

#### **PUBLIC**

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# **Business Intelligence Launch Pad User Guide**





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# **1 Document History**

The following table provides an overview of the most important changes in this document.

Version	Date	Description
SAP BusinessObjects Business Intelligence platform 4.3 SP3	December 2022	<ul> <li>Added the following:</li> <li>Banner messages in BI Launch pad</li> <li>HSTS - Http Strict Transport Security Support</li> <li>Pinning a report for future viewing</li> <li>Settings page improvement</li> <li>Fixed first column width for Document tile and Folder tile</li> <li>The Scheduled by filter is now introduced in the Instance page</li> <li>Introduced the More button</li> <li>Edit favorites is now allowed in List view mode</li> <li>Improved the Sort and Filter option on Table Columns</li> </ul>
SAP BusinessObjects Business Intelligence platform 4.3 SP2	January 2022	Added an additional column called Folder Path in Column preferences in BI Launch pad
SAP BusinessObjects Business	December, 2021	Added the following topic:
Intelligence platform 4.3 SP2		<ul> <li>Defining Database Credentials for a Data Source Reference [page 28]</li> </ul>
		Updated the following topic:
		<ul> <li>Managing your Account [page 26]</li> <li>Home [page 16]</li> <li>Instances [page 18]</li> <li>Recently Run [page 23]</li> <li>Accessing your Info [page 27]</li> </ul>
SAP BusinessObjects Business Intelligence platform 4.3 SP1	December, 2020	Fiorified BI Launch Pad is now renamed to BI Launch Pad. References to the term <i>Fiorified</i> is removed.
		Added the following topic:
		• Tips and tricks [page 74]

version	Date	Description
		Updated the following topics:
		<ul> <li>Finding Help for BI Launch Pad [page 11]</li> </ul>
		<ul> <li>Logging Out [page 12]</li> </ul>
		• Favorites [page 22]
		<ul> <li>User Settings [page 13]</li> </ul>
		• Folders [page 20]
		<ul> <li>Scheduling an object to email</li> </ul>
		<ul><li>Destinations [page 53]</li></ul>
		<ul> <li>Destination Options</li> </ul>
		<ul><li>Publication Destinations [page 80]</li></ul>
		<ul> <li>Customizing the Appearance of the BI Launch Pad [page 33]</li> </ul>
		<ul> <li>Calendar formats</li> </ul>
		<ul> <li>Exposed Crystal Reports data [page 72]</li> </ul>
		Enhanced Credential Mapping
		<ul> <li>Define the database credentials against a data source reference for a user in CMC</li> </ul>
SAP BusinessObjects Business	June, 2020	Added the following topics:
Intelligence platform 4.3		<ul> <li>BI Platform Tool Bar [page 15]</li> <li>Home [page 16]</li> <li>Favorites [page 22]</li> <li>Recent Documents [page 23]</li> <li>Recently Run [page 23]</li> <li>Applications [page 24]</li> <li>Launching Crystal Reports for Enterprise [page 150]</li> <li>Accessing Applications Tile Group in the Home Page [page 151]</li> <li>Modify Action on a Crystal Report [page 151]</li> <li>Setting Page Preferences [page 29]</li> <li>Customizing the Appearance of the BI Launch Pad [page 33]</li> <li>Customizing the Home Page of the BI Launch Pad [page 33]</li> </ul>

Description

Date

Version

Updated the following topics:

Version	Date	Description
		<ul> <li>Output file formats for instances</li> <li>[page 65]</li> </ul>
		<ul> <li>Crystal report instance formatting options [page 67]</li> </ul>
		<ul> <li>Viewing All Your Available Instances for Specific Dates [page 126]</li> </ul>
		<ul><li>Crystal Reports Viewers [page 142]</li></ul>

# 2 Getting Started with BI Launch Pad

The new BI Launch Pad is a modern version of the classic BI Launch Pad application, built for maximum productivity. It has a user experience that makes the user interface (UI) simple and intuitive. With the everso-simplified UI, it is now that much simpler to access, view, organize, and manage your BI objects. This documentation provides information and instructions for using the BI Launch Pad.

The BI Launch Pad application runs in a web browser and is the main interface for working with objects in the BI platform. You use the BI Launch Pad to perform the following tasks:

- Access and organize Crystal reports, Web Intelligence documents, and other objects.
- View information in a web browser, export it to other business applications (such as Microsoft Excel), and save it to a specified location.
- You can create and edit the documents.
- Use analytic tools to explore business information in detail.

You can now customize the home page of the BI Launch Pad.

#### Note

• Classic BI Launch Pad is now deprecated and replaced with new BI Launch Pad, which can be accessed with same URL http://<host name><port number>/BOE/BI.

#### 2.1 Who Should Use This Documentation?

This documentation is intended for users who work with objects over the web in the BI platform and the BI Launch Pad.

For more information about the platform, see the Business Intelligence Launch Pad User Guide and the Business Intelligence Platform Administrator Guide on the SAP Help Portal.

# 2.2 Licensing

Each type of user license in the BI platform grants or restricts access to particular tasks and applications. Depending on which license you have, you may be unable to access some applications or to perform some tasks in the BI repository.

The BI platform supports the following types of user licenses:

Concurrent user

#### Named user

#### ① Note

Number of concurrent logon sessions for a named user is limited to 10. If the named user tries to log into the 11th concurrent logon session, the system displays an appropriate error message. You need to release one of the existing sessions to be able to log in.

To determine which license you have, contact your system administrator. For more information about licensing, see the Business Intelligence Platform Administrator Guide on the SAP Help Portal.

# 2.3 Key Concepts

Familiarize yourself with key concepts in BI Launch Pad. Depending on which tasks you perform, some concepts may not apply to you.

Definition
An object is a document or file created in the BI platform or other software that is stored and managed in the platform repository.
A category is an organizational alternative to a folder. Use categories to label objects.
Scheduling is the process of automatically running an object at a specified time. Scheduling refreshes dynamic content or data in an object, creates instances, and distributes the instances to users or stores them locally.
An event is an object that represents an occurrence in the BI platform system. Events can be used for the following purposes:
<ul> <li>As scheduling dependencies that trigger actions after a scheduled job runs</li> </ul>
To trigger alert notifications
<ul> <li>To monitor the performance of the platform</li> </ul>
A calendar is a customized list of run dates for scheduling jobs.
An instance is a snapshot of an object that contains data from the time an object was run.
Alerting is the process of notifying users and administrators when events occur in the BI platform.

## 2.4 Key Tasks

Depending on your user license and access rights, you can perform the following tasks in the BI Launch Pad:

- View Objects
- Add Objects
- · Create Objects
- Modify and manage the objects you add
- Distribute content to users
- Set personal preferences for the BI Launch Pad user interface

### 2.5 Logging on to BI Launch Pad

Before you can log on to the BI Launch Pad application, you must have Microsoft Internet Explorer, Firefox, Chrome, or Safari installed on your computer.

The BI Launch Pad uses RESTful web services. BI Platform RESTful web services should be properly configured in the CMC to ensure a successful login and other workflows. For more information, see Configuring RESTful web services and SAP Knowledge Base Article 2576124.

1. In a web browser, enter the URL for the BI Launch Pad.

#### ① Note

The URL should be http://<WebServer>:<PortNumber>/BOE/BI, where <WebServer> is the name of the web server for BI platform and <PortNumber> is the port number for the platform.

If your system administrator has configured a custom URL for the BI Launch Pad, you may need to ask the administrator for the name of the web server, the port number, or the URL to enter.

You don't have to enter a system name. However, some Enterprise systems may require it.

- 2. If prompted, in the System field, enter the name of your Central Management Server (CMS).
- 3. In the Username field and the Password field, enter your logon credentials.
- 4. Choose Log On.

# 2.6 Finding Help for BI Launch Pad

Various help resources like product documentation (in PDF and HTML) formats, in-build help, and video tutorials are available to help you get accustomed with and use the BI Launch Pad application.

You can access product documentation, such as the Business Intelligence Launch Pad User guide, for your BI Launch Pad from the SAP Help Portal. Additionally, you can find walkthrough demo videos for various BI Suite workflows here: https://wiki.scn.sap.com/wiki/pages/viewpage.action?pageId=449905204

For more tutorials related to BI products, visit https://www.sap.com/LearnBI

In-build help in the product provides access to all documentation available at the time the software ships. It is accessible through the (Help) option present in BI Launch Pad. To access in-build help for the BI Launch Pad application, perform the following:

1. In the Home page, choose & (User Settings) from the top right corner of the BI Launch Pad.

You can find the drop down with the following options:

- Settings
- Edit Home Page
- About
- Help
- Logout
- 2. Select the ? (Help) option.

The in-build application help opens.

# 2.7 Logging Out

If you want to end your session and log out of the BI Launch Pad, perform the following steps:

- 1. From the *Home* page, choose **&** (User Settings) from the top right corner of the BI Launch Pad.
- 2. From the drop down, select the  $\circlearrowleft$  (Log Out) option.

You successfully log out of the application and return to the Login screen.

# 3 Introducing the BI Launch Pad User Interface

When you first log in to the BI Launch Pad, you see the default user interface, which you can customize for the tasks you perform.

The Home page of the BI Launch Pad contains the following elements:

- The Global Navigation Bar allows you to traverse between *User Settings*, *Recently visited*, and *Notifications*, where the *Notifications* enables an Administrator to send alert messages from the CMC to the User.
- The alert message appears as a notification popup on the top right corner in the BI Launch Pad screen.
- It also allows you to search within the BI Launch Pad. Web Assistant provides you a guided tour of the application.
- The BI platform Tool Bar allows you to navigate between different tabs like *Home*, *Favorites*, *Recent Documents*, *Recently Run*, and *Applications*.
- The Workspace comprises of Categories, Filters, and more options to manage your content.

The new BI Launch Pad has a renewed user experience, designed to help you focus on your tasks with ease. The new interface allows you to create and manage your documents and files using elements such as panels, bars, windows, and tiles. Any arrangement of these elements together contributes to the User Interface.

# 3.1 Global Navigation Bar

# 3.1.1 User Settings

The & User Settings dropdown allows you to access your account information and set personalization preferences. Through the User Settings, you can perform the following actions:

- Manage your user Settings.
- Use the *Page* option to rearrange the tiles in the BI Launch Pad as per your usage and priorities, and mark files as *Favorite*.
- Get an overview Q About the product.
- Find ? Help within the product
- U Log Out of the application

To navigate to the User Settings page, perform the following:

- 1. Log on to the BI Launch Pad.
- 2. Click 8 (User Settings) in the top right corner of the home page.

You can access different actions to perform in the User Settings dropdown.

- The \_\_\_\_ (User profile) avatar (icon) on the global navigation bar is now revised to a text avatar. When you hover on the letter displayed for the User, it displays the *Account Name* defined in the *Properties: Administrator* page in CMC. For example,
  - If the Account Name is defined as Administrator, the text avatar in the BI Launch Pad is shown as A in the User icon and the hover as Administrator.
  - If the *Full Name* below *Account Name* is defined as *John Cesar*, then the text avatar in BI Launch Pad is shown as *JC* and the hover shows the full name.
  - If the *Full Name* is defined as *John Cesar Shepherd*, then the text avatar in BI Launch Pad is shown as *JS* and the hover shows the full name.
- You can find the Account Information of the user in the Settings page, the User Account tab.
- Previously, when you click *Settings*, you were redirected to the *Account Preferences* page. Now, when you click *Settings*, you are redirected to the *User Account* page.
- Previously, the name of the application *BI Launch Pad* was displayed in the centre of the tool bar. But, if you wanted to view the *Currently Open Documents* and the document had a longer name, then the full name wasn't displayed due to space constraints.
  - Now, the *Welcome: Administrator* greeting in the tool bar is removed to increase the space and be able to display the full name of the document.

### 3.1.2 Search

BI Launch Pad search enables you to search content within the BI Launch Pad repository. The search in the BI Launch Pad starts looking for matches as you enter search text.

The following filters available in the Search drawer help you retrieve filtered views of the search results:

- Fields: Set to search all objects' metadata fields by default (title, description, and keywords). You can switch it to search only the title.
- Type: Set to 'All Documents' by default. You can switch it to filter for a specific document type (Web Intelligence, Crystal Reports, etc.), or to 'All' to search all repository administration objects (users, jobs, etc.).
- Location: Allows you to filter documents or objects by their parent folder.
- Refresh Time: Allows you to filter by refresh date ranges.

You can press Enter to view the complete results.

#### Search string recognition as you type

As you type, the search looks for results that match words in the search text. Matches to search text are based on an object's keyword, title, description, and owner information. Quick search results appear at the top of the current page, and full results (after you press Enter) appear in a separate full results page.

#### Matched word highlighting

When the search text matches words in an object's title or description, matched words appear in bold type.

#### Facets and search result grouping

Facet grouping by report field is available for the following document types: Crystal Reports, Web Intelligence reports, Agnostic, Text, Adobe Acrobat, Microsoft PowerPoint, Microsoft Word, Microsoft Excel, Rich Text, Design Studio, Analysis Office, Lumira, etc.

When a search produces many results, the BI Launch Pad classifies the result information in facets (that is, groups). You can select a facet and view search results for it. Search results are classified in the following facets:

- Fields
- Type
- Location
- Refresh Time

Each facet is assigned objects that appear in search results. Facets are generated from metadata.

## 3.1.3 Export to Excel

A download button (*Export Listed Table Items As Excel*) is introduced in the BI Launch Pad in the following places to export the documents of your interest.

It is available in the following places:

- Folders
- Categories
- Documents
- Instances, and
- Recycle Bin

#### 3.2 BI Platform Tool Bar

The tool bar in the home page of the BI Launch Pad allows you to view and navigate to different tile groups in the workspace. This displays the corresponding tile group in the workspace.

The following groups are available in the BI Launch Pad tool bar:

- Home [page 16]
- Favorites [page 22]

- Recent Documents [page 23]
- Recently Run [page 23]
- Applications [page 24]

The details on the user interface of each group is explained in further topics.

#### 3.2.1 Home

This group provides an easy accessibility to the content objects. It contains various tiles, which have specific functionalities. You can perform many tasks on the reports or alerts present in each tile.

The *Home* group consists of the following tiles:

- Documents [page 16]
- Instances [page 18]
- Categories [page 19]
- Folders [page 20]
- BI Inbox [page 21]
- Recycle Bin [page 22]

#### ① Note

You can now resize the column width in the following places:

- Folders
- Categories
- Documents
- Instances, and
- Recycle Bin

#### 3.2.1.1 Documents

The *Documents* tile in the *Home* page shows all the content objects (reports) present in the BI Launch Pad.

The *Documents* page consists of two options to view the reports in



view. You can also see a  $\mathbb{C}$  (*Refresh*) icon next to the option refreshes the schedule *History* page automatically to show the report run status. The following columns are displayed in the *Documents* page:

- *Title*: Displays the title of the report.
- Favorites: Displays a favorite icon for the report that is marked as a favorite.
- *Type*: Displays the type of the report.
- Description: Displays an overview of the report.

• Last Updated: Displays the last updated date and time of the report.

You can choose the columns to display by modifying the *Settings* in Page preferences. For more information on setting page preferences, refer to the Setting Page Preferences.

Depending on the type of a selected report, the following local actions can be performed:

View View Latest Instance Modify Properties	You can view the details of a selected report.  You can view the latest instance of the report.  You can edit the contents of the Webi report.  You can edit the following document details such as:  • Title • Description	
Modify	You can edit the contents of the Webi report.  You can edit the following document details such as:  • Title • Description	
·	You can edit the following document details such as:  • Title • Description	
Properties	<ul><li> Title</li><li> Description</li></ul>	
	Keywords.	
Schedule	You can schedule the report.	
Mobile properties	You can display the selected reports in the mobile BI Inbox of the recipient.	
History	You can view the historical instances of a report.	
Download	You can download a .lumx documents.	
Category	You can assign a report to single or multiple categories.	
Mark As Favorite	You can mark a report as a favorite.	
Details	You can view the additional details such as:  Type  Owner  Created On  Last Modified  Last Run  ID  CUID  Locale  Folder path Document Link.	
Send to	You can send the report to the following destinations:  • Default Enterprise Location  • BI Inbox  • Email  • FTP Server  • File System  • SFTP Server.	
Delete	You can delete the selected reports.	

When you select multiple reports, you can perform the following actions:

- Mark As Favorite
- Delete
- Send to

#### Note

- The report count gets updated as you scroll down the page.
- You can sort the reports (in Ascending/Descending order) based on Title (Alphabetical order) and the last updated date and time of the report.

### **3.2.1.2** Instances

You can schedule an object to run automatically at specified times. When a scheduled object runs successfully, an instance is created. An instance is a version of the object that contains data when an object is run.

In the *Instances* page, you can view the list of instances for a specific date range. To select a date range, you can specify a start and end date in the calendar widget. You can perform various actions depending on the status of the selected instance. You can even choose multiple instances and perform actions on them.

You can filter the instances based on the below status of the instances:

- Success
- Partial Success
- Failed
- Running
- Recurring
- Paused
- Expired

You can even filter the instances based on the report type. Following report types are available for filtering the instances:

- Publication
- Analysis Workbook
- Crystal Reports
- Lumira Document
- Web Intelligence
- Adobe Acrobat
- Microsoft Excel
- Text (CSV, CSV & HTML Archive)

You can also search the instances based on the Instance title.

You can configure column preferences in the BI Launch Pad to view the details of an instance such as *Instance Title*, *Type*, *Status*, *Created By*, *Instance Time*, *Expiry Date*.

Expiry Date column gives information about the last date of a recurring instance. You can configure this column in the column preferences in BI Launch Pad. To know more about the column customization, refer to the

Setting Column Preferences [page 31] topic. An administrator can configure this column for a user/user group by setting the preferences in CMC. Once configured, it is visible in the *Instances* page.

#### Auto Refresh on scheduled documents:

Previously, in the *Schedule Instances* page, to know the current *Status* (*Success* or *Failed*) of the scheduled instances, you had to manually click the *Refresh* button.

To avoid the hassle, an Auto Refresh Button is introduced now in the Schedule Instances page.

- Enable the Auto Refresh Button
- Select the instances to be scheduled
- Right click and select Run Now

Enabling the *Auto Refresh button* refreshes the page continously and displays the current run *Status* (*Success*, *Failed*, or *Running*) of the scheduled instances.

A *Download* button is also introduced in the *Schedule Instances* page to automatically download the instances in an excel list format.

- Select the instances you want to download / export
- Click the Download (Export Listed Table Items As Excel) button
- The Export Document window appears (it shows the generated file number)
- The downloaded file is saved in *Downloads* folder

### 3.2.1.3 Categories

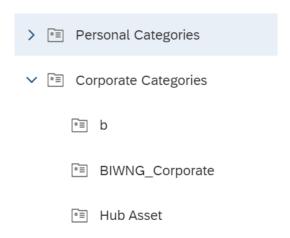
The *Categories* tile in the *Home* tab displays the number of categories that you have access to. Click the *Categories* tile to navigate to the categories page.

The BI Launch Pad supports both corporate (public) and personal categories.

Personal Categories: You can create any number of personal categories to organize your content objects.

Corporate Categories: These categories are accessible to all users, and are typically created by a system administrator or by users who have appropriate access rights.

*Hub Asset*: This is a new corporate category in which the BOE Documents mapped to it are automatically pushed to SAP Analytics Hub as assets, which contain only document links.



For more information, please refer to Push Hub Assets to SAP Analytics Hub [page 25].

#### **User Interface**

Categories tree view displays both personal and corporate categories. Expand the tree to view categories and subcategories, if any.

Categories list view contains two panels.

About Panel: Consists of categories breadcrumb navigator.

Example: Personal Categories/Sales/Webi. Also, displays object description and last updated time stamp.

Content Panel: Lists all categories and reports specific to that category. You can create a category by clicking



The  ${\bf C}$  (Refresh) icon allows you to refresh the page. Now with the **Auto Refresh** option, the schedule *History* page refreshes automatically to show the report run status.

You can perform sorting (Ascending/Descending) on some of the columns in the table. The "\*\* (More) icon allows you to perform various operations based on single or multiple selections of the content objects within the category.

You can mark an object within the category, or the category itself as favorite. For more information on categories, please refer the *Working with Categories* section in this document.

It is displayed in the Favorites column flagged with the  $\bigstar$  (Favorite) icon. You can unmark the favorite icon to remove an object from favorites.

### 3.2.1.4 Folders

The Folders tile in *My Home* contains the reports that you have access to. The BI platform supports both public and personal folders.

Public folders are typically created by a system administrator. Depending on your access rights, you can create personal folders in the BI Launch Pad.

You can navigate to the required folder in two ways:

#### Tree View

- On expanding the tree view, sub folders and child folders are shown, if any.
- When you select a folder in the tree view, the folder gets highlighted, and its content is displayed.

#### **List View**

List view contains two panels:

About Panel

The about panel consists of the breadcrumbs to navigate between folders. You can view the folder type, folder description, and the last updated time stamp.

#### Content Panel

The content panel lists all reports present in the selected folder. Based on the report type, you can view its description and last updated details.

The icon allows you to perform various actions based on the report type.

#### Context menu

- Earlier when you selected a listed document or a report, the icon helped you to perform certain actions such as View, View Latest Instance, Properties, Modify, Schedule, Mobile Properties, History, Categories, Remove From Favorite, Details, Organize, Send To, and Delete.
- The context menu now allows you to right-click over the document or report itself to view the dropdown menu with the actions you want to perform.
- When you select single report or a document, the right-click options are report or document specific.
- When you select multiple reports or documents of same type, you get content specific right-click options such as *Organize*, *Send To*, and *Delete*.
- When you select reports or documents of different content types, the right-click options are reduced to Organize (Cut, Copy) and Delete.

#### · Drag and Drop the files

You can now drag and drop or move files to a folder within a folder. To do so, select the files to move, then drag and drop it in the desired folder.

If you want to move a file from one folder to a sub folder of another folder, select the file and move the cursor to the folder you want to move it in. The parent folder auto expands to show the sub folders available in it. Select the folder and drop your file in it.

• The  ${f C}$  icon allows you to refresh the page. You can perform sorting (Ascending/Descending) based on the *Title* and *Last Updated* columns in the table.

#### ① Note

In the Folders page, you can:

- upload a hyperlink object, and a local document.
- create a publicaiton.
- select multiple reports, and perform various operations based on the type of the reports.

#### Tile View

The Tile view and Grid view was available only in *All Favorites*. Now the Tile and Grid view is available in all the *Folders* as well.

#### 3.2.1.5 BI Inbox

The BI Inbox lets you view and manage system alerts and administrator notifications.

The *BI Inbox* tile contains the unread alerts and notifications. You can select one of these options for an alert or a document in the BI Inbox:

- Mark as Read
- Mark as Unread
- Mark as Favorite
- Delete

In the BI Launch Pad, you can send the required report to recipient's BI Inbox. You can share the report to a single user or user group. To know more about sharing the content objects to BI Inbox, refer to the Sending Content Objects [page 41] in Organising Content Objects section.

## 3.2.1.6 Recycle Bin

The Recycle Bin tile in My home lists the deleted content objects.

When you delete a content object from the system, it is moved to the Recycle Bin, where it is temporarily stored until the Recycle Bin is emptied. This helps you to recover the accidentally deleted objects and restore them to their original locations. You can check the properties of a report and restore multiple reports.

#### ① Note

When you delete an instance, it is non-recoverable as it gets permanently deleted.

#### 3.2.2 Favorites

You can mark the content objects as favorites for easy accessibility. The *Favorites* group contains all the objects which are marked as favorites.

When you mark an object as favorite, it is displayed in *Favorites* tab flagged with the  $\bigstar$  (favorite) icon. The tile view and list view helps to manage the favorite objects and you can select one or more content objects to perform various actions depending on the nature of the content object.

To edit and rearrange the favorites, follow the below steps:

- 1. In the BI Launch Pad home page, go to Favorites.
- 2. Click View All Favorites.
- 3. Click the (Edit) icon to rearrange favorite objects.

You can also unmark the favorite icon to remove an object from the favorites.

#### ① Note

Starting in 4.3 SP3, if any folder or document is added to the *Favorites* section, the navigation of folders and documents is allowed within the *Favorites* section. Organizing functionalities like cut, copy, and paste are not allowed.

#### 3.2.3 Recent Documents

The *Recent Documents* tab lists the recent documents that you have viewed; sorted by type, with the most recently viewed document at the top (both in tile and list view).

In the Home page, the *Recent Documents* tab displays few recently viewed documents. Through *View All Recent Documents*, you can see the entire list of recent documents. You have two views: a list, and a tile view.

The Recent Documents page dispalys the total count of documents listed. The  ${\bf C}$  icon allows you to refresh the page. You can perform sorting (Ascending/Descending) based on the *Title*, *Type* and *Last Updated* details

in the table (in list view). The \*\*\* icon allows you to perform various operations based on single or multi-selection of the content objects. Depending on the nature of the selected content objects, actions are available to perform on them.

## 3.2.4 Recently Run

In the BI Launch Pad, the *Recently Run* tab allows you to view the recent document instances created for the scheduled content objects.

The Recently Run page displays total count of the available document instances. You have both the tile and list

view to manage the instances. The icon allows you to perform various operations based on single or multiple selection of the document instances. You can perform the below actions depending on the nature of the instances:

- View
- View Latest Instance
- Properties
- Mobile Properties
- Details
- Send To
- Delete

In the tile view, the details such as *Title*, *Type*, *Latest Schedule Date and Time*, and is displayed on the tiles. This provides an easy accessbility to manage the document instances.

#### Status indication

You can now view the **Success or Failed** status indication for the recently run documents displayed on the bottom of each run document in the *Recently Run* pane.

Previously, the *View All Recently Run* option redirected you to the *All Recently Run* page to view the recently run documents.

Whereas, the *View All Recently Run* option now redirects you to the *Schedule Instances* page to view the recently run documents.

# 3.2.5 Applications

The BI Launch Pad is an integration point between the repository and the SAP BusinessObjects applications:

You can work with the following default Applications available inside the BI Launch Pad:

- SAP Analytics Cloud
- Analysis edition for OLAP
- Information Steward
- Crystal Reports for Enterprise
- BI Workspace
- Web Intelligence
- BEx Analyzer

In the BI Launch Pad, you can start an application and then create, view, and edit corresponding objects, and save your changes or new objects directly to the repository. The applications available and the tasks you can perform in them are determined by the access rights provided by your system administrator.

