SAP BusinessObjects Business Intelligence platform
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# Getting Started Creating BI workspaces

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# 1 Introduction

This tutorial shows how to use SAP BusinessObjects BI workspaces to design and build BI workspaces and modules that contain SAP BusinessObjects Dashboards models and SAP BusinessObjects Web Intelligence documents.

> **Note**
>
> For information about creating Dashboards models and Web Intelligence documents, refer to the Dashboards and Web Intelligence documentation.

This tutorial shows you how to do the following:

- Create public or personal BI workspaces that contain multiple navigation lists and viewer modules.
- Create public or personal BI workspaces with modules that contain Dashboards models and Web Intelligence documents.
- Link content between modules created using Dashboards models and Web Intelligence documents.

## 1.1 BI workspaces

BI workspaces is an SAP BusinessObjects application that helps you track your business activities and performance using modules (templates for data) and BI workspaces (viewing data in one or more modules). Modules and BI workspaces provide information needed to adjust business rules as conditions change. BI workspaces also provides the following features:

- Tab-based browsing
- Page creation
- A point and click application builder
- Content linking between modules for in-depth data analysis

## 1.2 Prerequisites

### Prerequisites

As a prerequisite, you need to do the following:

- Install SAP BusinessObjects Business Intelligence platform 4.0.
- Have access to *Applications* > *BI workspace* from BI launch pad.
- Have permissions to create folders and store BI workspaces to the *Public Folders* or *My Favorites* nodes in the *Documents* tab.


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- Ensure that the source and target Dashboards modules, and Web Intelligence documents have been created and made available.

## 1.3 What does this tutorial cover?

This tutorial guides you through the basic steps to get started building BI workspaces, modules, and linking modules.

### BI workspaces scenario

As a sales manager for eFashion Corporation, you will use the eFashion sample universe to create a BI workspace. You will create a BI workspace that offers up-to-date sales information and save it as a corporate BI workspace in the *Public Folders* node. You can then use this BI workspace to share it with the CEO, Vice President, and other sales managers. Your corporate BI workspace will include the following:

A BI workspace that contains a Dashboards model and Web Intelligence document that you have created.

A BI workspace tab that contains reports showing store revenue and store sales vs profit margins.

A sub tab that contains a web page module and a viewer module.

A BI workspace that links content dynamically in a source and target Dashboards models and Web Intelligence documents.

Using this tutorial, you learn how to:

- Create a BI workspace that uses tabs and sub tabs, and insert modules.
- Use the content linking feature to link content dynamically between a source Dashboards module and target Dashboards module, or a Web Intelligence document.
- Make the BI workspace available to your manager.

### Lessons offered in the tutorial

This tutorial covers the following lessons:

Table 1:

| Chapter | Learn .... |
|---|---|
| 4: Creating and Designing BI workspaces | Lesson 1: Creating a BI workspace folder<br>Lesson 2: Creating a BI workspace<br>Lesson 3: Creating a tab in a BI workspace<br>Lesson 4: Creating a sub tab in a BI workspace |


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| Chapter | Learn .... |
| --- | --- |
| 5: Content Linking | Lesson 5: Linking content in a source Dashboards module and target Dashboards module<br>Lesson 6: Linking content in a source Dashboards module and target Web Intelligence module<br>Lesson 7: Defining URL parameters for content linking |


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# 2 Modules in BI workspace

Modules are templates into which you insert the data that you want to view in your BI workspace. A BI workspace is composed of one or more modules. Some of the most commonly used modules are:

- Navigation List module
- Web Page module
- Viewer module
- Text module
- Dashboards model
- Web Intelligence document
- Crystal Reports report


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# 3 Creating Modules

Before you start creating a BI workspace, you will create modules and Web Intelligence documents using Dashboards and Web Intelligence.

You will also create a public folder in the *Documents* tab of BI launch pad. In this tutorial, you are creating a BI workspace that is available for others to view, which is stored in the *Public Folders*.

You will save the Dashboards modules and Web Intelligence documents in the *corporate* category of the *Public Folders* in BI launch pad.

## 3.1 Creating modules using Dashboards models

You can create Dashboards models or visualizations, which will be used as modules in a BI workspace using Dashboards. To learn how to create Dashboards models using the legacy data connections, such as the *Portal*, *FS Command*, and *External Interface* components, refer to the following topics in the *Dashboard Design and Presentation Design User's Guide*:

- *5.2.1.7 Configuring Portal Data connections*
- *5.2.1.9 To configure FSCommand connections*
- *5.2.1.11 To configure External Interface connections*

You will then export the models to the SAP BusinessObjects Business Intelligence platform repository.

