



OpenText™ Documentum™ Content Management for SAP® Solutions

Configuration Guide

This guide explains how to configure OpenText Documentum CM for SAP Solutions for the Off cloud and Public cloud solution.

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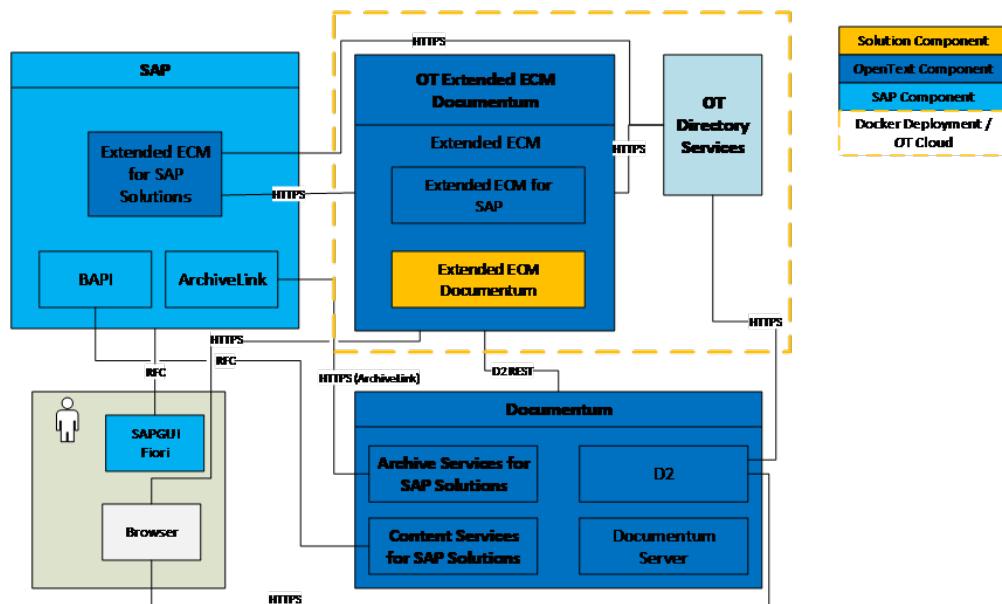
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Chapter 1

What is OpenText Documentum CM for SAP Solutions?

OpenText Documentum CM for SAP Solutions is an integration scenario of OpenText Documentum CM and Documentum. Both systems enrich their data with metadata from SAP business objects.



OpenText Documentum CM solution components

OpenText Documentum CM for SAP Solutions bundles various OpenText components to leverage the advantages of OpenText Content Management and its business workspaces while retaining the document management capabilities of Documentum. The solution can be provided as Docker Deployment on your individual Docker environment or as OpenText Cloud solution.

OpenText Documentum CM

The core features of OpenText Documentum CM are based on OpenText Content Management and its extension modules which are listed below. The connection to Documentum is realized using the OpenText Documentum CM Rest interface. The browser interface and the SAP ECC connection are called by HTTPS.

OpenText Content Management

Provides and manages business workspaces.

Documentum folders and documents are displayed and accessible from a business workspace. The business workspace is enriched with metadata of the corresponding SAP business object. Users can access the SAP object from the business workspace.

OpenText Content Management for SAP

Defines the connection of SAP and OpenText Content Management. It collects the available data in business workspaces and provides built-in analytics capabilities to equip customers with an integrated information management backbone built on the foundation of SAP® business applications that easily ties to other applications such as Documentum.

OpenText Directory Services (OTDS)

Provides the Single Sign-on access in both OpenText Content Management and Documentum and manages user access in SAP ECC. The interface for data exchange is based on HTTPS.

Documentum

Documentum stays the central solution for content management. It is installed on premises or as a service and provides functionality like lifecycle management, scanning or Microsoft Office integration. The OpenText Documentum CM Rest API connects Documentum with OpenText Documentum CM and enables, for example the workspace creation.

Archive Services for SAP Solutions

Archives data and documents using Archive Link.

Content Services for SAP Solutions

Processes documents that are archived by Archiving Services. It, for example, adds additional metadata, renames or links content.

OpenText Documentum CM

Provides direct access to folders, business workspaces and documents. The Smart View interface seamlessly integrates into OpenText Content Management for SAP which displays the content in SAP and OpenText Documentum CM. The browser interface is connected using HTTPS.

Server

The Documentum Server serves as the repository and keeps all documents related to SAP business objects in folders.

SAP ECC

The SAP system provides all structured information of the business object and passes them to OpenText Content Management and Documentum for display.

OpenText Documentum CM for SAP Solutions

Provides OpenText Content Management functionality in SAP. The connection to OpenText Documentum CM is realized with HTTPS.

Archive Link

Archives data and documents in Documentum. The connection to Archive Services is realized with HTTPS.

BAPI

Processes documents that are archived by Archive link. For example, adds additional metadata, renames or links content.

User Client**SAPGUI Fiori**

Widgets display OpenText Documentum CM in the Fiori environment. It uses RFC to connect to SAP ECC.

Browser

The browser is the main access point to work with the different solution components. It uses HTTPS to connect to the different components of the solution.

1.1 Concepts, scenarios, and best practices

1.1.1 Business objects

A *business object* is the representation of a real-life entity in a business application. For example, a business application maintains business objects for products, orders, deliveries and so forth. Every business object is defined by a set of attributes and by its relations to other business objects.

1.1.2 Business workspaces

A *business workspace* is a dedicated Content Server container, which is created for a business object. In this business workspace, authorized users can view metadata of the business object, share documents and use social media functions. Business workspaces can also be “stand-alone” with no link to a business object, although this is meant to be only a temporary status.

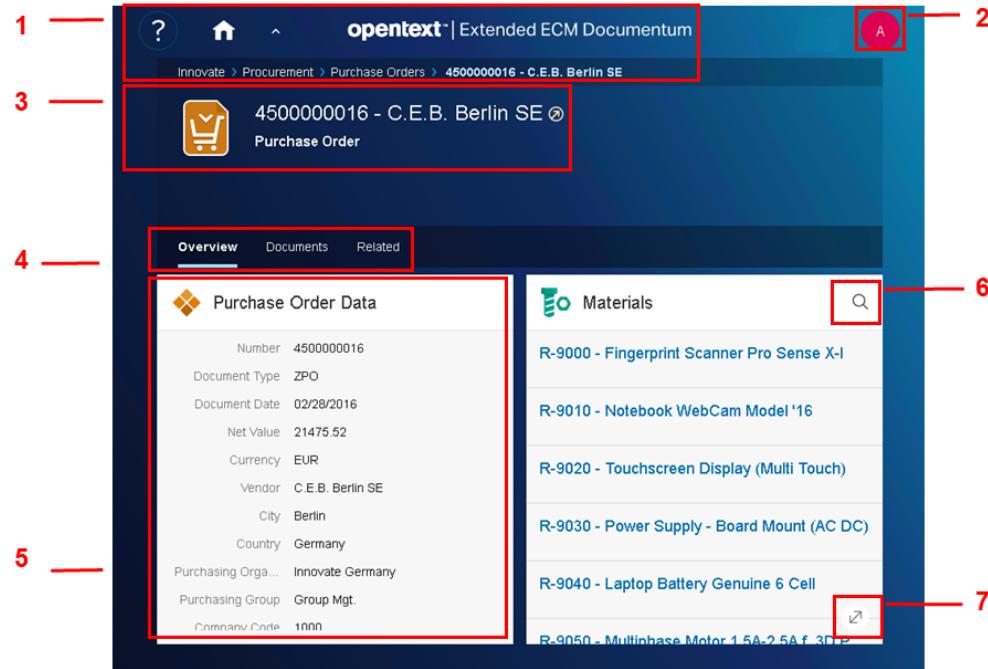


Figure 1-1: Sample business workspace in Content Management in Smart View

#	Description
1	Navigation with the Help button, the Home button, and breadcrumbs.
2	User profile
3	Business object information: Title, widget icon and other configurable metadata. Icons for comments and favorite
4	More content and metadata organized in different tabs, especially the Document tab.
5	Widgets for metadata, the team, other related workspaces, or other.
6	Search within a widget
7	Expanded view of a widget with more details
	Standard Content Server functionality

Metadata around the business object is displayed in *widgets*, which can be configured according to your needs. In this example, the Related Workspaces widget displays Sales Opportunities for this customer.

Content is visible in the **Documents** tab. You can have a dedicated folder structure for each workspace type.

The **layout** of this business workspace is defined by a *perspective*, which you can design for each business object. A perspective can also be specific to a role or to a device.

1.1.2.1 Scenarios for business workspace creation

Business workspaces can be created through different scenarios. You can combine these scenarios – if logic permits.

- **Manual or automatic creation**

Manual creation – A user creates a business workspace manually either in OpenText Documentum CM or in the SAP system. It can be configured for every supported user interface.

Automatic creation – The creation of a business workspace is triggered by an event in the SAP system. The same event can also be used to update the business workspace's metadata.

Batch creation – This scenario is typically used for the initial load of a system.

1.1.2.2 Related Workspaces

Business workspaces can be semantically related. For example, business workspaces for sales orders are related to the customer who ordered the goods.

Relations are created and maintained in the SAP system and transferred to OpenText Documentum CM through the property provider, thus, additional coding may be required.



Note: Relations can be created between workspaces of a single repository. They cannot be created across multiple repositories.

You can display related workspaces in widgets of the Business Workspace Perspective .

The screenshot shows the 'Related' tab selected in the navigation bar of a vendor record for 'C.E.B. New York Inc. (30010)'. Three related workspaces are displayed as cards:

- Purchase Contracts**: Shows 8 contracts. One example is '4600000041 - C.E.B. New York...' with a start date of 11/27/2018.
- Purchase Orders**: Shows 8 purchase orders. One example is '4500000020 - C.E.B. New York...' with a document date of 03/12/2016.
- Requests for Quotation**: Shows 6 RFQs. One example is '6000000018 - C.E.B. New York...' with a document date of 11/28/2019.

A relation is established and related workspaces are displayed in the widgets only when both the business workspace and the related workspace are available.

1.1.2.3 Cross-application business workspaces for identical business objects

If you have semantically similar business object types in different business applications, such as an employee in an S/4HANA system and a user in an SAP SuccessFactors system, you can create one cross-application business workspace for two or more business objects of different types and from different business applications.

Example 1-1: sfsf.user in SuccessFactors system and employee in S/4HANA system

You have employee data in two different business applications, in the SAP SuccessFactors system and in the SAP S/4HANA system. You want to create business workspaces for the employee data. Because the data in both systems is semantically identical, you only want to create one cross-application business workspace for each employee that contains the information from both the SuccessFactors and the S/4HANA system.



For more information, see “Enabling cross-application business workspaces for identical business objects” on page 96.

1.1.2.4 Workspace hierarchies and composite business workspaces

Workspace hierarchies define, which workspace type can be created within another workspace type, resulting in a meaningful nested structure. For more information, see “[Creating workspace hierarchies](#)” on page 90.

Composite business workspaces are used for complex business objects in an SAP system, which contain dependent entities that cannot stand alone. For example, in the SAP Plant Maintenance module, a *task list operation* can only exist in the context of a *task list*. This mandatory relation can be mirrored by *composite business workspaces* where each sub-entity has a separate business workspace inside its parent business workspace. This feature is recommended for cases where dependent business objects are involved.

Example: When a business workspace for a maintenance task list is created from SAP side, either manually or automatically, business workspaces for all operations are created automatically inside the task list’s business workspace.



Notes

- For the composite business workspace scenario, you need a property provider that supports composite business workspaces. For more information, see the SAP OpenText Content Management Solution Accelerator for SAP PM which is available in OpenText My Support (https://knowledge.opentext.com/knowledge/cs.dll/Open/SAP_PM_Plant_Maintenance_Blueprint).
- Composite business workspaces are currently limited to 5 levels.

For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

Chapter 2

Configuration steps

The following steps are essential to configure OpenText Documentum CM for SAP Solutions:

1. **Connect OpenText Directory Services OTDS to your Active Directory Service: –**
 - a. Enable support for OTDS for Documentum.
For more information, see “[Enabling OpenText Directory Services\(OTDS\)](#)” on page 251.
 - b. The connection of Content Server with OTDS is set up by your OpenText administrator.

 **Note:** Skip this step for container based deployment, reuse OTDS deployed along with Documentum
2. **Configure your SAP system: –**
 - a. Set up the connection of your SAP system with OpenText Content Management.
For more information, see “[Setting up the connection to the OpenText Content Management](#)” on page 125
 - b. Implement a Property Provider in SAP.
For more information, see “[Implementing a property provider in SAP](#)” on page 127.
The property provider extracts attributes of an SAP business object to hand it over to OpenText Content Management. Write your own property provider or use the generic property provider, which is delivered with OpenText Content Management for SAP Solutions.
 - c. Create a business object declaration in SAP.
For more information, see “[Creating a business object declaration in SAP](#)” on page 154.
The business object declaration defines a SAP business object for OpenText Content Management. Create a business object declaration for each business object type, and activate it.
3. **Configure your OpenText Content Management: –**
 - a. Connect your SAP system.
For more information, see “[Connecting the SAP system, OpenText Content Management and Documentum CM Server](#)” on page 27.

To connect the Documentum CM Server, see “[To connect a Documentum Content Server](#)” on page 31.

b. Prepare your Content Server tools:

- Create categories for the metadata of the SAP business object.

Requires **Business Administration Data Policies** usage privilege and **Category** object privilege.

For more information, see “[Creating a category for workspace type and business object type](#)” on page 33.

- Create classifications and the root folder for business workspaces.

Requires access rights to the classification volume and to the folder, in which business workspaces will be created.

For more information, see “[Creating a classification for workspace templates and location](#)” on page 38 and “[Creating a root folder for the business workspaces](#)” on page 39.

c. Configure a workspace type for your business workspace.

Requires **Business Administration Connected Workspaces** usage privilege.

For more information, see “[Creating a workspace type](#)” on page 40.

d. Define workspace templates.

The task requires system administrator’s access. This allows to create a template for the Content Server subtype business workspace (type 848). You also need access to the document templates volume to create new templates.

- Create a document template for every business workspace.

The workspace template name is what users see in the **Add** dialog when they create a new business workspace.

Requires system administrator’s access to define that a template can be created for the Content Server subtype business workspace (type 848). Requires access to Document Templates volume to create new templates.

For more information, see “[Defining a workspace template in Classic View](#)” on page 61 or “[Defining a workspace template in Smart View](#)” on page 72.

- Assign the permissions of Documentum and the Content Server to the templates.

For more information, see “[Defining OpenText Documentum CM and OpenText Content Management permissions](#)” on page 88.

- Assign the same classification to the root folder and to template.

For more information, see “[Assigning classifications](#)” on page 93.

- Add a classification to the template.

For more information, see “[Adding categories to the template](#)” on page 93.

-
- e. Create and configure the business object type.

Requires **Business Administration Content Management** usage privilege.

For more information, see “[Configuring business object types](#)” on page 74.

- Link the SAP Business Object Declaration and the Content Server workspace type.
- Map the SAP properties to Content Server attributes. For more information, see “[Mapping business properties to category attributes](#)” on page 78.
- Enter the folder structure import rule of the OpenText Documentum CM system. For more information, see “[Adding the OpenText Documentum CM folder structure import](#)” on page 82.
- Define the workspace templates that are used for Content Server (**General** tab) and Documentum (**Documentum** tab).

- f. Create perspectives for Smart View:

- Create perspectives for **Landing** pages (**Home** page).

For more information, see “[Creating a Perspective for the Landing Page](#)” on page 59.

- Create a perspective for every business workspace and add the Documentum Smart View widget.

For more information, see “[Creating a Perspective using the Perspective Manager tool](#)” on page 58.

- Create custom columns to display metadata in certain Smart View widgets.

Requires **Business Administration Columns and Facets** usage privilege and **Column** object privilege.

For more information, see “[Creating a custom column](#)” on page 54.

- g. For automatic workspace creation and update when SAP business objects are created or changed: In the SAP system (IMG), maintain the receiver modules.

For more information, see “[Configuring events for business workspaces](#)” on page 131.

4. Configure Documentum Server and Documentum: –

- a. Create custom business objects.

For more information, see “[Creating custom types for business objects](#)” on page 227.

- b. Create folder structure import rule in Documentum Config.

- c. Create Cabinet and Base folder structure:

For more information, see “[Preparing Documentum CM Server cabinet and folders](#)” on page 229.

- d. Archive Services - configure ArchiveLink (optional).
 - e. Content Services configuration
 - Create a query to extract SAP metadata. Documentum Content Services for SAP Solutions uses the query to read and add or edit metadata for objects.
For more information, see “[Configuring the query to search for documents stored in the Documentum repository via ArchiveLink](#)” on page 259.
 - Create replicate and link job. For more information, see “[Creating replicate actions, agents, and jobs](#)” on page 261.
5. **Configure your Documentum:** –
- a. Create Smart View Landing Pages.
For more information, see “[Creating a Perspective for the Landing Page](#)” on page 59.
 - b. Configure Business Workspace creation in OpenText Documentum CM.
For more information, see “[Enable workspace creation in OpenText Documentum CM](#)” on page 245.

2.1 OpenText Content Management configuration steps

The following need administrator’s permission and not available in the OpenText Managed Service Cloud. Contact your representative, if you have to perform one of these steps.

- “[Granting permissions and privileges for business administrators](#)” on page 21
- “[Granting usage privileges to OpenText Content Management users](#)” on page 92
- “[Creating a category for workspace type and business object type](#)” on page 33
- “[Configuring multilingual metadata languages](#)” on page 39

Part 1

Configuring OpenText Content Management

Chapter 3

Granting permissions and privileges for business administrators

The installation created the **Business Administrators** user group, which has all necessary usage privileges for business administrators and access to the **Business Workspaces** volume and the **Enterprise Application Integration** volume. You must now also grant permissions for some of the configuration volumes, object privileges, and the Warehouse usage privilege.



Note: Business administrators have default access to the **Business Workspaces** volume and the **Enterprise Application Integration** volume without manual configuration.

To grant permissions to configuration nodes:

1. Log on as system administrator.
2. From the function menu of a configuration volume, select **Permissions**.
3. In the **Assigned Access** area, click **Grant Access**.
4. Add the **Business Administrators** group and grant the required permissions up to and including the **Delete** permission. Make sure the **Delete** permission is only for sub-items not for the root folder, for example for the categories but not for the Categories volume.
5. Select **Apply to this Item & Sub-Items** and click **Update**.
6. Apply this to the following configuration nodes:
 - Enterprise workspace to create the root folder for business workspaces
 - Categories volume
 - Classifications volume
 - Facets volume
 - Outlook Add-in Configurations
 - Saved Queries Volume
 - Document Templates volume

To grant object privileges:

1. On the **OpenText Content Management Administration** page, click **Base Settings - Feature Configuration > Object Privileges**.
2. Add the **Business Administrators** group to the following object privileges:

- Appearance
- Category
- Category Folder
- Classification
- Custom View
- LiveReport if you want to configure widgets, which use LiveReports
- WebReports if you want to configure widgets, which use WebReports
- License metering if you want to run the License report.

To grant the transport warehouse usage privilege:

1. On the **OpenText Content Management Administration** page, click **Base Settings - Feature Configuration > Usage Privileges**.
2. Add the **Business Administrators** group to the **Warehouse Administration - Warehouse Manager** usage privilege. This usage privilege is optional.

Chapter 4

Understanding the configuration volumes

Configuration of business workspaces requires the **Business Administration** usage privileges. With these privileges you can access the Enterprise Application Integration volume, and other volumes and pages required for the configuration of business workspaces.

! Important

Administrators need **Business Administration Business Workspaces** and **Business Administration Enterprise Application Integration** usage privileges to configure OpenText Content Management.

The **Business Workspaces** volume and the **Enterprise Application Integration** volume are your entry point to configuration. To access the volumes, on the global menu, click **Enterprise > Business Workspaces** or **Enterprise > Enterprise Application Integration**.

Business Workspaces Volume



Categories

Requires **Business Administration Data Policies** usage privilege and **Category** object privilege.

[“Creating a category for workspace type and business object type” on page 33](#)



Classifications

[“Creating a classification for workspace templates and location” on page 38](#)



Event Bots

Requires **Business Administration Business Workspaces** usage privilege.

Section 10.1 “Event bots” in *OpenText Content Management - Smart View User Help (CSSUI-H-UGD)*



Facets

Requires **Business Administration Columns and Facets** usage privilege and **Column** object privilege.

[“Creating a custom column” on page 54](#)



Outlook Add-in Configuration

Requires **Business Administration Business Workspaces** usage privilege.

Not relevant for Business Workspaces



Perspectives

[“Creating a Perspective using the Perspective Manager tool” on page 58](#)



Saved Queries Volume

Requires **Business Administration Business Workspaces** usage privilege.

Not relevant for Business Workspaces



Variables for Replacement Tags

Requires **Business Administration Business Workspaces** usage privilege.

Not relevant for Business Workspaces



Workspace types

Requires **Business Administration Business Workspaces** usage privilege.

[“Creating a workspace type” on page 40](#)

Enterprise Application Integration Volume



Connections to Business Applications

Requires **Business Administration Enterprise Application Integration** usage privilege.

OpenText Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI)



Business Object Types

Requires **Business Administration Enterprise Application Integration** usage privilege.

OpenText Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI)



Unique names

Requires **Business Administration Enterprise Application Integration** usage privilege.

[“Unique names for OpenText Content Management items” on page 158](#)



Attachment Declarations

Not relevant for OpenText Documentum CM for SAP Solutions.



Scheduled bots

Requires **Business Administration Enterprise Application Integration** usage privilege.

.Section 10.4 “Scheduled Bots” in *OpenText Content Management - Smart View User Guide (CSSUI-UGD)*.



Licensing

Requires **Business Administration Enterprise Application Integration** (for count method configuration) and **License Metering** (for the license report) usage privileges.

OpenText Content Management for SAP Solutions uses a different license method. For more information, see Section 25 “Performing license measurement” in *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

Not used in OpenText Documentum CM.

Chapter 5

Connecting the SAP system, OpenText Content Management and Documentum CM Server

To connect OpenText Content Management with an SAP system, you define a business application connection in Content Server. To add Documentum CM Server to this connection, you specify connection parameters like the OpenText Documentum CM URL and the repository name.

To connect a business application:

1. On the global menu, click **Enterprise > Enterprise Application Integration**, and then click **Connections to Business Applications (External Systems)**.
2. Click **Add Item > Business Application**.
3. Specify the parameters for your business application according to the list below.
4. Click **Add**.

Business Application ID

Define the logical name of the business application. The name must be unique. It cannot be longer than 32 characters. This name is used when you select the business application in the business object type configuration.

This name can be, for example, a combination of the SAP system and the client IDs, or the tenant name of the SAP CX Sales Cloud and SAP CX Service Cloud system. You can also use the SAP logical system name (as configured in transaction SCC4). The convention for SAP logical system names is *<system ID>CLNT<client>*.

! **Important**

- You cannot change the name later.
- If you use S/4HANA Essential, the **Logical System Name** must be the same name as the CMIS user. The name will also be used as the repository name.
- If you use Business Scenarios, a business application with SAP S/4 HANA as **Logical System Name** is already created. You can use this name for the connection to your SAP system.

Connection Type

Select the adapter for your business application. If there is no special adapter for your specific business application available, select **Default WebService Adapter**.

! **Important**

If you have selected Default WebService Adapter or SFWebService as Connection Type, you can choose between the authentication methods Basic and OAuth. For the other Connection Types, you can only use the Basic authentication.

Enabled

Select this option to enable the configuration.



Tip: You can disable a configuration, for example if you created it only for testing and you do not want it to be used.

Comment

Enter a comment to give further information.

Base URL

Enter the common URL for accessing the business applications via a Web browser. You can use this base URL when configuring business object types on OpenText Content Management. The base URL is represented by the \$BaseUrl\$ variable for new business object types.

For example, <https://r3d5g.example.com:44300>

Application Server Endpoint

Specify the URL that will be called to obtain business object information.

Note that OData API V2, OData API V4, and Client inputs are only applicable for S/4HANA adapter.

Provide the following settings:

- **OData API V2:** enter the *OData API V2 root URL*. This entry is mandatory.
- **OData API V4:** enter *OData API V4 root URL*. This entry is optional.
- **Client:** specify a client to overrule the default SAP S/4HANA client setting.

An SAP S/4HANA system can use different clients at the same time. The ODATA service uses the default client for retrieving business object information. You can overrule the default setting and specify the actual client you want to retrieve data from.

**Example 5-1: SAP**

The following is an example for an SAP system: <https://myhost.example.com:44300/sap/bc/srt/xip/otx/ecmlinkservice/800/ecmlinkspiservice/basicauthbinding>

- <https://myhost.example.com:44300>: Common URL.
Port 8000 is the default HTTP port for SAP. For HTTPS the default port is 44300.
- 800 is the client number. Replace this number with your own client number.
- basicauthbinding is currently the only supported authentication.



Schema Version

Select the interface version.

Authentication Method

If you have selected Default WebService Adapter or SFWebService as Connection Type, you can choose between the authentication methods Basic and OAuth. For the other Connection Types, you can only use the Basic authentication.

Basic

This option is selected by default. The user must enter a username and a password.

- **User Name** – enter the user that is used to access business object type information in the business application.



Important

- If the business application is an SAP system, in the SAP system assign the /OTX/RM_CS_SAP_USER role to this user. This user requires permissions for the SAP authorization object S_RFC.
- If the business application is an SAP system of release S/4HANA 2022 or higher, in the SAP system you must also assign the /OTX/RM_CS_SAP_USER_S4 role to this user.
- If the business application is an SAP system and the following use case applies, the user also needs to be assigned to a Content Server.

In the SAP system, customizing is active for selecting a template, classification, or category based on business properties. To create or update a Business Workspace in OpenText Content Management, the following conditions have to be met:

- The connection to the business application is used.
- The unique names are defined in Content Server.
- The Content Server user who is assigned to this user needs reading permission on the unique names.
- Based on the customizing, the property provider in the SAP system needs to resolve one or more unique names.

For more information, see “[Selecting a template, classification or category based on business properties](#)” on page 156.

- **Password** – specify the password of the defined user for the specified application server endpoint.



Note: With using basic authentication, OpenText strongly recommends that you use SSL at the web server. For information about importing certificates to the keystore, see *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.

OAuth

Select this option to configure OAuth2 authentication. You must specify a token endpoint which is the URL of an authentication server. Authenticating against this authentication server with a client ID and a client secret, you obtain an access token which can then be used to authenticate against the application server.

- **OAuth Token Endpoint** – enter the URL of the authorization server that is used to acquire an access token.
- **OAuth Client ID** – enter the API Key created in the OAuth configuration.
- **OAuth Client Secret** – enter the private key you have generated in the OAuth configuration.
- **OAuth Request Type** – some SAP systems only support the basic authentication transport. Select the option suitable for your system:
 - **Basic** – select this option to send the OAuth parameter as basic authentication header.
 - **HTTP Body** – select this option to send the OAuth parameter within the request body.
- **OAuth Scope** – specify an OAuth Scope to restrict access to the application. OAuth 2.0 authentication supports Access Token Scopes to restrict access to certain subsets of the server resources. Note that this parameter is mandatory when using Azure Active Directory for authentication.

Test Connection

Click **Test** to perform a connection check to the specified business application. After a successful check, the message **Connection test was successful** is displayed next to the button. If the **Test** button is not active, you must first save the configuration. To save the configuration, click **Apply**.



Note: You can only test the connection after you have configured the SPI service in the business application accordingly and have saved the configuration. For more information, see *OpenText Documentum Content Management for SAP Solutions - Installation Guide (EESPDC-IGD)*.

Business Application Name

Enter localized names for the business application if required. For each available **Language**, enter the respective **Name**.

Repository root folder

For a CMIS integration, select the root folder of your CMIS document structure.

To connect a Documentum Content Server:

1. On the global menu, click **Enterprise > Enterprise Application Integration**, and then click **Connections to Business Applications (External Systems)**.
2. Open an existing connection or create a new one.
3. On the **Documentum** tab, enter the following parameters:
 - **Smart View Public URL:** URL to the Smart View client.
If you are using Chrome with SameSite attribute, see “[Supporting the SameSite attribute](#)” on page 253.
 - **Smart View Server URL:** Server or Cluster URL (cloud deployment) to the Smart View client.
In the absence of **Smart View Server URL**, **Smart View Public URL** is used.
 - **Repository:** Name of the repository in Documentum.
 - **Application:** Optional application name in Documentum.
 - **Network Location:** Optional network location in Documentum.
 - **Resource Identifier:** Identifier from OpenText Directory Services. For more information, see *OpenText Directory Services - Installation and Administration Guide (OTDS-IWC)*.
 - To test the connection to Smart View client and OpenText Documentum CM repository, click **Test**.
After a successful test, the following message is displayed next to **Test** button: The Connection test was successful.
4. **Optional** To add or remove a row representing a repository, click + or -. If the OpenText Documentum CM implementation has been configured with multiple repositories, you can configure them here.



Note: You cannot remove repositories with the value Yes in the In Use column. The value of the In Use column is Yes if the repository meets any one of following conditions:

- A business workspace in OpenText Content Management is mapped to the repository.
 - A repository rule is configured for the repository on the **Business object type** page.
 - The OpenText Documentum CM Folder Structure import is mapped to the repository on the **Business object type** page.
5. **Optional** To configure one or more additional Smart View clients, click **Add**, and then enter all parameters as described in [Step 3](#).



Notes

- The Smart View clients you are adding should be connected to the same OTDS as the other Smart View clients.
- To delete a Smart View client, click **Delete**.

6. Click **Save Changes** to save your settings.

Chapter 6

Configuring business workspaces

Business workspaces display content that is saved and managed in OpenText Documentum CM. Some of the OpenText Content Management standard configurations are not necessary or make no sense in context of the different storage location. Some of these are:

- Defining permission handling for business workspace templates
- Displaying related business workspaces in a folder
- Assigning the attachment declaration to a document type
- Enabling OpenText Recycle Bin for business workspaces
- Configure certain fields for business workspaces

6.1 Creating a category for workspace type and business object type

Categories bundle attributes and define their type and order. You can create your own categories to add relevant metadata to business workspaces. If you add a category to a workspace template, it is automatically available in business workspaces that are based on this template. You can also only use category attributes for the definition of workspace name and location.



Caution

Do not use Integer attributes. Integer ranges differ in both applications.



Tip: To create a category, you need the **Business Administration Data Policies** usage privilege and **Category** object privilege.

Categories and attributes can be used for the following in the workspace type or the business object type:

Workspace type configuration

- Define the location of the business workspace
- Define names for business workspaces
- Display information in widgets

Business object type configuration

- Map business properties from the business application to the category attributes

- Trigger automatic creation of business attachments based on the value of an attribute

For more information about categories, see the Administration help.

The screenshot shows the SAP Extended ECM interface with the title 'SAP Extended ECM'. The top navigation bar includes 'Enterprise', 'Personal', 'Tools', 'Admin', 'Search', and a 'Content Server Categories' link. Below the navigation is a breadcrumb trail: 'Content Server Categories > Equipment'. The main area displays a table titled 'Equipment' with columns 'Type', 'Rows', and 'Attribute Items'. The table lists eight attributes: 'Description of technical object', 'Manufacturer serial number', 'Manufacturer part number', 'Manufacturer of asset', 'Manufacturer model number', 'Catalog Profile', 'Planner Group', 'Maintenance Planning Plant', and 'Equipment category'. Each attribute has a corresponding input field. A 'Add Attribute' button is located at the top right of the table.

