer* under *Resources -> Adaptable Resources*. To include the style in a Manager installation, proceed as follows:

1. Right-click on your *Manager Style (UI)* resource.
2. In the context menu, select *Open Folder*.
3. Open the *version-'number'* folder of the resource.
4. Open the Manager files in the *webapps* folder of your Tomcat installation, for example:
...\Apache Software Foundation\Tomcat6.0\webapps\Manager_Installation
5. Copy the files from the resource folder into the folder of your Manager installation, replacing the existing files. Keep the other files in the installation folder untouched.
The files and folders are: *images*, *release*, *unprotected*, *webclient* and *index.htm*

13.8.9.3 Implementing the Manager Style (HANA Option/Cloud Edition)

Using a Manager, HANA option or Cloud edition instance you can upload and change your style to the running instance without redeployment or server downtime.

Requirement

To implement the Manager style, you need the following:

- Role *Master Author* or higher
- Workarea permission *Edit Workarea* for default workarea *System (_system)*

Procedure

The Manager styles that you create are stored in the Explorer under *Resources -> Adaptable Resources*. To include the style in your Manager instance, proceed as follows:

1. Right-click on your *Manager Style (UI)* resource and select *Export...*
2. Save the DKP file on your PC.
3. Open the Manager interface in your browser.
4. Go to *Workareas -> System*.
5. Expand the workarea tree to *Workarea -> Resources -> Adaptable Resources*.
6. Select the resource item *Manager Style (UI)*.
7. Select *Start Editing* in the upper right corner.
8. Select *Import Archive* and choose the exported DKP file.
9. Select *Upload*.
10. Check that the resource is checked in the *Import Archive* dialog box and select *OK*.
11. Select *Publish* to apply the modified style to the Manager.

i Note

Changes are only applied if the resource is published. To switch back to default style, you can [unpublish](#) the source.

Alternative procedure

Using Manager, HANA option, or Cloud edition you can connect the Producer directly to the [System](#) workarea (HANA option) or use the Cloud Producer (select [Open Producer](#) in the [System](#) workarea) to create/modify your individual Manager style.

13.8.10 Desktop Assistant: Mini Icons

You can define a set of icons used for the mini bubbles of the object bubbles for Desktop Assistant projects. The icons can be selected individually for each action macro by using the [Mini Icon Type](#) parameter.

The style contains the following icon types:



- [Help](#)
- [Info](#)
- [Warning](#)
- [Maintenance](#)
- [Update](#)
- [New](#)
- [Training](#)
- [Attachment](#)
- [Link](#)
- [Tip](#)
- [Note](#)
- [Compliance](#)

Mini icon templates

The templates for bubbles in the style editor:

- Desktop Assistant: Mini Icons
- Desktop Assistant: Mini Icons (Big)

13.8.10.1 Attributes of the Mini Icons

This chapter describes the basic settings and sections for adapting the Mini Icons style.

- *Name:*
Specifies the name of the style.
- *Background color:*
This setting specifies the background color of the preview.

Master colors 1 and 2

The master colors define the initial colors for the icons. There are two master color sections to define two different icon types.

The master colors have the following parameters:

- *Symbol:*
Defines the color of the symbol.
- *Background:*
Defines the background color of the icon.
- *Symbol (mouse over):*
Defines the color of the symbol in mouse over status.
- *Background (mouse over):*
Defines the color of the background in mouse over status.
- *Symbol (pressed):*
Defines the color of the symbol in pressed status.
- *Background (pressed):*
Defines the color of the background in pressed status.

Icons types

The settings define the shape and the color of the icons.

Each icon has the following parameters:

- *Background Shape:*
Defines the shape of the icon. The following shapes are available:
 - *Square*
 - *Circle*
 - *Diamond*
 - *Triangle*
 - *Note*
 - *Explanation*
 - *Symbol with Border*
 - *Plain Symbol*
- *Colors:*
You can adapt the symbol and background colors for each icon individually. Each icon uses a definition of the master colors by default.



13.8.11 Avatars

You can create avatars for the use in your content. An avatar has different gestures and poses and is stored as style resource in *Adaptable Resources*.

Adding avatars to the content provides different possibilities to enhance the learning experience. They can be used to present content, to guide through a story, pose questions or to speak directly to the learner.

Avatar templates

The templates for avatars in the style editor:

Avatar	Preview
Comic Man	
Comic Woman	

Using an avatar

To select an avatar in your content, proceed as follows:

1. Insert an *Image* object or open the HTML editor.
2. Select *Insert image from workarea*.
A dialog box opens.
3. Open the workarea tree *Resources -> Adaptable Resources -> Comic Man / Comic Woman* in the dialog box.
4. Select the required image of the avatar.
5. Select *OK* to insert the image.

> Recommendation

To show the resources in the selection dialog box, select *Filter Tree -> Show Resources*.

13.8.11.1 Attributes of the Avatars

The available settings depend on the avatar and characteristics.

Typical avatar attributes for defining the main characteristics:

- *Name:*
Specifies the name of the style.
- *Hair / Hat:*
Specifies the type of head or hair. Select a type from the dropdown box.
- *Skin*
- *Hair*
- *Eyes*
- *Mouth*
- Clothes attributes
- *Shoes*

You can change the colors of the settings to customize your avatar.

Logo / Details

The settings in the subcategory *Logo / Details* allow you to add images on the clothes of the avatar. For examples: logo of a company.

- *Add Logo / Images:*
Activate the setting, to display further image parameters.
- *Front:*
Specifies the front image of the avatar. (60 x 60 pixel)
- *Back:*
Specifies the back image of the avatar. (60 x 60 pixel)
- *More Images:*
For the avatars which are looking left or right you can add further images. This is helpful to use an image with

the correct perspective of the avatar.
The recommended image rotation is 4 degree.


13.9 Text Style Editor

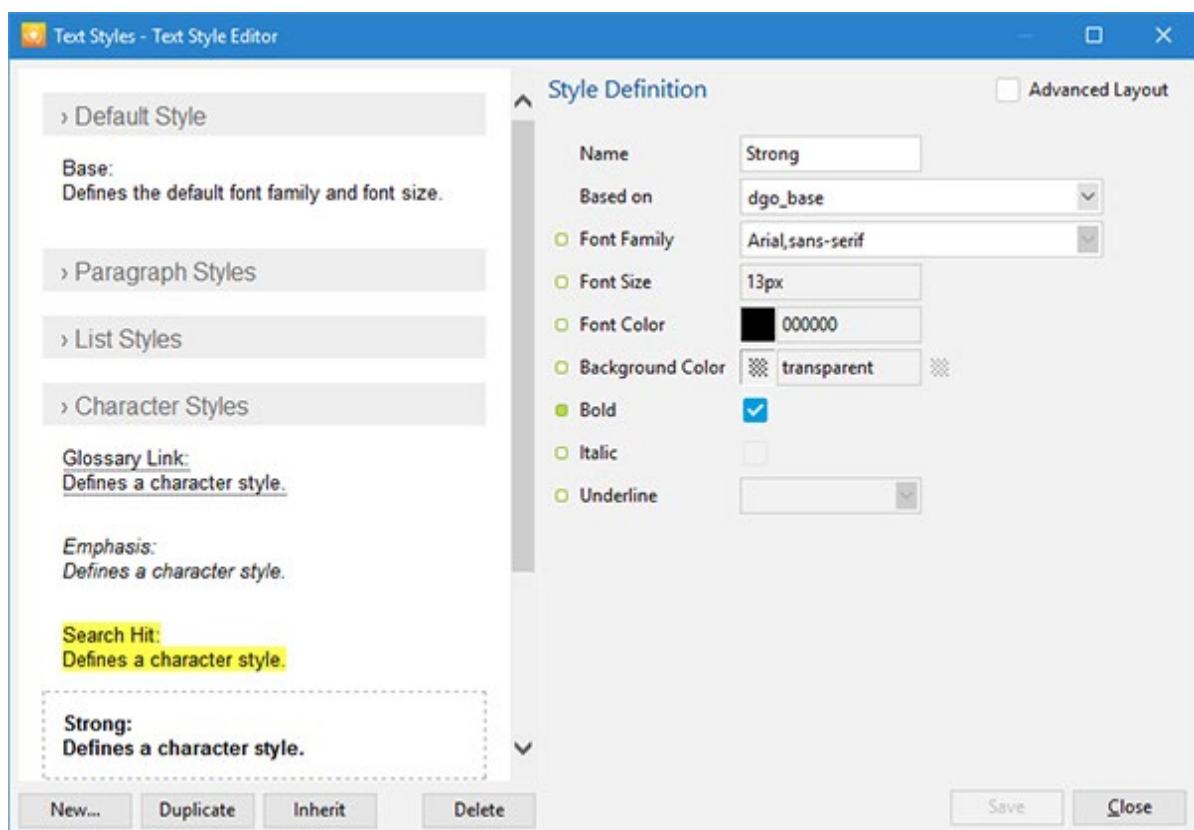
The text style editor is the component for editing text resources in the Producer. The editor allows you to customize texts for consistent use in the content.