The following table describes the various types of source and target modules that can be created using Dashboards models.

| Source Dashboards Module | Target Dashboards Module |
|---|---|
| Portal provider component | Portal consumer component |
| FS Command component | Portal component |
| External Interface/Portal/FS Command components | External Interface/Portal/FS Command components |

## 3.2 Creating modules using Web Intelligence

You can create Web Intelligence documents, which will be used as modules in a BI workspace using Web Intelligence. To learn how to create Web Intelligence documents, refer to the following topics in the *Performing interactive analysis using the desktop interface for SAP BusinessObjects Web Intelligence guide:*

- *Working with documents*
  *3.1 To start the SAP BusinessObjects Web Intelligence without loading a document*
- *3.2 To create a document from the BI launch pad*


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- *3.3 To open a document from the repository*


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# 4 Creating and Designing BI workspaces

## 4.1 Designing a corporate BI workspace

In this lesson you learn how to do the following:

- Create a BI workspace folder.
- Create a BI workspace.
- Set BI workspace preferences.
- Add tabs and sub tabs to a BI workspace.
- Add a text, web page, and viewer module to a BI workspace.
- Perform content linking between modules.

### 4.1.1 Before you begin

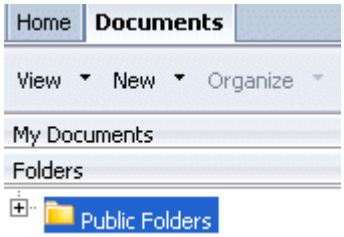
You can build BI workspaces in BI launch pad in one of the following ways from the BI launch pad homepage and toolbar:

- *Applications* > *BI workspace* from the homepage.
- *My Applications* > *BI workspace* from the homepage.

A BI workspace can contain several tabs and sub tabs, which you can add, move, and copy from one BI workspace to another.

### 4.1.2 Lesson 1: Creating a BI workspace folder

1. Log on to BI launch pad and click *Documents*.
2. In the *Folders* tree, click *Public Folders*.




3. Click *New* > *Folder*.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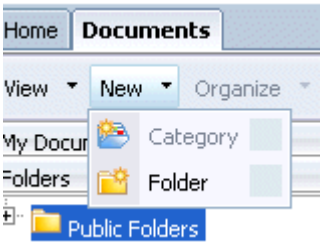


4. In the *Create Folder* window, enter a name for the folder.

   For example, enter *Corporate BI workspace*.

5. Click *OK*.

> **Note**
>
> You will use the *Corporate BI workspace* folder that you created and saved to the *Public Folders* list.

You can also store new folders in the *My Favorites* node and store BI workspaces. You can then copy these BI workspaces created in the *My Favorites* node to the *Public Folders* node so that everyone can access them. You can create new categories in the *Personal Categories* node.

You are ready to create and store BI workspaces and modules.

## 4.1.3 Lesson 2: Creating a BI workspace

1. In BI launch pad, click *Applications* > *BI workspace* or click *My Applications* > *BI workspace*.

   The *New BI workspace* window appears.

2. On the *BI workspace toolbar*, click *Save as* .
   The *Save as* window appears with the *My Documents* node displayed by default.
3. In the left pane, click *Folders*.
   The *Public Folders* node appears.
4. Expand *Public Folders* and click the *Corporate BI workspace* folder.
5. In the *Filename* field, enter a name for the BI workspace.

   For example, enter *eFashion BI workspace*.
6. Click *Save*.

   The *Save As Type* field is set to *BI workspace* by default.


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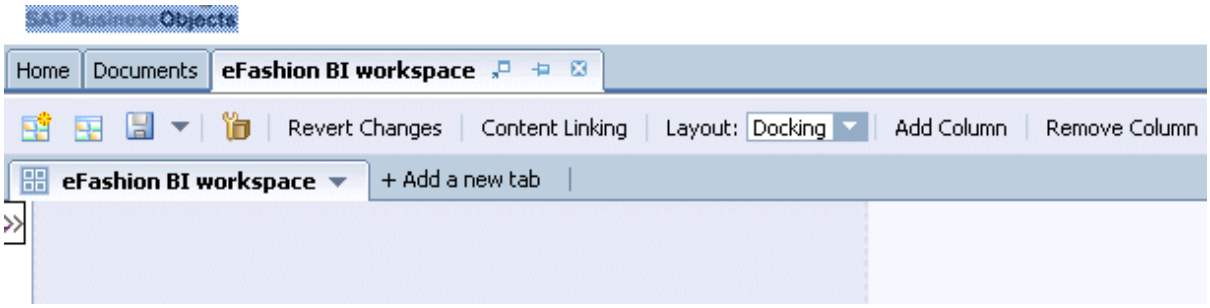
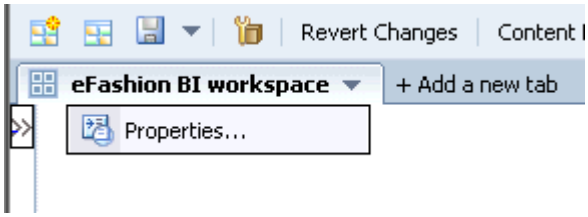
The BI workspace opens to its home tab. The tab uses the style you chose as the default style in the BI launch pad Preferences. You can define a new style for your BI workspace using *Properties*.




7. Click the arrow next to the *eFashion BI workspace* and select *Properties*.




   The *Properties* window appears.