Equipment			Add Attribute
Type	Rows	Attribute Items	
Text: Field	1 (locked)	Description of technical object:	<input type="text"/>
Text: Field	1 (locked)	Manufacturer serial number:	<input type="text"/>
Text: Field	1 (locked)	Manufacturer part number:	<input type="text"/>
Text: Field	1 (locked)	Manufacturer of asset:	<input type="text"/>
Text: Field	1 (locked)	Manufacturer model number:	<input type="text"/>
Text: Field	1 (locked)	Catalog Profile:	<input type="text"/>
Text: Field	1 (locked)	Planner Group:	<input type="text"/>
Text: Field	1 (locked)	Maintenance Planning Plant:	<input type="text"/>
Text: Field	1 (locked)	Equipment category:	<input type="text"/>

Figure 6-1: Category attributes

6.1.1 Creating categories

To create a category:

- On the global menu, click **Enterprise > Business Workspaces**, and then click **Categories**.
- Click **Add Item > Category**. Define the new category according to your requirements, and click **Add**.
- Click the newly created category and add attributes to it.

The attributes correspond to the business properties that your property provider provides. You can also add attributes that are not provided by the property provider. They can be filled manually or by another property provider in a cross-application business workspace scenario. If you do not create an attribute for a property that is delivered by the property provider, an info entry is logged in the log file.

- a. Click **Add Attribute** and select an attribute type, usually this is **Text: Field** or **Text: MultiLine**.



Notes

- The attribute type must be the same type as the business property provided by the property provider. OpenText recommends that the attribute field length is the same for both OpenText Content Management and the business application.
- Do not use Integer attributes. Integer ranges differ in both applications.

- b. Define the attribute.

OpenText recommends that you use a name similar to the business property name. You will later map these attributes to the business properties.

- c. Click **OK** and repeat the steps for all other attributes.



Tip: OpenText recommends that you have an attribute that you can use to uniquely identify the business workspace, for example an ID.

4. Click **Submit**.

6.1.1.1 Available attribute types in OpenText Content Management and Documentum

The available attribute types of OpenText Content Management and Documentum differ and some you cannot use all.

The following table lists, how you have to configure the attribute in the corresponding system to make it available:

Table 6-1: Attributes of OpenText Content Management and Documentum

OpenText Content Management Category attribute	Documentum Type Attribute	Description
Date: Calendar Attribute	Time	Adds a calendar to enter a date.

OpenText Content Management Category attribute	Documentum Type Attribute	Description
Date: Field	Time	<p>Adds a calendar to enter a date. A time field can be included.</p> <p> Note: DATE regions are 8 digit integers representing YYYYMMDD, For example, 20210331 is March 31, 2021.</p> <p>TIMESTAMP regions use the ISO 8601 format. For example, 20210331T13:12:00 is 1:12 pm on March 31, 2021.</p>
Text: ADN ID	String	An extension of standard Content Server Attributes. The ADN ID maintains a definition of the prefix and suffix used in the numbering schema, the sequence number to be assigned, the quantity value which allows multiple numbers to be created, and the results value list.
Text: ADN Table Key Lookup	String	Provides a way for values to be read from a database table. You configure a value in the description field that provides additional information about each of the selectable items in a list. The value retrieved from the database can also depend on supporting Attributes.
Text: Reference	String	
Text: Field	String	Adds a field for entering alphanumeric text, such as a Name field for typing a customer's name. This attribute can contain any letter, number, or symbol combination. The default size is 32 characters, and the maximum is 254.

OpenText Content Management Category attribute	Documentum Type Attribute	Description
Text: MultiLine	String	Adds a field for entering a relatively large amount of alphanumeric text, such as a Comments field for typing an explanation or description. The default size (Display Length) is 32 characters, and the maximum is 254. If the default size is exceeded, a multiline text field will automatically scroll to the right until reaching the maximum number of characters.
Set	String, text or time attributes that match to the attributes that define the set.	A special attribute type within a Category that contains two or more attributes that have a strong relationship between them. A Set is like a Category within a Category. For example, you may want to know the date that a specific user reviewed a Document (two attributes: Date and Reviewer), or the product code of a product that a customer is complaining about (three attributes: Code Number, Product Name, and Customer Name). A Set cannot be required; to require values within a Set, mark each attribute individually as Required.

Table 6-2: Attribute Types that are not supported

What is not supported	OpenText Content Management	Documentum
OpenText Documentum CM for SAP Solutions scenarios use automatically generated attributes. Popup list and auto complete is not supported.	Integer: Popup Date: Popup Text: Popup Text: Table Key Lookup	-

What is not supported	OpenText Content Management	Documentum
Integer fields of OpenText Content Management and Documentum differ in length. We do not recommend to use integer type.	Integer: Field Integer: Popup	Integer
Defines a partner, which is not part of the OpenText Documentum CM for SAP Solutions scenario.	Partner Set	-
The users of OpenText Documentum CM for SAP Solutions should work in SAP or Documentum. The scenario for User:Field is not supported	User: Field	-
Data from Documentum is not transferred back to SAP. A scenario for ID is not supported	-	ID
The format is not supported in	-	Double

6.2 Creating a classification for workspace templates and location

Users can only create business workspaces in a specific folder if this folder bears the same classification as the business workspace's template.

All classifications for business workspaces must be grouped in one classification tree. You must add this classification tree in the Document Template settings. For more information, see “[Configuring document template settings](#)” on page 62.

To create a classification for the folder where the business workspaces are created:

1. On the global menu, click **Enterprise > Business Workspaces**, and then click **Classifications**.
2. Open an existing classification tree or create a new one. You can name the classification tree, for example, **Workspace Types**. The classification tree must be set in the Document Template settings. For more information, see “[Configuring document template settings](#)” on page 62.
3. Click **Add Item > Classification** and define the new classification according to your requirements. Usually, you create a classification for each workspace type.

6.3 Creating a root folder for the business workspaces

You create a folder where business workspaces can be created. This is the root folder for business workspace of a certain type. The structure within this folder depends on how you configure the location path and sub location path of the workspace type. You can have fixed subfolders, and you can determine the subfolders based on attribute values.



Note: In OpenText Content Management only workspaces without content are stored. You must configure the location where they are stored. All content (folders and documents) is stored on the Documentum server.

For example, customers are classified by their sales districts “South” or “North”. You can use the **sales district** attribute to determine if the business workspace is stored in the South or the North folder. For more information, see “[General settings of a workspace type](#)” on page 42.

Add the classification that you created for this folder.

To create and configure the folder:

1. Go to the location where you want to create the root folder for your business workspaces.
2. Add a new folder and configure it as required: Add a name, description. For Classic View, you can also select an icon.
3. From the **Classifications** list, select the classification that you created in “[Creating a classification for workspace templates and location](#)” on page 38.



Important

This classification must be the same for folder and template, which you will configure in “[Defining a workspace template in Classic View](#)” on page 61.

6.4 Configuring multilingual metadata languages

For each language that you configured in the business application, you must configure a language in Content Server.



Note: System administrator rights are required for this task. Please ask OpenText Professional Services for assistance.

To configure multilingual metadata languages:

1. On the **OpenText Content Management Administration** page, click **Base Settings – Feature Configuration > Multilingual Metadata**.
2. Add an entry for each language that you want to support, and enable it.

! **Important**

- Select languages whose **Language Code** matches the value of the **Lng ISO** field in the SAP system, for example **en**.

You can have more languages in Content Server than you have customized in the business application, but you must not have less.

- **Restart Content Server after adding new language**

When you add a new metadata language, you must restart your Content Server to display all links in the Enterprise Application Integration volume correctly translated.

The screenshot shows the SAP GUI interface for configuring multilingual metadata. At the top, there's a small icon of a person with a gear and the text "Configure Multilingual Metadata". Below this, a sub-header says "Add A New Metadata Language". There's a form with a dropdown menu labeled "Add Language" and a "Language" input field containing "en" with a red asterisk indicating it's required. Buttons for "Apply" and "Cancel" are at the bottom of this section. Below this is a larger table titled "Configure Multilingual Metadata". The table has columns: Enabled, System Default, Language, Language (Local), Language Code, Database Collation, and Actions. It lists four languages: English (Enabled, System Default, Language: English, Local: English, Code: en, Collation: Latin1_CI_AI), German (Enabled, Language: German, Local: Deutsch, Code: de, Collation: Latin1_CI_AI), Arabic (Egypt) (Not Enabled, Language: Arabic (Egypt), Local: العربية, Code: ar_EG, Collation: Latin1_CI_AI), and Italian (Not Enabled, Language: Italian, Local: Italiano, Code: it, Collation: Latin1_CI_AI). Each row has edit and delete icons in the Actions column. At the bottom of the table are buttons for "Save Changes", "Apply", and "Cancel".

Figure 6-2: Configuring multilingual metadata languages

6.5 Creating a workspace type

A *workspace type* provides the framework for the creation of business workspaces. It defines how business workspaces of this type will look like.

What you configure in a workspace type

- Location of the business workspace
- Name of the business workspace, also in several languages
- Access policies

- **For Smart View**

- Name of the workspace type in several languages. The name of the workspace type can be displayed in the header tile of a business workspace.
- Perspective Manager: Configure a business workspace perspective for the workspace type. Perspective Manager is a separate tool.

- **For Classic View**

- An icon for business workspaces of this type.
- The population of the business workspace sidebar with *sidebar widgets*. Sidebar widgets enhance the standard user interface with additional information related to the respective business workspace.

Workspace Types							Add Item ▾
Type	Name	Business Object Types	Intelligent Workspace	Creation Status	Indexing Status	In Use	Modified
<input type="checkbox"/>	Account(C4C) ▾	Account(C4C)	Enabled	Enabled	Up to date	Yes	08/29/2017 10:34 AM
<input type="checkbox"/>	Account(c4c) v2 ▾	Account V2	Disabled	Enabled	Up to date	Yes	02/04/2020 04:25 PM
<input type="checkbox"/>	Accounting Document Header ▾	BKPF	Disabled	Enabled	Re-indexing required	Yes	08/29/2017 10:34 AM
<input type="checkbox"/>	After Upgrade WS Type ▾	After Upgrade BOT	Disabled	Enabled	Up to date	Yes	04/22/2019 05:20 PM

6.5.1 Creating workspace types

Create a workspace types.

1. Use the **Documentum** tab to configure a structure in Documentum. For more information, see “[Documentum settings of a workspace type](#)” on page 48.
2. Use the **General** tab to configure the location where the Business Workspace is created in Content Server.

The **Advanced** tab is not used for OpenText Documentum CM for SAP Solutions.

To create a workspace type:

1. On the global menu, click **Enterprise > Business Workspaces**.
2. Click **Workspace Types**.
3. Click **Add Item > Workspace Type**.
4. Define the new workspace type as described in the following sections.

The screenshot shows the 'General' tab of a configuration interface for a workspace type. It includes sections for:

- Name:** A mandatory field.
- Workspace Type Names:** Fields for 'Language' (de, en) and 'Name'.
- Business Workspace Names:** Fields for 'Language' (de, en) and 'Name Pattern' (with 'Insert Attribute' buttons).
- Widget Icon:** A file selection button.
- Perspective Manager:** A note to click 'Apply' to enable it.
- Workspace Copying:** A note about users not being able to copy workspace types.
- Workspace Creation Settings:** A dropdown for 'Location' (Current Location) and a checkbox for 'Create workspaces with fast bulk method'.

6.5.2 General settings of a workspace type

Name

Provide a name for the workspace type. This name is used in the Classic View, in Perspective Manager, and when creating workspace templates in the Smart View. This field is mandatory when creating a workspace type.

Workspace Type Names

Add a workspace type name for each language available. The workspace type name can be displayed in the header tile or in the metadata tile of a business workspace. Depending on the language users have chosen, they see the localized workspace type name. If for a language no workspace type name is specified, then the **Name** is used.



Note: To define multilingual workspace type names, add languages to the multilingual metadata. For more information, see *OpenText Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI)*.



Tip: Users can change their preferred metadata language: **My Account > Settings > Metadata Language**.

Business Workspace Names

You can display the names of business workspaces, even in different languages, and you can form patterns for the workspace names from attributes, for example Customer [91100:City]/[91100:Name] ([91100:Id:+3(4)]). For more information, see “[Using patterns for workspace names and business object names](#)” on page 49. You must at least define the workspace name for the default language.

You can use the multilingual texts option for master data business objects.

Example: The workspace type for “Equipment” has been configured to display workspace names in English and French.

Kate has set her preferred metadata language to English; she sees the business workspace for equipment 1000476 under its English name "Equipment Truck 12". Monique, whose metadata language is French, sees the same workspace under its French name "Équipement Camion 12".

 **Tip:** Users can change their preferred metadata language: **My Account > Settings > Metadata Language**.

Generate names also for workspaces without business object: Select this option if you want to use the name pattern also for business workspaces that do not have a business object, which could provide the metadata for the name pattern. If you use this option, OpenText recommends that you use mandatory attributes for the name pattern. So, when creating a workspace, users must provide metadata required for the name generation.

Workspace Icon

Specify an icon, which is displayed in business workspaces of this type in the Classic View. Click **Select Icon** to browse the available icons. The icon is visible to users in the Classic View on business workspaces and their root folder. For Smart View, you use the **Widget Icon**.

Widget Icon

Select an icon that is displayed in the Smart View for business workspaces of this type. For more information, see "["Widget icon" on page 47](#)".

Perspective Manager

The Perspective Manager is a tool with which you design different layouts. If you start the Perspective Manager from this link, it opens with a predefined layout template for business workspace perspectives. You can edit an existing Perspective or create a new one. For more information, see "["Creating a Perspective using the Perspective Manager tool" on page 58](#)".

Workspace Copying

Select this option to prevent users from copying business workspaces of this type.

Workspace Creation Settings

Define the folders under the root folder where business workspaces are created and stored.

You can also have subfolders, which are created based on business properties. Business workspaces are sorted into these subfolders. OpenText recommends that you use at least a simple subfolder structure to prevent possible performance loss due to too many business workspaces in one folder.

- **Location**

Define the root folder where business workspaces of this type are created and stored. Root folder and template must have the same classification. Only business workspaces based on templates with the same classification as the location can be created in this location. For more information about the root folder, see "["Creating a root folder for the business workspaces" on page 39](#)".

Select one of the following options:

- **OpenText Content Management Folder**

A fixed folder. Click **Select** and browse to the folder that you created as root folder. All business workspaces are created in this folder or in subfolders.

- **Current Location**

The folder in which users create a business workspace. This is the default option.

- **From Business Property**

A business property from the external business application determines the location of the business workspace. You must enter the name of the business property manually. Enter only the name of the business property without parentheses, for example, CUSTOMER. You can only use a business property of type **Text** and it must contain the node ID of a folder.

The business workspaces are then created in a folder that corresponds to the business property's value.

! **Important**

The business workspace is *not* moved automatically when the value of the business property that determines the location is changed.

- **From Category Attribute**

A category attribute determines the location of the business workspace.

Click **Select** and select a category. Then select an attribute. The attribute must contain the node ID of the folder.

The business workspaces are then created in a node that corresponds to the attribute.

! **Important**

The business workspace is *not* moved automatically when the attribute that determines the location is changed.



Note: If the workspace location, both root folder and sub location path, is calculated from a category attribute, which does not originate from a business property but from a fix value in the template, workspace creation works only in the Classic View. All other scenarios are not supported.

- **Sub Location Path**

Create a subfolder structure rather than saving all business workspaces in one folder. Select **From Pattern** to enter a pattern for the subfolder creation. You can use normal text, categories and attributes, business properties, and modifiers to create subfolders, for example [2032760:Region:(3)]/[2032760:City:+5].

This option is only available for location options **OpenText Content Management Folder**, **From Category Attribute**, **From Business Property**

(with the Enterprise Applications Integration), but not for option **Current Location**. For more information, see “[Using patterns for the location path](#)” on page 51.

Click **Insert Attribute** to select a category and an attribute.

You can also use multivalue attributes. This creates a folder path in the order of the values in this multivalue attribute. Empty values may only be at the end of the multivalue attribute.

If a sub location folder does not exist when the business workspace is created, the folder is created. You must ensure that the category attribute is never empty, for example by making it mandatory. If all attributes for a sub location are empty, the business workspace is created in the location folder. This applies to both single value and multivalue attributes.

! **Important**

The business workspace is *not* moved automatically when an attribute that determines the sub location path is changed.

- **Use also for manual creation**

Not relevant for OpenText Content Management for SAP Solutions.

- **Directly open created workspace**

In the Smart View, the newly created business workspace will be opened right after its creation.

- **Create workspaces with fast bulk method**

When creating big number of business workspaces, for example for the initial load, you can use the fast bulk method. This method creates business workspaces much faster but has its restrictions:

- **Location**

Only folders and business workspaces are supported. If you configure **From Business Property** or **From Category Attribute**, and the business property or category attribute contains the ID of a business workspace, any workspace hierarchy configuration of the parent business workspace is ignored.

- **Sub-items**

A business workspace template can only contain the following items:

- Related business workspaces
 - Folder
 - Email-Folder
 - Collection

- **Nested workspaces**

Composite workspaces and workspace hierarchies are not supported

- **Node data**

Only the following node data is attached:

- Categories and attributes
- Classifications
- Create Audit entry
- Business Workspaces Roles
- Business Workspaces Relations
- Custom Columns
- Facets

Other node data are not supported, most notably Recommender.

– **Records Management**

The following is supported:

- Records Management Classifications are supported.
- RSI

Supplemental Markings and Security Clearance are not supported.

– **Facets and Custom Columns**

Supported facets:

- Date Created
- Date Modified
- Modifier
- Owner
- Subtype (Content Type)
- Classification

Supported system columns:

- Created By
- Creation Date
- ID
- Modified
- Modified By
- Name
- Owner
- Size
- Type

Supported custom columns:

- Workspace Modify Date
- Workspace Type Id
- Workspace Name

- **Creation date**

The Template Workspaces option **Apply new creation date to sub-items** is not evaluated in the `createOrUpdateWorkspaces` call. In bulk mode the created sub-items always have the actual date as create date.

- **Modified By**

The **Modified By** attribute of a node is the user, which called the WebService call. Whereas with standard creation mode, the resulting modifier is the Admin user.

- **Reference number**

Reference number generation is not supported.

- **Web reports**

Web Reports will not be started when a business workspace is created.

- **Core Share**

Content sharing with OpenText Core is not supported.

! **Important**

Business workspaces are created in batches. If one business workspace of a batch with fast bulk method fails to be created, the whole batch call is ended and no business workspace of that batch is created.



Note: You can create cross application workspaces also with the fast bulk method.

6.5.2.1 Widget icon

The widget icon is displayed in the Smart View for business workspaces of this type. To add a workspace type icon, click **Browse**, and then select the icon.

Supported formats are gif, jpeg, jpg, png, x-png, and svg.

Files must not be larger than 1 MB. For best results, use a square image with the recommended size of 128x128 pixels.

You can select from sample icons, which are in the following folder on your installation: `<Install_Home>\support\otsapxcm\business_object_icons`, for example `\mycontentserver\OPENTEXT\support\otsapxcm\business_object_icons`.



Notes

- If no icon is configured for the workspace type, a default is taken. Users with sufficient permissions can change the icon for an individual business workspace.
- For proper functionality of widget icons the Support Asset deployment must be enabled. Go to **OpenText Content Management Administration >**

Support Asset Administration > Configure Support Asset Deployment. For details, see *OpenText Content Management Admin Help - Support Asset Administration (LLESSAM-H-AGD)*.

6.5.3 Advanced settings of a workspace type

You cannot use the **Advanced** tab for workspace types that are used in Documentum at the moment.

6.5.4 Documentum settings of a workspace type

The input defines the storage location in Documentum.



Caution

You must configure a path here.

If no path is configured, all workspaces of this type will be created in the user cabinet.

Location

Provide the location where you save the business workspaces of this type in **Documentum**. You can either enter the path to the location or click **Select Documentum Folder**, and then navigate and select the folder.

If you want to enter the path, make sure you start with a slash and use slashes to indicate subfolders. For example /Sales/Sales Orders/Requests.

6.5.5 Editing workspace names

You can display the names and descriptions of business workspaces in different languages. You can also compose workspace names and descriptions with metadata.

You can use the multilingual texts option for master data business objects.

Example: The workspace type for “Equipment” has been configured to display workspace names in English and French.

Kate has set her preferred metadata language to English; she sees the business workspace for equipment 1000476 under its English name “Equipment Truck 12”. Monique, whose metadata language is French, sees the same workspace under its French name “Équipement Camion 12”.



Tip: Users can change their preferred metadata language: **Tools > Settings > Metadata Language**.

To configure business workspace names or descriptions:

1. Add languages to the multilingual metadata.

2. Edit the property provider to support multilingual properties. For more information, see the SDK Guide on OpenText My Support (https://support.opentext.com/csm?id=kb_article_view&sysparm_article=KB0824884).
3. Add workspace name or description patterns for each language in the workspace type configuration. You can use category ID and attributes, business properties, free text as well as modifiers for the pattern.

Example: Product name with category and attribute: Equipment [91100:Product Name]/[91100:Product Family] ([91100:Id:+3(4)]).

Product name with business property: Equipment [PRODUCT_NAME]/[PRODUCT_FAMILY] ([OBJID:+3(4)])

Click **Insert Attribute** to select a category and an attribute. Alternatively, you can type category ID and attribute or business property.

! **Important**

You must at least enter a pattern for the default language. Other languages are optional.

4. **Generate names also for workspaces without business object:** Select this option if you want to use the name pattern also for business workspaces that do not have a business object, which could provide the metadata for the name pattern. If you use this option, OpenText recommends that you use mandatory attributes for the name pattern. So, when creating a workspace, users must provide metadata required for the name generation.

6.5.6 Using patterns for workspace names and business object names

You can use patterns to define business workspace names or descriptions, and business object names.

- **Business workspace names or descriptions** can include free text, category attributes, and business properties.
- **Business object names** can include free text and business properties.

To reference a category attribute or business property, use square brackets []:

- Category attribute example: [123117:Material Description]
- Business property example: [MATL_DESC_TXT]



Note: Multivalue attributes are not supported.

Examples for patterns

Free text and attributes

You can combine text and attributes to form a name pattern. You can also use characters like dash (" - "), parenthesis ("()"), or forward slash (" / ") in this name.

! **Important**

- You cannot use the following characters:
 - Colon : is not allowed in a node name. A colon is dropped from the pattern if it is used.
 - Square brackets [] are used in the pattern syntax to indicate category attributes or business properties.
In attribute values however, square brackets can be used.
- If one of the attributes in the pattern for multilingual workspace names and business object names does not provide a value, this attribute is omitted without error message.
- **Pattern** – Material - [123117:Material Description] ([2032760:Id])
- **Result** – Material - Standard Water Pump SWP123 (00000123)

First name, last name, login

You can use `firstname`, `lastname`, and `login` as additional modifiers for an attribute. `login` adds the login name of the selected user or the group name of the selected group to the generated name. `firstname` or `lastname` adds the first name or last name of the selected user to the generated name but nothing if a group is selected.

These modifiers are valid for attributes of type `User`, which can include groups, and for other attribute types like `Text` if the value is a user or group ID.

If you use a `User` attribute in a pattern without any of the these modifiers, the ID of the user or group is used for the name generation.

- **Pattern** –
[223113:User:firstname] [223113:User:lastname] ([223113:User:login]) - Fire Insurance
- **Result** – John Doe (jdoe) - Fire Insurance

Offset: +0

Cut off the specified number of characters and displays the rest. The offset must not be greater than the actual attribute length. Otherwise, an out-of-bound error is displayed. Separate the modifier from the attribute by a colon.

- **Pattern** – Material - [123117:Material Description] ([2032760:Id:+4])
- **Result** – Material - Standard Water Pump SWP123 (0123)

Cut off the first four digits of the ID.

Length: (0)

Display the specified number of characters. The length value may be greater than the original attribute length. Separate the modifier from the attribute by a colon.

- **Pattern – Material** - [123117:Material Description:(20)] ([2032760:Id])
- **Result – Material** - Standard Water Pump (00000123)
Displayed only the first twenty characters of the Material Description.

Combination of offset and length

Combine pattern modifiers.

- **Pattern – Material** - [123117:Material Description:(20)] ([2032760:Id: +4(3)])
- **Result – Material** - Standard Water Pump (012)
Added the string “Material -”, displayed only the first twenty characters of the Material Description, cut off the first four digits of the material ID and displayed only three, set the material ID in parenthesis.

6.5.7 Using patterns for the location path

You can form a pattern from attributes, text and a modifying syntax to define the following:

- Location where business workspaces are stored. For more information, see [“General settings of a workspace type” on page 42](#).
- You can use multivalue attributes. This creates a folder path in the order of the values in this multivalue attribute. Empty values may only be at the end of the multivalue attribute.

! **Important**

- You cannot use the following characters:
 - Colon : is not allowed in a node name. A colon is dropped from the pattern if it is used.
 - Square brackets [] are used in the pattern syntax to indicate category attributes or business properties.
In attribute values however, square brackets can be used.
- The forward slash (“/”) separates subfolders.
- If one attribute used for a subfolder is empty, the business workspace is not created. Empty attributes can cause an unwanted location and are therefore handled as error. OpenText recommends that you define attributes, which are used for the location in manual creation, as mandatory.
- If a multivalue attribute contains empty values, which are not at the end of the multivalue attribute, the business workspace is not created. Empty attributes can cause an unwanted location and are therefore handled as error.

- If **all** attributes for a sub location are empty, the business workspace is created in the **location** folder. This applies to both single-value and multi-value attributes.

To use the pattern for locations:

1. From the **Sub Location Path** list, select **From Pattern**.
2. Click **Insert Attribute**, then select an attribute and click **Insert**.
3. Enter text or syntax elements to form your pattern. The forward slash (“/”) is used to separate folders.



Available properties

If the business workspace is created with a reference to a business object in a business application, the following properties can be used:

- **BUS_APP_NAME** – This tag will be replaced by the *Business Application Name* that is configured in the connection to the business application, for instance “SAP S/4HANA”..
- **BUS_APP_ID** – If the business workspace is created with a reference to a business object in a business application, This tag will be replaced by the *Business Application ID* that is configured in the connection to the business application, for instance “S4H”.

See also Section 8.2 “Connecting a business application” in *OpenText Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI)*.

Examples for location path patterns

Free text and attributes

You can combine text, attributes and business properties to form a name pattern. You can also use characters like dash (“-”), parenthesis (“()”). You can select category attributes. Business properties must be entered manually in square brackets.

The forward slash (“/”) separates subfolders.

- **Pattern** – [PRODUCT_YEAR] > [PRODUCT_MONTH]
- **Result** – 2017 > 03

Creates folders for production year and month.

Offset: +0

Cut off the specified number of characters and displays the rest. The offset must not be greater than the actual attribute length. Otherwise, an out-of-bound error is displayed. Separate the modifier from the attribute by a colon.

- **Pattern** – [2032760:Id:+4]

- **Result** – 0123

Cut off the first four digits of the ID.

Length: (0)

Display the specified number of characters. The length value may be greater than the original attribute length. Separate the modifier from the attribute by a colon.

- **Pattern** – [123117:Material Description:(20)] ([2032760:Id])

- **Result** – Standard Water Pump (00000123)

Displayed only the first twenty characters of the Material Description.

Combination

Combine all of those pattern modifiers.

- **Pattern** – Material/[123117:Material Description:(20)]/[PRODUCT_YEAR]
- **Result path** – Material/Standard Water Pump/2017

Added the folder “Material” as root folder, displayed only the first twenty characters of the Material Description, and displayed the production year from a business property.

6.5.8 Managing workspace types

To manage workspaces types:

1. On the global menu, click **Enterprise > Business Workspaces**, and then click **Workspace Types**.
2. To edit an existing workspace type, click the name of the workspace type, or from the function menu, select **Edit**.
3. To delete a workspace type, select it, and then click **Delete**. The perspectives folder of this workspace type is also deleted.
You can only delete workspace types that are not referenced by a document template, or a business workspace, or a business object type. The value in the **In Use** column must be **No**.
4. To disable a workspace type, from the function menu, select **Disable Creation**. You see the current status of the workspace type in the **Creation Status** column.

Enabled

This workspace type is available to create new business workspaces.

Disabled

This workspace type is not available to create new business workspaces; however, this workspace type will be used to display business workspaces that were already created from this type.

5. You can enable Content Aviator for business workspaces. In Smart View, business users can use Content Aviator in these workspaces. For details, see Section 3 “Content Aviator” in *OpenText Content Management - Smart View User Help (CSSUI-H-UGD)*.

To enable Content Aviator for all business workspaces of this workspace type, from the function menu, select **Enable Aviator**. You see the current status of the workspace type in the **Aviator** column.



Prerequisites and limitations

- The Content Aviator feature must be enabled.

Enabled

Content Aviator is enabled for all business workspaces of this workspace type.

In Smart View, you cannot disable Content Aviator for single workspaces of this type. The **Enable/Disable Aviator** actions are not displayed on workspace level.

Disabled

Content Aviator is disabled for all business workspaces of this workspace type.

In Smart View, you can enable or disable Content Aviator for single workspaces of this type. The **Enable/Disable Aviator** actions are displayed on workspace level.

6.6 Configuring Smart View for Business Workspaces

You have several ways to configure how a Business Workspace can appear in Smart View.

6.6.1 Creating a custom column

You can create a custom column to display category attributes or other information in the Smart View widgets. For more information about widget configuration, see “[Configuring widgets for a Business Workspace](#)” on page 59.

The following business workspace-specific data sources can be used to create custom columns:

- Workspace Type ID
- Workspace Name <*language code*>, for example **Workspace Name en**
- Workspace Modify Date
- Workspace Type
- Workspace Template
- **Business Object Type ID**

The following custom columns have already been created in the **Facets** volume in the **Workspace Columns** folder.

- **Workspace Type ID**
- **Workspace Name** in each multilingual metadata language that is configured, for example **Workspace Name en**.

If you added another multilingual metadata language after installation, you must create the respective column manually and prepare it for sorting and filtering.

- **Business Object Type ID**

 **Note:** To create a custom column, you need the **Business Administration Facets and Columns** usage privilege and the **Column** object privilege.

Example: The collapsed view of the Workspaces widget displays the workspace name only. The expanded view of the same widget displays columns for workspace name, creation date, and owner and is sorted by creation date.

The workspace name is a default custom column. Creation date and owner are created as system default columns during installation.

 **Note:** You can enable sorting by date in the Workspaces widget or the Related Workspaces widget. For this, you create a custom column for the **Workspace Modify Date** data source and configure it to be sortable so that it can be used for sorting and filtering. No further configuration is required in the widget.

For more information about how to configure widgets, see *OpenText Content Management - Widget Configuration Guide (CSAV-CWG)*.

6.6.1.1 To create a custom column

To create a custom column:

1. On the global menu, click **Enterprise > Business Workspaces**.
2. On the **Business Workspaces** page, click **Facets**.
3. On the **Facets** page, browse to the folder where you want to store your custom columns.
4. On the folder page, click **Add Item > Column**.
5. On the **Add: Column** page, add a name and, optionally, a description.
6. In the **Data Source** list, select a category attribute. Each attribute can only be used once in a custom column. If an attribute is already used as data source for a custom column, it is no longer listed.

 **Tip:** A custom column displays a maximum of 64 characters of data. If the data exceeds 64 characters, the text truncates and an ellipsis (...) appears to represent the missing data. Setting the column width to a value greater than 64 characters does not affect this limitation.

7. To enable sorting and filtering, select the **Sortable** check box and click **Add**.
To only display the column in the Workspaces widget, in the Related Workspaces widget, or in the Browse view in the Classic View for on-premise installations, clear the **Sortable** check box.
8. Optional While you wait for the column to be built, to monitor the status, select **Properties > Specific** from the function menu.
9. Smart View: From the function menu of the custom column, select **Properties > Workspaces**. Then select **Used for Sorting and Filtering**. When you click **Update** the database index is created concurrently, which may take a few minutes.