In the text style editor, adapted styles are stored in the [Adaptable Resources](#) section of the [Explorer's](#) resource tree. The created styles can be used in the HTML editor during content creation.

Opening the text style editor

The text style editor can be opened with the [Tools -> Customization -> Edit Text Styles...](#)  menu. The editor is opened with the current default text style.

To edit a specific text style, choose [Text Styles](#) resource in the [Adaptable Resources](#)  and select [Edit Text Styles...](#) in the object editor.




i Note

The created text styles are always used for the current workarea. To use the styles in other workareas, export the resources as an archive file.

Duplicating text styles

You are able to use more than one text style for different uses cases, for example, to create an optimized text style for documentation.

Duplicate a resource as follows:

1. Select a resource in resource tree.
2. Open the context menu.
3. Select *Duplicate...* .
A dialog box opens.
4. Enter a *Name* and change the *ID*, if required.
5. Select *OK*.

13.9.1 Structure and Functions

The basic parts of the text style editor are:

- **Preview**
The preview on the left of the screen shows the available styles and the executed changes.
- **Settings page**
The settings page on the right of the screen shows the settings for the selected style.

The style editor includes several functions for managing styles:

- *New...:*
Creates a new style based on an available style.
- *Duplicate:*
The function duplicates the selected style. The duplicated style and the source style use the same base style.
A default style cannot be duplicated.
- *Inherit:*
Inherits the selected style. The inherited style uses the source style as base style.
- *Delete:*
Deletes a style from the style list and the resources.
- *Save:*
Saves the changes of the currently opened style.
- *Close:*
Closes the text style editor.

13.9.2 Text Style Categories

The text style editor has the following style categories in the preview view. Each section includes default styles and can contain created or duplicated styles.

- *Default Style:*
Includes the default text style for all style definitions. The default text style only includes the *Font Family* and *Font Size*.
- *Paragraph Styles:*
Includes the paragraph and heading styles.
- *List Styles:*
Includes styles for lists and list level.
- *Character Styles:*
Includes styles for formatting a text inside a paragraph.
- *Block Styles:*
Includes styles for specifying text boxes and the formatting of the text.
- *Table Styles:*
Includes styles for specifying tables, the table headers and the formatting of the text.
- *Link Styles:*
Includes styles for linked text.

13.9.3 Creating a Text Style

Before you can adapt a text style, you first need to create a new text style in the text style editor. This can be done as follows:

1. Select *New...*
The *New Text Style* dialog box is opened.
2. Adapt the following settings:
 - *Style Type:*
Shows the available style types. Select the type that you want to use as a template.
 - *Display Name:*
Enter a name for the style.
 - *CSS Class Name:*
Contains the name of the style that is used in the CSS of the HTML text. The *CSS Class Name* is generated from the *Display Name*. You can change the name, if required.
3. Select *OK*.

The new text style is added to the preview in the corresponding style category.

Duplicate or inherit a style

Alternatively, you can also duplicate or inherit an existing style in a style section.

- *Duplicate:*
Use this function if you want the duplicated style and the source style to use the same base style.
Note that a default style cannot be duplicated.
- *Inherit:*
Use this function if you want the inherited style to use the source style as the base style.

The functions can be used as follows:

1. Select the source style in the preview.
2. Select *Duplicate* or *Inherit*.
The *New Text Style* dialog box is opened.
3. Adapt the following settings:
 - *Display Name*:
Enter a name for the style.
 - *CSS Class Name*:
Contains the name of the style that is used in the CSS of the HTML text. The *CSS Class Name* is generated from the *Display Name*. You can change the name, if required.
4. Select *OK*.

The new text style is added to the preview under the source style.

13.9.4 Editing a Text Style

To edit a text style, proceed as follows:

1. Select the style that you want to change.
To open a style category, select the category name.
2. Edit the settings in the settings page.
Each text style includes style relevant parameters that can be adapted. The main sections are:
 - *Text* - general parameters
 - *Paragraph*
 - *Margin*
 - *Padding*
 - *Border*
 - *List Level*
3. Select *Save* to save your changes.

› Recommendation

In some cases, it is necessary to have a fallback font type, if the specified font cannot be displayed.

You can add a fallback font type to your specified font, separated by a comma. For Example: Standard Font, Fallback Font


13.10 Using Colors

Colors can be used in various parts of the Producer, such as for texts in the HTML editor, or for objects in the project editor or book page editor.


You can specify colors in the *Custom Color Dialog Box*.

To specify a set of colors you can use the *Color Palette* resource. The colors of the resource can be selected from the *Color Selection Dialog Box*.

13.10.1 Custom Color Dialog Box



The custom color dialog box allows you to define and customize your colors. The dialog box can be opened by selecting *Font Color...*  or by selecting a color preview of a color parameter.

i Note

If the workarea has a *Color Palette* resource, then the dialog box can be opened by selecting *Custom Color...*  in the *Color Selection* dialog box.

See also *Color Palette*.

The following settings are available for defining the color values:

- *Color wheel:*
The color wheel contains a wide variety of shades that can be selected by simply clicking on the required color.
- *Brightness:*
The brightness control allows you to define the brightness of the color wheel or the selected color.
- *New / Current:*
The two fields below the color wheel display the current and the selected color values. By selecting *Current*, the *New* color value will be removed and the value will be reset to its original state.
-  *Color Picker:*
The color picker allows you to choose a specific color shade on the screen.
Click on the button and with the mouse button held down, drag the picker icon onto the required color shade.
Release the mouse button to confirm the color value shown.
- *RGB color value:*
The RGB color value allows you to define a color via an RGB color space.
- *HSV color value:*
The HSV color value allows you to define a color using an HSV color space.
- *Hex color value:*
The hexadecimal color value allows you to define a color using the RGB color space as a hexadecimal value.
- *Recently Used:*
This fields display the last 16 colors that have been previously selected.
- *Standard Palette:*
This fields display 16 predefined standard colors.
-  *Add to Palette...:*
Select the button to add a custom color to the color palette. The color palette dialog box is opened.

13.10.2 Color Palette

The color palette allows you to predefine a set of colors used for content creation. For example, you can specify the colors of your corporate design. This helps the author to use the colors in the content consistently.

The color palette is a resource type of the *Adaptable Resources*.






Note

The color palette is not a default resource of the workarea. The resource is added after you specify and save colors in the color palette editor.

Color palette editor

The editor can be opened with the *Tools -> Customization -> Edit Color Palettes...*  menu.

The editor is structured as follows:

- **Toolbar:**
Contains functions for editing colors.
 -  *New Color:*
Allows you to create a new color for the resource.
 -  *Edit Name and Description:*
Allows you to edit the name and description of a color.
 -  *Reset Color:*
Resets the color and discards the last changes.
 -  *Move Color Up / Move Color Down:*
Changes the order of the color in the list.
 -  *Delete Color:*
Deletes a selected color from the resource.
- **Color list:**
Show the colors of the resource with preview, name and description.
- **Color selection controls:**
Contains controls for specifying a color. See also *Color Selection Dialog Box*.

13.10.2.1 Customizing a Color Palette

You can create a new color specification or you can change an available color.

Creating a new color

To create a new color, proceed as follows:

1. Select *New* to create a new color. Select *Edit* to edit an available color.
2. A dialog box is opened.
 1. *Color preview:*
The field shows a preview of the current color and the Hex value.
 2. *Color Name:*
Allows you to enter a name for the color.
 3. *Description:*
Allows you to enter a description for the color. The description can contain a use case or limitations for the color.