8. In the *Choose style sheet*, select *stylesheet* of your choice.
   The *Selected style sheet* icon changes to the *stylesheet* format displayed.
9. Click *OK*.
   You will not see the difference in style sheets until you add objects to your BI workspace.

You are now going to set preferences and add tabs and sub tabs to this BI workspace.

## 4.1.4 Setting the BI workspace preferences

eFashion BI workspaces generally use specific visual styles, so you will set the default workspace preference, so that you do not have to select this style each time you create a BI workspace tab or sub tab.

1. On the BI launch pad toolbar, click *Preferences*.
2. Expand *BI workspaces*.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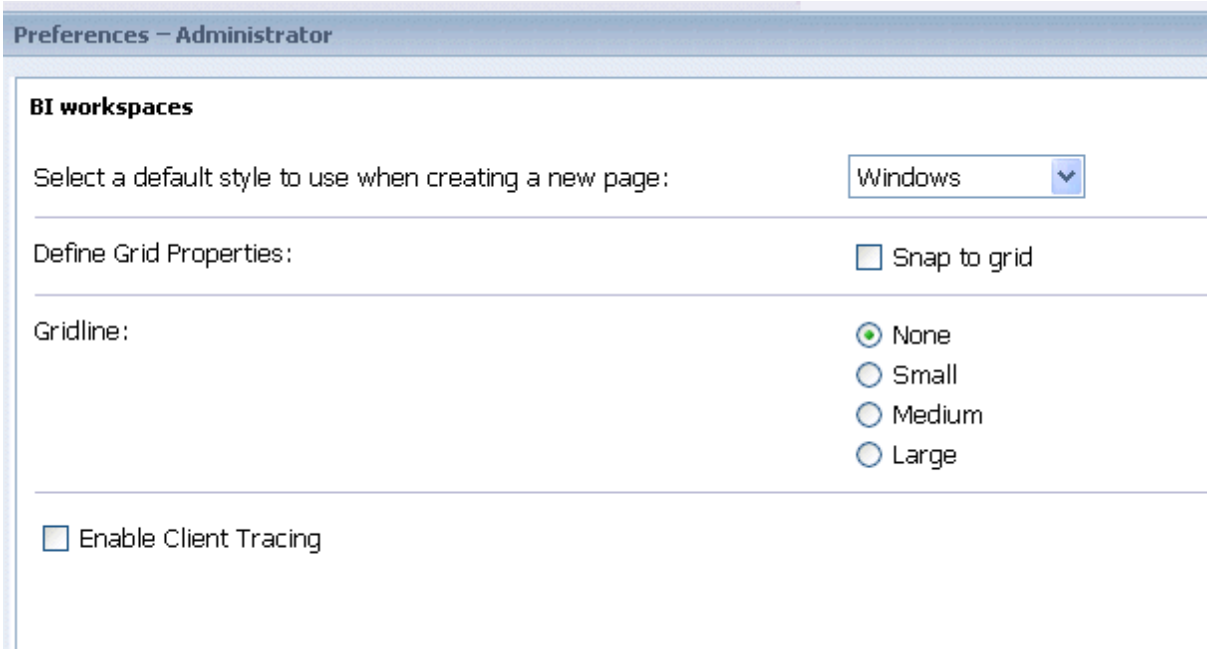



3. From the *Select a default style to use when creating a new page* list, select *Demo*.

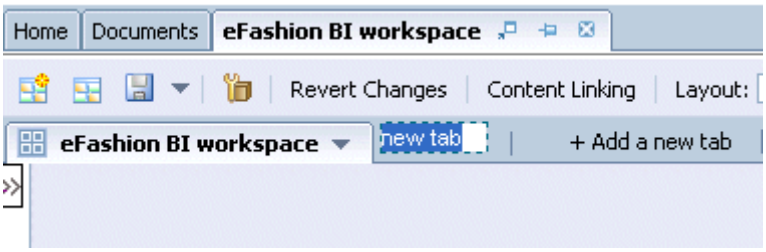
   Demo is now the default style for each BI workspace.
4. For *Define Grid Properties*, activate **`Snap to grid`**.
   Grids help you align objects in workspaces.
5. For *Gridline*, select *Medium*.
6. Leave the other preferences unchanged, and click *Save & Close*.

## 4.1.5 Lesson 3: Creating a tab in a BI workspace

Tabs and sub tabs are easy to manage in BI workspaces. You use them to organize and classify your data. Now you will create a tab in a BI workspace, which contains a navigation list and multiple viewer modules, and save it in the *Corporate BI workspace* folder.

1. Open the *eFashion BI workspace* and click *Edit BI workspace*.
2. Click *Add a new tab*, next to the *eFashion BI workspace* home tab.

   An active text box replaces the *Add a new tab* text.