# 4 Push Hub Assets to SAP Analytics Hub

You can add BI assets to a new category *Hub Asset*, and access the same BI assets from SAP Analytics Hub.

Any document mapped to *Hub Asset* category is automatically pushed to the *SAP Analytics Hub*.

Please refer the prerequisites before you add BI assets to a new category.

① Note

Publications are not supported in the *Hub Asset* category.

# 5 Personalizing your BI Launch Pad

Your personal preferences determine how you log on to BI Launch Pad, which views appear, and which settings apply to viewed objects.

You can manage all actions concerning your BI Launch Pad account by choosing the & (User Settings) icon on the Global Navigation Bar.

On choosing & (User Settings), you are directed to the User Settings page of the BI Launch Pad.

The access rights assigned by your system administrator determine whether you can set your own preferences. Before you start using BI Launch Pad, check whether your preferences have been set and configure them, if needed.

#### Note

If the Account Preferences and Application Preferences menu is not available in BI Launch Pad, you do not have the Change preferences for objects that the user owns right assigned in the Central Management Console (CMC) in the BI platform. To request access, contact your system administrator.

# 5.1 Managing your Account

You can view general information related to your user account, by accessing the Statings of the BI Launch

Under the *User Account* tab, you'll find three subtabs: *Account Information*, *Database Credentials*, and *Authorization Tokens*.

The Account Information subtab gives access to your account information, such your full name, email, etc. You can also change your password if needed. For more information, check out Accessing your Info [page 27], and Changing your Password [page 27].

The *Database Credentials* subtab displays the data source reference available to your user account. For more information about database credentials and data source reference, check out Enhanced Credential Mapping in the *Business Intelligence Platform Administrator Guide*.

The *Authorization Tokens* subtab lists the OAuthentication providers that have access to the BI platform. There, you can generate, delete, or extend tokens for all authorization references registered in the BI platform using the dedicated options. This is linked directly to the *Authorization References* application in the CMC. For more information, check out Authorization Server Configuration.

# 5.1.1 Accessing your Info

To view your user account information, perform the following steps:

1. From the *Home* page, choose



(User Settings) on the global navigation bar.

The User Settings page opens.



2. Choose

(Settings)

The Settings dialog box appears. By default, the User Account menu option is selected and Account Information is displayed in the User Account tab.

The details displayed under Account Information include Account Name, Full Name, Email, Description, and the Password Last Changed On date.

#### ① Note

- The \_\_\_\_ (User profile) avatar (icon) on the global navigation bar is now revised to a text avatar. When you hover on the letter displayed for the User, it displays the *Account Name* defined in the *Properties: Administrator* page in CMC. For example,
  - If the Account Name is defined as Administrator, the text avatar in the BI Launch Pad is shown as A in the User icon and the hover as Administrator.
  - If the *Full Name* below *Account Name* is defined as *John Cesar*, then the text avatar in BI Launch Pad is shown as *JC* and the hover shows the full name.
  - If the *Full Name* is defined as *John Cesar Shepherd*, then the text avatar in BI Launch Pad is shown as *JS* and the hover shows the full name.
- You can find the Account Information of the user in the Settings page, the User Account tab.
- Previously, when you click *Settings*, you were redirected to the *Account Preferences* page. Now, when you click *Settings*, you are redirected to the *User Account* page.
- Previously, the name of the application BI Launch Pad was displayed in the centre of the tool bar.
  But, if you wanted to view the Currently Open Documents and the document had a longer name,
  then the full name wasn't displayed due to space constraints.
  Now, the Welcome: Administrator greeting in the tool bar is removed to increase the space and be
  able to display the full name of the document.

# **5.1.2 Changing your Password**

You can choose to change your account password, at any time, for the BI Launch Pad.

You must have appropriate access rights to change passwords. If you have access rights but cannot change your password, contact your system administrator.

#### ① Note

If the Account Preference and Application Preference menu is not available on the header panel in the BI Launch Pad, you do not have the *Change preferences for objects that the user owns* right assigned

in the Central Management Console (CMC) in the BI platform. To request access, contact your system administrator.

To change your password, perform the following steps:

- 1. From the *Home* page, choose <u>8</u> (User Settings) on the Global Navigation Bar.
  - The User Settings page opens.
- 2. Choose (Settings).

The Settings dialog box appears. By default, the User Account menu option is selected and Account Information is displayed in the User Account tab.

The details displayed under Account Information include Account Name, Full Name, Email, Description, and the Password Last Changed On date.

- 3. In the Account Information pane, choose Change Password.
- 4. In the Old Password field, enter your old password.
- 5. In the New Password field, enter your new password.
- 6. In the Confirm New Password field, enter your new password again.

#### ① Note

Password must contain a minimum of 6 characters including (at least) one numeric, one special character, and one uppercase letter.

- 7. Choose Change Password.
- 8. Choose Save.

You have successfully changed your account password.

#### ① Note

When you, or your administrator, change your password, you are logged out of all your current sessions and are directed to the *Login* page to log in again.

# **5.1.3 Defining Database Credentials for a Data Source Reference**

A data source reference should have a database credential defined in the user properties to allow the user to connect to a database.

Data source referencing is now available in BI Launch Pad as well, where you can update and map your user credentials. The database credentials is synced between CMC and BI Launch Pad.

Follow the steps below to define the database credentials in BI Launch Pad.

- 1. Log in to BI Launch Pad.
- 2. Go to 8 (User Settings), click the \$\partial (Settings) option from the dropdown.

The Settings window is displayed.

3. Click User Account (Administrator).

The User Account page opens with two tabs: Account Information, Database Credentials, and Authorization Tokens.

4. Click Database Credentials.

You can view the synced data of the user from CMC displayed here.

Note

You cannot edit the Data source reference details.

But you can edit the Account Name, Password, and Confirm Password fields.

When you change your password, a toast message is displayed on the screen *Changes to some preferences* will take effect after the page reloads.

5. Click Save and Close to save the mapped credential changes.

### **5.2** Account Preferences

BI Launch Pad account preferences determine what appears in the default view of the software.

You can specify your account preferences by navigating to the Settings page.

# 5.2.1 Setting Page Preferences

You can set your preference for the landing page of the BI Launch Pad from the Home page.

- 1. On the Home page, choose 8 (Profile) on the Global Navigation Bar.
- 2. On the User Settings page, choose **②** (User Settings)
- 3. In the Settings dialog box, select Account Preferences.
- 4. In the Account Preferences, select the Page Preferences tab.
- 5. You can set or edit your home page and column preferences in BI Launch Pad. See the next topics Setting Landing Page Preferences [page 29] and Setting Column Preferences [page 31] for more information.

# **5.2.1.1** Setting Landing Page Preferences

You can customize your home page through Select Home Page option.

Perform the following steps to customize your home page:

1. In Account Preferences tab, disable the Use Administrator Provided Settings option.

#### ① Note

The *Use Administrator Provided Settings* option is enabled by default and the application uses the default administrator-configured preferences. You can modify the administrator preferences by disabling this feature.

2. Perform the following steps based on the Landing Page Preferences you choose.

#### Home Page options

#### **Next Steps**

#### **Custom Page**

- 1. In the *Landing Page* field, select one of the following options:
  - Documents
  - Schedules
  - Categories
  - Inbox
  - Folders
  - Recycle Bin

If you choose *Folders*, select a folder to display as the landing page.

- 2. In the List Documents As field, you can select Tile View or List View (Default).
- 3. In the *Landing Page* field, select one of the following options:
  - Show All
  - Documents
  - All Categories
  - Favorites
  - Recently Viewed
  - Recently Run
- 4. In the *Choose Column to display* field, select a column:
  - Type
  - Last Run
  - Instances
  - Description
  - Created By
  - Last Updated
  - Created On
  - Location (Categories)
  - Favorites (Home Page)
  - Status (Schedule)
  - Instance time (Schedule)
  - Folder Path

Home Page options	Next Steps
Custom Group	In the Landing Group field, select one of the following options:  • Favorites • Recent Documents • Recently Run • Applications  For List Document as field, you can now have Tile View for Favorites, Recent Documents, and Recently Run folders.
Document	In the <i>Select Document</i> field, choose a document or a publication from <i>My Folders</i> or <i>Public Folders</i> to view it as the default landing page.
Category	In the Select Category field, choose a category from Personal Categories or Corporate Categories to view it as the default landing page.
	If you select a category, the default view is a Grid view.

Once you have customized the page preferences, refresh the BI Launch Pad to see the changes.

# **5.2.1.2** Setting Column Preferences

You can customize the columns that appear in the list view of any BI Launch Pad asset such as *Documents, Folders,* or *Categories*.

1. In Account Preferences tab, disable the Use Administrator Provided Settings option.

#### ① Note

The *Use Administrator Provided Settings* option is enabled by default and the application uses the default administrator-configured preferences. You can modify the administrator preferences by disabling this feature.

- 2. In Column Preferences, you can Select the columns to display from the dropdown as per your requirement.
- 3. Select Save.

You have saved your preferences successfully.

#### 5.2.1.3 View the document

Select an option to View the Document.

- 1. Within BI Launch Pad: Select this option to view a document in the BI Launch Pad portal.
- 2. In a new browser tab: Select this option to view a document in a new browser tab.

#### ① Note

You can now define the page size in BI Launch Pad through the Set the maximum number of items per page option.

Click Save to save your preferences.

# **5.2.2 Setting Preferred Viewing Locale and Time Zone Preferences**

Your Preferred Viewing Locale (PVL) and time zone preferences determine how dates, times, and numbers are formatted in the BI Launch Pad. For multilingual objects, the PVL also sets the language used to display an object's name and description. If an object has multiple translated names and descriptions, the display language is determined as follows:

- 1. The system displays the name and description that correspond to the user's PVL. The BI platform may use a default fallback locale, but it is typically a variation of the user's PVL. For example, if the PVL is French (Canada) and the object does not have a translated name and description in Canadian French, the platform will use French (France).
- 2. If no PVL is set, the platform displays the name and description in the same language as the product locale.
- 3. If option 1 or 2 is not feasible, the platform displays the name and description in the object's source language.

Selecting the PVL and time zone ensures that scheduled objects are processed in the time zone you are working in.

Before scheduling objects, check the time zone selected for the BI Launch Pad. The default time zone is local to the web server that is running the BI platform, not to the Central Management Server (CMS) computer that your machine connects to.

To set your PVL and time zone, perform the following steps:

- 1. From the Home page, choose & (User Settings) on the Global Navigation Bar.
  - The User Settings page opens.
- 2. Choose \$\price \text{(Settings)}.

The Settings dialog box appears.

- 3. From the General pane on the left, choose Account Preferences.
- 4. In the Account Preferences pane on the right, choose the Locale and Time Zone Preferences tab.
- 5. In the *Preferred Viewing Locale* field, select the desired preferred viewing locale.

- 6. In the Current Time Zone field, select the desired time zone.
- 7. In the *Product Locale* field, select the desired product locale.
- 8. Choose Save.

# 5.3 Customizing the Appearance of the BI Launch Pad

You can customize the appearance of the BI Launch Pad.

- 1. Log in to the BI Launch Pad.
- 2. Go to Settings Appearance .
- 3. In the *Themes* list, choose a theme:
  - SAP Belize Deep
  - SAP Belize
  - SAP Belize High Contrast Black
  - SAP Belize High Contrast White
  - Quartz Light
  - Quartz Dark
  - Quartz HCB
  - Quartz HCW
- 4. Click Save.
- 5. Refresh the BI Launch Pad to see the theme you selected.

#### Note

To enable this feature in the BI Launch Pad, make sure the CSS rule in properties file is theme.enable=default.

# 5.4 Customizing the Home Page of the BI Launch Pad

Both Administrator and users can now customize the home page of the BI Launch Pad, and the settings for a user group in CMC.

To do so, you have to turn off the Administrator Provided Settings of the home page preferences.

Perform the following steps to customize your home page:

- 1. On the Home page, choose **&** (Profile) on the Global Navigation Bar.
- 2. On the *User Settings* page, choose **(***User Settings*)
- 3. In the Settings dialog box, select Account Preferences.
- 4. In the Account Preferences, select the Page Customization tab.
- 5. You can choose the required tabs from the below list to display on your home page.

- Home
- Favorites
- Recent Documents
- Recently Run
- Applications
- 6. You can also choose the required tiles to display in your **Home** group of the home page.

Following tiles of **Home** group are available for your selection:

- All Documents
- Categories
- Instances
- Recycle Bin
- BI Inbox
- Folders

Once the customization is done, reload the BI Launch Pad to see the changes.

# **6 Organizing Content Objects**

The BI platform supports both public and personal folders and categories.

Public folders and categories (accessible to all users) are typically created by a system administrator. Depending on your access rights, you can create personal folders and categories in the BI Launch Pad.

#### Sorting folders and documents

Sorting is the process of arranging the folders and documents in a systematic way in alphabetical order. You can now sort the folders first followed by the documents, sequentially in ascending or descending order alphabetically based on the following attributes:

- Title
- Type
- Last Modified
- Date Modified
- Current Open Documents

*Managing Shortcuts*: The existing shortcut objects created in the old BI Launch Pad can be listed in new SAP BI Launch Pad (4.3), and can be viewed in the Unified viewer.

# 6.1 Creating a Folder

To create a folder, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. From the Home page, choose the Folders tile.
- 3. In the Folders page, navigate to the location where you want to create a folder:
  - To create a personal folder, expand the My Folders drawer.
  - To create a public folder, expand the *Public Folders* drawer.
- 4. When you are at the desired location, from the menu bar, choose + (Create/Upload Objects).
- 5. Select the New Folder option from the drop-down menu.
- 6. In the Create folder dialog box, enter:
  - a. In the Name field, enter a name for the new folder.
  - b. In the *Description* field, enter an optional description for the new folder.
  - c. In the Keywords field, enter optional keywords for the new folder.

7. Choose Save.

You have now successfully created a new folder.

## **6.2** Uploading Documents to a Folder

To upload a document to a folder, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. In the Home tab, choose the Folders tile.
- 3. In the Folders page, navigate to the folder in which you want to upload the document.
- 4. Click + (Create/Upload Objects) icon and select the *Upload Document* option.
- 5. In the *Upload document to My Folders* dialog, browse and upload the required file.
- 6. Enter the document details such as *Title*, *Description*, and *Keywords* (if any). Optionally, you can map the document to required categories.
- 7. Click Add.

The document is uploaded to the folder.

#### ① Note

- You can replace any third-party documents (Word, PDF, Text etc.,) with a new document by Replaceoption.
- You can map the documents to either Personal Category or Corporate Category.
   Once the document is uploaded and mapped to a specific category, then you can find the document by navigating to the mapped category.

# 6.3 Setting the Properties of a Folder

To set properties for a folder, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. From the Home page, choose the Folders tile.
- 3. In the Folders page, navigate to the desired folder for which you want to set properties.
- 4. Choose (More) corresponding to the desired folder.
- 5. Select *Properties* from the drop-down menu.
- 6. In the *Properties* dialog box, enter/edit the desired properties.
- 7. Choose Save.

You have now successfully set properties for a folder.

# 6.4 Moving or Copying a Folder

You can cut or copy a folder and paste it to another folder location.

To move a folder from a source to a target location, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. From the Home page, choose the Folders tile.
- 3. In the Folders page, navigate to the required folder.
- 4. Choose (More) corresponding to the desired folder and choose Organize Cut from the drop-down menu.

#### ① Note

If you want to retain the folder in the source location and copy it to the target, choose *Organize Copy* .

- 5. Navigate to the target folder (where you want to move the copied/cut folder).
- 6. In the target folder location, choose (More) from the page menu bar and select *Paste*.

The chosen folder is moved or copied to the target folder location and appears in the list of contents.

### 6.5 Deleting a Folder

To delete a folder, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. From the Home page, choose the Folders tab.
- 3. In the Folders page, navigate to the desired folder.
- 4. Choose (More) corresponding to the desired folder and choose *Delete* from the drop-down menu.

The chosen folder is deleted.

### 6.6 Mapping of Default Values from CMC to BI Launch Pad

Once you configure *Default Settings* in the Central Management Console (CMC), they are reflected as default values in the BI Launch Pad.

- 1. Log on to the CMC.
- 2. Right-click a report and choose *Properties*.

- 3. Configure Default Settings and click Save.
- 4. Log on to or refresh the BI Launch Pad.
- 5. Select the report for which you configured the default properties in the CMC, click (More) and choose *Schedule*.

The default properties you configured in the CMC are displayed in the *Instances* tab.

### 6.7 Accessing a Link to a Folder or Category

A folder link provides direct access to a public folder or a category in the BI Launch Pad. You can send the link to someone to give them access to the folder or category, if they have the appropriate access permissions.

#### Note

A folder link is not available for personal categories.

- 1. Log on to the CMC and select Applications Processing settings.
  - Under Set Default folder for New BI Launch Pad URL, the default folder link is visible as: http://(Host Name): (Web Application Server Port)/BOE/BI?startFolder=%SI\_CUID%
- 2. Replace Host Name with the valid host name or the IP address.
- 3. Refresh the BI Launch Pad.
- 4. Go to the Folders tile and locate the folder or category to associate with the folder link.
- 5. Right-click the folder or category and select *Details*.
  - A folder link for the respective folder or category is displayed.
- 6. Copy the folder link and click *OK* to close the dialog box.
- 7. Share the copied folder link with the recipients, with the instruction to contact a system administrator if they receive an error message about their access rights.

Recipients must have access rights to a folder or a category to open its link.

When a recipient opens a folder link in a browser, the BI Launch Pad logon screen appears if the session is not available. After the recipient enters valid logon credentials, the BI Launch Pad opens to the folder or category.

If the recipient has no rights to access the folder or category, an error message is displayed.

In this case, the recipient should contact a system administrator.

### 6.8 Quick Access to Content Objects

### 6.8.1 Working with Hyperlinks

Hyperlinks make it easy to access a content object. They let you view the content object in the *Unified Viewer* or through *Open Document*.

- 1. Click the Folders tile, open a folder and click "+" (Create/Upload Objects)
- 2. Click Hyperlink.
- 3. In the *Create Hyperlink* dialog box, enter a title for the hyperlink.
- 4. Enter the description and keywords for the hyperlink.
- 5. Enter the URL of the desired content object.
- 6. To assign the hyperlink, click *Assign to Category* and choose one or more categories from *Personal Category* or *Corporate Category*.
- 7. Click Save.

The hyperlink appears as a content object in the selected folder.

You can perform the following actions on a hyperlink:

- View You can view the hyperlink InfoObject.
   You can view hyperlinks to content objects through Open Document. Hyperlinks to Web Intelligence documents and Lumira documents can be viewed in the Unified Viewer as well.
- *Properties* You can view and edit the title, description, keywords, URL, and Assign to Category fields of the hyperlink.
- Mobile Properties You can view a hyperlink on mobile devices.

#### Note

You must set mobile properties before sending the hyperlink to the BI Inbox.

- Categories You can assign the hyperlink InfoObject to a desired category.
- Mark As Favorite You can mark the hyperlink InfoObject as favorite for easy access.
- Details You can view the details of the hyperlink such as Description, Keywords, Categories, Folder path, and Document link.
- Send To You can send the hyperlink InfoObject to the BI Inbox.
- Delete You can delete the hyperlink InfoObject.

#### 6.8.2 External Links

You can view a web page in the Unified Viewer through an external link.

- 1. Click the Folders tab, and open a folder
- 2. Click + (Create/Upload Objects).
- 3. Select Hyperlink.

- 4. In the Create Hyperlink dialog box, enter a title for the external link.
- 5. Enter the description and keywords for the external link.
- 6. Enter the URL of the desired webpage.
- 7. Click Assign to Category.
- 8. Select the categories from Personal Category, or a Corporate Category to assign the external link.
- 9. Click Save to create the external link for the web page chosen.

Once the external link is created, it appears as a content object in the selected folder.

#### ① Note

You can view an external link in the Unified Viewer, where you can perform all the actions that are mentioned for a hyperlink.

The https links are automatically opened in new window.

### 6.8.3 Creating a Shortcut to a Content Object

To save navigation time, create shortcuts to frequently viewed content objects.

- In the Folders page, choose a content object to create a shortcut. Click the (More) icon and select
   Organize Copy Shortcut

A shortcut object is now created. Based on the type of the content object for which the shortcut is created, various actions can be performed.

### 6.8.4 Copy Open Document URL

To save navigation time, you can now quickly copy the opendoc link from the selected content object in two ways.

- 1. In the Folders page, select a content object to create a shortcut.
- 2. Right-click and select the option *Copy Opendoc Link* from the list displayed.

  A toast message appears on the screen: Opendoc url successfully copied to clipboard.

#### ① Note

You can also copy the opendoc link through Details.

- 1. Select a content object, right-click and select the option *Details* from the list displayed.
- 2. The Details screen appears with the content object information.
- 3. Copy the Document Link.
- 4. Click Close.

### 6.8.5 Pinning a Report for Future Viewing

You can now pin a document or instance that you frequently view in the BI Launch pad.

- 1. Pinning the document:
  - Open an object, right-click the object or instance and select View.
  - If the report is opened, it becomes available in the quick access dropdown of the BI Launch Pad.
  - Click on Pin icon beside the report of the report in dropdown.
  - Now the icon has changed to Pinned status.
- 2. Unpin the document
  - Click the quick access dropdown.
  - Click on the pinned icon beside the report.
  - Now the pinned icon has changed to the unpinned icon.

#### Limitations:

- 1. Promotion management does not support pinning of the reports.
- 2. Below supported objects for pinning
  - Webl
  - · Crystal reports
  - Lumira
  - Analysis Office
  - Hyperlink
  - Analysis for OLAP

#### ① Note

Pinning is currently not supported for Scheduling, Publications, Applications, and Folders which are available in Quick access dropdown.

### 6.9 Sending Content Objects

In BI Launch pad, you can send content objects to the below mentioned users or groups.

- 1. Log on to the BI Launch pad.
- 2. Select a content object and click (More).
- 3. Choose Send To Send to BI Inbox .
- 4. Similarly, you can send your content objects to other available options such as: *Google Drive, Microsoft OneDrive, Email, FTP*, and *SFTP*.

You can also search for a user or user group in the *Search* field with the username/user group name or full name of the user.

For more information, please refer Destinations [page 53]

In the search results, username/user group name is displayed in the *Title* column and the full name of the users or groups is displayed in the Full Name column.

# 7 Working with Categories

### 7.1 Creating a Category

Perform the following steps to create a category:

- 1. In the My Home tab, choose Categories tile.
- 2. Navigate to a location where you would like to create a category and select the Objects).

The Create Category dialog box appears.

- 3. In the Category Name filed, enter a desired name for the category.
- 4. (Optional) In the Description field, enter a description for the category.
- 5. Select the desired *Type* of the category.
- 6. (Optional) In the Add Tags field, enter desired tags for the category.
- 7. (Optional) In the Upload Image field, browse and choose an image file to upload to the category.

#### Note

The supported image types are as follows: .jpeg/.jpg, .png, .gif, .svg. The maximum image size supported is 100 KB.

8. Choose Save.

After the folder or category is created, you can add objects to it, if you have appropriate access rights to the objects.

### **7.2** Opening a Category

Perform the following steps to open a category:

- 1. In the Home tab, select the Categories tile.
- 2. In Categories page, choose the desired category to open.

### 7.3 Deleting a Category

Perform the following steps to delete a category:

- 1. In the Home tab, select the Categories tile.
- 2. In the desired category, choose (More).
- 3. Select Delete.

The desired category is now deleted.

### 7.4 Marking a Category as Favorite

Perform the following steps to mark a category as favorite:

- 1. In the Home tab, select the Categories tile.
- 2. In the desired category, choose (More).
- 3. Select Mark As Favorite.

The desired category is now marked as your favorite.

# 7.5 Assigning Content Objects to a Category

To assign a content object to a category, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. In the Home page, choose the Folders tile.
- 3. In the *Folders* page, navigate to the folder that contains the content object that you want to assign to a category.
- 4. Click (More) on the corresponding object,.
- 5. Select Categories from the drop-down menu.

The Assign to Category dialog box appears.

6. Choose the categories that you want to assign the content objects to and select OK.

You have now successfully assigned a content object to a category.

### 8 Information Classification

In the BI Platform you can classify Web Intelligence and Crystal Report documents by utilizing Sensitivity labels defined at your organization's Azure Policy Server within the Azure Information Protection Platform deployment in your Microsoft Azure tenant.

If your Administrator has enabled the Information Classification functionality, you will have access to the *Sensitivity* option in the right-click menu for Web Intelligence and Crystal Report documents within BI Launchpad.

#### ① Note

- Information Classification functionality is available only on Windows Platform.
- The feature of applying Sensitivity labels is only supported for *Web Intelligence* and *Crystal Report* documents.
- To view the sensitivity labels, you must be granted the Information Classification Right by the administrator.

### 8.1 To apply classification

- 1. Login to BI Launchpad.
- 2. Navigate to Folders.
- 3. Right click on a document you wish to classify.

You can only classify Web Intelligence or Crystal Report documents.

- 4. Select Sensitivity.
- 5. From the dialog box, select a classification label of your choice.
- 6. Click Save.

#### ① Note

- Only Owner of the document can apply the Sensitivity Label to the document.
- If a document is classified and subsequently scheduled, the output of the scheduled instance will automatically adopt the same classification label. This occurs when the scheduled output format is chosen as either Microsoft Excel or Adobe Acrobat during the scheduling process.

# 9 Scheduling Content Objects

### 9.1 Concepts

Multiple elements and parameters can help you schedule the content objects.

The following sections provide you with details about concepts related to scheduling the reports.

	For more information about	Read
Get Started	Instances	Instances [page 46]
	Prompts	Prompts [page 49]
	Formats	Formats [page 50]
	Destinations	Destinations [page 53]
	Delivery rules for sheduled documents	Delivery rules for scheduling [page 61]
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#### 9.1.1 Instances

An instance is a single version of a document or publication. For each scheduled document that runs, the BI Platform saves a history of instances to the default Enterprise server.