3. Select [OK](#).
The new color is created and selected in the list.
4. Specify the color by using the color wheel or enter a color value.

Changing an available color

To change an available color, proceed as follows:

1. Select a color in the list.
2. To edit the name and description select [Edit](#) in the toolbar or double-click the color.
 1. A dialog box is opened. Change the values.
 2. Select [OK](#).
3. Specify the color by using the color wheel or enter a color value.




13.10.3 Color Selection Dialog Box

The color selection dialog box allows you to select the colors of a color palette. The dialog box can be opened by selecting [Font Color...](#)  or by selecting a color preview of a color parameter.

Note

The dialog box is only available, if the workarea has a [Color Palette](#) resource.

See also [Color Palette](#).

- [Recently Used](#):
This fields display the last 7 colors that have been previously selected.
- [Standard Palette](#):
This fields display the colors of the [Color Palette](#).
You can display the colors or the colors and the descriptions. Select a button in the top of the dialog box to change the view.
 -  [Show List View](#)
 -  [Show Swatch View](#)
-  [Custom Colors...](#):
The control opens the custom color dialog box to specify a custom color.

13.11 Using an External Editor for Images

Images are one of the main contents in objects, especially in projects. In some cases, it may be necessary to change, update or retouch an image. You can use an image editing editor, in order to make it easier to edit images. When editing content, you can open a specific image from the Producer in the external editor. Once the image has been edited and saved, the changes are visible in the Producer.


An external editor can be used for all types of images in:

- projects

- book pages
- style editor

Editing an image externally

To use an external editor, proceed as follows:

1. Select the macro with the included image.
2. Select [Replace Image](#)  (macro editor) of the image parameter. Choose [External Editor...](#) from the menu. The image is opened in the editor and a dialog box appears.

Note

Do not close the dialog box when editing the image. When you close the dialog box, the changes are discarded.

3. Edit the image in the editor.
4. Save the image in the editor and close the image.
5. Select [OK](#) to confirm the changes.

Specifying the external editor

The default editor for editing images is Microsoft Paint. To set a different editor, proceed as follows:

1. Select [Browse...](#) (see above) in the dialog box.
2. Select the executable file of the editor.
3. Confirm with [Open](#).
4. Select [Cancel](#) or [OK](#) and restart the function for editing in the selected editor.

13.12 Keyboard Settings

Many functions in Producer may be executed using keyboard shortcuts (hotkeys). It is important to distinguish between shortcuts that relate to the Producer menu commands and keyboard shortcuts that relate to particular actions during the recording of a step. All actions can be assigned or reassigned from default settings to individually selected keys using the command [Tools -> Keyboard Settings...](#) This is where you may also assign hotkeys to actions that have not been assigned a default shortcut setting.

This function allows the user to freely assign shortcuts to the keys that seem the most logical or are the easiest to remember.

On the left you will see a complete list of available actions. These are subdivided into groups which can be selected via a drop-down list box. The list box contains the actions in that group. If an action has been selected, its name and its current key assignment are displayed. The PC keyboard layout is displayed on the right side of the screen. Under the keyboard graphic in the [Action](#) box the name of the selected action is displayed along with the previous and new key assignment (if any new assignment has been made).

All keys are color-coded. Yellow indicates the key assigned to the action in question. Red indicates that a key already has an assignment. Green indicates a free key. Blue indicates whether the `Shift`, `Alt` or `Ctrl` key needs to be held for the particular action. White fields indicate keys that are not available for individual assignments.

The currently assigned keyboard shortcut for each of the different keys can be checked by moving the mouse pointer over it. A small status line under the keyboard displays which action is using the key. Pressing the `Shift`, `Alt` or `Ctrl` keys is simulated by simply clicking on the corresponding position on the keyboard display. Clicking it again deactivates it.

Assigning shortcuts

To assign a new hotkey, simply click on the green key of your choice. When all changes have been made, click on *OK* or *Apply* in order to activate all hotkeys. If you would like to return to the default settings, simply click on the button *System Default*. Individual key assignments can be deactivated using the button *Remove Hotkey*. The key will then be available for a new action assignment. Note that the corresponding action can no longer be carried out with a keyboard shortcut until a new one is assigned.

In addition to default keyboard shortcuts, there are several actions that have no default keyboard shortcuts. You may assign these shortcuts as you wish.

13.13 watchdog

The watchdog is a functionality of SAP Enable Now and is used to show a feedback to the user if a product component is not responding during a process.




In such a case a dialog box with a hint is opened. The dialog box contains the following buttons:

- *Restart:*
Restarts the Producer.
- *Please Wait:*
Waits for finishing the process. The Producer will not be closed.
- *Close:*
Closes the product component. In case of an exception the button is displayed instead of *Please Wait*.
- *Open Log Folder:*
Opens a folder with a log file and closes the Producer.
The log file contains information about the executed processes and can be used by the support to analyze the occurred problem.

The log files are stored in the folder:



```
C:\Users\User\AppData\Local\Temp\Low\watchdog_logfiles
```

14 Settings Dialog Box

The [Settings](#) dialog box contains all the global settings for working with Producer as well as the settings for recording and editing contents and settings for the trainer installed in the current workarea. You can open the dialog box by using the menu [Tools -> Settings...](#) .

14.1 General Usage


The functions and characteristics of the [Settings](#) dialog box are:

- **Layouts**
The most setting pages using different layouts, that can be switched about the title bar.
 - [Standard Layout](#) - contains the basic settings
 - [Advanced Layout](#) - contains the further settings for advanced users
- **Green Control**
Some of the settings have a green control, that allows it to activate  or deactivate  a setting. A deactivated setting uses the default settings of the Producer. To edit a deactivated setting, the green control has to be activated per click.
- **Project Override**
The [Project Override](#) subcategory provides specific settings for the currently opened project. The global settings are not affected.
- **Default Settings**
The [Default Settings](#) button allows it to reject executed changes.
- **Restart**
Some of the settings require a Producer restart before they become active. In this case a dialog shows up when the settings are applied or the dialog is closed.

14.2 Initialization and Fallback Default Parameters

Parameters defined in the central configuration dialog are differentiated in terms of how they are used into initial and so-called fallback parameters. This involves differentiating according to whether they are supposed to initiate a global default of the available parameters or overwrite non-individualized parameters.

Note

Parameters are saved for each workarea where they are filed under [Resources -> Configurations](#) . Particularly close attention is to be paid to this if individual parameter settings are also to be made available to other authors or used as a Workarea standard when connecting to Manager.

14.2.1 Use in the Macro Settings

Macro Initialization and *Macro Fallback Defaults* allow you to define specific macro parameters across a workarea. However, they do not apply in the case of individualized parameter definitions (with green lamp activated).

Macro Initialization

You can use the *Macro Initialization* to define all of the relevant macros' parameters prior to the project creation process, thus ensuring the greatest possible project consistency. Parameters that are predefined using *Macro Initialization* are shown as being activated in the relevant macro settings (the green lamp preceding the parameter is activated). That means they are unaffected by changes in the *Macro Fallback Defaults*.

i Note

Note that *Project Initialization* depict initial parameters. The parameter definitions they contain only apply once they have been established and are not applied to already existing projects.

Macro Fallback Defaults

The *Macro Fallback Defaults* allow you to determine parameters in all of the workarea's previously recorded projects, thereby ensuring, for example, consistency within the workarea upon conclusion of the project creation process. Unlike when defining *Macro Initialization* parameter settings made via the *Macro Fallback Defaults* in the relevant macros are NOT shown as being activated (the green lamp preceding the parameter remains inactive). The advantage of this is that settings specified using *Macro Fallback Defaults* can always be changed globally again.

i Note

Note that *Macro Fallback Defaults* only take effect in NON-activated parameter data.

14.2.2 Application Example

The following case study is intended to explain the different *Macro Initialization* and *Macro Fallback Defaults* application examples using the explanation bubble.

When creating the workarea prior to recording the projects, it needs to be stipulated that all explanatory bubbles to be inserted should use the *Info* display type. The author can apply any necessary variances himself on a case by case basis although as a matter of principle the explanatory bubble should be used for this type of information. To avoid inconsistencies as a result of omitting this parameter configuration and to free the author from having to reapply this setting each time, this setting is defined as a *Macro default*.