3. In this text box, enter a name for the new tab and press *Enter*.

   For example, enter *Store Revenue Charts* .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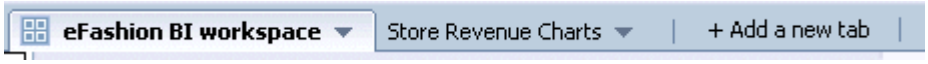
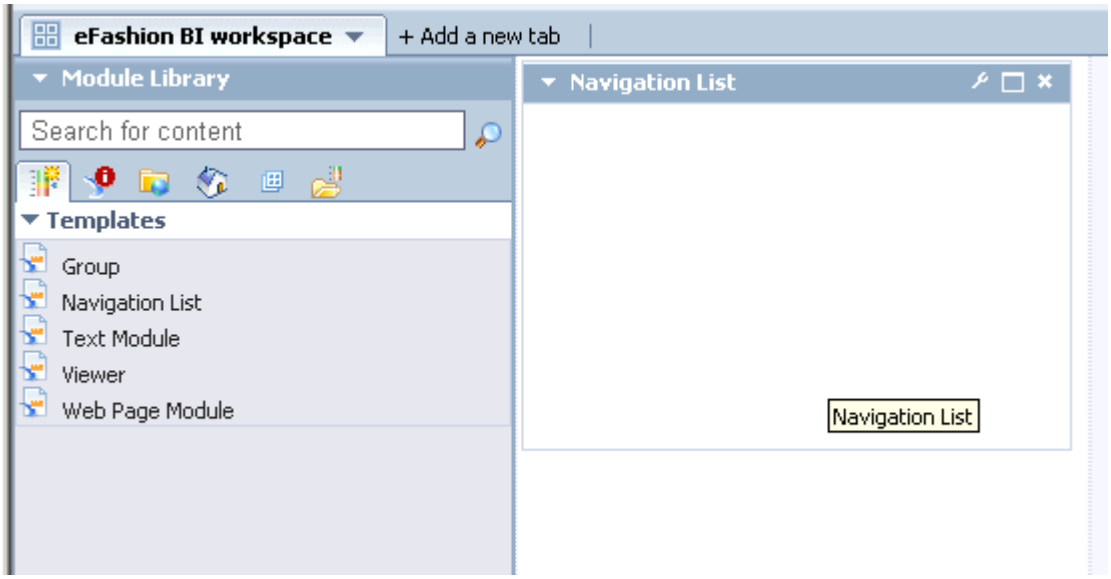



4. Click the *Store Revenue Charts* tab.
5. In the *Module Library*, click *Templates* and drag *Navigation List* module to the first column of the BI workspace layout.




The *Navigation List* module appears in the BI workspace layout.

6. Click *Public Modules* and drag *Store Sales vs Profit Margins* to the second BI workspace column.

   The *Store Sales vs Profit Margins* module is from an existing list of modules.
7. Click *Templates* and drag *Viewer* module to the third BI workspace column.
8. Repeat Step 7 to drag and drop another viewer into third column of BI workspace. The viewers can then be edited to contain various types of data sources or information that can be invoked using Navigation List.
9. Close *Module Library*.

> **Note**
>
> The modules auto-resize when you change the size of the browser.

10. For each module, deactivate the border:
    a. Click *Edit*.

    b. On the *Layout* tab, deselect *Show window border*.
    c. Click *OK*.
11. *Save* the BI workspace and click *Exit Edit Mode*.

## 4.1.6 Lesson 4: Creating a sub tab in a BI workspace

1. Open *eFashion BI workspace* and click *Edit BI workspace*.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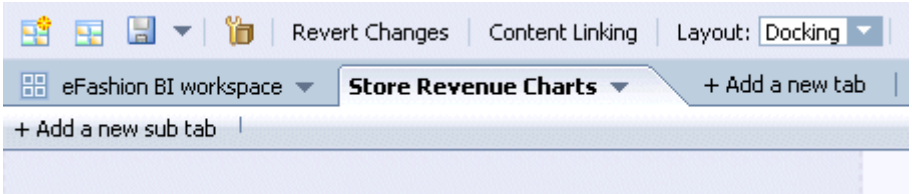
2. On the *BI workspace* toolbar, click *Add a new sub tab*.




3. In the *text* box, enter a name for the new sub tab and press *Enter*.

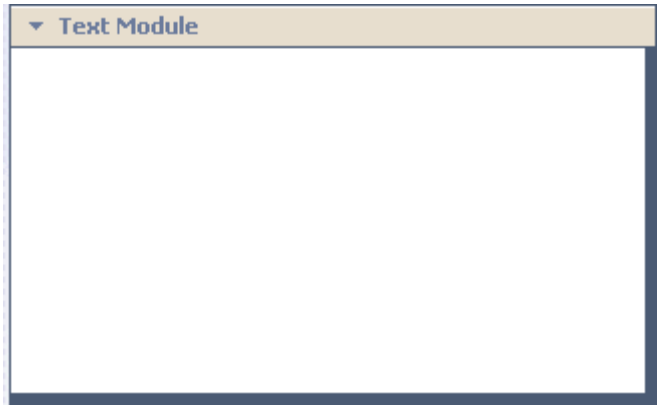
   For example, enter *Useful Links*.
4. Click the *Useful Links* sub tab.
5. On the *BI workspace* toolbar, from the *Layout* list, select *Freeform*.