For each document or publication, the list of instances is available in the History dialog. You can also access the

list on instances by clicking the *Instances* tile on the home page. In the BI Launch Pad, click and select *History* in the contextual menu. The history displays information such as:

- Instance time
- Title
- Status
- · Created by
- Type
- Parameters

You can view discussions for an instance in the *History* dialog or in the *Collaboration* drawer of the feed panel, if the BI Launch Pad is integrated with SAP Jam.

## 9.1.2 Replace

When you are trying to reschedule a recurring instance, you can replace the schedules.

In the schedule page of BI Launch Pad, you can even reschedule any recurring instance whenever required. To ease your rescheduling process, you have *Replace* option.

This lets you replace an existing schedule or to create a new schedule from an existing schedule.

In the schedule page, you can choose among these oprtions per your need to replace a schedule:

- Replace existing schedule.
- Create new schedule from an existing schedule

By default, you can create new recurring schedule with options set in recurring schedule from which it is triggered.

#### 9.1.3 Recurrence

The recurrence pattern defines how often you want the BI Platform to run a document.

Option	Description
Now	Immediately runs the document once.
Once	Runs the document once at a specified time. If you schedule a document with events, it will run once if the event is triggered between the start and end times.
Hourly	Creates an instance every N hours and X minutes between the interval of dates you specify.
Daily	Runs the document once every N days between the interval of dates you specify.
	The first instance will be created at the specified start time, and instances will be created every N days at that time until the document stops running at the specified end time.
Weekly	Runs the document each week on selected days between the interval of dates you specify.
	The first instance will be created at the specified start time, and instances will be created each week on those days at that time until the document stops running at the specified end time.
Business Hours	Runs the document at a specific interval, every N hours, between a start and end time. You can also specify whether you want the document to run every day of the week, or on specific days, and set dates between which the document you run regularly (between February 13th 2020 and June 12th 2020 for instance).

otion Description	
Monthly	Runs the document once every N months between the interval of dates you specify.
	The first instance will be created at the specified start time, and instances will be created every N months at that time until the document stops running at the specified end time.
Specific Day of a Month	If set to <i>Day of the month</i> , creates an instance each month on the specified day, at the specified start time. The first instance will be created at the specified start time, and instances will be created on the specified day of each month at that time until the document stops running at the specified end time.
	If set to <i>Week-day of the month</i> , you can select a specific day the of week in the month (for example, the first tuesday of the month, the third monday of the month and so on).
Calendar	Creates an instance on each calendar date you specify at a specified start time.
	① Note
	Calendars can't be created in the BI Launch Pad. They must be created in the Central Management Console first before you can see them in the BI Launch Pad. See Creating a calendar for more information.
	_

# 9.1.3.1 Modifying the Default End Date of a Recurrence Pattern

You can modify the default schedule *End Date* for recurring instances to a specific value through the global.propeties file of the application.

- 1. Navigate to the global.properties file from your BOE installation folder.
  - For example: C:\Program Files (x86)\SAP BusinessObjects\tomcat\webapps\BOE\WEB-INF\config\default\global.properties
- 2. Open the global.properties file in a text editor.
- 3. Search for the property schedule.end.year, and change the value to any specific number as per your requirement.

#### ① Note

The default *End Date* value should be a whole number. For example, schedule.end.year=2

4. Save the global.properties file.

#### ① Note

The changes you make, affect only the new schedules and not any recurring schedules or saved publications.

5. Restart the application server.

The default *End Date* is now configured to a new value.

### 9.1.4 Prompts

A prompt is a filter in the form of a question displayed by Web Intelligence that you answer by selecting specific values.

When you answer a prompt, it determines the data displayed in a report. If you are working in sales for example, and a prompt asks you to select a region, the document will only display data related to the region you selected.

When a document is scheduled, prompts can have static values and are specified when creating the scheduling job. For SAP Business Explorer (SAP BEx) queries, you can fill prompts dynamically using BW variables default values. This mechanism supports any type of SAP Business Warehouse (SAP BW) default values including SAP exit variables.

The support of dynamic prompt values is also available for SAP HANA variables and universe prompts parameters that contain dynamic expressions in their default values.

#### ① Note

To have dynamic prompt values in a scheduled document on BEx, make sure that:

- You select the Use BEx query defined default values at runtime option in the Variable Manager wizard.
- You purge document data using the Purge Last Selected Prompt Values option.
- You purge the prompt(s) value(s) when creating the scheduling job.

The way that options appear in the tab might differ from a document to another, depending on how the system administrator has configured the prompts.

#### ① Note

If you cannot see the *Prompts* tab, that is because the document you are scheduling doesn't contain prompts.

#### Constant and dynamic values processing

You can modify a prompt's value by clicking either *Modify* to edit a value, *Constant Value* or *Dynamic Value* to set it to dynamic or constant.

Constant values are fixed values that don't require calculations. Web Intelligence can schedule documents with constant values immediately.

Dynamics values are processed based on other documents to filter and compute the values.

SAP BEx variables, SAP HANA variables and Universe variables can support dynamic values. Dynamic values contain expressions and require calculations at runtime. Web Intelligence delegates the calculations to the backend (either the Universe Information Engine, SAP BEx or SAP HANA), and schedules the document after the values are computed. SAP BW exit or customer exit variables for example are often used as dynamic variables in prompts.

#### Use prompts values from source document

You can select the *Use prompts values from source document* option. In this case, when the document is refreshed to generate the new instance, the prompts are answered with the answers saved in the document. These answers can have been provided and saved from a previous refresh or can be prompts' default values.

#### 9.1.5 Formats

You can save an instance in different formats after the BI Platform generates it.

When you schedule a document you can save an instance in the following formats:

• Web Intelligence: .WID

Microsoft Excel - Data: .XLSX

• Microsoft Excel - Reports: .XLSX

Adobe Acrobat: .PDF

• Comma Separated Values (CSV) - Data: .CSV

• Comma Separated Values (CSV) Archive - Reports: .ZIP

Plain text: .TXTHTML archive: .ZIP

When you publish a document you can save an instance in the following formats:

Web Intelligence: .WID
Microsoft Excel: .XLSX
Adobe Acrobat: .PDF
MIME HTML: .MHTML

#### **Excel Formats**

You can choose whether you want to scendule the whole reports or only the data providers. Select *Microsoft Excel - Data* to export the queries' data providers. When exporting, a sheet in the Excel file is created per selected data provider. The name of the sheet is the name of the data provider.

#### Note

This option is only available if the Export the cube's data security right is granted.

If you want to export indidual reports, select Microsoft Excel - Reports.

#### **CSV formats**

You can choose to save the following CSV options:

- CSV Data: Generates a CSV file with the contents of the data provider.
- CSV Archive Reports: Generates a ZIP file of CSV files. Each CSV corresponds to one report and contains the report data.

Regardless of the format you select, you can edit the CSV options by setting the *Default options* toggle to off, and specify a text qualifier, a column delimiter and the charset. In the column delimiter drop down, you can also directly type in a custom charcacter you want to use, such as the pipe (|) for instance. If needed, you can generate one CSV file per data provider by checking the dedicated option.

#### **Chart resolution configuration**

When you schedule a document to save an HTML archive, you select the reports to include in the archive and make sure that each report has a unique name.

The HTML archive contains the following files and folders in a single ZIP file that you can download:

- A default index.html file that contains links to the reports in the archive. To see a report, you click the link with the report name.
  - You can replace the default index.html file with one you create to suit your business needs.
- A JavaScript file, report.js returns the report names from the document included in the archive. This script is used to generate the links in the index.html file.
- A sub-folder for each report in the archive. The sub-folder contains additional content for the report.

Note that your administrator manages the resolution (DPI) for charts rendered as pictures through scheduling in the C:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\java\lib\procWebiPublishing.properties file.

```
#webi scheduling/publishing properties
#Tue Dec 20 09:47:08 CET 2016
concurrency.minimum_documents_per_connection=20
processing.disable_refresh=false
concurrency.number_of_connections=1
filtering.keep_existing_filters=true
rendering.pdf.dpi=96
```

When the destination for a ZIP file is File System, FTP or Secured FTP and you are defining a schedule, you can choose between the options to automatically name the ZIP file based on BI Platform rule or to name it explicitly.

#### Related Information

Exporting documents, reports, or data

### 9.1.6 Caching

Each time the BI Platform runs a scheduled document, an instance is generated and saved in the Output File Repository System. You can select the format used to cache the document.

Before selecting a cache format, make sure that:

- A context is set in the Web Intelligence document. If there are multiple contexts, refresh the document with the correct context before scheduling it.
- Web Intelligence is selected as the output format for the document. If a different output format is selected, cache options will have no effect.

#### △ Caution

If you do not select a cache format, the platform will not cache the document.

#### **9.1.7 Events**

Event-based scheduling and publishing provides you with additional control over scheduled documents and publications. You can set up events so that documents are processed only after a specified event occurs.

To successfully schedule a document with an event, you need to create the event first and then schedule the document. After you have created the event, you can select it as a mandatory condition to trigger the scheduling job. If and only if the event occurs, the BI Platform triggers the scheduling job.

You create events in the Central Management Console (CMC), and then select them in the BI Launch Pad when you schedule documents. For more information on how to create event, refer to the dedicated sections of the SAP BusinessObjects Business Intelligence Platform User Guide.

### 9.1.8 Scheduling server group

You can set the default server to run the scheduled document.

There are three available options regarding the server group:

- Use first available server: Runs the document on the server with the most resources free at the time of scheduling. This is the default selection.
- *Give priority to a server group*: Runs the document on servers in a particular server group. If no servers in the selected server group are available, the document runs on the next available server.
- *Use this server group*: Runs the document only on servers in a particular server group. If no servers in the selected server group are available, the document runs on the next available server.

As a best practice, if your deployment of the BI Platform uses federation and you want to run the document at the site where it is located, check the *Run at origin site* option.

#### 9.1.9 Destinations

You can schedule a document instance to be sent to a specific destination.

In the schedule page, you can see different destinations such as BI Inbox, FTP and SFTP Server, File System etc.

You can now choose multiple destinations as per your needs at one go and schedule the report. Even an administrator can perform this operation from Central Management Console while scheduling any BI report. This lets you optimize the number of schedules.

The destinations available depend on the destinations your system administrator has enabled and on your access rights. If your administrator specified a destination for an object, that destination option is listed in the *Schedule* dialog box. You may be able to set options for the destination or to select a different destination. For most destinations, you must provide additional information.

#### ① Note

You can change options for the default Adaptive Job Server in the Servers area of the Central Management Console (CMC). For more information, refer to SAP BusinessObjects Business Intelligence Platform Administrator Guide.

#### △ Caution

The *Destination* tab can be slow to load when there are tens of thousands users existing in the system. If you experience this issue, please check SAP Note 2897486 to know why and how to fix it.

#### **Default Enterprise Location options**

Option	Description
Destination	Default Enterprise Location
	The scheduled job will run on the Output File Repository Server (FRS). You do not need to set additional options for this destination. Historical instances are saved to the default Enterprise server but not to any other destination.

## **BI Inbox options**

Option	Description
Destination	BI Inbox
Keep an instance in the history	Saves a copy of this instance in the document's history. This option in enabled by default.  If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.  Even when this option is unchecked, the history keeps the instances of scheduled documents that weren't sent because they failed to meet a delivery rule.
Use default settings	Uses the default Adaptive Job Server values for BI Inboxes.  If you do not want to use the default Adaptive Job Server values, disable the option, and set the destination recipient options that appear.
Available Recipients and Selected Recipients	In the Available Recipients list, select users or user groups to send the instance to, and click > to add the users or groups to the Selected Recipients list.
Find title (if available)	Enter a recipient's user name, full name, or email address in the <i>Find title</i> box to quickly locate the user in the <i>Available Recipients</i> list.
Target Name	<ul> <li>To use a system-generated file name for the instance, select <i>Use Automatically Generated Name</i>.</li> <li>To choose a file name for the instance, select <i>Use Specific Name</i>, and enter a name or select variables for the file name from the <i>Add placeholder</i> list. You can select from several types of variables: <i>Title</i>, <i>ID</i>, <i>Owner</i>, <i>DateTime</i>, (your) <i>Email Address</i>, and (your) <i>User Full Name</i>, and <i>File Extension</i>.</li> </ul>
Send As	<ul> <li>To send a shortcut to the instance to recipients, select Shortcut.</li> <li>To send a copy of the instance to recipients, select Copy.</li> </ul>

### **Email options**

Option	Description
Destination	Email
Keep an instance in the history	Saves a copy of this instance in the document's history. This option in enabled by default.  If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.  Even when this option is unchecked, the history keeps the instances of scheduled documents that weren't sent because they failed to meet a delivery rule.

Option	Description
Use default settings	Uses the default Adaptive Job Server values for emails.
	If you do not want to use the default Adaptive Job Server values, disable the option, and set the destination recipient options that appear.
From	Enter a return email address, or select variables for the email address from the <i>Add</i> placeholder list. You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , and (your) <i>User Full Name</i> . Click a variable to add it. Separate email addresses with a semicolon (;).
	This option might be unavailable depending on your system configuration.
То	Enter each email address that you want to send the instance to, or select variables for the email address from the <i>Add placeholder</i> list. You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , and (your) <i>User Full Name</i> . Click a variable to add it. Separate email addresses with a semicolon (;).
Сс	Enter each email address that you want to send a copy of the email and instance to, or select variables for the email address from the <i>Add placeholder</i> list. You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , and (your) <i>User Full Name</i> . Click a variable to add it. Separate email addresses with a semicolon (;).
Всс	Enter the email address of each undisclosed recipient, or select variables for the email address from the <i>Add placeholder</i> list. You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , and (your) <i>User Full Name</i> . Click a variable to add it. Separate email addresses with a semicolon (;).
Subject	Enter the subject of the email.
Message	For the body of the email, you can now customize your message content using the rich text editor with a custom toolbar having various formatting options.
	① Note
	When you insert an image in the email, the image gets downloaded automatically if both sender and reciever have access to the image link used.
Add Attachment	Select this check box if you want to add an attachment to the email message containing the instance.
File Name	To use a system-generated file name for the instance, check Use Automatically Generated Name.
	<ul> <li>To select the file name for the instance, check <i>Use Specific Name</i>, and enter a name or select variables for the file name from the <i>Add placeholder</i> list.</li> <li>Check <i>Add File Extension</i> check box to automatically add the file extension to the instance file name. If you do not add a file extension, you might be unable to open the document.</li> </ul>
Enable SSL	

### **FTP Server options**

Option	Description
Destination	FTP Server
Keep an instance in the history	Saves a copy of this instance in the document's history. This option in enabled by default.
	If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.
	Even when this option is unchecked, the history keeps the instances of scheduled documents that weren't sent because they failed to meet a delivery rule.
Use default settings	Uses the default Adaptive Job Server values for FTP Servers.
	If you do not want to use the default Adaptive Job Server values, disable the option, and set the destination recipient options that appear.
	You can change the values in the Servers area of the CMC. For more information, refer to SAP BusinessObjects Business Intelligence Platform Administrator Guide.
Host	Enter the IP address of the FTP server host computer where you want to send the instance.
Port	Enter the port of the FTP server where you want to send the instance. The default is <b>21</b> .
User Name	Enter a user name with access rights to upload the object to the FTP server.
Password	Enter the password required to access the FTP server.
Account	Enter the account required to access the FTP server.
	The account is part of the standard FTP protocol but is rarely implemented. Enter an account only if your FTP server requires it.
Directory	Enter the path to the FTP directory where you want to send the instance.
File Name	To use a system-generated file name for the instance, check Use Automatically Generated     Name.
	<ul> <li>To select the file name for the instance, check Use Specific Name, and enter a name or select variables for the file name from the Add placeholder list. You can select from several types of variables: Title, ID, Owner, DateTime, (your) Email Address, (your) User Full Name, and File Extension.</li> <li>Check Add File Extension to automatically add the file extension to the instance file name. If you do not add a file extension, you might be unable to open the document.</li> </ul>

## File System options

Option	Description
Destination	File System
Keep an instance in the	Saves a copy of this instance in the document's history. This option in enabled by default.
history	If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.
	Even when this option is unchecked, the history keeps the instances of scheduled documents that weren't sent because they failed to meet a delivery rule.
Use default settings	Uses the default Adaptive Job Server values for the file system.
	If you do not want to use the default Adaptive Job Server values, disable the option, and set the destination recipient options that appear.
User Name	Enter a user name with access rights to save files to the destination directory.
	You can specify a user name and password only for servers on Windows.
Password	Enter the user password that is required to access the destination directory.
	You can specify a user name and password only for servers on Windows.
Directory	Enter the path to a local hard disk location or mapped location or a UNC path to the directory where you want to send the instance.
	If you are scheduling a Web Intelligence document and want to create folders based on variables (such as the title of the instance, owner, date and time, or user names), use a placeholder. The placeholder is inserted after the text in the box.
File Name	To use a system-generated file name for the instance, check Use Automatically Generated     Name.
	• To select the file name for the instance, check <i>Use Specific Name</i> , and enter a name or select variables for the file name from the <i>Add placeholder</i> list. You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , (your) <i>User Full Name</i> , and <i>File Extension</i> .  Check <i>Add File Extension</i> to automatically add the file extension to the instance file name. If
	you do not add a file extension, you might be unable to open the document.

# **Google Drive options**

Option	Description
Destination	Google Drive

Option	Description
Keep an instance in the history	Saves a copy of this instance in the document's history. This option is enabled by default.
	If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.
	Even when this option is unchecked, the history keeps the instances of scheduled documents that weren't sent because they failed to meet a delivery rule.
Cloud Drive Folder Details	Enter the path to the Google drive directory where you want to send the instance.
File Name	• To use a system-generated file name for the instance, check <i>Use Automatically Generated Name</i> .
	• To choose the file name for the instance, select <i>Use Specific Name</i> . and enter a name or select variables for the file name from the <i>Add placeholder</i> list.  You can select from several types of variables: <i>Title</i> , <i>ID</i> , <i>Owner</i> , <i>DateTime</i> , (your) <i>Email Address</i> , (your) <i>User Full Name</i> , and <i>File Extension</i> .

### ① Note

When your authorization authentication is not complete in BI Launch pad, and you select scheduling to *Google Drive* or *Microsoft OneDrive*, it prompts for authentication.

## **Microsoft OneDrive options**

Option	Description
Destination	Microsoft OneDrive
Keep an instance in the history	Saves a copy of this instance in the document's history. This option in enabled by default.  If you want the BI platform to automatically delete the instance from the Output FRS to minimize the number of instances on the server, uncheck the option.
	Even when this option is unchecked, the history keeps the instances of scheduled documents that were not sent because they failed to meet a delivery rule.
Cloud Drive Folder Details	Enter the path to the Microsoft directory where you want to send the instance.

Option	Description	
File Name	To use a system-generated file name for the instance, check Use Automatically Generated     Name.	
	• To select the file name for the instance, check <i>Use Specific Name</i> . Enter a name or select variables for the file name from the <i>Add placeholder</i> list.  You can select from several types of variables: <i>Title, ID, Owner, DateTime</i> , (your) <i>Email</i>	
	Address, (your) User Full Name, and File Extension.	

### 9.1.10 Personalization

Personalization is the process of filtering data in source documents so that only relevant data appears to publication recipients.

With personalization, you alter the view of data but don't change the data being queried from the data source.

The following illustration explains how personalization works. You have created a document that contains different types of data, all included in the document: 1, 2, and 3. You have to send the document to three different recipients, each one them receiving a single type of data. The first recipient receives data of type 1, the second recipient receives data of type 2, and the third recipient receives data of type 3.

















To personalize source documents:

• For Enterprise recipients, make sure to apply a profile when you design a publication.

#### ① Note

Before you can use profiles to personalize data for Enterprise recipients, the profiles must be created and configured in the Central Management Console. If you need to add profiles, refer to Creating a profile for more information.

• For dynamic recipients, you can map a data field or column in the source document to data in the dynamic recipient source. For example, you can map a Customer ID field in a source document to the Recipient ID field in the dynamic recipient source.

To view a list of recipients who will receive unpersonalized publication instances after personalization, select Additional Options Advanced in the New Publication dialog box, and select the Display users who have no personalization applied check box.

#### **Related Information**

Personalized placeholders for source document names [page 60]
Personalized placeholders for email fields [page 61]
To select personalized placeholders for source documents
To select personalized placeholders for email fields
To personalize a document with a global profile target
To personalize a document by filtering fields

# 9.1.10.1 Personalized placeholders for source document names

A placeholder is a container for variable data. Adding personalized placeholders to source file names helps recipients identify filtered data.

Recipients who belong to multiple user groups with different personalization values can distinguish between multiple versions of the same source document, without viewing its contents. If a publication contains more than one source document, the *Add placeholder* list for *Use Specific Name* contains personalized placeholders only if all source documents were filtered on the same field.

The following personalized placeholders are available for reports:

- %fieldname\_VALUE%
  For example, when selecting the *Email Address* placeholder, %*SI\_EMAIL\_ADDRESS*% appears in the *Use Specific Name* box. At run-time, the placeholder is replaced by the value of the field used to filter the document. This placeholder is unique for each recipient.
- %fieldname\_NAME% For example, when selecting the *Title* placeholder, %*SI\_Name*% appears in the *Use Specific Name* box. At run-time, the placeholder is replaced by the actual name of the field. This placeholder is the same for all recipients.

#### **Related Information**

To select personalized placeholders for source documents

### 9.1.10.2 Personalized placeholders for email fields

A placeholder is a container for variable data. You can use personalized placeholders in the *Subject* box and the *Message* box when sending a publication via email.

For each filter used in a document during personalization, the following placeholders appear in the Add placeholder list:

- %Field Query 1-VALUE%
   At run-time, the placeholder is replaced by the personalized value used to filter the document. This placeholder is unique for each recipient.
- %Field Query 1-NAME%
   At run-time, the placeholder is replaced by the name of the field. This placeholder is the same for all recipients.

Before being able to use personalized placeholders in the *Subject* or *Message* box, make sure to personalize all source documents for the publication on the same field. If a publication contains several source documents, the *Add placeholder* list for the *Subject* and *Message* boxes displays personalization parameters only when all source documents are filtered on the same field(s).

#### Related Information

To select personalized placeholders for email fields

# 9.1.11 Delivery rules for scheduling

Prevent the sending of erroneous or empty documents by setting delivery rules for scheduled documents. Define a status for the documents that fail to meet the rules so you can identify them and reschedule them, change the connection details, or take other, appropriate action.

You define conditions that the document must meet for it to be sent to the following destinations:

- Bl Inbox
- Email
- FTP Server
- File System
- SFTP server

When the document fails to meet those conditions, it is not sent. You can choose one or both of the following conditions for a document:

- The scheduled content has been successfully refreshed and is not partial: The document is sent only when all the data providers for the document have been successfully refreshed. A document that contains data from incomplete results isn't sent.
- The scheduled content contains data: The document is sent only when at least one report in the document contains data. An empty document isn't sent.

When you select a condition, you can also define the status that displays in the history for a document that fails to meet the condition, as follows:

- Warning (by default)
- Failed

If a report in your document has multiple queries and one or multiple queries return partials results, when you select the *The scheduled content has been successfully refreshed and is not partial* rule, the report is sent in case of *Warning* status, but is not sent in case of *Failed* status.

When you select both conditions and the status of one condition is *Warning* while the status of the other condition is *Failed*, the history shows *Failed*.

### 9.1.12 Delivery rules for publishing

You can set delivery rules to fine-tune the processing and distribution of publications.

When you set delivery rules for a document, the publication is delivered to recipients only if it meets certain conditions. The BI platform supports several types of delivery rules. For Web Intelligence documents however, you can only set recipient delivery rules. There are two recipient delivery rules available:

- Deliver individual document when condition is met
- Deliver all documents only when all conditions are met

For each document of the publication, a delivery rule is always coupled with a condition. As a publisher, this is a way to fine-tune the publication process according to the recipients you want to deliver the publication to. There are four conditions you can choose from:

- Always deliver
- Never deliver
- · If scheduled content contains data
- If scheduled content has been fully refreshed

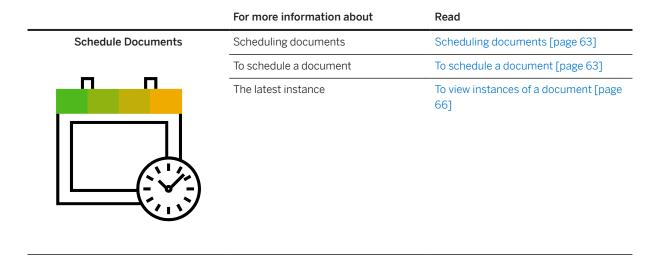
If a document fails to meet the condition you have purposely selected, you can either cancel the delivery of that specific document or cancel the whole publication.

### 9.2 Scheduling documents

You can schedule documents to automatically run at specified times. Each time a scheduled document runs successfully, an instance of that document is created.

An instance is a version of the document containing data from the time the document is run. You can access the list of instances in the document's history. You can check the status of an instance to see whether the instance was sent and, if not, why not. If you have access rights to view documents on demand, you can view and refresh any instance to retrieve the latest data from the data source. By scheduling and viewing instances, you ensure that documents have the most up-to-date information available for viewing, printing, and distributing.

The default time zone is local to the web server that runs the BI platform, not to the Central Management Server (CMS) that your machine connects to. Before scheduling documents, confirm that your local time zone is selected in the BI Launch Pad preferences. Also, make sure that you have the required security rights to schedule documents to the different locations available: File System, FTP, SFTP, SMTP, BI Inbox or Google Drive. If you don't have the access rights to view or to set your preferences; or schedule documents, contact your system administrator.



#### 9.2.1 To schedule a document

When scheduling a document, options are sometimes set up with specific settings by default. Feel free to modify these settings according to your needs.

Before scheduling a document, confirm that a context is set in the document. If the document has multiple contexts, refresh the document with the correct context before you schedule it.

#### △ Caution

When using the navigation tabs to schedule a document, the *Destination* tab can be slow to load when there are tens of thousands users existing in the system. If you experience this issue, please check SAP Note 2897486 to know why and how to fix it.