 **Notes**

After the database index has been created, you can use the custom column for filtering and sorting.

- Filtering is only supported for data type **String**.
- Sorting is not supported for **User** fields.

For more information about custom columns, see the online help.

6.6.2 Converting a rule-based to a business workspace-type Perspective

For Business Workspaces on off-cloud systems, Perspectives that were created with versions 16.2.9 or earlier, are Container Perspectives that determine their respective workspace type with a rule. Starting from version 16.2.10, Perspectives can be created as Perspectives with Type **Business Workspace**. The business workspace type is set automatically when you launch the Perspective Manager tool from the Business Workspace Type configuration page.

Starting from version 20.2, Perspectives are no longer ActiveView based. All new Perspectives use a new Perspectives node-type. Legacy ActiveView-type Perspectives must be manually converted to the new Perspectives node-type Perspectives.

 **Important**

If you have more than one Perspective for the same business workspace type, you must follow a certain order for the conversion of these Perspectives.

6.6.2.1 To convert a rule-based Perspective to a Perspective node-type Perspective

To convert a rule-based Perspective to a Perspective node-type Perspective:

1. On the global menu, click **Enterprise > Business Workspaces**.
2. On the **Business Workspaces** page, click **Perspectives**.
3. Check for multiple Perspectives for the same workspace type by sorting the list of Business Workspaces Perspectives by size to see all workspace type folders with multiple Perspectives in them. If there are no workspace types with multiple perspectives, the order of migration is not relevant and you can skip the steps **4** and **5**.
4. Go to **OpenText Content Management Administration > ActiveView Administration > Manage Global Perspectives**.



Note: This page only appears if you still have legacy ActiveView-type, rule-based Perspectives in the system.

5. On the **Global Perspectives** page, in the **Container Perspectives** section, search for Perspectives with the same workspace type ID.



Important

Take note of the order in which these Perspectives are listed. You must convert the Perspectives in this same order.

6. On the global menu, click **Enterprise > Perspective Manager**.
7. On the **General** tab of the Perspective Manager, open the workspace perspective that you want to convert, click **Edit Perspective** and convert it. Stick to the order that you noted in step **5**.
 - a. On the **General** tab, in the **Create new perspective** area, select the **Edit existing** option and browse to the Perspective that you want to convert.
 - b. In the **Type** area, select the **Workspace** option.
 - c. Click the **Rules** tab, to verify the workspace type.
 - d. Click the **General** tab, and in the Workspace Type list, select the same workspace type listed on the **Rules** tab.
 - e. Click the **Rules** tab and delete the rule with the workspace type.
 - f. On the Perspective Manager header, click **Update**.

For more information, see the online help for Perspective Manager.

6.6.3 Creating a Perspective using the Perspective Manager tool

Perspectives control how users see the layout of a business workspace in the Smart View. The Perspective Manager tool walks you through the creation, design, and configuration of a Perspective.

With Business Workspaces, the Perspective Manager tool offers a reduced set of options for Perspectives. For Business Workspaces, a new Perspective is tied to the workspace type and already contains a sample layout.

For information about how to use the Perspective Manager tool to create a Perspective for a business workspace, see *OpenText Content Management - Perspective Manager Help (CSAV-H-PPG)*.



Important

Changes in Perspectives take effect immediately. If you are unsure of your changes, OpenText recommends that you create your Perspective on a test system before implementing it on a production system.



Notes

- For systems with OpenText Documentum CM for SAP Solutions, OpenText recommends that you create a new tab in the Perspective for Documentum documents. For example, you can name the tab as "Documents" and place the Documentum widget on it to show the Documentum view of the workspace. For more information, see *OpenText Content Management - Widget Configuration Help (CSAV-H-CWG)*.
- When you transport Perspectives using the Transport Warehouse, you must follow a certain order to keep dependencies. For more information, see *OpenText Content Management User Help - Transport (LLESTRP-H-UGD)*.

6.6.3.1 To create a business workspace-type Perspective

For information about how to use the Perspective Manager tool to create a Perspective for a business workspace, see *OpenText Content Management - Perspective Manager Help (CSAV-H-PPG)*.

6.6.4 Configuring widgets for a Business Workspace

You can add any widget to a business workspace-type Perspective. Your system configuration determines which widgets are appropriate.

For information about how to configure widgets, see *OpenText Content Management - Widget Configuration Guide (CSAV-CWG)*.

For information about the configuration options for the different widgets, see Section 7 “Widget configuration” in *OpenText Content Management - Perspective Manager Customization Guide (CSAV-PPG)*.

6.6.5 Creating a Perspective for the Landing Page

The Perspective that appears for your users in OpenText Content Management must contain the widgets that allow access to your business workspaces.

To create a Perspective for the Landing Page:

1. On the global menu, click **Enterprise > Perspective Manager**.
2. In Perspective Manager, on the **General** tab, create or update your **Home** page/ Landing Page.

Field	Description
Create new	Creates a new Perspective.
Edit existing	Opens a dialog to browse to an existing Perspective that you want to edit.
Title	Defines the name of the Perspective.
Type:	Select Landing Page to create a Perspective for a Home page.
Scope:	All Landing Page Perspectives have a Global scope.

3. Click the **Rules** tab and use the rules editor to restrict the availability of the page for certain devices, groups, or users.
4. Click the **Layout** tab to add tiles or configure the tile order on the Home page.
5. Click the **Configure** tab to select, arrange, and configure the widgets that you want to appear on your Landing Page.
For more information about how to use the Perspective Manager tool and how to configure widgets, see the help available from Perspective Manager.
6. On the Perspective Manager header, click **Save** or **Update** to save your changes.

6.6.6 Creating an activity manager object for the Activity Feed

You can use OpenText™ Pulse, to display an Activity Feed in the Header widget or in the standard Activity Feed widget. The Activity Feed monitors all activities related to content and status for a business workspace and its subitems. It shows, for example, when someone adds a document.

If you want to also monitor attribute changes, you must create an activity manager object. An activity manager object is linked to one category attribute. When the value of the attribute changes, it creates an activity, which is then shown in the Activity Feed widget.



Note: System administrator rights are required for this task. Please ask OpenText Professional Services for assistance.

Example: You add the category attribute **Amount** of a Sales Order to an activity manager object. When the amount changes, it is displayed in the Activity Feed.

For detailed information about the activity manager object and Pulse, see the online help for OpenText Pulse.



Notes

- Each activity manager evaluates its rules by the order in which they are listed.
- The Activity Feed message supports localization and starts with a default activity string message. Optionally, you can customize the activity string with substitution placeholders for the attribute value.



Tip: To create activity manager objects, you need the **Business Administration Facets and Columns** usage privilege and **Activity Manager** object privilege.

To enable activity monitoring with OpenText Pulse, you need access to the **OpenText Content Management Administration** pages.

To enable Pulse:

1. On the **OpenText Content Management Administration** page, select **Pulse Administration > Configure**.
2. Select **Enable Pulse**.

To enable activity monitoring for business workspaces:

1. On the **OpenText Content Management Administration** page, select **Pulse Administration > Collaboration Administration**.
2. From the **Select Object Types to Manage** list, select the **Business Workspace** object type and click the **Add Object Type** button 
3. Select the collaboration feature that you want to make available.

4. Click **Update**.

To create an activity manager object:

1. From the global menu bar, select **Enterprise > Facets Volume**.
2. **[Optional]** Create a folder for the activity manager objects.
3. Click **Add Item** and select **Activity Manager**.
4. Enter at least a name and select a category attribute as data source.
5. Click **Add**.

To create rules for the activity manager:

1. Open the **Specific** tab of the activity manager object.
2. Click the **Add a new rule before this one** button 
3. Enter a rule name and select an option from the **Rule Criteria** list, for example, **Value Changed**.
4. The **Activity String** is populated with a template string. You can edit the string and also add multilingual versions.

The standard string looks like the following: **[ObjName] [AttrName] changed from ' [OldVal] ' to ' [NewVal] '**.

Example: If you created an activity manager object that monitors the status of a sales order workspace, the string would then produce the following activity message: *Sales Order 123 status changed from 'pending' to 'closed'*.

5. Edit the list of **Included Object Types**. Remove object types that you do not want to monitor.
6. Click **Submit**.

6.7 Defining a workspace template in Classic View

Templates manage the business workspace creation. They can automatically add content to a newly created business workspace or manage permissions. You can define a workspace template in Classic View and in Smart View.

6.7.1 Configuring document template settings

You must configure that the subtype for business workspaces (subtype 848) can be used as a template.

To configure document template settings:

1. On the **OpenText Content Management Administration** page, click **Document Templates Administration > Configure Content Server Document Templates**.



Tip: In this section, only the most important settings for business workspaces are mentioned. For detailed information about all settings, see the online help for this page.

2. In the **Managed object types** section, click **Configure** and make sure that at least the **Business Workspace (subtype 848)** item is configured.
3. For the **Classification tree for object types**, select a classification tree for business workspaces.
4. Configure the other settings as required. For more information, see the online help for this page.

The screenshot shows the 'Configure Content Server Document Templates' interface. It has two main sections: 'Global Settings' and 'Classification Settings : Global Configuration'.

Global Settings:

- Managed object types:** A 'Configure' button is shown, with 'Configure Subtypes' below it.
- Inherit RM classification from template or destination:** An unchecked checkbox with a note: "By enabling this option, the sub items in a template will always use the RM classification from its template, otherwise it will inherit from the destination".
- Apply new creation date to sub-items:** An unchecked checkbox with a note: "Sub-items created by the wizard by default use the template source's create date (excluding Task and TaskList). Enabling this option will use the date it is created. Note: If the sub-items include RM classifications, the 'Record Date' and 'Status Date' of the classification will be set to the new creation date".
- Global configuration:** A checked checkbox next to the text "Use the global configuration instead of the object specific configuration".
- Select object type:** A dropdown menu showing "Select object type" and "Global Configuration".

Classification Settings : Global Configuration:

- Classification tree for object types:** A dropdown menu showing "Classification tree for object types" and "Classifications:Types". There are three buttons to the right: a three-dot ellipsis button, a copy button, and a delete button (with an X).

6.7.2 Creating a workspace template

To create a workspace template:

1. On the global menu, click **Enterprise > Document Templates**.
2. Click **Add Item > Business Workspace**.



Note: For more information, see “Configuring document template settings” on page 62.



Tips

- Typically, you create a template for each workspace type.
- You may define several templates for the same workspace type but with differences in their attributes. For example, you can have *Customers with a revenue larger than one million Euros* and *Customers with a revenue of less than one million Euros* represented in business workspaces based on different templates.



Copying workspace templates

OpenText recommends *not* to copy existing templates because most parts of the configuration will not be copied.

3. Fill the fields as required.



Note: Users will see the name of the template in the **Add** menu of Smart View when they create a business workspace, for example **Add > Customer** or **Add > Material**.

4. From the **Classifications** list, select the same classification that you selected for business workspace location. For more information, see “Creating a root folder for the business workspaces” on page 39.



Important

The workspace template and the business workspace location must have the same classification if you want to create them manually.

5. Select a **Workspace Type** from the list.
6. Click **Add**.
7. Configure the template as required.

In addition to the standard settings like classification and permissions you can also configure the following:

- Custom **categories** to hold metadata.



Notes

- OpenText recommends that you disable metadata inheritance: This feature copies metadata from categories of the business workspace

into categories of documents and other items in the business workspace. However, as this is a one-off action, metadata updates are not inherited. Inheritance also has impact on system performance. Instead of inheritance, you can use the indexing function.

- To turn off inheritance, click the **Edit Inheritance** button  and select **Disable Inheritance** for categories in templates.
 - When a user adds one or more categories to the document template and then creates a workspace before the business object is available, the form fields to add the custom metadata values are displayed. The custom metadata that is mapped on the Business Object Type page is synchronized with the external business application when such a workspace is created or updated, for example, when the business object is assigned later.
 - **Permission** handling when the workspace template is used to create a business workspace.
 - **Control behavior of smart document types**, for example, when uploading or deleting a document.
8. Open the workspace template and add subfolders and documents as needed using the **Add Item** button. You can use placeholders, which represent data, such as a user name or a reference number, whose value is determined when an instance of the template is created.



Hierarchical template structure

For each workspace template, you can also add shortcuts to other workspace templates. Templates used in shortcuts can also contain shortcuts to templates; thus, you can build complex template structures. When creating a workspace from the top level template, for each shortcut a workspace instance is created using the template linked in the shortcut. Category attribute values from the shortcut are passed over to the created instance. You can add only shortcuts to workspace templates whose workspace type use *Current Location* as creation location.

You can use the following placeholders when creating business workspaces:

Placeholder	.. is replaced by
<Category_CategoryID_AttributeID />	Value of the specified Category attribute on the created workspace

Placeholder	.. is replaced by
<Category_CategoryID_AttributeID[position]>	Value of the specified Category attribute on the created workspace. Use this only when the attribute contains multi-values such as set. [position] is the display order of the attribute on the wizard from top left to bottom right.
<Category_CategoryName_Attributename />	Value of the specified Category attribute on the created workspace
<CreationDate />	Date the object is created  Note: When using the Business Workspace Template Synchronization bot: If there is no item with the current date, a new item is created with the current date.
<Login />	Login name of the user who created the workspace
<Name />	Name of the created workspace
<ParentName />	Name of the folder in which the workspace is created
<Type />	Classification that was used to select the template of the created workspace. Only in Classic View, not available in Smart View or when workspace is created automatically.
<UserId />	User ID of the user who created the workspace
<UserName />	Name of the user who created the workspace



Tip: You can also use these placeholders when updating a workspace using the *Business Workspace Template Synchronization* scheduled bot. For more information, see Section 10.4.3.4 “Configuring Business Workspace Template Synchronization bot” in *OpenText Content Management - Smart View User Help (CSSUI-H-UGD)*.

9. To test the configuration, open the location folder, which is configured for this template. The **Add** dialog now contains an option with the template name.

! **Important**

Changes to the workspace template are *not automatically* applied to existing workspaces that have already been created from the template. They apply only to business workspaces that will be created *after* you made the changes.



Tip: If you want to organize your templates in folders, you can move them. You can move them within the Document Templates volume but not to a folder outside the volume, for example the Enterprise workspace.

6.7.3 Defining group replacement

Group replacement allows to create a business workspace with different access rights than its template. This means that an assigned group of the template is replaced with a new one.

Background: In the **Team Roles and Permissions** settings of your business workspace template, you define groups that have access to the template and define their access rights. These settings are later used for the business workspace that is created. Use group replacement, to limit the access to certain groups, depending on criteria like the place where the business workspace is created and who created the business workspace.

Scenarios of group replacement:

- Business workspaces are created for business objects of connected SAP systems. Multiple business objects use the same template.

All different user groups in the system can access this template. But the access to the business objects is restricted to different groups.

Therefore, the content that is saved for it in the business workspace must not be accessed by everybody who has access to this default template. For example, business workspaces for US vendors are only accessed by US teams. This is realized, using SAP attribute information for defining the group that gets access to the created business workspace. For more information, see “[Assigning access to business workspaces based on SAP attribute values](#)” on page 67.

- A group should have access to the business workspace template but not to the business workspace that is created with the template. For more information, see “[Providing access to a business workspace template but not to the business workspace](#)” on page 71.

6.7.3.1 Assigning access to business workspaces based on SAP attribute values

Group replacement manages access to business workspaces based on SAP attribute values. This allows to automatically define the groups that have access to business workspace content without adding a separate template for every business object.

Steps to enable group replacement:

Define the SAP attribute

Plan the attribute or attributes that can be used to restrict access to a business workspace. Make sure that your concept fits to your access restrictions and that the attribute is transferred to Content Server. For more information, see [“Implementing a property provider in SAP” on page 127](#).

Define the groups

Use the Active directory, if it is configured to synchronize to OTDS and Content Server or directly create the groups in OTDS.

Create the following groups:

- Create groups for all values of the selected SAP attribute and add the members. Make sure that the values of your attribute are part of the different group names.
- Add an empty dummy group. This group is replaced with the groups that you created for the SAP attribute, when a business workspace is saved.
- Add a group to provide access to the template. This group gets **Role Access** to the template. By assigning Role Access, the group is removed from the business workspace, when it is created.

OpenText Content Management

- **Attribute:** – Create the attribute as part of the category that you assign to your business workspace template.



Note: OpenText recommends that the attributes are mandatory. This prevents the creation of business workspaces without a responsible OTDS group.

- **Business Object Type:** – Configure the transfer of the attribute values of SAP into the Content Server attribute.
- **Business workspace template:** –
 - Add the dummy group that you created in OTDS to the business workspace.
The group is added with **Group or User Access**.
Provide the access that all users need.
 - Add the group that provides access to the template as **Role Access**.

Provide the access that all users need.

- Add the OpenText Documentum CM permissions for the dummy group to the business workspace template. The permissions are automatically transferred to the group that replaces the dummy group.
- In the specific settings, define how the target group is identified. Use the attribute or parts of the attribute to set the group name.

 **Example 6-1: Working with group replacement**

Story: A company manages the vendors by regions: Asia Pacific, Europe, Middle East, America, Africa. These regions define who should have access to content that is saved for a vendor. An Asia Pacific procurement group, should access all content that is saved about Asia Pacific vendors, European procurement groups access European vendor content, and so on. If a new vendor is added, all procurement employees of the respective region should automatically get access to the new content that is saved in a business workspace.

Involved settings:

SAP

In SAP, the **vendor** SAP Object has a **region** attribute assigned. The values there, define who gets access to the business workspace and its content.

The property provider must be configured to hand over the attributes to Content Server.

Active Directory

The Active Directory synchronizes with OTDS. From there, all groups are automatically created in Content Server.

- An empty dummy group is created.
- A template group with all users that add content to business objects in the different regions is added. This group contain users from Asia Pacific, Europe, Middle East, America and Africa.
- Six groups are created: Asia Pacific, Europe, Middle East, America and Africa. Every group only contains users from the respective region. The names or parts of the name of these groups are identical with the attribute values, for example the SAP attribute value is Europe and the group is called Team Europe. These groups define the access to business workspaces in Content Server.

OpenText Content Management

OpenText Content Management handles which group gets access to a new business workspace. For this, the value of the SAP **region** attribute must be transferred to OpenText Content Management, when a new business workspace is created. And this value is then used to set the name of the group that has access rights to that business workspace.

The settings in detail:

- Attribute:
 - A **region** attribute is created.
 - A **vendor** Business Object Type is created for vendors and the values of SAP are transferred into the region attribute.
- Business workspace template:
 - The dummy group for group replacement is assigned to the template. The group is added in **Group or User Access** with all necessary access rights.
 - The template group is added in **Role Access**. It has full access rights.
 - The default group is added to the **Documentum permissions** of the template and the necessary permissions for OpenText Documentum CM are selected. The access rights of this group define the access rights of the group in OpenText Documentum CM.
 - In the specific settings, the rules to replace the target group are defined. The definition of the target group looks like this: Team <category 56187 14/>. If the business workspace is created in SAP, the template automatically assigns a target group with a name that fits to the value of the region group. For example, **Team Europe**.



6.7.3.1.1 Configuring the business workspace template for group replacement

You usually assign the access rights to business workspace templates to different groups. To enable a flexible assignment of different groups, depending on SAP values, you first have to define a dummy group that represents all other groups. The specific settings of a business workspace template define how a dummy group is replaced with the actual group that should get access to the business workspace. This so called target group is defined by SAP attributes that receive their value when the business workspace is created.

For detailed information about all preliminary configurations, see [Steps to enable group replacement: on page 67](#).

To configure the business workspace template for group replacement:

Prerequisites

- Groups and members of the group are defined:
 - A dummy group without members is created.
 - The group for template access is defined.

- The groups that will use the business workspaces, created with the templated, are defined.
- The category that contains the SAP attribute is added to the Object Type of your business workspace.
- SAP attribute values that define the target groups are transferred into the object type of the business workspace.



Note: OpenText recommends that the attributes are mandatory. This prevents the creation of business workspaces without a responsible OTDS group.

- A Document Template is configured.
1. Grant access to the business workspace for the template group:
 - a. In OpenText Content Management Templates, select the template of your business workspace.
 - b. From the function menu of the workspace template, select **Team Roles and Permissions**.
 - c. In **Group or User Access**, click **Grant Access**.
 - d. Search for the name of the dummy group and select Grant access.
 - e. Select the access rights for your dummy group.

These access rights are transferred to the group that is selected when the business workspace is created.
 2. Grant access to the business workspace template for the dummy group:
 - a. In OpenText Content Management Templates, select the template of your business workspace.
 - b. From the function menu of the workspace template, select **Team Roles and Permissions**.
 - c. In **Role Access**, click **Grant Access**.
 - d. Search for the name of the group and select Grant access.
 - e. Select the access rights for the template.

Groups with **Role Access** have no access to the resulting business workspace.
 3. Define the OpenText Documentum CM Permissions for the dummy group:
 - a. From the function menu of the workspace template, select **Documentum Permissions**.
 - b. Select the dummy **User/Group**.
 - c. Select the **Basic Permission** and **Extended Permissions** for OpenText Documentum CM.
 - d. Click **Update**.
 4. Define how the dummy group is replaced:

 **Tip:** The dummy group is only shown, if both, the OpenText Documentum CM and the OpenText Content Management access rights are defined.

- a. From the function menu of the workspace template, select **Properties > Specific**.
- b. In the **Use** column select your dummy group that is replaced by a different group, when the business workspace is created.
- c. In the **Target Group** field add the expression that defines the name of the group:

 **Note:** The replacement settings are only applied when a new workspace is created. Already existing workspaces are not affected if you change the settings.

- Add the attribute that contains the value that defines the group. The attribute is structured like this <Category CategoryID AttributeID />. For example <Category 56187 14/>.

Category

Defines that the value is taken from an attribute that is part of a category.

Category ID

Add the Category ID. To find the ID of your category, go to the address bar of your browser and add ?func=attributes.dump. On this page, search for the category that contains the attribute.

AttributeID

Add the AttributeID. Use ?func=attributes.dump as described in Category ID to find the value of your attribute.

6.7.3.2 Providing access to a business workspace template but not to the business workspace

Normally, all groups that are added to the business workspace template, are also added to the business workspace that is created from the template.

This means that the access to the template also guarantees access to all business workspaces that are created with this template.

With group replacement, you can realize a scenario, where a user group can access the template to create a business workspace but not access the business workspace that they created.

To remove a group with template access from the business workspace:

Prerequisites

- The **Group or User Access** to the business workspace is defined.

- SAP attribute values that define the target groups are transferred into the object type of the business workspace.



Note: OpenText recommends that the attributes are mandatory. This prevents the creation of business workspaces without a responsible OTDS group.

- A Document Template is configured.

1. Open the **Specific** tab of the template.

The **Group Replacements** section lists all groups that are granted access to the template or items within the template.

2. In the **Use** column select the group that should not access the business workspace.

3. Leave the **Target Group** field empty.

When a workspace is created from this template, the group replacement is configured but no value for the new group is provided.

6.8 Defining a workspace template in Smart View

A workspace template is the foundation for creating new business workspaces. Technically, it is a business workspace that you create in the Document Templates volume and which is connected to a workspace type. You need special permissions to access the Document Templates volume.

You define the following information in a workspace template:

- Folder structure
- Access permissions

For a robust business workspace, use the following best practices:

Good template design avoids rework effort of existing business workspaces

A workspace template is the master copy for all business workspaces that are created from it. This means that everything configured in the workspace template is copied to the new business workspace, but the business workspace does not maintain any connection to the template. Any changes to the structure or access permissions in the template has no effect on any business workspaces already created using the template. Any business workspaces created after the template change are affected. Therefore, carefully design your template, especially before you start any initial mass creation of business workspaces.

Avoid complex folder structures for business workspaces

For end users, a complex folder structure adds additional complexity for accessing and managing documents. It can also negatively impact system performance when you create large numbers of business workspaces.

Keep folder names unique within a workspace template

When creating more complex folder structures, avoid using the same folder name in different folder hierarchies. For example, do not create two **Email** sub-

folders in different folders. While this is still valid, it will cause issues when creating a Livereport or WebReport against the **Email** folder. Also, if you add two identically named folders as favorites, you will have trouble distinguishing them.

6.8.1 Create a template

A workspace template is the foundation for creating a new business workspaces. Technically, it is a business workspace that you create in the Document Templates volume.

Create a template:

1. Go to the Documents Templates volume. If you have access permissions to this volume, your administrator will have configured a link to it on your **Home page**.
2. Click the **Add item** button  and select **Business Workspace**.
3. Enter a name for the workspace template.
4. Select the workspace type for which this workspace template is meant. The workspace type also controls which Perspective is used for this workspace template.



Note: You can create templates for document but not for folders. A folder in the Document Templates volume cannot be used as a template to create a new folder in Smart View.

6.8.2 Configure permissions

The permissions that you configure for a template will be applied to every business workspace that is created from this template.

For information about how to edit permissions, see *OpenText Content Management - Smart View User Help (CSSUI-H-UGD)*.

6.8.3 Delete a template

If you have sufficient permissions, you can delete templates like any other item. See *OpenText Content Management - Smart View User Help (CSSUI-H-UGD)*.



Note: A template that is referenced by a business workspace cannot be deleted.

6.9 Configuring business object types

You configure a business object type to use in Content Server. You select the business object type from the business application, map properties of the business object to categories and attributes in Content Server, and select a workspace template.

6.9. Configuring business object types

Configure Business Object Type

General		SAP S/4HANA Cloud	
Name:	Equipment D7K		
Business Object Type			
Business Application:	D7K (HTTP)		
Business Object Type:	EQUI	Equipment ✓ <input type="button" value="Select From Business Application"/>	
Display URL:	[\${BaseUrl}/sap/bc/gui/sap/ts/webgui/~logingroup=SPACE8~tr]		
Business Workspace			
Used for Business Workspace:	<input checked="" type="checkbox"/> Yes		
Workspace Type:	Equipment D7K <input type="button" value="Select"/>		
Is Default Display for Workspace Type:	<input checked="" type="checkbox"/> This Business Object Type is displayed if more than one Business Object Type is used in just one Business Workspace Type.		
Is Default Search for Workspace Type:	<input checked="" type="checkbox"/> This Business Object Type is used in the search when you link a business object as workspace reference to a business workspace.		
Workspace Template:	This setting is only used when a business workspace is created from the business application. Content Server Temp <input checked="" type="checkbox"/> Content Server Document Templates:Equipment D7K <input type="button" value="Select"/>		
Business Object/Business Attachment			
Can be Added as Business Object:	<input checked="" type="checkbox"/> Yes		
Options:	<input checked="" type="checkbox"/> Enable Metadata Mapping from the business application to OpenText Content Server <input type="checkbox"/> Enable Callback Interface Before Adding Business Objects <input type="checkbox"/> Enable Callback Interface Before Removing Business Objects		
Business Object Name Pattern:	[OBJTYPE] [DESCRIPT]		
Configure Content Server Objects:	Managed Object Types		
Automatic Adding of Business Object:	<input type="checkbox"/> Yes		
Property Mapping			
Business Properties:	Business Property	Mapping Method	Category and Attribute
	MANPARNO	Category Attribute	Content Server Categories:Equipment <input type="button" value="Select"/> Manufacturer.Part Number
	CITY1	Category Attribute	Content Server Categories:Equipment <input type="button" value="Select"/> Location.City
	OBJKEY	Category Attribute	Content Server Categories:Equipment <input type="button" value="Select"/> Master Data.Equipment Number
	MANFACTURE	Category Attribute	Content Server Categories:Equipment <input type="button" value="Select"/> Manufacturer.Name
		Select Method...	
Business Property Groups:	Property Group	Mapping Method	Category and Set
		Select Method...	
	Property Name	Set Attribute	
Configure Barcode			
Retrieve Barcode:	From Category Attribut <input checked="" type="checkbox"/>	Content Server Categories:Equipment(EQUI) <input type="button" value="Select"/>	Manufacturer serial number
Assignment of Attachment Declaration Configuration to Document Type			
Document Types:	Document Type	Attachment Declaration	
	Select Document type...	Select Declaration type... <input checked="" type="checkbox"/>	<input type="checkbox"/> Create as business attachment
Widget Configuration for Smart View			
Business Object Type Names:	Language	Name	
	ar	<input type="text"/>	
	da	<input type="text"/>	
	en_US	<input type="text"/>	
<input type="button" value="Save Changes"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/>			

Figure 6-3: Configure Business Object Type

6.9.1 Configuring a basic business object type

General	
Name: !	Equipment D7K
Business Object Type	
External System: !	D7K (HTTP)
Business Object Type: !	EQUI Equipment ✓ Select From External System
Display URL:	\$BaseUrl\$/sap/bc/gui/sap/its/webgui?~logingroup=SPACE&~transaction=

Name

Name of the business object type. This is an internal name and only visible to administrators. OpenText recommends that you use the name under which the business object is known in the business application. You can also add the name of the business application.

Business Application



Tip: You can also create the business object type without connection to the SAP system. The OpenText Content Management configuration tries to link to the SAP system.

Select the **Logical System Name** of the SAP system that you configured. For information, see *OpenText Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI)*.

Business Object Type

Select the Business Object type of your SAP system for which you configure the Business Object type.



Important

You must select a business object that is *not* already used in a business object type configuration. Otherwise, you cannot save this business object type.

The business object type can be displayed to the end user, for example in the Smart View header widget. Therefore, you can edit the business object type name, also in different languages. The **Widget Configuration for Smart View** is located at the end of the configuration page.

Display URL

The URL which displays business object information on the business application server. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

6.9.2 Configuring the creation of business workspaces

You can use business objects in business workspaces and thus use the metadata of the business object to enrich the business workspace. To use business objects in business workspaces, you must enable this type of usage and provide workspace type information. To use the metadata from the SAP system it must be mapped to category attributes in OpenText Content Management.

Used for Business Workspace

Select this option if you want to enrich business workspaces with information from a business object. Selecting this option displays the following parameters for the configuration.

Workspace Type

Select the workspace type that you created for this business object type.

You can also create a new workspace type at this point. Click the **New Workspace Type** button  and define the workspace type.

Is Default Display for Workspace Type

If you have more than one business object type associated with the same workspace type, enable this option to make this business object type the default type to be displayed.



Tip: You can later change this with an option in the function menu of a business object type.

OpenText Content Management Classic View

If you did not select any business object type for default display the following occurs in a business workspace:

- No sidebar widgets will be displayed in the newly created workspace
- No Web URL will be displayed on the **Properties > General** tab of the business workspace

Whenever you select the **Default Display ...** option for a business object type, it will be removed from other business object types that are related to the same workspace type.

Is Default Search for Workspace Type

Enable this option so that users use the search of this business object type when they create a business workspace manually in OpenText Content Management.

Whenever you select this option for a business object type, it will be removed from other business object types that are related to the same workspace type.

Workspace Template

When users create a business workspace from the business application, they cannot select the document template manually. With these options, you select the method how the document template is determined:

- **Content Server Template:** Select the document template that you created for this business object type from Content Server.
- **From Business Property:** The business property provides the ID of the template. This method is used when a dynamic template determination is needed. To use this method, the property provider must be implemented accordingly.
- **From Workspace Template Selection:** You can use the workspace template configurations created in the Workspace Template Selection. In these configurations, you can configure rules for different business object types.

Business Object Type Names

The header widget for Smart View can display the name of the workspace type in different language. You can provide a name in each language that is installed on your repository.

You must also map business properties to category attributes. For more information, see “[Mapping business properties to category attributes](#)” on page 78.