To this end, parameter type (2) is defined in the central configuration dialog under *Authoring Settings -> Macro Initialization (1) -> Explanation*. It will then be placed in the explanatory bubble in all the projects that are to be recorded.

Once all projects have finished recording, it is recognized in the workarea finalization process that most explanatory bubble content contains excessively detailed additional information, thus distorting in *Test mode* what the learner has actually learned. As this was not considered in the planning phase, the parameter *In Test mode* was not activated in any of the recorded projects and consequently was not defined either. At this point, the extra effort of

rectifying all the projects manually can be avoided by amending the specific *Macro alternate parameter*. Deactivating the parameter *In Test mode* (2) in the central configuration dialog in *Playback Settings -> Macro Fallback Defaults parameter (1) -> Explanation* deactivates the parameter in all workarea projects.

i Note

Note that *Macro Fallback Defaults* only take effect with default parameters, namely ones which have not been changed. Activated parameters (green lamp) are unaffected when an alternate parameter is changed.

14.3 Producer

The *Producer* area contains the basic settings for the administration of the Producer. Further there are configurations of the tools and the functions for the creation and editing of content.

- **General**
The settings page influences the appearance and the use of specific editing tools of the Producer.
- **Manager Workarea**
The settings page influences the communication between the local and Manager workarea.
- **Directories**
The settings page defines the auto save function and the automatic update of the Producer.
- **Save**
The settings page defines the modes, which will be created when generating a project. All modes are activated by default.
- **Templates**
The settings page defines the templates for the creation of content objects.
- **Expert Features**
The settings activate additional Producer functions. Note, that the functions are not covered by the standard support package and do not represent standard guaranteed system properties.

14.3.1 General

Settings are located in this category which influence the appearance and the use of specific editing tools of Producer.

Some of the settings require Producer to be restarted before they become active. In this case, you will be informed by a dialog as soon as the settings are applied or the dialog closes.

- *Primary Language:*
Defines interface language of the Producer.
- *Secondary Language:*
Defines the fallback user interface language of the Producer. In the primary language not available translations will be shown in the secondary language.
- *Default Language for Spell Checking:*
This option defines a default language to be used for spell checking. Typically the language used is the one

defined for an object. If no language package for Windows Office is installed, the Producer uses the defined default language.

- *Spell Check:*
Activates spell checking for the HTML editor. This requires an installed spell checker for Microsoft Word.
- *Drag&Drop Macro Editing:*
Specifies, that macros can be moved with drag&drop in the project editor.
- *Advanced Accessibility Features:*
Enables the advanced accessibility features (magnifiers) of the Producer.
If the features are not needed, deactivate the option to save memory.
- *Move Time with Macros:*
The effect of this option is that when a macro is inserted or removed, the other macros are seamlessly shifted along the timeline or any gaps arising are closed. Move time with macros enables the other macros to seamlessly shift along the timeline when a macro is inserted or removed. When a macro is inserted, all subsequent macros shift back along the timeline by the exact duration of the inserted macro. If a macro is deleted within a step, the resulting gap is automatically closed.
- *Max. most recently used folders:*
This allows you to define how many of the recently opened directories are to be displayed in file dialogs.
- *Show disabled warnings:*
If dialogs were suppressed by selecting the option *Don't show this message again*, activating this parameter can redisplay the dialogs.
- *Use Old Office formats:*
This option is used to generate documents in the 97-2003 Office format (DOC/PPT). If the option is deactivated, the DOCX/PPTX formats are generated.
- *Generate trainer on closing Producer:*
Specifies whether the library should be generated when closing the Producer.
It is recommended to deactivate the setting, if the workarea includes a large number of objects.
- *Forbid Active Content:*
Activate this setting to prevent the import of JS, HTM and HTML files. This will forbid the import of potentially dangerous content.
- *Preferred Internet Browser:*
Choose whether you want to use the Microsoft Internet Explorer or your system's default browser for local playback and other Producer functions.

14.3.2 Server Workarea

The settings in this category influence the communication between the local and the server workarea.

The main parts of the settings page are:

- *General:*
The settings influence the creation and the handling of a server workarea.
- *Workflow Settings:*
The settings define the behavior and the default values of the server interaction dialogs (like *Save to Server*, *Finish Editing*, *Change Workflow*, ...).

- *Preferred actions:*
The settings define, whether the context menu provides operation calls for the current, single object or the relevant bulk operation calls including the sub-objects as well, if existent.
- *Show Tree Selection:*
The settings define, whether the tree selection dialog is displayed when executing an operation.

14.3.3 Directories

The settings in this category affect the paths used by Producer for saving settings and other program components, as well as the *Autosave* functionality.

- *Updates' path:*
This allows automatic updates for associated resources to be configured. In the process, an administrator creates a central folder in which the new resources are filed. When the path is specified, the new resources are imported into the Workarea when the Producer is launched.
- *Autosave:*
When this option is activated, projects are saved automatically at regular intervals with the time increment entered under *Autosave Interval*.
- *Autosave Interval:*
The value entered here specifies the frequency in minutes with which projects are automatically backed up if the option *Use Autosave* is activated.

14.3.4 Save

In this area, you can define which modes are to be created when saving a project. All modes are activated by default. Deactivate a mode for a particular project type if you do not wish to generate that mode.

- **Desktop Assistant**
 - *Desktop Assistant*
- **Standard (Simulation)**
 - *Demo*
 - *Practice*
 - *Test*
 - *Concurrent*
 - *Guided Presentation*
 - *Free Presentation*
- **Web Assistant**
 - *Web Assistant*

14.3.5 Templates

In this area, you can configure standard templates for use when creating new objects in the workarea. A template is an object that has been created with predefined settings and properties. For more detailed information, refer to the section on [Templates](#) for objects in the workarea in this user guide.

Templates can be created for the following types of objects:

- [Simulation Project](#)
- [Quiz Project](#)
- [Context Help Project - Desktop Assistant](#)
- [Guided Tour Project - Desktop Assistant](#)
- [Context Help Project - Web Assistant](#)
- [Guided Tour Project - Web Assistant](#)
- [Group](#)
- [Desktop Assistant](#)
- [Book](#)
- [Book Page](#)
- [Text Unit](#)

14.3.6 Expert Features

In this area, you can activate additional Producer functions that have been reserved for special users. This is accomplished by entering parameters in the list. The syntax used for an entry follows this example: `Feature=1;` One entry per line can be made. `1` activates a feature, `0` deactivates it without deleting the line.

Note

Note that additional functionality created by entries made in this tab is not covered by the standard support package offered by SAP SE and are not standard guaranteed system properties.

14.4 Authoring Settings

The [Authoring Settings](#) area contains settings for the creation, recording and editing of simulation projects as soon as for the creation of book pages.

The [Authoring Settings](#) are a resource type of the [Adaptable Resources](#).

- **Record - General**
The settings on this page define the recording of projects and include settings for the object recognition and the screenshot creation.
- **Audio (Simulation)**
The settings on this page define the usage of audio in simulation projects.


- **Auto Crop** (Documentation)
The settings on this page define the cropping area for the auto crop function of documentation.
- **Recording** (Simulation)
The settings on this page include functions for the recording of controls as soon as automated editing functions which will be executed during the recording.
- **Rerecording** (Simulation)
The settings on this page include functions for the rerecording of controls and for the handling of conflict situations.
- **Macro Initialization** (Simulation)
The *Macro Initialization* area includes the initial settings for all editable parameters of the macros. The settings should be set before the recording or the insert of a macro to take effect.
- **Book Page Editor** (Book Page)
The settings define the grid lines of the book pages in the book page editor as well as the snapping behavior when moving an object in relation to other objects.
- **Book Page Initialization** (Book Page)
The *Book Page Initialization* area includes the default settings for all editable parameters of the book page objects. The settings should be set before the recording or the insert of an object to take effect.

14.4.1 Recording - General

You use the settings in this category when recording simulation projects. They control the way screenshots are made when recording an application and object recognition is performed.

If a project is open, the additional *Project Overrides* subcategory is available. It provides specific settings that apply only to the project that is currently open.