- 1. In the BI Launch Pad, browse to the document you want to schedule using either the *Recent Documents* section, the *Documents* tile, or the *Folders* tile.
- 2. Click > Schedule.
- 3. In the *Instance Title* tab, give a name to the instance you want to schedule. By default, the instance name is the document's name.
- 4. Click *Add* in the *Select delivery destinations* section. By default, the destination is set to *Default Enterprise Location*.
- 5. Select a destination in the *Destination* drop down.
- 6. Set the Recurrence, Events and Scheduling Server Group options in their dedicated sections.

#### Note

Choose the *Any event* check box if you want to trigger the scheduled object after any one of the events occur.

- 7. Click the Report Features tab.
- 8. Set the Output Format, Prompts and Delivery Rules options in their dedicated sections.
- 9. Click Schedule.

### 9.2.2 To pause or resume an instance

You can pause and resume instances of scheduled documents with a *Pending* or *Recurring* status.

For example, if a job server is down for maintenance, you can pause a scheduled instance to prevent the BI Platform from running the document. Scheduled jobs fail when the job server is not running. When the job server is running again, you can resume the scheduled instance.

- In the BI Launch Pad, on the home page, click the *Instances* tile.
   You can also browse to the document you're looking for using either the *Recent Documents* section, the *Documents* tile, or the *Folders* tile.
- 2. Click > History.
- 3. Using the dedicated checkboxes, select one or multiple documents, and click next to the instance(s) you want to pause or resume.
- 4. Click Pause or Resume.

# 9.2.3 Output file formats for instances

You can send or schedule objects to different formats for each type of instance.

#### **Crystal report file formats**

The *Crystal Reports* option preserves more formatting than other file formats. When you select other file formats, the BI platform preserves as much formatting as the format allows. However, reports may lose some or all formatting. If you choose to print a report when it is scheduled, the report instance is automatically sent to the printer in *Crystal Reports* format. This file format does not conflict with the file format you select when scheduling the report.

For information about scheduling a Crystal report to a specific format, see exporting information in the SAP Crystal Reports 2020 User's Guide.

Format	Description	
Crystal Reports	This .rpt format preserves the most formatting of all output format options. It produces a normal, editable report.	
Crystal Reports (RPTR)	This .rptr format produces a read-only Crystal report.	
Microsoft Excel (XLSX)	This .xlsx format is a page-based format that converts the report contents into Excel cells on a page-by-page basis. Content from multiple pages are exported to the same Excel worksheet. If a report element covers more than one cell, the export program merges cells to represent a report element. This export format retains most of the formatting, but does not export line and box elements from your report. This format is an enhancement to the existing Microsoft Excel (XLS) exporting type, and removes the 65536 rows and 256 columns restrictions.	
Microsoft Excel (XLS)	This .xls format attempts to preserve the look and feel of the original report. It preserves data and does not merge cells. You must specify some formatting properties for the report.	
Microsoft Excel - Data Only (XLS)	This .xls format saves only data, and each cell represents a field.	
Microsoft Excel - Data-only (XLSX)	This .xlsx format is a record-based format that concentrates on data. However, this format does export most of the formatting as well. The data-only format does not merge cells; each object is added to only one cell. The data-only format can also export certain kinds of summaries in Crystal Reports as Excel functions. The summaries that are supported are SUM, AVERAGE, COUNT, MIN, and MAX	
Microsoft Word	This . doc format preserves as much formatting as possible, including graphics. Each object appears in an individual text field.	

Format	Description	
PDF	.pdf format	
Rich Text Format (RTF)	This .rtf format preserves as much formatting as possible, including graphics. Each object appears in an individual text field. This option is available only from a web viewer.	
Microsoft Word - Editable (RTF)	This .doc format preserves less formatting than the <i>Microsoft Word (97-2003)</i> option. Text appears in lines, and images are placed inline with text.	
Plain Text		
Paginated Text	You must specify some formatting properties for the report.	
Tab Separated Text (TTX)	This format places a tab character between values. You must specify some formatting properties for the report.	
Separated Values (CSV)	This .csv format places a specified character between values.  You must specify some formatting properties for the report. For example, if you select this option, you must enter characters for the separator and delimiter.	
XML	.xml format	

### Web Intelligence file formats

Format	Notes
Web Intelligence	.widformat
Microsoft Excel	.xlsxformat
Adobe Acrobat	.pdf format
Comma Separated Values (CSV)	.csv format
Plain Text	.txt format

### 9.2.4 To view instances of a document

You can view instances of a scheduled document.

1. In the BI Launch Pad, on the home page, click the *Instances* tile.

You can also browse to the document you're looking for using either the *Recent Documents* section, the *Documents* tile, or the *Folders* tile.

- 2. Click > History.
- 3. To view an instance, click > View.

You can also check the latest instance of a scheduled document by clicking > View Latest Instance. You'll be able to edit a Web Intelligence instance, but you won't be able to save it and erase it. Use the Save As function instead.

## 9.2.5 Crystal report instance formatting options

When you schedule a Crystal report instance to some output formats, you may need to set additional options.

Microsoft Excel (XLS) and (XLSX) formats

Description
To include all pages in a report, select All.
• To include a page range, select <i>Pages from</i> , enter the first page number to include, and enter the last page number to include in the <i>to</i> box.
Select this check box to use the export options defined in a report. You cannot set any other formatting options.
<ul> <li>To set the width of Excel columns based on objects in a report, select Column width based on objects in the, and choose a report area from which to take the column width in the list.</li> </ul>
<ul> <li>To set a constant column width, select Constant column width (in points), and enter the width in the box.</li> </ul>
To choose when to export page headers and footers in an instance, select Once Per Report or On Each Page.
• To exclude page headers and footers from an instance, select <i>None</i> .
Select this check box to create a page break after each page in a report
Select this check box to export date values in a report as text strings
Select this check box to view grid lines in exported documents
(XLS) and Microsoft Excel - Data Only (XLSX) formats
Description
Select this check box to use the export options defined in a report. You cannot set any other formatting options.

Option	Description
Set Column Width	<ul> <li>To set the width of Excel columns based on objects in a report, select Column width based on objects in the, and choose a report area from which to take the column width in the list.</li> <li>To set a constant column width, select Constant column width (in points), and enter the width in the box.</li> </ul>
Export object formatting	Select this check box to preserve the object formatting.
Export images	Select this check box to export the images in a report.
Use worksheet functions for summaries	Select this check box to use summaries in a report to create worksheet functions in Excel.
Maintain relative object position	Select this check box to maintain the position of objects, relative to one another.
Maintain column alignment	Select this check box to preserve the alignment of text in columns in a report.
Export page header and page footer	Select this check box to include the header and footer in an instance.
Simplify page headers	Select this check box to use simple page headers.
Show group outlines	Select this check box to show group outlines.
Microsoft Word format  Option	Description
Page Range	<ul> <li>To include all pages in a report, select All.</li> <li>To include a page range, select Pages from, enter the first page number to include, and enter the last page number to include in the to box.</li> </ul>
PDF format Option	Description
Page Range	<ul> <li>To include all pages in a report, select All.</li> <li>To include a page range, select Pages from, enter the first page number to include, and enter the last page number to include in the to box.</li> </ul>
Use the export options defined in the report	Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Create bookmarks from group tree	Select this check box to create bookmarks in a PDF file based on the tree structure of a report. This makes reports easier to navigate.

#### Rich Text Format (RTF) format

Description
<ul> <li>To include all pages in a report, select All.</li> <li>To include a page range, select Pages from, enter the first page number to include, and enter the last page number to include in the to box.</li> </ul>
RTF) format
Description
<ul> <li>To include all pages in a report, select All.</li> <li>To include a page range, select from, enter the first page you want to include, and enter the last page you want to include in the to box.</li> </ul>
Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Select this check box to insert page breaks after each page in a report.
Reports 2020 only  Description
Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Enter a value between 8 and 16 to indicate the number of characters to include per inch. This setting determines how text files appear and are formatted.
vistal Reports 2020 only  Description
Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Enter the number of lines of text to include between page breaks.
Enter a value between 8 and 16 to indicate the number of characters to include per inch. This setting determines how text files appear and are formatted.
- Crystal Reports for Enterprise only  Description
Use the options in this area to limit the number of report pages that you want to export.
Select this check box to use the export options defined in a report. You cannot set any other formatting options.

Option	Description
Export page header and page footer	Select <i>Once Per Report</i> or <i>On Each Page</i> to choose when to export page headers and footers in an instance.
	Select <i>None</i> to exclude page headers and footers from an instance.
Character Encoding	Select the character encoding system to use in the exported text file: UTF-8, UTF-16 Little Endian, or UTF-16 Big-Endian.
Minimum Lines per Page	Enter the number of lines of text to include between page breaks.
Insert Form Feed character	Select this check box to insert a form feed character after each page, as specified in the Minimum Lines Per Page field. The form feed character creates a page break.
Number of Characters per Inch	Enter a value between 8 and 20 to indicate the number of characters to include per inch. This setting determines how text files appear and are formatted.
New Tab Separated Text for	mat – Crystal Reports for Enterprise only
Option	Description
Page Range	Use the options in this area to limit the number of report pages that you want to export.
Use the export options defined in the report	Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Double quote string fields	Select this checkbox to surround string fields with double quotes(""). To keep the quoted strings meaningful, multi-line text objects are exported in a single line.
Export page header and page footer	Select Once Per Report or On Each Page to choose when to export page headers and footers in an instance.
	Select <i>None</i> to exclude page headers and footers from an instance.
Character Encoding	Select the character encoding system to use in the exported text file: UTF-8, UTF-16 Little Endian, or UTF-16 Big-Endian.
Minimum Lines per Page	Enter the number of lines of text to include between page breaks.
Insert Form Feed character	Select this check box to insert a form feed character after each page, as specified in the Minimum Lines Per Page field. The form feed character creates a page break.
Number of Characters per Inch	Enter a value between 8 and 20 to indicate the number of characters to include per inch. This setting determines how text files appear and are formatted.
Separated Values (CSV) form	mat
Option	Description
Use the export options defined in the report	Select this check box to use the export options defined in a report. You cannot set any other formatting options.
Delimiter	Enter the character to use as the delimiter.

Option	Description
Separator	Enter the character to use to separate values, or select the Tab check box.
Mode	Select <i>Standard Mode</i> or <i>Legacy Mode</i> . When you select <i>Standard Mode</i> , you can choose report, page, and group sections to include in an instance. When you select <i>Legacy Mode</i> mode, you cannot choose report, page, or group section options.
Report and page sections	If you chose Standard Mode, select Export or Do not export to indicate whether to export report and page sections.
	If you selected <i>Export</i> , select the <i>Isolate report/page sections</i> check box if you want to isolate the report and page sections.
Group sections	If you chose <i>Standard Mode</i> , select <i>Export</i> or <i>Do not export</i> to indicate whether to export group sections. If you selected <i>Export</i> , select the <i>Isolate group sections</i> check box if you want to isolate the group sections.
XML	
Option	Description
Use the export options defined in the report	Select this check box to use the export options defined in a report. You cannot set any other formatting options.
XML Exporting Formats	Choose an XML export format, such as Crystal Reports XML.

# 9.2.6 Crystal Reports 2020 OData Service on recurring schedules

Crystal Reports recurring schedules can be exposed as OData service (OData v4).

Make sure the following prerequisistes are met:

- You have a recurring schedule for a Crystal Report 2020 report.
- The schedule format is set to Crystal Reports.
- The schedule destination includes Default Enterprise Location, or a destination with the *Keep instance in history* option enabled.

# 9.2.6.1 To find the exact Crystal Reports OData Service URL and logon

The format of the OData Service URL is as follows: http://host:port/biprws/infostore/ The format of the OData Service URL is as follows: http://host:port/biprws/infostore/

This is certified for WACS and Tomcat. Default ports are 6405 for WACS, and 8080 for Tomcat.

- 1. In BI Launch Pad, find the Crystal Reports 2020 report and click History.
- 2. Find the recurring instance (either in Recurring, Paused, or Expired state) and click Details .
- 3. Copy the OData Service URL (with actual cycle on the OData Serv
- 4. Use your BOE account with BOE logon token or HTTP basic authentication to log in.

  To enable HTTP basic authentication, please refer to To enable HTTP basic authentication in the Business Intelligence Platform Administrator Guide.

# 9.2.6.2 To use Crystal Reports OData Service in SAP Analytics Cloud

Make sure you've installed and configured SAP Cloud Connector. Refer to Configuring the SAPCP Cloud Connector for more information.

- 1. Log in to SAP Analytics Cloud, click the main menu on top left, and click **Connection**.
- 2. Click "+" to create a new connection, and select **OData Services** under **Acquire Data**.
- 3. Give your OData connection a name, and paste your Crystal Reports OData service URL in the **Data Service URL** box.
- 4. If SAP Cloud Connector is used to connect BOE, check **Connect to an On-Premise OData service** and select the location according to your configuration.
- 5. In **Authentication Type**, select **Basic Authentication** and enter your BOE credential.
- 6. Click **Create** to create the connection.
- 7. Create a model based on the newly created OData Service connection. You can also set your model to refresh under certain time interval (e.g. append or reload new data from your Crystal Reports, which is recurring scheduled in BOE to run once a day).
- 8. Create a story, chart or more on this model, and start consuming data from your Crystal Reports.

### 9.2.6.3 Exposed Crystal Reports data

The OData service exposes saved data in the latest successful instance.

When placed on the report canvas, the following elements are exposed:

- Database Fields
- Formula Fields
- Group Name Fields
- Parameter Fields (those placed on report canvas)
- Running Total Fields
- Special Fields: Group Number, Data Date and Time, etc.
- SQL Expression Fields

Summaries

These elements aren't exposed:

- Crosstab
- Fields inside a sub report

Below is the data type mapping between OData and Crystal Reports:

#### Crystal Reports Data Type OData Data Type

Boolean	OData Boolean
Number / Currency	OData Number
Date	OData Date
Time	OData Time
Datetime	OData DateTimeOffset (Consists of both date and time. TimeStamp in SAP Analytics Cloud)
String	OData String
Memo (up to 65535)	OData String
Blob (e.g picture)	Not supported

## 9.2.6.4 Paging, sorting and filtering

You can use the parameters listed below to page, sort, filter, or select a subset of data.

### **Paging**

Crystal Reports 2020 OData Service by default returns 200 records each time, this batch size can be configured using the \$top parameter. For example, parameters to get 500 records (\$top=500), starting from position 1000 (\$skip=1000):

• skip=1000&\$top=500

### **Sorting**

By default, the original order in saved data is kept User can specify a column to reorder the dataset. For example:

• \$orderby=Order Amount desc

#### **Filtering**

Only matching items are returned. For example:

- \$filter=Shipped eq true
- \$filter=Shipped gt 1000
- \$filter=Customer\_Name eq 'abc'
- \$filter=contains(Customer\_Name, 'abc')
- \$filter=Delivery\_Time lt 17:00:00
- \$filter=Delivery\_Date eq 2004-01-30
- \$filter=Delivery\_DateTime eq 2012-12-02T17:00:00Z

#### Select

Only select fields return. For example:

• \$select=Order\_ID,Customer\_Name,Order\_Amount

## 9.2.6.5 Tips and tricks

You can control whether to expose report and page sections.

Report and page sections often have multiple static fields like report title, column titles, legal disclaimer, and many more. If you don't want to expose these fields in your Crystal Reports OData service, follow these steps:

- 1. Open your report in Crystal Reports 2020 Designer.
- 2. Click File Export Report Export Options .
- 3. Select the .CSV format to modify its default export options.
- 4. Under Report and Page sections, select Do not export.
- 5. Save the report.
- 6. Create a new recurring schedule, its OData service will stop exposing fields from Report and Page sections.

Whether fields on Group sections are exposed or not can be controlled in similar way.

If you need to update OData field names, follow these steps:

- 1. Open your report in Crystal Reports 2020 Designer.
- 2. Locate your summary field in report canvas (or in the Report Explorer)
- 3. Right-click Format Fields.
- 4. In the Format Editor, switch to the Common tab.
- 5. Update the object name.
- 6. Save the report.
- 7. Create a new recurring schedule, the summary field name in the new OData service will be updated accordingly.

OData field names for Group Name fields, Special fields can also be updated in similar way.

## 9.2.7 To delete instances from your BI Inbox

You can delete all instances from your BI Inbox.

- 1. In the BI Launch Pad, click BI Inbox.
- 2. Click Organize Delete All Messages ...
- 3. When prompted, click *OK* to confirm the deletion.

### 9.3 Scheduling Object Packages

When scheduling a document, options are sometimes set up with specific settings by default. Feel free to modify these settings according to your needs.

Before scheduling a document, confirm that a context is set in the document. If the document has multiple contexts, refresh the document with the correct context before you schedule it.

#### △ Caution

When using the navigation tabs to schedule a document, the *Destination* tab can be slow to load when there are tens of thousands users existing in the system. If you experience this issue, please check SAP Note 2897486 to know why and how to fix it.

- 1. In the BI Launch Pad, browse to the document you want to schedule using either the *Recent Documents* section, the *Documents* tile, or the *Folders* tile.
- 2. Click > Schedule.
- 3. In the *Instance Title* tab, give a name to the instance you want to schedule. By default, the instance name is the document's name.
- 4. Click *Add* in the *Select delivery destinations* section. By default, the destination is set to *Default Enterprise Location*.
- 5. Select a destination in the Destination drop down.
- 6. Set the Recurrence, Events and Scheduling Server Group options in their dedicated sections.

#### Note

Choose the *Any event* check box if you want to trigger a schedule publication after any one of the events occur.

- 7. Click the Report Features tab.
- 8. Select Component.

### ① Note

Based on the selection of the content type (CR, Webl, and Lumira and so on), please proceed to select the report specific features.

9. Click Schedule.

## 10 Working with Publications

## 10.1 Creating a Publication in the BI Launch Pad

- 1. In the *Home* group, click the *Folders* tile.
- 2. In the *Folders* page, navigate to the folder where you want to create a publication.
- 3. Click + (Create/Upload Objects) icon and select Publication.

  The New Publication page appears, with general property options displayed.

#### Note

The *General* tab shows fields selected by default while creating a publication or while viewing properties of a publication.

The Summary tab shows brief information of a publication while creating a publication or while viewing properties of a publication.

- 4. (Required) In the *Title* field, enter the title of the publication.
- 5. (Optional) In the Keywords field, enter the desired keyword that is associated with the publication content.
- 6. (Optional) In the Description field, enter a description of the publication.
- 7. In the Source Documents area, click the + (Add) icon.
- 8. In the Select Source Documents dialog box, select one or more source documents to add to the publication.
- 9. Click OK.

#### ① Note

When you select one or more reports, the *Report Features* tab appears between the *General* and *Summary* tab.

Based on the selected report, for more information, refer the *Configuring Crystal Reports in Publication* sectionand for Webi documents, refer to the *Designing Web Intelligence Documents* section.

The *Refresh At Runtime* check box is selected by default for each source document. It refreshes the document against its data source when the publication runs.

If you don't want to refresh source documents at runtime, clear the *Refresh At Runtime* check box.

- 10. Specify the information required for the publication: destinations, recurrence pattern, enterprise and dynamic recipients, delivery formats, events, server group, and how documents are personalized
  - For more information, see Designing Publications [page 78] section.
- 11. Click Save and Close.

#### ① Note

To mark a publication as favorite for easy and quick access, click the icon beside the publication, and select *Mark As Favorite*.

## 10.2 Designing Publications

To design a new publication, use the publishing feature in the BI platform.

You can access the publishing feature in the Central Management Console (CMC) or in the BI Launch Pad, depending on your access rights and on your access to BI platform web-based applications.

At any point during publication design, you can save changes made to a publication, close it, reopen it, and make further changes.

## 10.2.1 Opening a Publication for Editing

- 1. Locate the publication in the BI Launch Pad:
  - a. In the *My Home* group, click the *Folders* tile, and navigate to the folder where you created the publication.
  - b. Click the icon beside the publication and select *Properties*.

The *Properties* page of the publication is displayed. Here, you can modify various properties of the publication and save the changes.

- 2. Locate the publication in the Central Management Console (CMC) in the BI platform:
  - Double-click the publication.
  - Right-click the publication and select Properties.

The *Properties* page of the publication is displayed. Here, you can modify various properties of the publication and save the changes.

The publication opens in a new window.

## 10.2.2 Defining General Properties for a Publication

You define properties for a publication in the *Properties* page.

In CMC or BI Launch Pad:

- 1. Open the publication for which you want to define the general properties.

  The *Properties* page appears, displaying the publication's general properties and title.
- 2. (Optional) In the Description box, enter a description of the publication.

- 3. (Optional) In the Keywords box, enter keywords that are associated with the publication's content.
- 4. Click Save & Close.

### 10.2.3 Adding Source Documents

You can add, modify, and remove documents to a publication in the *New Publication* page at any given time while creating a publication.

When choosing source documents, the dynamic content document type determines which options are available.

- 1. In the New Publication page, expand General, and select Source Documents.
- 2. Click the + (Add) icon.
- 3. In the *Select Source Documents* dialog box, locate and select dynamic content documents of the same document type to include in the publication.
- 4. Click OK.

The selected source documents appear in the *Items* list in the *New Publication* page. The check box in the *Refresh At Runtime* column is selected by default for all source documents. When this check box is selected, the document is refreshed against its data source when the publication runs. If you do not wish to do so, clear the check box for that document in the *Refresh At Runtime* column.

#### ① Note

To improve system performance, clear the check box in the *Refresh At Runtime* column for each document.

- 5. You can set the order in which documents appear, when sending source documents as an attachment or a merged PDF file. In the *New Publication* page, in the *Source Documents* area, select a document in the *Items* list, and click *Move Up* or *Move Down* icon to reorder the documents.
- 6. Click Save and Close.

## 10.2.4 Selecting a Destination for a Publication

You select a destination for a publication while you create or schedule a publication.

- 1. In the New Publication or Publication Schedule page, expand General, and select Destinations.
- 2. (Optional) To avoid storing publication instances on your system, delete the *Default Enterprise Location* under *Selected Delivery Destinations* list.
- 3. Set a low instance limit on the publication object.
  For instructions, see the SAP BusinessObjects Business Intelligence Platform User Guide.
- 4. Click *Add* under *Select Delivery Destinations*, select the check box beside each destination that you want to send the publication to.
  - If you want to create a shortcut to the publication, select both *BI Inbox* and *Default Enterprise Location* as destinations.

If the publication will be sent to email recipients and you want to embed a link to the Enterprise location in the email body, select both *Email* and *Default Enterprise Location* as destinations.

The destination you chose appears in the left navigation pane of the Select Destinations dialog.

- 5. If necessary, select a destination to configure from the left navigation pane. Options for the destination appear.
- 6. (Optional) To choose a name for the publication, select *Use specific name*, and enter a name or select a placeholder in the *Add Placeholder* list.
  - If you do not choose a name, a system-generated name is assigned to a publication. When the publication runs, a value will be inserted in each placeholder.
- 7. (Optional) If you selected *Use specific name* and the publication contains multiple documents that you want to assign individual names to, select the *Specific Name per Document* check box, and enter a name or select a placeholder in the *Add Placeholder* list for each document.
  - If you do not choose a name, the same system-generated name is assigned to each document.
- 8. (*Email* only) To embed a link to the Enterprise location in the email body, position the cursor in the *Message* box, and select *Viewer* in the *Add placeholder* list under the box.
  - The placeholder %SI\_VIEWER\_URL% is inserted in the email body. It will be replaced by a link when the publication runs. If you are unable to embed a link, confirm that you selected both *Email* and *Default Enterprise Location* as the destination.
- 9. (BI Inbox only) Under Send As, click Shortcut to create a shortcut to the publication or Copy to create a copy of the publication.
  - If you are unable to create a shortcut, confirm that you selected both *BI Inbox* and *Default Enterprise Location* as the destination.
- 10. If you selected multiple destinations, repeat steps 5 to 10 for each destination to select and configure the destination.
- 11. Click Confirm.

#### 10.2.4.1 Publication Destinations

The following destinations are available for publications:

- Default Enterprise Location
- BI Inbox
- Email
- FTP Server
- File System
- SFTP Server

The *Deliver objects to each user* check box is selected by default for all destinations. However, in some cases, you may not want to deliver objects to each user. For example, three recipients have identical personalization values so they receive the same data in publication instances. If you clear the *Deliver objects to each user* check box, one publication instance is generated and delivered to all three recipients. If you select the *Deliver objects to each user* check box, the same publication instance is delivered three times (once for each recipient).

## **Default Enterprise Location**

If you send a publication to this location, choose a folder that is accessible to all recipients.

Publication destination	Actions you can perform on the publication	Instance is saved to
The folder it was created in	<ul> <li>Merge all exported PDF documents (Crystal reports only)</li> <li>Package the publication as a compressed (.zip) file</li> </ul>	Output File Repository Server  Historical instances are saved to the default Enterprise server but not to any other destination.

### **BI Inbox**

Publication destination	Actions you can perform on the publication	Instance is saved to
Each recipient's BI Inbox	<ul> <li>Merge all exported PDF documents (Crystal reports only)</li> <li>Package the publication as a compressed (.zip) file</li> <li>Deliver objects to individual users</li> <li>Use default file name or enter a specific file name and add placeholders</li> <li>If you select <i>Use specific name</i>, enter a file extension or add the <i>File Extension</i> placeholder or select the check box <i>Add file extension</i> to automatically add the extension to a file name.</li> </ul>	<ul> <li>Output File Repository Server</li> <li>Specified BI Inboxes</li> </ul>
	• Note If you do not add a file extension to a file name, you may be unable to open the document.	
	• Send the publication as a shortcut or a copy If you send a publication to a recipient's BI Inbox as shortcut, choose a folder that is accessible to all recipients. To send a publication shortcut to a BI Inbox, select both BI Inbox and Default Enterprise Location as the destination.	

### **Email**

Before you can schedule or send a report instance to this destination, you must enable and configure the email (SMTP) destination on the Adaptive Job Server.

## Actions you can perform on the publication

#### **Publication destination**

## Each recipient via email

### n Instance is saved to

- Merge all exported PDF documents (Crystal reports only)
- Package the publication as a compressed (.zip) file
- Deliver objects to individual users
- (Required) Enter your email address in the From box

#### Note

If you do not enter your email address, the BI platform uses the email address associated with the publisher's account. If the publisher's account has no email address, the platform uses the email address for the Adaptive Job Server. If there is no email address in the From box, the publisher's account, or the Adaptive Job Server, the publication will fail.