6.9.3 Mapping business properties to category attributes

Property Mapping section

You can map simple business properties to simple attributes, and you can map business property groups to set attributes. For both, you can use different mapping methods:

- **Business Property:** The business property is mapped to a second business property that contains the ID of the category. In the **Attribute** field, you enter the attribute name of this category. The first business property is then mapped to this attribute. To use this method, the property provider must be implemented accordingly.
- **Category and Attribute:** The business property is mapped to a category and an attribute. You can select the category from Content Server.



Notes

- Map all fields of the business object type that you want to display in Content Server. Make sure that you also map all fields that are required for the determination of the workspace name and the location. If you need attributes for Content Server policies that are generated from SAP authorizations, you must map them as well. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
- You cannot assign a property group to a simple attribute.

Business Properties:			
Business Property	Mapping Method	Category and Attribute	
PO_NUMBER	Category Attribute	Content Server Categories Purchase Order	Select Order Number order_number_diff
OBJTYPE	Category Attribute	Content Server Categories Purchase Order	Select Type type_value_diff
DOC_DATE	Category Attribute	Content Server Categories Purchase Order	Select Document Date document_date_diff
PUR_GROUP	Category Attribute	Content Server Categories Purchase Order	Select Group group_value_diff
STATUS	Category Attribute	Content Server Categories Purchase Order	Select Status status_diff
OBJKEY	Category Attribute	Content Server Categories Purchase Order	Select Key key_value_diff
DOC_TYPE	Category Attribute	Content Server Categories Purchase Order	Select Document Type document_type_diff
PURCH_ORG	Category Attribute	Content Server Categories Purchase Order	Select Organization organization_diff
VEND_NAME	Category Attribute	Content Server Categories Purchase Order	Select Vendor vendor_name_diff
	Select Method...		
Business Property Groups:			
Property Group	Mapping Method	Category and Set	
	Select Method...		
Property Name	Set Attribute		Select a Documentum type attribute

Business Properties

- **Business Property:** Name of the business property as it is provided by the property provider. If the SAP System is available, click in the field to get a list of all business properties of this business object.
- **Mapping Method and Category and Attribute**

Business Property: Enter the exact name of the business property and the attribute name.

Category Attribute: Select the category and its attribute from Content Server.

Add the attribute name in your Documentum system, where the data is saved.

Compose multiple business application properties to a single business workspace metadata

You can combine multiple business properties as used in your business application into one workspace metadata. Including some information in one attribute, for example, such as a size indication like 60 kg or currency information like 500 Euro, makes the content more understandable for the user.

To configure a mapping with multiple business properties, you can enter patterns to combine them in the **Business Property** box and map them to one category attribute. You can either map an existing category attribute or create a new one.

For details about creating the patterns, see “[Using patterns for workspace names and business object names](#)” on page 49.

Note that the Length and Offset modifiers are not supported for composed properties.

Example: You can combine the business properties Net Order Value = 500.00 and Currency = EUR to be mapped in the single category attribute Price with Currency = 500.00 EUR.

This corresponds to the field Total Value = 500.00 EUR.



Note: For the C4C and S/4HANA connection types, the OBJTYPE and OBJKEY business properties are now available per default. You can configure these properties, for example, in the workspace name pattern, workspace type name pattern, sub location path and in the property mappings. The same applies to the BusAppID and BusAppName properties.

Business Properties Groups

- **Property Group:** Name of the property group as it is provided by the property provider
- **Mapping Method and Category and Set**

Business Property: Enter the exact name of the business property that determines the relevant category, and enter the set name. Then map a business property of the group to an attribute of the set.

Category Set: Select the category and its attribute set from Content Server. Then enter the property name and select an attribute from the set.



Displaying navigation properties

For the SAP S/4HANA Adapter, related navigation properties are displayed in the format `navigation_property.property_name`.

Navigation Properties representing collections of related entities will be displayed under the **Business Properties Groups** section, while navigation properties representing single related entities will be displayed directly within the **Business Properties** section.

Example: In OdataV2 navigation properties will be displayed:
`to_BusinessPartner.CityName`

In OdataV4 navigation properties will be displayed:
`_BusinessPartner.CityName`

6.9.4 Assigning external document type to attachment declaration

In this section, you define the processing of a document from external sources. Therefore, you assign an attachment declaration to the external document type that contains the processing information.

If no mapping is configured here, the document will neither be filed nor migrated to OpenText Content Management.

Assignment of External Document Type to Attachment Declaration section

- **External Document Type:** Select an external document type from the list that displays all document types configured for the business object in the business application. A document type may be specified at most once.

- **Attachment Declaration:** From the list of available attachment declarations saved in OpenText Content Management, select an attachment declaration to map to an external document type. An attachment declaration can be mapped to multiple document types.

6.9.5 Configuring cross-application relations

In this section, you can configure the automatic creation of a cross-application business workspace to create a business workspace that references business objects of two or more business applications.

Cross-Application Relations				
Cross-Application Relations	Property	Business Application	Business Object Type	Action
	AdditionalName	S4Hana_D07	S4Hana_D07_Pro	<input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="button" value="Save Changes"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/>				

Cross-Application Relations

- **Property:** Enter the property of the business object type you want to link.
- **Business Application:** From the list, select the business application of the other business object that you want to link.
- **Business Object Type:** From the list, select the corresponding business object type.

To add more cross-application relations, click the  Add New Row icon

6.9.6 Managing business object types

To manage business object types:

1. On the global menu, click **Enterprise > Enterprise Application Integration**.
2. Click **Business Object Types**.

The list of business objects types shows the following information:

- **Name** of the business object type
- **Business object type's name** in the business application
- **Business Application** as defined in OpenText Content Management.
- **Workspace Type** connected to the business object type.
- **Display** is set to default if you want this business object type to be the default, in case you have more than one business object type associated with the same workspace type business object type. You can make business object type the default for display with an option on the function menu.

- **Search** is set to default if you search for a business object type from a business workspace that has more than one business object type associated. You can make business object type the default for search with an option on the function menu.
 - **In Use** indicates if this business object type is used and cannot be deleted.
 - **Status** indicates if this business object type is enabled and can be used. You can change the status with an option on the function menu. Disabled business object types cannot be opened.
3. Select the function menu option **Disable** so that this business object type cannot be used to create business workspaces, neither can it be used to add business objects to a OpenText Content Management item, regardless of whether the **Can be Added as Business Object** option is selected or not.
The business object type will still be available to display previously created business workspaces or added business objects.
The business object type cannot be used for the search or display of the corresponding workspace type.
4. To delete a business object type, select the business object type and click the **Delete** button .

6.10 Adding the OpenText Documentum CM folder structure import

The **Folder Structure import** field contains the label that you define in OpenText Documentum CM.

To add the Folder Structure import:

1. Go to the **Documentum** tab.
 2. In the **Repository** list, select a repository.
-  **Note:** If multiple repositories are configured, then the selected repository becomes the default repository in which business workspaces are created. The default is used if no repository rule exists or no repository rule is applicable.
3. In the **Folder Structure import** list, select a Folder Structure import. The **Folder Structure import** list contains the Folder Structure imports that you have defined for the selected repository in OpenText Documentum CM previously.

Target Repository	Condition	Action
demorepo2	*Account Detail.Account Name starts with A	

4. If you have configured multiple repositories on the Business Application page, you can control the repositories by configuring repository rules in the **Repository Rules** section. The new business workspaces are created in the repository that follows the defined conditions. To configure a Repository Rule, follow the below steps:
 - a. In the **Target Repository** list, select a repository.
 - b. In the row of the repository in the **Conditions** column, click the **Edit Expression** button . The **Expression Builder** opens. To create or edit the expression:
 - i. In the **Actions** list, select a type, for example, Personal Information.
 - ii. To create and edit the expression, select a category attribute from the list, select a condition operator, and enter the required attribute value in the text box.
 - iii. To expand the expression, add another row. Select a logical operator to connect the rows.
 - iv. To delete a row, click the **Remove This Row** button .
 - v. When you are done with the expression, click the **Submit** button.
 - c. To add or remove a repository rule, click + or -.

6.11 Validating the target repository name

If you have configured at least one repository rule for a business object type, the Preview option will be available under Repository Rules. You can use the Preview option to validate the target repository name based on the provided metadata value.

To validate the target repository name:

1. In the **Repository Rules** area, click **Preview**.

The **Repository Rule Validation** dialog box appears. The rule validation form contains all the attributes defined in the repository rule. For example, if you use the Organization and Group attributes to define the target repository rule, then only those attributes are available in the rule validation form.

2. Enter the values for the attributes.



Note: You can choose not to enter any value for an attribute.

3. Click **Validate**.

6.12 Creating the display URL

The display URL is used in OpenText Content Management to open business object data from the business application in a browser window. The URL syntax depends on the respective type and version of the SAP system.

- For workspace references, this URL is used for the **Display** button on the **General** tab of the business workspace's properties (function menu **Properties > General**).
- For added business objects, this URL is used when the user clicks the **Display** action of an added business object in the **Business Objects** tab.

To be able to use a business object ID in a display URL, it may include special characters:

Table 6-3: Special characters in business object ID

Allowed special characters	! . , : " ' ^ ` () [] { } < > * # ~ \$ & @ = +
Not allowed special characters	/ \ ;

The following sections provide example display URLs for selected business applications.

6.12.1 SAP ERP

The display URL of an SAP ERP system uses the general transaction `RM_WSC_START_BO` to identify the business object type. To identify the individual business object, you can use the `BorObjectID` or a category attribute.

ERP URL with BorObjectID

```
$BaseUrl$/sap/bc/gui/sap/its/webgui?-loggingroup=SPACE&-transaction=%2fOTX
%2fRM_WSC_START_BO+KEY%3d$BorObjectId$%3bOBJTYPE%3d$BorObjectName$&-OkCode=ONLI
```

\$BaseUrl\$

Base URL defined in the configuration of the connection to the business application. For more information, see Section 22.2 “Connecting SAP as a business application” in *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.

RM_WSC_START_BO

General transaction for OpenText Content Management

\$BorObjectId\$

BORident from SAP object

\$BorObjectName\$

SAP object type (for example KNA1)

ERP URL with business object ID from category attribute

If you want to use a category attribute instead of the business object ID for the identification of the business object, you can use the following display URL and replace the variables with your values:

```
$BaseUrl$/sap/bc/gui/sap/its/webgui?-logingroup=SPACE&~transaction=%2fOTX
%2fRM_WSC_START_BO+KEY%3d$attribute:catname=<Cat ID>,attrname=<attribute name>$
%3bOBJTYPE%3d$BorObjectName$&~OkCode=ONLI
```

<Cat ID>	Category ID which you find in the URL of the category in OpenText Content Management: ...&objId=1234567&...
<attribute name>	Name of the attribute
<set name>	With attributes grouped in a set, you must also use the set name followed by a colon and the attribute name.

```
$attribute:catname=<Cat ID>,attrname=<set name>:<attribute name>$
```

Example: ERP display URL with category and attribute:

```
$BaseUrl$/sap/bc/gui/sap/its/webgui?-logingroup=SPACE&~transaction=%2fOTX
%2fRM_WSC_START_BO+KEY%3d$attribute:catname=1234567,attrname=LastName$%3bOBJTYPE%3d
$BorObjectName$&~OkCode=ONLI
```

ERP display URL with category and attribute set:

```
$BaseUrl$/sap/bc/gui/sap/its/webgui?-logingroup=SPACE&~transaction=%2fOTX
%2fRM_WSC_START_BO+KEY%3d$attribute:catname=1234567,attrname=Company:Name$%
%3bOBJTYPE%3d$BorObjectName$&~OkCode=ONLI
```

ERP URL for DocuLink view

Do not configure anything in this section. OpenText Content Management Documentum for SAP Solutions does not use these feature.

6.12.2 SAP SRM

The display URL of SAP SRM is based on object-based navigation (OBN) in SAP Enterprise Portal. OBN offers portal users an additional method of navigation, which is role-dependent and based on business objects. The display URL uses the OBN technical name as well as the operation. For more information about OBN, see the SAP Help Portal (http://help.sap.com/saphelp_erp60_sp/helpdata/en/e4/f86f4132f15c58e1000000a1550b0/content.htm).

To identify the SAP SRM business object, you can use the BorObjectID or a category attribute. Business partners (BUS1006), however, are handled differently.

The following provides URL templates that you can fill with the values from the table below.

SRM URL type 1 with BorObjectID

Substitute <Technical Name> and <Operation> from table **Table 6-4**. Business Object ID is determined automatically.

```
$BaseUrl$/?NavigationTarget=OBN://BOSystemAlias=SAP_SRM/  
BOTechnicalName=<Technical Name>/Operation=<Operation>&NavMode=3&  
SAPSRM_BOID=$BorObjectID$&SAPSRM_MODE=DISPLAY
```

Example: For SAP SRM Purchase Order: \$BaseUrl\$/?NavigationTarget=OBN://
BOSystemAlias=SAP_SRM/BOTechnicalName=po/Operation=detail&NavMode=3&
SAPSRM_BOID=\$BorObjectID\$&SAPSRM_MODE=DISPLAY

For SAP SRM Confirmation: \$BaseUrl\$/?NavigationTarget=OBN://BOSystemAlias=
SAP_SRM/BOTechnicalName=conf/Operation=detail&NavMode=3&SAPSRM_BOID=
\$BorObjectID\$&SAPSRM_MODE=DISPLAY

SRM URL type 2 with business object ID from category attribute

Substitute <Technical Name> and <Operation> from table.

Business Object ID is determined from attribute. Enter category ID and attribute.

```
$BaseUrl$/?NavigationTarget=OBN://BOSystemAlias=SAP_SRM/  
BOTechnicalName=<Technical Name>/Operation=<Operation>&NavMode=3&  
SAPSRM_BOID=$attribute:catname=<Cat ID>,attrname=<Attr Name>$&SAPSRM_  
MODE=DISPLAY
```

Example: For SAP SRM Shopping Cart: \$BaseUrl\$/?NavigationTarget=OBN://
BOSystemAlias=SAP_SRM/BOTechnicalName=sc/Operation=detailprof&
NavMode=3&SAPSRM_BOID=\$attribute:catname=123456,attrname=GUID\$&
SAPSRM_MODE=DISPLAY

123456 is the ID of Shopping Cart Category, and GUID the attribute name.

SRM URL type 3 for object type Business Partner

Substitute <Technical Name> (bupa) from table.

Business object type BUS1006 (business partner) can have different roles, for example, supplier or bidder. To address the correct role, <Operation> must be provided by a category attribute. A sample property provider /OTX/RMSRM_CL_WSPP_BUPA, which provides the attribute OBN_OPERATION is available in OpenText My Support (<https://knowledge.opentext.com/knowledge/lisapi.dll/Overview/35570575>). Business Object ID is determined from attribute.

```
$BaseUrl$/?NavigationTarget=OBN://BOSystemAlias=SAP_SRM/  
BOTechnicalName=<Technical Name>/Operation=$attribute:catname=<Cat  
ID>,attrname=<Cat Name for OBN>$&NavMode=3&SAPSRM_BOID=  
$attribute:catname=<Cat ID>,attrname=<Attr Name>$&SAPSRM_MODE=DISPLAY
```

Example: For SAP SRM Business Partner: \$BaseUrl\$/?NavigationTarget=OBN://
BOSystemAlias=SAP_SRM/BOTechnicalName=bupa/Operation=
\$attribute:catname=123456,attrname=OBN Operation\$&NavMode=3&SAPSRM_
BOID=\$attribute:catname=123456,attrname=GUID\$&SAPSRM_MODE=DISPLAY

123456 is the ID of SAP SRM Business Partner Category, OBN Operation is the attribute name that determines the operation. The second category attribute GUID in the same category 123456 contains the business object ID.

Table 6-4: SRM display URL variables

SRM business object type	URL type	<i><Technical Name></i>	<i><Operation></i>
Contract (BUS2000113)	1	cont	detail
Contract version independent (/otx/rmcnt)	2	cont	detail
RFX (BUS2200)	1	rfx	detail
RFx version independent (/otx/rmrfx)	2	rfx	detail
RFX Response (BUS2202)	1	qte	display_rfx_resp
RFX Response version independent (/otx/rmrsp)	2	qte	display_rfx_resp
Shopping Cart (BUS2121)	2	sc	detailprof
Purchase Order (BUS2201)	1	po	detail
Confirmation (BUS2203)	1	conf	detail
Invoice (BUS2205)	1	inv	detail
Business Partner (BUS1006)	3	bupa	from category attribute: \$attribute:catname=<Cat ID>, attrname=OBN Operation\$

6.12.3 SAP Fiori

For a display in SAP Fiori, you must modify the default URL of your Fiori app. The Track Sales Order app has the following default URL:

```
$BaseUrl$/sap/bc/ui5/ui2/ushell/shells/abap/FioriLaunchpad.html?sap-client=<client>
&sap-language=<language>#<semantic object>-<action>
&/newdetail/SalesOrders(\ '$attribute:catname=<category name>,attrname=<attribute name>
$\' /$attribute:catname=<category name>,attrname=<attribute name>$/1000/10/00
```

Replace <semantic object>, <action><category name> and <attribute name> with the respective values in your system.

Example URL for Track Sales Order

```
$BaseUrl$/sap/bc/ui5_ui5/ui2/ushell/shells/abap/FioriLaunchpad.html?sap-client=100  
&sap-language=EN#<Semantic Object>-Action  
/&newdetail/SalesOrders(\'$attribute:catname=6377616,attrname=Sales Order ID  
$\\')/$attribute:catname=6377616,attrname=Customer ID  
$/attribute:catname=6377616,attrname=Ship To$/1000/10/00
```



Note: This sample URL contains line breaks for better readability.

For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

6.12.4 SAP CX

For more information, see Section 16.4 “Configure Display URL In the business object type configuration” in *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

6.13 Defining OpenText Documentum CM and OpenText Content Management permissions

You have to assign the Content Server permission and the OpenText Documentum CM permissions to your workspace templates.

Assign the corresponding permissions for the two templates that you created for your business workspace:

The template requires Content Server and OpenText Documentum CM permissions. For more information, see “[Defining the permissions for the OpenText Content Management template](#)” on page 89 and “[Defining permission handling for Content Server business workspace templates](#)” on page 89. “[Defining permissions for OpenText Documentum CM](#)” on page 90.

Content Server permissions allow to create new business workspaces. The OpenText Documentum CM permissions make the business workspace available for OpenText Documentum CM users and thus, display the business workspace and its OpenText Documentum CM content in SAP.

6.13.1 Defining the permissions for the OpenText Content Management template

To set Permissions for item templates:

1. On the Content Server Administration page, click **Template Workspaces Administration > Open the OpenText Content Management Document Templates Volume**.
2. On the Functions menu of the template, click **Team Roles & Permissions**.
3. If you assign group or user access to the template, complete the following steps for each user or group that you want to add.
 - a. Add the user or group.
 - i. On the left side of the page in the **Group or User Access** section, click the **Grant Access** button 
 - ii. On the right side of the page, in the **Grant Access to <template_name>** section, find the user or group that you want to add.
 - iii. Enable **Grant Access** beside the user or group.
 - iv. Click **Submit**.
 - b. Assign permissions to the user or group.
In the **Edit Permissions** section on the right side of the page, enable the permissions that you want to grant that user or group, and then click **Update**.
4. On the left side of the page, click **Done**.

6.13.2 Defining permission handling for Content Server business workspace templates

Permissions are defined for the workspace template and for the folder in which the new workspace is created. You can define that these two permission sets are merged.

The merging also applies to the items in the template. The permissions are merged with the permissions of the location where the business workspace is created.



Notes

- If merging is enabled, the owner of the newly created business workspace will be the user who created the business workspace. If merging is not enabled, the owner will be the same as the owner of the template.

Example: User AMILLER creates a new business workspace for a customer using the Customer template. For the Customer template, user AMILLER only has See access. For the folder **Customer**, where the new business workspace is created, user AMILLER also has Modify access.

If the **Merge with creation location** option is selected, user AMILLER will have both See and Modify access. If the **Merge with creation location** option is *not selected*, user AMILLER will have only See access.

To define how permissions are handled:

1. From the function menu of the workspace template, select **Properties > Specific**.
2. To merge the permissions, select **Merge with creation location**.

6.13.3 Defining permissions for OpenText Documentum CM

Workspaces and their content are transferred and saved in OpenText Documentum CM. To make sure that the data is created with a matching permission set in OpenText Documentum CM, you have to add the required OpenText Documentum CM permissions to the workspace template. Whenever a workspace is created, using this template, the permissions are automatically assigned.

To assign OpenText Documentum CM permissions to a workspace template

1. From the function menu of the workspace template, select **Properties > Documentum Permissions**.
2. Click  **Select User** and select a OpenText Documentum CM User/Group.
3. In the **Basic Permissions** list, select one permission.
4. In the **Extended Permissions** list, mark one or more permissions.
Use the **CTRL** key to mark multiple permissions.
5. If you want to add further permissions for users or groups, use the  **Add User** or  **Remove User** button.
6. Click the **Update** button.

6.13.4 Creating workspace hierarchies

Business workspaces may reside in other business workspaces to reflect the corresponding business object hierarchy. However, such a hierarchy should not exceed 5 levels of business workspaces. To build up such a hierarchy, you must define which business workspaces are allowed to host other workspaces. The hierarchy mechanism is defined in templates.

Prerequisites You fully configured all workspaces types for what will later be parent workspaces and child workspaces.

If parent workspace template and child workspace template have differing roles, you can map roles from parent workspaces to child workspaces. The role of the child workspace will then be replaced by the mapped role of the parent workspace with all the access rights of the child workspace role. With this mechanism, users with

roles of the parent workspace can access the child workspace even if their specific role was not initially assigned to the child workspace. On the other hand, members of roles of the child workspace do not automatically gain access to the respective parent workspace. With this role mapping, you reduce the number of roles to maintain.

There are two options to create workspace hierarchies:

- Create workspace templates for parent and children and use the classification to map the child workspaces to the parent workspace. You need to manually create the child workspaces.
- Create a workspace template and use shortcuts to link the child workspaces. Here, the child workspaces are created automatically with the parent workspace.



Tip: Setting values for categories makes sense when you have two or more shortcuts to the same child workspace like in a test environment.

Example: To create a project workspace (parent) with 4 project phase workspaces (children), you would create one project workspace template with 4 shortcuts that point to the project phase workspace template. In the shortcuts, you use a category with an attribute “phase name”, for which in each shortcut you set the name of the phase, like *Initiate*, *Plan*, *Execute*, *Close*.

To map roles of the parent workspace to the child workspace:

1. In the function menu of the template, select **Properties > Workspace Hierarchies**.
2. From the **Classify ...** list, select the classification, which is assigned to the template that you want to be a child template.
The selected classification is listed in the **Child Classifications** area. The list in the **Select Child Template** box now contains all templates that have this classification.
3. Select a template from the **Select Child Template ...** list.
4. Map the roles of the parent template to the roles of the child template: Select the appropriate role from the **Child Roles** list. You can map each role only once.
5. Click **Save**.
6. Repeat steps 3 to 5 for each template that is listed in the **Select Child Template ...** list.
7. On the **Classifications** tab of the parent workspace template, clear the **Inherit** check box.

The **Inherit** option must be deactivated, so that the child workspace does not have the same classification as its parent and can be configured differently from its parent.

6.14 Granting usage privileges to OpenText Content Management users

The following privileges are related to Business Workspaces and Enterprise Applications Integration:

- **Business Administration:**
 - Content Server Document Templates
 - Business Workspaces
 - Enterprise Applications Integration
 - Enterprise Applications Integration (SAP Solutions)
- **Move Business Workspaces:** Only users with this privilege can move a business workspace to a different folder.
- **Edit attributes relevant for group mapping:** This privilege is relevant if you use group replacement in the template. It restricts the editing of attributes that are used to define the groups that have access to a business workspace. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
- **Regenerate Reference Attribute:** This privilege allows to generate a new reference number. This may be necessary if the reference number contains attributes and these attributes have changed. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
- **Change/Remove Workspace Reference:** This privilege allows users to change the business object of a business workspace, or remove the business object from the workspace.
- **Display Business Objects:** This privilege allows users to display the data of a business object in the business application.
- **Add/Edit/Remove Business Objects:** This privilege allows users to add business objects to items.

To administer the privileges:

1. On the **OpenText Content Management Administration** page, click **Base Settings – Feature Configuration > Usage Privileges**.
2. Find the **Business Workspaces and Enterprise Application Integration** usage types and configure them according to your requirements.

For more information about permissions and privileges, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.

6.15 Assigning classifications

Classifications make your business workspace available in OpenText Content Management.

Make sure that you assign the same classification to:

- the document template that defines the Content Server settings.
- root folder for the business workspace.

To add classifications to an item:

1. Open the context menu of the folder or template.
2. Click **Properties > Classifications**.
3. In the **Classify** list, click **Browse Classification**.
4. Navigate to the classification and click **Submit** button.

6.16 Adding categories to the template

If you did not already add the category, when you created the template, you can also add it later.



Note: The categories are added to the template that is used to manage the business workspace in OpenText Content Management.

To add a category:

1. Open the context menu of the template.
2. Click **Properties > Categories**.
3. Click Add Categories button.
4. Click the **Select** button to add a category.
5. Click the **Submit** button

6.17 SAP S/4HANA Cloud only: Configuring additional settings

If you connected an SAP S/4HANA Cloud system as business application, you must provide additional parameters on the **SAP S/4HANA Side-by-Side** tab.

Version

Type of service to be configured in Service URL of OData Service and Collection of OData Service.

Service URL of OData Service

Name of the Core Data Service (CDS) in SAP S/4HANA. Each business object has one CDS, which you copied into your Z namespace to make it available.

Collection of OData Service

Name of the collection associated with this business object

Search Form Attributes

Attributes displayed in a search form with which users search for business objects to add them to a business workspace, as well as in the resulting result list. Click to move attributes from the list of **Available Attributes** to the list of **Displayed Attributes**. We recommend to use less than 50 Displayed Attributes.

Note that if the Displayed Attributes list is empty, the search form will show the key properties from the OData API of the BO Type.

! **Important**

You must not use attributes with the same label in the **Displayed Attributes**. If you cannot rename the label, you must remove the attribute.

Events

Events that trigger automatic creation or update of workspaces.

Use the check boxes to enable the events that are supposed to trigger workspace creation or update. The list of specific events is provided by the SAP S/4HANA system and depends on the business object type. Typically used events are:

Created – a new business object has been created in the SAP S/4HANA system. Automatic workspace creation is triggered.

Changed – an existing business object on the SAP S/4HANA system has been updated. Automatic workspace update is triggered.

ItemChanged – an item level business object on the SAP S/HANA system, for example, a Purchase Order Item, has been updated. Automatic workspace update for all item level workspaces of the header item workspace, for example, a Purchase Order, is triggered.

Other events – depending on the situation, either workspace creation or update is triggered.

To complete the configuration of the scenario, you must configure a **Listen to S/4HANA Events** scheduled bot that processes the triggered events. For more information, see Section 17.4.2 “Listen to S/4HANA Events bot” in *OpenText*

Content Management - Enterprise Applications Integration and Configuration Guide (EEP-CGI).

Business Relations

Manually set relations between properties modelled in the CDS view and business object types of the business application.

Relation Type

- **Parent** –This option defines the parent relationship with another business object type.
- **Child** –This option defines the child relationship with another business object type.
- **Composite Parent** –You can use this relation type for business objects type SOT and SONT. Configuring this relation type ensures that the relationship between the business workspace and its parent is maintained.

When you create a business workspace for a SONT business object, it will be created inside the parent business workspace. If a parent business workspace does not exist, it will be created first and then the new SONT business workspace is created.

! **Important**

Some business objects require multiple attributes to create a unique identifier (composite key). This is not supported for the Composite Parent relation type.

Property

Select the property for the business relation type.

Business Object Name

Enter the business object name of the business object type you want to define as parent business workspace.

Action

To add a new relation type, click **Add New Row** .

To remove the relation type, click **Remove This Row** .

6.17.1 Restrictions

For the integration with S/4HANA Cloud, the following restrictions apply:

1. Business workspace creation > Search form to find a business object

- When searching for a business object, the input given for non-string fields must be complete. Partial input or wildcards do not yield a result.
- You must not use attributes with the same label in the search form, with which you search business objects while creating a business workspace. The **Displayed Attributes** list must not contain the same name twice. If you cannot rename the label, you must remove the attribute.

2. S/4HANA adapter

The S/4HANA adapter supports those business objects, which are having keyfields of type **STRING**.

3. Scheduled Processing

A Scheduled Processing job created for “Listen to S/4HANA Events” does not consider the input given for the **Business Object Type** field. The job processes all business objects found in the event queue and which are registered.

4. Versioned documents

Content versioning is not supported by SAP CMIS. Documents must not be versioned.

5. SAP S/4HANA Cloud Public Edition

Cross-application scenario: The leading object is the one with the information about Identical Business Object (IBO) relations. If the non-leading object is not yet available in the business application and the configured property refers to the leading object, creating a *business workspace* for the leading object is not supported.

6.18 Enabling cross-application business workspaces for identical business objects

A single business workspace can represent multiple, by business processes related business objects from different SAP systems, for example the following:

- Customer that is used in SAP ERP and SAP CRM.
- Vendor that is used in SAP ERP and SAP SRM

Any user who has access to one of the business objects in one of the SAP system also has access to the workspace, and thereby to the information provided by both systems.

To enable the creation of cross-application workspaces for multiple business objects from different SAP systems, follow the procedures to customize business workspaces. In addition, take into consideration the following:

Configuration of cross-application business workspaces

- **Property providers**

At least one property provider must contain information about the other related business object types.

- **Template and categories**

Create a template and categories with attributes. You can either create a category that fits both business object types, or create separate categories for the two business object types.

- **Business object types**

Create business object types for each of the business objects. The business object types must have the **same document** template and the **same workspace type**. Also define, which of the business object types should be leading by default for displaying the business object in the respective enterprise application.

For mapping business properties to category attributes, you have the following options:

- Map the properties of the business object to the same category attributes on Content Server.
If information changed for one business object in one of the enterprise applications, the business workspace is updated. If two business objects map their properties to the same category attribute on Content Server, the last update wins.
- Map the properties of all business objects to attributes of different categories on Content Server. With this, attributes are displayed on different tabs of the business workspace.



Note: In OpenText Documentum CM, you must create all attributes in one root folder type.

- **Workspace types**

You must use the same workspace type for both business object types.

- **Business Workspace Names**

If the workspace name pattern contains common category attributes, the value for these attributes during workspace creation or update is taken from the business object that has the **Is Default Display for Workspace Type** option selected in the business object type configuration.



Important

Name patterns containing any common business property, for example, [OBJKEY], are not supported.

- **Business Property Mapping**

If any common category attributes are mapped for business properties or property groups, the metadata will be taken from the business object that has the

Is Default Display for Workspace Type option selected in the business object type configuration.

- **Access to workspaces and to functions related to the SAP system**

If access to the business workspace is based on policies, take into consideration the following: If users have access to at least one of the business objects in one of the SAP systems, and the policies are created accordingly, the users will have access to the workspace on Content Server.

For displaying the search help, the SAP user that you used in the **Connections to Business Applications (External Systems)** must have the corresponding authorization in the SAP system that is defined as default (**Default Search for Workspace Type** in the business object type definition on Content Server). For more information, see *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.

- For some SAP versions, the SAP logon ticket seems to contain the target system and client, so there might be restrictions concerning the use of cross-application business workspaces together with SAP logon tickets.

Data update policy with several business objects in one workspace

For cross-application workspaces, the propagation of properties from business applications is as follows:

1. If the property is *unique to a particular system* and it is correctly configured for propagation into the business workspace, it will be displayed as expected.
2. If the property is *common to more than one business object* and this metadata is correctly configured for each business object for propagation into the business workspace, then the resulting value will reflect the last business object which updated the common property.

