How-To Guide

PUBLIC

SAP Business One 10.0 SP2311 and Later

SAP Business One 10.0 SP2311, version for SAP HANA and Later

Document Version: 1.5 – 2023-12-14

How to Work with SAP Crystal Reports in SAP Business One

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

© 2023 SAP SE. All rights reserved.

Document History

Version	Date	Change
1.0	2021.04.01	Initial version for SAP Business One 10.0 FP2102 and SAP Business One 10.0 FP2102, version for SAP HANA. Update includes an alternative way to open the *Default Layout* window. For more information, see Defining Printing Sequence As Default Printing Option.
1.1	2022.04.13	Updated for SAP Business One 10.0 FP2202 and SAP Business One 10.0 FP2202, version for SAP HANA. SAP Crystal Reports 2020 SP2_P1, version for the SAP Business One application is available.
1.2	2022.11.09	Updated with reference to SAP Note 2845037. The note provides information about reinstalling SAP Crystal Reports for SAP Business One and associated SAP Business One components.
1.3	2023.01.05	Updated for SAP Business One 10.0 FP2208 and SAP Business One 10.0 FP2208, version for SAP HANA. SAP Crystal Reports 2020 SP2_P4, version for the SAP Business One application is available.
1.4	2023.07.17	Updated for SAP Business One 10.0 FP2305 and SAP Business One 10.0 FP2305, version for SAP HANA. • SAP Crystal Reports for SAP Business One now supports the authentication service. For more information, please refer to the guide *Identity and Authentication Management in SAP Business One* on the SAP Help Portal. • Only superusers can preview SAP Crystal Reports `.rpt` files.
1.5	2023.12.14	Updated for SAP Business One 10.0 SP2311 and SAP Business One 10.0 SP2311, version for SAP HANA. The option *Add-ins → SAP Business One → Preview in SAP Business One* in the menu bar only works when the checkbox *Enable Default Connection String* is selected on the *Service* tab of the *General Settings* window (*Administration → System Initialization → General Settings*) in SAP Business One.

PUBLIC
© 2023 SAP SE. All rights reserved.

Table of Contents

1 Introduction ... 6
1.1 Installing SAP Crystal Reports for SAP Business One ... 6
1.2 Integration Features ... 6
1.3 Terms and Definitions ... 7
1.4 Related Documentation ... 8

2 Basic Operations ... 9
2.1 Overview ... 9
2.2 Creating Reports and Layouts with SAP Crystal Reports for SAP Business One ... 9
2.2.1 Connecting to Data Sources ... 10
2.2.2 Creating Selection Criteria Windows ... 14
2.2.3 Working with Selection Criteria Tokens ... 18
2.2.4 Adding Drilldown Functionality with Link Arrows ... 29
2.2.5 Saving SAP Crystal Reports .rpt Files as Reports or Layouts ... 32
2.2.6 Logging Off from a Data Source ... 35
2.3 Working with SAP Crystal Reports Layouts and Reports in SAP Business One ... 35
2.3.1 Running Layouts ... 35
2.3.2 Editing Layouts ... 36
2.3.3 Deleting Layouts ... 38
2.3.4 Running Reports ... 39
2.3.5 Editing Reports ... 40
2.3.6 Deleting Reports ... 41

3 Working with Multilanguage Reports ... 42
3.1 Translating Reports ... 42
3.2 Generating Multilanguage Reports ... 45
3.3 Viewing Translated Reports in SAP Business One ... 46
3.4 Deleting Translations ... 46
3.5 Creating New Reports from a Generated Multilanguage Report ... 47
3.6 Exporting Translations ... 47
3.7 Importing Translations ... 48

4 Setting Authorizations for Reports Created with the SAP Crystal Reports Software ... 50

5 Setting Data Sources for User-Defined Crystal Reports and Crystal Reports Layouts ... 51

6 Developing Add-Ons to Import .rpt Files ... 52

7 Master Layouts ... 53

8 Exporting Reports and Layouts Created with the SAP Crystal Reports Software ... 55

9 Importing Reports and Layouts Created with the SAP Crystal Reports Software ... 58
9.1 Importing SAP Crystal Reports .rpt Files ... 58

© 2023 SAP SE. All rights reserved.

9.2 Importing SAP Business One .b1p and .b1px Package Files....63

10 Searching for Layouts and Reports 69
10.1 Searching for Layouts 69
10.2 Searching for Reports....70

11 Previewing and Printing Reports and Layouts in SAP Business One 71
11.1 Previewing and Printing Reports and Layouts Saved in SAP Business One 71
11.2 Previewing SAP Crystal Reports .rpt Files Saved on Your Computer....72

12 Working with Printing Sequences....74
12.1 Creating Printing Sequences....74
12.2 Modifying Printing Sequences....76
12.3 Deleting Printing Sequences....77
12.4 Previewing and Running Printing Sequences....77
12.5 Defining Printing Sequence As Default Printing Option....78

13 Report and Layout Manager Window....79

Appendix: Document Types and Source Tables.... 80

PUBLIC
© 2023 SAP SE. All rights reserved.

1 Introduction

SAP Business One provides integration with SAP Crystal Reports, version for the SAP Business One application.

For more information about the Crystal Reports for SAP Business One Matrix, see SAP Note 2329487.

> **Note**
>
> In addition to the SAP Crystal Reports software, SAP Business One supports Print Layout Designer (PLD). You can use either one to create layouts for SAP Business One documents. For information about working with PLD, go to https://help.sap.com.

1.1 Installing SAP Crystal Reports for SAP Business One

> **Note**
>
> You do not need to install the SAP Crystal Reports viewer in a separate procedure. It is an integral part of the SAP Business One core product.

To make SAP Business One data sources and the *Add-ins* menu available for the SAP Crystal Reports designer, you must install the Crystal Reports integration component separately. The integration package script SAP `Business One Crystal Report Integration Package.exe` is located in the `…Packages×64\SAP CRAddin Installation` folder of the SAP Business One upgrade package.

For more information, see the *Administrator's Guide* that is provided with the SAP Business One upgrade package.

When you encounter error messages described in SAP Note 2845037 or feel the need to reinstall SAP Crystal Reports for SAP Business One and associated SAP Business One components, follow the reinstallation steps in SAP Note 2845037.

1.2 Integration Features

Integration with SAP Crystal Reports includes the following features.

- SAP Crystal Reports viewer

  This WYSIWYG (what you see is what you get) application provides you with an accurate printing preview of reports and documents, and enables exporting reports to PDF and other formats. In addition, you can use the filtering function of the viewer by entering different values in the parameter panel. For more information, see the SAP Business One online help.

- Report and layout management

  In SAP Business One, you can access a report and layout management window. From one location, you can manage the properties of Crystal reports, Crystal Reports layouts, PLD layouts, and layouts that are created by third parties. In addition, you can define layout printing sequences. The *Report and Layout Manager*

© 2023 SAP SE. All rights reserved.

window allows you to export and import Crystal reports and Crystal Reports layouts. For more information, see the SAP Business One online help.

- SAP Crystal Reports, version for the SAP Business One application

  You can save reports and layouts from within SAP Crystal Reports for SAP Business One to SAP Business One databases. You can create reports and layouts more easily using SAP Business One database tables that are arranged according to the modules in the SAP Business One *Main Menu*.

  Using the SAP Crystal Reports software, you can draw data from SAP Business One tables and company databases as selection criteria. Additionally, you can create controls in reports and layouts that are aligned with standard SAP Business One user interface (UI) elements.

  Note

  This document includes the processes and procedures involved in working with the SAP Crystal Reports software. However, these processes and procedures relate to the SAP Business One context only. For more detailed information about working with the SAP Crystal Reports software, see the SAP Crystal Reports online help that is accessible from SAP Crystal Reports software or from the SAP Crystal Reports DVD.

- Master layouts

  You can create a master layout that can be applied to various document types. For example, a master layout that is created for a sales invoice can be applied to sales quotations or deliveries. For more information, see *Master Layouts*.

- Multilanguage translator

  You can maintain translations of a report created with the SAP Crystal Reports software. For more information, see *Working with Multilanguage Reports*.

- Accessibility of source documents

  You can add drilldown functionality to a report by adding link arrows to display related details about specific objects when previewing a report created with SAP Crystal Reports in SAP Business One. For more information, see Adding Drilldown Functionality with Link Arrows.

1.3 Terms and Definitions

The following terms are used in this document:

Term	Definition
SAP Crystal Reports, version for the SAP Business One application	Software that is designed to work in conjunction with SAP Business One for creating layouts for SAP Business One documents
SAP Crystal report	Report that is created with SAP Crystal Reports, version of the SAP Business One application
SAP Crystal Reports layout	Printing layout created by SAP Crystal Reports, and applied to appropriate document types and reports
master layout	SAP Crystal Reports layout that is applicable to multiple document types

PUBLIC
© 2023 SAP SE. All rights reserved.

Term	Definition
SAP Business One data source	Data repository from which to retrieve SAP Business One tables organized in a hierarchical tree structure according to the modules in the SAP Business One *Main Menu*
token	Special format of a parameter name containing SQL-syntax code in a report or layout created with SAP Crystal Reports software. You use tokens to create different types of report selection criteria and their controls for use in SAP Business One.
SAP Crystal Reports viewer	Fully integrated component of SAP Business One that lets you view reports and layouts that are created with the SAP Crystal Reports software
printing sequence	Defined set of rules for printing documents

1.4 Related Documentation

This document refers to some other materials, as listed below:

Document	Location
User Interface Standards and Guidelines	http://service.sap.com/smb/sbocustomer/documentation
Print Layout Designer documentation and training materials available on the Print Layout Designer landing page	http://channel.sap.com/sbo/pld (accessible by partners only)
SDK online help file *SDK_EN.CHM*	http://service.sap.com/smb/sbocustomer/documentation Available also on the SAP Business One product DVD and in the download package from SAP Service Marketplace
SAP Business One *Administrator's Guide*	http://service.sap.com/smb/sbocustomer/documentation Available also on the SAP Business One product DVD and in the download package from SAP Service Marketplace
SAP Crystal Reports 2011 online help	Available from within the SAP Crystal Reports software
SAP Crystal Reports *User Guide*	Available on the SAP Crystal Reports DVD
How to Integrate SAP Crystal Server with SAP Business One	http://service.sap.com/smb/sbocustomer/documentation

© 2023 SAP SE. All rights reserved.

2 Basic Operations

You create reports with SAP Crystal Reports and save them as either reports or layouts in SAP Business One, depending on your needs.

2.1 Overview

There are many procedures and sub-procedures involved in the processes of working with SAP Crystal Reports. A typical high-level flow of procedures is as follows:

1. Create a report with SAP Crystal Reports
2. Import the report as either a Crystal report or Crystal Reports layout
3. Run the report or apply the layout to a document
4. Export the report or layout

Figure 1 is a high-level representation of the workflow for working with SAP Crystal Reports for SAP Business One:

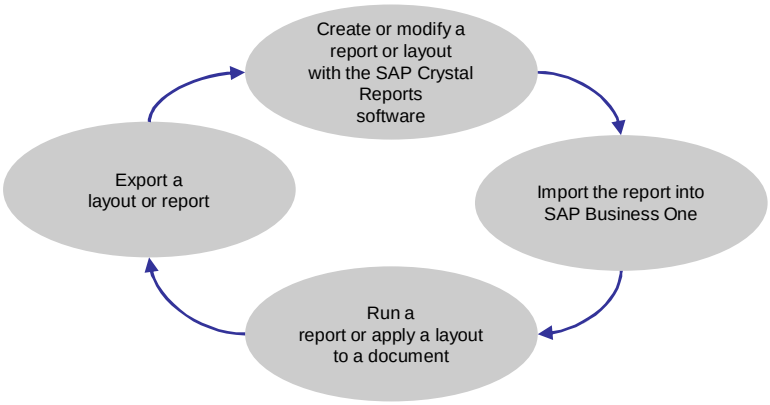


Figure 1: Working with SAP Crystal reports and SAP Crystal Reports layouts

2.2 Creating Reports and Layouts with SAP Crystal Reports for SAP Business One

This section describes the following procedures involved in creating reports and layouts with SAP Crystal Reports for SAP Business One:

1. Connecting to Data Sources
2. Creating Selection Criteria Windows
3. Working with Selection Criteria Tokens

PUBLIC
© 2023 SAP SE. All rights reserved.

4. Adding Drilldown Functionality with Link Arrows
5. Saving SAP Crystal Reports .rpt Files as Reports or Layouts
6. Logging Off from a Data Source

Prerequisites

You must connect to at least one data source before you can begin creating a new report in the SAP Crystal Reports software. SAP Business One supports the following data sources in the SAP Crystal Reports software:

- SAP Business One
- ODBC
- OLE DB (ADO)

> **Recommendation**
>
> We recommend that you connect to the SAP Business One data source.

For more information, see Installing SAP Crystal Reports for SAP Business One.

2.2.1 Connecting to Data Sources

The following procedure describes how to connect to SAP Business One data sources when creating a new report. For information about data sources, see the SAP Crystal Reports online help.

> **Caution**
>
> When creating a report using more than one data source, you must create one subreport for each additional data source. For example, the primary report has already used one data source; if you want to use two additional data sources, you must create two subreports (one subreport for each additional data source).

Procedure

1. On the SAP Crystal Reports start page, choose *Blank report*.

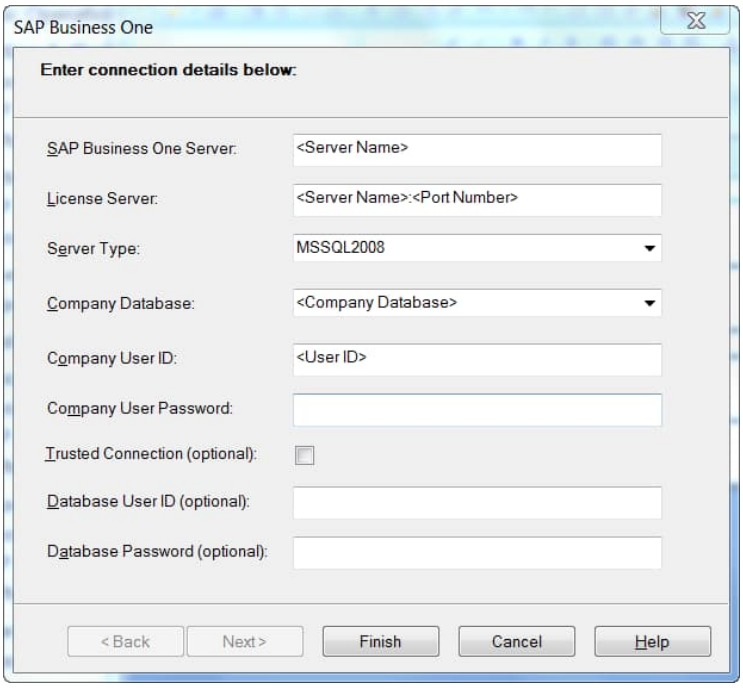
   > **Note**
   >
   > To create a report with a wizard, choose *Report wizard* instead of *Blank report* and enter the required information. For information about the standard report creation wizard, see the SAP Crystal Reports online help.

2. In the *Database Expert* window, in the *Available Data Sources* pane on the left side of the screen, create a new SAP Business One connection.

   > **Note**
   >
   > In the course of creating or modifying a report, you can open the database expert by choosing *Database* → *Database Expert* in the menu bar.

© 2023 SAP SE. All rights reserved.

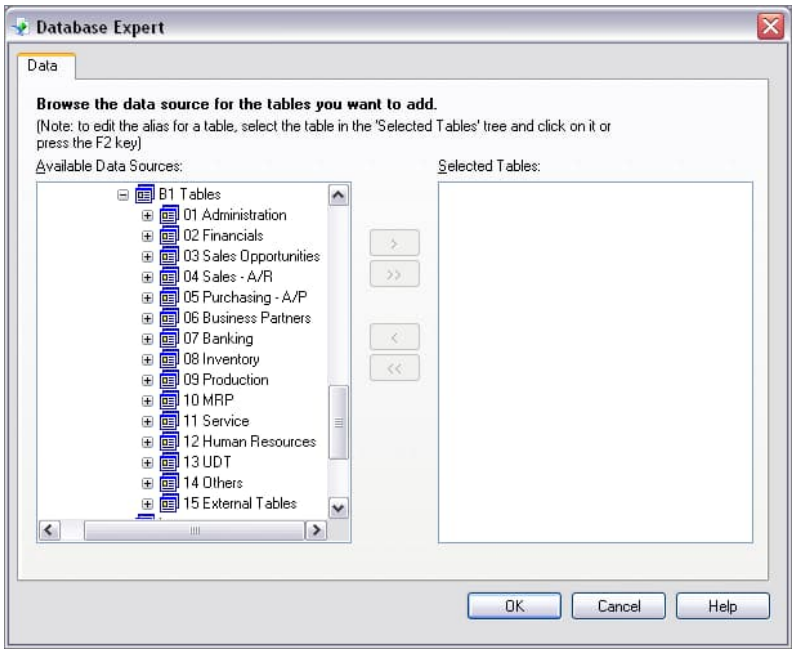
3. In the *SAP Business One* window, enter the required information and choose the *Finish* pushbutton.



4. In the *Database Expert* window, in the *Available Data Sources* pane, under the *B1 Tables* node, select one or more tables and move the selected tables to the *Selected Tables* pane using the *Add (>)* arrow button.

   Note

   The *13 UDT* folder stores the tables of SAP add-ons. The *15 External Tables* folder stores the tables of third-party add-ons.



PUBLIC
© 2023 SAP SE. All rights reserved.

> **Note**
>
> You can view the descriptions of the SAP Business One tables in the data source shown above. For more information, see Viewing Table Information in SAP Business One Data Source.

For information about SAP Business One database tables, see the *SDK_EN.CHM* file on the SAP Business One product DVD or in the download package.

5. Choose the *OK* pushbutton.
6. If you have selected more than one table, the *Links* tab appears and displays the selected tables and their relationships. Choose the *OK* pushbutton to exit the database expert.

> **Note**
>
> If you select more than one table on which to base a new report, a foreign key relationship is automatically created between the tables.

> **Note**
>
> If you have connected to a different data source than an SAP Business One data source, select from all available tables by choosing *<connected database>* → *dbo* → *Tables*

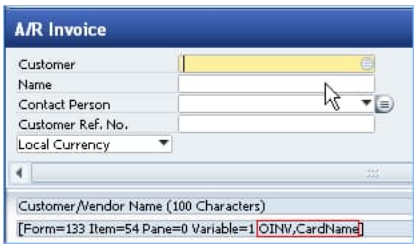
Result

A new report appears in *Design* view on a new tab of the work area.

> **Recommendation**
>
> To open the *Preview* tab for a quick view of your report, in the menu bar, choose *View* → *Print Preview*. The *Preview* tab appears next to the *Design* tab in the work area.

2.2.1.1 Viewing Table Information in SAP Business One Data Source

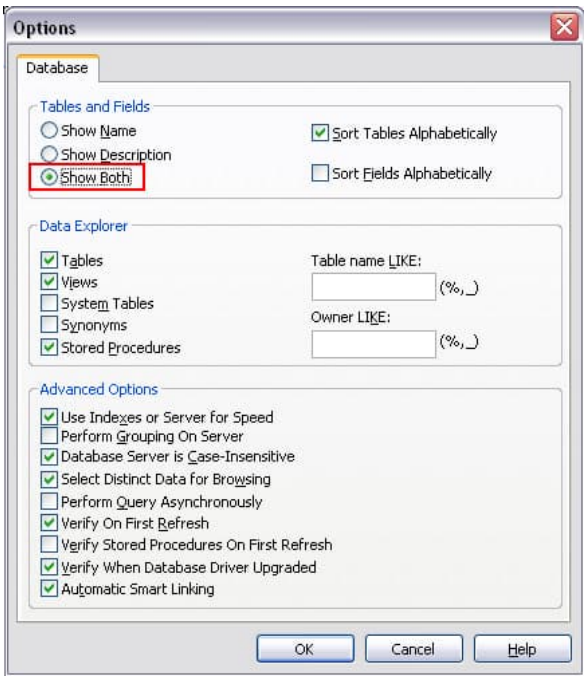
> **Note**
>
> To find out the table information of a specific SAP Business One window, pane, or field, in the SAP Business One menu bar, choose *View* → *System Information*. Then, by moving your cursor around the window, you can see the window's table information displayed in the SAP Business One status bar at the bottom of the screen. In the example below, the table is `OINV` and the *Name* field that the cursor is pointing to is based on the *CardName* column of the `OINV` table.



PUBLIC
© 2023 SAP SE. All rights reserved.