- Enter recipient email addresses or add the Email Address placeholder to the To box
- Enter recipient email addresses or add the Email Address placeholder to the Cc box
- Enter recipient email addresses or add the Email Address placeholder to the Bcc box
- Enter a subject or add placeholders to the Subject box
- Enter your message and customize it using the rich text editor for formatting options, or add placeholders and embed a dynamic content document in the body of the email in the Message box
- Attach source document instances to an email

Specified email recipients

Output File Repository Server

Instance is saved to

#### ① Note

When you insert an image in the email, the image gets downloaded automatically if both sender and reciever have access to the image link used.

 Use default file name or enter a specific file name and add placeholders
 If you select *Use specific name*, enter a file extension or add the *File Extension* placeholder or select the check box *Add file extension* to automatically add the extension to a file name.

#### O Note

If you do not add a file extension to a file name, you may be unable to open the document.

#### **FTP Server**

If you are sending the publication to the *FTP Server* destination and some recipients share identical personalization values, you can clear the *Deliver objects to each user* check box to decrease overall processing time. When you clear *Deliver objects to each user*, placeholders used when configuring destinations will contain the publisher's (not the recipient's) information.

## Actions you can perform on the publi-

#### **Publication destination**

#### An FTP server

(You must enter the FTP server location in the Host box. If you do not, the platform uses the FTP server configured for the Adaptive Job Server.)

## cation

- Merge all exported PDF documents (Crystal reports only)
- Package the publication as a compressed(.zip)file
- Enter the port number, user name and password, and account
- Enter a directory name
- Use default file name or enter a specific file name and add placeholders

If you select Use specific name, enter a file extension or add the File Extension placeholder or select the check box Add file extension to automatically add the extension to a file name.

#### O Note

If you do not add a file extension to a file name, you may be unable to open the document.

- Output File Repository Server
- Selected FTP server

Instance is saved to

### **File System**

If you are sending the publication to the File System destination and some recipients share identical personalization values, you can clear the Deliver objects to each user check box to decrease overall processing time. When you clear Deliver objects to each user, placeholders used when configuring destinations will contain the publisher's (not the recipient's) information.

Actions you can perform on the publi-	
cation	Instance is saved to

#### **Publication destination**

A directory on a file system

(You must enter the directory for the publication.)

- Merge all exported PDF documents (Crystal reports only)
- Package the publication as a compressed (.zip) file
- Enter a user name and password to access the file location
- Deliver objects to individual users
- Use default file name or enter a specific file name and add placeholders
   If you select *Use specific name*, enter a file extension or add the *File*

ter a file extension or add the *File Extension* placeholder or select the check box *Add file extension* to automatically add the extension to a file name.

#### O Note

If you do not add a file extension to a file name, you may be unable to open the document.

- Output File Repository Server
- Selected file location

#### **SFTP Server**

If you are sending the publication to the *SFTP Server* destination and some recipients share identical personalization values, you can clear the *Deliver objects to each user* check box to decrease overall processing time. When you clear *Deliver objects to each user*, placeholders used when configuring destinations will contain the publisher's (not the recipient's) information.

## Actions you can perform on the publi-

#### **Publication destination**

#### An SFTP server

(You must enter the SFTP server location in the Host box. If you do not, the platform uses the SFTP server configured for the Adaptive Job Server.)

- cation
  - Merge all exported PDF documents (Crystal reports only)
  - Package the publication as a compressed(.zip)file
  - Enter the port number, user name and password, and account
- Enter a directory name
- Enter the fingerprint
- Use default file name or enter a specific file name and add placeholders

If you select Use specific name, enter a file extension or add the File Extension placeholder or select the check box Add file extension to automatically add the extension to a file name.

#### ① Note

If you do not add a file extension to a file name, you may be unable to open the document.

- Output File Repository Server
- Selected SFTP server

Instance is saved to

## 10.2.5 Selecting a Recurrence Pattern

The recurrence pattern determines how often a publication runs. You select a recurrence pattern for a publication in the Schedule dialog box.

- 1. Right-click the publication to set a recurrence pattern for and select *Schedule*.
- 2. In the Schedule dialog box, click Recurrence.
- 3. In the Run object list, select a recurrence pattern.
- 4. In the Number of retries allowed box, enter the number of times the server should attempt to rerun a failed job.
- 5. In the Retry interval in seconds box, enter how long the server should wait before attempting to rerun a job.
- 6. Click Schedule.

The publication runs at the scheduled times.

## 10.2.5.1 Recurrence Pattern Options

### ① Note

The recurrence options in the Schedule page and Publication page of the BI Launch Pad are changed to **only 4 first level options** (*Now*, *Once*, *Recurring* [with sub-options] and *Calendar*) starting from 4.2 SP4.

You can set these recurrence options to schedule an object, one or more components of an object package. Below are the recurrence options available and their behavior of operation:

Option	Sub-options	Description
Now		Runs the object one time, starting immediately
Once		Runs the object once, at the specified start time. If you schedule an object with events, the object will run once, if the event is triggered between the start and end times.
		Choose when to start and to stop running the object in the Start Date/Time and End Date/Time lists, and enter the date of the start and the stop times.
Recurring	Hourly	Creates an instance every nth hour (where 'n' ranges from 00 to 23), at the specified time. The first instance will be created at the specified start time, and instances will continue to be created every nth hour, until the object stops running at the specified end time.
		Choose the time to run the object in the <i>Hours</i> and <i>Minutes</i> lists that appear on clicking the Every <i>Hour(s)</i> drop-down. Select when to start and to stop running the object in the <i>Start Date/Time</i> and <i>End Date/Time</i> lists, and enter the date of the start and the stop times.

Option	Sub-options	Description
Recurring	Daily	Runs the object once daily, at the specified start time. The first instance will be created at the specified start time, and instances will be created daily at that time, until the object stops running at the specified end time.
		Choose the day of the week to run the object in the Every <i>Days(N)</i> box, select when to start and to stop running the object in the <i>Start Date/Time</i> and <i>End Date/Time</i> lists, and enter the date of the start and the stop times.
Recurring	Weekly	Runs the object each week on the selected days, at the specified start time. The first instance will be created at the specified start time, and instances will be created each week on those days at that time, until the object stops running at the specified end time.
		Select the required week-day on which to run the object, choose when to start and to stop running the object in the <i>Start Date/Time</i> and <i>End Date/Time</i> lists, and enter the date of the start and the stop times.

Option	Sub-options	Description
Recurring	Monthly	Runs the object on the specified date, at the specified start time, and at the specified monthly intervals. The first instance will be created at the specified start time, and instances will be created in monthly intervals at that time, until the object stops running at the specified end time.
		Choose the month in which to run the object in the Every <i>Month(N)</i> box, choose when to start and to stop running the object in the <i>Start Date/Time</i> and <i>End Date/Time</i> lists, and enter the date of the start and the stop times.
		① Note
		If you choose to run the object every (1) month, the options to choose day of the month and day of the week also get enabled.
Recurring	Specific Day of a Month	Creates an instance each month on the specified day, at the specified start time. The first instance will be created at the specified start time, and instances will be created on the specified day of each month at that time, until the object stops running at the specified end time. Enter the time to start and to stop running the object and the day of the month on which to run the object.
Recurring	1st Monday of the Month	Creates an instance each month on the first Monday of the month, at the specified start time until the end date. Enter the time to start and to stop running the object.
Recurring	X Day of Nth Week of the Month	Creates an instance each month on the specified day and week, at the specified start time. Enter the time to start and to stop running the object, the day of the week, and the week in the month to run the object.

Option	Sub-options	Description
Recurring	Last day of the Month	Creates an instance on last day of the month, at the specified start time until the end date. Enter the time to start and to stop running the object.
Calendar	The object runs on the dates specified in a calendar.	Creates an instance on each calendar date you specify, at the specified start time.
		Enter the time to start and to stop running the object, and select a calendar that you have access to. The schedule runs based on the dates defined in the CMC for the selected calendar.
Business Hours	The object runs on each calendar date you specify, at the specified start time.	The object runs on the particular days of the week and during the particular hours of the day that are specified under business days and Business Hours.

## 10.2.6 Publications for Enterprise or Dynamic Recipients

You can send publications to Enterprise recipients via a BI Inbox, E-mail, FTP, the file system, or to dynamic recipients via E-mail.

Enterprise recipients are users who are part of the BI platform system. You can send reports for these users to their BI Inbox or via E-mail, FTP, the file system.

Dynamic recipients are Non-Enterprise users, either outside of your network or not configured with users, groups, profiles, security, and so on. For example, dynamic recipients might be suppliers of your company's monthly office supplies and inventory. A BI Inbox is not a valid destination for dynamic recipients because they do not have a BusinessObjects Enterprise user account.

Dynamic recipients are different from Enterprise recipients in the following ways:

- Publications can be sent to dynamic recipients only via E-mail.
- Dynamic recipients can be used only with local profiles.

To create publications, you create a source file and a recipient file, set up the publication in the BI Launch Pad, and then schedule the publication.

The source file contains raw data for the publication; a publication can include more than one source file. For example, for a monthly report on suppliers, the source file might list inventory SKU numbers and categories and include a unique ID/supplier defined in a "Supplier ID" field. The recipient file must contain the same unique ID/supplier as the source file as well as recipient E-mail addresses to map to the source file. In the example, the recipient file should include the same ID in a "Supplier ID" field, supplier names, and supplier E-mail addresses.

## 10.2.6.1 Creating a Publication for Enterprise Recipients

Enterprise recipients are users who are part of the BI platform system. For Enterprise recipients, you must create prompts to define filtering in the source file.

To create profiles in Central Management Console (CMC), perform the following steps:

- 1. In the Central Management Console (CMC), click Profiles.
- 2. Select Manage New New Profile 1.
- 3. In the Create New Profile dialog box, enter a Title and Description for the profile.
- 4. Click OK.

Double-click the profile you created to configure its properties.

#### Note

Assigning and removing access levels to the user or user groups is an optional step, it can be achieved through the *Available Access Levels*. The selected access level is displayed under *Assigned Access Levels*.

To assign and remove access levels, you can follow the steps given below:

- 1. Click User Security, and assign access rights to users or user groups.
- 2. Select the user / user group, and click Assign Security.
- 3. Click Apply, and click OK.

The assigned access level is shown in the Access column.

- 5. Click Profile Targets to define targets and filter source files:
  - a. Locate the profile target to use in the Object column, and select the check box beside it.
  - b. Click Edit.

The local profile is derived from the source file, and the global profile comes from the universe.

c. Select Filter Expression, and click Edit.

A dialog box appears, displaying the profile options.

d. In the *User/Group* column, locate the user or the user group to define profile targets for, and select the check box beside it.

The prompts are now defined. You can create the publication in BI Launch Pad.

- 6. To create a publication in the BI Launch Pad, refer to Creating a Publication in the BI Launch Pad [page 77].
- 7. To select Delivery Destinations, click Add.

The Select Destinations dialog box appears.

- a. Select the destinations you want to create a publication for.
- b. In Default Enterprise Location, (Optional) select the Package As ZIP File check box.
- 8. In Email:
  - a. In the *From* field, enter the sender's email address or select a placeholder in the list.
  - b. In the To field, select %SI EMAIL ADDRESS% in the list.
  - c. In the Subject field, enter the subject or select a placeholder.
  - d. (Optional) In the *Message* field, enter a message to recipients about the publication or select a placeholder.

- 9. Go to the Enterprise Recipients to select recipients, and click the Select button.
  - The *Enterprise Recipients* dialog box appears. Search and filter the recipients for each user or user group who should receive the publication.
- 10. Under *Available Recipients*, check the check box beside each user or user group to move them to the *Selected Items* or *Excluded Items*, and click *OK*.
- 11. Click Personalization.
- 12. Under *Global Profiles*, for each source document for the publication, select the profile you created from the list in the *Enterprise Recipient Mapping* column.
- 13. Click Formats, and perform the following actions:
  - a. Under Documents, select a report.
  - b. Under *Format Options for Selected Document*, select the check box beside the delivery format required for the publication.
  - c. Under *Output Format Details*, select *All reports* to use the same format for all reports in the publication, or choose *Select one report* and select a report in the list.
- 14. Click Destinations, and select a destination:
  - a. Under Select Destinations, select the Email check box.
  - b. (Optional) Select the Package As ZIP File check box.
  - c. Select the Deliver objects to each user check box.
  - d. In the From box, enter the sender's email address or select a placeholder in the list.
  - e. In the To box, select %SI\_EMAIL\_ADDRESS% in the list.
  - f. In the Subject box, enter the subject or select a placeholder.
  - g. (Optional) In the *Message* box, enter a message to recipients about the publication or select a placeholder.
- 15. Select the check box beside each user or group who should receive the publication.
- 16. Click Save & Close.

Schedule the publication to run.

## 10.2.6.2 Creating a Publication for Dynamic Recipients

Dynamic recipients are Non-Enterprise users, either outside of your network or not configured with users, groups, profiles, security, and so on.

The source file and dynamic-recipient file must be created. To create a publication in the BI Launch Pad, refer to Creating a Publication in the BI Launch Pad [page 77].

To create a publication for *Dynamic Recipients*, follow the steps mentioned below.

- 1. In the Choose the Source for Dynamic Recipients list, select Web Intelligence Report Dynamic Recipient Provider or Crystal Reports Dynamic Recipient Provider.
- 2. Under Choose the Source for Dynamic Recipients, click Browse and select the recipient file.
- 3. Map fields from the recipient file (that is, the source document) to the publication:
  - a. In the Recipient Identifier (required) list, select a field from the recipient file to map to the publication.
  - b. In the *Full name* list, select a field from the recipient file to map to the recipient.
  - c. In the Email list, select Email ID to map email addresses from the recipient file to the publication.

You can select the *User entire list* check box to send the publication to all recipients defined in the dynamic-recipient file.

- 4. Click Personalization, and configure personalization for recipients:
  - a. Under Parameters, select a report field to personalize.
  - b. In the *Dynamic Recipient Mapping* column, select a field in the recipient file to map to the report field you selected.
  - c. Repeat steps 11a and 11b for each field that should be sent to specific recipients.
- 5. Click Formats, and select a delivery format for the publication.
- 6. Click Destinations, and select a destination:
  - a. Under Select Destinations, select the Email check box.
  - b. (Optional) Select the Package as ZIP File check box.
  - c. Select the Deliver objects to each user check box.
  - d. In the From box, enter the sender's email address or select a placeholder in the list.
  - e. In the To box, select %SI\_EMAIL\_ADDRESS% in the list.
  - f. In the Subject box, enter the subject or select a placeholder.
  - g. (Optional) In the *Message* box, enter a message to recipients about the publication or select a placeholder.
- 7. Click Save & Close

Schedule the publication to run.

## 10.2.7 Publications for SAP Recipients

A publication intended for SAP recipients works the same way as a publication intended for Enterprise or dynamic recipients.

However, SAP recipients have the following differences in a publishing workflow:

- You do not use personalization to design source documents for SAP recipients. Each SAP recipient has a
  profile value mapped to a user account outside of the BI platform, and the profile value serves as built-in
  personalization. You do not need to create profiles and profile values for SAP recipients in the platform or
  to map profiles to source document fields.
- The only report bursting method that works for a publication intended for SAP recipients is *One database fetch per recipient*. It maximizes security and individually processes the database logon credentials of each publication recipient.

For information about single sign-on configuration and authentication, see the SAP Business Objects Business Intelligence Platform Administrator Guide.

#### 10.2.8 Publications for Live Office

When you design publications for use with SAP BusinessObjects Live Office, consider this information.

 Dynamic content documents can consist only of Crystal reports or Web Intelligence documents in the original format.

- Dynamic recipients are not supported.
- The only destination option available is *Default Enterprise Location*.
- If recipients receive multiple publication instances after personalization, they can view only the first
  publication instance in the Live Office Client. Recipients who inherit multiple profile values from group
  membership may receive multiple instances. To avoid sending multiple instances, assign only necessary
  profile values to recipients.

## 10.2.9 Selecting Personalized placeholders for Publication Source Documents

You select personalized placeholders for a publication in the Schedule dialog box.

Before you can use personalized placeholders in publication instance names, the publication's source documents must use personalization to filter data.

When scheduling a publication instance, you can use placeholders in the *Use Specific Name* field for source documents, and you can combine text and placeholders—and use multiple placeholders—in a publication name.

- 1. Right-click the publication to select placeholders for and select Schedule.
- 2. In the Schedule dialog box, click Destinations in the navigation list.
- 3. Under Show options for selected destinations, select Use Specific Name and choose a placeholder for the publication name from the Add placeholder list.

  The placeholders you select appear in the Specific Name box for the document title.
- 4. To add individual documents:
  - a. Under Target Name, select Specific Name per Document.
  - b. For each document title, select a placeholder from the Add placeholder list.

The placeholders you select appear in the Specific Name box for each document title.

5. Click OK.

After personalization is set up for a publication, personalized placeholders appear in the *Add placeholder* list in the *Destinations* dialog box.

## 10.2.10 Selecting Personalized Placeholders for Email Fields

You select personalized placeholders for a publication in the Schedule dialog box.

You can combine text and placeholders—and use multiple placeholders—in any email field. When scheduling a publication to an email destination, you can use placeholders in the *From*, *To*, *Cc*, *Bcc*, *Subject*, *Message*, and *Use Specific Name* fields.

- 1. Right-click the publication to select placeholders for and select Schedule.
- 2. In the Schedule dialog box, click Destinations in the navigation list.
- 3. In the Destination list, select Email.
- 4. Set the destination options, including placeholders, as needed.

## 10.2.11 Embedding Content from a Dynamic Source Document in an Email

You embed content from a source document for a publication in the Schedule dialog box.

You can embed content from dynamic content documents in the body of an email. For Crystal reports, you can embed content from a report. For Web Intelligence documents, you can embed an entire document or a single report tab.

- 1. Right-click the publication to take the content from and select Schedule.
- 2. In the Schedule dialog box, click Formats in the navigation list.
- 3. (Crystal reports only) Under Format Options for Selected Document, select the mHTML check box.
- 4. (Web Intelligence documents only) Choose whether to publish the entire document or one report tab:
  - a. Under Output Format, select the mHTML check box.
  - b. Under *Output Format Details*, select *All reports* to publish the entire document or *Select one report* and choose a report tab in the list.
- 5. Click Destinations in the navigation list.
- 6. In the *Destinations* dialog box, under *Select Destinations*, select the *Email* check box. The email configuration options appear.
- 7. In the *From* box, enter a name or email address or select *Email Address* in the *Add placeholder* list.

  For example, you can enter **Robert**, **Publisher**, or **publisher@sap.com**. If you enter a name, the name is appended to your email server—for example, **Publisher@<EmailServer>**.
- 8. In the Subject box, enter a subject or select a placeholder.

  If you personalized the report, personalized placeholders are available in the Add placeholder list.
- 9. In the Message box, enter the message that you want to appear in the body of the mail.
- 10. To embed dynamic content in the Message box, position the cursor in the Message box where you want to embed content, and select Report HTML Content in the Add placeholder list.
  %SI\_DOCUMENT\_HTML\_CONTENT% appears in the Message box. When the publication runs, the placeholder is replaced by personalized content from the dynamic content document.
- 11. If the publication contains other source documents, select the *Add Attachment* check box.

  Other source documents in the publication will be added to the email as attachments when the publication runs.
- 12. Click OK.

## 10.2.12 Configuring Crystal Reports in Publication

### 10.2.12.1 Personalization in Crystal Reports

You can personalize a Crystal report for recipients with parameters or by filtering fields.

Personalize Crystal reports with local profile targets when possible. Parameter-based personalization requires one database fetch per recipient when the parameter is used in a record selection formula, command, table, or stored procedure, which can increase publication processing time.

For example, if a profile is mapped to a parameter and the profile value for an Enterprise recipient conflicts with the parameter value, the profile value will override the parameter value when the publication runs. Similarly, if a personalization value in the dynamic recipient source conflicts with a parameter value for a dynamic recipient, the parameter value will be overridden when the publication runs.

Personalization that is based on parameters is overridden by other personalization methods.

## 10.2.12.1.1 Personalizing a Crystal Report Using Parameter Values

You personalize a Crystal report in the Schedule dialog box.

- Before you can use profiles to personalize data for Enterprise recipients, the profiles must be configured in the BI platform.
- Before you can perform this task, the Crystal report must contain parameters.
- 1. Right-click the Crystal report to personalize and select Schedule.
- 2. In the Schedule dialog box, click Personalization in the navigation list.
- 3. Review the parameter values under *Parameters* and note any values that need to be changed.
- 4. To change a default value, click the *Edit Values* button beside the default parameter value, select or enter the parameter value, and click *OK*.
- 5. Perform one of the following actions:
  - To override the default parameter personalization with Enterprise-recipient profile values, in the
     Enterprise Recipient Mapping column, select a profile in the list.
     If this profile is not configured in the BI platform, personalization will fail. If you need profiles added to
     the BI platform, contact your system administrator.
  - If you are using only default parameter values to personalize a report, select *Default value for all recipients* in the *Enterprise Recipient Mapping* column.

The *Enterprise Recipient Mapping* column appears only if the publication is intended for Enterprise recipients.

- 6. To override the default parameter personalization with dynamic recipient personalization values, in the *Dynamic Recipient Mapping* column, select a dynamic recipient source in the list.
  - The Dynamic Recipient Mapping column appears only if the publication is intended for dynamic recipients.

If you are using default parameter values to personalize a report, select *Not Specified* in the *Dynamic Recipient Mapping* column.

## 10.2.12.1.2 Personalizing a Crystal Report by Filtering Fields

You personalize a Crystal report in the Schedule dialog box.

Before you can use profiles to personalize data for Enterprise recipients, the profiles must be configured in the BI platform.

When you use filters, a ViewTime selection formula is added to a report to filter data. The formula is applied when the publication runs and is not saved in the report. You can filter multiple fields in Crystal reports. Static-value profiles can filter only string fields in Crystal reports. To filter other types of fields, use expression profile values. If you map the incorrect type of field to the profile, personalization will fail.

This feature is not available for Crystal reports in .rptr format.

- 1. Right-click the Crystal report to personalize and select Schedule.
- 2. In the Schedule dialog box, click Personalization in the navigation list.
- 3. Under *Local Profiles*, in the *Report Field* column, select a Crystal report field in the list.

  The list of available fields includes all database fields and recurring formulas in the main report and in not-on-demand subreports.
- 4. In the Enterprise Recipient Mapping column, select a profile in the list.
  - This profile maps the report to profile values defined for Enterprise recipients. If the profile is not configured in the BI platform, personalization will fail. If you need profiles added, contact your system administrator.
  - The *Enterprise Recipient Mapping* column appears only for publications intended for Enterprise recipients.
- 5. In the *Dynamic Recipient Mapping* column, select a dynamic recipient source in the list.

  The report field is mapped to a column in the dynamic recipient source that contains corresponding values.
  - The *Dynamic Recipient Mapping* column appears only for publications intended for dynamic recipients.
- 6. Repeat steps 2 to 5 for each report field you want to filter.
- 7. Click OK.

# 10.2.12.2 Selecting the Publication Format(s) for a Crystal report

You select the publication format for a Crystal report through *Publication Properties > Report Features > Formats*.

You can select and configure more than one publication format for a Crystal report. When you select a format, the available formatting options appear. For some options, such as *Crystal Reports* and *Crystal Reports* (*RPTR*), no formatting options appear and the default source document formatting is applied.

- 1. Right-click the Crystal report to select a publication format, and select *Schedule*.
- 2. In the Schedule dialog box, click Formats.

- 3. Under *Format Options for Selected Document*, select a format to publish the Crystal report in.

  The options for the selected format appear.
- 4. Configure the formatting options as needed.
- 5. When the *Use the export options defined in the report* check box is available, perform one of the following actions:
  - Select the check box to use the default export options defined in the source document.
  - Clear the check box to configure export options for the format you selected, and then configure the options that appear.
- 6. Repeat steps 3 to 5 for each format in which you want to publish this Crystal report.
- 7. Click OK.

Repeat this task for each Crystal report in the publication.

## 10.2.12.2.1 Crystal Report Formatting Options

No additional options appear when you choose *Tab Separated Text (TTX)* as the formatting option. *PDF* options apply to source documents published as PDF files.

### Microsoft Excel (97-2003)

Option	Description
Page Range	<ul> <li>To publish an entire report as an Excel file, select All.</li> <li>To publish specific report pages, select Pages, enter the first page number in the from box, and enter the last page in the to box.</li> </ul>
If you clear the Use the export options defined in t	the report check box, the following options are available:
Set Column Width	• To define column widths relative to objects in a report, select Column width based on objects in the, and select an option in the list—Whole report, Report Header, Page Header, Group Header #, Details, Group Footer #, Page Footer, or Report Footer.
	• To define a constant width for all report columns, select Constant column width (in points), and enter a number in the box.
Export page header and page footer	Select this check box to choose how frequently headers and footers appear in Excel files, and select an option in the list—None, Once Per Report, or On Each Page.

Option	Description
Create page breaks for each page	Select this check box to create page breaks that reflect the page breaks in a report.
Convert date values to strings	Select this check box to convert date values to text strings.
Show gridlines	Select this check box to include grid lines in Excel files.

## Microsoft Excel (97-2003) (Data Only)

If you clear the *Use the export options defined in the report* check box, the following options are available:

Option	Description
Set Column Width	<ul> <li>To define column widths relative to objects in a report, select Column width based on objects in the, and select an option in the list—Whole report, Report Header, Page Header, Group Header #, Details, Group Footer #, Page Footer, or Report Footer.</li> <li>To define a constant width for all report columns, select Constant column width (in points), and enter a number in the box.</li> </ul>
Export object formatting	Select this check box to preserve object formatting from a report.
Export images	Select this check box to publish report images in Excel files.
Use worksheet functions for summaries	Select this check box to use report summaries to create worksheet functions for Excel files.
Maintain relative object position	Select this check box to preserve the relative position of report objects.
Maintain column alignment	Select this check box to preserve the column alignment from a report.
Export page header and page footer	Select this check box to choose how frequently headers and footers appear in Excel files, and select an option in the list— None, Once Per Report, or On Each Page.
Simplify page headers	Select this check box to simplify page headers in a report.
Show group outlines	Select this check box to show group outlines from a report.