6.19 Enabling composite business workspaces

The composite business workspace scenario mainly depends on the property provider. The property provider must be programmed to identify composite parent and child relationships.

Example: The following BOR objects are examples for a composite business workspace scenario in SAP Plant Maintenance:

- Parent: Maintenance Order (BUS2007)
Child: Maintenance Order Operation (AFVC_PM)
- Parent: Planned maintenance task list (BUS1019)
Child: Operations (custom business object /OTX/RMTLO is part of the SAP OpenText Content Management Solution Accelerator for SAP PM)



Tip: Sample property providers for maintenance orders, maintenance order operations, task lists, and task list operations are included in business scenarios of OpenText Content Management. For more information, see Section 7

“Enterprise Asset Management” in *OpenText Content Management - Business Scenarios Business Administration Help (EEBS-H-UGD)*.

The composite business workspace scenario has the following characteristics:

Business object declaration

- You need a business object declaration for both the parent and the child business object.

For more information, see “[Configuring business object types](#)” on page 74.

Workspace type

You only need to specify the **Workspace Location** for the workspace type for the topmost parent business object. For a child business object, the location is always the business workspace of the parent, regardless what you specify in the workspace type.

Policies

Child business workspaces cannot have their own policies; they inherit policies from their parent.

Creation

SAP – When you create a business workspace for a parent business object automatically or manually, business workspaces for all according child business objects are created.

Content Server – When you create a business workspace for a parent business object, *no* business workspaces for child business objects are created.

Deletion

When you delete a parent business workspace, all child business workspaces are deleted, too.

Sidebar widgets

- **Attributes** sidebar widget displays the attributes of the current business workspace.
- **Recent Changes** sidebar widget displays all recently added or changed documents in the current and all child business workspaces.
- **Related Items** sidebar widget displays the relationships of the current business workspace.
- **Work Items** sidebar widget displays your work items.
- **Workspace Reference** sidebar widget displays the workspace reference of the current business workplace.

Chapter 7

Creating Scheduled Bots for business workspaces

The Scheduled Bots framework lets you process a large number of items.

7.1 Creating a Delete Documentum Workspaces bot

With OpenText Documentum CM, the scheduled processing framework can delete business workspaces on Content Server which have been deleted in Documentum. To achieve this, you can schedule bot to run periodically and during off-hours with a low server workload.

To create and configure a Delete Documentum Workspaces bot

1. Click **Enterprise** and open the **Enterprise Application Integration** volume.
2. Click **Scheduled Bots** and find the list of scheduled bot.
3. To create a new bot, click the **Add scheduled bot** button .
4. In the **Create scheduled bot** dialog, edit these settings:
 - **Name:** Enter a job name, for example, **Delete stale Documentum workspaces**.
 - **Description:** Enter a job description.
 - **Product component:** Select **OpenText Documentum Content Management**.
 - **Scheduled Bot:** Select the **Delete Documentum Workspaces** job type.
5. Click **Add**.
6. To configure and schedule the bot, click the bot name in the Scheduled Bots list.
7. On the **Configuration** tab, you can configure the following:
 - **Business Application:** Select an appropriate business application which has the Documentum-Smartview URL configured.
 - **Documentum User ID:** Select a technical OpenText Documentum CM User ID which has access to Smart View client.

This technical user must exist in the Documentum Administrator (DA) and must be assigned to the `d2_xecm_ws_cleanup_group` group. For more information on this assignment, see *OpenText Documentum Content Management - Administrator User Guide (EDCAC-UGD)*.
8. On the **Advanced Parameters** tab, you can configure the following:
 - **Keep History:** Specify the number of entries you want to display in the job history. If you leave the box empty, no bot history will be kept.
 - **Distributed Agent Priority (0–100):** Set the priority of the distributed agent tasks for this job. The priority must be a value between 0 and 100. 0 means

the task will be processed with lowest priority and 100 means the task will be processed with highest priority in the distributed agent system. The default is set to 80 if the field is left blank.

9. On the **Start options** tab, you can configure the **Start mode**:
 - **Manual:** Select this option to run the bot manually as required.
 - **On Schedule:** Select this option to configure a schedule for regular bot runs.
 - a. In the **Repeat** area, under **On these days**, select the days you want to run the bot.
 - b. Under **At these times**, in the **Hours** and **Minutes** boxes, enter the hours and minutes when you want to run the bot on the selected days.
 - **After bot:** Select this option to run the bot after a specific bot.
 - a. In **Run after bot** list, select a bot after which your bot should run.
 - b. If you do not want your bot to run if the previous bot created errors, select the **Do not start if the previous bot created errors** switch.
 - c. In the **Maximum number of errors in the previous bot**, select the number of errors. The bot does not start if the previous bot created more errors than the selected number.
10. Click **Update**.
11. Configure the following property in the <TomcatHome>\webapps\D2-Smartview\WEB-INF\classes\rest-api-runtime.properties file:
`rest.context.config.location=com.emc.d2.rest.context.jc,com.opentext.d2.rest.context.jc.`
12. Disable the Recycle Bin on Content Server.

When you delete the Documentum workspaces, the corresponding business workspaces in Content Server are deleted and any relationships to these workspaces are removed.

7.2 Creating a Document Template Synchronization bot

Use the Scheduled Bots framework to synchronize Document Templates with existing workspaces in OpenText Documentum CM. The synchronization process includes the following actions:

- Synchronizes changes made to Document Templates with OpenText Documentum CM.
- Propagates permissions for changes made in workspace templates to existing workspace instances.

The bot type propagates folders and permissions that have been changed in workspace templates to existing workspace instances. The bot type Document

Template Synchronization synchronizes the following changes to OpenText Documentum CM.

- Adding a new folder
- Removing an existing folder (if not empty)

Notes

- Synchronization occurs only if the Sub-folder type in **Documentum Client Configuration > Folder Structure import** is empty or dm_folder(default).
- This bot does not delete folder hierarchy that contain Folders or Sub-folders of type xecm_workspace.
- The bot supports only the provided input for composite workspaces. For example, if the Tasklist Pump A has Tasklist Pump Operations 001 as the composite child and the Document Template Synchronization bot is run only for Parent Document Template or Workspace IDs, then only Tasklist Pump A template folders are synchronized.

Prerequisite:

Create and define a folder structure import setting with:

- **Name:** DM_Folder_Config
- **Root folder type:** dm_folder
- In the Documentum-Configuration Matrix, enable Default Context for the folder structure import setting DM_Folder_Config.

For more information, see “[Defining Folder Structure import](#)” on page 241.

To configure the Document Template Synchronization scheduled bot:

1. Click **Enterprise** and open the **Enterprise Application Integration** volume.
2. Click **Scheduled Bots** and find the list of scheduled bots.

To create a new bot:

- a. Click the **Add scheduled bot** button .
 - b. In the **Create scheduled bot** dialog, edit these settings:
 - **Name:** Enter a job name, for example, Template Synchronization to Documentum workspaces.
 - **Description:** Enter a job description.
 - **Product component:** Select **OpenText Documentum CM**.
 - **Scheduled Bot:** Select the **Document Template Synchronization** bot.
 - c. Click **Add**.
3. Select the appropriate bot name from the Scheduled Bots list.

4. Configure the following in the **Configuration** tab:
 - **Business Application:** Select an appropriate business application that has the Documentum-Smartview URL configured.
 - **Documentum Superuser ID:** Select a technical OpenText Documentum CM User ID that has access to Smartview client.
 - In the **Select IDs** list, select one of the following options for synchronization:
 - **Document Template IDs:** Synchronizes changes made in Document Templates. To restrict the synchronization, click **Select**, then browse and select the document template IDs in the **Document Template IDs** area.
 - **Folder IDs:** Synchronizes changes made in Folders. To restrict the synchronization, click **Select** and then browse and select the folder IDs in the **Folder IDs** area.
 - **Workspace IDs:** Synchronizes changes made in workspaces. To restrict the synchronization, click **Select** and then browse and select the workspace IDs in the **Workspace IDs** area.
 - **Skip Delete Synchronization:** Prevents synchronization of deleted folders from the template to the workspace in OpenText Documentum CM.
 - **Page Size:** Specifies the number of pages to retrieve the Business Objects list from the business application. The default value is 100.
 - **Block Size:** Specifies the number of objects, for example, workspaces, to be processed at once. The default value is 100.
5. Configure the following in the **Advanced Parameters** tab:
 - **Keep History:** Specifies the number of entries to display in the job history. If left blank, no bot history is retained.
 - **Distributed Agent Priority (0–100):** Sets the priority for distributed agent tasks associated with the job.
 - 0 indicates the lowest priority.
 - 100 indicates the highest priority.
 - If left blank, the default priority is set to 80.
6. Configure the **Start mode** in the **Start options** tab:
 - **Manual:** Runs the bot manually as required.
 - **On Schedule:** Configures a schedule for regular bot runs.
 - a. In the **Repeat** area:
 - Under **On these days**, select the days to run the bot.
 - Under **At these times**, enter the hours and minutes in the **Hours** and **Minutes** boxes.

- **After bot:** Select to run the bot after a specific bot has completed its run.
 - a. In **Run after bot** list, select the bot that should precede.
 - b. To prevent execution if the previous bot encountered errors, select the **Do not start if the previous bot created errors** switch.
 - c. In the **Maximum number of errors in the previous bot**, specify the error threshold. The bot will not start if the number of errors exceeds this value.
7. Click **Update**.

7.3 Creating a Workspace Relation Synchronization bot

You can use this bot to synchronize the workspace relations in SAP with existing workspaces in OpenText Documentum CM.

When batch jobs are run to create or update workspaces in asynchronous mode in SAP or Salesforce, some relations are synchronized, but a few relations might be missed. This bot synchronizes the missed relations for which dependent workspaces are available in Documentum.

To configure the Workspace Relation Synchronization scheduled bot:

1. Click **Enterprise** and open the **Enterprise Application Integration** volume.
2. Click **Scheduled Bots** and find the list of scheduled bots.
3. To create a new bot, click the **Add scheduled bot** button .
4. In the **Create scheduled bot** dialog, edit these settings:
 - **Name:** Enter a job name, for example, Synchronize workspace relations in Documentum.
 - **Description:** Enter a job description.
 - **Product component:** Select **OpenText Documentum CM**.
 - **Scheduled Bot:** Select the **Workspace Relation Synchronization** bot.
5. Click **Add**.
6. To configure and schedule the bot, click the bot name in the Scheduled Bots list.
7. On the **Configuration** tab, in the **Documentum User ID** list, select an appropriate user who is authorized to create workspaces or relations on the created workspaces in Documentum.
8. On the **Advanced Parameters** tab, you can configure the following:
 - **Keep History:** Specify the number of entries you want to display in the job history. If you leave the box empty, no bot history will be kept.

- **Distributed Agent Priority (0–100):** Set the priority of the distributed agent tasks for this job. The priority must be a value between 0 and 100. 0 means the task will be processed with lowest priority and 100 means the task will be processed with highest priority in the distributed agent system. The default is set to 80 if the field is left blank.
 - **Quick Scheduler:** Turn on this switch to rerun the bot if the process time is less than or equal to 5 minutes.
9. On the **Start options** tab, you can configure the **Start mode**:
- **Manual:** Select this option to run the bot manually as required.
 - **On Schedule:** Select this option to configure a schedule for regular bot runs.
 - a. In the **Repeat** area, under **On these days**, select the days you want to run the bot.
 - b. Under **At these times**, in the **Hours** and **Minutes** boxes, enter the hours and minutes when you want to run the bot on the selected days.
 - **After bot:** Select this option to run the bot after a specific bot.
 - a. In **Run after bot** list, select a bot after which your bot should run.
 - b. If you do not want your bot to run if the previous bot created errors, select the **Do not start if the previous bot created errors** switch.
10. Click **Update**.

Chapter 8

Using the Content Server Integration Widget

The Content Server integration widget provides JavaScript libraries, which you can use to display business workspaces and other Content Server functionality in a modern and more flexible way.

- User experience*
- When a user starts creating a new business workspace, the integration widget first offers business workspaces without business object. Users can then decide if they want to complete one of the available early workspaces or create a new one. This integration widget is also called “Create and Complete” widget.

You can use the “Create and Complete” integration widget for the following SAP Systems:

- Business Content window: [“Enabling the integration widget in the Business Content window” on page 170](#)
- SAP Fiori: [“Customizing intent-based navigation for business documents” on page 186](#)

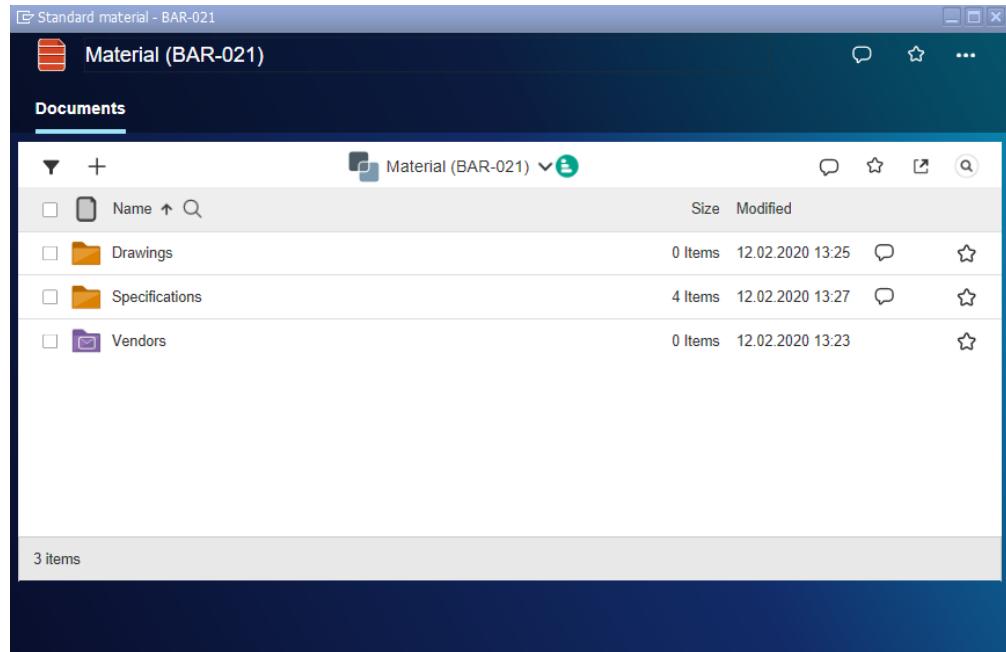


Figure 8-1: Integration into Business Content window

8.1 Prerequisites

Browser

Browser must be HTML5-compliant, which is any recent version of Firefox, Safari, Chrome, and Microsoft® Edge based on Chromium.



Note: The following limitations occur in SAP GUI 7.70 with MS Edge (Chromium) mode:

- OpenText Office Editor does not support Microsoft Edge yet.
- Windows Viewer is not supported. OpenText recommends using Web Viewer instead.
- High-contrast themes are not supported.

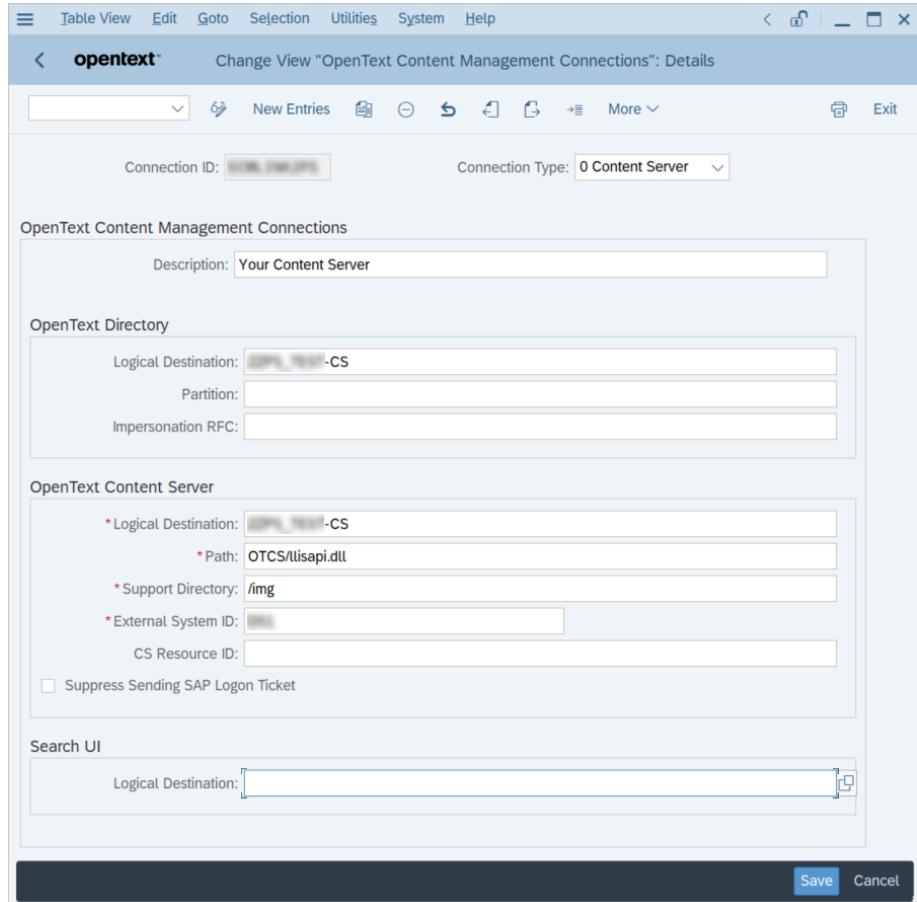
SAP System

Web Dynpro, for example SAP ERP, SAP SRM

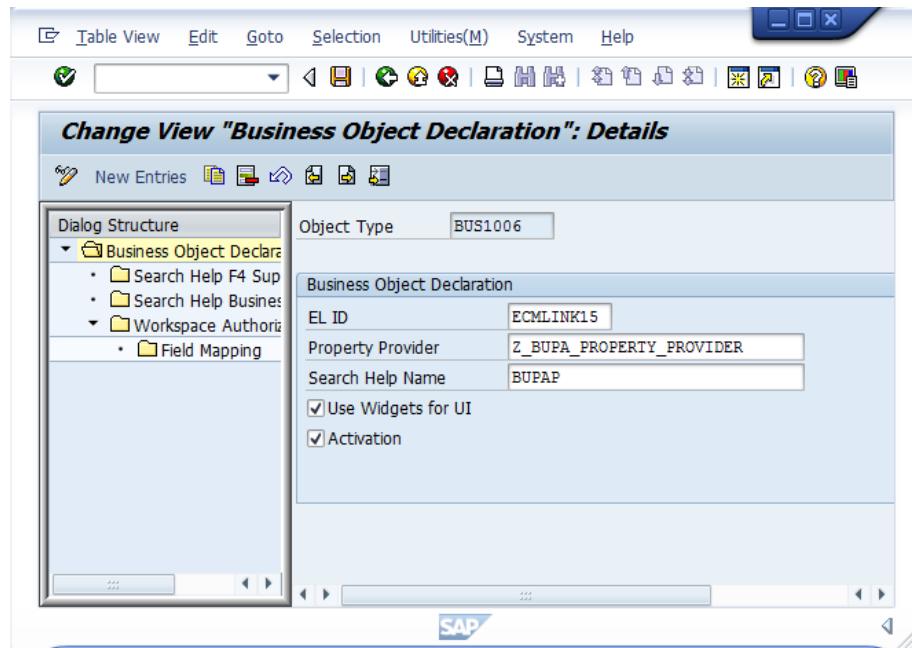
- SAP_BASIS 731
- SAP_UI 740 (see SAP Note 1742528)
- Class CL_WD_HTML_ISLAND must exist on your system. Use transaction SE24 to check.

Configuration

- In the IMG activity **OpenText Content Management for SAP Solutions > Infrastructure > Maintain OpenText Content Management Connections**, the **Support Directory** field must contain the directory on Content Server where the files for the Content Server integration widgets are stored.



- In the IMG activity **OpenText Content Management for SAP Solutions > Business Configuration > Maintain Business Object Declarations**, the **Use Widgets for UI** field must be selected. For more information, see [“Creating a business object declaration in SAP” on page 154](#).



SAP Notes

1746385 - Main WEBCUIF Browser Support Note

Microsoft IIS

If you want to use the integration widget and if you use Content Server on Microsoft IIS, you must configure detailed errors messages on local and remote requests. For more information, see "[Configuring Microsoft IIS to return meaningful REST API error messages](#)" on page 171.

8.2 Troubleshooting for the integration widget

8.2.1 Browser does not display integration widget correctly

If you are using Internet Explorer to display the SAP application, check if it is in Standard mode.

For more information, see SAP Note 1753544 - Web Dynpro - HTML standards mode.

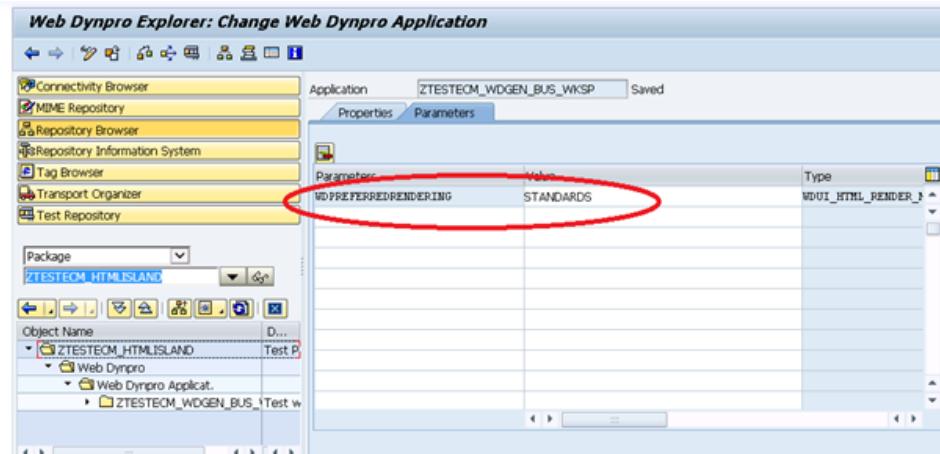
To check the browser mode:

1. In Internet Explorer, press F12 and open the DOM Explorer.
2. Make sure that following entry exists in the <head> section:

```
<meta http-equiv="x-ua-compatible content="IE-EDGE">
```

To set the browser mode for the Web Dynpro application:

1. In the Web Dynpro Explorer (SE80 transaction), go to your application.
2. Set the WDPREFERREDRENDERING parameter to STANDARDS.

**8.2.2 User does not see logging in browser**

To see logging of widgets in the Internet Explorer console for debugging, the user must be registered in the /OTX/RM_WDGENTRA table.

To maintain users for logging:

1. Start transaction SE16 to maintain the /OTX/RM_WDGENTRA table.
2. Enter the user that you want to enable for logging.

8.2.3 Smart View in Content Server or the integration widget returns Error: Bad Request (400)

Cause Content Server runs on Microsoft IIS, which is not configured to display detailed errors for REST API calls.

Solution Do the following:

To enable Detailed Errors in Microsoft IIS:

1. Open Internet Information Services (IIS) Manager.
2. On the left, expand the Content Server website, and click the Content Server Application.
3. The default Application name is OTCS.
4. In the middle pane, double-click **Error Pages**.

5. On the right, under **Actions**, click **Edit Feature Settings On the Edit Error Pages Settings**, enable **Detailed errors** in the **Error Responses section**, and then click **OK**.

Chapter 9

Transporting configuration objects

You can use the Content Server Transport Warehouse to transport the OpenText Documentum CM configuration from one Content Server installation to another, for example if you are using development, test and productive systems.

The transport contains:

- Categories, classifications and folders
- Workspace types and variables for group replacement
- Workspace templates including workspace hierarchies, if available
- Business object types including repository rules



Note: When transporting the repository rules, you can change the target repository.

You must set the same OpenText Documentum CM permissions and Business object type repository rules as the source system on the target system.

For more information about the transport, see *OpenText Content Management User Help - Transport (LLESTRP-H-UGD)*.

Chapter 10

Disabling the recycle bin

The scheduled processing job that automatically deletes the OpenText Documentum CM workspaces in OpenText Content Server requires that the recycle bin is disabled in OpenText Content Management. This is done so that deleted OpenText Documentum CM workspaces are not restored in case of a stale OpenText Documentum CM workspace in OpenText Content Server.

To disable the recycle bin:

1. In the **OpenText Content Management Administration**, click **Base Settings > Feature Configuration > Recycle Bin**.
2. At **Recycle Bin Settings > Recycling Rules**, clear the **Enable Recycle Bin** option.

Chapter 11

Analyzing and Troubleshooting the OpenText Documentum CM configuration

11.1 Analyzing the OpenText Documentum CM configuration

Business administrators can use the diagnostic check to analyze the OpenText Documentum CM configurations.

! **Important**

They can run the diagnostic check after specifying at least one external application and one business object type in the form.

11.1.1 Understanding the OpenText Documentum CM diagnostic program

The OpenText Documentum CM diagnostic program assists the business administrators to identify the errors in configuration. After configuring the OpenText Documentum CM, the business administrator can run the diagnostic check to ensure that everything is configured correctly. The diagnostic check analyzes the configurations in OTDS, External Application, Business Object Type, Workspace Type, Document Template, User privileges, and Scheduled Processing.

To run the diagnostic check:

1. Navigate to Admin > OpenText Content Management Administration.
2. On the **OpenText Content Management Administration** page, in the **OpenText Documentum Content Management Administration** section, click the **Run Diagnostic Check** link. Alternatively, you can also search for using the filter text field.
3. In the **Diagnosis** area, select **Scheduled Bots** to run a diagnostic check on schedule jobs. For other diagnostic checks related to workspace creation, select **Workspace Creation**.
4. In the **Business Application** list, select an application.
5. In the **Business Object Type** list, select an object type for the selected business application.
6. **Optional** In the **User Name** field, click **Select User Name** and select a OpenText Documentum CM User.



Note: You should select the **User Name** if you want to run the diagnostic check on User privileges.

7. Click **Run Diagnostic Check**.

11.1.2 Understanding the diagnostic check result for a business application

The sections are displayed in the diagnostic result based on the **Diagnosis** you selected:

Diagnosis: Workspace Creation

OTDS

This section provides the result of the following checks:

- The status of OTDS.
- Checks the availability of Content Server Partition.
- Checks the availability of Content Server Resource.

Business Application

This section provides the result of the following checks for each Smart View:

- **Application Server:** Checks if the test connection is established with the Application Server.
- **Documentum Smartviews:**
 - **Smart View Public URL:** Checks if the Smart View Public URL is accessible.
 - **Smart View Server URL:** Checks if the Smart View Server URL is accessible.
 - **Documentum Repositories:** Checks if a test connection is established for each configured OpenText Documentum CM repository.

Business Object Type

This section provides the result of the following checks:

- **Default Repository:** Checks if a repository value is selected on the **Documentum** tab of the **Business Object Type** page.
- **Folder Structure Import:** Checks if the **Folder Structure Import** is selected on the **Documentum** tab.
- **Documentum attributes mapped in Business Properties:** Checks if all configured OpenText Content Management attributes are mapped to the corresponding OpenText Documentum CM attributes.

- **OpenText Content Management attributes data types:** Checks if the attributes configured in the **Property mapping** section have supported data types (Text, Date, and Integer).
- **Documentum Repositories:** Checks the following in each configured repository:
 - **Documentum attribute data type:** Checks if the OpenText Documentum CM attribute mapped in the **Property mapping** section has the same data type as the corresponding OpenText Content Management attribute.
 - **Documentum attribute data length:** Checks if the OpenText Documentum CM attribute mapped in the **Property mapping** section has data size equal to or more than the corresponding OpenText Content Management attribute data size. This check is performed only for Text/String data type.

Workspace Type

This section provides the result of the following checks:

- **Documentum Workspace Location in Repositories:** Checks if a **Location** is configured in **Workspace Creation Settings** for each configured repository.

Document Template

This section provides the result of the following checks:

The diagnostic check is performed on all document templates configured on the **Business Object Type** page.

- The count of child folders in the document template.
- Checks if the users or groups which are configured with OpenText Documentum CM permission have any basic permissions.
- **Users or Groups in Documentum Repositories:** Checks if all users or groups configured in OpenText Documentum CM permissions are present in OpenText Documentum CM repositories.

User Privileges

This section provides the result of the following checks against the user selected in the **User Name** section. If a user is not selected, the diagnostic check is not performed on User Privileges.

- Checks if the user is a Business Administrator or has system administration rights privileges.
- **Workspace Type:** Checks if the user has permissions to access the location specified in **Workspace Creation Settings** for each configured repository.
- **Business Object Type:** Checks if the user can access the Folder Structure Import for each configured repository.
- **Document Template:** Checks if the user has Write/Delete permissions for the document template.

Diagnosis: Scheduled Bots

Scheduled Bots

This section provides the result of the following checks for the configured Scheduled Processing Jobs:

- Checks if recycle bin is disabled.
- **Delete Documentum Workspaces(Job):**
 - Checks if the business application is configured in job configuration.
 - Checks if a OpenText Documentum CM user is configured in job configuration.
 - **Documentum Repositories:** Checks if the user exists and is part of the d2_xecm_ws_cleanup_group in each configured repository.
- **Document Template Synchronization(Job):**
 - Checks if the business application is configured in job configuration.
 - Checks if a OpenText Documentum CM user is configured in job configuration.
 - **Documentum Repositories:** Checks if the OpenText Documentum CM user and DM_Folder_Config Folder Structure Import configuration exist for each configured repository.
- **Create or Update Documents (Job):**
 - Checks if a OpenText Documentum CM user is configured in job configuration.
 - Checks if an external system is configured in job configuration. If an external system is configured, then checks the following configurations:
 - Tests the connection to the application server.
 - Checks if the connection type is Documentum Salesforce Adapter.
 - Tests the connection of repositories in external system with the configured user.
 - Checks if a business object type is configured in job configuration.
 - If a business object type is configured, checks if the external document types from Salesforce are mapped to the attachment declarations in OpenText Documentum CM.
 - If a business object type is configured and external document types are mapped to the attachment declarations, then checks the following configurations for each of the mapped attachment declarations.
 - Checks if a default repository is configured in the attachment declaration.