Settings

- *Record Bar Position:*
Specifies the position of the record bar during the recording. The positions are: *Top*, *Bottom* or *Minimized*.
- *Area:*
Specifies the area for recording the screenshot and controls. There are two types:
 - *Region:*
Lets you record a specified screen area. The area size can be specified in the *Size* parameter.
 - *Active Window:*
Lets you record the window that is currently in the foreground.
 - *Browser Client Area:*
Lets you record the client area of a browser window. The area size can be specified in the *Size* parameter.
- *Size:*
Specifies the size of the recording area for the selected *Region* option. Select a predefined size from the dropdown box.
You can specify a size manually in the input field (top, left, width, height) or click on *Edit Size*  to display a selection border.

> Recommendation

If you want to show the change of application in the taskbar, you need to enlarge the recording area for the taskbar.

- *Fit Application Window:*
Changes the application window to the size of the recording area when you start recording or when you reposition the window.
- *Fit Newly Opened Application Window:*
Changes a newly opened application window to the size of the recording area during the recording. The setting is active if the *Fit Application Window* setting has been activated.
- *Disable Path Building:*
While recording, the path information is saved for the rerecognition of objects during rerecording. You can deactivate path building, if the recording is very time-consuming and no rerecording is required.
- *Automatic Profile Change:*
If you change the application during recording, the selected application profile might need to be adapted. There are the following options:
 - *Always Change:*
Specifies that the profile changes automatically during the recording process. If no application profile is associated with the current application, the *Standard* profile is used.
 - *Never Change:*
Specifies that the profile is used for all applications during recording that have been selected at the beginning of the recording.
 - *Restrict to Profile:*
Specifies that a specific profile is used for recording. The authors cannot change the profile. Select a profile in the *Application Profile* parameter.
- *Application Profile:*
Specifies the profile used during recording if the *Restrict to Profile* option is used for the *Automatic Profile Change*.
- *Record Hot Keys:*
Specifies that keyboard shortcuts you used during the recording are recorded.
- *Generate Inspection Pages:*
Specifies that additional information that forms the basis for subsequent control recognition are saved. It can be used in a later process for additional control recognition. The process can be time-consuming.
- *Control Recognition Method:*
Specifies the method for the recognition of controls during recording.
 - *Profound Recognition:*
Recognizes controls by using interfaces to read page and object information. The method is recommended for recording projects used for rerecording and Desktop Assistant project conversion.
 - *Simple Recognition:*
Recognizes controls as graphical objects. This is required, for example, when recording with Citrix or when using terminal applications.
An individual cursor is displayed for this setting if the *Allow Rollover Effects* option is deactivated.

i Note

When recording using the *Simple Recognition* option, make sure that the mouse option *In dialog fields automatically jump to the standard button* is deactivated in the Microsoft Windows settings. This mouse attribute impairs the control recognition function by preventing mouse movements.

- *Allow RollOver Effects:*
Specifies whether rollover effects are suppressed during recording when moving the cursor over a control. This prevents the menu from being changed accidentally, for example, with rollover effects not visible on the screenshot.
- *Recording Mode:*
Specifies the mode used for recording a simulation. You can start the activated mode by using the *Record Application* toolbar button.
 - *Quick Recording:*
Lets you record a project quickly without object recognition.
 - *Profile-Based Recording:*
Lets you record a project using application profiles for object recognition. This mode is recommended, when using projects for rerecording and Desktop Assistant.
 - *Both Recording Modes:*
The recording mode can be selected when you start recoding. This allows you to select a recording mode that is specific to the use case.
- *Lock Recording Area:*
Specifies that a dialog box for changing the recording area is not displayed during recording. Activate this setting if authors should use a predefined area.

Fallback method for object recognition

- *Fallback Method:*
Specifies the method for recording controls that are not identified correctly during recording:
 - *Recognize Hotspot:*
Creates a macro with the values of the clicked position. The object name and field image are recorded and the macro settings are defined using standard values.
Once the recording is complete, the macro can be edited in the macro editor.

14.4.2 Rerecording

A number of different settings can be made for rerecording in the settings dialog box.

The following settings can be adjusted:

General

- *Response Time:*
This value entered here defines how long the Producer waits during the rerecording process for a new screen to be rendered before performing and recording the next action in the application. The value is entered in

milliseconds. Should the default value of 2 seconds (2000ms) not be sufficient because your application response time is longer, you should increase this value.

- *Keep Crop:*
This setting specifies that a layout that was set up for a *Screen* macro is to be kept intact. If this setting is deactivated, the layout will not be applied during rerecording. This can be necessary if a control is at a different position in the new version of an application and the layout has to be reset.
- *Keep Bubble Orientation:*
Activating this setting retains the selected bubble orientation. If this option is deactivated the orientation of the bubble may change relative to the original project according to the position and size of the object to be rerecorded.
- *Language Dependent Type:*
If this parameter has been activated, the name of the control is a clue that can be used to recognize it during rerecording. This is useful in new versions of an application in which corresponding Controls occupy a different position or are differently designed. A search then takes place for this Control via the relevant interface using the associated name.

Automatic Mode

- *Hotspot Handling:*
This setting defines how a click range is to be edited during automatic rerecording of a project.
 - *No Editing:*
If this option is selected a *Hotspot* is recorded automatically by Producer. In the process the Producer uses the recorded position to identify a control device at this position. If no control device is identified a *Hotspot* is recorded at this point.
 - *Interactive:*
With this option the rerecording changes at a *Hotspot* from the automatic to the interactive mode. As a result it is possible to edit the *Hotspot*. Refer to the chapter on interactive rerecording for this.
- *Dropdown List Interactive:*
Activate this setting to rerecord the dropdown lists of your project interactively during the automatic rerecording. Thus the particular choice can be influenced manually.

Interactive mode

- *Bubble Type:*
Specifies which bubble type is displayed in the editor during rerecording when a control is edited.

14.4.3 Audio

The settings on this page define the usage of audio in simulation projects and for book pages.

- *Recording Device:*
Specifies the audio device for recording. Click on *Configure...* to open a system dialog with further settings for the device.
- *Bubble Text for Text-to-Speech:*
Specifies the mode for the bubble text for converting text to speech.

- *Voice for Text-to-Speech:*
Specifies a voice for generating Text-to-Speech audio. The dropdown list displays the available voices based on your Text-to-Speech service configuration.
- *Configure Text-to-Speech Services*
Opens a dialog where you can choose between *Windows Text-to-Speech* and *Google Text-to-Speech* and configure the Google service *API URL* and *API Key* parameters.
You can also choose to *Show only language specific voices in voice selection*, in this case you will see only the voices available for your current Producer language.
- *Audio Format:*
Sets the global audio format. The standard format shows *default* in the entry and a changed format shows *current*.
 - *Output Format:*
Sets the audio format used for content publishing.
 - *Editing Format:*
Sets the audio format used for content editing.

14.4.4 Macro Initialization

The *Macro Initialization* area includes the initial settings for all editable parameters of the macros. The settings override the default settings of the Producer and should be set before the recording or the insert of an element to take effect. To initialize the parameters allow it to achieve consistency in the content creation and to reduce the editing effort.

The area is separated into the macro groups:

- *Interactions*
- *Special Macros*
- *Page Macros*
- *Quiz Items*
- *Documentation Macros*

14.4.5 Book Page Editor

Here you can define the grid lines for the book pages in the book page editor as well as the snap-in-place function with the ledger lines, which is a helpful tool when dragging an object to ensure that they are properly aligned with other objects.

Configuring the grid

The grid is part of the background and assists you in precisely designing the layout of your objects on a book page. You can define the space between the grid lines as well as the distance from the upper-left corner. The settings for the grid are:

- *Grid Spacing Horizontal*

- [Grid Spacing Vertical](#)
- [Grid Offset Left](#)
- [Grid Offset Top](#)

Configuring the snap-in-place function

You can activate and deactivate the Snap-in-place option as well as define which objects should use this option and how much distance there should be between the object and the grid area where it will be snapped into place. If this option is activated, when dragging an object, it will automatically lock to the grid, which facilitates positioning objects and helps to maintain conformity and accuracy throughout your project. The settings for the snapping are:

- [Show Snap Positions](#)
- [Enable Snapping](#)
- [Snapping Distance](#)
- [Snap to Objects](#)
- [Snap to Centers](#)
- [Snap to Guiders](#)
- [Snap to Grid](#)
- [Snap to inner Border](#)
- [Snap to outer Border](#)

› Recommendation

You can activate the snapping of objects temporally with pressed *Ctrl*/key. For that deactivate the snapping in general and activate the snapping to specific objects.