## **Microsoft Excel Workbook Data-only**

If you clear the *Use the export options defined in the report* check box, the following options are available:

Option	Description
Set Column Width	• To define column widths relative to objects in a report, select Column width based on objects in the, and select an option in the list—Whole report, Report Header, Page Header, Group Header #, Details, Group Footer #, Page Footer, or Report Footer.
	<ul> <li>To define a constant width for all report columns, select Constant column width (in points), and enter a number in the box.</li> </ul>
Export object formatting	Select this check box to preserve object formatting in a report.
Export images	Select this check box to publish report images in Excel files.
Use worksheet functions for summaries	Select this check box to use report summaries to create worksheet functions for Excel files.
Maintain relative object position	Select this check box to preserve the relative position of report objects.
Maintain column alignment	Select this check box to preserve the column alignment from a report.
Export page header and page footer	Select this check box to choose how frequently headers and footers appear in Excel files, and select an option in the list—None, Once Per Report, or On Each Page.
Simplify page headers	Select this check box to simplify page headers in a report.
Show group outlines	Select this check box to show group outlines from a report.

## Microsoft Word (97-2003)

Option	Description
Page Range	<ul> <li>To publish an entire report as a Word file, select All.</li> <li>To publish specific report pages, select Pages, enter the first page number in the from box, and enter the last page in the to box.</li> </ul>

### **PDF**

Option	Description
Page Range	<ul> <li>To publish an entire report as a PDF file, select All.</li> <li>To publish specific report pages, select Pages, enter the first page number in the from box, and enter the last page in the to box.</li> </ul>
If you clear the Use the export options defined in	the report check box, the following option is available:
Create bookmarks from group tree	Select this check box to create bookmarks in the generated PDF file based on group tree.

## **Rich Text Format (RTF)**

Option	Description
Page Range	• To publish an entire report as an RTF file, select All.
	<ul> <li>To publish specific report pages, select Pages, enter the first page number in the from box, and enter the last page in the to box.</li> </ul>

## Microsoft Word - Editable (RTF)

Option	Description
Page Range	<ul> <li>To publish an entire report as a Word file, select All.</li> <li>To publish specific report pages, select Pages, enter the first page number in the from box, and enter the last page in the to box.</li> </ul>
If you clear the Use the export options defined in the rep	port check box, the following option is available:
Insert page break after each report page	Select this check box to create page breaks that reflect the page breaks in a report.

### **Plain Text**

If you clear the *Use the export options defined in the report* check box, the following option is available:

Option	Description
Number of Characters per Inch	Enter the number of characters that should appear per inch in a plain text file. The recommended range is between 8 and 16.

## **Paginated Text**

If you clear the *Use the export options defined in the report* check box, the following options are available:

Option	Description
Number of Lines per Page	Enter the number of lines that should appear on each page of a paginated text file.
Number of Characters per Inch	Enter the number of characters that should appear per inch in a paginated text file. The recommended range is between 8 and 16.

## **Separated Values (CSV)**

If you clear the *Use the export options defined in the report* check box, the following options are available:

Option	Description
Delimiter	Enter the character to use as a delimiter.
Separator	Enter the character to use to separate values, or select the            Tab         check box to separate values with tabs.
Mode	Select Standard Mode (the default) or Legacy Mode. In standard mode, you can control how report pages and group headers and footers appear in CSV output.
Report and page sections	<ul> <li>To export report and page sections, select <i>Export</i>.</li> <li>If you do not want to export report or page sections, select <i>Do not export</i>.</li> <li>To isolate report and page sections, select the <i>Isolate report/page sections</i> check box.</li> </ul>

Option	Description
Group sections	• To export group sections, select <i>Export</i> .
	<ul> <li>If you do not want to export group sections, select Do not export.</li> </ul>
	<ul> <li>To isolate group sections, select the Isolate report/page sections check box.</li> </ul>

#### **XML**

If you clear the *Use the export options defined in the report* check box, the following option is available:

Option	Description
XML Exporting Formats	To specify the XML format, select an option in the list.

## 10.2.12.3 (Optional) Selecting Print Options for a Crystal Report in a Publication

You can select print options for a Crystal report in *Publication Properties > Report Features > Print Settings*. Before you can set print options for the default printer:

- The printer must be installed and configured properly.
- The Crystal Reports Job Server must be running on an account that has sufficient privileges to access the printer you specify.

For more information, see the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

You can print instances in Crystal reports format each time a publication runs, using the Crystal Reports Job Server's default printer or a different printer. The BI platform prints instances after the publication is personalized but before delivery.

- 1. Right-click the Crystal report to set print options, and select Schedule.
- 2. In the Schedule dialog box, click Print Settings.
- 3. Under *Documents*, select the Crystal report that you want to print when the publication runs.
- 4. Select the *Print Crystal reports when scheduling* check box. The Crystal report print options appear.
- 5. Select *Default printer* to print to the Job Server's default printer, or select *Specify the printer* and select the printer's path and name:
  - If the job server runs on Windows, in the Specify the printer box, enter \
     \PrintServer>\<PrinterName>

Replace <PrintServer> with the name of your printer server and <PrinterName> with the name of your printer.

- If the job server runs on Unix, confirm that the Unix is shown (not hidden), and enter the print command that you usually use in the *Specify a printer* box.
  - For example, enter lp -d <PrinterName>
- 6. In the Number of Copies box, enter the number of copies to print.
- 7. Under Page Range, select All to print all pages in the publication or Pages and enter the page range to print.
- 8. (Optional) In the Set collate option to list, select Collate, Do not collate, or Use printer defaults.
- 9. (Optional) In the Page Scaling list, select Scale to fit, Only shrink to fit, or Do not scale.
- 10. (Optional) To center report content on the page, select the Center the page check box.
- 11. (Optional) If the Crystal report is wide and you want it to print on one page, select the *Fit horizontal pages into one page* check box.
- 12. Click Schedule.

## 10.2.12.4 (Optional) Selecting a Recipient Delivery Rule for a Crystal Report in Publication

Recipient delivery rules determine whether a publication is delivered to a particular recipient after processing and personalization. After creating a publication, you can open the publication and change the delivery rules for it.

- 1. Click the icon beside the publication to set delivery rule for and select *Properties*.
- 2. In the Publication Properties window, expand Report Features, and click Delivery Rules in the navigation list.
- 3. Under Recipient Delivery Rule, select Deliver individual document when condition is met or Deliver all documents only when all conditions are met.
- 4. In the *Condition* column beside each document, select the condition to be met before the publication is delivered.
- 5. Click Save and Close.

## 10.2.12.5 (Optional) Selecting a Global Delivery Rule for a Publication

Global delivery rules determine whether a publication can be processed and delivered to all recipients. You can set a global delivery rule on any Publication in the BI Platform based on Crystal reports.

- 1. Click the icon beside the publication to set delivery rule for and select *Properties*.
- 2. In the Publication Properties page, expand Report Features, and click Delivery Rules in the navigation list.
- 3. Under *Global Delivery Rule*, click *Browse*.

  The *Select Document* dialog box appears, you can select a Crystal report as source of the global delivery rule.

#### Note

The Crystal report must contain an alert.

- 4. Locate and select the Crystal report, and click OK.
- 5. In the *Condition* list, select the applicable condition for the publication to be processed and delivered.
- 6. Click Save and Close.

## 10.2.12.6 (Optional) Formatting a merged PDF file from Crystal reports

Before you can format a merged PDF file:

- Crystal reports must have titles in order to be included in a merged PDF file. To set the title for a report, open the report in SAP Crystal Reports, select File Summary Info, and enter a title for the report in the Title box on the Summary tab. Save the report and re-export it to the repository.
- In the BI Launch Pad, for a publication, in the *Properties* page, under *Source Documents*, the Crystal reports and PDF files that you want to merge must appear in the correct order.
- In the BI Launch Pad, for a publication, in the Properties page, expand Report Features.
- Under *Formats*, the *PDF* check box must be selected as a format for each Crystal report that you want to include in the merged PDF file.
- In the BI Launch Pad, in the *Schedule* page, under *Destinations*, the *Merge Exported PDF* check box must be selected for each destination that you want to send the merged PDF file to.

Ensure that the merged PDF contain detailed bookmarks that allow easier navigation. For each Crystal report listed.

- Select the report in the *Documents* list in the *Formats* area.
- Clear the Use the export options defined in the report check box.
- Select the Create bookmarks from group tree check box.

To format a merged PDF file, perform the following steps:

- 1. Click the icon beside the Publication to format a merged PDF file for and select *Properties*.
- 2. In the Properties page, expand Report Features, and click Merged PDF Options in the navigation list.
- 3. Create a table of contents for the merged PDF file:
  - a. Enable the *Create Table of Contents* toggle button. The format options for the table of contents appear.
  - b. In the Title box, enter a title for the table of contents.
  - c. In the *Title Font* list, select the font, font size (in points), and font color for the title of the table of contents.
  - d. In the *Item Font* list, select the font, font size (in points), and font color for items in the table of contents.
- 4. Set the page number format for the merged PDF file:
  - a. Enable the *Apply Running Page Numbers* toggle button. The format options for page numbers appear.
  - b. In the Number Format box, enter a format for page numbers.
    - By default, the format is set to Page &p of &P. You can change the format, but you must use &p as a placeholder for the current page number and &P as a placeholder for the total number of pages.

- c. In the Number Location list, select the page number orientation for the merged PDF file.
- d. In the *Number Font* list, select the font, font size (in points), and font color for the page numbers.
- e. If you want the table of contents to have page numbers, select the *Apply page numbers to Table of Contents pages* check box.
- 5. Set recipient logon credentials and permissions for recipient actions:
  - a. Enable the Set Restrictions toggle button.
  - b. In the *User Password* box, enter the password that recipients must enter to view the merged PDF file.
  - c. In the Owner Password box, enter the password that recipients must enter to edit the merged PDF file.
  - d. To allow recipients to print the PDF file, select the Allow Printing check box.
  - e. To allow recipients to modify the PDF file, select the Allow Modification of Contents check box.
  - f. To allow recipients to copy and paste PDF contents, select the Allow Copy and Paste check box.
  - g. To allow recipients to modify annotations in the PDF file, select the *Allow Modification of Annotations* check box.
- 6. Click Save.

## 10.2.12.7 Configuring Database Logon Information for a Crystal Report in Publication

You can configure the database logon information that recipients use to log on to the database and refresh the data in the Crystal report.

Confirm that database settings for the Crystal report are correct or modify a report's default database setting. In the CMC, select *Folders*, select the Crystal report, and select *Manage Default Settings Database Configuration* to check the database information or to enter new information.

#### ① Note

To avoid breaking existing schedule or publication, changes in CMC **Database Configuration** will only show up the next time you schedule or publish that Crystal report.

- 1. Click the icon beside the publication to configure database logon information for and select *Schedule* or *Properties*.
- 2. In the Schedule or Properties page, expand Report Features, and click Database Logon in the navigation list.
- 3. In the *Data Sources* list, select a data source.

  The database information for the data source appears in the *Details* section.
- 4. Confirm that the information in the *Database Server* field and the *Database* field is correct.
- 5. In the *User* field, enter the user name that recipients must use to log on.
- 6. In the Password field, enter the password that recipients must use to log on.
- 7. Click Schedule (or Save in Properties page).

You can also modify the data source information that a Crystal report references in the report itself.

Open the Crystal report in SAP Crystal Reports, select Database Set Datasource Location Select a connection, or create a new connection in the Set Datasource Location dialog box.

## 10.2.13 Designing Web Intelligence documents

## 10.2.13.1 Selecting the Publication Format for a Web Intelligence Document

You must select a publication format for each dynamic content source Web Intelligence document in a publication.

- 1. Right-click the Web Intelligence document to specify a publication format for and select *Schedule*.
- 2. In the Schedule dialog box, click Formats in the navigation list.
- 3. Under Output Format, select the check box beside the format to publish the Web Intelligence document in:
  - Web Intelligence
  - Microsoft Excel
  - Adobe Acrobat
  - mHTML
- 4. If you selected *Comma Separated Values (CSV)*, under *Format Options and Settings*, perform the following actions:
  - a. In the Text qualifier list, select a text qualifier.
  - b. In the Column delimiter list, select a column delimiter.
  - c. In the Charset list, select the character set.
  - d. If you want to enter a new character set, select the *Enter a new charset* check box, and enter the character set in the box.
  - e. If you want to use the settings configured as the default, select the Set as default values check box.
  - f. If you want to generate a comma-separated value for each data source, select the *Generate separate CSV per Data Provider* check box.
- 5. Repeat steps 3 to 4 for each format in which to publish the document.
- 6. Click OK.

## 10.2.13.2 Personalizing a Web Intelligence Document with a Global Profile Target

You can personalize a Web Intelligence document for Enterprise recipients by filtering with a global profile target.

- Before you can use a profile to personalize data for Enterprise recipients, the profile must be configured in the BI platform. If a profile is not configured in the platform, personalization will fail.
- Before personalizing a Web Intelligence document, ensure that the profile has a global profile target.

When you define personalization under *Global Profiles*, you do not need to set personalization options under *Filters*. If you need profiles added to the BI platform, contact your system administrator.

- 1. Right-click the Web Intelligence document to personalize and select Schedule.
- 2. In the Schedule dialog box, click Personalization in the navigation list.
- 3. Under Global Profiles, in the Enterprise Recipient Mapping column, select a profile in the list.

This profile maps the document to the universe field (global profile target) that is filtered for Enterprise recipients.

4. Click OK.

# 10.2.13.3 Personalizing a Web Intelligence Document by Filtering Fields

Before you can use a profile to personalize data, the profile must be configured in the BI platform. If a profile is not configured in the platform, personalization will fail.

Static-value profiles can filter only string fields in source documents. To filter other types of fields, use expression profile values. If you map an incorrect type of field to the profile, personalization will fail. If you need profiles added to the platform, contact your system administrator.

Scheduling and publishing a Web Intelligence document to .wid format generates a .wid file. Filters in .wid files can be removed by any recipient with appropriate security rights. When the .wid file will be sent to recipients or destinations, use filters carefully. For example, if you filter a Web Intelligence document to limit the information that recipients can see and then send the published .wid file to recipients, any recipient with security rights to edit the document can remove or update the filter and access data that should not be visible.

- 1. Right-click the Web Intelligence document to personalize and select Schedule.
- 2. In the Schedule dialog box, click Personalization in the navigation list.
- 3. Under Local Profiles, for each profile listed in the *Title* column, select a profile from the list in the *Report Field* column.
  - This profile maps the report field to profile values for Enterprise recipients.
- 4. Under *Local Profiles*, in the *Enterprise Recipient Mapping* column, select a profile the list.

  This profile maps the document to the universe field (global profile target) that is filtered for Enterprise recipients.
- 5. In the *Dynamic Recipient Mapping* column, select a profile in the list.

  The field in the source document is mapped to the column that contains corresponding values in the dynamic recipient source.
- 6. Repeat steps 3 to 5 for each field to filter.
- 7. Click OK.

## 10.2.14 Optional publication tasks

The tasks in this section are optional (not required to design and schedule a publication) but can improve publication performance.

#### 10.2.14.1 Editing Parameter (prompt) Values for an Object

If you don't want to use the default parameter (prompt) values in a content object, you can edit the values.

Parameters (prompts) ask you to enter information. In report objects, the information you enter can determine which data appears in a report. For example, in a report used by sales, a parameter can ask you to choose a region. When a region is selected, the report displays the results only for that selected region.

- 1. In the *Documents* tile, click the icon beside the object to edit parameter (prompt) values for and select *Schedule*.
- 2. In the Schedule page, expand Report Features, and click Prompts in the navigation list.

The parameter (prompt) options can differ from object to object depending on how your system administrator has configured the parameter or prompt. For example, program objects can appear in an *Argument* box.

If the Prompts option is not available, the content object does not contain parameters or prompts.

- 3. (Crystal reports only) In the Prompts area, click Edit Values..., and edit a parameter value.
- 4. (Web Intelligence documents based on SAP BEx query only) In the *Prompts* area, click *Modify* to edit a prompt value or *Clear* to remove the value.

In Web Intelligence documents, parameters are called as prompts. When a scheduled document runs, based on SAP Business Explorer (SAP BEx) queries, a prompt's value can be fixed or obtained by an SAP Business Warehouse (SAP BW) data source variable. Prompts can contain mandatory variables in SAP BW data sources.

The SAP BW data source must be able to process the value provided for a prompt. If the data source cannot process a value, document execution fails. For example, SAP BW exit or customer exit variables are often used as dynamic variables in prompts.

If the *Clear* button is not available, your administrator can enable it by setting bex.dynamic\_variable.schedule=true in the <InstallDir>\<WebAppServer>\webapps\boe\web-inf\config\custom\AnalyticalReporting.properties file. For instructions, see the *Business Intelligence Platform Administrator Guide*.

5. Click Schedule.

## 10.2.14.2 Selecting Events to Trigger a Publication

Event-based scheduling gives you additional control when a publication runs. Use events to trigger a publication to run or use a publication job to trigger an event.

For information about events, see the SAP BusinessObjects Business Intelligence Platform User Guide.

- 1. Click the icon beside the publication to select events for and select *Schedule*.
- 2. In the Schedule page, expand General, and select Events in the navigation list.
- 3. To specify file-based and custom events for a publication, click the Events to wait for field.
- 4. In the Select Events dialog, select the check box beside the events to move them to the Selected Items list and click Add.

The events trigger the publication job to run.

#### Note

Choose the *Any event* check box if you want to trigger a schedule publication after any one of the events occur.

- 5. To specify schedule events for a publication, click the Events to trigger on completion field.
- 6. In the Select Events dialog box, select the check box beside the events to move them to the Selected Items list and click Add.
  - The events occur after the publication job runs.
- 7. Click Schedule.

#### 10.2.14.3 Selecting a Server Group for a Publication

You cannot schedule publications across sites in a federation. For information about server groups, see the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

- 1. Click the icon beside the publication to select a server group for and select Schedule.
- 2. In the Schedule page, expand General, and select Scheduling Server Group in the navigation list.
- 3. To run the publication job at its site of origin, enable the *Run at origin site* toggle button.
- 4. Select a server group option, and click Schedule.

## 10.2.14.4 Adding a Publication Extension in the CMC

A publication extension is a library of code that applies business logic to publications. You must add a publication extension before you can use the extension in a publication.

Before you can use a publication extension, deploy the extension on all computers that run the Adaptive Processing Server, and then restart the Adaptive Processing Server and other servers that host a Publishing Service. The location of the server varies, depending on the operating system:

- In Windows, the server is located at <InstallDir>\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\java\lib\
- In Unix, the server is located at <InstallDir>/sap\_bobj/enterprise\_xi40/java/lib/

You can add publication extensions only in the Central Management Console (CMC). (You cannot add them when designing a publication in the BI launch pad.)

To define the order in which to execute publication extensions, click *Move Up* or *Move Down* under the *Before Publication Delivery* list or the *After Publication Delivery* list. For more information about publication extensions, see the *SAP BusinessObjects Business Intelligence Platform Java SDK Developer Guide*.

- 1. In the CMC, go to the *Folders* management area, and locate the publication to add a publication extension to.
- 2. Right-click the publication and select *Properties*

- 3. In the *Properties* dialog box, expand *Additional Options* in the navigation list, and select *Publication Extension*.
- 4. In the *Publication Extension Name* box, enter a name for the extension.
- 5. In the Class Name box, enter the fully qualified class name for the extension.
- 6. (Optional) In the Parameter box, enter a parameter name.
- 7. To use the extension after processing but before delivery, above the *Before Publication Delivery* list, click the *Add* button.
  - The extension is added to the Before Publication Delivery list.
- 8. To use the extension after delivery, above the *After Publication Delivery* list, click the *Add* button. The extension is added to the *After Publication Delivery* list.
- 9. Click Save.

## 10.2.14.5 Enabling Email Notification for a Publication Job in the CMC

Enable email notification when you want to receive an email message after a publication job runs.

Before enabling email notification, confirm that the Adaptive Job Server is properly configured.

You can enable email notification only in the Central Management Console (CMC). (You cannot enable it when designing a publication in the BI Launch pad.)

- 1. In the CMC, go to the *Folders* management area, and locate the publication job to enable email notification for
- 2. Right-click the publication job and select Schedule.
- 3. In the Schedule dialog box, click Notification in the navigation list, and expand Email Notification: Not in use.
- 4. For successful publication jobs, to receive email notification at default recipient email addresses, select the *A job ran successfully* check box, and select *Use the Job Server's defaults* to use the default addresses on the Adaptive Job Server.
- 5. For successful publication jobs, to receive email notification at specified recipient mail addresses, select the *A job ran successfully* check box, select *Set the values to be used here*, and perform the following actions:
  - a. In the From box, enter the email address or a name to send the notification from.
  - b. In the To box, enter the email address of each recipient who should receive the notification.
  - c. In the *Cc* box, enter the email address of each additional recipient who should be copied on the notification.
  - d. In the *Subject* box, enter the subject of the notification.
  - e. In the Message box, enter a message to accompany the notification.
- 6. For failed publication jobs, to receive email notification at default recipient email addresses, select the *A job failed to run* check box, and select *Use the Job Server's defaults* to use the default addresses on the Adaptive Job Server.
- 7. For failed publication jobs, to receive email notification at specified recipient mail addresses, select the *A job failed to run* check box, select *Set the values to be used here*, and perform the following actions:
  - a. In the From box, enter the email address or a name to send the notification from.
  - b. In the To box, enter the email address of each recipient who should receive the notification.

- c. In the *Cc* box, enter the email address of each additional recipient who should be copied on the notification.
- d. In the Subject box, enter the subject of the notification.
- e. In the Message box, enter a message to accompany the notification.
- 8. Click Schedule.

## 10.2.14.6 Enabling Auditing Notification for a Publication Job in the CMC

Enable audition notification when you want to audit successful or failed publication jobs.

You can enable auditing notification only in the Central Management Console (CMC). (You cannot enable it when designing a publication in the BI Launch Pad.) For more information about auditing, see the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

- 1. In the CMC, go to the *Folders* management area, and locate the publication job to enable auditing notification for.
- 2. Right-click the publication job and select Schedule.
- 3. In the Schedule dialog box, expand Additional Options, click Notification, and expand Audit Notification: Not in use.
- 4. To audit successful publication jobs, select A job ran successfully.
- 5. To audit failed publication jobs, select *A job failed to run*.
- 6. Click Schedule.

## 10.2.14.7 Selecting a Profile Resolution Method

Select a profile resolution method so that, when a profile conflict occurs, the profile resolution determines whether instances can be merged or delivered as separate documents in a publication.

You can select a profile resolution method either in the Central Management Console (CMC) or in the BI Launch Pad.

## 10.2.14.7.1 Selecting a Profile Resolution Method in the CMC

- 1. In the CMC, go to the *Folders* management area, and locate the publication to select a profile resolution method for.
- 2. Right-click the publication job and select *Properties*.
- 3. In the *Properties* dialog box, expand *Properties* option in the navigation list, and click *Advanced*.
- 4. Under *Profile Resolution Method*, perform either of the following actions:
  - Select Do not merge if you want profiles from multiple user groups to result in separate documents.

- · Select Merge if you want to apply profiles from multiple user groups to the same document.
- 5. Click Save & Close.

# 10.2.14.7.2 Selecting a Profile Resolution Method in BI Launch Pad

- 1. In the My Home group, click the Folders tile.
- 2. In the *Folders* page, navigate to the folder where the publication for which you want to select profile resolution method is present.
- 3. Click the icon beside the publication and select *Properties*.
- 4. In the Properties page, expand General, and select Advanced in the navigation list.
- 5. Under *Profile Resolution*, perform either of the following actions:
  - · Select Don't merge if you want profiles from multiple user groups to result in separate documents.
  - Select Merge if you want to apply profiles from multiple user groups to the same document.
- 6. Click Save and Close.

#### 10.2.14.8 Selecting a Report Bursting Method

Select a report bursting method to determine how source documents are personalized, processed, and delivered in a publication.

Before selecting a report bursting method, ensure that the publication contains Web Intelligence documents intended for Enterprise recipients and that profiles used for personalization have filter expressions.

Report bursting method uses different filter types to personalize and process documents. For example, the *One database fetch for all recipients* option uses a report filter, and the *One database fetch per recipient* option uses a query filter. Each filter type supports a different set of operator. If a filter expression uses an operator that the report bursting method does not support, the publication fails.

You can select a report bursting method either in the Central Management Console (CMC) or in the BI Launch Pad.

## 10.2.14.8.1 Selecting a Report Bursting Method in the CMC

- 1. In the CMC, go to the *Folders* management area, and locate the publication to select a profile resolution method for.
- 2. Right-click the publication job and select *Properties*.
- 3. In the Properties dialog box, expand Properties option in the navigation list, and click Advanced.
- 4. Under Report Bursting Method, select a report bursting method.

5. Click Save & Close.

# 10.2.14.8.2 Selecting a Report Bursting Method in the BI Launch Pad

- 1. In the Home group, click the Folders tile.
- 2. In the *Folders* page, navigate to the folder where the publication for which you want to select profile resolution method is present.
- 3. Click the icon beside the publication and select *Properties*.
- 4. In the Properties page, expand General, and select Advanced in the navigation list.
- 5. Under Report Bursting Method, select a report bursting method.
- 6. Click Save and Close.

# 10.3 Running Publications and Working with Published Instances

At any point during or after publication design, you can view a publication's properties in the *Summary* dialog box-including the publication's title, location, description, source documents, the number of recipients who will receive the publication (sorted by recipient type, Enterprise or dynamic), how the publication is personalized, the distribution format, and the destination.

Click *Summary* to open the *Summary* dialog box. You can use other options on the navigation panel to change the properties of and to save or schedule a publication.

### 10.3.1 Testing a Publication

Use the test mode in the BI Launch Pad to send a publication to yourself before sending it to recipients.