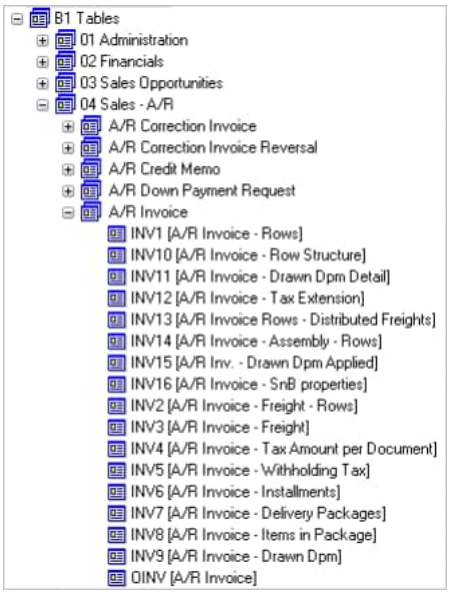
When selecting tables from an SAP Business One data source, you can display the table information as follows:

1. In the *Database Expert* window, in the *Available Data Sources* pane, right-click a connection and choose *Options*.
2. In the *Options* window, in the *Tables and Fields* area, select the *Show Both* radio button.



3. Choose the *OK* pushbutton.

   A description is shown for each SAP Business One table in the hierarchy tree as shown below.

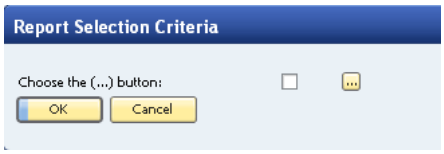


PUBLIC
© 2023 SAP SE. All rights reserved.

2.2.2 Creating Selection Criteria Windows

You can use tokens to create selection criteria windows for data filtering.

Example



In the window above, when you choose the *(...)* [Browse] button, the *Items List - Selection Criteria* window opens:

For each selection criteria window that you want to create, you create a blank report (`.rpt` file) and then add several parameters, each containing a different token. For example, you use different tokens to add a title, a separator line, and a dropdown list. You can change the order of these parameters to define how the related UI elements appear in the window.

The procedure below demonstrates how to create the example selection criteria dialog windows shown above. For more information, go to the following sections:

- Tokens for Creating SAP Business One Controls
- Creating and Updating Parameters
- Syntax and Rules for Defining Tokens

Procedure

1. In SAP Crystal Reports, create a blank report and connect to data sources as described in Connecting to Data Sources.
2. In the *Database Expert* window, select the `OITM` (item master data) table and choose the *OK* pushbutton.
3. In *the Field Explorer* pane on the right, open the *Database Fields* node, and then open the `OITM` node.

   Note

   The field explorer is displayed by default for a new report. If you have closed it and want to reopen it, choose *View* → *Field Explorer* in the menu bar.
4. Drag the following fields to the work area on the *Design* tab and drop them in the *Details* area:
   - *ItemCode*
   - *ItemName*

© 2023 SAP SE. All rights reserved.

The fields appear in the *Details* area with their associated labels in the *Page Header* area. You can edit the label text. For more information, see the SAP Crystal Reports online help.

> **Recommendation**
>
> If a table contains many fields and you find it hard to locate the field you are looking for, right-click the table and choose *Sort Fields Alphabetically*.

5. In the *Field Explorer* pane, right-click *Parameter Fields* and choose *New*.

   For information about parameters, see Creating and Updating Parameters.

6. In the *Create New Parameter* window, in the *Name* field, enter the following token:

   `MyParameter@SELECT * FROM OITM`

7. In the *Value Options* list at the bottom of the window, set the values in one of the following two configurations: choose one item from a list or browse for multiple items.

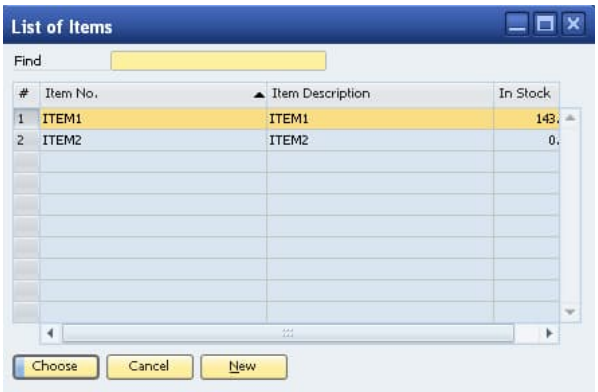
   - *Choose from List* field

     To create a choose-from-list field for single-choice selection, set the values according to the table below:

Value Option	Setting
Prompt Text	**`Select an item`**
Allow multiple values	*False*
Allow discrete values	*True*
Allow range values	*False*

     As a result of setting values according to the table above, a user can make a single choice.

     When you click the *Choose from List* icon in the selection criteria window, a *List of Items* window appears.



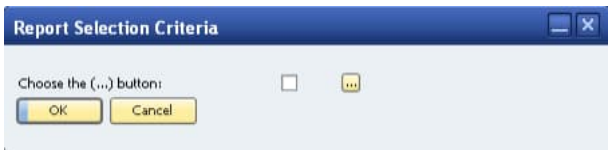
   - (...) [Browse] button

     To create a (...) [Browse] button for multiple-choice selection, set the values according to the table below.

PUBLIC
© 2023 SAP SE. All rights reserved.

Value Option	Setting
Prompt Text	`Choose the (...) button`
Allow multiple values	*True*
Allow discrete values	*True*
Allow range values	*False*

As a result of setting values according to the table, a user can make multiple selections.

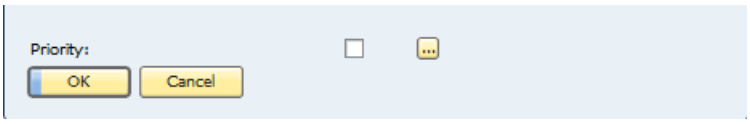


When you choose the (...) [Browse] button, the following *Items List - Selection Criteria* window appears.

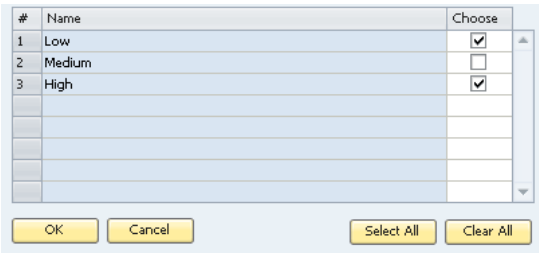
8. In the *Create New Parameter* window, choose the *OK* pushbutton.

2.2.2.1 Multiple Selection Grid

Each of the (...) [Browse] buttons in the following window opens the similar grid control for selecting multiple values. Each (...) [Browse] button has a checkbox for indicating if any value has been selected.



To create a multiple selection grid like the one below, proceed as follows:

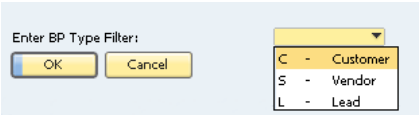


© 2023 SAP SE. All rights reserved.

1. In the *Create Parameter* or *Edit Parameter* window, in the *Value* list, enter a list of valid values:
   - *Low*
   - *Medium*
   - *High*
2. In the *Value Options* area, set the *Allow multiple values* option to *True*.

   Note

   If you set the *Allow multiple values* option to *False*, a dropdown list appears, such as the business-partner type control shown below, instead of the (...) [Browse] buttons and checkboxes above.



2.2.2.2 Viewing and Running Selection Criteria Windows in SAP Business One

After you have created selection criteria windows as described in the example above, you can view them in SAP Business One as described in the following procedure.

Procedure

1. In the SAP Crystal Reports window, in the menu bar, choose *Add-ins* → *SAP Business One* → *Preview in SAP Business One*.

   Note

   Only superusers can open this window.

   Note

   This option only works when the checkbox *Enable Default Connection String* is selected on the *Service* tab of the *General Settings* window (*Administration* → *System Initialization* → *General Settings*) in SAP Business One.

   The *Report Selection Criteria* window opens in SAP Business One.
2. Choose the *Choose from List* icon or (...) [Browse] button, depending on the type of selection criteria you set.
3. In the selection window that opens, select the required criteria and choose the *OK* button.

PUBLIC
© 2023 SAP SE. All rights reserved.

4. In the *Report Selection Criteria* window, choose the *OK* button.

   The report opens in the SAP Crystal Reports viewer. For information about the viewer, see the SAP Business One online help.

Result

You can save your new report and run it in SAP Business One. For more information, see the following:

- Saving SAP Crystal Reports .rpt Files as Reports or Layouts
- *Working with SAP Crystal Reports Layouts and Reports in SAP Business One*

2.2.3 Working with Selection Criteria Tokens

You can create controls that align with standard SAP Business One UI elements.

This section provides explanations for and examples of SAP Business One tokens as shown in the list below:

- Tokens for Creating SAP Business One Controls
- Creating and Updating Parameters
- Syntax and Rules for Defining Tokens

Prerequisites

- You are familiar with the guidelines of working with the SAP Business One user interface.

  Note

  For information about working with the SAP Business One user interface, see *User Interface Standards and Guidelines* at http://service.sap.com/smb/sbocustomer/documentation. This document provides the best practices for designing the SAP Business One interface. It describes the structure and appearance of the interface and the rules for performing actions that affect the system.

  By following these guidelines, you can improve the quality and consistency of the application. The document offers the latest GUI design rules and recommendations. It also includes relevant GUI information, including a glossary, case studies, reusable components, and international support standards.
- You are familiar with SQL syntax, which is required for creating the tokens described in the following sections.
- You are familiar with the syntax and rules for defining tokens (see Syntax and Rules for Defining Tokens).

2.2.3.1 Tokens for Creating SAP Business One Controls

SAP Business One provides tokens that can be used to create standard SAP Business One controls. Most of these tokens contain SQL statements that you can use to dynamically select data from tables and fields in SAP Business One. You can use other tokens to create UI elements such as titles and horizontal separator lines.

© 2023 SAP SE. All rights reserved.

For more information about SAP Business One databases, tables, and fields, see the SDK online help file, *SDK_EN.CHM*, on the SAP Business One product DVD or in the download package.

Use the following basic structure to create SQL tokens in reports that you want to run in SAP Business One:

```
<parameter_name>@<SQL_Expression>
```

Example

An example SQL expression is `SELECT * FROM OCRD WHERE cardType='c'`.

In this case, the condition in the WHERE clause specifies the query scope.

Titles

You can assign a title token to group selection criteria, such as checkboxes. In the example below, *Business Partner Type* is the title.

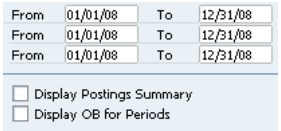
To create a title, use the following token:

```
<parameter_name>@title
```

To define the text that you want to appear as the title, in the *Value Options* list, in the *Prompt Text* field, enter the required text. In the example above, the user entered `Business Partner Type` in the *Prompt Text* field.

Separators

Separators are horizontal lines that span the width of a window. You can use separators to separate selection criteria groups as in the example below:



To create a separator, use the following token:

```
<parameter_name>@separator
```

No other specific values are required for this token.

Item Selection Criteria Groups

This token is related to the OITM table and groups different selection criteria types together. You can use this token to select multiple items or a single item.

To select items from the OITM table, define the token as below:

```
<parameter_name>@SELECT * FROM OITM
```


PUBLIC
© 2023 SAP SE. All rights reserved.

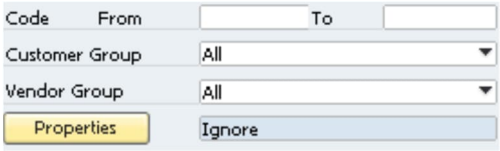
If the parameter allows multiple values, a (...) [Browse] button appears in the selection criteria window when you run the report.

If the parameter does not allow multiple values, a field with a *Choose from List* icon appears in the selection criteria window when you run the report.

> **Note**
>
> For specific instructions about creating this token, see Creating Selection Criteria Windows.

Business Partner Selection Criteria

You can define a token that selects business partner data from the OCRD table as in the example shown below.



To create selection criteria controls related to business partners, use the following example tokens:

- To include all types of business partners:

  ```
  <parameter_name>@FROM OCRD
  ```

- To include only customer-type business partners:

  ```
  <parameter_name>@FROM OCRD WHERE cardType='c'
  ```

- To include only vendor-type business partners:

  ```
  <parameter_name>@FROM OCRD WHERE cardType='s'
  ```

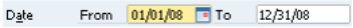
- To include only lead-type business partners:

  ```
  <parameter_name>@FROM OCRD WHERE cardType='l'
  ```

Date Format Selection Criteria

You can define date selection criteria using one of the following types of date controls:

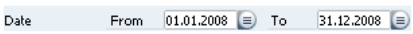
- *Date Selector* calendar window – Allows the user to enter any date by choosing the *Calendar* icon in a field, as shown below:

  To create this control, do the following:

  - Define the parameter type as *Date* or *Date Time*
  - Set *Allow multiple values* to *False*
  - Set *Allow range values* to *True*

- *Choose from List* control – Allows the user to choose only specific posting periods by clicking the *Choose from List* icon as shown below:

© 2023 SAP SE. All rights reserved.

To create this control, do the following:

- Define the following token, which draws data from the OFPR table:

  ```
  <parameter_name>@SELECT * FROM OFPR
  ```

- Define the parameter type as *Date* or *Date Time*
- Set *Allow multiple values* to *False*
- Set *Allow range values* to *True*

Account Tree

The *Account Tree* object in SAP Business One allows the user to view different levels of account and multiple selection options of the nodes.

To create an account tree, use the following token, which allows you to define multiple values. Set the *Allow multiple values* value option to *True*.

```
<parameter_name>@SELECT * FROM OACT
```

By Location and By Warehouse

Location and warehouse information is usually grouped together as tabs, as in the examples below:

To create this control, use the following token, which selects data from the OWHS table. Set the *Allow multiple values* value option to *True*.

```
<parameter_name>@SELECT * FROM OWHS
```

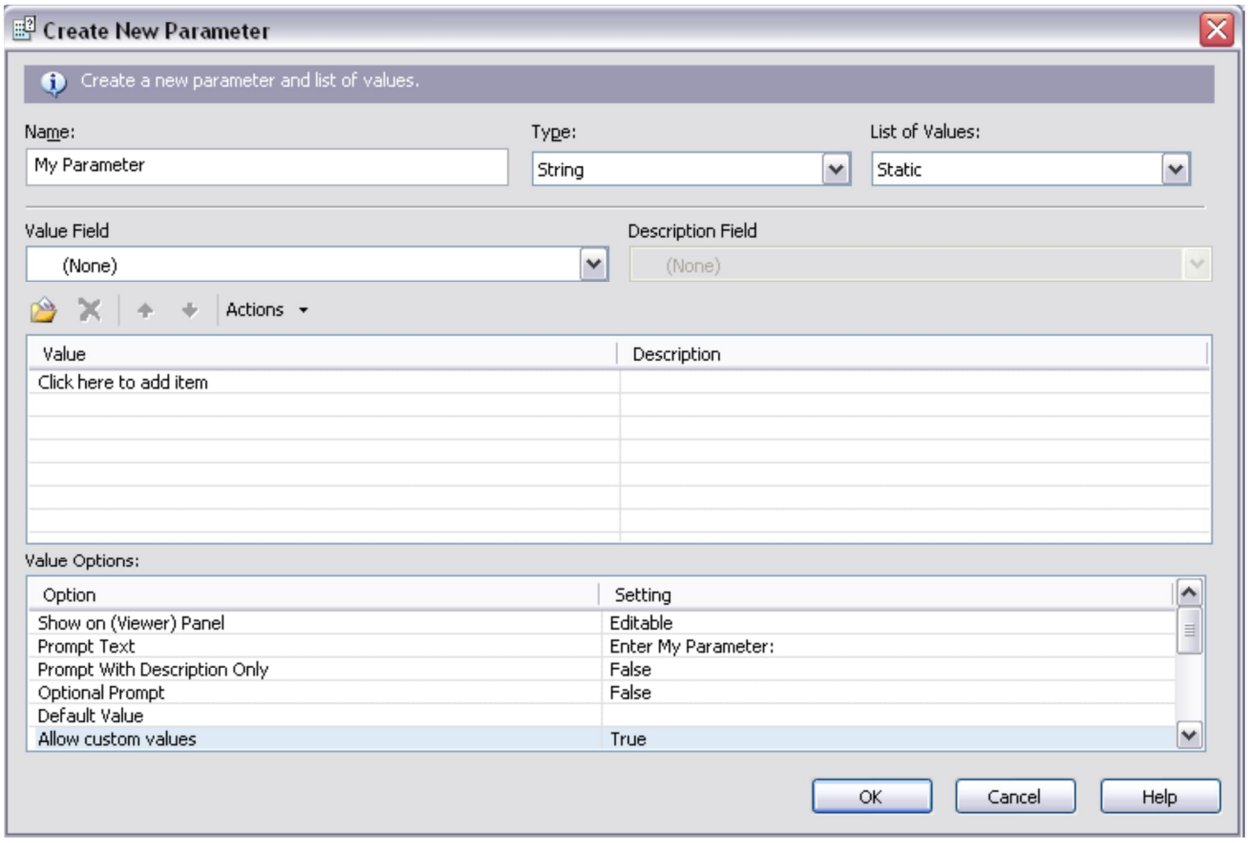

PUBLIC
© 2023 SAP SE. All rights reserved.

© 2023 SAP SE. All rights reserved.

2.2.3.2 Creating and Updating Parameters

To create or update a parameter, in the SAP Crystal Reports window, in the *Field Explorer* pane on the right, right-click *Parameter Fields* and select *New*.

The *Create New Parameter* window appears.



In this window, you can define the name, type, and values of the parameter.

> **Note**
>
> After you have added a parameter, you cannot change its name; however, you can edit its type and values. For more information, see Creating Selection Criteria Windows and Working with Selection Criteria Tokens.

Parameter Type

The following table provides a list of parameter types (the *Type* dropdown list) and their related control types in SAP Business One:

Parameter Type	Control Type	Values
Boolean	Checkbox	Fixed values: • *True*

PUBLIC
© 2023 SAP SE. All rights reserved.

Parameter Type	Control Type	Values
		• *False*
Currency	Edit box with a calculator	N/A
Date	Calendar-type date picker; that is, an edit box with a calendar	N/A
Date Time	Calendar-type date picker; that is, an edit box with a calendar	Note Because SAP Business One does not have a time control, this parameter provides a default time of `00:00`.
Number	Edit box with a calculator	N/A
String	Edit box	N/A
Time	Not supported	N/A

List of Values

The type of the list of values can be defined as either static or dynamic.

- Static

  Note

  If *Allow multiple values* is set to *False*, the static type provides a field with a *Choose from List* button. If you set this value to *True*, the static type provides a (...) [Browse] button that opens a window with multiple selection options.

  This is the recommended option. A static prompt is one that always contains the same values. For example, if a parameter prompts a country value, you could create a static prompt because the country list contains a set of values that does not change often. If the token syntax is applied to the parameter name, the option values are dynamically populated for this parameter.

  It provides the following options:

  - Simple parameters (display options)
  - Hard-coded lists of values such as `customer`, `vendor`, and `lead`
  - Complex dynamic values

    Note

    For complex dynamic values, if you include a token in the parameter name, SAP Business One fetches the data list from the database dynamically.

  When you set the *List of Values* type to **`Static`**, either you can enter or import fixed values in the *Value* area or SAP Crystal Reports reads data from the database using the SQL code in the parameter name.

© 2023 SAP SE. All rights reserved.

- Dynamic

  This option is not recommended. The values of a dynamic prompt are retrieved dynamically and directly from the data source and are not stored within the report. For example, if you are prompting for customer name, you could create a dynamic prompt because the names in your customer database probably change frequently.

  When you set the *List of Values* type to **`Dynamic`**, the value area is not available, and you can retrieve data only by using the SQL code in the parameter name. Furthermore, the static type with token and SQL statement provides a better way of getting the option list because the user can filter by adding a `WHERE` clause in the SQL part of the parameter name.

Value Area

The values that you enter or import in the *Value* fields appear for selection in SAP Business One selection criteria windows.

For information about the *Value* and *Description* fields, see the SAP Crystal Reports online help.

Value Options and Settings

In the *Create New Parameter* or *Edit Parameter* window, you can define settings for value options as shown in the table below. For information about these value options and settings, see the SAP Crystal Reports online help.

Value Option	SAP Business One Control Type	Setting Descriptions
Show on (Viewer) Panel	N/A	• Determines the *Parameter Panel* options in SAP Crystal Reports viewer: • *Do not show* • *Editable* (default) • *Read only*
Prompt Text	N/A	Appears in the SAP Business One control as a UI string providing an instruction to the user, such as “Enter a value.”
Prompt With Description Only	N/A	Fixed values: • *True* – Prompts the user with only a description • *False* (default) – Prompts the user with a value and its description
Optional Prompt	N/A	Set this to *True* if you want to allow the user to bypass entering a value for this parameter.
Default Value	N/A	Add a value to this field if you want a default to appear when the program prompts the user to select a value. If the user does not change it, the default value is applied. Note This option is available only for parameters with static prompts.

PUBLIC
© 2023 SAP SE. All rights reserved.