   You will now add a text module to this BI workspace sub tab.

## 4.1.7 Adding a text module to the BI workspace sub tab

You need to add informational text to the home tab of your corporate BI workspace that explains the purpose of the BI workspace.

1. From the *Layout* list on the *BI workspace toolbar*, click *Template*.
   The *Template* layout defaults to a three column template and the *Predefined templates* appears. You want to change this.
2. From the *Predefined templates* list, select *2 Rows*.
3. Open the *Module Library* .
4. From the *Templates* tab, drag *Text Module* and place it on the BI workspace layout.
5. Place your mouse over the Text Module.




   The *Text Module toolbar* appears.
6. Click *Edit*.

   The *Edit Contents* dialog box appears.
7. In the *Enter text or HTML to display* field, enter a text that you want to be displayed on the *Text Module* layout.

   For example, enter *This corporate BI workspace offers up-to-date information on eFashion sales revenues and profits*.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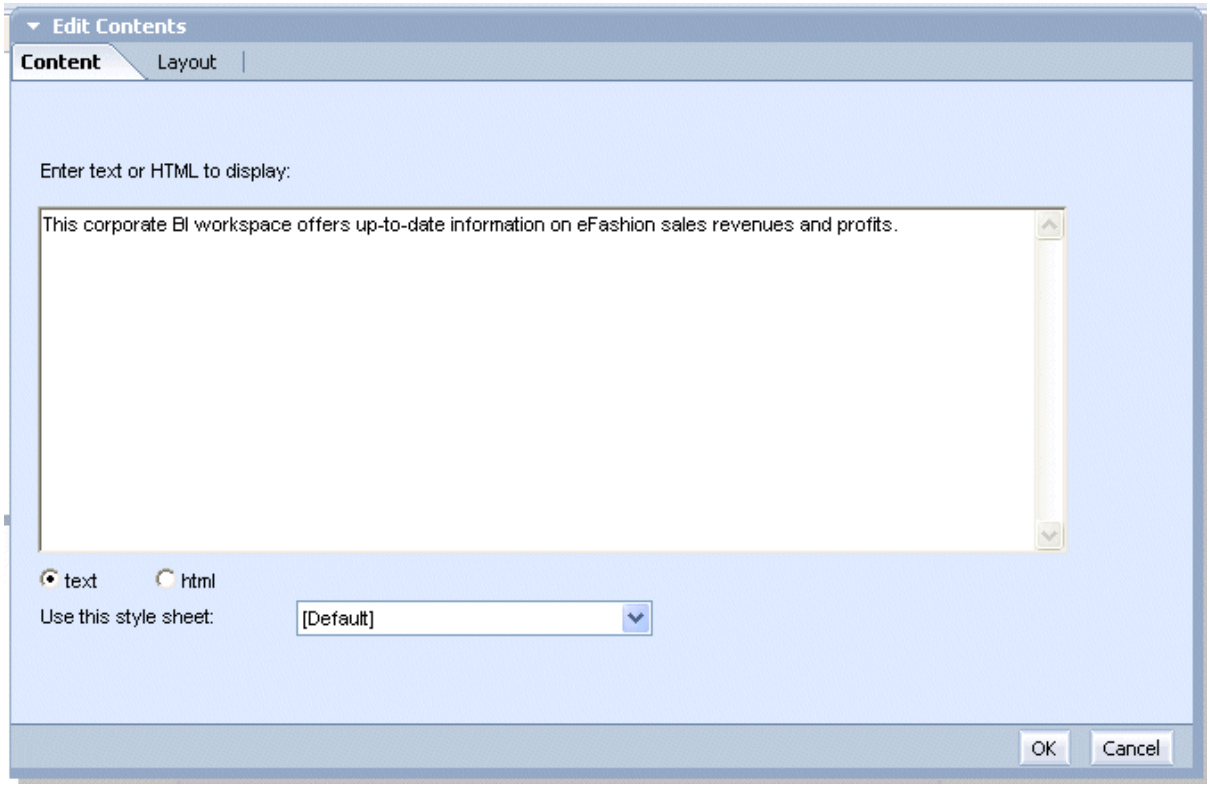


8. In the *Layout* tab page, enter a title for the *Text Module*.

   The default title is *Text Module*.

   > **Note**
   >
   > You can also change the title from the module toolbar, instead of changing it from the *Edit Contents* dialog box. Place the cursor over the module toolbar. The *Click to edit title* option appears. Now, when you click the title on the toolbar, a text box is displayed . Enter a new title for the Text Module.
   > 

9. Deselect *Show window border*, if you want the *Text Module* toolbar to be invisible when you exit the BI workspace edit mode and click *OK*.