When you're testing a publication and have added yourself as the recipient, the same information that is planned to be delivered to the recipients configured in the publication, is sent to you. If necessary, you can exclude selected recipients from the original group of recipients in test mode. This allows you to check how the publication content appears to your recipients.

- 2. (Optional) In the *Test Mode*, modify the recipients as required:
  - a. Under Enterprise Recipients, click on Select
  - b. Under Available Recipients, include or exclude the users or user groups.

- c. Select OK.
- 3. (Optional) Under *Dynamic Recipients*, you can modify the recipient list that is retrieved from the document or you can remove the document.
- 4. Select Test.

The publication runs in test mode and once done, the publication is sent to the intended test recipients.

### 10.3.2 Scheduling a Publication to Run

When scheduling a publication, you can use the default recurrence pattern or enter new values, and you can change the recipients each time you schedule a publication.

To create a publication in the Business Intelligence Launch Pad, please refer to *Creating a Publication in the BI Launch Pad User Guide*.

A publication can then be designed and saved before it can be scheduled to run.

- 1. Click the icon beside the publication to schedule, and select *Schedule*.
- 2. In the *Schedule* page, expand *General*, and select *Recurrence* in the navigation list and confirm that the option selected in the *Run Report* list is correct.
- 3. Click Schedule.

### 10.3.2.1 Viewing the Progress or History of a Publication Job

- 1. Click the icon beside the publication job and select *History*.

  The *History* page appears with the list of instances and shows the status (Success, Failed, or Running) of the job in the *Status* column.
- 2. Click the status (Success, Failed, or Running) to view the details and download the log.

### 10.3.2.2 Viewing Latest Instance of a Publication

- 1. To view the latest instance of the publication, click the icon beside the publication, and select *View Latest Instance*. If there are any successful instances, then a dialog box appears with the list of documents.
- 2. Click the document to download or view it in the unified viewer. Based on the type of document, it either gets downloaded or opens in unified viewer.
- 3. To download the log file, click Download Log at the bottom of the dialog box.

#### 10.3.3 Subscribe and Unsubscribe

A subscription enables the users who are not recipients of a publication, to view the latest instance. Enterprise recipients can unsubscribe from a publication at any time. Dynamic recipients can neither subscribe to nor unsubscribe from a publication. Users with the appropriate access rights can subscribe and unsubscribe other users. To subscribe to or unsubscribe from a publication, the following are required:

- A BI platform account
- Access to the BI Launch Pad in the platform
- View rights to the publication
- Subscriber rights for the user account (Enterprise recipients)

#### 10.3.3.1 Subscribing or Unsubscribing from a Publication

To subscribe to a publication after it is scheduled, subscribe to its recurring instance or reschedule the publication.

You must have appropriate access rights to a publication before you can subscribe to it.

Only Enterprise recipients can subscribe to or unsubscribe from a publication. Dynamic recipients cannot subscribe to or unsubscribe from publications.

- 1. On the home page, click the Folders tile.
- 2. Navigate to the folder where you have a publication for which you want to subscribe to or unsubscribe from.
- 3. Click the icon beside the publication and select *Subscribe* or *Unsubscribe*.

You are now either subscribed or unsubscribed from a publication based on your selection.

## 10.3.3.2 Subscribing or Unsubscribing from a Publication Instance

After a recurring publication is scheduled, Enterprise recipients can subscribe to its first recurring instance. For example, when a publication is scheduled to run twice a week, you can subscribe to the first publication instance, but not the second one.

You must have appropriate access rights to a publication before you can subscribe to its instances.

Only Enterprise recipients can subscribe to or unsubscribe from a publication instance. Dynamic recipients cannot subscribe to or unsubscribe from publication instances.

- 1. In the My Home group, click the Folders tile.
- 2. Navigate to the folder where you have a publication and its instance for which you want to subscribe to or unsubscribe from.
- 3. Click the icon beside the publication and select *History*.

4. In the *History* page, click the icon beside the instance and select *Subscribe* or *Unsubscribe*.

You are now either subscribed or unsubscribed from a publication instance based on your selection.

# 10.3.4 Viewing Publications sent to the Default Enterprise Location

As a recipient, you can view only your own personalized publication instances in the BI platform.

- 1. Perform either of the following actions to start the Central Management Console (CMC):
  - In Windows, select Start Programs SAP Business Intelligence SAP BusinessObjects BI platform 4 SAP BusinessObjects BI platform Central Management Console .
  - In a web browser, enter http://<ServerName>:<ConnectionPort>/CMC, replacing <ServerName> with your CMS name and <ConnectionPort> with your connection port number (specified during installation). The default connection port number is 8080.
- 2. Enter your logon credentials:
  - a. In the System box, confirm that the CMS name and CMS port are correct.
  - b. Enter your user name and password.
  - c. In the Authentication list, select the authentication type
- 3. Click Log On.
- 4. Under *Folders*, right-click the publication and select *History*.
- 5. In the *History* dialog box, click the link in the *Instance Time* column.
- 6. Double-click the instance to view.

### 10.3.5 Viewing Publications sent to a BI Inbox

Dynamic recipients can view publications sent to a BI Inbox. They cannot log on to the BI Launch Pad to view publication results.

- 1. Perform either of the following actions to start the BI Launch Pad:
  - In Windows, select Start Programs SAP Business Intelligence SAP BusinessObjects Bl platform 4 SAP BusinessObjects Bl platform Java Bl Launch Pad .
  - In a web browser, enter http://<ServerName>:<ConnectionPort>/BOE/BI, replacing <ServerName> with your CMS name and <ConnectionPort> with your connection port number (specified during installation). The default connection port number is 8080.
- 2. Enter your logon credentials:
  - a. In the System box, confirm that the CMS name is correct.
  - b. Enter your user name and password.
  - c. In the Authentication list, select the authentication type.
- 3. Click Log On.
- 4. Click My Inbox.

5. Double-click the instance to view.

### 10.3.6 Redistributing a Publication Instance

When you want to resend an instance to a recipient but do not want to rerun an entire publication, you can redistribute successful publication instances to all or some of the original recipients.

Only recipients specified when the publication was originally run can receive redistributed instances.

- 1. Perform one of the following actions:
  - In the BI Launch Pad, right-click a publication and select *History*.
  - In the Central Management Console (CMC), right-click a publication and select Actions History
- 2. In the *History* dialog box, select a successful publication instance.
- 3. Perform one of the following actions:
  - In the launch pad, select More Actions Reschedule 1.
  - In the CMC, select Actions Reschedule .
- 4. Choose which recipients will receive redistributed instances:
  - To redistribute an instance to Enterprise recipients, click *Enterprise Recipients*, and click the > button to move recipients from the *Available* list to the *Selected* list.
  - To redistribute an instance to dynamic recipients:
  - a. Click *Dynamic Recipients*, and confirm that columns mapped to recipient IDs, full names, and email addresses are correct.
  - b. To redistribute the publication to all dynamic recipients, select *Use entire list*.
  - c. To redistribute the publication to selected dynamic recipients, click the > button to move recipients from the *Available* list to the *Selected* list.
- 5. Click Redistribute.

The publication history appears, and the redistributed instance has a status of Running. The date in the *Instance Time* column is updated to reflect the redistribution time.

### 10.3.7 Retrying a Failed Publication

Before retrying a failed publication, view the log file for the publication instance, address any errors, and reschedule the publication.

Using the option to "Retry" failed instances of a publication, you can:

- Overwrite the "failed" instance (*Run Now* and *Reschedule* create new instances, but *Retry* uses the failed instance itself).
- Process only the failed recipients, in case of a partial failure.
- Run the full job without creating a new instance, in case of a complete failure.

#### ① Note

You can also perform auto-retry by specifying the *Number of retries allowed* and the *Retry interval in seconds* under the *Recurrence* property of the publication. In case of a failure, it attempts to run the publication again.

- 1. Select the failed publication instance.
- 2. Perform either of the following actions:
  - In the BI Launch Pad, select More Actions History
  - In the Central Management Console (CMC), select Actions History.
- 3. Right-click on the failed instance and click *Retry*. The instance status changes to *Running*. Wait till the status changes to *Success*.

If the publication fails again, review the new log file and fix any errors that occurred.

#### 10.4 Publication Performance

You can improve publication performance by modifying the Adaptive Processing Server, the Publishing Service, and the Publishing Post Processing Service.

#### **Adaptive Processing Server**

Area	Consideration
CPU and memory	Move the Adaptive Processing Server to a faster machine that has more available CPUs and BI platform Feature Pack 3 or later installed. The server will automatically scale to use more CPUs.
	Isolate the Publishing Service and the Publication Post Processing Service on dedicated Adaptive Processing Servers and remove unused services hosted on those servers. Each service will consume more shared resources (requests to thread pool, memory, and CPU consumption) on an Adaptive Processing Server, and publishing performance may improve.

#### **Publishing Service**

Because publishing is a hard-drive-intensive process, the Publishing Service should be installed on a machine with fast I/O or SAN disks for the FRS.

Area	Consideration
Many publication instances that execute concurrently	If the underlying CMS, FRS, Adaptive Job Server, and report processing servers have been scaled appropriately, horizontally scale out the Publishing Service across multiple Adaptive Processing Servers, on one or more machines, to concurrently process more publication instances.
	A single publication job (for example, with one million recipients) is not shared across Publishing Services hosted on different Adaptive Processing Servers. Horizontally scaling out the Publishing Service will not improve processing time for a single publication, regardless of the number of recipients.
Publications with many recipients	Vertically scale the Adaptive Processing Server on machines with more CPUs and RAM to concurrently process more recipients and to generate more jobs on the Adaptive Processing Server.
	You may need to scale the Adaptive Job Server and report processing servers accordingly to increase throughput.
	You may need to increase the Adaptive Processing Server's heap size (that is, set – Xmx to 2 GB or more) when the server runs on a machine with more than eight CPU cores. The larger number of CPU cores enables the Adaptive Processing Server to spawn more threads and increase throughput. Note that more threads require more RAM.
Publishing cleanup option	For a large publication that does not need redistribution or to view artifacts in the report, do not select the default destination.
Crystal report publications	If you do not need to apply unique security for each recipient, select <i>One database fetch for each batch of recipients</i> .  Database access will be batched in multiple, smaller, concurrent queries.
Web Intelligence publications	Select One database fetch for all recipients or One database fetch per recipient.
	When you select <i>One database fetch for all recipients</i> for a large publication, to break the database query into multiple, smaller queries, add the following command-line option to speed disk delivery to all Adaptive Processing Servers that host the Publishing Service:
	-Dcom.businessobjects.publisher.scopeb atch.max.recipients= <integer></integer>

Area	Consideration
Large publications with slow disk delivery to a single folder on Windows	Search for "disable short file name generation" (article ID 210638) or for "NtfsDisable8dot3NameCreation" on Microsoft TechNet at http://technet.microsoft.com and follow the instructions.
Large publications with slow disk delivery to a single folder that contains more than 300,000 files on Windows	Search for "how NTFS works" at http://technet.microsoft.com and follow the instructions.

#### **Publishing Post Processing Service**

The Publishing Post Processing Service is called when the *Package as ZIP File* check box (in the *Schedule* dialog box) and/or the *Merge Exported PDF* check box (in the *Destinations* dialog box) is selected or when custom post-processing plugins are enabled on a publication.

Area		Consideration
Publications with both <i>Packag Exported PDF</i> selected	e as ZIP File and Merge	Horizontally scale out the Publishing Post Processing Service to spread the ZIP- and PDF-merging workloads across multiple Publishing Post Processing Services hosted on different Adaptive Processing Servers.

### 10.4.1 Recommendations for Adding Source Documents

This section contains recommendations for adding dynamic content documents to publications.

#### Use publication log files to troubleshoot errors in failed publications

When you schedule publications to run, log files are generated to record errors that may occur when the publications are processed. To view all log files for a publication instance, select More Actions History In the History dialog box, click the link for the instance in the Instance Time column. The instance details appear in a new window.

## If using parameter-based personalization for Crystal reports, set parameters to default

Parameter-based personalization may lead to slower publication performance. To significantly speed performance, personalize Crystal report publications by mapping fields to Enterprise recipient profiles or to dynamic recipient personalization values.

If you must personalize Crystal reports using parameters, in the *Personalization* section, set parameters to their default value.

#### ① Note

Before you can use Enterprise recipient profiles in publications, the profiles must be configured in Bl platform.

# View and schedule individual dynamic content documents before adding them to a publication

If you can view and schedule dynamic content documents successfully, the data source connection is working properly and the source document data can be refreshed when the publication is scheduled. If you cannot view and schedule dynamic content documents, confirm that the data source connection settings are correct. The following table summarizes how to check the settings:

Document type	How to check data source connection settings
Crystal report	In the CMC, select the Crystal report, and select Manage  Default Settings In the Default Settings dialog box, click  Database Configuration on the navigation panel.
Web Intelligence document	In the CMC, select the Web Intelligence document, and select Manage Default Settings In the Default Settings dialog box, click Report Universes on the navigation panel.

In some cases, you may have to open a dynamic content document in the designer to configure the data source connection and to re-export the file to the CMS repository and overwrite the previous copy. For more information about configuring data source connections for dynamic content documents, see the designer documentation.

#### Avoid unnecessary data refreshes

If a data refresh is unnecessary for a dynamic content document, in the *Source Documents* section, clear the *Refresh At Runtime* check box for that document to improve overall publication performance.

## 10.4.2 Recommendations for Using Dynamic Recipient Sources

#### Sort dynamic recipient sources according to the recipient ID column

In general, you should sort dynamic recipient sources by the *Recipient ID* column. This is especially important when you are running a high-volume publication or when you selected *One database fetch for each batch of recipients* because it can reduce the number of deliveries to recipients with multiple personalization values.

## For Crystal report dynamic recipient sources, confirm that database configuration information is correct

In the CMC, select the dynamic recipient source, select Manage Default Settings, and confirm the following settings:

- Under *Database Configuration*, confirm the database logon information is correct and *Use same database logon as when report is run* is selected.
- Under *Parameters*, confirm that all parameters have values and all *Prompt when viewing* check boxes for parameters are cleared.

## If using Crystal report dynamic recipient sources, contact your administrator and confirm that the RAS is configured correctly

The Report Application Server (RAS) must be configured to read at least the same number of database records as the number of recipients in the dynamic recipient source. For example, to process a dynamic recipient source with data for 100,000 recipients, the RAS must be set to read more than 100,000 database records.

## 10.4.3 Recommendations for Sending and Receiving Email Publication Instances

## If possible, view embedded-content email-publication instances in Outlook 2003

View embedded content in email publication instances in Outlook 2003 whenever possible. Embedded content in email publication instances may have formatting issues when viewed in Outlook 2007 or in web email accounts, such as Hotmail or Gmail.

# Contact your administrator to confirm that the email settings are configured properly for the Destination Job Server

You must ensure that email settings are properly configured for the Destination Job Server. Publications intended for email destinations may fail because email has not been configured properly as a destination for the Adaptive Job Server. For more information, see the SAP BusinessObjects Business Intelligence Platform Administrator Guide.

## 11 Managing your Instances

### 11.1 Viewing the Historical Instances of an Object

An instance is a single publication of a report. For each scheduled object that runs, the BI platform saves a history of its instances to the Default Enterprise Server. You can view the historical instances of an object in the *History* page.

The History dialog box chronologically lists the instances for an object, with the most recent instances at the top of the list.

To access, choose \*\*\* (More) on the content object and select *History* option.

Depending on the type of the content object, the following headers are present in the *History* page:

- Title
- Status
- Instance Time
- Created By
- Locale
- Parameters

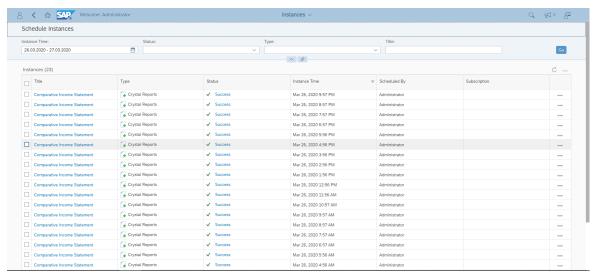
### 11.2 Viewing All Your Available Instances for Specific Dates

The *Instances* tile of the BI Launch Pad allows you to view all your instances available on an interval of time (specified using the Start date and End date).

To view your available instances, perform the below steps:

1. Choose the *Instances* tile in the BI Launch Pad home page.

Below is an example view of the Instances tile. (By **default**, the available instances of **today's calendar date** are displayed.)



2. To view the instances available in a date-range (time-interval) - Choose a start date and an end-date in the Calendar widget in the *Instances Time*.

→ Tip

The calendar widget only **allows you to select two dates consecutively**. Once your selected dates turn blue (get highlighted), they are enabled.

- 3. **Optional:** You can filter the instances based on the below status of the instances:
  - Success
  - Partial Success
  - Failed
  - Running
  - Recurring
  - Paused
  - Expired
- 4. **Optional:** You can even filter the instances based on the report type.

Following report types are available for filtering the instances:

- Publication
- Analysis Workbook
- Crystal Reports
- Lumira Document
- Web Intelligence
- Adobe Acrobat
- Microsoft Excel
- Text (CSV, CSV & HTML Archive)
- 5. **Optional:** You can also search the instances based on the Instance title.
- 6. Click Go.

The available instances (schedules) in the selected date range are listed.

### 11.3 Working With Instances

In the *Schedule* and the *History* page of BI Launch Pad, you can select one or more instances and perform actions based on the status of the instance.

When you select a single instance, you can perform the following actions depending on its status:

- View
- Details
- Delete
- Run Now
- Send To
- Pause

When you select multiple instances, you can perform the following actions depending on their status:

- Run Now
- Pause
- Send To
- Details
- Delete

When you select one or more components of an object package, you can perform the following actions depending on their status:

- View latest Instance
- Details
- Delete
- Run Now
- Send To
- Pause

### 11.3.1 Working with Instances through Schedule Tab

In the *Schedule* tab, you can select a single instance or multiple instances, and perform specified actions based on the status of the instance.

- 1. Log on to the BI Launch Pad.
- 2. Select the Schedule tile.
- 3. Select a scheduled instance or instances, choose (More), and select an action to perform.

### 11.3.2 Working with Instances through the History Page

You can select a single instance or multiple instances of an object in the *History* page.

Select one or more instances of the object, click (More) and select an action to perform.

You can perform following actions on selection of an individual instance:

- View
- Run Now
- Reschedule
- Details
- Delete

Below actions are available on selection of multiple instances:

- Run Now
- Delete

### 11.3.3 Detailed Error Message for Failed Instances

## 11.3.3.1 Viewing Error Message Through Details Pane

You can see a detailed error message for any report by accessing each object.

- 1. Select an object in the Folders page.
- 2. Click (More) and select History.
- 3. Select an instance of the object, click (More) and select *Details*.

The detailed error message is displayed for a failed instance.

### 11.3.3.2 Viewing Error Messages in the Schedule Tab

You can see a detailed error message for an instance in the *Instances* page.

- 1. Log on to the BI Launch Pad.
- 2. In the *Instances* page, specify a *Instance Time* to list the instances.
- 3. Select any scheduled instance, choose (More), and select *Details*.

A detailed error message is displayed for the failed instance.

## 12 Alerting

### 12.1 Alerting concepts

Alerts notify you about changes and notify users and administrators when events are triggered. Use alerting to manage objects and events on the basis of exception.

#### Subscribing to alerts

In the BI platform, users and administrators can subscribe to alerts in the BI Launch Pad or in the Central Management Console (CMC).

#### **Enabling alerts**

When new reports are created, report designers enable alerts. As events are triggered, notifications are sent to subscriber email addresses or to a BI system destination (for example, a BI Launch Pad account).

#### Viewing alert notifications

In the platform, users and administrators view notifications in the BI Launch Pad or in an email.

Right-click an alert and select See More to display alert information, including the alert's title, message, and trigger time.

#### **Managing alerts**

Content administrators and power users manage alerts in the BI Launch Pad or in the CMC.

System administrators manage alerts in the CMC and control user access by assigning access rights.

#### **Example: Alerting and Crystal reports**

For example, Julie works at an auto insurance company and tracks the number of claims filed using a Crystal report. Julie subscribes to the daily Claim Number alert and chooses to receive her alert notification by

email. After a week, the number of auto insurance claims reaches 10,000, meeting the alert's condition and triggering the alert. Julie receives an email notification and realizes that auto insurance claims have increased dramatically. She informs her manager and recommends launching a campaign to promote safer driving habits.

#### 12.1.1 Alert sources

Monitoring uses alerting to notify system administrators of changes in the overall health of the BI platform.

Alerts based on monitoring probes are located in the Monitoring Events folder, in the *Events* area of the CMC. For more information about monitoring, see the *SAP BusinessObjects Business Intelligence Platform Administrator Guide*.

Objects created in applications such as Information Steward and Event Insight also use alerting. For more information, see the application's documentation.

Object that supports alerting	Description
Crystal reports	Crystal reports can contain multiple alerts. When you add a report containing alerts to the repository, the BI platform automatically creates event objects that correspond to each alert in the report. Event objects are located in the Crystal Reports Events folder, under <i>Events</i> , in the Central Management Console (CMC). You can search for alerts using <i>Content Search</i> .
	Only reports created in the platform support alerting and allow users to subscribe to alert notifications when the reports are added. To subscribe, locate the report, and perform the subscription task on the report object.
Events (file-based, schedule-based, and custom)	You can enable alerting for any event.

## 12.1.2 Differences between alerting and Crystal report alert notifications

In earlier versions of the BI platform, you could configure Crystal report alert notifications when you schedule reports. The platform still supports this functionality for reports created in SAP Crystal Reports.

Key difference	Alert notifications in Crystal reports	Alerting in BI Launch Pad
Supported objects	Reports created in Crystal Reports	<ul> <li>Reports created only in Crystal Reports</li> <li>Events</li> <li>Monitoring probes</li> <li>Information Steward alerts</li> <li>Event Insight alerts</li> </ul>
Supported destinations	Email	<ul><li>My Alerts in BI Launch Pad</li><li>Email</li></ul>
Usage	You configure alerts when you schedule a Crystal report.	You subscribe to alert notifications from the alert source and can change a subscription as needed.
	Recipients can include Enterprise users or dynamic users. You must manually enter all recipient email addresses.	Recipients can be Enterprise users or dynamic users. You must manually enter email addresses for dynamic recipients.

### 12.1.3 Alerting workflow

#### **Alerting workflow for Crystal reports**

- 1. The report creator designs a report that contains alerts in SAP Crystal Reports for Enterprise.
- 2. The report creator or a content administrator adds the Crystal report to a folder in the *Folders* or *Personal Folders* area of the Central Management Console (CMC). When the report is added, the BI platform automatically creates report event objects, based on the alerts in the report.
- 3. A user logs on to the CMC or to the BI Launch Pad, locates the Crystal report, and subscribes to the alert.
- 4. The report creator or a content administrator schedules the Crystal report to run. If the alert condition is met, the alert is triggered and the user receives notification according to the subscription settings.

#### Alerting workflow for events

- 1. The content administrator creates an event in the CMC and enables alerting on the new event.
- 2. The user sees the alert in the *Events* area of the CMC or searches for the alert in the launch pad, and subscribes to it.

- 3. The event occurs, triggering the alert.
- 4. The user receives notification that the event occurred according to the subscription settings.

## 12.1.4 Access rights required for alerting

Depending on your role in the alerting workflow and your responsibilities, the access rights you need may vary.

Document alert rights

Role	Task	Rights required
User	Subscribe to a document alert	<ul> <li>View rights on the document</li> <li>View rights on the corresponding event</li> <li>Subscribe rights on the user's own account</li> <li>To view an instance via a document link in an alert notification, you must also have View Instance rights on the document.</li> </ul>
User	Unsubscribe from a document alert	<ul> <li>View rights on the corresponding event</li> <li>Subscribe rights on the user's own account</li> </ul>
User	Receive notification about a document alert	<ul><li>View rights on the corresponding event</li><li>View rights on the document</li></ul>
Content administrator	Manage destination and parameter settings for a document alert	<ul><li>Edit rights on the document</li><li>Edit rights on the event</li></ul>
Content administrator	Manage alerting settings for a document	<ul> <li>View rights and Edit rights on the document</li> <li>View rights and Edit rights on the corresponding event</li> <li>View rights and Subscribe rights on the users or groups to add as subscribers</li> </ul>
		To add a user group to the list of subscribers, you must also have View rights and Subscribe rights on the user group object. Having View rights and Subscribe rights on individual users in a group is not sufficient.
Content administrator	Unsubscribe a user from a docu- ment alert	<ul> <li>View rights on the document</li> <li>View rights on the corresponding event</li> <li>View rights and Subscribe rights on the user</li> </ul>
Content administrator	Trigger a document alert	<ul> <li>View rights and Schedule rights on the document</li> <li>View rights and Trigger rights on the corresponding event</li> </ul>

#### Event alert rights

Role	Task	Rights required
User	Subscribe to an event alert	<ul> <li>View rights on the event</li> <li>Subscribe rights on the user's own account. By default, each user has Subscribe rights on her or his own account.</li> </ul>
User	Unsubscribe from an event alert	<ul> <li>View rights on the event</li> <li>Subscribe rights on the user's own account. By default, each user has Subscribe rights on her or his own account.</li> </ul>
Content administrator	Manage alerting settings for an event	<ul> <li>View rights and Edit rights on the event</li> <li>View rights and Subscribe rights on users or groups to add as subscribers</li> <li>To add a user group to the list of subscribers, you must also have View rights and Subscribe rights on the user group object. Having View rights and Subscribe rights on individual users in a group is not sufficient.</li> </ul>
Content administrator	Trigger an event	View rights and Trigger rights on the event
Alert notification rights  Role	Task	Rights required
User	Receive an alert notification	View rights on the corresponding event
User	Mark an alert notification as read or unread	<ul> <li>View rights on the alert notification</li> <li>Subscribe rights on the user account</li> </ul>
User	Reread an alert notification	View rights on the alert notification
User	Delete an alert notification in BI launch pad	<ul> <li>View rights on the alert notification</li> <li>Subscribe rights on the user account</li> </ul>

## 12.1.5 Alert source objects

The way that you view alert sources depends on the object type of the alert source.