Value Option	SAP Business One Control Type	Setting Descriptions
Allow custom values	Not supported	N/A
Allow multiple values	(...) [Browse] button that can pop up a new window to allow the user to select multiple values	Fixed values: • *True* • *False*
Allow discrete values	Dropdown list	A user can select only one singular value. If you have *Allow multiple values* set to *True*, a user is able to select more than one discrete value for the parameter field, though these values will continue to function singularly as opposed to a range value. You can choose discrete values for this parameter field after you choose the *Refresh Report Data* command. Fixed values: • *True* • *False*
Allow range values	From/to fields	Fixed values: • *True* – Provides *From* and *To* dropdown lists • *False* – Provides a *Choose from List* icon
Min length	N/A	Restricts values, depending on the type. For example, if the type is *String*, this value is *Min Length*. If the type is *Date*, *Date time* or *Time*, the value is *Start*. If the type is *Number* or *Currency*, the value is *Min value*.
Max length	N/A	Restricts values, depending on the type. For example, if the type is *String*, this value is *Max Length*. If the type is *Date, Date time* or *Time*, the value is *End*. If the type is *Number* or *Currency*, the value is *Max value*.
Edit mask	N/A	Applicable only for the *String* parameter type. For more information, see the SAP Crystal Reports online help.

2.2.3.3 Syntax and Rules for Defining Tokens

When defining tokens for use in SAP Business One, you must follow the following rules:

- A parameter name must start with an alphanumeric character or an underscore (_). For information about creating parameters, see Creating and Updating Parameters.

© 2023 SAP SE. All rights reserved.

- The special character @ (at sign) is reserved for SAP Business One tokens and must follow the parameter name with no space between them.

  For example, “My Parameter@” means that this parameter is specific to SAP Business One.
- An SQL statement usually follows the at sign (@) with no space in between.
- The general syntax for creating SAP Business One tokens is:

  `<Parameter Name>@SELECT … FROM … WHERE …`
- When you are creating tokens, the SELECT command is not always mandatory for SAP Business One tables. For example, SELECT is not mandatory for the OCRD (business partners) and OACT (G/L accounts) tables. For an example where SELECT is not used, see *Business Partner Selection Criteria* in Tokens for Creating SAP Business One Controls.
- A parameter name may include another parameter name, which means that the first parameter references the second parameter. The referencing parameter must specify the parameter it references by adding the at sign (@) before the name of the referenced parameter.

  Example

  `Country@SELECT distinct Country FROM OCST`

  `State@SELECT code, name FROM OCST WHERE (Country = '@Country')`

  A state parameter references a country parameter. If you choose *United States* from the country list, the states of the United States appear in the *State* dropdown list. If you do not choose a country, the state dropdown list has no data.

  The first statement lists all countries, while the second parameter (state parameter) calls the country parameter. For the second parameter to work, you must have a parameter called "Country".

  Note

  A parameter can reference more than one other parameter in WHERE clauses. However, each referenced parameter must fulfill the following requirements:

  - Its *Allow multiple values* setting is defined as **`False`**.
  - Its *Allow range values* setting is defined as **`False`**.
- The following combination of parameter value settings is not supported:
  - *Allow multiple values*: **`True`**
  - *Allow discrete values*: **`False`**
  - *Allow range values*: **`True`**

  However, if you allow multiple values and discrete values, the *Allow range values* setting can be **`False`**.
- If a parameter allows multiple values, you must use the `IN` clause to reference the parameter.

  Example

  Parameter B: **`Customer@select cardcode from OCRD where cardtype = 'C'`**

  - If parameter B allows multiple values,

    Parameter A: **`Invoice@select docnum, docdate from OINV where cardcode in (@Customer)`**
  - If parameter B does not allow multiple values,

    Parameter A: **`Invoice@select docnum, docdate from OINV where (cardcode = '@Customer')`**

PUBLIC
© 2023 SAP SE. All rights reserved.

- The `DocKey@` token is mandatory in an SAP Crystal Reports `.rpt` file that you want to use as a layout. The `DocKey@` token is used to identify the current active document. SAP Business One populates its value when you preview or print a layout.

  When you apply the `DocKey@` token, in the *Select Expert* window, you need to specify a filter condition, such as:

  `{OINV.DocEntry}={?DocKey@}`

  If the `DocKey@` token does not exist, create a new parameter with the following settings:

  - In the *Name* field, enter **`DocKey@.`**
  - In the *Type* dropdown list, select *Number* or *String*, depending on the type of the DocEntry value.
  - In all other fields, leave the default settings.

    Note

    For information about the *Select Expert* window, see the SAP Crystal Reports online help.

- The `ObjectId@` token provides specific document-type information. We recommend you use this token for SAP Crystal Reports layouts that you want to assign to multiple document types as master layouts. For example, you can apply the `ObjectId@` token if you want to include dynamic titles that change according to different document types or if you want certain functions suppressed for particular document types. However, this token is optional in an SAP Crystal Reports `.rpt` file that you want to use as a layout for only one document type:

  If the `ObjectId@` token does not exist, create a new parameter with the following settings:

  - In the *Name* field, enter **`ObjectId@`**
  - In the *Type* dropdown list, select *Number*
  - In all other fields, leave the default settings

    Recommendation

    If you want to design a master layout for multiple document types, do not use the `ONLY` keyword.

  For information about SAP Crystal Reports master layouts, see *Master Layouts*.

- The `UserCode@` parameter is an optional token that is recommended only in SAP Crystal Reports layouts where you want to display the code of the user currently logged on to SAP Business One. The parameter type is *String*. This token is only for layouts; you cannot use it in reports.
- The `FolioPref@` and `FolioNum@` parameters are valid only for Mexico, Chile, Costa Rica, and Guatemala. They are optional tokens that are recommended only in SAP Crystal Reports layouts in which you want to display a folio prefix and a folio number. SAP Business One populates them with the folio prefix and folio number you assign to the document for the first printing. For the first printing of some legal documents, SAP Business One prompts users to enter the folio prefix and folio number. The values are taken for the subsequent printing.

Dropdown Lists and Choose from List Icons

If the SQL query part of a parameter name (token) does not specify which column to select from the database, such as **`aaa@SELECT * from OITM`**, SAP Business One provides a field with a standard *Choose from List* icon that opens a window with a list, in this case a list of existing items.

If the token specifies columns, such **`as bbb@SELECT code, name FROM OCST`**, SAP Business One provides a dropdown list control.

© 2023 SAP SE. All rights reserved.

If two SELECT columns are specified, the first column is used as the dropdown list's key, and the second column is used as descriptions for the dropdown list.

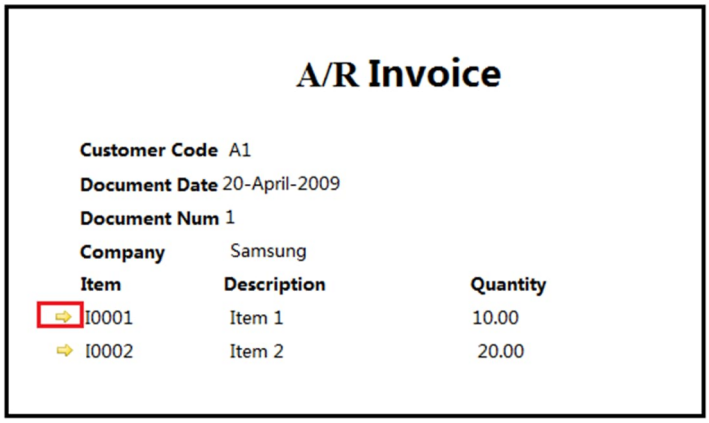
SQL Token Codes Examples

The table below provides SAP Business One SQL token examples and descriptions.

SAP Business One SQL Token	Description
`<parameter_name>@SELECT * FROM OPRJ WHERE PrjName LIKE 'World%'`	This expression returns all projects whose name starts with "World"
`<parameter_name>@SELECT CurrCode FROM OCRN WHERE ISOCurrCod <> 'CAD'`	This expression returns all currency codes defined in SAP Business One except for the Canadian dollar.
`<parameter_name>@SELECT * FROM ODSC WHERE CountryCod = 'US'`	This expression returns all U.S. banks defined in SAP Business One.

2.2.4 Adding Drilldown Functionality with Link Arrows

To add the drilldown functionality to a report, create link arrows for specific objects in the report. When you preview the report in SAP Business One and click the arrow icon, related details about the object are displayed.



The drilldown functionality supports the following windows:

- Documents:
  - *A/P Invoice*
  - *A/R Credit Memo*
  - *A/R Invoice*
  - *Delivery*
  - *Goods Receipt*
  - *Inventory Transfer*

PUBLIC
© 2023 SAP SE. All rights reserved.

- *Journal Entry*
- *Purchase Order*
- *Sales Order*
- *Sales Quotation*

- Master data:
  - *Business Master Data*
  - *Item Master Data*
- User-defined objects (UDOs)

> **Note**
>
> The formulas you use to define link arrows for master data are different from those for documents and UDOs, that is, you must use the "CStr" function for documents and UDOs. For examples, see the note of step 5 of the procedure below.

> **Note**
>
> If you reference a database field in a user-defined table (UDT), you must replace the "at" sign (@) prefix of the UDT name with an underscore (_). For an example, see the note of step 5 of the procedure below.

The following example demonstrates how to create a link arrow to drill down to item details in the *Item Master Data* window. The hyperlink refers to the OITM table (see step 5).

Prerequisites

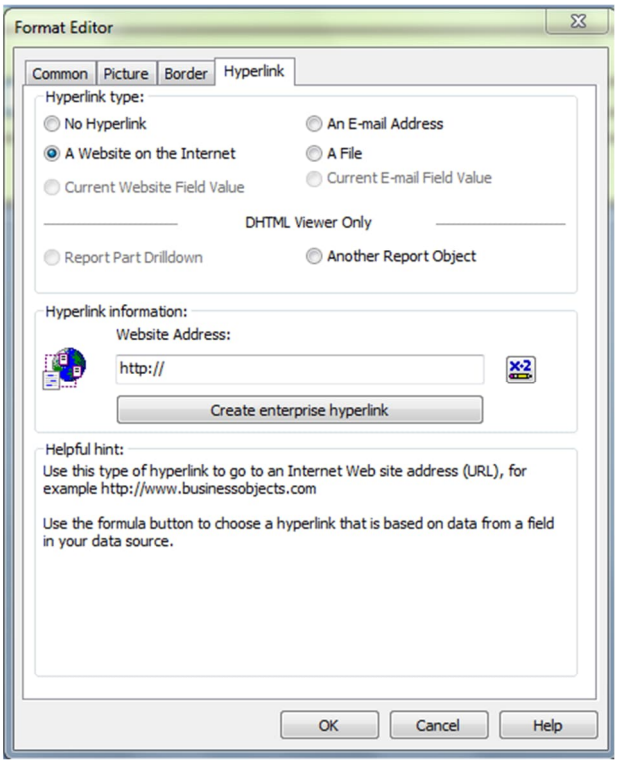
In the *Database Expert* window, you have added the OITM table from an SAP Business One database. For more information, see Connecting to Data Sources.

Procedure

1. In the SAP Crystal Reports window, on the *Design* tab, insert the *Link Arrow* icon graphic.
2. Right-click the graphic and choose *Format Graphic*.

   The *Format Editor* window opens.

© 2023 SAP SE. All rights reserved.



3. On the *Hyperlink* tab, in the *Hyperlink type* area, select the *A Website on the Internet* radio button.
4. In the *Hyperlink information* area, choose the *Formula* button to the right of *the Website Address* field.

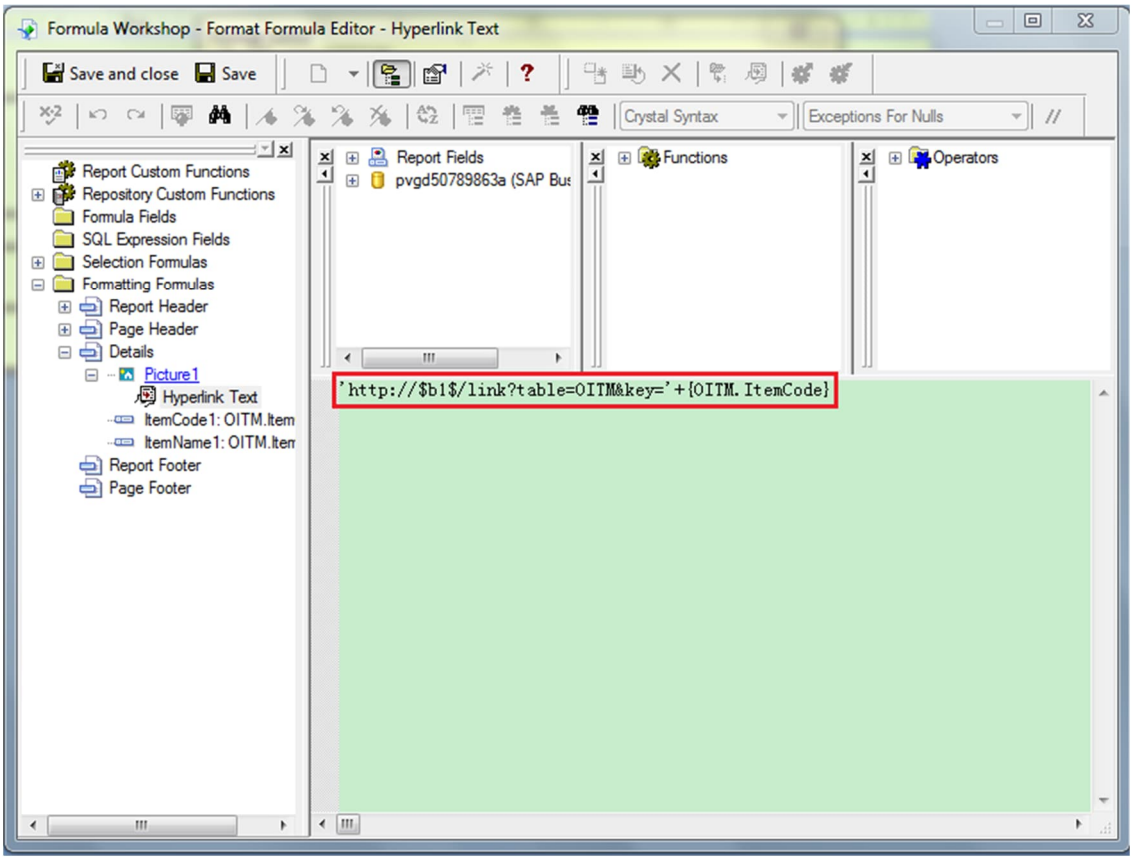
   The *Formula Workshop - Format Formula Editor - Hyperlink Text* window opens.

   Note

   The *Formula* button changes color when a hyperlink formula has been added. For information about the *Formula* button, see the SAP Crystal Reports online help.
5. In the work area, enter the following formula:

   ```
   'http://$b1$/link?table=OITM&key='+{OITM.ItemCode}
   ```


PUBLIC
© 2023 SAP SE. All rights reserved.



Note

If you are creating a link arrow to drill down to deliveries, you should define the formula as below, using the "CStr" function:

```
'http://$b1$/link?table=ODLN&key='+CStr ({ODLN.DocEntry}, 0)
```

If you are creating a link arrow to drill down to a UDO linked to a UDT named @TEST, you should define the formula as below:

```
'http://$b1$/link?table=@TEST&key='+CStr ({_TEST.DocEntry}, 0)
```

6. In the toolbar, choose the *Save and close* button.
7. In the *Format Editor* window, choose the *OK* button.

2.2.5 Saving SAP Crystal Reports .rpt Files as Reports or Layouts

To define an SAP Crystal Reports `.rpt` file as a report or a layout and save it to the SAP Business One database, in the *Add-ins* menu, choose the *Save* or *Save As* option.

© 2023 SAP SE. All rights reserved.

Note

Before you save an `.rpt` file, you can preview it in SAP Business One. In the SAP Crystal Reports software toolbar, choose *Add-ins → SAP Business One → Preview in SAP Business One*. Only superusers can open this window. This option only works when the checkbox *Enable Default Connection String* is selected on the *Service* tab of the *General Settings* window (*Administration → System Initialization → General Settings*) in SAP Business One.

Note

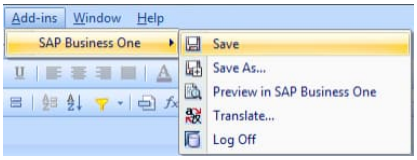
To save an SAP Crystal Reports `.rpt` file to your local hard drive, in the SAP Crystal Reports window, choose *File → Save or File → Save As.* If you decide later that you want to save the `.rpt` file to SAP Business One, you can import it using the report and layout import wizard. For more information, see *Importing SAP Crystal Reports .rpt Files*.

Prerequisites

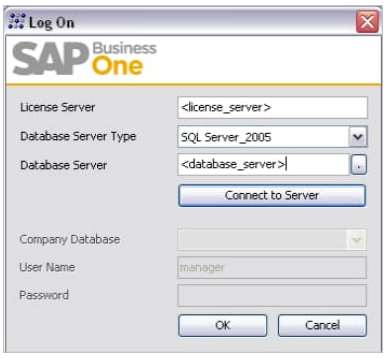
You are designated as a superuser in SAP Business One.

Procedure

1. In the toolbar of the SAP Crystal Reports software, choose *Add-ins → SAP Business One → Save* or *Save As*. Alternatively, in the *External Command* toolbar, choose .



2. In the *Log On* window, specify the necessary information and choose the *OK* button. This logs you on to SAP Business One, and you can proceed.



PUBLIC
© 2023 SAP SE. All rights reserved.

Note

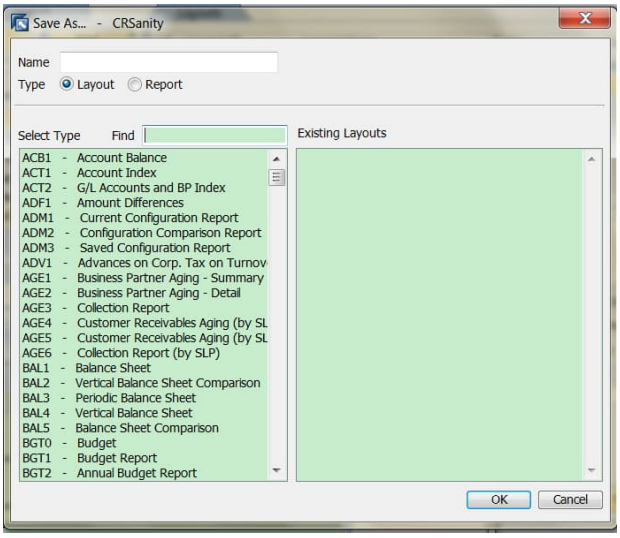
The *Database Server* value must be registered in the System Landscape Directory. For example, if only the host name of the database server is registered, you can enter only the exact host name value; if you enter the IP address, logon will fail. For more information, see SAP Note 2026931.

If you open the SAP Crystal Reports application from within SAP Business One by editing a report, you are automatically logged on to SAP Business One and this window is not displayed.

Note

For SAP Business One 10.0 FP 2305 or later versions, if you have registered and enabled identity providers in the SLD control center, you can log in with the accounts of the authentication server users, domain users or the external IDP users that you have bound to the SAP Business One company users. The login scenario depends on the identity providers you activated. For more information, please refer to the guide *Identity and Authentication Management in SAP Business One* on the SAP Help Portal.

3. In the *Save As* window, do the following:
   1. In the *Name* field, specify a name for the `.rpt` file.
   2. For document type, select either the *Layout* or the *Report* radio button and choose the *OK* button.
      - *Layout*



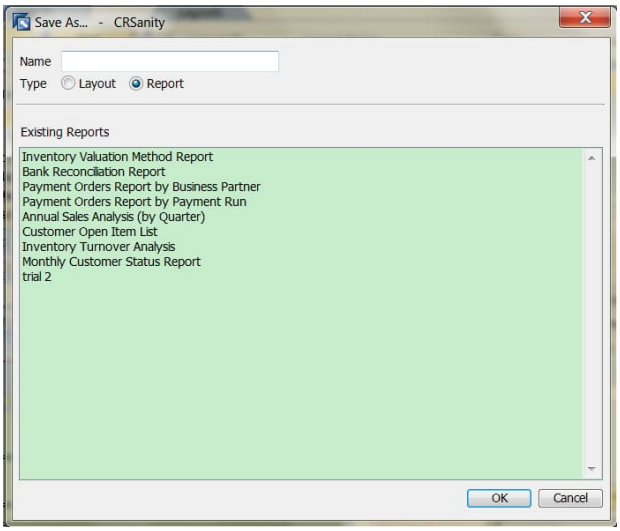
Note

It is important to note that an SAP Crystal Reports `.rpt` file that you want to define as a layout in SAP Business One must contain a parameter with the `DocKey@` token. Check this in the SAP Crystal Reports software before you save the `.rpt` file as a layout. For information about this token, see Syntax and Rules for Defining Tokens.

- *Report*

  The report is saved to the *Lost Reports* folder in the *Report and Layout Manager* window. For more information, see *Creating New Report Folders*.