14.4.6 Book Page Initialization

The [Book Page Initialization](#) area includes the initial settings for all editable parameters of the book page objects. The settings override the default settings of the Producer and should be set before the recording or the insert of an object to take effect. To initialize the parameters allow it to achieve consistency in the content creation and to reduce the editing effort.



The area is separated into the book page object groups:

- [Action Objects](#)
- [Layout](#)
- [Link Buttons](#)
- [Media Objects](#)
- [Book Page Objects](#)

14.5 Playback Settings

The [Playback Settings](#) area contains settings for the playback of simulation projects and of book pages which, will be interpreted at runtime of the trainer, book reader and library functionalities.

The [Playback Settings](#) are a resource type of the [Adaptable Resources](#).

- **General (Simulation)**
The settings on this page define the properties of simulation projects for the playback.
Specific settings for an opened project can be set on the [Project Override](#) subpage.
- **trainer (Simulation)**
The settings on this page define the playback and tracking of content and the properties of the trainer functionality.
The settings are the global settings for the use of the trainer functionality. Individual settings can be set on the pages library, book reader or for each mode.
- **book reader**
The settings on this page define the playback and tracking of content and the properties of the book reader functionality.
- **library**
The settings on this page define the playback of content and the properties of the library functionality.
- **Mode Settings**
The settings on these pages define the playback and tracking for each mode.
Specific settings for an opened project can be set on the [Project Override](#) subpage.
There are the following modes:
 - [Demo Mode](#)
 - [Practice Mode](#)
 - [Test Mode](#)
 - [Concurrent Mode](#)
 - [Guided Presentation Mode](#)
 - [Free Presentation Mode](#)
- **Macro Fallback Defaults**
The [Macro Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp ) parameters of the macros.
- **Book Page Fallback Defaults**
The [Book Page Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp ) parameters of the book page objects.

14.5.1 General

The settings here define how highlights and bubbles are displayed globally for all projects contained in the current workarea. They are used as default settings for all recorded highlights and bubbles. For changed settings to take effect, the modes of a project need to be generated again.

In the subcategory [Project Overrides](#) the same group of settings can also be applied specifically to the current project only. The global settings for all projects are not affected.

- [Explanation Link \(Forward\):](#)
In the parameter you can specify a link text or image, which will be used for continuing a simulation in the displayed explanation bubble. The text may contain HTML attributes.
- [Show Note in Test Mode:](#)
If this option is activated, a bubble is displayed in test mode which contains a link which opens an additional window in demo mode showing the actual step and closing it again afterwards. The bubbles for entry fields also show the explanation from practice mode.
- [Step-Based Demo Playback \(Audio off\):](#)
Having deactivated the trainer bars audio button, this parameter will suppress automatic playback of Demo mode. Instead every step has to be confirmed manually by clicking the automatically inserted [Next](#) button within the action bubble. With activated audio, the playback will resume automatically when step-based audio has finished.
- [Show Mouse:](#)
This option also shows the mouse pointer for actions that are performed in the application with the mouse. By default the mouse pointer is hidden.

Setting subcategories

There are the following subcategories of the settings:

- [Highlights:](#)
Contains settings for the style of highlights.
- [Bubbles:](#)
Contains settings for the style and the behavior of bubbles.
- [Quiz:](#)
Contains settings for the display and the behavior of the quiz playback.
See also *Central Settings for Quizzes*.
- [Page Style:](#)
Contains settings for the style of simulation pages.
See also *Designing Simulation Pages*.
- [Feedback:](#)
Contains settings for the feedback during playback of the test mode or the practice mode.
- [Video:](#)
Contains duration settings for content pages for the video generation.

14.5.2 Macro Fallback Defaults

The [Macro Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp) parameters of the macros. The settings take effect during the playback of the content and can always be changed. To set fallback defaults allows it, to achieve consistency and to set parameters centrally.

The area is separated into the macro groups:

- [Interactions](#)
- [Special Macros](#)
- [Page Macros](#)

- [Quiz Items](#)
- [Documentation Macros](#)

i Note

Note that the [Macro Fallback Defaults](#) only take effect in non-activated parameter data.

14.5.3 Book Page Fallback Defaults

The [Book Page Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp) parameters of the book page objects. The settings take effect during the playback of the content and can always be changed. To set fallback defaults allows it, to achieve consistency and to set parameters centrally.

The area is separated into the book page object groups:

- [Action Objects](#)
- [Layout](#)
- [Link Buttons](#)
- [Media Objects](#)
- [Quiz Items](#)
- [Book Page Objects](#)

i Note

Note that the [Book Page Fallback Defaults](#) only take effect in non-activated parameter data.

14.5.4 Settings of trainer, book reader, library and Modes

The following chapters contain information about the setting areas and settings of:

- [trainer](#)
- [book reader](#)
- [library](#)
- [Demo Mode](#)
- [Practice Mode](#)
- [Test Mode](#)
- [Concurrent Mode](#)
- [Guided Presentation Mode](#)
- [Free Presentation Mode](#)

14.5.4.1 Visual Properties

The *Visual properties* section contains the following settings:

- *Show Focus Layer:*
Displays a gray layer to highlight the required control of the current step.
The focus layer is not supported in Enterprise Mode of the Internet Explorer 11.
Consider for each mode, when using the option:
 - **Demo mode:** Shows a focus layer for the current control.
 - **Practice mode:** Shows a focus layer for the required control if *Show Help* was selected for a wrong action.
 - **Test mode:** Shows a focus layer for the required control if *Show Help* was selected for a wrong action.
 - **Concurrent mode:** Shows a focus layer for the current control.
 - **Guided Presentation mode:** No focus layer can be shown.
 - **Free Presentation mode:** No focus layer can be shown.
- *Show start page / Show end page:*
When playing back a simulation, for each mode a start page can be displayed which explains the mode and what the user has to expect. When the simulation is over or was closed, a stop page is displayed in order to indicate that the mode has been terminated. In test mode the stop page also informs the user if he passed the test or not.

14.5.4.2 Audio

The trainer uses different audio channels to playback audio content. These channels allow authors to preconfigure the volume of the audio and learners can change the volume during playback.

The following channels can be modified in the *Audio* subcategory for the *Playback Settings* of *trainer - Global*, *book reader* and for each simulation mode:

Setting	Description
<i>General</i>	Specifies the initial general volume of audio files (0-100). The volume of all other sound channels depends on this setting.
<i>Narrative</i>	Specifies the initial volume (0-100) of the sound channels <i>Explanations</i> and <i>Page Sound</i> .
<i>Book sound</i>	Specifies the initial volume (0-100) of the sound channel <i>Book Sound</i> .
<i>Effects</i>	Specifies the initial volume (0-100) of the sound channel <i>Effects</i> .
<i>Simulation sound</i>	Specifies the initial volume (0-100) of the sounds that is played in simulations.

A volume slider is displayed for each audio channel in the control bar of the trainer bar or book reader bar.

14.5.4.3 Function Keys

Using the key functions, you can control the trainer via the keyboard. These correspond to the button functionality. The key functions are defined by default for *Demo mode* and *Concurrent mode* and the trainer, as it is possible to manipulate the sequence of events in these modes. For the book reader and the library the hotkeys for *Back*, *Next* and *Feedback* are used.

The following keys are assigned by default to their respective functions:

Function	Key
Play	Space
Pause	Space
Stop	
Back	Left
Next	Right
Feedback	Ctrl + F1

- *Ignore Hotkeys for Browser:*

Defines that the hotkeys of the browser cannot be used during content playback. The learner can use only the navigations of the trainer and the specified hotkeys.

The following hotkeys will not be prevented:

Safari: CTRL+F, CTRL+P, CTRL+O

Internet Explorer: CTRL+P, CTRL+O, ALT+Home opens a new window

14.6 Desktop Assistant: Authoring Settings

The *Desktop Assistant: Authoring Settings* area contains settings for the creation, recording and editing of Desktop Assistant content.

The *Desktop Assistant: Authoring Settings* are a resource type of the *Adaptable Resources*.