The following table summarizes where alert sources are located:

Object type (alert source)	How to locate the object
Crystal report	Crystal reports can be stored in personal folders or in public folders.
	<ul> <li>To view a Crystal report in a personal folder, on the home page, click the <i>Folders</i> tile, and click the <i>My</i> <i>Folders</i>. Then, browse your personal folders to find the Crystal report.</li> </ul>
	<ul> <li>To view a Crystal report in a public folder, on the home page, click the Folders tile, and click the Public Folders.</li> <li>Then, browse the folders to find the Crystal report.</li> </ul>
Event (file-based, schedule-based, and custom)	Search for the name of an alerting-enabled event.

If you subscribe to an alert, you can quickly view it. On the home page, click the *Folders* tab, and click the *My Subscribed Alerts* folder.

#### 12.1.6 Alert notifications

Alert notifications can be sent to a destination in the BI Launch Pad or to a subscriber email address.

You can view alert notifications in two ways in the launch pad:

- On the home page, click *BI Inbox*, and click *Alerts* to display all alert notifications.
- On the home page, click the *Folder*, and click *My Subscribed Alerts* to display only the notifications of to which you have subscribed.

In both cases, clicking the notification displays the alert message, and information such as the date and time when the alert was triggered.

## 12.2 Subscribing and unsubscribing to an alert

- 1. On the home page, click Folders and find the alert you want to subscribe to.
- 2. Click Subscribe .
- 3. To unsubscribe, click Unsubscribe 1.

You can see the alerts you subscribe to in the My Subscribed Alerts folder.

#### 12.3 Subscribing other users to an alert

- 1. On the home page, click Folders and find the alert you want to edit.
- 2. Click Manage Subscribers Manage Subscribers
- 3. In the Manage Subscribers dialog, click Subscribers List.
- 4. Click Add.
- 5. Use the dedicaded checkboxes to select add users or user groups, and click Set Default Description.
- 6. Select a destination.

#### ① Note

To be able to select *Email* as a destination, make sure the users you have selected have an email associated to their accounts.

- 7. To edit the destination settings of a subscriber:
  - a. Select a user and click Edit.
  - b. Select a destination.

Only email destinations that are enabled and configured on the Adaptive Job Server are available. If no email destination is configured, only the *My Alerts* check box appears.

- c. Click Save & Close.
- 8. Click Close.

## 12.4 Excluding users from an alert

You can exclude users from an alert when you want to subscribe most, but not all, users in a group to the alert. First, you subscribe the entire group, and then you exclude users who do not need to receive alert notifications.

The Excluded list overrides all other subscription settings for a user.

- 1. On the home page, click Folders and find the alert you want to edit.
- 2. Click Manage Subscribers .
- 3. In the Manage Subscribers dialog, click Excluded List.
- 4. Click Add Exclude list.
- 5. Use the dedicaded checkboxes to select users you want to exclude.
- 6. Click OK.
- 7. Click Close.

#### 12.5 Managing custom alerting settings for an alert source

Notifications are typically sent using the default destination settings for alerting.

- 1. On the home page, click Folders and find the alert you want to edit.
- 2. Click Manage Alert Settings .
- 3. In the *Manage Alerting Settings* dialog, check *Enable My Alerts* to select the BI launch pad as a destination. Alert notifications will be sent to the subscriber's BI launch pad accounts. In the BI launch pad, subscribers can view alerts in *My Subscribed Alerts* folders, in the *Folders* tile.
- 4. To choose email as a destination, select the Enable Email check box.
- 5. Select *Use default email settings* to use the default alerting settings for email, or select *Use custom email settings* and fill in the fields as follows:
  - a. In the *From* field, enter a return email address, or select variables for the email address from the *Add* placeholder list.
  - b. In the *To* field, enter each email address that you want to send alert notifications to, or select variables for the email address from the *Add placeholder* list.
  - c. In the *Cc* field, enter each email address that you want to send alert notifications to, or select variables for the email address from the *Add placeholder* list.
  - d. In the *Bcc* field, enter the email address of each undisclosed recipient that you want to send alert notifications to, or select variables for the email address from the *Add placeholder* list.
  - e. In the *Subject* field, enter the subject of the alert notification, or select variables for the subject from the *Add placeholder* list.
  - f. In the *Message* field, enter the message for the body of the alert notification, or select variables for the message from the *Add placeholder* list.
  - g. Select the Add Attachment check box to add an attachment to the alert notification.
  - h. Under *File Name*, select *Use Automatically Generated Name* or *Use Specific Name*. If you select *Use Specific Name*, enter a file name or select a placeholder in the list.
  - i. Select the *Add File Extension* check box to automatically a file extension to file names. If you do not add a file extension to a file name, the document cannot be opened.
- 6. Click Save & Close.

## 13 Managing Deleted Items

Recycle Bin is an application in the BI Launch Pad. When the user deletes an item from the BOE system, it is moved to Recycle Bin, where it is temporarily stored until Recycle Bin is emptied. This gives the user the opportunity to recover accidentally deleted reports/folders and restore them to their original locations.

With the recycle bin application, the user can:

- Initiate restoration of any deleted item (such as reports and folders)
- Permanently delete items from the recycle bin

The recycle bin displays the title, type, date, and time of deletion of the deleted documents.

#### 13.1 Restoring an Item from the Recycle Bin

The Recycle Bin displays a list of deleted items. In order to restore an item from the recycle bin, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. In the Home page, choose the Recycle Bin tile.
- 3. Select the checkbox corresponding to the item you want to restore, and choose (More).
- 4. Select Restore from the drop-down menu.

You can navigate to the location of the restored item to confirm the restore operation.

#### ① Note

- If you restore an item from the Recycle Bin and another item with the same name already exists in the restore location, the item is saved in the restore location with the following name: "<item name> restored(1, 2, ...)".
- When the parent folder of an item in the Recycle Bin is deleted, the parent folder is recreated when the item is restored. However, the parent folder will only contain the item that is restored from the Recycle Bin.
- You cannot open/navigate to an item in the Recycle Bin.

You have now successfully restored an item from the Recycle Bin.

## 13.2 Permanently Deleting Items from the Recycle Bin

As a BI Launch Pad user, you have the right to permanently delete items from the Recycle Bin or to empty the Recycle Bin.

In order to permanently delete items from the Recycle Bin, proceed as follows:

- 1. Log on to the BI Launch Pad.
- 2. In the *Home* page, choose the *Recycle Bin* tile.
- 3. Select the checkbox corresponding to the item you want to delete, and choose (More).
- 4. Select *Delete* from the drop-down menu.

A warning message appears.

5. Choose OK.

You have now successfully deleted an item from the Recycle Bin.

## 14 BI Workspace

A BI Workspace lets you organize and display different BI platform data sources in a single view. It lets you quickly see your organizational goals and monitor your organization's performance and growth. With BI Workspaces, you can analyze and manage complex data effectively and share the information across organizations.

You can build your own portfolio of reports and categories and create one or more BI Workspaces to display them as needed.

For more information on BI Workspaces, refer the BI Workspaces User Guide.

# 15 Working with Applications in the Bl Launch Pad

The BI Launch Pad is an integration point between the repository and these SAP Business Objects applications:

- Analysis, edition for OLAP
- BEx Web Application
- BI Workspaces
- Crystal Reports for Enterprise
- Web Intelligence
- SAP Analytics Cloud

SAP Analytics Cloud is one simple cloud solution connecting your people, information, and ideas to enable fast and confident decision making.

Machine learning technology and embedded artificial intelligence help you to discover deep insights, simplify access to critical information, and empower informed decision making for all. This enables you to create dynamic visual stories based on your key business areas with trusted data that is managed by IT. It lets you make better decisions by interacting with visualizations, drilling down for more detailed information, and answering business questions on the fly.

It also seamlessly integrates with your data and planning solutions to simplify your analytics landscape. You can connect to data from multiple different sources and visually analyze your information to see the full picture of your business and make better-informed decisions.

You can create and modify versions of your planning data to drive better budgeting, forecasting, and analysis for the future of your business.

In the launch pad, you can start an application and then create, view, and edit corresponding objects and save your changes or new objects directly to the repository. The applications available and the tasks you can perform in them are determined by your access rights, which your system administrator assigns.

### 15.1 Starting an Application in the BI Launch Pad

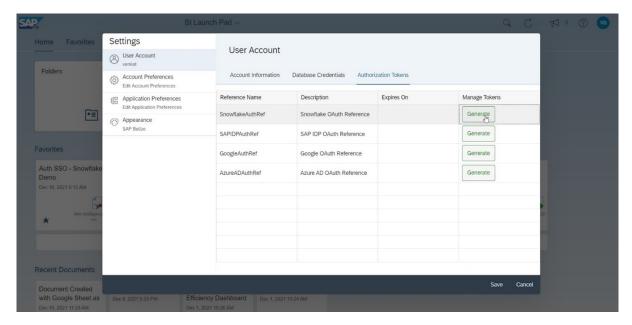
You can start an application in the *Home* page of the BI Launch Pad.

In the *Home* page, click the *Applications* tab and select the application to open. The application you selected opens in a new window.

#### 15.2 Authorization Tokens

The Administrator creates Authorization Servers listed in the BI Launch pad.

BI Users (you) are allowed to use the Authorization servers to authorize themselves in the BI Launch pad via the *Authorization Tokens* tab under *User Account* section in *Settings*.



You are also provided the provision to delete an already established Authorization (Refresh Token).

If you are authorized, then the system shows the validity of the Token as well. If the validity expires, you have to reauthenticate it against the authorization server.

For more information, please refer the blog .

### 15.3 Working with Crystal Reports

### 15.3.1 Viewing Crystal Reports

When you click a Crystal report, the report appears in a viewer.

The type of viewer you have determines which tasks you can perform.

### 15.3.1.1 Crystal Reports Viewers

Use Crystal reports viewers to view reports, navigate multiple pages, refresh data, drill down to details behind charts and summarized data, select parameters, print, and export data.

Some features of Crystal reports viewers may be disabled by your administrator. For more information, contact your administrator.

A new Fiori Viewer is added in the BI Launch pad since BI 4.3 SP03. It aligns better with the BI Launch pad UI and allows moving the page with your finger(s), fully respects BI Launch pad theme(s). It also comes with

various other enhancements such as *Fit to Width* and *Full Screen*. BI Launch Pad users could switch between Fiori Viewer (UI5) and the Classic Web Viewer (DHTML) by selecting the user settings icon and navigating to

Settings > Application Preferences > Crystal Reports >.

#### ① Note

The Fiori Viewer in BI Platform is for Crystal Reports 2020 reports only. Crystal Reports for Enterprise reports still opens in the Classic Web Viewer.

You can also use standalone Crystal reports viewers to display reports even when you are not logged on to the BI platform.

#### 15.3.1.1.1 Classic Web Viewer

Use this viewer to view, refresh, and print reports, edit parameters, and export reports to a variety of formats.

You can access the Web Viewer in a browser, without downloading a plug-in. It is the only Crystal report viewer that can access the *parameter panel* or that displays SAP Crystal Reports for Enterprise reports.

#### 15.3.1.1.1 Classic Web Viewer Toolbar

Toolbar option	Description
File menu	Use this menu to open a Crystal report from the BI repository, send a report to a recipient, create a shortcut in the My Favorites folder, schedule a report, and view report history.
and and	Click to go to the previous page in a Crystal report or to go to the next page.
4	Click to print a Crystal report.
₽	Click to refresh a Crystal report to the most current data from the report's data source.
点	Click to export a Crystal report to your computer or to a location on a network.
1	Click to go to the previous page in a Crystal report or to go to the next page, select <i>Go to First Page</i> and <i>Go to Last Page</i> in the list to go to the first or last page in a report, or enter a page number in the box to go to that page.
100% -	Select a percentage in the list to zoom or reduce text in a Crystal report by that percentage.

Toolbar option	Description
	Click to show or hide the freeze panel lines. Report content on top of the horizontal line and on the left of the vertical line will freeze. Scroll down or scroll right to compare the freeze content with other content. Drag the freeze panel line to decide how much report content to freeze.
<b>E</b>	Click to display the group tree, which you use to navigate through data in a Crystal report.
(?)	Click to show or hide the parameter panel, which you use it to change data in a report and to configure how data is displayed. You can access the parameter panel only in the web viewer.

### 15.3.1.1.2 Fiori Viewer

Use Crystal Reports Fiori viewer to *View*, *Refresh*, and *Print* reports, *Edit* parameters, and Export reports to a variety of formats.

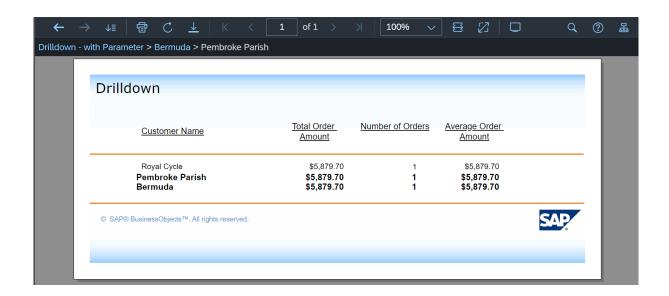
This Fiori viewer aligns better with the BI Launch pad UI, allows moving pages with your finger(s), fully respects BI Launch pad theme(s), and also comes with various other enhancements such as *Fit to width* and *Full screen*.

#### ① Note

The Fiori Viewer is for Crystal Reports 2020 reports only. Crystal Reports for Enterprise reports opens in the Classic Web Viewer.

For more information on Fiori viewer usage tips and known restrictions, please refer SAP Note 3240950.

### 15.3.1.1.2.1 Fiori Viewer Toolbar



Toolbar option	Description
Drill down history navigation	Use these buttons to move forward or backward in your previous drill down states (if any).
Print	Click to print a crystal report.
Refresh	Click to refresh a crystal report to the most current data from the report's data source.
Export	Click to export a crystal report to your computer or a location on the network , in the specified format you desire.
Favorite	Click to favorite or un-favorite current report.
Page navigation	Use page navigation buttons to move to next page, previous page, last page or first page. Or enter a page number in the box to go to that page directly.
Zoom	Select a percentage in the list to zoom or reduce text in a crystal report by that percentage.
Fit to width	Quickly zoom the report content to fit to current page width
Fit to page	Quickly zoom the report content to fit to current page (width and height).
Full screen	Enter full screen mode
Following 3 buttons are on the right hand side of toolbar	
Find panel	Display or hide the find panel where you can search inside current crystal report.

Toolbar option	Description
Prompt panel	Display or hide the prompt panel where you can view parameter values applied on your report and modify them if necessary.
Group tree panel	Display or hide the group tree panel where you can navigate through data in a crystal report in a hierarchical way.

### 15.3.1.1.3 Crystal Reports Viewer 2020

Use SAP Crystal Reports viewer 2020 to view downloaded Crystal reports without connecting to the BI platform.

SAP Crystal Reports viewer 2020 is installed on your computer automatically. Use it to perform the following tasks:

- Print or export reports
- Save reports
- Select data to view
- Drill down on data in reports
- View multiple reports

SAP Crystal Reports viewer 2020 functions the same as Crystal report viewers in the BI launch pad. For more information about SAP Crystal Reports viewer 2020, see the SAP Crystal Reports Viewer 2020 Help.

### 15.3.1.1.3.1 Installing Crystal Reports viewer 2020

When you install the Crystal Reports viewer 2020, it resides as a client-software viewer on your computer.

This task applies only to the English-language version of the www.sap.com web site.

- 1. In a browser, go to http://www.sap.com/solutions.
- 2. In the Search box on the web page, search for Crystal Reports Viewer.
- 3. In the search results, double-click the first result called *SAP Crystal Reports Viewer*.

  The SAP Crystal Reports viewer web page appears, with a *Download Now* link on the right side of the page.
- 4. Download and run the SAP Crystal Reports Viewer 2020 installation program.
- 5. Follow the on-screen instructions, accepting the default values.
- 6. Click Finish.

SAP Crystal Reports viewer 2020 opens when you double-click a Crystal report (.rpt) file on your computer. However, if SAP Crystal Reports is installed on your computer, it takes precedence over SAP Crystal Reports viewer 2020 and displays reports by default.

# 15.3.1.1.3.2 Crystal Reports viewer 2020 toolbar

Toolbar option	Description
#	Click to export a Crystal report to your local computer or to a location on a network.
<b>3</b>	Click to print a Crystal report.
==	Click to show or hide the group tree, which you use to navigate through data in a Crystal report.
1	Click to go to the previous page in a Crystal report or to go to the next page, select <i>Go to First Page</i> and <i>Go to Last Page</i> in the list to go to the first or last page in a report, or enter a page number in the box to go to that page.
2	Click to refresh a Crystal report to the most current data from the report's data source.
[ A6	Enter text in the box, and click to search for the text in a Crystal report.
100% -	Select a percentage in the list to zoom or reduce text in a Crystal report by that percentage.

# 15.3.1.2 Opening the Group Tree in a Crystal report Viewer

Use the group tree to navigate through data in a Crystal report.



# 15.3.1.3 Drilling on Data in a Crystal Report

You can drill on a Crystal report to see the data under charts and summarized groups.

In a Crystal report viewer, double-click a link in a report.

# 15.3.1.4 Viewing and Editing Parameters of Crystal Reports in a Web Viewer

You must use a web viewer to view and edit parameters in Crystal reports.

- 1. Locate and select the Crystal report to view.
- 2. Select View View .
- If prompted to enter report values, enter the values.
   You must enter report values before you can view the report.
- 4. Select the data to view, and click OK.



- To select the parameters to access in the report, click The parameter panel displays the report parameters.
- 6. Select a parameter.
- 7. To edit the parameter value, perform either of the following actions:
  - On the parameter panel, enter a new value.
  - Click > to open an editing dialog box, enter a new value, and click OK.
- 8. Edit the remaining parameters as needed.
- 9. To view the report with the new parameter values, click Apply.

### 15.3.1.5 Viewing Alerts in a Crystal report

You can view alerts for a Crystal report in the Central Management Console (CMC).

- 1. Go to the *Folders* management area of the CMC.
- 2. Locate the folder or category that contains the Crystal report to view, and select the report.
- 3. Select More Actions Alerts.

The Alerts dialog box appears, displaying the instances that triggered the alert.

4. Double-click an instance title to open an instance.

### 15.3.1.6 Printing Crystal reports

You can print successful instances of Crystal reports and of reports viewed on demand.

Depending on the Crystal report viewer you use, the steps in this task may vary. However, the general instructions for printing reports are the same. If on-screen instructions are provided, follow them instead of performing this task.

#### Note

The person who designs a report chooses the page orientation. You cannot change it in the *Print* dialog box.

- 1. Open the document to print.
- 2. On the *viewer* toolbar, click ...
- 3. In the Print dialog box, under Print range, select All or enter the page range to print.
- 4. Under *Copies*, enter the number of copies to print.

  Select the *Collate* check box to print pages in numerical order. For example, if you are printing two copies of a four-page report, your report prints pages one, two, three, and four of the first copy and then prints pages one, two, three, and four of the second copy.
- 5. Under *Printer Paper*, select the paper size and the paper source options.
- 6. Under *Options*, if a Crystal report is wide but should print on one page, click *Fit Horizontal Pages to One Page*.
- 7. To print Flash objects embedded in a Crystal report, select *Print Flash Objects for Current Page*.
- 8. Click OK.

### 15.3.1.7 Exporting Crystal Reports

You can export successful instances of Crystal reports and of reports viewed on demand to multiple formats.

For reports that you can drill down on, export the drilled-down view. For example, you can export data that predicts sales trends to an Excel spreadsheet and then email it to the sales team.

- 1. Open the Crystal report to view.
- 2. On the viewer toolbar, click <u></u>
- 3. In the Export dialog box, in the File Format list, select a file format to export the Crystal report to.
- 4. Under Page Range, select All Pages or enter the range of pages to export.
- 5. Click Export.
  - In the new Fiori Viewer, with necessary configuration by the BI administrator, you can also directly export your report to Google Drive or Microsoft OneDrive, in a specified format you desire. For example, choose *Microsoft OneDrive* in the *Export To* list, and click *Browse* to choose a target folder on your cloud drive.
  - You will be asked to authenticate if no valid authorization token is available yet. See Authorization Server Configuration - SAP Help Portal and Managing your Account - SAP Help Portal

### 15.3.1.7.1 Export Format Options

You can export Crystal reports to these file formats.

When you export a Crystal report to a file format other than .rpt, the report may lose some or all of its formatting. The BI Launch Pad attempts to preserve as much formatting as each export format allows.

Flash objects only appear if you export to a Crystal report format (.rpt or .rptr) or to .pdf. Fallback images appear when exporting to all other formats. For information about scheduling a Crystal report to a specific format, see exporting information in the SAP Crystal Reports 2020 User Guide.

Description
.rpt format. You cannot export to this file format from a drilled-down view.
.rptr format. This read-only file format attempts to preserve the appearance of the original Crystal report.
.xlsxformat
.xlsx format. This file format is data-only.
.xls format
.xls format. This file format is data-only.
.rtf format
.pdf format. Password protection options are made available when export from the <i>Crystal Reports Fiori viewer</i> .
.rtf format. This file format can be displayed only in the web viewer.
.rtf format. This file format preserves less formatting than the <i>Microsoft Word (RTF)</i> format. Text appears in lines, and images are placed inline with text.
. csv format
.xml format

Description

### 15.3.1.8 Interactively Sorting Data in a Crystal Report

- 1. Open a Crystal report that uses interactive sorting.
- 2. Select the value to sort on.

File format

- 3. Click an arrow to sort data in the report:
  - To sort data in ascending order, click <u>A</u>.

# 15.3.2 Launching Crystal Reports for Enterprise

You can now launch the Crystal Reports for Enterprise Designer from the home page of the BI Launch Pad by following two ways:

- 1. Accessing Applications group in the Home Page.
- 2. By Modify action on a Crystal Report.

#### By Accessing Applications group in the BILP Home Page

You can launch SAP Crystal Report for Enterprise using the applications group.

- 1. In the home page, Go to the Applications group.
- 2. Among applications, select the Crystal Reports for Enterprise.

The Crystal Reports for Enterprise Designer page appears. Also, LaunchCRDesigner\*.bclp file gets downloaded automatically.

#### ① Note

If the file is not getting downloaded instantly,

- Click on the hyperlink of the downloadable file on the page.
- If a dialog box appears with the option to Open or Save, click on Open.
- If the download is blocked by your browser, please adjust your browser security settings or contact your local system administrator.
- 3. Open the LaunchCRDesigner\*.bclp file to launch the Crystal Reports for Enterprise Designer.

### 15.3.2.1 Accessing Applications Tile Group in the Home Page

You can launch the SAP Crystal Report for Enterprise using the applications group in the BI Launch Pad.

- 1. In the home page, go to the Applications tile group.
- 2. Among the applications, select the Crystal Report for Enterprise.

The Crystal Report for Enterprise Designer page appears. Also, LaunchCRDesigner\*.bclp file gets downloaded automatically.

#### Note

If the file is not getting downloaded instantly,

- Click the hyperlink of the downloadable file on the page.
- If a dialog box appears with the option to Open or Save, click Open.
- If the download is blocked by your browser, please adjust your browser security settings or contact your local system administrator.
- 3. Open the LaunchCRDesigner\*.bclp file to launch the SAP Crystal Reports for Enterprise Designer.

### 15.3.2.2 Modify Action on a Crystal Report

You can also launch the SAP Crystal Report for Enterprise by selecting *Modify* action for a desired crystal report.

- 1. In the Home group of BI Launch Pad, go to the Documents tile.
- 2. For a desired crystal report, click and choose *Modify*.

This launches the SAP Crystal Reports for Enterprise Designer. You can edit the parameters of the selected crystal report.

Once launched, SAP Crystal Reports for Enterprise automatically logs on to BOE current BI Launch Pad user credentials.

### 15.4 BEx Web Applications in the BI Launch Pad

You can use BEx web applications in the Business Explorer (BEx) of Business Warehouse (BW) for data analysis, reporting, and analytical tasks.

BEx is the SAP Business Intelligence suite. It provides flexible reporting and query, reporting, and analysis tools for strategic decision-making support in a business. As an employee with access authorization, you can use BEx web applications to evaluate historical or current data at various levels of detail and from different perspectives, on the web and in Microsoft Excel. You can access data from the SAP Enterprise portal or from the BI Launch Pad in the BI platform.

Before you can open BEx web applications in the BI Launch Pad, your system administrator must configure a platform server and a connection to a BW system. Authors of BEx web applications format data from SAP BW in the BEx Web Application Designer, using web items (analysis, filter pane, chart, map, document, and so on). Once the platform server and connection to a BW system are configured, you can open BEx web applications in the launch pad, navigate the data, and save the navigational state of BEx web applications as bookmarks in your browser favorites.

For information about BEx web application features, go to the SAP Help Portal at http://help.sap.com, and select SAP NetWeaver SAP NetWeaver.

### 15.4.1 Accessing BEx Web Applications in the BI Launch Pad

#### ① Note

You can use information broadcasting only in BEx web applications that run in a SAP NetWeaver landscape (not in the BI Launch Pad or BI platform). Information broadcasting requires SAP NetWeaver components, such as the Enterprise Portal and Knowledge Management.

- 1. Log on to the BI Launch Pad.
- 2. In the Home page, click the Applications tab and select the BEx Web Applications.
- 3. Log on to the NetWeaver Business Warehouse (BW) system.
- 4. In the *Open* dialog box, select a BEx web template.

You can select only BEx web templates with data sources that are stored in the BW master system. Your system administrator defines which BW system is configured as the BW master system in BI platform.

The BEx Web application opens, and you can navigate data in it.

# 15.4.2 Saving BEx Web Applications as Bookmarks

Before creating a bookmark, choose which BEx navigational state to bookmark for later use. To decide, on a *BEx* tab in the BI Launch Pad, navigate to the data and select a navigational state.

- 1. In the context menu for the BEx web application, select Distribute and Export Dookmark Depending on the BEx configuration, the Bookmark option may be available on the context menu or as a button.
- 2. Save the BEx web application in a favorites folder in your browser.

After logging on to the BW system, you can access the BEx bookmark in your favorites or send it as a link to other users. For information about BEx Web Application Designer, web items, and web design API commands, go to the SAP Help Portal at http://help.sap.com, and click SAP NetWeaver.

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