© 2023 SAP SE. All rights reserved.



2.2.6 Logging Off from a Data Source

If you want to connect to a different SAP Business One data source, you must first log off from the data source to which you are currently logged on.

In the SAP Crystal Reports menu bar, choose *Add-ins → SAP Business One → Log Off*.

2.3 Working with SAP Crystal Reports Layouts and Reports in SAP Business One

You can run, edit, or delete layouts and reports created with the SAP Crystal Reports software in SAP Business One. SAP Business One provides a central workplace

For more information, see the SAP Business One online help.

2.3.1 Running Layouts

To run a layout created with the SAP Crystal Reports software in SAP Business One, proceed as follows:

1. In SAP Business One, open a document whose layout you want to view.
2. Choose one of the following menu paths:

PUBLIC
© 2023 SAP SE. All rights reserved.

- *File → Preview*

  Choose this option if the SAP Crystal Reports layout you want to view is defined as the default layout of the document type.

- *File → Preview Layouts*

  Choose this option if you want to view a non-default layout created with the SAP Crystal Reports software.

The document appears in the SAP Crystal Reports viewer.

> **Note**
>
> You can create a layout for one document type and apply this layout to another document type. When you view the latter document type in this layout, SAP Business One automatically redirects you to the tables relevant to this document type and displays the correct data despite the fact that the layout itself contains table information relevant to the former document type. For more information, see *Master Layouts*.

2.3.2 Editing Layouts

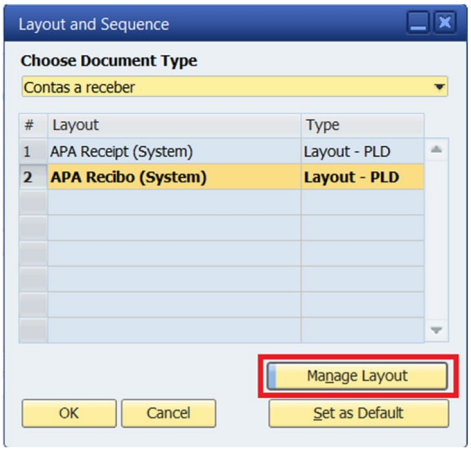
To edit an SAP Crystal Reports layout, proceed as follows:

1. To open an SAP Crystal Reports layout for editing, do one of the following:
   - Open the layout in the *Report and Layout Manager* window:
     1. From the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.
     2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the document type of the layout you want to edit.
     3. In the work area on the right, select the SAP Crystal Reports layout you want to edit and choose the *Edit* button.

> **Note**
>
> If you want to edit a PLD-type layout, select it and choose the *Edit* button. The Print Layout Designer opens. For more information, see the Print Layout Designer documentation on the SAP Help Portal.

© 2023 SAP SE. All rights reserved.

- Open the layout in the relevant window:
  1. From the SAP Business One *Main Menu*, navigate to a document whose layout you want to edit and open it.
  2. In the tool bar, choose (*Layout and Sequence*).
  3. In the *Layout and Sequence* window, select the SAP Crystal Reports layout that you want to edit and choose the *Manage Layout* button.



  4. In the *Report and Layout Manager* window, choose the *Edit* button.

2. The SAP Crystal Reports software opens the layout you have selected, and you can make any required changes.

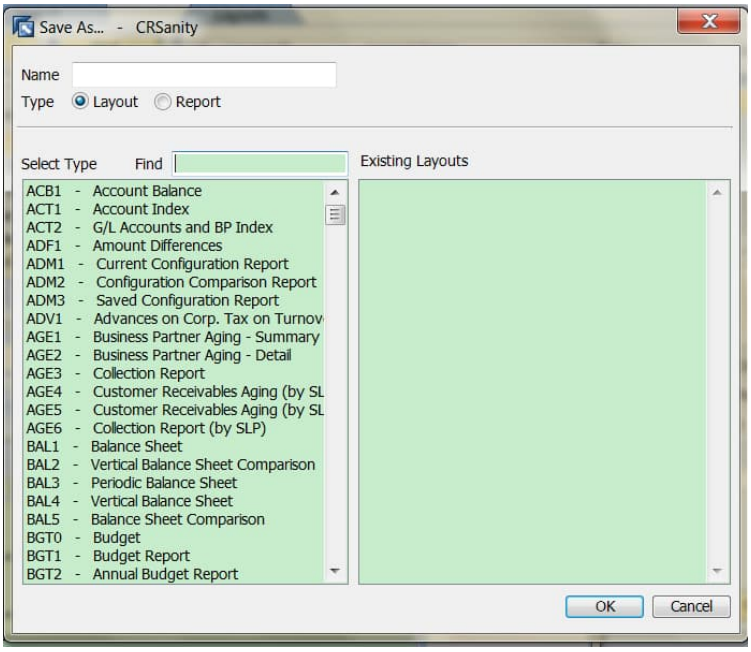
   Note

   Before adding any new tables, make sure that the option of *Automatic Smart Linking* is not selected under *File → Options → Database*.

3. In the menu bar, do one of the following:
   - To save the updated layout in the SAP Business One database, choose *Add-ins → SAP Business One → Save*. Alternatively, in the *External Command* toolbar, choose .

PUBLIC
© 2023 SAP SE. All rights reserved.

- To save the updated layout as a new layout with a different name or to apply it to another document type in the SAP Business One database, choose *Add-ins → SAP Business One → Save As*. Alternatively, in the *External Command* toolbar, choose .



Caution

In the window that opens, make sure the *Layout* radio button is selected; otherwise the updated layout is saved as a report.

- To save the updated layout as an `.rpt` file on your local hard drive, choose *File → Save*.
- To save the updated layout as a new `.rpt` file with a different name or in a different location on your local hard drive, choose *File → Save As*.

4. Choose the *OK* button.

2.3.3 Deleting Layouts

Prerequisite

You are designated as a superuser in SAP Business One.

Procedure

Note

You cannot delete a layout that is provided in the SAP Business One core product.

© 2023 SAP SE. All rights reserved.

To delete an SAP Crystal Reports layout, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the document type of the layout you want to delete and select it.
3. In the work area on the right, select the layout that you want to delete and then choose *You Can Also* → *Delete*.
4. To confirm that you want to delete the layout, choose the *Yes* button.

2.3.4 Running Reports

You can run a report created with the SAP Crystal Reports software in SAP Business One from the *Report and Layout Manager* window or from the SAP Business One *Main Menu*.

Run the report from the Report and Layout Manager window

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to run and select it.

   Note

   After you have saved an `.rpt` file as a report into SAP Business One, the report appears only in the *Lost Reports* folder in the *Report and Layout Manager* window. To make it appear in the SAP Business One *Main Menu*, assign it to a folder of a specific module. For information about assigning the report to a module in SAP Business One, see Saving SAP Crystal Reports .rpt Files as Reports or Layouts.
3. In the work area on the right, choose the *Run Report* button.
4. If the report contains multiple data source connections, the *Log On to Data Source* window opens. Specify the user code and password for each data source and choose the *OK* button.
5. If a selection criteria window appears, enter the required information and choose the *OK* button.

   The report appears in SAP Crystal Reports viewer.

Run the report from the SAP Business One Main Menu

Procedure

1. In the SAP Business One *Main Menu*, locate the report you want to run and select it.

PUBLIC
© 2023 SAP SE. All rights reserved.

If the report is created with the SAP Crystal Reports software, an SAP Crystal Reports icon appears to the left of the report name.

2. If a selection criteria window appears, enter required information and choose the *OK* button.

   The report appears in SAP Crystal Reports viewer.

2.3.5 Editing Reports

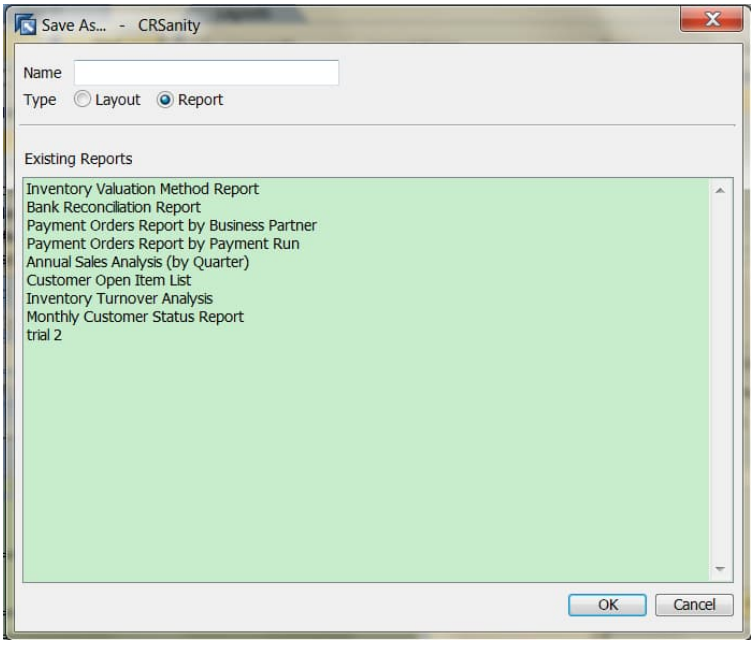
To edit a report created with the SAP Crystal Reports software, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to edit and select it.
3. In the work area on the right, choose the *Edit* button.

   The report opens in the SAP Crystal Reports software and you can make any desired changes.

   Note

   To avoid creating unwanted links or disrupting existing links in the report, before you add any new tables, make sure that the *Automatic Smart Linking* checkbox is not selected under *File* → *Options* → *Database*.
4. In the menu bar, do one of the following:
   - To save the updated report in the SAP Business One database, choose *Add-ins* → *SAP Business One* → *Save*. Alternatively, in the *External Command* toolbar, choose .
   - To save the updated report as a new report with a different name in the SAP Business One database, choose *Add-ins* → *SAP Business One* → *Save As*. Alternatively, in the *External Command* toolbar, choose



© 2023 SAP SE. All rights reserved.

Caution

In the window that opens, make sure the Report radio button is selected; otherwise the updated report is saved as a layout.

- To save the updated report as an `.rpt` file on your local hard drive, choose *File → Save*.
- To save the updated report as a new `.rpt` file with a different name or in a different location on your local hard drive, choose *File → Save As*.

5. Choose the *OK* button.

2.3.6 Deleting Reports

Prerequisite

You are designated as a superuser in SAP Business One.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the navigation pane on the left, navigate to the report you want to delete.
3. In the work area on the right, choose *You Can Also → Delete*.
4. To confirm that you want to delete the report, choose the *Yes* button.

PUBLIC
© 2023 SAP SE. All rights reserved.

3 Working with Multilanguage Reports

You can deliver reports created with the SAP Crystal Reports software in multiple languages. You can maintain translated content in multiple languages in one report.

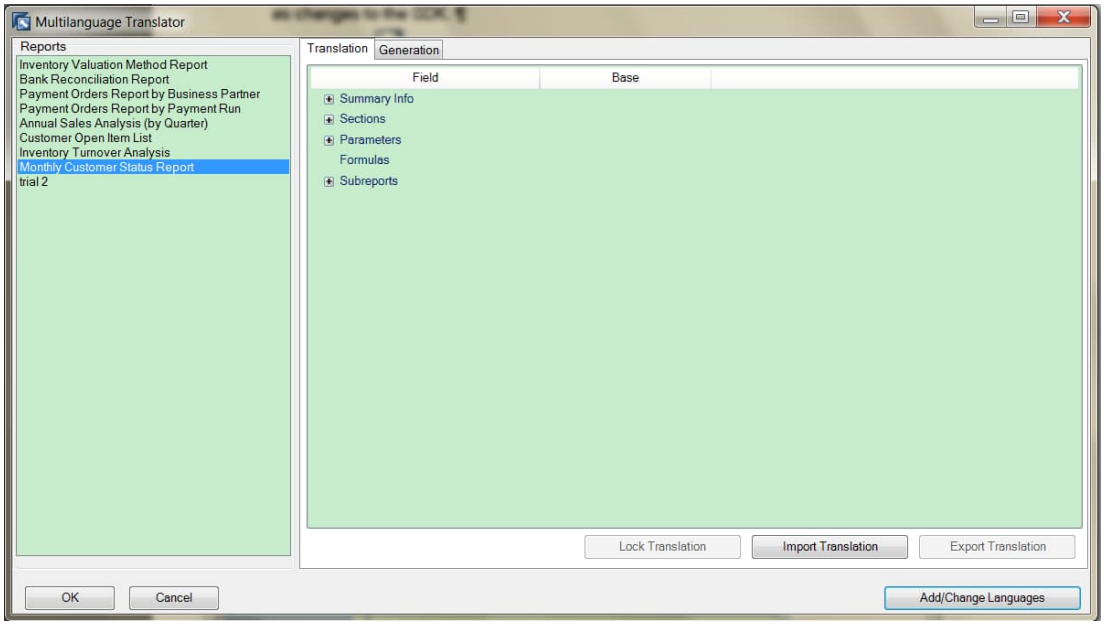
The multilanguage translator tool in SAP Crystal Reports, version for SAP Business One, enables you to translate your reports in all the languages supported in SAP Business One.

To access the multilanguage translator in SAP Crystal Reports, do one of the following:

- Choose *Add-ins → SAP Business One → Translate...*.
- Click (Translate).

  If you have not logged on to a company database, the SAP Business One *Log On* window appears. Enter the required information.

  The *Multilanguage Translator* window opens. All reports created with the SAP Crystal Reports software in the company database are listed in the *Reports* pane.



3.1 Translating Reports

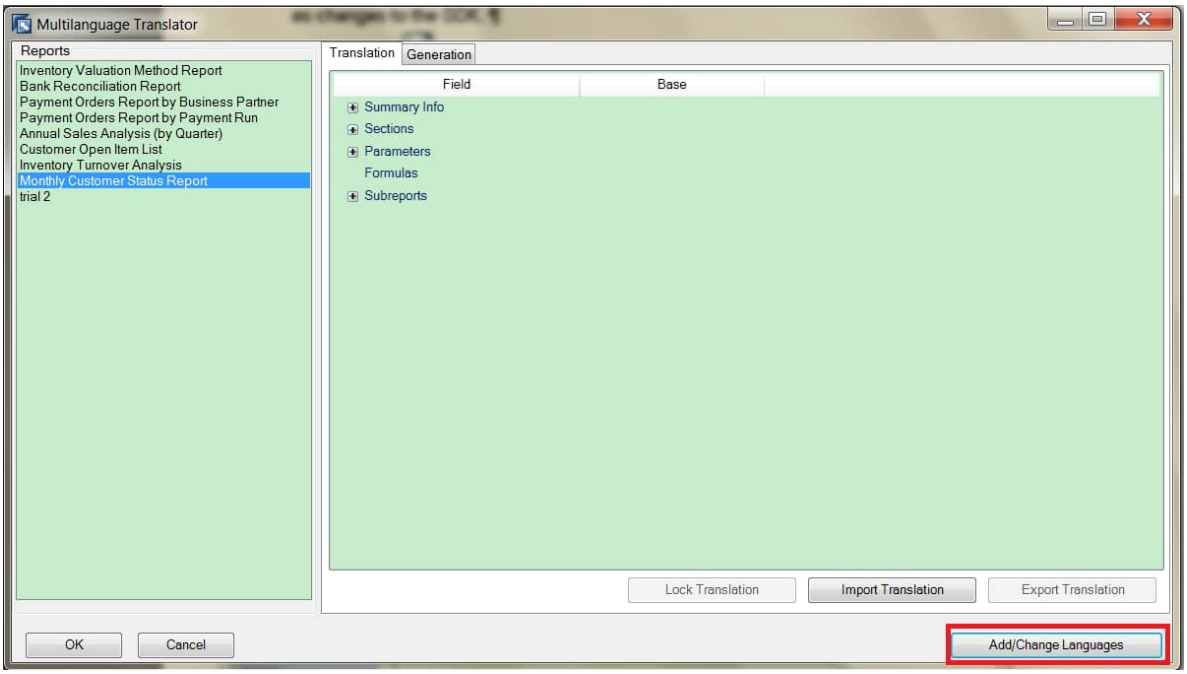
Procedure

1. In the *Multilanguage Translator* window, from the *Reports* list, select the report you want to translate into other languages.

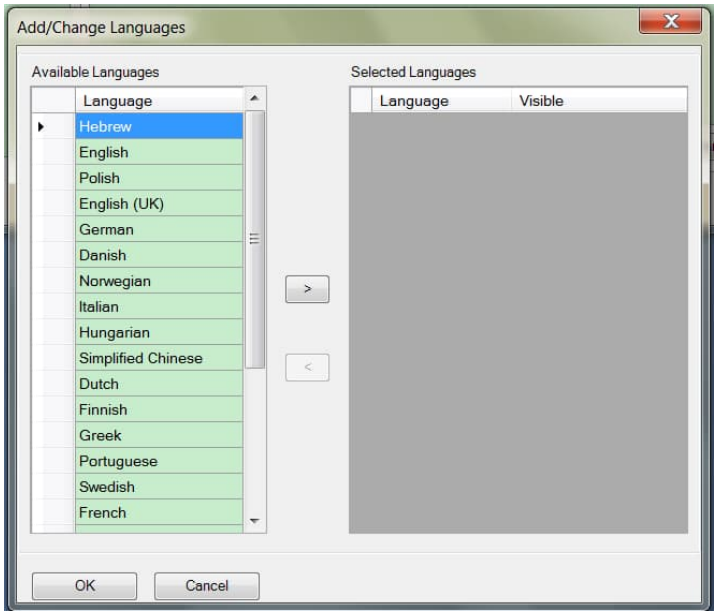
   The details of the report appear on the *Translation* tab.

© 2023 SAP SE. All rights reserved.

2. To add or change target languages into which the report can be translated, choose the *Add/Change Languages* button.



3. In the *Add/Change Languages* window, from the *Available Languages* list, select the languages into which you want to translate the report. To move the selected languages to the *Selected Languages* list, choose the > button.



4. In the *Selected Language(s)* list, to display the selected language(s) in the *Multilanguage Translator* window, select the *Visible* checkbox for each.

PUBLIC
© 2023 SAP SE. All rights reserved.

> **Note**
>
> If you do not select the *Visible* checkbox for a language, the translation in this language will not be displayed in the *Multilanguage Translator* window.

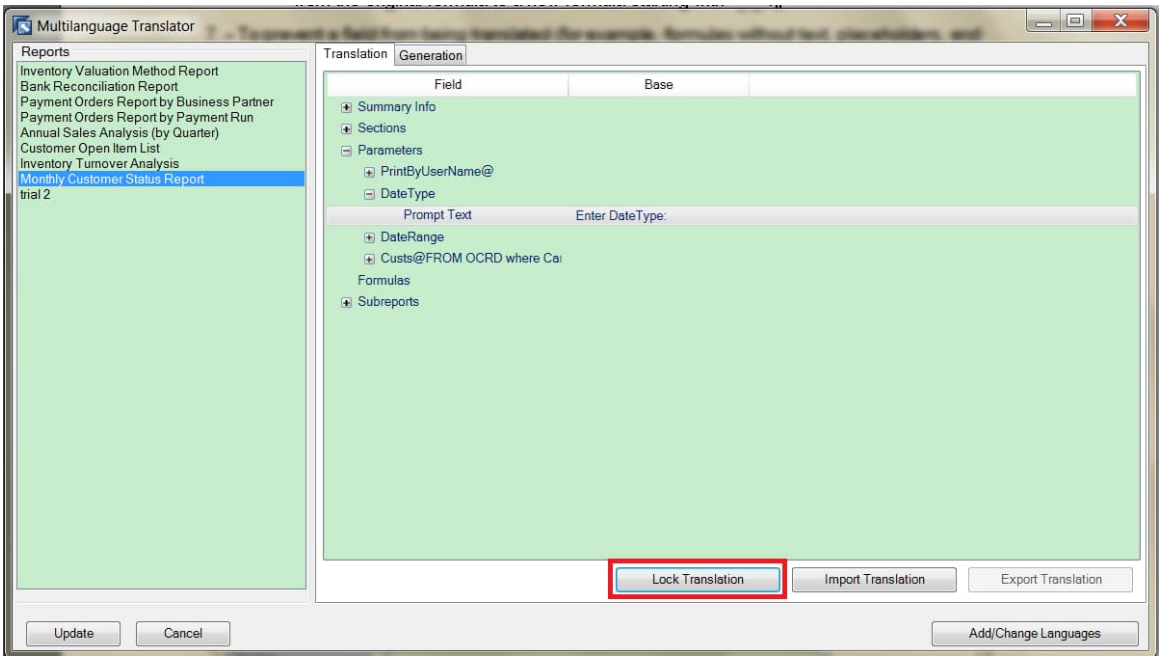
5. In the *Add/Change Languages* window, choose the *OK* button.
6. In the *Multilanguage Translator* window, on the *Translation* tab, select the field whose content you want to translate and enter translations.