- Checks if OpenText Documentum CM Document Type is configured in the attachment declaration.
 - Checks if xecm_document exists in Documentum Administrator Types.
 - Checks for missing OpenText Documentum CM attributes.
 - Checks if the attributes configured in the **Property mapping** section have supported data types (Text, Date, and Integer).
 - Checks the following for each repository:
 - Checks if the OpenText Documentum CM attribute mapped in the **Property mapping** section has the same data type as the corresponding OpenText Content Management attribute.
 - Checks if the OpenText Documentum CM attribute mapped in the **Property mapping** section has data size equal to or more than the corresponding OpenText Content Management attribute data size. This check is performed only for Text/String data type.
 - Checks if the root folder configured in **Document Location** is Business Workspace.
-

Part 2

Configuring the SAP system

Chapter 12

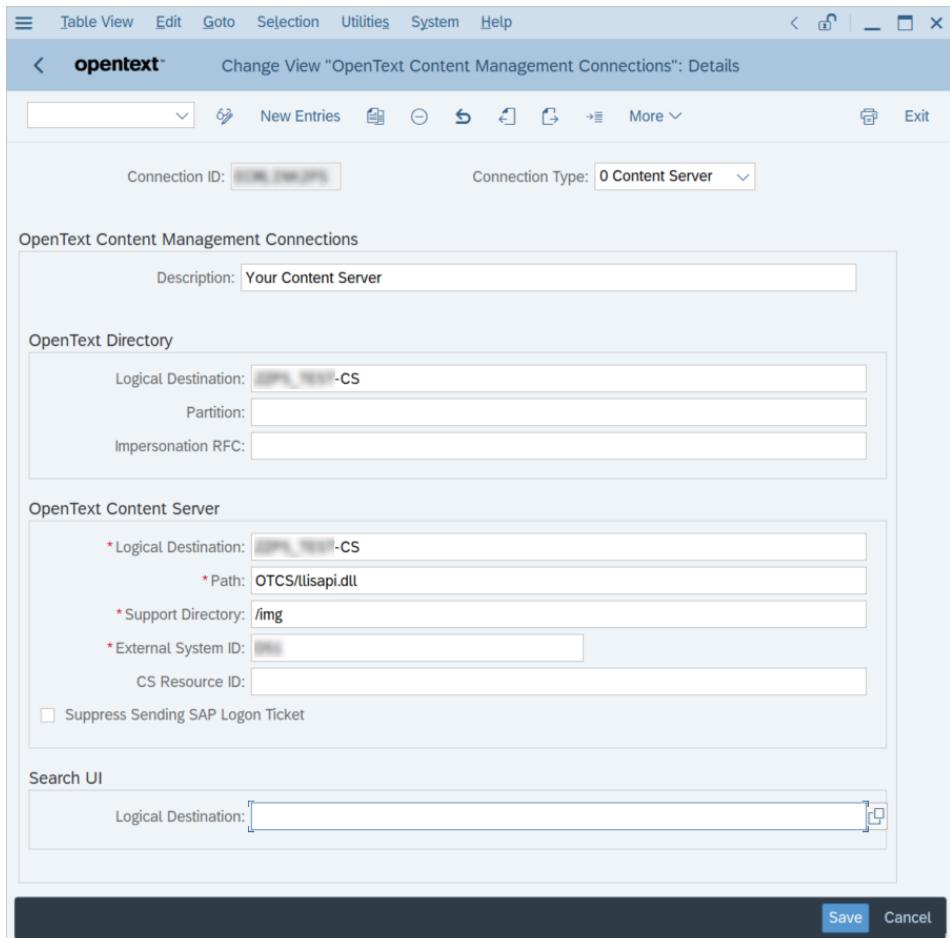
Customizing the SAP system

12.1 Setting up the connection to the OpenText Content Management

All parameters for a connection to OpenText servers are collected with an connection ID. For an installation, you have to create a new connection ID.

To maintain connection settings in:

1. Navigate to the **Infrastructure > Maintain OpenText Content Management Connections** activity, and then click  **Execute**.
2. Click **New Entries**.



3. Enter the following parameters:

Connection ID

Enter a connection ID.

OpenText Content Management Connections

- **Description:** Enter a description for the connection.

OpenText Directory

- **Logical Destination:** Enter the logical destination as defined for it. .
- **Partition:** Enter the OTDS partition that is used to authenticate SAP users in Content Server, only if you are using policies and only if you have consolidated those users in OTDS in the format user@partition. Do not enter @ together with the partition, only the partition name. Leave the field empty if you do not use partitions at all.

Example: Users in your system are created using the following scheme USER@PARTITION, for example nick@SAP_USER. In this case, here, you enter SAP_USER.

- **Impersonation RFC:** If you are using impersonation, enter the RFC destination used for impersonation. In addition, you must implement and activate the /OTX/RM_IMPERSONATE BAdI and perform additional configuration tasks. You also must provide the **CS Resource ID**.

RFC Impersonation uses a web service for SSO: If you want to restrict this web service to redirect to a certain Content Server, you can maintain a whitelist.

For more information about implementation, see the OpenText Content Management for SAP Solutions SDK guide on OpenText My Support (https://support.opentext.com/csm?id=kb_article_view&sysparm_article=KB0824884).

For more information about the impersonation scenario and relevant configuration, see Section 5.7.1 “Enabling user-specific impersonation (SAP BAdI)” in *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.

OpenText Content Server

- **Logical Destination:** Enter the logical destination as defined for it. .
- **Path:** cs/cs
- **Support Directory** defines the directory on Content Server where the files for the Content Server widgets are stored, for cloud installations the directory is cssupport. For more information, see Section 10 “Using the Content Server Integration Widget” in *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
- **External System ID:** Enter the SAP System ID.

- **CS Resource ID:** Content Server Resource ID as defined for Directory Services. This option is necessary if you want to use impersonation with web-based SSO. To retrieve the ID, open Administration Client. Go to **Directory Services > Resources > <Content Server entry> > Edit** and copy the **Resource identifier**, for example, d7c6b26b-af12-4d87-87cd-050de0768f4a.

RFC Impersonation uses a web service for SSO: if you want to restrict this web service to redirect to a certain Content Server, you can maintain a whitelist.

Suppress Sending SAP Logon Ticket

Select this option if you do not want to send the SAP Logon Ticket.

Search UI

Enter the logical destination, you created for it.

4. Click  Save.

12.2 Implementing a property provider in SAP

A property provider is an ABAP class that retrieves the business properties of an SAP business object. These fields are mapped to Content Server attributes of the business workspace. You need a property provider for each SAP business object for which you want to create business workspaces and map SAP properties to the attributes.

You have the following options:

- You can use the generic property provider /OTX/RM_GEN_PP_CL_BO. This property provider detects the SAP table behind the given business object and returns all table fields as properties, which you can then map to category attributes for the business object type. Only business properties are transferred, no relations. No development is needed.
- You can derive the property provider from the generic property provider /OTX/RM_GEN_PP_CL_BO. A data providing method must be implemented. A complex nested ABAP data structure can be defined and filled for providing data. All parameters of the property provider interface can be used. Knowledge in ABAP OO is necessary for implementing complex scenarios.
- You can derive the property provider from the base class /OTX/RM_WSCI_CL_WSPROV_DEFAULT.
- If you do not plan to map SAP fields to Content Server attributes, for instance because you do not need metadata in your business workspace, then you do not need to write your own property provider. In this case, use /OTX/RM_WSCI_CL_WSPROV_DEFAULT, the default property provider.



Tip: When you create a category for the workspace type, you should use attributes according to the properties that property provider provides. For

more information, see “[Creating a category for workspace type and business object type](#)” on page 33.

To use the generic property provider:

1. Retrieve the reference table using the SW01 transaction.
 - a. Open the business object in **Display** mode.
 - b. Expand **Key fields** and double-click the first name.
The reference table is displayed in **Data type reference** section.
 - c. Double-click the reference table to display the fields.

You can use all fields of the reference table as attribute of a workspace.
2. Later, create a category and single-value attributes for the business properties that you want to use.
3. Later, in the business object type definition, map the business properties to the created attributes.

To derive the property provider from the base class:

1. Use transaction SE24 to open the Class Builder.
2. To enhance the basic metadata, you derive a new class from the default business property provider class. All the elements needed for this implementation are collected in the package interfaces of the /OTX/RM package and the /OTX/RM_WSCI package.



Tip: Property providers for *composite business workspaces* must also provide the workspace location for the child business workspaces, which is the location of the hierarchically closest parent. Any customizing of a static or dynamic location ID for child business workspaces in the IMG is overruled by the property provider.

12.3 Checking the appearance of the SAP integration

If you want to integrate the OpenText Documentum CM functionality in SAP CRM, you can adjust the Content Server appearance and use an SAP based skin. As a standard, these settings are made automatically during the installation of Business Workspaces

After installation, unique names for standard SAP themes already exist. You can edit these unique names and their assignment. Changes take effect immediately. The following SAP themes are already configured: content_server, default, sap_tradeshow, sap_tradeshow_plus. Unique names for appearances must use the prefix theme_ and they are always expected in lower-case, even if SAP sends the parameter in upper-case. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.



Note: System administrator rights are required for this task. Contact OpenText Professional Services for assistance.

To check the appearance integration:

1. On the OpenText Content Management **Administration** page, click **Appearances Administration > Open the Appearances Volume**.

		Copy	Move	Delete	Zip & Download	Email Link	Print	Collect	Size	Modified
Type	Name									
	EXTENDED ECM SRM TRADESHOW								1 Item	12/11/2015 10:00 AM
	EXTENDED ECM CONTENT SERVER								1 Item	12/11/2015 10:01 AM
	EXTENDED ECM CRM DEFAULT								1 Item	12/11/2015 10:00 AM

2. Select the recommended appearance:

For SAP CRM: **EXTENDED_ECM_CRM_DEFAULT**

3. Check if the following settings are present according to [Figure 12-1](#).

- **Current Status:** Enabled
- **Header** section
- **Content Server Components** section
- **Workspace** section

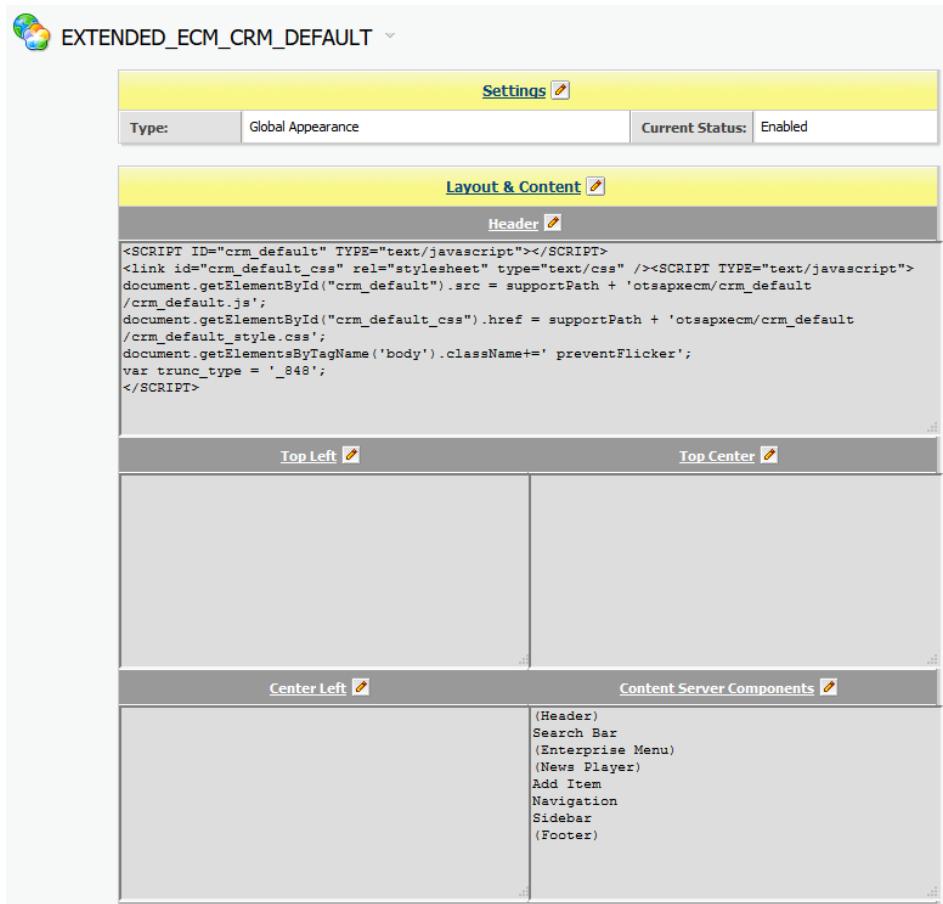


Figure 12-1: Appearance settings for SAP CRM

Header script for EXTENDED_ECM_CRM_DEFAULT -

```

<SCRIPT ID="crm_default" TYPE="text/javascript"></SCRIPT>
<LINK ID="crm_default_css" REL="stylesheet" TYPE="text/css" /></LINK>
<SCRIPT TYPE="text/javascript">
document.getElementById("crm_default").src = supportPath + 'xecmpf/crm_default/
crm_default.js';
document.getElementById("crm_default_css").href = supportPath + 'xecmpf/
crm_default/crm_default_style.css';
document.getElementsByTagName('body').className+= ' preventFlicker';
var trunc_type = '_848';
</SCRIPT>
<STYLE>
#pw_SideBarWrapper {display: none;}
</STYLE>

```

These settings will turn off certain standard Content Server UI components such as header and footer; an additional JavaScript will be added to the appearance to manipulate the breadcrumb navigation.

Chapter 13

Configuring events for business workspaces

You can customize the system so that when a business object in SAP is changed or a new business object is created, an action is triggered in OpenText Content Management. For example, when a business object is created in SAP, a business workspace is created in OpenText Content Management. Or when metadata changes in SAP, this change transfers to .

Typically, this is based on CREATED and CHANGED *events* which are triggered by the business object. However, if a business object does not provide events, you can use change documents as an alternative method. This chapter explains how to find out which method is appropriate and how you customize it.

13.1 Preparing events implementation

After you have identified the business object that should trigger the automatic creation or update of a business workspace, you need to find out which method to use for events:

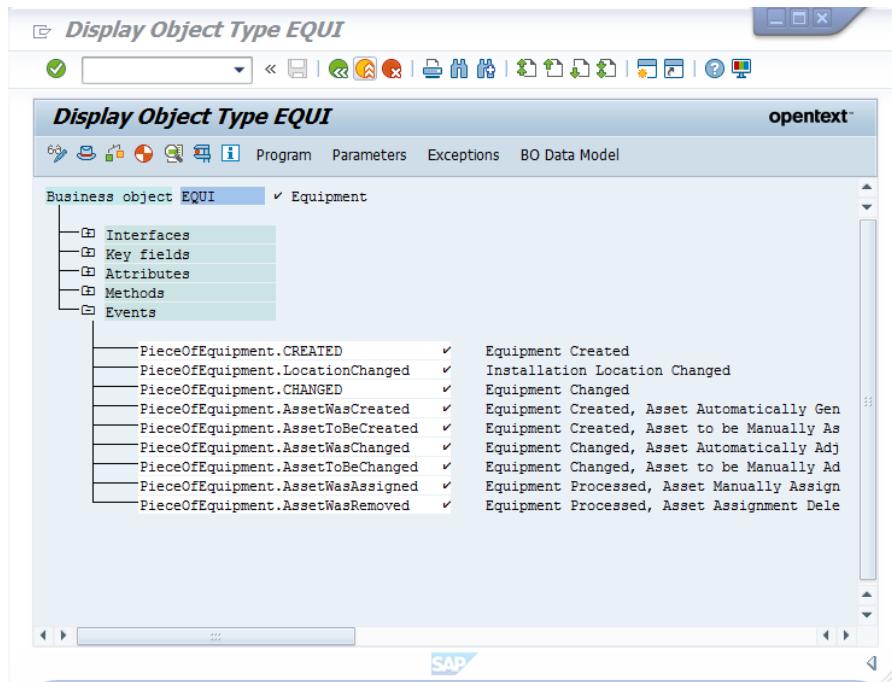
- *Events* that are provided by the business object
- *Change documents* when events are missing

! **Important**

The following describes only roughly how to find event methods for a business object type. For a detailed description, see the SAP NetWeaver help (http://help.sap.com/saphelp_nw70/helpdata/EN/c5/e4aeef453d11d189430000e829fbdb/frameset.htm).

To find out which event method the business object type requires:

1. Find out if your business object type provides the CREATE and CHANGE events:
 - a. Run transaction SW01.
 - b. Enter the name of the business object and click **Display**.
 - c. Check if the business object provides the required events. If so, you can maintain the events in the IMG for OpenText Documentum CM. For more information, see “[SAP: Linking events to receiver type function modules](#)” on page 132.



2. If the business object type *does not* provide events, check which change documents it writes that you can use to trigger events:
 - a. Run transaction SE16 to view table TCOB which maintains the change documents.
 - b. In this table, the **TABNAME** is the name of the table, and the **OBJECT** is the name of the change document object. For example, the business object type **KNA1** (Business Partner) writes a change document **DEBI**.

For more information, see “[SAP: Using change documents for the automatic creation and updates when events are missing](#)” on page 140.

13.2 SAP: Linking events to receiver type function modules

When a business object is created or changed, an event is created for this object, for example a CREATED event or a CHANGED event. You can use this event to create or update the corresponding Content Server item. Typically, these items include business workspaces and added business objects.

You define entries for every relevant business object event and link them to the respective function modules.



Tip: For composite workspaces, you might need a custom function module with additional logic.

To use the asynchronous method via queuing, use the respective function module that end with `_ASYNC` or `_ASY`. For more information, see “[Creating business workspaces document asynchronously](#)” on page 162.

! **Important**

The SAP Workflow System must be set up and running correctly for events to be created (`SWU3` transaction). For more information, see the SAP documentation.

Table 13-1: Receiver type function modules and events for business workspaces

Function	Receiver function module	Event
For (asynchronous) creation and update of business workspaces. This function modules update an existing workspace with the CHANGED event. With a CREATED event and all other events, the function module either updates the workspace or creates a new workspace if it does not exist yet.	/OTX/RM_WSC_UPD /OTX/RM_WSC_UPD_ASYNC	Every relevant event, for example CHANGED, CREATED, ASSETTOBECREATED
For (asynchronous) update of existing business workspaces This function module updates an already existing workspace with any event. It does not create new workspaces.	/OTX/RM_WSC_UPD_EXISTING /OTX/RM_WSC_UPD_EXISTING_ASYNC	Every relevant event, for example CHANGED
For (asynchronous) creation of business workspaces if the business object <i>does not have</i> the relevant events. For more information, see “ SAP: Using change documents for the automatic creation and updates when events are missing ” on page 140.	/OTX/RM_WSC_UPD_SUPERTYPE /OTX/RM_WSC_UPD_SUPER_ASYNC	CREATED, CHANGED

Function	Receiver function module	Event
<p>For (asynchronous) update of existing business workspaces if the business object <i>does not have</i> the relevant events. This function module updates an already existing workspace that does not have the relevant events. It does not create a workspace.</p> <p>For more information, see “SAP: Using change documents for the automatic creation and updates when events are missing” on page 140.</p>	/OTX/RM_WSC_UPD_SUPERTYPE_EXST /OTX/RM_WSC_UPD_SUPER_EXST_ASY	Every relevant event, for example CHANGED

Table 13-2: Receiver type function modules and events for added business objects

Function	Receiver function module	Event
For added business objects if the according business object has the relevant events.	/OTX/WSC_UPD_BUS_REFs	Every relevant event, for example CHANGED, CREATED, ASSETTOBECREATED
For added business objects if the business object <i>does not have</i> the relevant events. For more information, see “SAP: Using change documents for the automatic creation and updates when events are missing” on page 140 .	/OTX/RM_WSC_UPD_BUS_REFs_SUPER	CREATED, CHANGED

To link events to a receiver function module:

1. In the IMG, navigate to the **Business Configuration > Maintain Receiver Module Events** activity and click Execute.
2. Click **New Entries**.
3. It depends on the object type if you define settings for a **BOR Object Type** or a **ABAP Class**.

For BOR object types

- **Object Category:** BOR Object Type

- **Object Type:** Name of the object type, for example, EQUI. For print lists, enter PRINTLIST.
- **Event:** Event of the SAP business object type, for example CHANGED, CREATED, ASSETTOBECREATED. The name depends on the object type.
 - For automatic creation and update of automatically created workspaces, create entries for every relevant event, for example CHANGED, CREATED, ASSETTOBECREATED. The names depend on the object type.
 - For update of manually created workspaces and for update of added business objects, create entries for every CHANGED event. The names depend on the object type.
- **Receiver Type:** Enter a name that identifies this entry. If you are using the /OTX/RM_WSC_UPD_SUPERTYPE or the /OTX/WSC_UPD_BUS_REFS_SUPER function module, enter the name of the supertype of the derived business object, for example KNA1. For more information, see “[SAP: Using change documents for the automatic creation and updates when events are missing](#)” on page 140.
- **Receiver Call:** Select Function Module.
- **Receiver Function Module:** Receiver function module for the required function, see “[Receiver type function modules and events for business workspaces](#)” on page 133 or “[Receiver type function modules and events for added business objects](#)” on page 134.
- **Check Function Module:** Leave empty.
- **Receiver Type Function Module:** Leave empty.
- **Destination of Receiver:** Enter NONE to use the context of the user that runs the functions. If you leave this field empty, the background workflow user, usually WF-BATCH, is used. It must exist in the system.
- **Event delivery:** Select Using tRFC (Default).
- **Linkage activated:** Select this option to enable the linkage.
- **Enable Event Queue:** OpenText recommends that you do not use the standard SAP event queue when using the OpenText Content Management asynchronous queue.
- **Behavior Upon Error Feedback:** Select your preferred behavior, for example System defaults.
- **Receiver Status:** Leave default here.

For ABAP classes

- **Object Category:** ABAP Class
- **Object Type:** Name of the object type, for example /SAPSRM/CL_WF_PDO_PO.

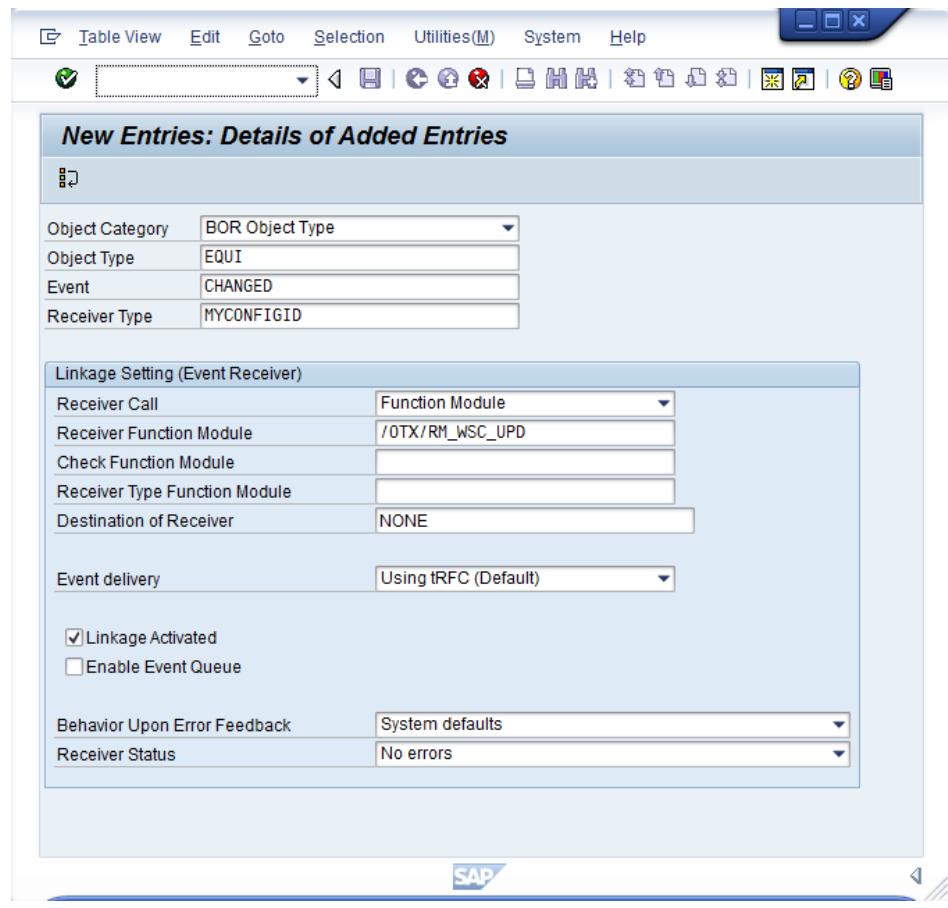
- **Event:** Event of the SAP business object type, for example READY_FOR_WORKFLOW. The names depend on the object type.
- **Receiver Type:** Enter a name that identifies this entry.
- **Receiver Call:** Enter Method.
- **Class Name:** Class for the required function. Enter /OTX/RMSRM_CL_EVT_UPD.
- **Check Function Module:** Leave empty.
- **Receiver Type Function Module:** Leave empty.
- **Destination of Receiver:** Enter NONE to use the context of the user that runs the functions. If you leave this field empty, the background workflow user, usually WF-BATCH, is used. It must exist in your system.
- **Event delivery:** Select **Using tRFC (Default)**.
- **Enable Event Queue:** OpenText recommends that you do not use the standard SAP event queue when using the OpenText Content Management asynchronous queue.
- **Behavior Upon Error Feedback:** Select your preferred behavior, for example **System defaults**.
- **Receiver Status:** Leave default here.

-
4. Select **Linkage activated** to enable the linkage.
 5. Click  **Save**.
 6. Repeat the procedure for every relevant business object type.

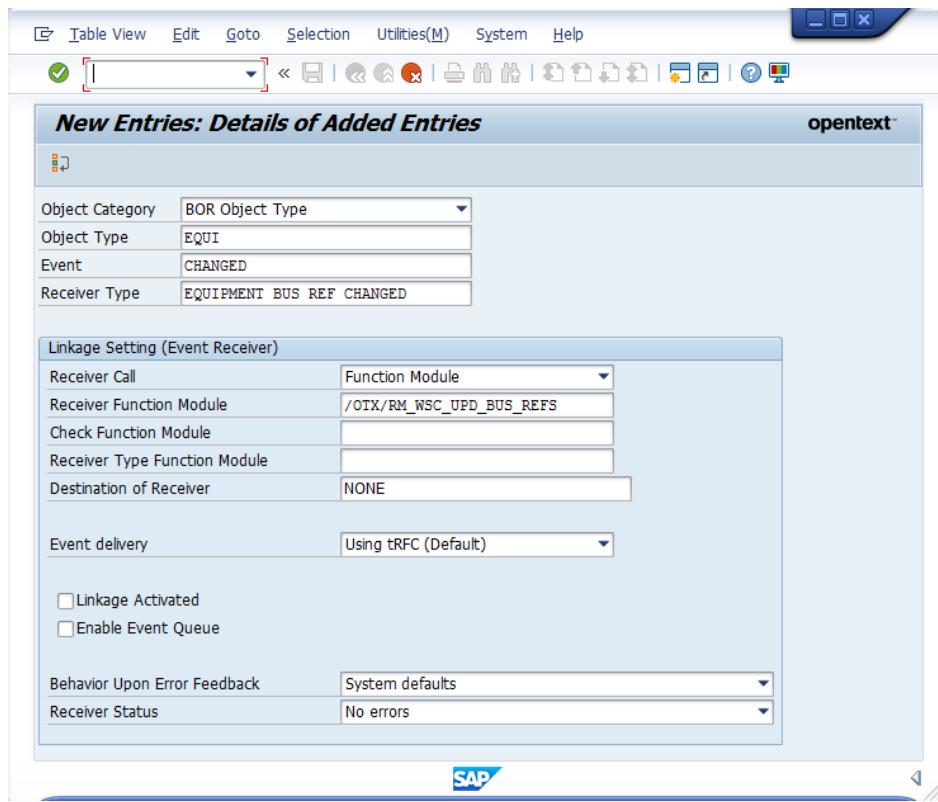
For examples of possible entries for the different scenarios, see “[Configuration examples for business workspace and business object updates](#)” on page 137.

Configuration examples for business workspace and business object updates

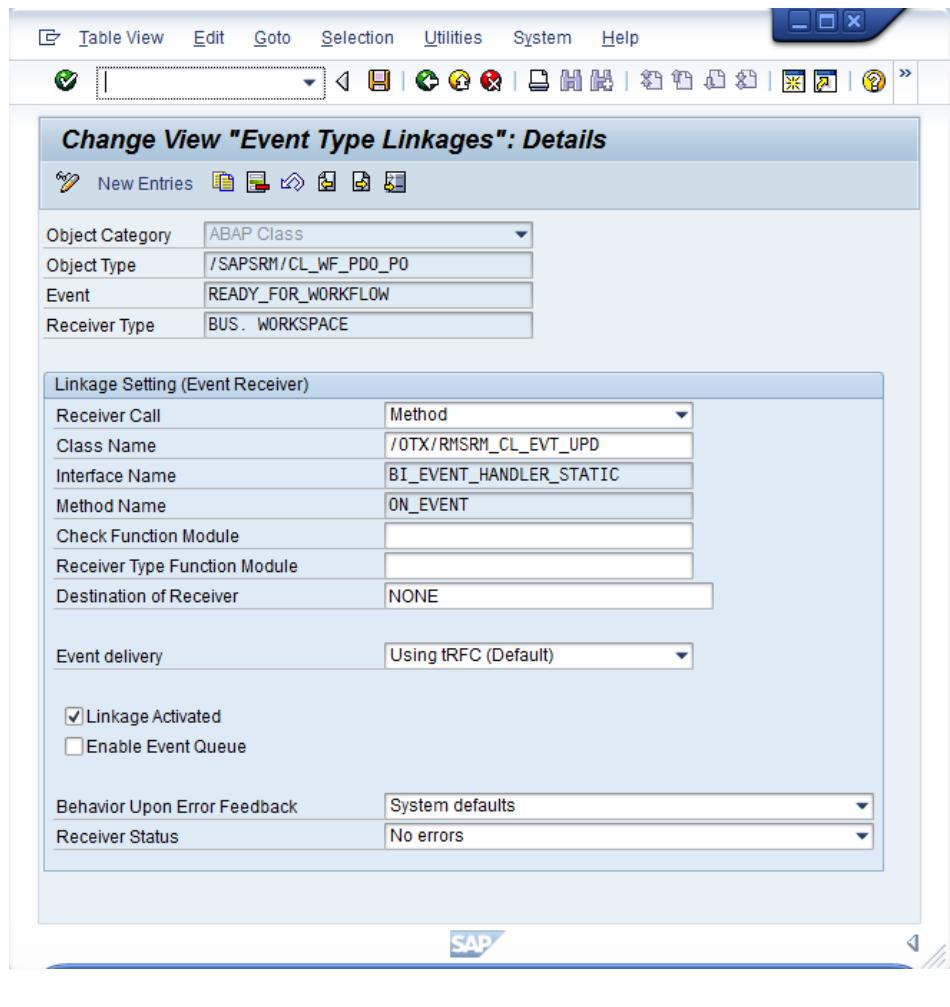
- ➡ Example 13-1: Update of business workspaces: receiver function module for CHANGED event of the EQUI business object



➡ Example 13-2: Update of added business objects: receiver function module for CHANGED event of the EQUI business object



▶ Example 13-3: Creation and update of business workspaces for purchase orders in an SAP SRM system



13.3 SAP: Using change documents for the automatic creation and updates when events are missing

There are business objects that do not have the CREATE and CHANGE events, which are required to use the /OTX/RM_WSC_UPD and /OTX/RM_WSC_UPD_BUS_REFS function modules. For these business objects, it might be an option to use change documents to trigger automatic creation or updates.



Tip: To find out if a business object writes the documents, see “[Preparing events implementation](#)” on page 131.

In this case, use one the following function modules:

- /OTX/RM_WSC_UPD_SUPERTYPE for the automatic update and creation of workspaces. Use /OTX/RM_WSC_UPD_SUPER_ASYNC for asynchronous queue processing.
- /OTX/RM_WSC_UPD_SUPERTYPE_EXST for the automatic update of an already existing workspace. It does not create a workspace. Use /OTX/RM_WSC_UPD_SUPER_EXST_ASY for asynchronous queue processing.
- /OTX/RM_WSC_UPD_BUS_REFS_SUPER for the update of business objects that have been added to the Content Server item.



Note: You can use only one of the function modules. If you need both the update of business workspaces and of business objects, contact OpenText Professional Services for assistance.