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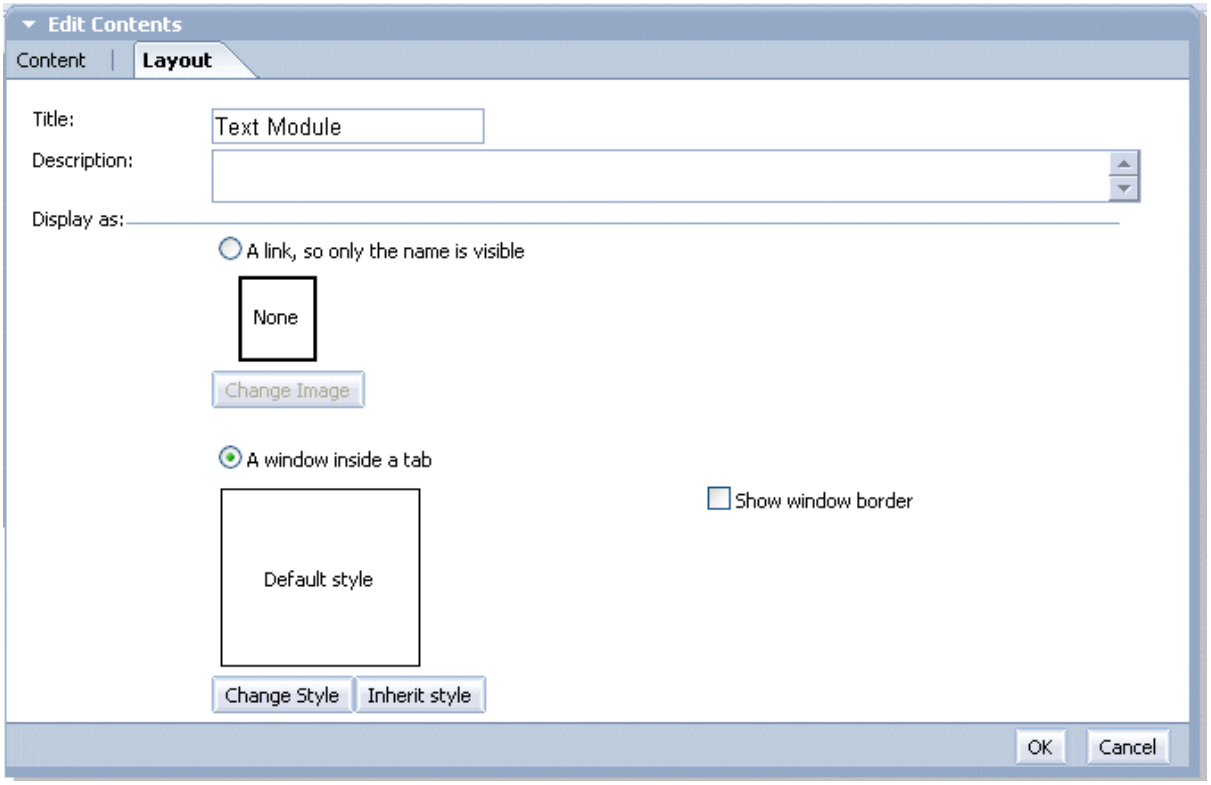
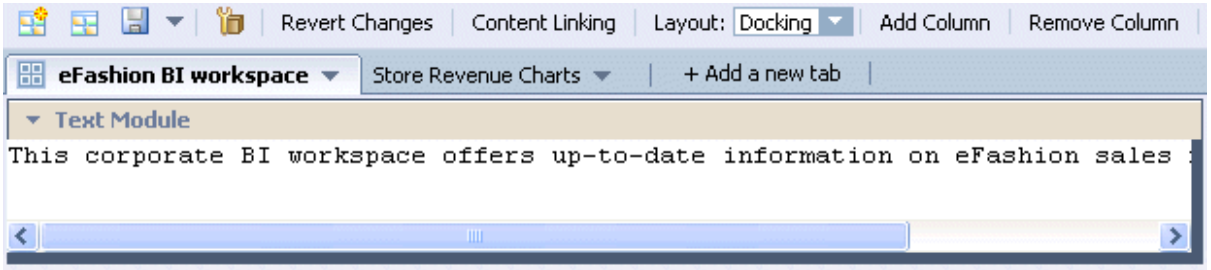



Move your mouse over *Text Module* , and then to a different part of the BI workspace. The *Text Module* toolbar appears only when your mouse is in the text module section, and disappears when the mouse moves elsewhere on the BI workspace.

You can resize the module so that the text is aligned properly in the *Text Module* layout.

10. Drag the lower, right-hand corner of the *Text Module* to adjust and align the text properly.

    The text should look like the example below.




## 4.1.8 Adding a web page module to the sub tab

Ensure that you are in the *Useful Links* sub tab page of the *eFashion BI workspace*.

1. In the *Module Library*, click *Templates*.
2. Drag *Web Page Module* to the left column of the BI workspace layout.

   Make sure that it snaps to the grid line in the upper-right hand corner by moving the object from left to right, then up and down.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3. Move your mouse to the *Web Page Module* toolbar and click *Edit*.

   The *Edit Contents* dialog box appears.
4. In the *Enter the web page URL* field, type `http://www.sap.com/`.
5. Click *Layout*.
6. In the *Title* field, enter a title for the *Web Page Module*.