> **Note**
>
> You can also translate a formula with a name starting with "__" into multiple languages. For a formula that contains both texts that need translation and other content that does not need translation such as functions, data fields, and so on, you can extract the texts from the original formula to a new formula starting with "__".

7. To prevent a field from being translated (for example, formulas without text, placeholders, and separators), select the field and choose the *Lock Translation* button.

   After a field is locked, the name of its button becomes "Unlock Translation".

> **Caution**
>
> All translations of a field are removed when it is locked. Its content cannot be translated until you unlock the field by choosing the *Unlock Translation* button.



8. To save new and updated translations into the database, choose the *Update* button.

Result

After creating a translation, you must activate it in SAP Business One by generating a corresponding multilanguage report. For more information, see *Generating Multilanguage Reports*.

© 2023 SAP SE. All rights reserved.

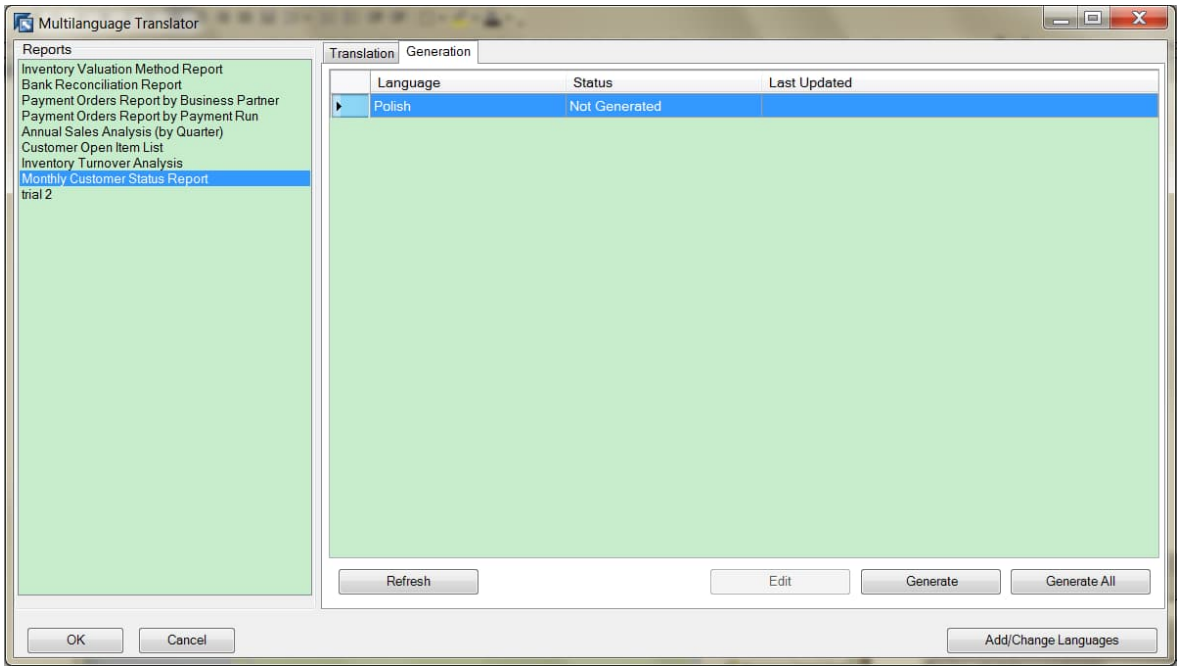
3.2 Generating Multilanguage Reports

To activate a translation of a report in SAP Business One, you must generate a corresponding multilanguage report after either creating or importing a translation.

> **Caution**
>
> Before you generate the language version, make sure the translations meet your requirements. If you determine that a language version is not correct after it has been generated, you have to delete the incorrect version and create a new language version of the report. For more information, see *Deleting Translations*.

Procedure

1. In the *Multilanguage Translator* window, select the report whose translations you want to activate.
2. Select the *Generation* tab and do one of the following:
   - To activate one or more individual translations, select each language that you want to activate and choose the *Generate* button.
   - To activate all languages, choose the *Generate All* button.



When you activate a language, the value in the *Status* column changes to `Generated`. The generated report is saved in the database. When you change the display language in SAP Business One to the language in which you have generated a report, the generated report is displayed instead of the source report,

For information about viewing a translated version of a report in SAP Business One, see *Viewing Translated Reports in SAP Business One.*

PUBLIC
© 2023 SAP SE. All rights reserved.

3.3 Viewing Translated Reports in SAP Business One

To view a report in SAP Business One that has been translated and activated (see *Generating Multilanguage Reports*) into one or more languages, proceed as follows:

1. In SAP Business One, change the display language into the language in which you want to view the report.
2. Run the report from one of the following locations:
   - *Report and Layout Manager* window
   - SAP Business One *Main Menu*

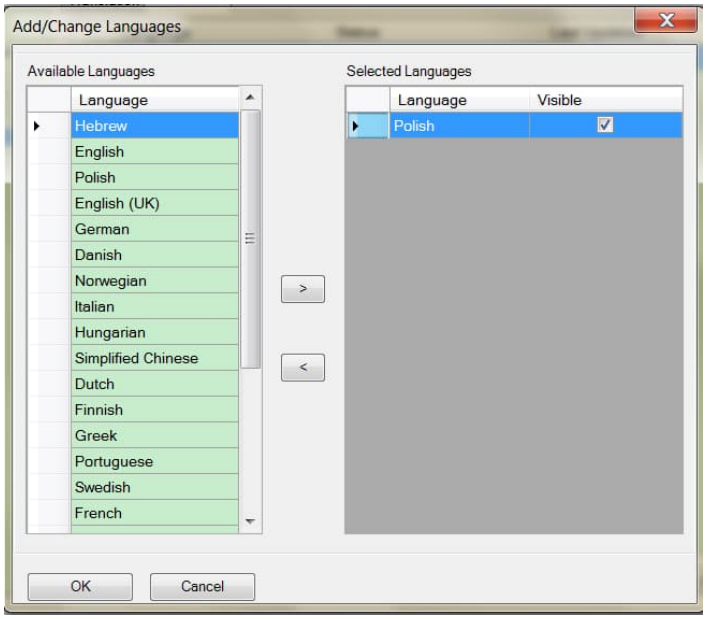
   For more information, see *Running Reports.*

3.4 Deleting Translations

You can delete unwanted or incorrect translations of a report even after it has been activated (see *Generating Multilanguage Reports*).

Procedure

1. In the *Multilanguage Translator* window, from the *Reports* list, select the report whose translations you want to delete.
2. Choose the *Add/Change Languages* button.
3. In the *Add/Change Languages* window, from the *Selected Languages* list, select the language you want to remove and choose the < button.



4. In the dialog window that asks for your confirmation, choose *Yes*.

   The translation in this language is removed.

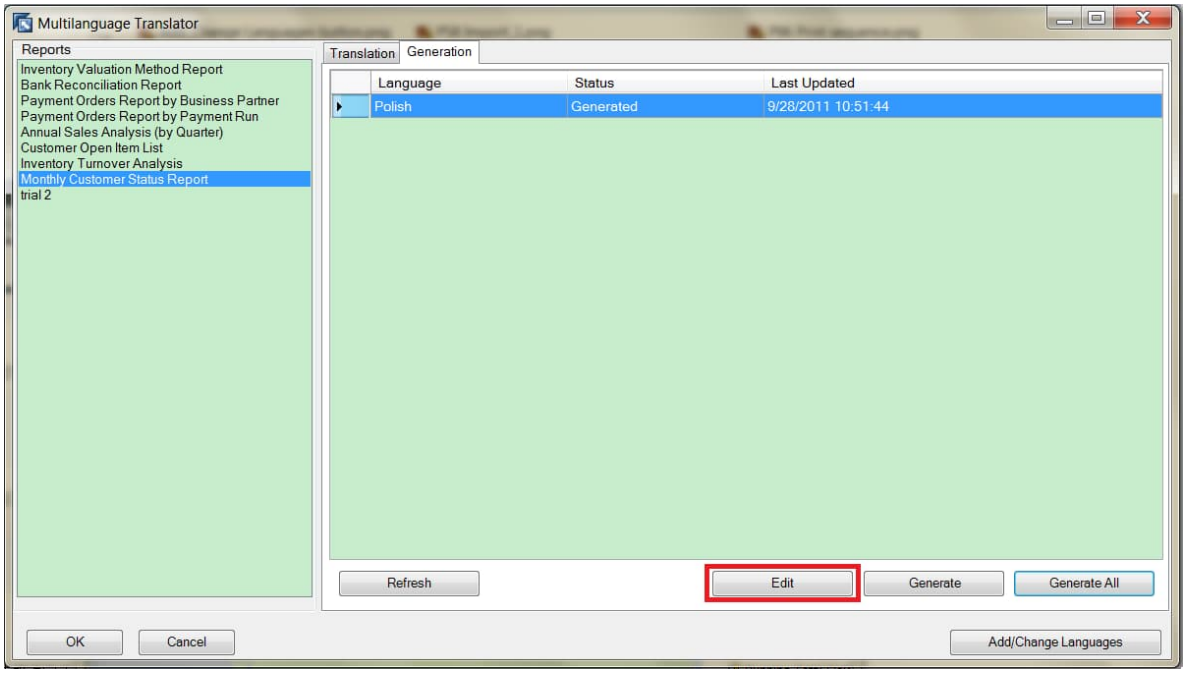
© 2023 SAP SE. All rights reserved.

3.5 Creating New Reports from a Generated Multilanguage Report

After you activate a translation for a multilanguage report (see *Generating Multilanguage Reports*), you can create a new report (`.rpt` file) using the activated translation. The new report, however, is not saved to the database; you save the report (`.rpt` file) to a directory on your local hard drive. You can import the `.rpt` file into SAP Business One later as a new report. For more information, see *Importing SAP Crystal Reports .rpt Files*.

Procedure

1. In the *Multilanguage Translator* window, select the report with the translation on which you want to base your new report.
2. Select the *Generation* tab.
3. Select the language version on which you want to base your new report and choose the *Edit* button.



4. In the SAP Crystal Reports window, edit the report.

   To save the edited report (`.rpt` file), choose *File → Save As*.

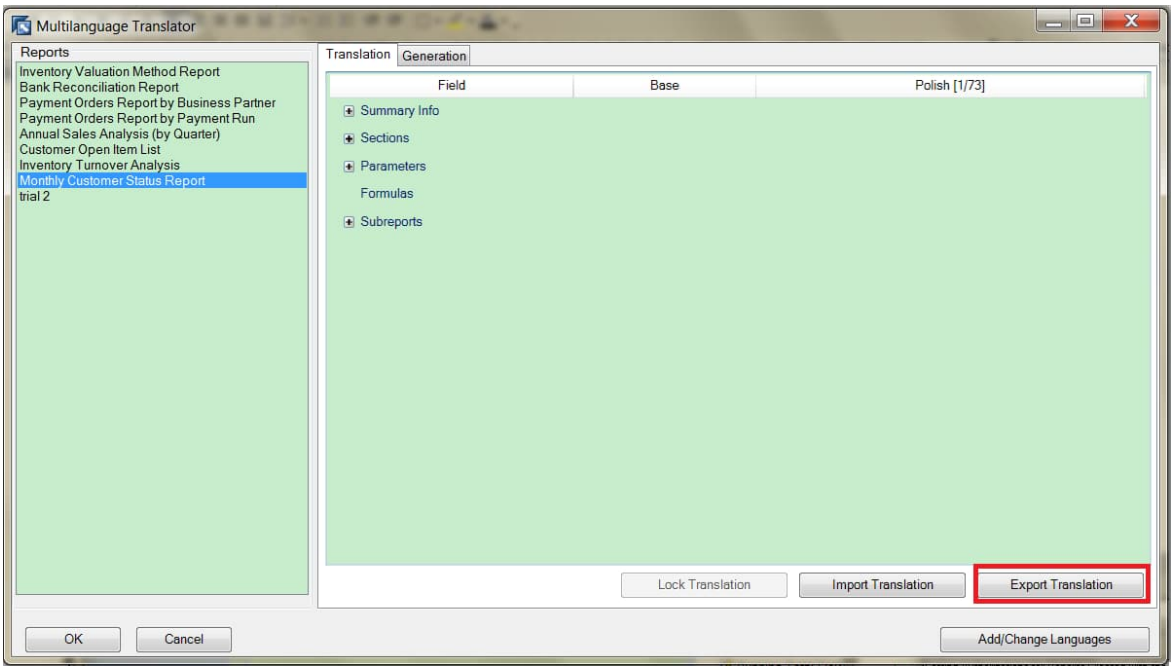
3.6 Exporting Translations

You can export translations of a multilanguage report and then import the translations into another report whose resource format is the same as the original report.

PUBLIC
© 2023 SAP SE. All rights reserved.

Procedure

1. In the *Multilanguage Translator* window, on the *Translation* tab, select the report whose translations you want to export.
2. To exclude translations you do not want to export, choose the *Add/Change Languages* button.
3. In the *Add/Change Languages* window, deselect the *Visible* checkbox for corresponding languages. Then choose *Update* and *OK*.
4. Choose the *Export Translation* button.



5. In the *Export Translation* window, specify a name and location for the `.xml` file of the exported translations, and choose the *Save* button.

3.7 Importing Translations

You can import translations of a multilanguage report into the existing report. This is useful, for example, when you want to correct some of the translations in a report that has already been generated, and you do not want to delete the translation and create a new one.

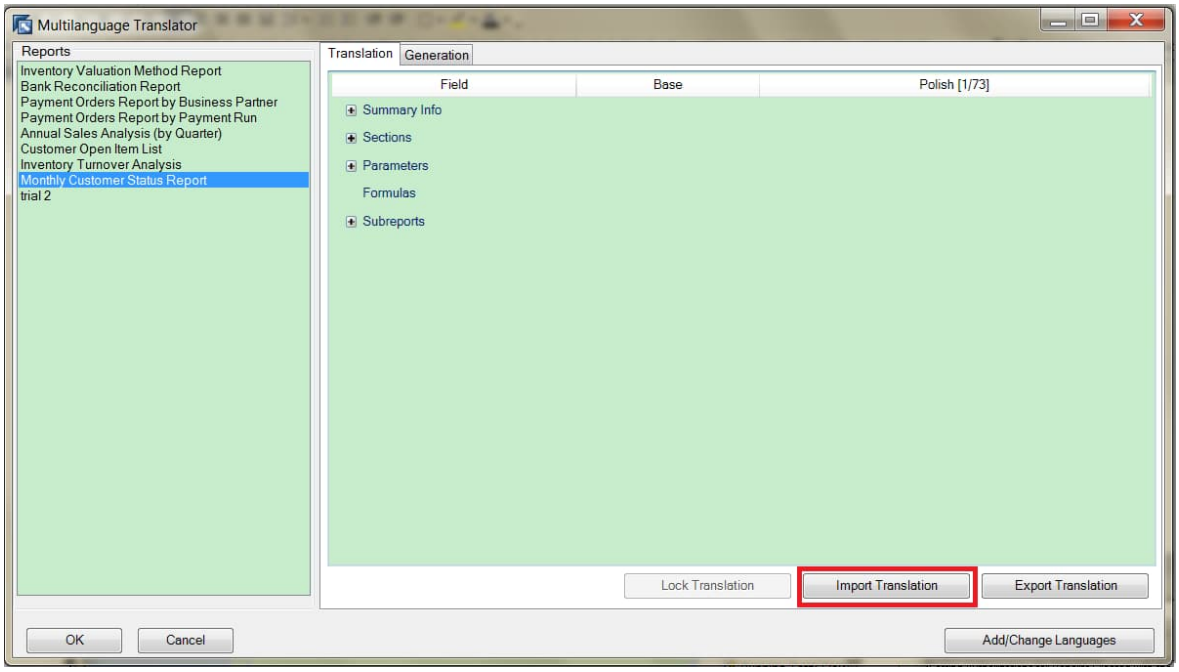
Prerequisite

You can import only `.xml` translation files. In addition, the files must have the same format as the resource format of the report that you are editing.

© 2023 SAP SE. All rights reserved.

Procedure

1. In the *Multilanguage Translator* window, on the *Translation* tab, select the report for which you want to import translations.
2. Choose the *Import Translation* button.



3. In the *Import Translation* window, select the `.xml` file containing the translations and choose the *Open* button.

   Translations are imported. If the translation file contains translations in languages that already exist for the report, you can choose whether or not to replace the existing translations with the imported translations.

Result

After importing a translation file, you must activate the translations in SAP Business One by generating a corresponding multilanguage report. For more information, see *Generating Multilanguage Reports.*

PUBLIC
© 2023 SAP SE. All rights reserved.

4 Setting Authorizations for Reports Created with the SAP Crystal Reports Software

Prerequisite

You are designated as a superuser in SAP Business One.

Procedure

> **Note**
>
> You can apply only *Full Authorization* or *No Authorization* to reports created with the SAP Crystal Reports software. A user cannot have read-only access to these reports.

To set authorizations for a report, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the pane on the left, navigate to the report for which you want to set authorizations, select the report, and choose the *Set Authorization* button.
3. In the *Authorizations* window, in the pane on the left, select the user that you want to authorize for the report.
4. In the *Authorization* column, in the dropdown list, select one of the following:
   - *Full Authorization*
   - *No Authorization*
5. Choose the *Update* button and then choose the *OK* button.

For information about setting authorizations in SAP Business One, see the SAP Business One online help.

© 2023 SAP SE. All rights reserved.

5 Setting Data Sources for User-Defined Crystal Reports and Crystal Reports Layouts

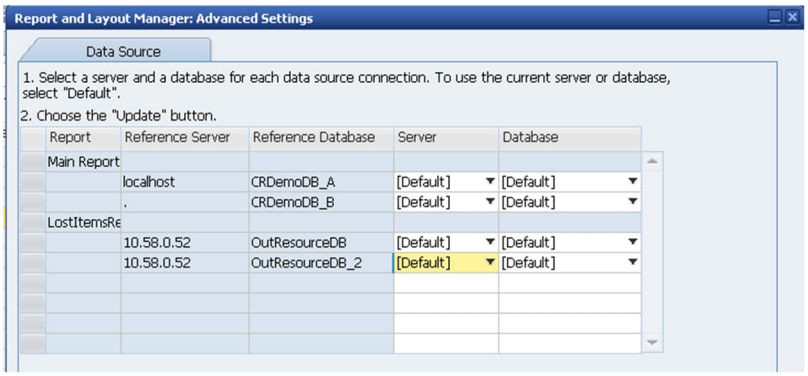
A report or layout created with the SAP Crystal Reports software can have more than one data sources. For example, your company runs a weekly report that includes sales from all your retail outlets in a single report. In SAP Business One you maintain one company database for each of the retail outlets. In this case, you need to be able to retrieve data from multiple sources (databases).

To set the data sources for an imported report or layout in SAP Business One, proceed as follows:

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the pane on the left, navigate to the report or layout for which you want to set data sources, select it, and choose *You Can Also* → *Define Advanced Settings*.
3. In the *Report and Layout Manager: Advanced Settings* window, do the following:
   1. Select the *Data Source* tab.
   2. Specify the server and the database for each data source connection in the report or layout.
   3. To use the current company database, select *[Default]* for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.

      Note

      The reference server and database is the data source used to create the report or layout. It is not necessarily the current company database and is displayed only for your information.



   4. To save the changes, choose the *Update* button.
   5. If you specified a server or database (did not choose *[Default]),* the *Site User* window opens. Specify the site password and choose the *OK* button.
   6. Choose the *OK* button.

PUBLIC
© 2023 SAP SE. All rights reserved.

6 Developing Add-Ons to Import .rpt Files

The SAP Business One data interface (DI) API enables you to create add-ons that import SAP Crystal Reports `.rpt` files as either reports or layouts. The *ReportLayoutsService* object lets you do the following:

- Import an `.rpt` file as a layout and assign it to one or more document types. For more information, see *Master Layouts*.
- Import an `.rpt` file as a report and assign a menu entry to the report.

For information about SAP Business One APIs, see the SDK Help Center.

To access the SDK Help Center, proceed as follows:

1. Go to https://www.sdn.sap.com/irj/sdn/businessone.
2. Under *BUSINESS ONE KNOWLEDGE CENTER*, click the link of the relevant SAP Business One release.
3. Click the SDK Help Center link.

© 2023 SAP SE. All rights reserved.

7 Master Layouts

Using the SAP Crystal Reports software, you can create master layouts for certain document types in SAP Business One.

Recommendation

For a layout that you want to define as a master layout, we strongly recommend that you include the `ObjectId@` SQL token in the layout. For information about working with the `ObjectId@` SQL token, see Syntax and Rules for Defining Tokens.

You define and apply master layouts when importing `.b1p` or `.b1px` package files that contain layouts. For more information, see *Importing SAP Business One .b1p and .b1px Package Files*.

Note

You cannot define a single imported `.rpt` file as a master layout.