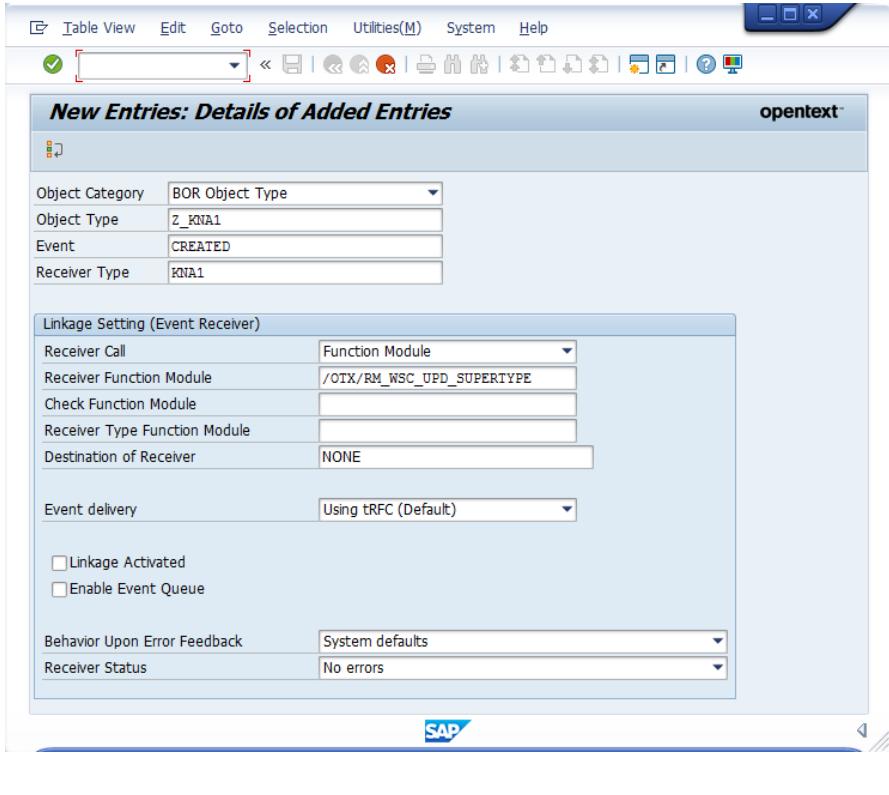
To enable automatic creation and updates using change documents:

1. In the SW01 transaction, derive a new subtype for the business object that does not have the required events. For example, create a subtype Z_KNA1 for the KNA1 supertype. As program, enter Z_KNA1.
2. In the SW01 transaction, for the created subtype, add the /OTX/RMWSC interface. This interface creates the relevant events for the derived business object.
3. In the **Maintain Change Document Events** activity, define the change document that triggers the event for the derived business object type.

For example, for the derived Z_KNA1 business object type, you can use the change document object DEBI to trigger a CHANGED event. For more information about the activity, see “[SAP: Maintaining change document events](#)” on page 141.

4. Link the function module to the event of the new subtype as described in “[SAP: Linking events to receiver type function modules](#)” on page 132. In the **Receiver Type** field, enter the name of the supertype of the derived business object, for example KNA1.

➡ **Example 13-4: Update of business objects: receiver module for the CREATED event of the Z_KNA1 business object**



13.4 SAP: Maintaining change document events

You can use the writing of change documents to trigger events for a business object type. This is relevant for the following:

- For business object types that do not have the required events to create or update a business workspace or business objects. For more information, see “[SAP: Using change documents for the automatic creation and updates when events are missing](#)” on page 140.

For example, you can define that when the DEBI change document is created, for the Z_KNA1 business object type, the CREATED event is triggered.

- For the update of policies when role assignments are changed or deleted. For more information, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*. You define two entries for the PFCG change document object. If the PFCG change document object is changed or deleted, for the /OTX/PFCG object type the USER_CHANGED event is triggered.

Tip: For more information about the creation of events when change documents are written, see the SAP Help portal (<http://help.sap.com/>)

saphelp_nw70/helpdata/EN/c5/e4aeef453d11d189430000e829fbcd/frameset.htm).

To maintain change document events:

1. In the IMG, navigate to the **Business Configuration > Maintain Change Document Events** activity and click Execute.

Change Doc. Obj...	ObjectCat...	Business Obj. Type	Event	On Create	On Change
DEBI	BOR Object	Z_KNA1	CREATED	<input checked="" type="radio"/>	<input type="radio"/>
DEBI	BOR Object	Z_KNA1	CHANGED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	AP1	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	AP2	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	UPDATED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	RA	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	APPROVED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	EXECUTED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	COMPLETED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	INITIATED	<input checked="" type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	YDRAW	REVIEWED	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	DRAW	STATUS_RA	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	DRAW	STATUS_RI	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	DRAW	STATUS_RJ	<input type="radio"/>	<input type="radio"/>
DOCUMENT	BOR Object	DRAW	STATUS_AP	<input type="radio"/>	<input type="radio"/>
EINKBELEG	BOR Object	BUS2012	CHANGED	<input type="radio"/>	<input type="radio"/>
EINKBELEG	BOR Object	OCVBUS2012	CREATED	<input checked="" type="radio"/>	<input type="radio"/>
EINKBELEG	BOR Object	BUS2011	QUOTATIONCREATED	<input checked="" type="radio"/>	<input type="radio"/>
EINKBELEG	BOR Object	BUS2012	RELEASESTEPCREATED	<input checked="" type="radio"/>	<input type="radio"/>
EINKBELEG	BOR Object	FREBUS2012	CREATED	<input checked="" type="radio"/>	<input type="radio"/>

2. Add the following entries:

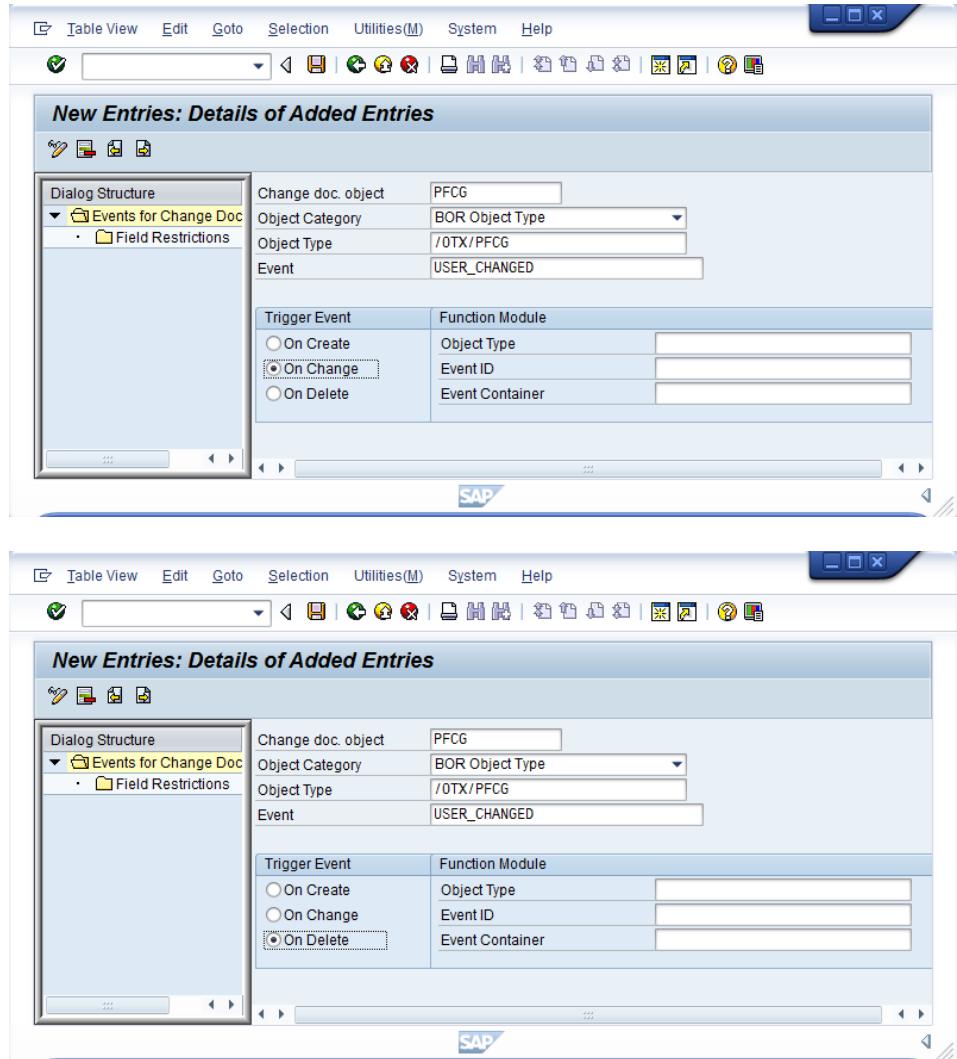
For business object types that do not have the required events, link all relevant actions of change document objects to the related business object events:

- **Change doc. object:** Enter the change document object, for example DEBI.
- **Object Category:** BOR Object Type
- **Object Type:** Derived business object type, for example Z_KNA1.
- **Event:** Enter CHANGED or CREATED.
- **Trigger Event:** Select On Create or On Change.

For the update of policies when role assignments are changed or deleted, create two entries. For more information, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.

- **Change doc. object:** PFCG
- **Object Category:** BOR Object Type
- **Object Type:** /OTX/PFCG

- **Event:** USER_CHANGED
- **Trigger Event:** Select once On Change and once On Delete.



3. Click Save.

Chapter 14

Using batch operations

14.1 SAP: Creating or updating business workspaces using batch operations

Usually, business workspaces are created or updated automatically triggered by an event or manually by users. However, in special cases you may wish to create or update a series of business workspaces in one go. This can be done by generating an SAP report for the respective business object type and using this report to create the workspaces in Content Server.

! **Important**

The business object declaration must be maintained before the report can be executed; see also *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

The search help, which is configured in the business object declaration, must not have a Search Help exit. Search helps with search help exits are not supported for batch creation.



Note: Configuring search help using CDS entities (for example MEKKD) is supported in batch operations.

Prerequisites

- The OTCMFND software component and the OTX namespace must be set to modifiable using the SE03 transaction.
- Your SAP user must be registered as a developer.

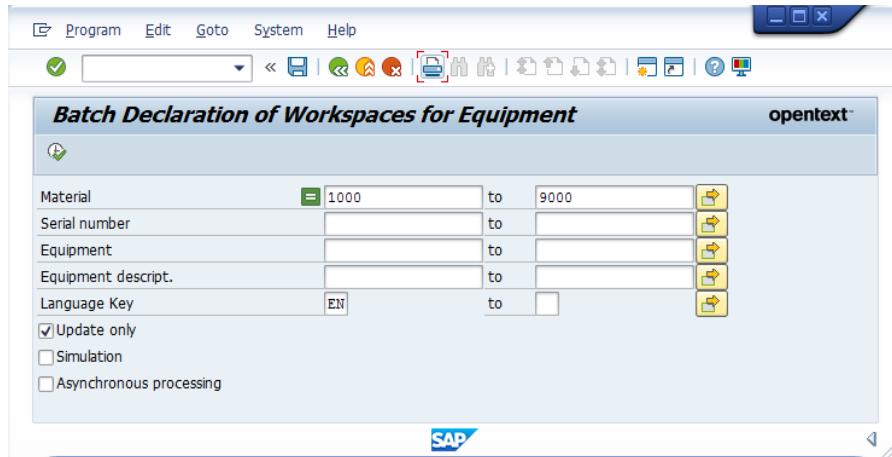
To create workspaces in batch operation:

1. Generate the report for the batch declaration:
 - a. Enter /n/OTX/RM_WSC_GEN to run the report.
 - b. Select an appropriate SAP business object in the **Object Type** field.
 - c. Click **Execute**.

The generated report has the name /OTX/RM_WSC_CREATE_<business object>; by default it is added to the /OTX/RM_WSCG package and inserted in a transport request.

2. Run the report that you created to actually generate the workspaces:
 - a. Start the SA38 transaction.

- b. Run the created mass report, for example, for equipments /OTX/RM_WSC_CREATE_EQUI.



- c. If required, specify selection criteria.
d. Select **Update only** to only update existing business workspaces and *not* create new business workspaces.
e. Select **Simulation** to first check the report and see if the report matches your expectations.
f. Select **Asynchronous processing** to place the batch declaration in the asynchronous queue. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
g. Click **Execute**.

If not simulated, the specified workspaces are created or updated in Content Server.

- With synchronous processing: errors that may occur are added to the error queue and logged in the SAP log, which you can access with the SLG1. At the end, the batch process returns status and error information for each workspace that was or was not created.
- With asynchronous processing: the asynchronous queue processes the batch declaration, status information and errors are logged there as well. For more information, see “[Monitoring the asynchronous queue](#)” on page 166.



Note: If the business object property provider provides relations, the same will be propagated to Documentum and workspaces will be created as related workspaces.

Special case: Composite business workspaces

If you are creating composite business workspaces in a batch operation you must first create the parent business workspaces, as they are the location for the respective child business workspaces. The location where child business workspaces are

created is always controlled by the property provider, regardless of any location settings you may have entered in the business object declaration of the child. If there is no business workspace in which a child business workspace can be created, no child business workspaces are created.

14.2 SAP: Alternative for creating or updating business workspaces using batch operations

An alternative report allows you to create or update a series of business workspaces in one step. Therefore, no new report needs to be generated for the respective business object type.

! **Important**

The business object declaration must be maintained before the report can be started. As for the classic report for batch creation, search help exits are not supported. There is a new checkbox to tell the report to ignore search help exits.

Restrictions

- The fields of the search help are rendered as selection fields in the second screen of the report. If the number of fields is larger than 20, then only the first 20 fields are displayed.
- The alternative search help must match the key fields of the business object type or must match the *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

Using predefined auxiliary reports

The report for the automated workspace creation and update needs the exact keys of the Plant Maintenance business objects. The OpenText Content Management for SAP Enterprise Asset Management Business Scenario contains two auxiliary reports to list the technical keys for the corresponding object.

Report	Description
/OTX/RLSA_PM_LIST_ORD_OP	Lists a given Plant Maintenance order hierarchy
/OTX/RLSA_PM_LIST_TL_GRP	Lists a given Plant Maintenance task group hierarchy

To create workspaces in batch operation

1. In your SAP system enter transaction /OTX/RM_WSC_BULK. Alternatively enter transaction SA38 to execute report /OTX/RM_WSC_BATCH_CREATE.
2. Select the business object type.
3. Select the search help or keep it empty.
4. Select **Ignore exit of search help** to ignore search help exits.



Note: This step works if the exits are used for formatting only. It is still recommended to use search helps without exits.

5. Select **Update only** to update existing business workspaces only, and not to create new business workspaces.
6. Select **Simulation** to first check the report and see if the report matches your expectations.
7. Select **Asynchronous processing** to place the batch declaration in the asynchronous queue.

For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

8. Click **Reset Restriction Fields** to calculate the selection fields for restriction based on the selected search help. An empty search help is replaced by the search help assigned to the business object type.
9. Click **Execute**.



Note: If you change the business object type, press **Enter** or click **Reset Restriction Fields** again to change the search help and to get the corresponding list of fields. If you want to use a different search help, change it after you changed the business object type.

- **Synchronous processing** – Errors that may occur are added to the error queue and logged in the SAP log, which you can access with the **SLG1** transaction. At the end, the batch process returns status and error information for each workspace that was or was not created.
- **Asynchronous processing** – The asynchronous queue processes the batch declaration; Status information and errors are logged there as well. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.



Note: If the business object property provider provides relations, the same will be propagated to Documentum and workspaces will be created as related workspaces.

*Special case:
Composite
business
workspaces*

If you are creating composite business workspaces in a batch operation, you first have to create the parent business workspaces, as they are the location for the respective child business workspaces. The location where child business workspaces are created is always controlled by the property provider. Regardless of any location settings, you may have entered in the business object declaration of the child. If there is no business workspace in which a child business workspace can be created, no child business workspaces are created.

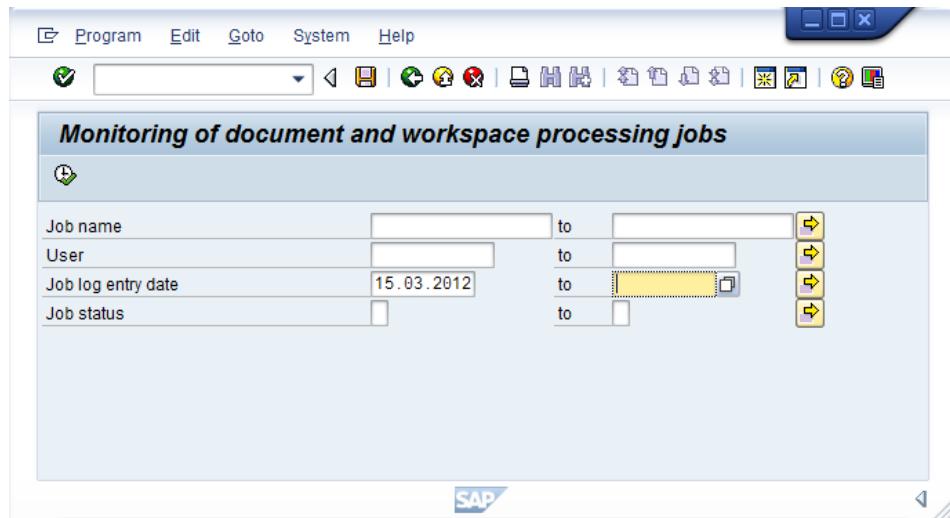
14.3 SAP: Monitoring batch processing jobs

You can monitor batch jobs for creating or updating business workspaces, and declaring ArchiveLink or SAP DMS documents and print lists in the /OTX/RMMON transaction.

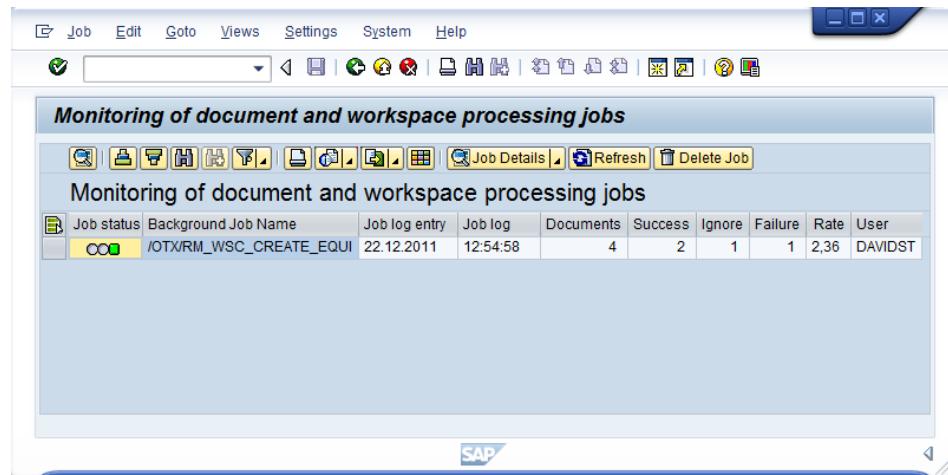
 **Note:** If you used asynchronous processing for the batch job, you must use the asynchronous queue monitor. For more information, see “[Monitoring the asynchronous queue](#)” on page 166.

To monitor batch processing jobs:

1. Start the /OTX/RMMON transaction.



2. In the **Monitoring of document and workspace processing jobs** dialog, enter parameter to filter the list of jobs.
3. Click  **Execute**.



Job status	Background Job Name	Job log entry	Job log	Documents	Success	Ignore	Failure	Rate	User
OOO	/OTX/RM_WSC_CREATE_EQUI	22.12.2011	12:54:58	4	2	1	1	2,36	DAVIDST

Besides the standard SAP job attributes the number of processed entries, their process status and the current declaration rate/minute are tracked. These values are updated during the job execution. Click **Refresh** to display the most current values.

4. Click **Job Details** to access the SAP standard job overview, job log and spool functions.
5. If required, click **Delete Job** to delete the monitoring entries.

Chapter 15

Reporting incidents to SAP Solution Manager

You can allow users to report incidents directly from Smart View to your local SAP Solution Manager. For more information about SAP Solution Manager, see https://help.sap.com/viewer/p/SAP_Solution_Manager.

To enable SAP incident reporting:

1. On the OpenText Content Management Administration page, click **Integration to SAP Solutions > Configure SAP Support Integration**.
2. Click **Enable** and provide the connection parameters to the server, which hosts the SAP Solution Manager: **Server**, **Port Number** and **Protocol**. Make sure, that you have no spaces at the end of the server name or the port number. The URL to the SAP support portal is <https://support.sap.com/en/index.html>.
3. Click **Save Changes**.

To report an incident as a user:

1. In Smart View, click the **Profile Menu**.
2. Click **Report incident to SAP**.
3. Fill in the required information in the incident report and save your data.

Chapter 16

Integrating into SAP GUI

You have several customizing options when integrating OpenText Documentum Content Management (CM) into SAP GUI:

- Make business workspaces available via Generic Object Services (GOS).
- Customize the functions and appearance of the Business Content window.

16.1 Mapping authorizations in SAP

Authorization object fields within SAP are mapped to category attributes of the Content Server for specific business objects. This mapping is required if you want to use Content Server policies generated from SAP authorizations.

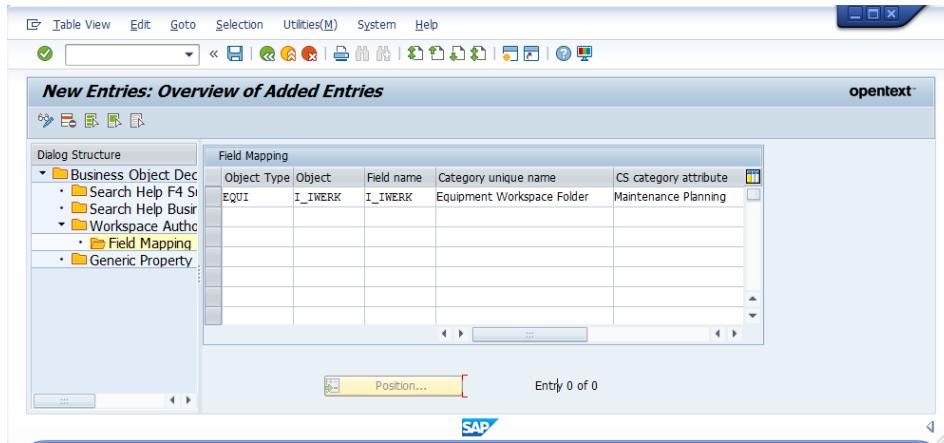
! **Important**

The Content Server category attributes used for policies must be defined in the metadata mapping configuration.

For information about the complete configuration, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.

To define a workspace authorization mapping:

1. In the IMG, navigate to the **Business Configuration > Maintain Business Object Declarations** activity and click  **Execute**.
2. Select a business object declaration from the list and double-click **Workspace Authorization**.
3. Click **New Entries** and provide the following information:
 - **Object Type:** SAP business object type related to the workspace.
 - **Object:** Authorization object in SAP which is related to the SAP business object type.
4. Select the entry from the list of available authorizations and double-click **Field Mapping**.



5. Enter or modify the following parameters:

Object Type

SAP business object type related to the workspace.

Object

Authorization object in SAP which is related to the SAP business object type.

Field name

Field name of authorization object in SAP which is related to the SAP business object type.

Category unique name

Not relevant for OpenText Documentum CM for SAP Solutions.

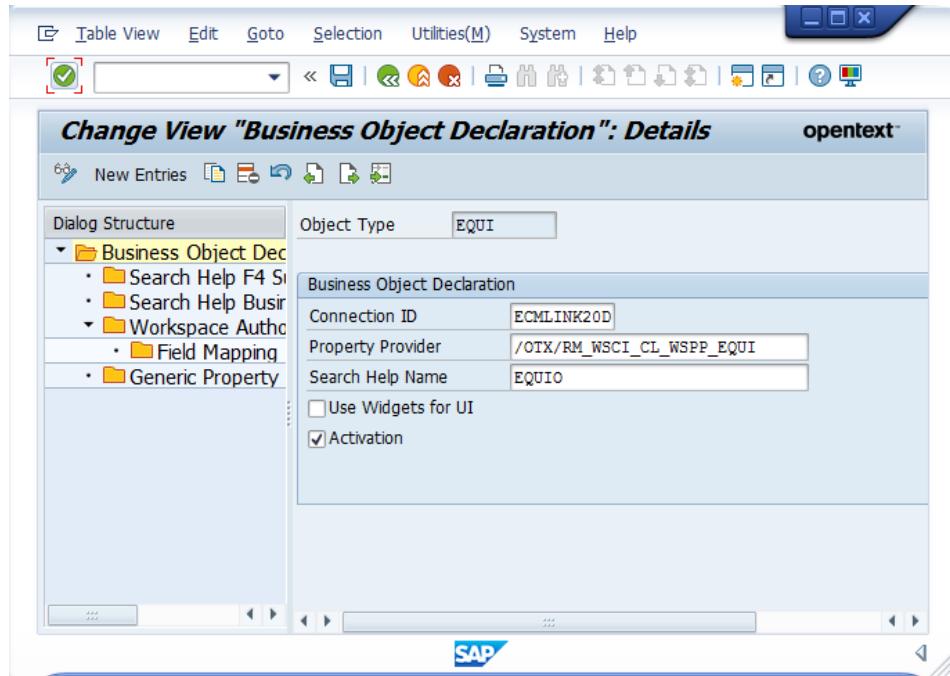
CS category attribute

Attribute name of the Content Server category.

16.2 Creating a business object declaration in SAP

To create a business object declaration in SAP:

1. In the IMG, navigate to the **Business Configuration > Maintain Business Object Declarations** activity and click Execute.
2. Click **New Entries**.



3. Define the business object declaration with the following parameters:

Object Type

Select the business object type for which you want to create the declaration.

Connection ID

Enter the ID of the connection that you created during installation. For more information, see *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.

Generic Property Provider

Select one of the available property providers from the value list.

If you do not have a property provider yet or do not need a customized property provider, use the default property provider /OTX/RM_WDSCI_CL_WSPROV_DEFAULT.

For more information, see “[Implementing a property provider in SAP](#)” on page 127 and “[Selecting a template, classification or category based on business properties](#)” on page 156.

Search Help Name (optional)

The configuration is not working with OpenText Documentum CM for SAP Solutions.

Use Widgets for UI

When a business workspace is displayed from the SAP system, the standard Content Server user interface opens within the SAP window.

For the following scenarios, you can use the Create and Complete integration widget, that shows the relevant functionality in the Content Server look and feel:

- Business Content window
- SAP Fiori
- SAP Web Dynpro applications like SAP SRM or SAP PPM

For more information, see “[Using the Content Server Integration Widget](#)” on page 107.

Activation

Select the check box to activate the business object declaration.



Important

Only after you activated the declaration, you can continue with the definition of the business object on Content Server. For more information, see “[Configuring business object types](#)” on page 74.



Tips

- To view a complete business object declaration from versions prior to 10.5, see *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.
- If you are migrating from an existing configuration, you can display the old business object declaration in read-only mode. To show the full business object declaration, enter &SHOW_LEGACY_ON in the transaction field and press ENTER. To switch to the current view again, enter &SHOW_LEGACY_OFF and press ENTER.

16.3 Selecting a template, classification or category based on business properties

With the generic property provider, you can define rules that define, which template, classification or category is used for a business workspace. This feature allows for more flexibility for business workspace modeling, based on configuration, different templates, classification or category.

The value of the custom attribute to be added is defined as a unique name. This unique name must be defined in Content Server. For more information about defining unique names, see “[Unique names for OpenText Content Management items](#)” on page 158.



Note: If you use this customizing, the generic property provider needs to be able to access the Content Server to resolve the unique names referenced in the customizing. Therefore, the Content Server user needs read permission on the unique names.

If a user creates or updates a business workspace in the Content Server with reference to an SAP business object, the connection is established with the user defined for connecting to the business application.

For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*

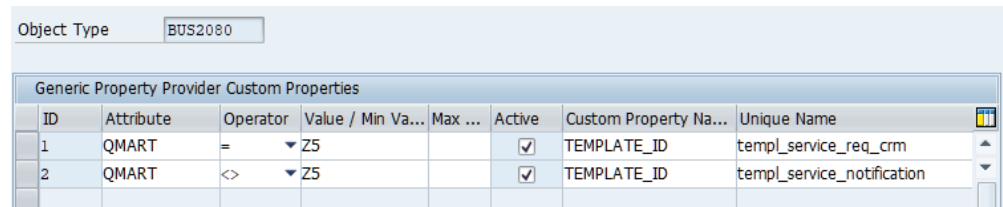
Typically, you define at least two conditions to cover all possible values.

Notes

- The conditions are evaluated from top to bottom. The first condition that is met for a custom property determines the value of the custom property. The next conditions for the same custom property are not processed anymore.
- The logic of minimum and maximum values follows standard SAP rules:

Condition	Actual Value	Test Result
= 3	0003	Fail
= 0003	0003	Success
Between 1 and 9999	0003	Fail
Between 0001 and 9999	0003	Success

Example: Following configuration examples demonstrates the dynamic assignment of a template for the service notification (BUS2080) based on Notification Type (QMART). If the value of QMART attribute is Z5, the template templ_service_req_crm is used. For all other values, the template templ_service_notification is used.



Generic Property Provider Custom Properties								
ID	Attribute	Operator	Value / Min Va...	Max ...	Active	Custom Property Na...	Unique Name	
1	QMART	=	Z5		<input checked="" type="checkbox"/>	TEMPLATE_ID	templ_service_req_crm	
2	QMART	<>	Z5		<input checked="" type="checkbox"/>	TEMPLATE_ID	templ_service_notification	

To define custom properties:

- In the IMG, navigate to the **Business Configuration > Maintain Business Object Declarations** activity and click **Execute** .
- Select a business object declaration from the available list; then double-click **Generic Property Provider Custom Properties** in the **Dialog Structure** area.
- Click **New Entries**.
- Enter the following parameters:

Config ID

Enter a numeric ID. The ID defines the order in which the conditions are processed.

Attribute

Enter the attribute that is used to define the condition.

Operator

Enter the operator. You can use the following operators:

- `=, <, >, <=, >=` to define a value that is equal, greater or less than the value defined in the **Value / Min Value** field.
- Between, Not Between to define a range within which the value is or is not. Enter both a minimum and a maximum value
- Pattern, Not Pattern to define a pattern that is met or is not met, for example `Z*` for all entries starting with Z. Use plus `+` as wildcard for one character and asterisk `*` as wildcard for 0 to n characters.

Value / Min Value

Enter a value or a minimum value, depending on the operator that you use.

Max Value

Enter a maximum value.

Active

Select to make the condition active.

Custom Property

Enter the name of the custom property, for example `TEMPLATE_ID` or `LOCATION_ID`.

Unique Name

Enter the unique name that you defined. The unique name refers to a Content Server item. For more information, see “[Unique names for OpenText Content Management items](#)” on page 158.

-
5. Save your entries.

16.4 Unique names for OpenText Content Management items

OpenText Content Management uses node IDs to refer to OpenText Content Management items, for example for category attributes. When you use category attributes to compose a business workspace name, you use the node ID. This creates problems when moving a configuration from one system to another system, because node IDs are different in different OpenText Content Management systems. To avoid problems here, you define a unique name for a Content Server item like an alias. If you use the unique name in your Content Server configuration, you are independent of the node ID.



Note: After you created all relevant items on OpenText Content Management and before you create the document declarations or policy definitions, you

must define unique names for all OpenText Content Management items that are relevant for your document declarations or policy definitions.