- **Macro Initialization**

The *Macro Initialization* area includes the default settings for all editable parameters of the macros. The settings should be set before the recording or the insert of a macro to take effect.

14.6.1 Macro Initialization


The *Macro Initialization* area includes the initial settings for all editable parameters of the macros. The settings override the default settings of the Producer and should be set before the recording or the insert of a macro to take

effect. To initialize the parameters allow it to achieve consistency in the content creation and to reduce the editing effort.

14.7 Desktop Assistant: Playback Settings

The [Desktop Assistant: Playback Settings](#) area contains settings for the playback of Desktop Assistant content, which will be interpreted at runtime of the Desktop Assistant.

The [Desktop Assistant: Playback Settings](#) are a resource type of the [Adaptable Resources](#).

- **General**
The settings on this page define the properties of Desktop Assistant content for the playback. Specific settings for an opened project can be set on the [Project Override](#) subpage.
- **Macro Fallback Defaults**
The [Macro Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp ) parameters of the macros.
- **Desktop Assistant Settings**
The [Desktop Assistant](#) area contains settings for the playback of Desktop Assistant content.

14.7.1 General

The [General](#) settings contain the following subareas:

Object Bubble

Contains parameters for specifying the design of the object bubbles.

Form Bubble

Contains parameters for specifying the design of the form bubbles.

Highlight

Contains parameters for specifying the design of the highlights.

Advanced (Advanced Layout)

- [Update Frequency](#):
Specifies how frequently the Desktop Assistant checks for updated content. If updated content is available, the Desktop Assistant will start the content automatically. This is especially useful for change management processes.
- [Disable Standby Status](#):
Specifies that the standby status of the Desktop Assistant cannot be set. If this option is deactivated, you can set the standby status with the shortcut CTRL + F11 or by clicking on the status icon.
- [Hide Exit Entry](#):
Specifies that the 'Exit' entry in the context menu of the Desktop Assistant's status icon is hidden.

- [Desktop Assistant Tracking](#):
Activates the tracking for Desktop Assistant content. The content has to be started from a Manager workarea.
- [Additional MIME Types](#):
Defines additional MIME types that will be used by the local server to download Desktop Assistant content. The types must be defined one per line in the following format:
`msg:application/vnd.ms-outlook`
`svg:image/svg+xml.`
For a full list of supported MIME types, see the chapter *Supported MIME Types for Playback* of this document.

14.7.2 Macro Fallback Defaults

The [Macro Fallback Defaults](#) area includes the fallback settings for all and deactivated (green lamp) parameters of the macros. The settings take effect during the playback of the content and can always be changed. To set fallback defaults allows it, to achieve consistency and to set parameters centrally.

i Note

Note that the [Macro Fallback Defaults](#) only take effect in non-activated parameter data.

14.7.3 Desktop Assistant - Web Assistant Mode

You can choose to use the Web Assistant mode to make your Desktop Assistant look and feel the same as Web Assistant. To activate it, select the checkbox [Use Web Assistant mode](#).

When you activate this mode, you can change the settings in the newly available group [Web Assistant mode](#), which is now the first group of settings in the list.

You can find the following setting in this group:

- [Style](#)
Defines the Web Assistant style shown during content playback. You can choose from styles defined in [Adaptable Resources](#). Default is [Desktop Assistant \(Web Assistant mode\)](#).
- [Framework Server](#)
Defines the server from which the Web Assistant framework is loaded. The Web Assistant server provides the in-app help framework. The server gets a request to load the framework.
Default value is `https://webassistant.enable-now.cloud.sap/`.
We recommend that you do not change the default framework URL as it always uses the latest release version.
- [Learning Center URL](#)
Defines the URL of the Learning Center. You can enter the URL to a library or an external page.

> Recommendation

You can enter the same URL that is used for the parameter `learningCenterUrl` in your Web Assistant.

- [Advanced: Web Assistant Parameters](#)
Most of the color customization parameters can be adjusted in [Adaptable Resources](#), however, this field allows to add additional parameters for customization. Use the following syntax: `Feature=value;`. For example,

```
showShortDescription=false;.
```

You can find supported parameters and more information in *Web Assistant Integration Guide*, chapter *Customizing the Web Assistant UI*.

i Note

When you have *Web Assistant mode* activated, some of the options for Desktop Assistant style and content become unavailable and are not shown in the further settings sections. For example, the *Recording* control becomes unavailable as this functionality is not supported in *Web Assistant mode*.

For a full list of supported parameters, see the chapter *Available Parameters for Web Assistant Mode* of this document.

14.7.4 Desktop Assistant - Style and Windows

The settings for the appearance of the windows and sidebar are:

- *Style*:
Specifies the appearance of the Desktop Assistant's components. You can select a style from the resources.
- *Show Only Sidebar on Start*:
Specifies if only the sidebar is displayed instead of the main window when the Desktop Assistant is started.
- *Alignment*:
Specifies the alignment of the window on the screen. The option *Free* allows you to define a position in the associated parameter.
Available for sidebar, main window, content window, and book window.
- *Position (Free)*:
Specifies the window's position (left, top) for *Free* alignment on the screen. The values are given in pixels.
Available for main window, content window, and book window.
- *Size*:
Specifies the size (width, height) of the main window in pixels.
Available for main window, content window, and book window.

14.7.5 Desktop Assistant - Sidebar

You can specify the position of a control in the sidebar for the playback of the Desktop Assistant.

The settings for the sidebar are:

- *Position: 'Content' Control*
- **Search**
The following settings allow you to configure the search of content:
 - *Search Type*:
Activates the search and specifies the search type. A control is displayed in the sidebar.
You can search in the library or in the Desktop Assistant content.

- *Search Group:*
Allows you to define a group of the workarea for searching content in the library.
- *Position: 'Search' Control*
- **External Search**
The following settings allow you, to configure the external search of content:
 - *URL*
 - *Provide Context Information*
 - *Context Information*
- *Position: 'Instant Help' Control*
- *Position: 'Add Sticky Note' Control*
- **Request Content**
The following settings allow you, to configure the request of content:
 - *Request Content Type*
 - *Request Content E-Mail / URL:*
Allows you to specify an e-mail address or a URL.
 - *Request Content URL Params:*
Allows you to specify the parameters for the author URL.
 - *Position: 'Request Content' Control*
- *Position: 'Recording' Control*
- *Position: 'Exit' Control*

Control Position

For each control, you can specify a position in the sidebar. The controls can be positioned on the main level of the sidebar, some controls can also be positioned in the submenu. For the submenu, a control is displayed to open the submenu.

i Note

Make sure to select for each control a unique position in the sidebar. For each position only one control is displayed.

14.7.6 Desktop Assistant - Content and Behavior

The settings for the content and behavior are:

- *Use Text from:*
Defines the text type for the Desktop Assistant. The default is *Short Description*.
- *Default Start Content:*
Defines the mode or the document format to be started by default from the content list.
- *Default Start Document:*
Defines the document type, if a document is set in the *Default Start Content* setting.

- [*Show 'Info' Tab:*](#)
Displays an control in the main window to display an info text. The info text can be entered in the short description of the Desktop Assistant group.
- [*Show 'Share Content' Control*](#)
Displays a 'Share Content' button in the footer of the main window. The button opens a dialog box with the link to the selected content.
- [*Consider Roles:*](#)
Activates the use of roles for the display of content during playback.
See also [Using Roles](#).
- [*Consider Content Categories*](#)
Activates the use of content categories for sorting content in the main window of the Desktop Assistant.
- [*Content Sorting*](#)
Defines the sorting of the available content in the list.
- [*Hide Instant Help in Guided Tour:*](#)
Defines that all instant help information are hidden during playback of the guided tour. If the guided tour has been finished, the instant help will be shown again.
- [*Hide Book Reader Control Bar:*](#)
Specifies if the book reader control bar is hidden during playback of books or book pages.
- [*Exchange Desktop Assistant Direct Start and More options*](#)
If this setting is activated, then clicking the bigger area of the Desktop Assistant item will start to play the content, whereas the smaller area will go into the detailed view where you can select additional options for this content item.
- [*Enable Fuzzy match*](#)
Defines whether fuzzy match is used for matching the context of the content with an application page.
- [*Enable Advanced Application Identification*](#)
Specifies that only the relevant application information is used for the Desktop Assistant playback. This allows you to optimize the performance of the Desktop Assistant.
Note: The option can lead to a false object recognition. It is recommended to test the playback before publishing the content.
- [*Clear Content List on Context Mismatch*](#)
Defines that the content list is cleared if no context was found. With deactivated setting the content of the last recognized object is shown.
- [*Hide Desktop Assistant on Running Web Assistant*](#)
Specifies that Desktop Assistant windows are hidden when Web Assistant is running in the foreground.
 - [*Show Web Assistant Message*](#)
Specifies that a message is displayed when Web Assistant is running in the foreground or leaves the foreground mode.
 - [*Open Web Assistant Panel*](#)
Opens the Web Assistant panel when Web Assistant is running in the foreground and Desktop Assistant windows are hidden.