Document types to which you can apply master layouts fall into four categories: sales documents, purchasing documents, inventory documents, and production documents. These categories, related document types, and their source tables are listed below:

Category	Document Type	Table Name
Sales	A/R invoice	OINV
	A/R credit memo	ORIN
	A/R correction invoice	OCIN
	Sales quotation	OQUT
	Sales order	ORDR
	Return	ORDN
	A/R down payment invoice	ODPI
	Delivery note	ODLN
Purchasing	A/P invoice	OPCH
	A/P credit memo	ORPC
	A/P correction invoice	OCPI
	Purchase quotation	OPQT
	Purchase order	OPOR
	Purchase request	OPRQ
	Goods return	ORPD
	A/P down payment invoice	ODPO
	Goods receipt PO	OPDN

PUBLIC
© 2023 SAP SE. All rights reserved.

Category	Document Type	Table Name
Inventory	Goods issue	OIGE
	Goods receipt	OIGN
	Inventory transfer	OWTR
	Inventory transfer request	OWTQ
Production	Receipt from production	OIGN
	Issue for production	OIGE

For a complete listing of document types, document type codes, and corresponding source tables, see Appendix.

You can create a layout for one document type and apply this layout to another document type. When you view the latter document type in this layout, SAP Business One automatically redirects you to the tables relevant to this document type and displays the correct data in spite of the fact that the layout itself contains table information relevant to the former document type.

Example

You create a layout with the tables OINV, INV1, and so on, which are relevant to the A/R invoice, and you apply the layout to the sales order. When you view sales orders in this layout, SAP Business One redirects you to the tables ORDR, RDR1, and so on, which are relevant to sales orders.

Note

To avoid the automatic redirection and to prevent the layout from being used as a master layout, proceed as follows:

1. Open the layout.
2. In the *Database Expert* window, rename the tables by adding "_ONLY" at the end of each table.
3. Save the layout.

© 2023 SAP SE. All rights reserved.

8 Exporting Reports and Layouts Created with the SAP Crystal Reports Software

Note

If you have integrated SAP Business One with an SAP Crystal Server, you can export system and user-defined Crystal reports to the SAP Crystal Server. For more information, see the guide *How to Integrate SAP Crystal Server with SAP Business One* on the SAP Help Portal.

You can export Crystal reports and Crystal Reports layouts from SAP Business One as `.b1px` package files using the report and layout export wizard.

`.b1px` package files are applicable only for SAP Business One 8.82 and any subsequent releases. Both Crystal reports and Crystal Reports layouts can be included in the same `.b1px` package file; by contrast, `.b1p` package files that are exported from SAP Business One 8.81 contain only layouts or only reports, but not both.

Note

You can export only user-defined reports and layouts created with the SAP Crystal Reports software; you cannot export reports or layouts delivered with SAP Business One.

Caution

Do not manually change the extension of a file to "b1px". It could have unpredictable results.

Data source connections of a report or layout are exported along with it. In addition, when exporting a report, SAP Business One exports all its existing language versions. For more information, see *Working with Multilanguage Reports*.

Prerequisites

- You have installed the following:
  - SAP Business One
  - SAP Crystal Reports, version for the SAP Business One application
- You have authorization to the *Report and Layout Manager* window.
- You have created one or more SAP Crystal Reports layouts or reports that are ready to be exported.

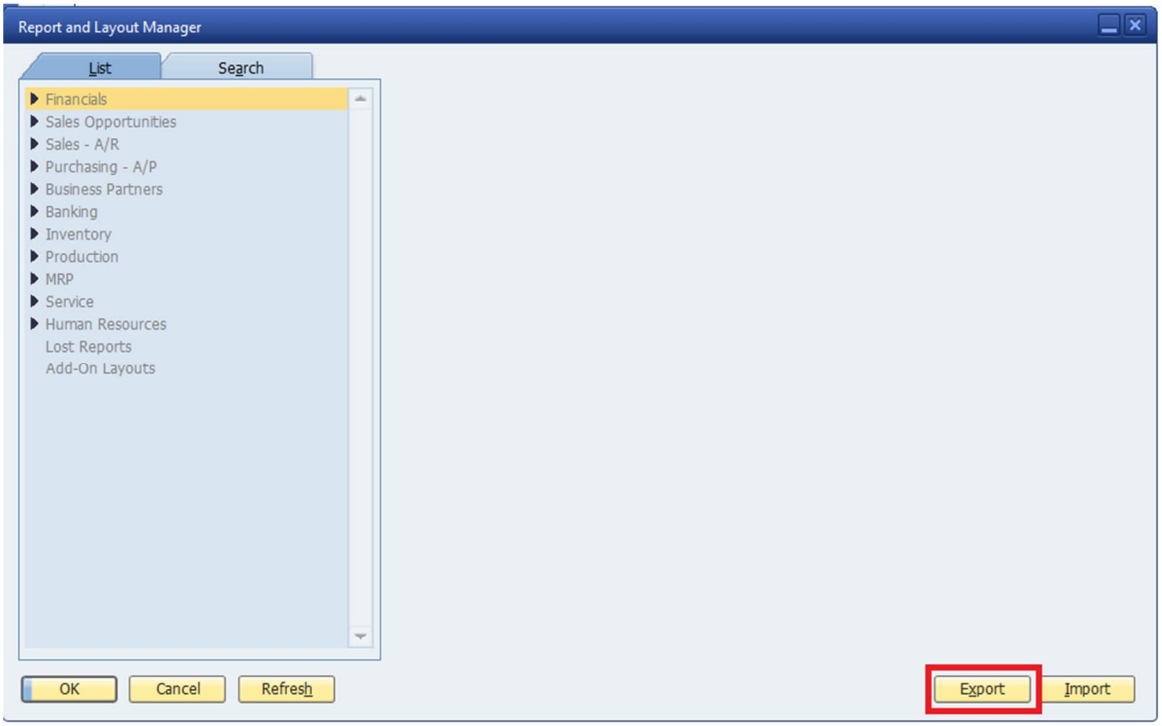
Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

PUBLIC
© 2023 SAP SE. All rights reserved.

2. In the *Report and Layout Manager* window, in the work area on the right, choose the *Export* button.

   The report and layout export wizard starts.



3. In the *Report and Layout Export Wizard* window, choose the *Next* button.
4. In the *Report and Layout Selection* window, to view the layouts or reports you want to export, in the *Name* column, click the arrows to the left of the nodes.

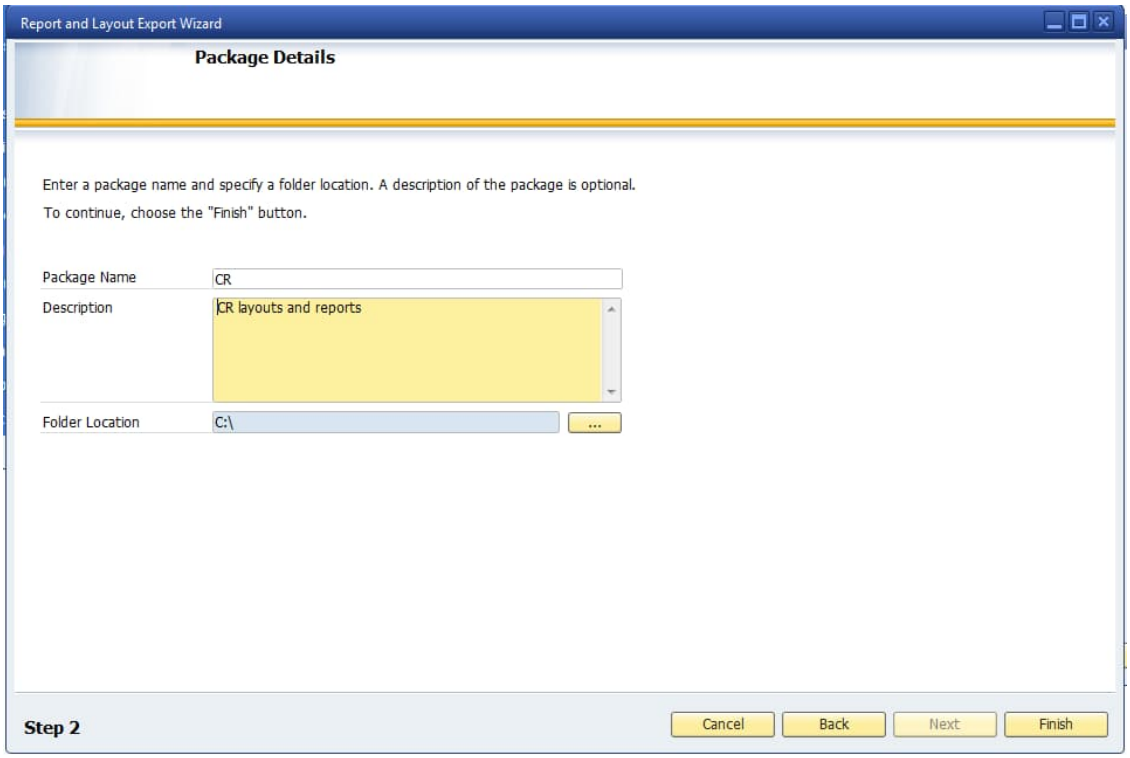
   The add-on layouts appear in the *Add-On Layouts* folder.

   To open or close all the nodes at once, choose the *Expand* or *Collapse* button respectively.

   In the top right corner of the window, from the *Display* dropdown list, select to display layouts, reports, or both.
5. Select the checkbox to the left of each layout or report you want to export.
6. Choose the *Next* button.

© 2023 SAP SE. All rights reserved.

7. In the *Package Details* window, enter the following information:
   - Package name
   - Description – Description of the package is optional. The description that you enter here is visible to a user when importing the package file into SAP Business One.
   - Folder location – Specify a location where you want to save the `.b1px` package file.



8. To complete the export, choose the *Finish* button.

   An SAP Business One `.b1px` package file is created. The *Export Complete* window appears, displaying the export details.
9. To exit the wizard, choose the *Close* button.

PUBLIC
© 2023 SAP SE. All rights reserved.

9 Importing Reports and Layouts Created with the SAP Crystal Reports Software

You can import SAP Crystal Reports layouts, reports, and `.rpt` files into SAP Business One using the report and layout import wizard. As of SAP Business One 8.82, SAP Business One imports three types of files:

- `.rpt` files
- `.b1p` package files
- `.b1px` package files

When importing either an `.rpt` file with multiple data source connections or a `.b1p` or `.b1px` package file that contains reports or layouts with multiple data source connections, you can change the data sources for the imported reports or layouts.

When importing an `rpt` file as a report, you can create a folder for the report in the SAP Business One *Main Menu*. For more information, see *Creating New Report Folders*.

When importing a `.b1p` or `.b1px` package file that contains reports, you can define authorizations for the reports.

When importing a `.b1p` or `.b1px` package file that contains layouts that can be applied to multiple document types, you can define these layouts as master layouts. For information about master layouts, see *Master Layouts*.

When importing a `.b1p` or `.b1px` package file, SAP Business One automatically detects whether the contents are layouts or reports, the document types of the layouts, and the menu paths of the reports.

When importing a `.b1px` package file that contains reports, SAP Business One imports all existing language versions of the reports. For more information, see *Working with Multilanguage Reports*.

9.1 Importing SAP Crystal Reports .rpt Files

To import SAP Crystal Reports `.rpt` files into SAP Business One, you use the report and layout import wizard.

Recommendation

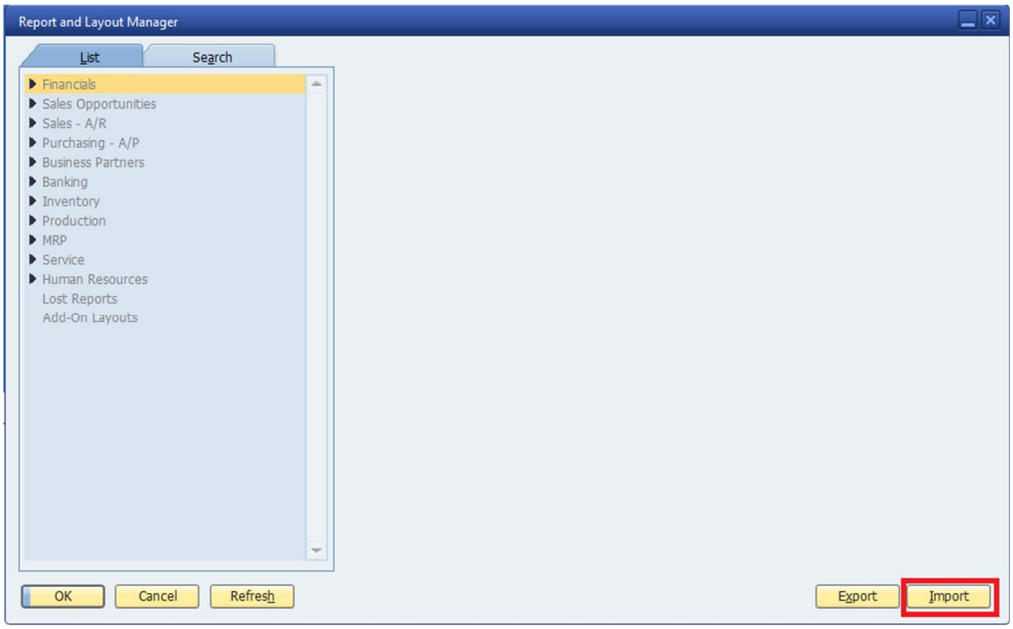
Before importing an `.rpt` file, verify with the provider whether the file is intended as a layout or report.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. In the *Report and Layout Manager* window, in the work area on the right, choose the *Import* button.

   The report and layout import wizard starts.

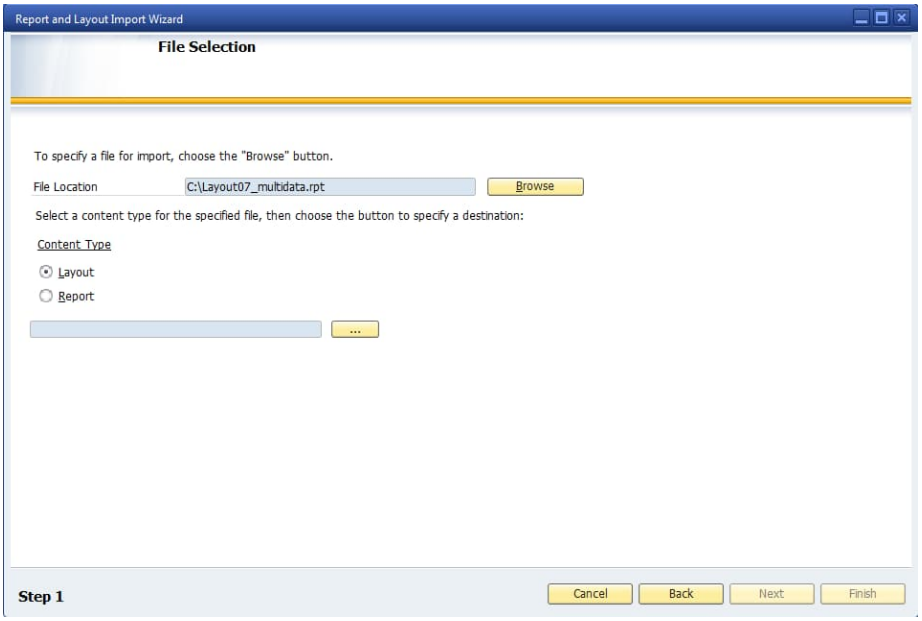
© 2023 SAP SE. All rights reserved.



3. In the *Report and Layout Import Wizard* window, choose the *Next* button.
4. In the *File Selection* window, choose the *Browse* button.
5. In the *Open* window, navigate to the `.rpt` file you want to import and choose the *Open* button.
6. Select the appropriate content type.

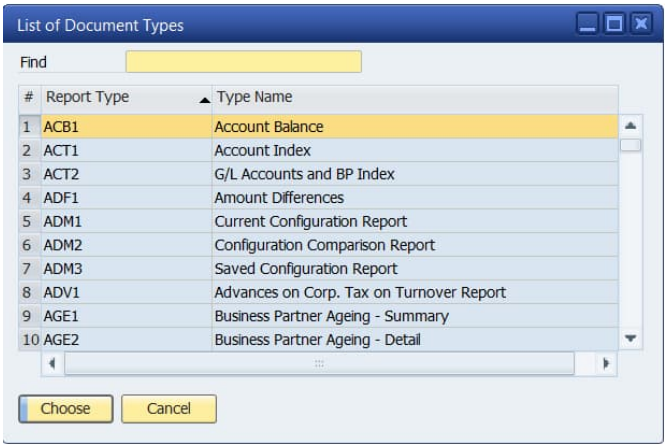
   Note

   If you are not sure whether the `.rpt` file is intended as a report or a layout, verify this with the provider of the file.



7. Choose the ellipsis button.
   - If you selected the layout content type, the *List of Document Types* window opens.

PUBLIC
© 2023 SAP SE. All rights reserved.



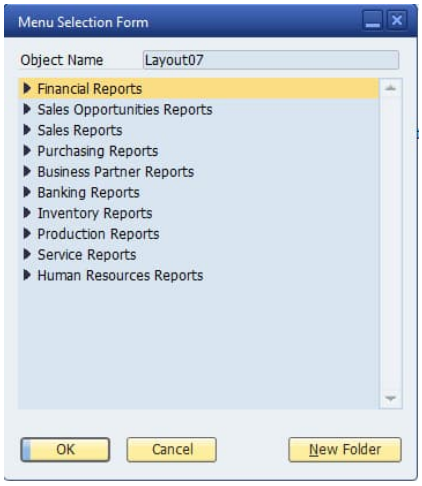
Select a document type and choose the *Choose* button.

Note

In the *List of Document Types* window, the list of document types is similar to the document list in the Print Layout Designer (PLD). There is an entry for each specific document type, such as *A/R invoice* (items).

- If you selected the report content type, the *Menu Selection Form* window opens.

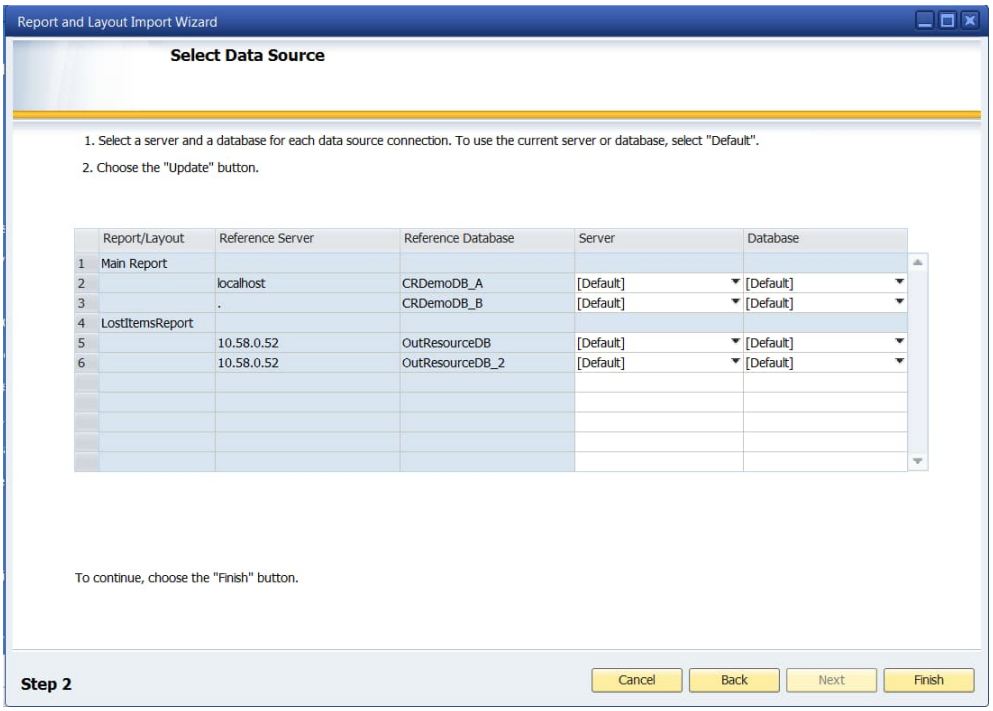
  Select a report folder and choose the *OK* button. Alternatively, to create a new folder, select *the New Folder* button. For more information, see *Creating New Report Folders*.



8. If the `.rpt` file contains multiple data source connections, in the *File Selection* window, choose the *Next* button. Otherwise, continue to the next step.

   The *Select Data Source* window opens.

© 2023 SAP SE. All rights reserved.



For each data source connection select a server and database.

To use the current company database, select *[Default]* for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.

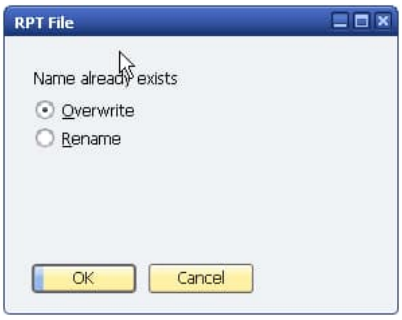
> **Note**
>
> If an `.rpt` file with only one data source connection is imported as a report or a layout, you can change its data source later in the *Report and Layout Manager* window. For more information, see *Setting Data Sources for User-Defined Crystal Reports and Crystal Reports* Layouts.