   The default name is *Web Page Module*.

   You can also change the title from the module toolbar, instead of changing it from the *Edit Contents* dialog box. Place the cursor over the module toolbar. The *Click to edit title* option appears

   

   . Now, when you click the title on the toolbar, a text box

   

   is displayed. Enter a new title for the Web Page Module.
7. Select *A link, so only the name is visible*.
8. Click *OK*.

The SAP website appears in the *Web Page Module* layout.

## 4.1.9 Adding a viewer to the BI workspace sub tab

Ensure that you are in the *Useful Links* sub tab page of the *eFashion BI workspace*.

1. In the *Module Library*, click *Templates*.
2. Drag *Viewer* to the BI workspace layout.
   The *Viewer* module appears on the BI workspace layout.
3. Close *Module Library*.
4. Move your mouse over the *Viewer* toolbar and click *Edit*.

5. In the *Select the document to display* area, click *Corporate* to select a document to be displayed in the *Viewer* module.
6. Click *Layout* .
7. In the *Title* field, enter a title for the *Viewer* module.

   You can also change the title from the module toolbar, instead of changing it from the *Edit Contents* dialog box. Place the cursor over the module toolbar. The *Click to edit title* option appears. Now, when you click the title on the toolbar, a text box is displayed
   
   . Enter a new title for the Viewer Module.


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8. Deselect *Show window border*, if you want the *Text Module* toolbar to be invisible when you exit the BI workspace edit mode and click *OK*.
   The *Viewer* module with the selected list of documents appears.

   > **Note**
   >
   > Drag the lower, right corner of the*Viewer* to make it larger.

9. Click *Save* and click *OK* to confirm the changes made to the BI workspace.
10. Click *Exit Edit Mode*.

The *Viewer* module appears with the list of documents selected.


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# 5 Content linking

## 5.1 Linking modules using content linking

Interportlet communication enables various data sources to be linked dynamically using the `Portal`, `FsCommand`, and `External Interface` components. You can create Dashboards models, Web Intelligence documents, or Crystal reports and export them to the SAP BusinessObjects Business Intelligence platform repository.

These documents will then be embedded in the BI workspaces as modules and are used to interact with each other by dynamically passing data using the BI workspace content linking feature.

### 5.1.1 Lesson 5: Linking content in a source Dashboards module and target Dashboards module

Before you begin linking modules, you should have the source and target Dashboards modules created and saved in the corporate modules category of the SAP BusinessObjects Business Intelligence platform repository.

1. Log on to BI launch pad.
2. Click *My Applications* > *BI workspace*.
   The *New BI workspace* window with the BI workspace layout, toolbar, and module library is displayed.
3. On the *BI workspace* toolbar, click *Save As*.
   The *Save as* dialog box appears.
4. In the *Title* field, enter a name for the BI workspace and save it to one of the folders in the *Public Folders*.

   For example, you can enter **`Interportlet Communication`**.

   The title of the *New BI workspace* changes to *Interportlet Communication*.
5. In *Module Library*, click *Public Modules*.
6. Expand *Public Modules* and find the Dashboards portal provider map module (source) and Dashboards consumer line chart module (target) from the list.

   Refer to the Dashboards documentation to create the source and target modules.
7. Drag and drop the source and target Dashboards modules on the *Interportlet Communication* BI workspace layout.
   The two modules appear on the BI workspace layout.
8. On the *BI workspace toolbar*, click *Content Linking*.
   The *Content Linking* window with the source and target modules and *Available Connections* table containing the *Modules* and *Ports* columns appears. The *Available Connections* table shows the potential source and


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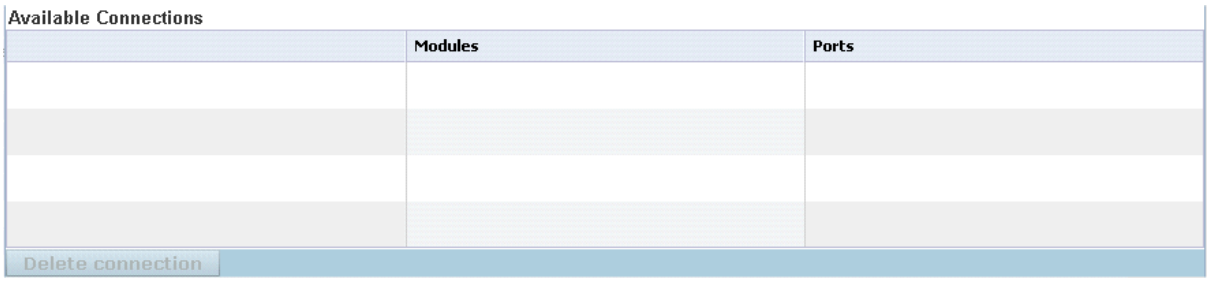
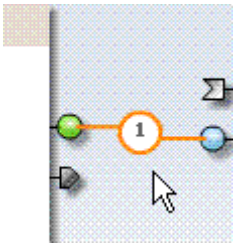
target modules that can be linked.