14.7.7 Available Parameters for Web Assistant Mode

The *Web Assistant mode* supports the following parameters of Desktop Assistant:





Desktop Assistant Style and Windows

Parameter	Web Assistant Mode
<i>Style</i>	
<i>Show Only Sidebar on Start</i>	
<i>Sidebar Alignment</i>	
<i>Main Window Alignment</i>	
<i>Main Window Position (Free)</i>	
<i>Main Window Size</i>	
<i>Content Window Alignment</i>	
<i>Content Window Position (Free)</i>	
<i>Content Window Size</i>	
<i>Book Window Alignment</i>	
<i>Book Window Position (Free)</i>	
<i>Book Window Size</i>	

Desktop Assistant Sidebar


Parameter	Web Assistant Mode
<i>Position: 'Content' Control</i>	
<i>Search Type</i>	
<i>Position: 'External Search' Control</i>	
<i>Position: 'Instant Help' Control</i>	
<i>Position: 'Add Sticky Note' Control</i>	
<i>Request Content Type</i>	
<i>Position: 'Recording' Control</i>	
<i>Position: 'Exit' Control</i>	

Desktop Assistant Content and Behavior



Parameter	Web Assistant Mode
<i>Use Text From</i>	
<i>Default Start Content</i>	
<i>Default Start Document</i>	
<i>Show 'Info' Tab</i>	

Parameter	Web Assistant Mode
<i>Show 'Share Content' Control</i>	
<i>Consider Roles</i>	
<i>Consider Content Categories</i>	
<i>Content Sorting</i>	
<i>Hide Instant Help in Guided Tour</i>	
<i>Switch Desktop Assistant Direct Start and More Option</i>	
<i>Hide Book Reader Control Bar</i>	
<i>Enable Fuzzy Match</i>	
<i>Enable Advanced Application Identification</i>	
<i>Clear Content List on Content Mismatch</i>	
<i>Hide Desktop Assistant on Running Web Assistant</i>	

Cache

Parameter	Web Assistant Mode
<i>Use Caching</i>	
<i>Folder Location</i>	

Glossary Bubble

Parameter	Web Assistant Mode
<i>Style</i>	
<i>Size</i>	



Supported



Not supported

Note

The following functionality is also **not** supported in Desktop Assistant - Web Assistant Mode:

- Focus Layer
- Restricted Mode
- Form Mode
- Conditions for Guided Tours and Context Help
- Step List for Guided Tours
- Automatic start of content
- Content object attachments
- Desktop Assistant Details window

Also note that:

- Each bubble macro of a Context Help project is represented as a tile in the Help Panel
- Both short and long asset descriptions can only contain plain text and text length is limited to 234 symbols
- Only one asset can be started for a content object, you need to specify it in the *Default Start Content* option

There is also some regular Web Assistant functionality missing in this mode:

- What's New Mode
- Link Tiles
- Icons for Context Help tiles

14.7.8 Supported MIME Types for Desktop Assistant Playback

The following MIME Types are supported for the Desktop Assistant playback:

MIME Type in correct input format
<code>avi:video/avi</code>
<code>mp4:video/mp4</code>
<code>wmv:video/x-ms-wmv</code>
<code>jpg:image/jpeg</code>
<code>jpeg:image/jpeg</code>
<code>gif:image/gif</code>
<code>svg:image/svg+xml</code>
<code>bmp:image/x-ms-bmp</code>
<code>png:image/png</code>
<code>htm:text/html</code>
<code>html:text/html</code>
<code>md:text/markdown</code>
<code>rtf:application/msword</code>
<code>docx:application/msword</code>
<code>doc:application/msword</code>
<code>dot:application/msword</code>
<code>pptx:application/vnd.ms-powerpoint</code>
<code>ppt:application/vnd.ms-powerpoint</code>
<code>pot:application/vnd.ms-powerpoint</code>
<code>xlsx:application/vnd.openxmlformats-officedocument.spreadsheetml.sheet</code>

MIME Type in correct input format
<code>xls:application/vnd.ms-excel</code>
<code>pdf:application/pdf</code>
<code>txt:text/plain</code>
<code>wav:audio/x-wav</code>
<code>mp3:audio/x-mp3</code>
<code>gsm:audio/x-gsm</code>
<code>js:application/javascript</code>
<code>css:text/css</code>
<code>xml:text/xml</code>
<code>xliff:text/xml</code>
<code>xlif:text/xml</code>
<code>xlif:text/xml</code>
<code>dnt:application/x-datango-navigation</code>
<code>dkp:application/x-datango-package</code>
<code>slc:application/x-wpb-slc</code>
<code>potx:application/vnd.openxmlformats-officedocument.presentationml.template</code>
<code>xltx:application/vnd.openxmlformats-officedocument.spreadsheetml.template</code>
<code>dotx:application/vnd.openxmlformats-officedocument.wordprocessingml.template</code>
<code>ttf:application/octet-stream</code>
<code>woff:application/font-woff</code>
<code>woff2:application/font-woff2</code>
<code>svg:image/svg+xml</code>
<code>eot:application/vnd.ms-fontobject</code>
<code>msg:application/vnd.ms-outlook</code>

14.8 Documentation Settings

The *Documentation Settings* area contains settings for the creation of documentation. The properties of each documentation type can be specified individually.

The *Documentation Settings* are a resource type.

Further information to the documentation settings is available in the chapter *Documentation Settings*.

15 Technical Support

Please use the SAP Incident Wizard on the SAP Support Portal to submit your incidents on the following components:

- **KM-WPB** // Enable Now
- **KM-WPB-PRO** // Enable Now – Producer
- **KM-WPB-IPR** // Enable Now – Instant Producer
- **KM-WPB-MGR** // Enable Now – Manager
- **KM-WPB-NAV** // Enable Now – Desktop Assistant
- **KM-WPB-CXH** // Enable Now – Context Sensitive Help
- **KM-WPB-APR** // Enable Now – Application Profiles
- **KM-WPB-SMI** // Enable Now – Solution Manager Integration

Using the SAP Support Portal

If you are not familiar with the SAP Support Portal, read the following information:

- To access the SAP Support Portal you need an S-user ID and password. You can request access data from your SAP Super Administrator or register online on the SAP Support Portal page under [Registration](#).
- With this user, you have read-access to all the contents of the SAP Support Portal, you can use the SAP Community Network and SAP Help Portal, and you can also book courses under SAP Education.
- If you want to work with the support applications (Incident Wizard, license key request, system data maintenance, manage remote connections, software download and so on), you need the corresponding authorizations, which your SAP Super Administrator can give you.
- You can find information for new users and about support applications on the Support Portal Homepage under [Learn More](#). There you can also register for a personal overview demonstration of the SAP Support Portal.
- In case of problems with SAP Support Portal contact your local Customer Interaction Center. An online web form is available on <http://support.sap.com/contactus>. This web form should be used for all written communication with your local customer interaction center. More Details about Incident Processing, Support Addresses and Hotline Numbers can be found here: <http://service.sap.com/sap/support/notes/560499>
- Are you interested in a tour through the SAP Support Portal? [Register for an online demo](#).

Diagnosis function in Producer

The Producer diagnosis function can also be used to check the technical data of the installation on your computer (version, operating system, browser, etc.). Open Producer and select [Diagnosis...](#) by using the [Help](#) menu. The Producer transmits the required information automatically and lists this in a corresponding dialog box. This information can also be saved as a text file and sent as an E-mail attachment to the SAP support staff.

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