9. In the *File Selection* window or the *Select Data Source* window, choose the *Finish* button.

   If you specified a server or database other than *[Default],* the *Site User* window opens. Specify the site password and choose the *OK* button.

   If the name of the `.rpt` file already exists in SAP Business One as a report or for a specific document type as a layout, the *RPT File* window opens. Do one of the following:

   - To replace the existing layout or report, select the *Overwrite* radio button and choose the *OK* button.



   - To keep the existing layout or report, select the *Rename* radio button, enter a new name, and choose the *OK* button.

PUBLIC
© 2023 SAP SE. All rights reserved.

10. In the *Import Summary* window, a summary of the import results appears. To exit the wizard, choose the *Close* button.

Creating New Report Folders

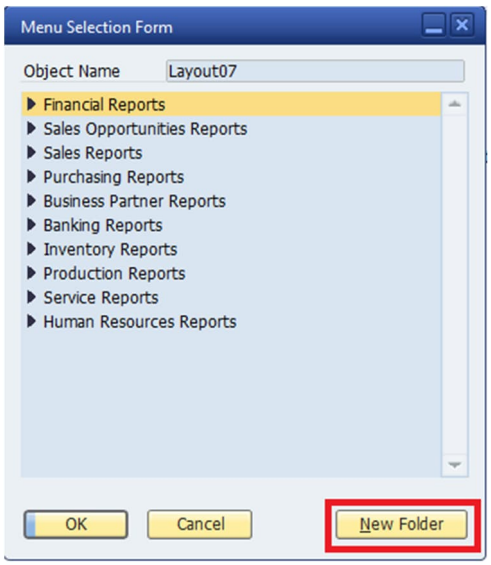
You can create new report folders in the SAP Business One *Main Menu* when using the wizard to import an `.rpt` file as a report into SAP Business One.

> **Note**
>
> You can create new report folders directly by choosing *Administration → System Initialization → Menu Structure*. For more information, see the SAP Business One online help.

Procedure

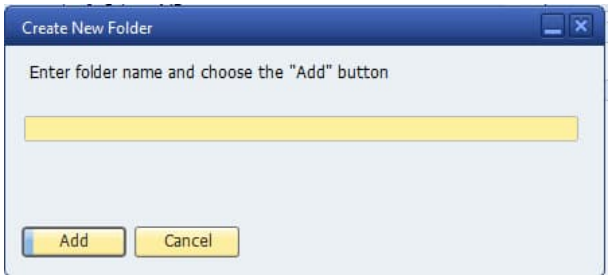
1. In the *Menu Selection Form* window (see step 7 in *Importing SAP Crystal Reports .rpt Files*), select a module or folder in which you want to create a new folder.

   Alternatively, in the *Report and Layout Manager* window, you can open the *Menu Selection Form* window by selecting a report and choosing the ellipsis button in the *Menu Location* area.



2. Choose the *New Folder* button.
3. In the *Create New Folder* window, enter a name for the new folder.

© 2023 SAP SE. All rights reserved.



4. Choose the *Add* button.

> **Note**
>
> The new folder won't appear in the SAP Business One *Main Menu* until a report is successfully imported into it.

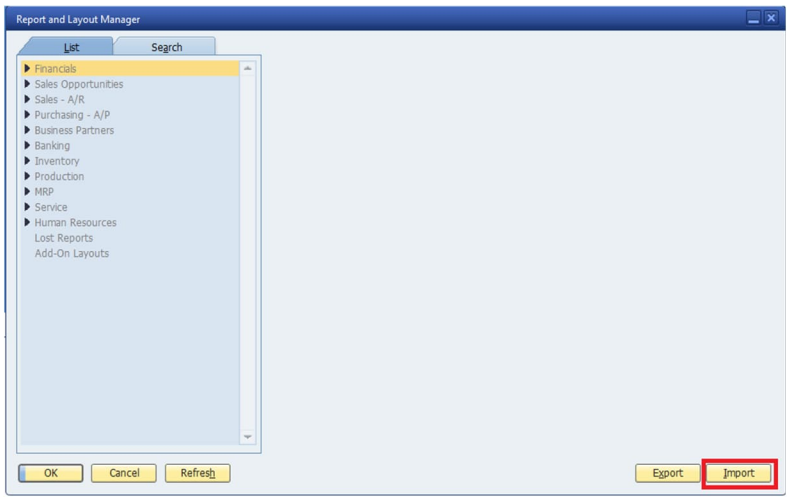
9.2 Importing SAP Business One .b1p and .b1px Package Files

To import `.b1p` and `.b1px` package files into SAP Business One, you use the report and layout import wizard.

When importing a `.b1p` or `.b1px` package file, SAP Business One automatically detects whether the contents are layouts or reports, the document types of the layouts, and the menu paths of the reports. After the import, reports appear in the detected menu paths; layouts are displayed when you choose corresponding document types; and add-on layouts also appear in the *Add-On Layouts* folder.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.



2. In the *Report and Layout Manager* window, in the work area on the right, choose the *Import* button.

   The report and layout wizard starts.

PUBLIC
© 2023 SAP SE. All rights reserved.

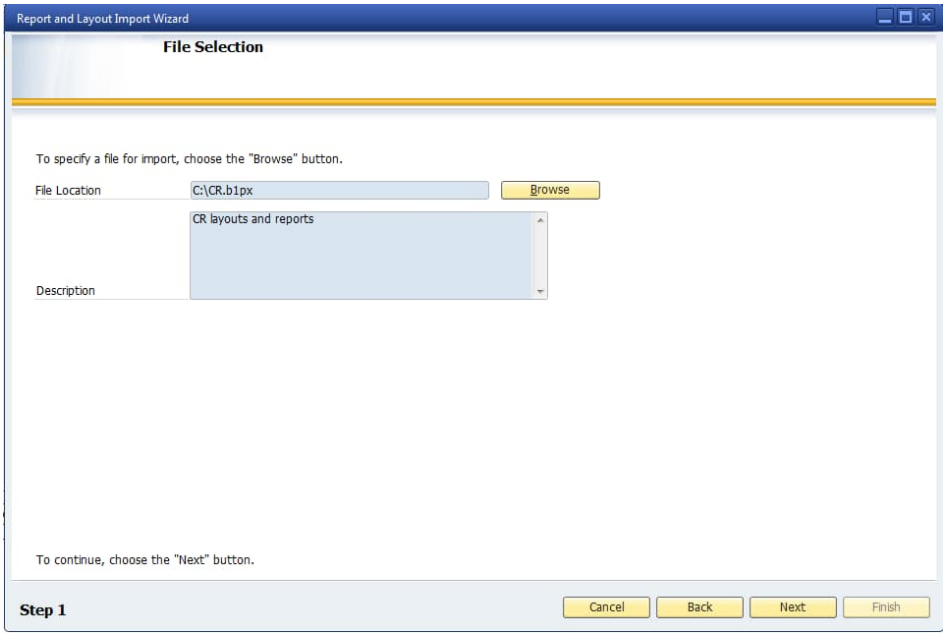
3. In the *Report and Layout Import Wizard* window, choose the *Next* button.
4. In the *File Selection* window, choose the *Browse* button.
5. In the *Open* window, navigate to the SAP Business One `.b1p` or `.b1px` package file you want to import and choose the *Open* button.

   Note

   SAP Business One automatically distinguishes between layouts and reports in the `.b1p` and `.b1px` package file as well as their corresponding document types or menu paths. After the import wizard completes successfully, you can change the menu paths of the imported reports using the *Report and Layout Manager* window.

   A description appears in the *Description* text box if a description was added during the export process of the `.b1p` or `.b1px` package file.

   For information about the export process, see *Exporting Reports and Layouts Created with the SAP Crystal Reports Software*.



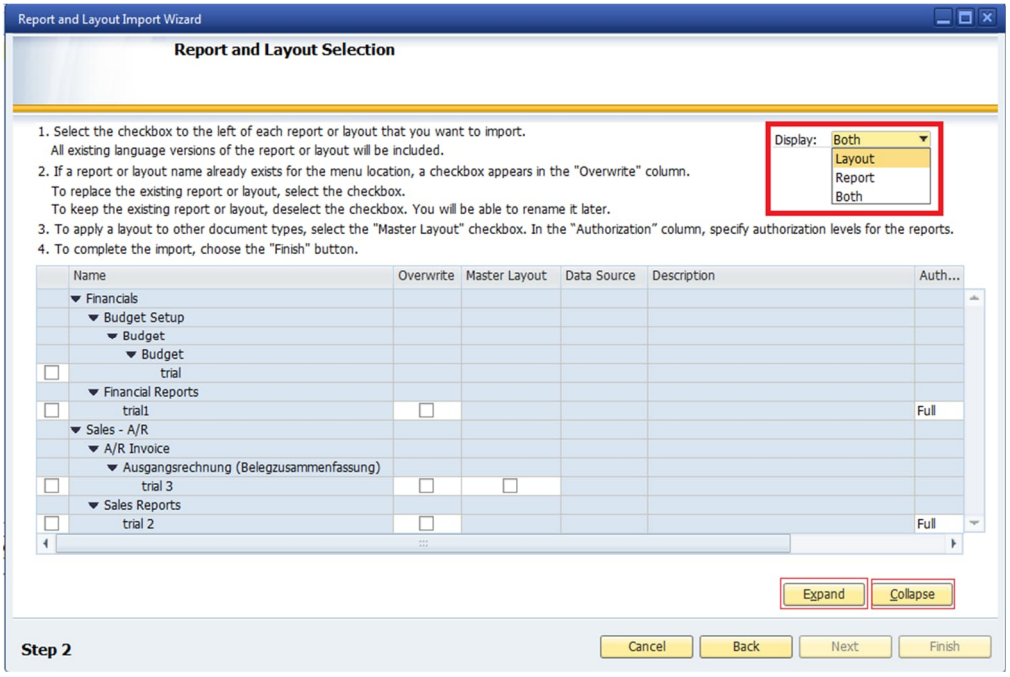
6. Choose the *Next* button.

© 2023 SAP SE. All rights reserved.

7. In the *Report and Layout Selection* window, to view the layouts or reports you want to import, in the *Name* column, click the arrows to the left of the nodes.

   To open or close all the nodes at once, choose the *Expand* or *Collapse* button respectively.

   In the top right corner of the window, from the *Display* dropdown list, select to display layouts, reports, or both.



8. Select the checkbox to the left of each report or layout that you want to import.
9. If a report or a layout for a certain document type and the same name already exists in SAP Business One, select the *Overwrite* checkbox to replace the existing report or layout.

   Note

   If you do not select the *Overwrite* checkbox, you will be prompted to rename the imported report or layout later.

10. If the `.b1p` or `.b1px` package file contains layouts that can be applied to multiple document types, you can choose to define them as master layouts.

    Caution

    You define a layout as a master layout only during this process. For more information, see *Master Layouts*.

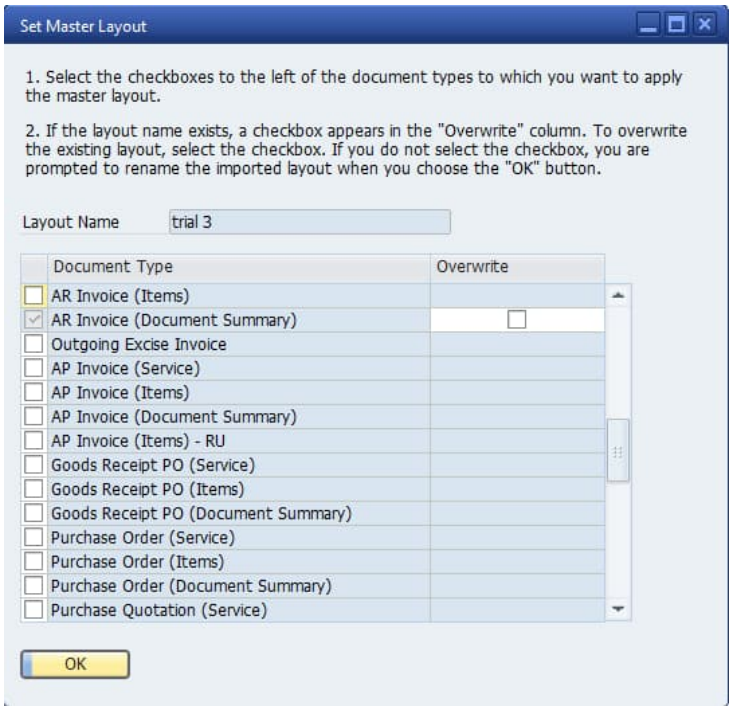
    Recommendation

    For a layout that you want to define as a master layout, we strongly recommended that you include the **`ObjectId@`** SQL token in the layout. For information about working with the **`ObjectId@`** SQL token, see Syntax and Rules for Defining Tokens.

    To define a layout as a master layout, proceed as follows:

    1. In the *Report and Layout Selection* window, select the Master Layout checkbox.
    2. In the *Set Master Layout* window, select the document types to which you want to assign the layout.

PUBLIC
© 2023 SAP SE. All rights reserved.



3. If a document type that you selected already has a layout with the same name, select the Overwrite checkbox to replace the existing layout.

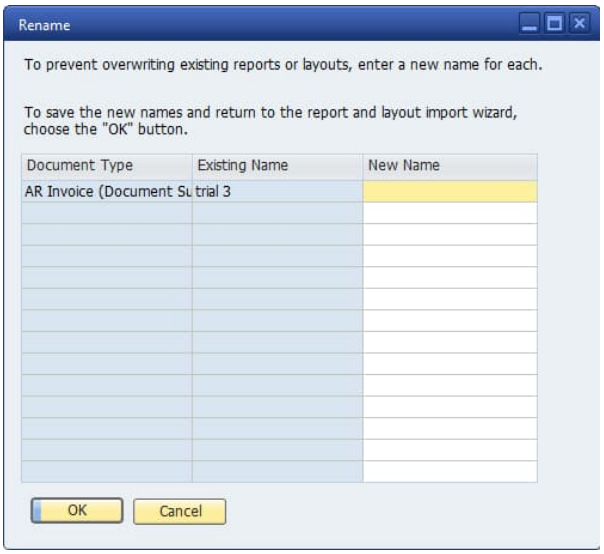
   Note

   If you do not select the *Overwrite* checkbox, you will be prompted to rename the imported layout in the next step.

4. Choose the OK button.

   If there are no naming conflicts, you return to the *Report and Layout Selection* window.

   Otherwise, the *Rename* window opens. Enter a new name for each duplicate layout listed and choose the *OK* button.



© 2023 SAP SE. All rights reserved.

Recommendation

After the import wizard completes successfully and before you start using a master layout, make sure it appears with all the document types to which it has been applied. If not, make the required corrections to the layout. For more information, see *Searching for Layouts*.

11. If the package file contains reports or layouts with multiple data source connections, to specify data source connections for a report or layout, proceed as follows:
    1. In the Data Source column, click the Default link.
    2. In the Select Data Source window, select a server and database for each data source connection.
    3. To use the current company database, select [Default] for both the server and database. The report or layout connects to the current company database depending on whatever company the user logs on to.
    4. To save the changes, in the Select Data Source window, choose the Update button.
    5. If you specified a server or database other than [Default], in the Site User window that opens, specify the site password.
    6. In the Select Data Source window, choose the OK button.

    If you changed the default settings of servers and databases, in the *Report and Layout Selection* window, the value in the *Data Source* column changes to *Assigned*.

    ### Note

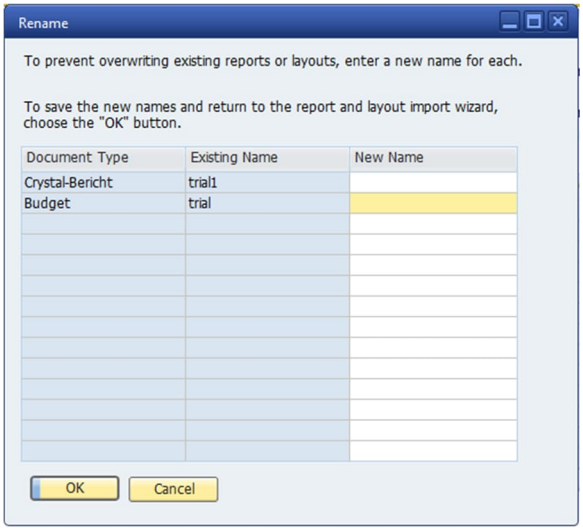
    If an `.rpt` file with only one data source connection is imported as a report or a layout, you can change its data source later in the *Report and Layout Manager* window. For more information, see *Setting Data Sources for User-Defined Crystal Reports and Crystal Reports* Layouts.

12. In the *Authorization* column, select one of the following permission levels for each report you are importing:
    - Full – All users have full authorization for the report.
    - None – Only superusers have full authorization for the report.

    For information about setting authorizations in SAP Business One, see Setting Authorizations for Reports Created with the SAP Crystal Reports Software and SAP Business One online help.

13. Choose the *Finish* button.

    If you did not select *Overwrite* checkboxes in step 8, the *Rename* window opens. Enter a new name for each report or layout, and choose the *OK* button.



PUBLIC
© 2023 SAP SE. All rights reserved.

The *Import Summary* window appears with a summary of the import results.

14. To exit the wizard, choose the *Close* button.

© 2023 SAP SE. All rights reserved.

10 Searching for Layouts and Reports

In the report and layout manager, you can search for reports and layouts by keyword.

10.1 Searching for Layouts

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. Select the *Search* tab.
3. Select the *Document Type* radio button.
4. Enter keywords and choose the *Find* button.

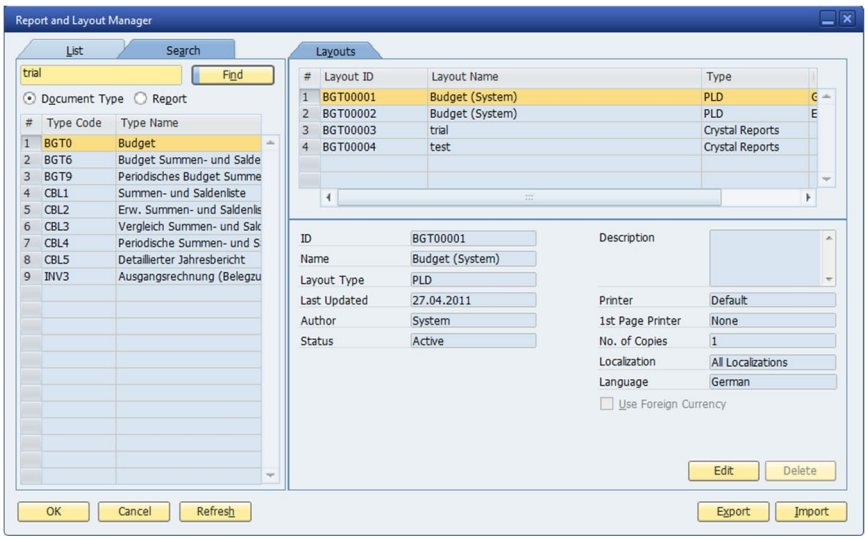
   A list of document types that match the keywords is displayed.

   Note

   You can search by one of the following keywords:

   - Document type name
   - Document type code
   - Layout ID
   - Layout name
5. Select the document type to which the layout you are searching for is applied.

   The layout is displayed in the list of layouts on the *Layouts* tab.



PUBLIC
© 2023 SAP SE. All rights reserved.

6. To view the details of the layout, select it.

   Details are displayed in the work area on the *Layouts* tab.
7. To locate the layout in the main menu, select the *List* tab.

10.2 Searching for Reports

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.
2. Select the *Search* tab.
3. Select the *Report* radio button.
4. Enter keywords and choose the *Find* button.

   A list of reports that match the keywords is displayed.
5. To view the details of a report, select it.

   Details are displayed in the work area on the right.
6. To locate the report in the main menu, select the *List* tab.

   Note

   To change the location of the report, choose the ellipsis button in the *Menu Location* area. For information about creating a new folder for a report, see *Creating New Report Folders*.

© 2023 SAP SE. All rights reserved.

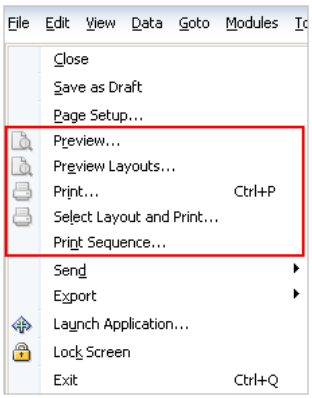
11 Previewing and Printing Reports and Layouts in SAP Business One

In SAP Business One you can preview and print SAP Crystal Reports layouts and reports:

- To preview and print layouts and reports that are saved in SAP Business One, use the *File* menu.
- To preview SAP Crystal Reports `.rpt` files that are not saved in SAP Business One (external files) but reside on your computer, use the *Tools* menu.