9. Click the *PARAMETER_OUT* indicator next to the source module and drop the cursor on the *PARAMETER_IN* indicator next to the target module to activate linking between the source and target modules.

   The *LEGACY_IN* and *LEGACY_OUT* indicators appear by default for all the modules in the content linking page layout.

   A dotted line appears while you drag and drop the *linking icons* between the modules indicating that you have not finished linking the modules. You should map the parameters of the modules. The dotted line indicates that no parameters have been mapped between the modules.
10. Click the *dotted line* between the modules.
    The *Parameter Mapping* table with the *Source Parameter* and *Target Parameter* columns appears.
11. In the *Source Parameter* column of the *Parameter Mapping* table, click *click to add Mapping...* drop list and select a parameter.
12. In the *Target Parameter* column of the *Parameter Mapping* table, click *click to add Mapping...* drop list and select a parameter.
    The parameter pairing between the source and target modules is displayed with a solid line indicating a fully completed link and mapping.




> **Note**
>
> You can delete any of the parameter pairings by clicking *Delete connection*.

13. Click *Save* and then click *OK* to save the BI workspace.
14. Click *Exit Edit Mode*.

> **Note**
>
> Click *Texas* in the Dashboards source map module. You will notice that the line charts in target modules render data for that state. You can also perform granular linking between modules by selecting the data ranges of the source and target module values displayed.

You have successfully linked two Dashboards modules using content linking.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When you click on any state in the map module, the state name is dynamically passed to target modules and the passed data is displayed.

### Related Information

Lesson 6: Linking content in a source Dashboards module and target Web Intelligence module [page 21]

## 5.1.2 Lesson 6: Linking content in a source Dashboards module and target Web Intelligence module

Before you begin linking modules, you should have the source Dashboards module and target Web Intelligence module created and saved in the corporate modules category of the SAP BusinessObjects Business Intelligence platform repository.

1. Follow steps from 1 to 5 of the *Linking content in a source Dashboards module and target Dashboards module* task.
2. Expand *Public Modules* and find the Dashboards portal provider Map module (source) and Web Intelligence consumer module (target) from the list.
3. Drag and drop the modules in the *Interportlet Communication* BI workspace layout.
4. Follow steps 8 to 14 of the *Linking content in a source Dashboards module and target Dashbaords module* task.
5. In the Dashboards source map module, click *Texas*. You will notice that the line charts in target modules render data for that state.
   You have successfully linked modules created using Dashboards model and Web Intelligence document through content linking.

When you click on any state in the map module, the state name is dynamically passed to the target Web Intelligence document and the passed data is displayed.

### Related Information

Lesson 5: Linking content in a source Dashboards module and target Dashboards module [page 19]
Creating modules using Web Intelligence [page 7]

## 5.1.3 Lesson 7: Defining URL parameters for content linking

To link a report module to a Web Page module using Google URL parameters, you might do the following:

1. Create a new BI workspace and save it.
2. Open the Module Library, and from the *Public Modules* list, open the `Interactive Analysis` folder and drag the `Charting Samples` module to the workspace.


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3. Open the *Report 3* tab in the module, and right-click on it to select that report part. Using this chart, you will be able to select a manufacturing line and view international trends through the `Google trends` application.
4. Drag a target Web Page Module to the right of the first module and enter the following Google trends search URL: **`http://www.google.com/trends?q=`**.
5. In the BI workspace toolbar, click *Content Linking*.

   The *Content Linking* dialog box is displayed. At the top, a diagram illustrates the source and target modules. The *Available Connections* table lists the potential modules and ports that can be linked.
6. In the diagram at the top, link the out port of the Charting Samples module to the in port of the Web Page Module.
7. In the *Parameter Mapping* table at the bottom right, choose `q` in the first cell of the *Target Parameter* column so that the `Lines` value will be mapped to the output of the `Google trends` module. Close the dialog box.
8. Save the workspace and click *Exit Edit Mode*.

When you click on any of the *Lines* bars in the graph of the Charting Samples module its name will appear in the `<Search Trends>` field in the Google module, displaying the relevant links for that trend.


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# 6 Viewing what you have accomplished

Congratulations! you have completed creating your first corporate BI workspace . Close the BI workspace and return to BI launch pad to view what you have completed.

Go to *Documents* > *Public Folders* > *Corporate BI workspace* .

Inside the *Corporate BI workspace* folder, you can find the following documents:

- eFashion BI workspace
- Store Revenue Charts
- Store Sales vs Profit Margins


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# 7 To learn more about modules and BI workspaces

To learn about modules and BI workspaces, do one of the following:

- Refer to the *SAP BusinessObjects BI Workspaces User's Guide*, *Dashboards and Presentation Design User's Guide*, and *Performing interactive analysis using the desktop interface for SAP BusinessObjects Web Intelligence*.
- Enroll in SAP BusinessObjects™ BI workspace XI: Designing BI workspaces course.
  This course is available as a classroom training and an eLearning lesson.
  For details, go to http://www.sap.com.


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