11.1 Previewing and Printing Reports and Layouts Saved in SAP Business One

In the SAP Business One menu bar, in the *File* menu, you can use any of the following preview and printing options:



- *Preview*

  Provides a preview window displaying a printing preview of the open document or report based on the default layout. If the document or report has a default SAP Crystal Reports layout, the print preview opens in SAP Crystal Reports viewer. Alternatively, you can click the icon in the toolbar. For information about SAP Crystal Reports viewer, see the SAP Business One online help.

- *Preview Layouts*

  Opens the *Choose Layout* window, displaying both SAP Crystal Reports layouts and PLD-type layouts. You can select a layout other than the default layout to view the open document or report. If you select an SAP Crystal Reports layout, the document or report is displayed in SAP Crystal Reports viewer.

- *Print*

  Opens the standard Microsoft Windows *Print* window. Alternatively, you can click the icon in the toolbar to directly print the layout or report according to the default printing settings.

- *Select Layout and Print*

PUBLIC
© 2023 SAP SE. All rights reserved.

Opens the *Choose Layout* window, displaying both SAP Crystal Reports layouts and PLD-type layouts. You can select any layout to print the open document or report. When you choose the OK button, the standard Microsoft Windows *Print* window opens.

- *Print Sequence*

  Opens the *Print Sequence* window. Select a print sequence that you want to apply to an open document, and choose the *Print* button. For information about printing sequences, see *Working with Printing Sequences.*

  Note

  When you choose *File → Print Sequence*, the *Print Sequence* window opens, but there are no items listed if no printing sequence has been created for the specific document type.

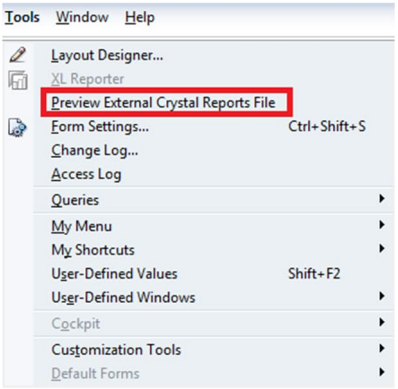
For information about printing in SAP Business One, see *Printing in SAP Business One* in the online help for SAP Business One.

11.2 Previewing SAP Crystal Reports .rpt Files Saved on Your Computer

You can preview SAP Crystal Reports `.rpt` files that are saved on your computer but not saved or imported into SAP Business One as reports or layouts.

Procedure

1. In the SAP Business One menu bar, in the *Tools* menu, select *Preview External SAP Crystal Reports File*.

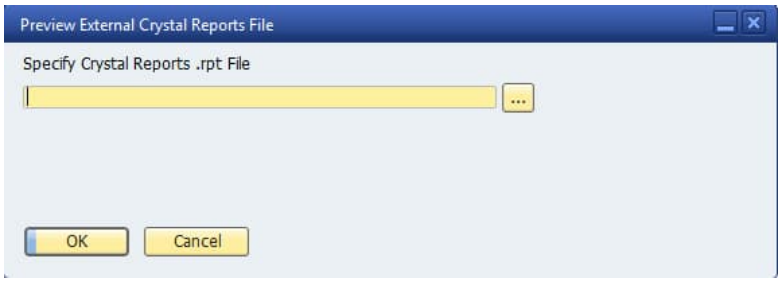


   Note

   Only superusers can open this window.

2. In the *Preview External SAP Crystal Reports File* window, choose the (...) [Browse] button.

© 2023 SAP SE. All rights reserved.



3. In the *Select SAP Crystal Reports .rpt File* window, specify a file on your computer that you want to preview in SAP Business One.
4. Choose the *Open* button.
5. In the *Preview External SAP Crystal Reports File* window, choose the *OK* button.

   The external file appears in SAP Crystal Reports viewer.

   Note

   You may need to specify selection criteria as you would when you run a report created with the SAP Crystal Reports software. For more information, see *Running Reports.*

PUBLIC
© 2023 SAP SE. All rights reserved.

12 Working with Printing Sequences

You can create printing sequences for certain document types in SAP Business One. You can apply printing sequences to the following:

- Standard SAP Business One layouts (PLD-type)
- Layouts that you have created or edited using Print Layout Designer (PLD)
- SAP Crystal Reports layouts

Prerequisite

Only users who have been designated as superusers in SAP Business One can perform the following actions regarding printing sequences:

- Create a printing sequence
- Modify a printing sequence
- Delete a printing sequence

12.1 Creating Printing Sequences

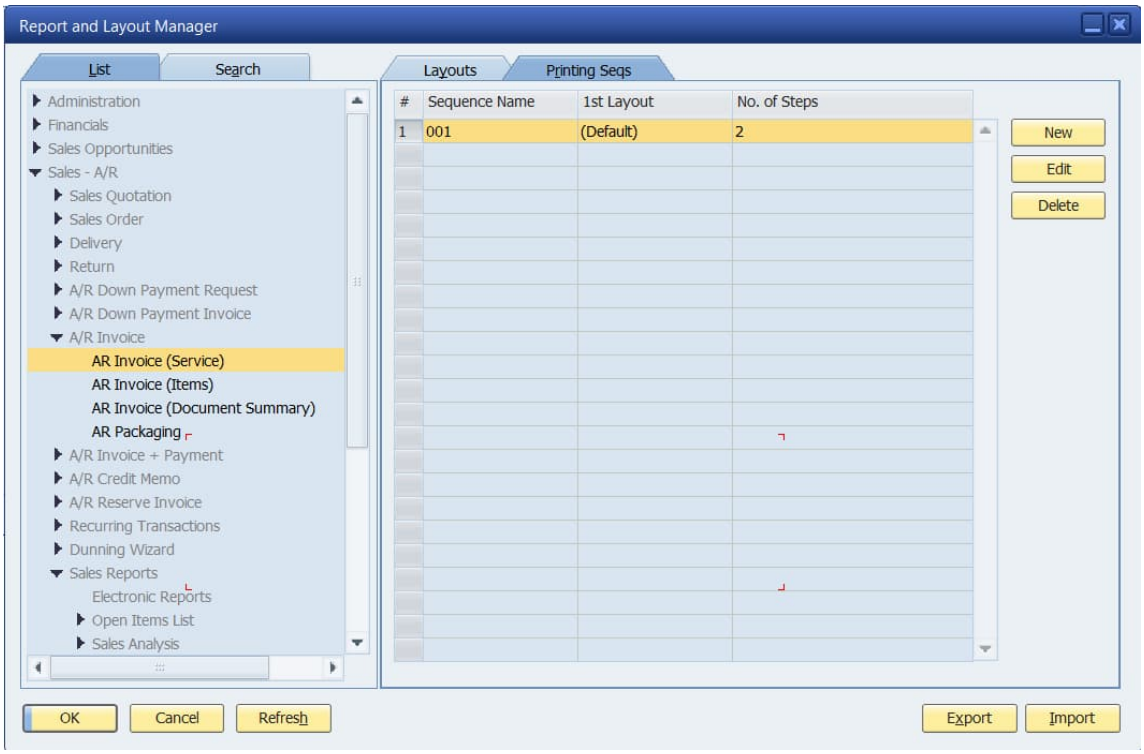
Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

   The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type for which you want to create a new printing sequence, such as *A/R Invoice* (Items).

© 2023 SAP SE. All rights reserved.

3. In the work area on the right side of the window, select the *Printing Seqs* tab.

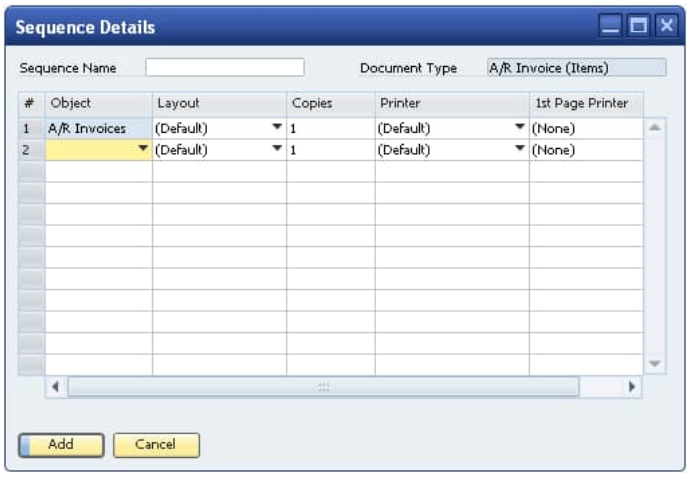


4. On the *Printing Seqs* tab, choose the *New* button.

   The *Sequence Details* window opens.

   Note

   The document type for the new sequence is indicated in the *Document Type* field at the top right of the window. You cannot edit this field. If you want to create a printing sequence for a different document type, close the *Sequence Details* window. In the navigation pane on the left of the *Report and Layout Manager* window, select a different document type.



5. In the *Sequence Details* window, do the following:

PUBLIC
© 2023 SAP SE. All rights reserved.

1. In the *Sequence Name* field at the top of the window, enter a name for the printing sequence.
2. In the *Object* column, in the dropdown list, select a category of document types, for example, *A/R Invoices*.
3. In the *Layout* column, select a layout.

   Note

   You cannot delete a layout that is added to a printing sequence.
4. In the *Copies* column, enter the number of copies that you want to be printed each time this sequence is used.
5. In the *Printer* column, select a printer that you want to use each time this printing sequence is used.
6. In the *1st Page Printer* column, select a printer for printing the first page of the printing sequence.

   Note

   This field is optional. If you do not select a first-page printer, the printer you select in the *Printer* column prints the entire sequence including the first page.

6. Choose the *Add* button.

   The new printing sequence appears in the table on the *Printing Seqs* tab.

12.2 Modifying Printing Sequences

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

   The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type whose printing sequence you want to modify.
3. In the work area on the right side of the window, select the *Printing Seqs* tab.
4. On the *Printing Seqs* tab, select the row of the printing sequence you want to modify and choose the *Edit* button.

   The *Sequence Details* window opens.
5. In the *Sequence Details* window, make required changes.
6. Choose the *Update* button, and then choose the *OK* button.

© 2023 SAP SE. All rights reserved.

12.3 Deleting Printing Sequences

Caution

Deleting a printing sequence is irreversible.

Procedure

1. From the SAP Business One *Main Menu*, choose *Administration* → *Setup* → *General* → *Report and Layout Manager*.

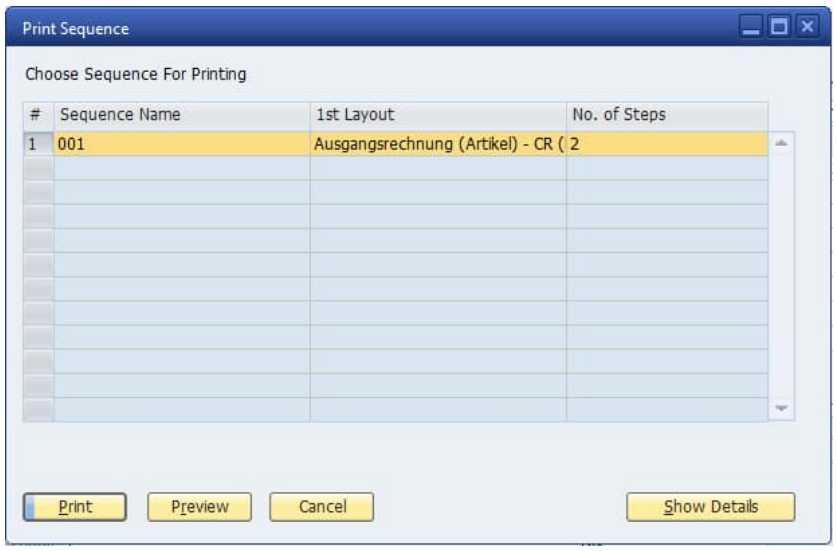
   The *Report and Layout Manager* window opens.
2. In the navigation pane on the left side of the window, select a document type whose printing sequence you want to delete.
3. In the work area on the right side of the window, select the *Printing Seqs* tab.
4. On the *Printing Seqs* tab, select the row of the printing sequence you want to delete and choose the *Delete* button.

   The printing sequence is permanently deleted from SAP Business One.

12.4 Previewing and Running Printing Sequences

Procedure

1. Open a document to which a printing sequence has been applied.
2. In the SAP Business One menu bar, choose *File* →*Print Sequence*.
3. In the *Print Sequence* window, select a sequence and choose the *Preview* or *Print* button.



PUBLIC
© 2023 SAP SE. All rights reserved.

The document and all documents defined in the printing sequence are previewed or printed in the order of the printing sequence.

12.5 Defining Printing Sequence As Default Printing Option

Procedure

1. Open a document whose default printing option you want to define, for example, the A/R invoice.
2. Select the specific document type whose printing sequence you want to define as its default printing option, for example, the A/R invoice (items).
3. In the SAP Business One tool bar, choose the (*Layout and Sequence*) button.
4. In the *Layout and Sequence* window, select a printing sequence of the document type and choose the *Set as Default* button.

   The *Default Layout* window appears.

   Alternatively, to open this window, choose *Set as Default* on the *Layouts* tab of the *Report and Layout Manager* window (*Administration* → *Setup* → *General* → *Report and Layout Manager*).

© 2023 SAP SE. All rights reserved.

13 Report and Layout Manager Window

To open the *Report and Layout Manager* window, from the SAP Business One *Main Menu*, choose *Administration → Setup → General → Report and Layout Manager*.

You use the *Report and Layout Manager* window to perform the following functions:

- View and change the details of the following:
  - Crystal reports
  - Crystal Reports layouts
  - Customized PLD layouts
- Import Crystal reports and Crystal Reports layouts
- Export Crystal reports to a local disk or your Crystal Server
  For more information, see the guide *How to Integrate SAP Crystal Server with SAP Business One* on the SAP Help Portal.
- Export Crystal Reports layouts to a local disk
- Access the SAP Crystal Reports software to edit Crystal reports and Crystal Reports layouts
- Set user authorizations for running user-defined Crystal reports
- Manage data sources for user-defined Crystal reports and Crystal Reports layouts
- Run Crystal reports
- Work with printing sequences for certain document types

Prerequisite

- For the following actions, you have to be designated as a superuser in SAP Business One:
  - Import and delete Crystal reports and Crystal Reports layouts
  - Define authorizations for user-defined Crystal reports
  - Set data sources for Crystal reports and Crystal Reports layouts

    Note

    The *Import, Advanced* (for setting data sources), *Set Authorization*, and *Delete* buttons are inactive for regular users.

For detailed descriptions of the UI elements and controls in the *Report and Layout Manager* window, see the SAP Business One online help.

PUBLIC
© 2023 SAP SE. All rights reserved.

Appendix: Document Types and Source Tables

The following table lists document types and corresponding source tables available in SAP Business One.

Document Type Code	Table Name	Document Type
1	ACT	Accounts
2	CRD	Cards
3	DSC	Discount codes
4	ITM	Items
5	VTG	VAT groups
6	PLN	Price list names
7	SPP	Special prices
8	ITG	Item groups
9	RTM	Rates matching
10	CRG	Card payment groups
11	CPR	Contact persons
12	USR	Users
13	INV	Invoices
14	RIN	Revert invoices
15	DLN	Delivery notes
16	RDN	Revert delivery notes
17	RDR	Orders
18	PCH	Purchases
19	RPC	Revert purchases
20	PDN	Purchase delivery notes
21	RPD	Revert purchase delivery notes
22	POR	Purchase orders
23	QUT	Quotations
24	RCT	Receipts
25	DPS	Deposits
26	MTH	Match history

© 2023 SAP SE. All rights reserved.

Document Type Code	Table Name	Document Type
27	CHH	Checks history
28	BTF	Journal batches
29	BTD	Journal batches directory
30	JDT	Journal transactions
31	ITW	Item – warehouse accumulators
32	ADP	Printing administration
33	CLG	Contact log
34	RCR	Recurring transactions
35	NNM	Object's next serial number
36	CRC	Credit cards
37	CRN	Currency codes
38	IDX	Index (Madad)
39	ADM	Administration
40	CTG	Credit terms
41	PRF	Form preferences
42	BNK	Bank pages
43	MRC	Firm groups (Marca)
44	CQG	Card query groups
45	TRC	Transaction codes
46	VPM	Payment to vendor
47	SRL	Serial numbers
48	ALC	Import expenses
49	SHP	Shipment types
50	LGT	Length units
51	WGT	Weight units
52	ITB	Item groups
53	SLP	Sales person
54	FLT	Reports filter
55	TRT	Transaction types
56	ARG	Arancel (custom) groups

PUBLIC
© 2023 SAP SE. All rights reserved.

Document Type Code	Table Name	Document Type
57	CHO	Checks paid to vendors (outgoing checks)
58	INM	Inventory match
59	IGN	Inventory general entry
60	IGE	Inventory general exit
61	PRC	Profit center
62	OCR	Overhead cost rate
63	PRJ	Project
64	WHS	Warehouses codes and names
65	COG	Commission groups
66	ITT	Item tree links
67	WTR	Warehouses transfers
68	WKO	Work orders
69	IPF	Import file
70	CRP	Credit pay systems
71	CDT	Credit due terms
72	CRH	Credit history
73	SCN	Substitutional catalog number
74	CRV	Credit payments
75	RTT	Index and currency rates
76	DPT	Deposit temporary
77	BGT	Budget
78	BGD	Budget STR system
79	RCN	Retailer chains
80	ALT	Alert templates
81	ALR	Alerts pool
82	AIB	Alerts inbox
83	AOB	Alerts outbox
84	CLS	Contact log subjects
85	SPG	Special prices for groups
86	SPRG	Run externals applications
87	MLS	Mailing lists

© 2023 SAP SE. All rights reserved.

Document Type Code	Table Name	Document Type
88	ENT	Panama – enterada
89	SAL	Panama – salida
90	TRA	Panama – traspaso
91	BGS	Budget scenario
92	IRT	Interest rates
93	UDG	User defaults groups
94	SRI	Items serial numbers
95	FRT	Finance reports template
96	FRC	Finance reports categories
97	OPR	Sales opportunities
98	OIN	Interest
99	OIR	Interest level
100	OSR	Information source
101	OST	Sales stage
102	OFR	Defect cause
103	CLT	Contact log types
104	CLO	Contact log locations
105	ISR	Internet service request
106	IBT	Item batch numbers
107	ALI	Alternative items
108	PRT	Partners
109	CMT	Competitors
110	UVV	User valid values
111	FPR	Finance period
112	DRF	Document draft
113	SRD	Internal manage of SRI and IBT
114	UDC	User display categories
115	PVL	Pelecard vendors list
116	DDT	Deduction at source – terraces
117	DDG	Deduction at source – groups
118	UBR	Users – branch

PUBLIC
© 2023 SAP SE. All rights reserved.

Document Type Code	Table Name	Document Type
119	UDP	Users – departments
120	WST	Workflow steps
121	WTM	Workflow templates
122	WDD	Workflow documents
123	CHD	Check out drafts
124	CINF	Company info
125	EXD	Expenses definition
126	STA	Sales tax authorities
127	STT	Sales tax authorities type
128	STC	Sales tax code
129	CRY	Countries
130	CST	States
131	ADF	Address format
132	CIN	Correction invoice
133	CDC	Cash discount
134	QCN	User query category names
135	IND	VAT indicator EC
136	DMW	Data migrate wizard packages
137	CSTN	Station ID
138	IDC	Indicator
139	GSP	Goods shipment
140	PDF	Payment draft
141	QWZ	Query wizard
142	ASG	Account segmentation
143	ASC	Account segmentation categories
144	LCT	Location
145	TNN	1099
146	CYC	Cycle
147	PYM	Payment method
148	TOB	1099 beginning balances
149	RIT	Dunning interest rate

© 2023 SAP SE. All rights reserved.

Document Type Code	Table Name	Document Type
150	BPP	BP priorities
151	DUN	Dunning letter
152	UFD	User fields – description
153	UTB	User tables
154	CUMI	User menu
155	PYD	Payment run
156	PKL	Pick list
157	PWZ	Payment wizard
158	PEX	Payment results table
159	PYB	Payment block
160	UQR	Queries
161	CBI	Central bank indicator

PUBLIC
© 2023 SAP SE. All rights reserved.

www.sap.com/contactsap

© 2023 SAP SE. All rights reserved.
No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE. The information contained herein may be changed without prior notice.
Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.
Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.
IBM, DB2, DB2 Universal Database, System ads, System i5, System p, System p5, System x, System z, System z10, System z9, z10, z9, iSeries, pSeries, xSeries, zSeries, eServer, z/VM, z/OS, i5/OS, S/390, OS/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+, POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipes, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF, Redbooks, OS/2, Parallel Sysplex, MVS/ESA, AIX, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.
Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.
Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.
Oracle is a registered trademark of Oracle Corporation.
UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.
Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.
HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
Java is a registered trademark of Sun Microsystems, Inc.
JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.
SAP, R/3, xApps, xApp, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.
These materials are subject to change without notice. These materials are provided by SAP SE and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.