Type	Name	Object	Browse
Appearances			
theme_content_server	Content Server Appearances:EXTENDED_ECM_CONTENT_SERVER	<input type="button" value="Browse"/>	
theme_default	Content Server Appearances:EXTENDED_ECM_CRM_DEFAULT	<input type="button" value="Browse"/>	
theme_sap_tradeshow	Content Server Appearances:EXTENDED_ECM_SRM_SAP_TRADESHOW	<input type="button" value="Browse"/>	
theme_sap_tradeshow_plus	Content Server Appearances:EXTENDED_ECM_SAP_TRADESHOW_PLUS	<input type="button" value="Browse"/>	
General			
templ_service_notification	Content Server Document Templates:Service Notification D7K	<input type="button" value="Browse"/>	
templ_service_req_crm	Content Server Document Templates:Service Request CRM D7K	<input type="button" value="Browse"/>	

16.4.1 Creating unique names

To define a unique name:

1. From the global menu, select **Enterprise > Enterprise Application Integration**.
2. Click **Unique Names**.

The displayed list may already contain unique names that were created during migration or upgrade. Unique names for appearances are sorted in the **Appearances** group, all other unique names are initially sorted in the **General** group. You can delete single entries in these default groups but you cannot delete these two groups.

3. To add a unique name, click the **Add Item** button and then click **Unique Name**.
 - a. Enter the unique name. Maximum length is 26 characters.
Unique names for SAP themes must begin with `theme_`.
 - b. Click **Browse** and navigate to the **Content Server** object that you want to associate with the unique name. Select it.
 - c. Select the group where you want to store the unique name.
 - d. Click **Add**.
4. You alter a unique name using the function menu:
 - a. You can rename a unique name, however you must then change the unique name in all places where it is used.
 - b. You can move a unique name from one group to an other group.
 - c. You can delete a unique name.

 **Notes**

- If you delete a unique name, you must make sure that it was not used anymore.
 - If you delete a unique name group that contains unique names, the unique names are deleted as well.
5. To edit the assignment to a OpenText Content Management item, click **Browse** again.

16.4.2 Creating unique name groups

To create a unique name group:

1. From the global menu, select **Enterprise > Enterprise Application Integration**.
2. Click **Unique Names**.
The displayed list may already contain unique names that were created during migration or upgrade. Unique names for appearances are sorted in the **Appearances** group, all other unique names are initially sorted in the **General** group. You can delete single entries in these default groups but you cannot delete these two groups.
3. To add a group, click **Add Item > Unique Name Group**. Enter a name and click **Add**. You can sort the list by the group name. Unique names within the group are sorted alphabetically.
4. To delete a group, select it and click the **Delete** button .

 **Notes**

- If you delete a unique name group that contains unique names, the unique names are deleted as well.
- If you delete a unique name, you must make sure that it was not used anymore.
- You cannot delete the default groups **General** and **Appearances**.

16.5 Customizing the automatic creation or update of business workspaces in SAP

You can customize OpenText Documentum CM to automatically create or update a business workspace whenever a certain event takes place.

Example: You decided to create a business workspace for each one of your customers. Instead of creating the workspace manually when you created a new customer, you customize OpenText Documentum CM to automatically create a business workspace for each new customer.

For this, you use the SAP *event CREATED* that triggers the creation of a workspace.

In addition to the steps you take to enable manual workspace creation, you must customize the events that trigger the automatic creation.

OpenText Documentum CM provides the following function modules for the automatic update and creation of workspaces. To use the asynchronous queuing, use the respective function module that end with `_ASYNC` or `_ASY`. For more information, see “[Creating business workspaces document asynchronously](#)” on page 162.

- `/OTX/RM_WSC_UPD` or `/OTX/RM_WSC_UPD_ASYNC` function module. This function module updates an existing workspace with the `CHANGED` event. With a `CREATE` event and all other events, the function module either updates the workspace or creates a new workspace if it does not yet exist.
- `/OTX/RM_WSC_UPD_EXISTING` or `/OTX/RM_WSC_UPD_EXISTING_ASYNC` function module. This function module updates an already existing workspace with any event. It does not create a workspace.
- `/OTX/RM_WSC_UPD_SUPERTYPE` or `/OTX/RM_WSC_UPD_SUPER_ASYNC` function module. You can use this function module, if a business object does not have the relevant events.
- `/OTX/RM_WSC_UPD_SUPERTYPE_EXST` or `/OTX/RM_WSC_UPD_SUPER_EXST_ASYNC` function module. This function module updates an already existing workspace that does not have the relevant events. It does not create a workspace.
For more information, see “[SAP: Using change documents for the automatic creation and updates when events are missing](#)” on page 140.
- `/OTX/RMSRM_CL_EVT_UPD` method for SAP SRM. This method creates and updates workspaces in SAP SRM.

For more information about the **Maintain Receiver Module Events** IMG activity, see “[SAP: Linking events to receiver type function modules](#)” on page 132.

16.6 Creating business workspaces document asynchronously

The asynchronous queue for the creation of business workspaces helps you increase system speed and overcome occasional consistency issues.

Use case: Asynchronous creation of business workspaces with SAP events

With the asynchronous queue in place, creation and update requests for business workspaces are queued for asynchronous processing. Usually, the asynchronous process is started by a background job. The process then processes the queue entries and creates or updates business workspaces. If an operation fails, the entry stays in queue with a proper hint until the failure source is remedied.

Use case: Asynchronous mass creation of business workspaces

You use the batch creation reports to create a large number of business workspaces. You can choose to place the creation jobs in the asynchronous queue for processing. For more information see, “[SAP: Creating or updating business workspaces using batch operations](#)” on page 145.

Parallel processing You can use parallel processing for the asynchronous queue. In order to increase speed, you can define that several processes run in parallel for a defined number of items. You can define the settings for the program when you schedule the background job.

Monitoring You can monitor the queue, check errors and re-start a queued item manually. You can also control the queuing process by locking writing to or reading from the queuing database table or locking the process itself. For more information, see “[Setting queue properties](#)” on page 164.

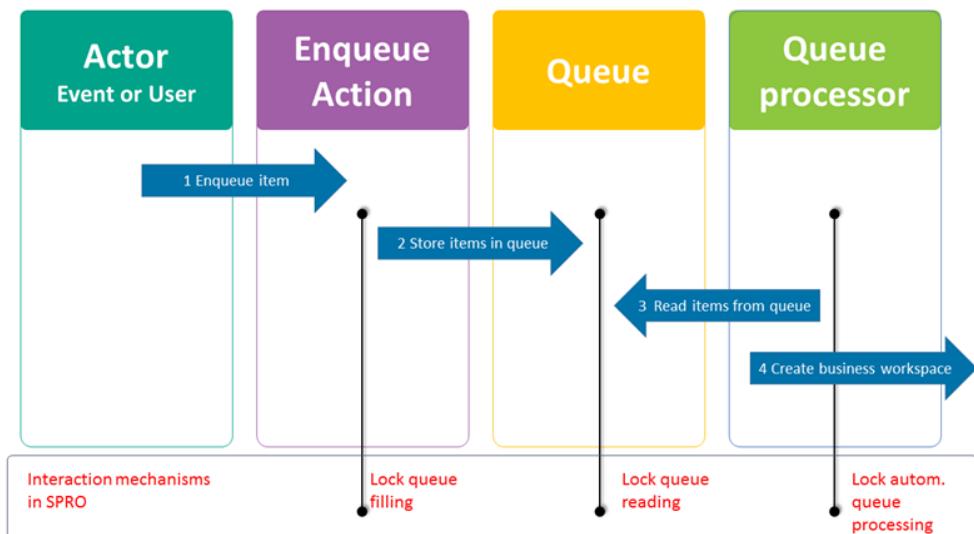


Figure 16-1: Asynchronous queuing for business workspaces

Queue processing

1. An event or a user enqueues items
2. The enqueueing actions stores the items in the queue
Enqueuing can be paused with option **Lock queue filling**.
3. The queue processor reads items from the queue
Reading from the queue can be paused with option **Lock queue reading**.
4. Business processes are being created.
Creating business workspaces can be paused with option **Lock automatic queue processing**.

Processing of the items is either started manually or by a scheduled job.

API functions and function modules

The OpenText Content Management for SAP Solutions contains function modules for Create or Update events to be processed either synchronously or asynchronously. For workspace creation that is not event-based, you can use the new API methods. The API is described in the SDK documentation, which you find in OpenText My Support (https://support.opentext.com/csm?id=kb_article_view&sysparm_article=KB0824884).



Note: OpenText recommends that you first analyze the rate of the workspace creation and update operations and the time one operation consumes. In most cases, the manual queue processing can deliver the best system response time and resource consumption rate. So according to the results of the analysis schedule the queue processing manually to run in periodically.

16.6.1 Setting up asynchronous queueing for event-based creation

OpenText Documentum CM provides function modules that you can use to trigger the creation or update of business workspaces or business documents by an event. To use the asynchronous queue, you must use the dedicated function modules that contain _ASYNC or _ASY in their name.

If you want to process manual workspace creation via the asynchronous queue, you must address the BOR API. For more information, see the SDK documentation, which you find in OpenText My Support.

To use the asynchronous queue for event-based creation of business workspaces:

1. In the IMG, navigate to the **Business Configuration > Maintain Receiver Module Events** activity and click  **Execute**.
2. Configure events with a function module that is designed for the asynchronous queue. For more information, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

Authorizations for the background user (for example WF-BATCH)

- For the /OTX/RM object, for the /OTX/RMACT field, set the value to 03.
- For the J_6NRL_WSC authorization object, for the /OTX/RMWAC field, set the value to 01.

16.6.2 Setting queue properties

To maintain the queue properties:

1. In the IMG, navigate to the **Business Configuration > Maintain Declaration Queue** activity and click  **Execute**.
2. Set the following options according to your requirements:
 - **Lock queue filling:** Writing to the queue is disabled. No more items can be added.
 - **Lock queue reading:** The queue processing background process is disabled. Reading from the queue is disabled and thus, no business workspaces will be created. This attribute is checked regularly by a running background process and if set to true the process quits.
 - **Max processing count:** Number of times an item is processed before it enters the status **Persistent Error**. For more information, see “[Re-processing or deleting failed items](#)” on page 168.
3. Define the settings of the queue processing program /OTX/RM_WSC_Q_CONSUMER_BGJOB.

- a. Start the SE38 transaction.
- b. As program, enter /OTX/RM_WSC_Q_CONSUMER_BGJOB.
- c. Click  **Execute**.
- d. Define the settings:

Number of items to process

Define the number of items to process in total. If the parameter is empty the program runs as long as there are items to process.

Number of items to fetch

Define the number of items that are collected for processing at the same time. Default is 150. Ideally, it is at least the multiplication of the number of processes and the number of items per process. If there are more items in the queue than the defined number, they are collected in a new selection.

Number of items per process

Define the number of items that are processed by each process at the same time. Default is 50.

Use old processing (deprecated)

Only select if you do not want to use the new processing logic. If you select this check box, all other settings are ignored and parallel processing is not possible.

Server group

You can define which server group should process the queue. For more information about parallel processing with asynchronous RFC, see the SAP documentation about parallel processing with asynchronous RFC (for example at http://help.sap.com/saphelp_snc700_ehp01/helpdata/en/22/0425c6488911d189490000e829fbdbd/frameset.htm)

Number of parallel processes

Define the number of processes that run in parallel:

- Number of parallel processes = 0: no parallelization is used at all.
- Number of parallel processes = 1: data fetching runs decoupled from the workspace creation. All request are sent in one web service request according to the number of items per process parameter
- Number of parallel processes >1: data fetching runs decoupled from the workspace creation. The value determines how many web service calls are started in parallel.

-
- e. Save your entries. These settings are used when the program is executed.
 4. Use the SAP background job scheduler (transaction SM36) to plan the queue processing program /OTX/RM_WSC_Q_CONSUMER_BGJOB.
- Select a user with which the business workspaces will be created. This user must have the authorizations defined in “[Setting up asynchronous queueing for](#)

event-based creation” on page 164 and all necessary permissions in Content Server. This user is also the owner of the business workspaces in Content Server.



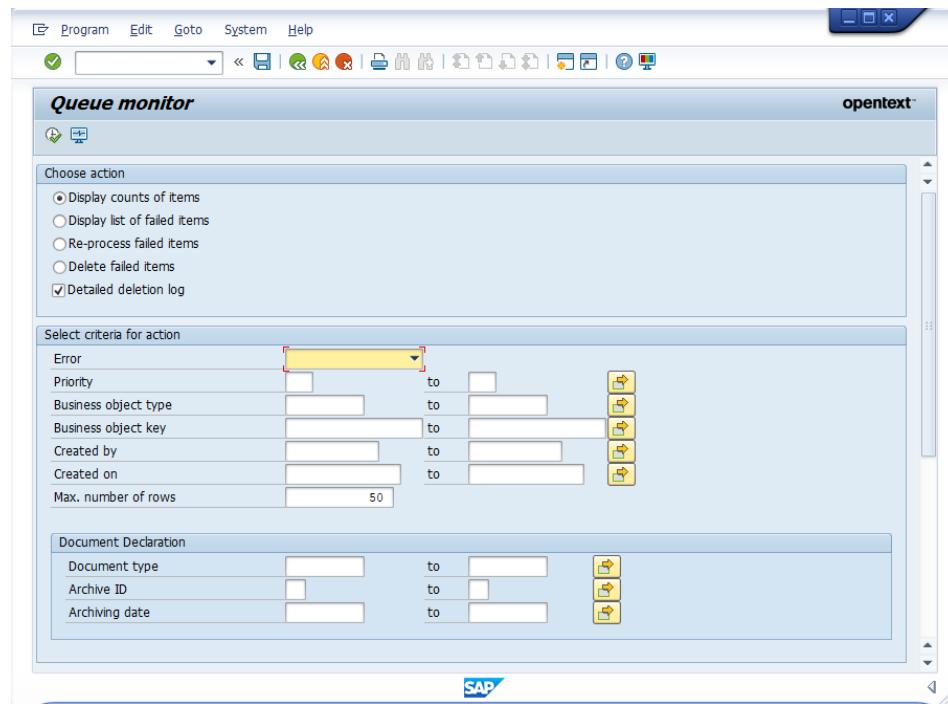
Note: The customizing object of the **Maintain Declaration Queue** IMG activity has Current settings enabled. This way, its settings are excluded from the client lock in a productive client. See also the text help of the **No changes allowed** flag in transaction SCC4.

16.6.3 Monitoring the asynchronous queue

You can view items in the asynchronous queue that failed to process. You can enable the re-processing of the failed items. In a special transaction, you can also view the number range currently in use for the asynchronous queue. However, you do not need to do any customizing here.

To monitor the queue:

1. Start the /OTX/RM_WSC_Q transaction.



2. **Optional** Click **Queue status** to view the current settings of the asynchronous queue and the number of items that are currently processed.
3. Select a an option: either view a simple count of failed items or view a detailed list of failed items. For more information about the other options, see “Re-processing or deleting failed items” on page 168.

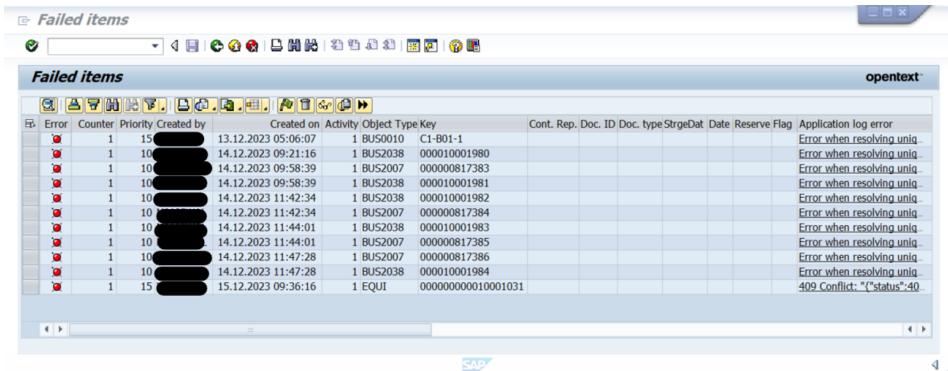
4. Provide filter criteria as required.

In the **Max. Nr. of Displayed Rows** field, enter the number of rows you want to see. You can later browse to the other rows.

The **Created on** field is defined as a DEC counter with 15 characters and 0 decimals using the TSTPS conversion exit. It expects a formatted datetime, that is a date formatted as defined in the user profile followed by a space and a time in 24 Hour Format. Wildcards (*) or (?) are not supported. If only a date is entered, the time 00:00:00 is added by the conversion exit.

Example: 24.12.2023 16:00:00

5. Click  **Execute** to start the report.
6. If you selected **Display list of failed items**, the detailed list displays all failed items, which match your filter criteria.



Error	Counter	Priority	Creator by	Created on	Activity	Object Type Key	Cont. Rep. Doc. ID	Doc. type	StrgDat	Date	Reserve Flag	Application log error
1	15	15	[REDACTED]	13.12.2023 05:06:07	1	BUS0010	C1-B01-1					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 09:21:16	1	BUS2038	000000001980					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 09:58:39	1	BUS2007	0000000817383					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 09:58:39	1	BUS2038	000000001981					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:42:34	1	BUS2038	000000001982					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:42:34	1	BUS2007	0000000817384					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:44:01	1	BUS2038	000000001983					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:44:01	1	BUS2007	0000000817385					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:47:28	1	BUS2007	0000000817386					Error when resolving uniq
1	10	10	[REDACTED]	14.12.2023 11:47:28	1	BUS2038	000000001984					Error when resolving uniq
1	15	15	[REDACTED]	15.12.2023 09:36:16	1	EQUI	00000000000000001031					409 Conflict: {"status":409}

7. Click the link in the **Application log error** column to see more information from the application log.
8. You can view the source objects for failed item:

For a failed business workspace creation, select the item and click  **Display Object** to view the business object

9. To re-process failed items, select one or more rows, then click  **Re-process selected items**.
10. To view further rows, click  **Next items**.

16.6.4 Re-processing or deleting failed items

You can attempt to reprocess items, which failed previously. Failed items receive the status Persistent Error, if they failed several times and reached the number of the maximal processing count, that you entered in the settings. They will not be processed further. For more information, see “[Setting queue properties](#)” on page 164.

To re-process items:

1. Start the /OTX/RM_WSC_Q transaction.
2. Select **Re-process failed items**.
3. Provide filter criteria as required.

In the **Max. Nr. of Displayed Rows** field, enter the number of rows you want to see. You can later browse to the other rows.

4. Click  **Execute** to start the report.
5. To re-process single items, open the detailed list view and select the items there. For more information, see “[Monitoring the asynchronous queue](#)” on page 166.

To delete failed items:

1. In the /OTX/RM_WSC_Q transaction, select **Delete failed items**.
2. Select **Detailed deletion log**.
3. Provide filter criteria. You can, for example, select all items with Error status **Persistent Error**.
4. Click  **Execute** to start the report.

16.6.5 Viewing the number range interval

To view the number range interval for the asynchronous queue:

The asynchronous queue now uses a number range. You can view the current state of the number range interval.

1. Start the /OTX/RM_WSC_Q_NR transaction.
2. Click **Intervals** to view or edit the currently used number.
3. Click **Status** to edit the current number.

16.7 Customizing the Generic Object Services (SAP GUI)

 **Note:** You can open business attachments that are compound documents and display any document they contain.

You can make business workspaces available for users in SAP GUI via Generic Object Services (GOS). The user can then create workspaces in SAP GUI. For this, you customize the GOS table.

 **Tip:** For a detailed description of the *Business Content window*, see *OpenText Archiving and Document Access for SAP Solutions - User Guide (ER-UGD)*.

To customize General Object Services:

1. Start the SM30 transaction, and then enter SGOSATTR in the **Table/View** field. Click **Maintain**.
2. Click **New Entries**.
3. Customize the new entry according to the following list. The OTX_ATTACH service displays the Business Content window: business workspaces and business documents (ArchiveLink documents). From the Business Content window, users can access the complete functionality.

Name of service

Enter OTX_ATTACH.

Description

Provide a description, for example, Business Content. This description is displayed in the GOS menu.

Quick Info

Provide a quick info, for example, Business Content. This information is displayed for the icon.

Class for Generic Service

Enter /OTX/RM_GOS_SRV_ATTACH_LIST.

Service Type

Select **Single Service**.

Icon

ICON_BUSINAV_DATAMODEL



Note: Control and Commit required must remain unselected.

4. You must define the position of the new service in the General Object Services. In the **Next service** field, enter the name of the service that should follow after this service. If the service is the last, leave the field empty.

! **Important**

If you do not define the position correctly, it might not be displayed at all.

- You want to add the new service at the beginning of the existing services: Enter the name of the first existing service in the **Next service** field of the new service.
- You want to add the new service at the end of the existing services: Enter the name of the new service in the **Next service** field of the last existing service. Leave the **Next service** field of the new service empty.
- You want to add the new service in between the existing services: Enter the name of the new service in the **Next service** field of the predecessor of existing services. Enter the name of the successor existing service in the **Next service** field of the new services.

5. Click  **Save**.



Note: For more information about maintaining the SGOSATTR table, see the SAP documentation (<https://www.sdn.sap.com/irj/scn/index?rid=/library/uuid/a0139058-ef9d-2b10-598c-9e23dc6f44fc>).

For problems when displaying services in GOS, see SAP Note 961713 - *Structure of table SGOSATTR*.

16.8 Enabling the integration widget in the Business Content window

In the Business Content window, users can work with business workspaces. You can define separately for each business object type that users see the Create and Complete integration widget (Content Server Smart View) instead of the default view.

! **Important**

- If you want to use the integration widget and if you use Content Server on Microsoft IIS, you must configure detailed errors messages on local and remote requests. For more information, see “[Configuring Microsoft IIS to return meaningful REST API error messages](#)” on page 171.
- If you use SAP GUI for Windows, and if you want to use office editors in the integration widget in Microsoft Edge, you must apply the following SAP Notes:
 - [3260025 - SAP GUI for Windows HTML control based on Edge](#) – to provide access to the COM object through the host object using JavaScript – code changes on SAP application server.
 - [3259070 - SAP GUI for Windows Edge HTML control](#) – accessing properties and methods of native COM objects from webpage JavaScript – lists required SAP GUI for Windows version and patch level.

- If you use SAP GUI for Windows, a new window opened from the integration widget with the **Open Business Workspace in Fullpage** action does not support office editors in Microsoft Edge.

To enable the integration widget (Content Server Smart View):

1. In the IMG, navigate to the **OpenText Content Management for SAP Solutions > Business Configuration > Maintain Business Object Declarations** activity, and then select **Use Widgets for UI** for the business objects for which you want to enable the integration widget in Business Content window, Web Dynpro or CRM UI.
For more information about the activity, see “[Creating a business object declaration in SAP](#)” on page 154.
2. Through authorization object **J_6NRL_WSC**, if users may view the Business Content window in full page view. You may want to disable this option to avoid that users forget to log out properly.
 - a. Run transaction **pfcg** to edit the authorization role.
 - b. In the **J_6NRL_WSC** authorization object, set the **/OTX/RMWAC** field **Business workspace activity** to value **02 Open Business Workspace in Fullpage..**

16.8.1 Configuring Microsoft IIS to return meaningful REST API error messages

Using the default configuration, Microsoft IIS returns a generic error message when interfaces that are based on the Content Server REST API, such as the Content Server Smart View, encounter errors. Presenting a more informative error message to users can aid in troubleshooting any difficulties that they encounter.

Example: With **Detailed errors** enabled, IIS returns a message similar to An item with the name <filename.txt> already exists, but if **Detailed errors** is not enabled, IIS returns only Error: Bad Request (400).

To enable Content Server to display informative error messages when problems occur with Content Server REST API interfaces enabled using Microsoft IIS, OpenText recommends that you enable **Detailed Errors** in Microsoft IIS.

To enable Detailed Errors in Microsoft IIS:

1. Open Internet Information Services (IIS) Manager.
2. On the left, expand the Content Server website, and click the Content Server Application.
3. The default Application name is OTCS.
4. In the middle pane, double-click **Error Pages**.

5. On the right, under **Actions**, click **Edit Feature Settings On the Edit Error Pages Settings**, enable **Detailed errors** in the **Error Responses** section, and then click **OK**.

16.9 Maintaining Content Server subtypes as copy/move target in the Business Content window

In the Business Content window, users can copy or move documents or other items from one location to another location in Content Server. However, if you are using custom Case subtypes and you want to copy or move documents to these custom Case subtypes you must do the following SAP customizing.

All Content Server items that can be targets for a copy/move operation are maintained in the `/OTX/RM_STWL` table. This table is part of OpenText Documentum CM and it is filled with a predefined set of subtypes. The new table `/OTX/RM_STWL_C` is available to maintain new entries.

! **Important**

As soon as `/OTX/RM_STWL_C` has one entry, the `/OTX/RM_STWL` is not used anymore. If you intend to use `/OTX/RM_STWL_C`, you must copy the entries of `/OTX/RM_STWL` into the custom table.

To maintain custom Case subtypes for copy/move operations:

1. Copy all entries from the `/OTX/RM_STWL` table to the **Subtype** column of the `/OTX/RM_STWL_C` table.
 - a. Start transaction `SE16`, and then open `/OTX/RM_STWL`.
 - b. Start transaction `SM30`, and then open the maintenance view of the `/OTX/RM_STWL_C` table.
 - c. Copy all entries from `/OTX/RM_STWL` into the clipboard. You can use **CTRL + Y** to copy several rows.
 - d. Copy the rows into the **Subtype** column of the `/OTX/RM_STWL_C` table.
 - e. Add the connection ID for which the subtype is valid.
2. Add a new entry for your new Case subtype:
 - **Conn. ID:** Connection ID. You find this information in the **IMG > OpenText Content Management for SAP Solutions > Infrastructure > Maintain OpenText Content Management Connections**. For more information, see *OpenText Documentum Content Management for SAP Solutions - Installation Guide (EESPDC-IGD)*.
 - **Subtype:** ID of the Case subtype. You find this information in the **OpenText Content Management Administration > Template Workspaces Administration > Administer Case Types**. The subtype ID of a Case is a positive integer between 31350 and 31399. For more information, see the **OpenText Content Management** online help for this administration page.

Chapter 17

Integrating OpenText Content Management for SAP Solutions into SAP Fiori apps

You can make business documents available in SAPUI5 apps. These can be either your own custom apps or SAP Fiori apps based on SAPUI5. The documents are displayed in a custom tile or can be navigated to in cross-app navigation. There may be some ambiguity in terminology, because a “Fiori app” could be one of the following:

- An SAP Fiori app as delivered by SAP. For a list of all apps, see <https://fioriappslibrary.hana.ondemand.com>.
- An SAPUI5 app following the SAP Fiori Design Guidelines
- Any browser app hosted on an SAP Fiori Launchpad server.

In any case, the techniques presented in this chapter refer to apps implemented with SAPUI5 and typically hosted on an SAP Fiori Gateway server with SAP Fiori Launchpad. For information on how to integrate DocuLink UIs into SAP Fiori Launchpad, see “[Customizing the Fiori Launchpad for the OpenText Test Launcher](#)” on page 175.

17.1 SAP Fiori architecture

SAP Business Suite or S/4HANA features an ABAP engine for transactional applications. Backend application artifacts and application content are stored in the backend database.

In addition, the UI apps are deployed on a central SAP ABAP NetWeaver server, which also contains the UI Service Add-on for the shell services and the Gateway Add-on for the OData enablement of the ABAP-based Suite system.

Fiori apps are created using HTML5 and SAPUI5. For some extensions, the underlying jQuery JavaScript library may be used. All supported form factors and operating systems are supported with one development project and a single code line per user interface app.

17.2 Integration of OpenText products

SAP Fiori integrations are, for example, available for the following products:

- OpenText™ Content Management for SAP® Solutions
- OpenText™ Document Presentment Live for SAP® Solutions

For more information, see *OpenText Document Presentment Live for SAP Solutions - Customizing Guide (CCMSAPL-CGD)*.

Additional resources

- Release notes for Archiving and Document Access for SAP Solutions (<https://knowledge.opentext.com/knowledge/lisapi.dll/Overview/67835278>)

17.3 Understanding the customizing for a Fiori integration

Embedded deployment is recommended for SAP S/4HANA. The following steps are relevant to enable the Content Management for SAP functionality in the different systems:

Prerequisites

- You have installed and configured the SAP Fiori system landscape. For more information about the system landscape, see SAP Help Portal at SAP Fiori Deployment Options (https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE/22bbe89ef68b4d0e98d05f0d56a7f6c8/4d0feecb64fe49ccbe45c3361e71b7c4.html?locale=en-US).
- SAPUI5 version as stated in the Release Notes.
- You have done the initial configuration of SAP Gateway.

! **Important**

The connection between the backend system and the frontend system must be configured as a trusted connection.

- You have set up the SAP Fiori infrastructure.

For more documentation, see the SAP Help Portal at <https://help.sap.com>:

- Search for **SAP Fiori Implementation Information** and then open the guide for your SAP release
- Search for **UI Technology Guide for SAP S/4HANA** and then open the guide for your SAP release.

The following steps are relevant to enable the Archiving and Document Access for SAP Solutions functionality in the different systems:

Table 17-1: Installation and configuration steps in the different systems

Step	System	Additional information
Installation of OpenText Content Management for SAP Solution Foundation package OTCMFND	SAP S/4HANA (backend system)	Requires installation packages OTEXBAS and OTEXBASF
Installation of OpenText Content Management for SAP Solution Foundation package OTCMFND	SAP S/4HANA (frontend system)	SAP FIORI FES 2023 for S/4HANA or later
Setting up the SAP Fiori Launchpad	SAP Gateway system (frontend system)	SAP Help Portal https://help.sap.com . Search for Setting Up the Launchpad and open the guide for your SAP release.

For more information, see SAP Help Portal at <https://help.sap.com>, search for the topic below and open the guide for your SAP release:

- SAP Fiori Overview

After you have enabled the functionality in general, further steps are necessary to integrate a specific application.

17.4 Customizing the Fiori Launchpad for the OpenText Test Launcher

OpenText Test Launcher /OTX/RMF_LAUNCH is a test application. You can use it to test the integration of OpenText Documentum CM in the Fiori Launchpad. It is contained in the ABAP Add-On OTEXBASF of Archiving and Document Access for SAP Solutions.

Configuration overview

- The application comes with its OData services. You check if they are available after installation and activate them if necessary.
- In the Fiori Launchpad, users work with their apps. You configure the Fiori Launchpad to show the OpenText Test Launcher for relevant users such as administrators who test the integration. For this, you create a tile catalog and a tile group.
- The application is displayed in a tile. The tile is configured to show a specific navigation target with a defined semantic object.
- The PFCG role defines, which users can access a specific tile catalog and tile group. For the test user, you define a specific role and assign a catalog and a group to it.

17.4.1 Frontend: Adding the OData services

The OData services are typically installed on the backend system, and you add them as external services on the frontend system. If the OData services are not added yet, you add them in the **Activate and maintain services** transaction.

To add the OData service:

1. Start the **Activate and maintain services** (/IWFND/MAINT_SERVICE) transaction.
2. Click **Add Service**.
3. Enter the system alias of your backend system.
4. In the **Technical Service Name** field, enter the technical name of the relevant OData services. The following services are relevant:
 - 5. In the **Version** field, enter 1.
 - 6. Click **Get Services**.
 - 7. Click **Add Selected Services**.
 - 8. Enter a technical name for the service in your customer namespace.
 - 9. Assign a package or click **Local Object**.
 - 10. Click **Execute** to save the service.
 - 11. On the **Activate and maintain services** screen, check if the system alias is maintained correctly. If not, delete the alias and add the correct one.

17.4.2 Frontend: Activating the ICF services

Check if the relevant services are already activated. If not, activate them.

To activate the ICF service:

1. On the frontend server, start transaction **Maintain Services (SICF)**.
2. Click  **Execute**.
3. Navigate to **default_host > sap > bc > ui5_ui5 > otx**.



4. Activate the following services:

- `rmf_launch` for the Test Launcher

To activate the service select it and on the menu, click **Service/Host > Activate**.

17.4.3 Frontend: Configuring the launchpad navigation

The navigation between launchpad applications is based on *intents*. Intents are abstract representations, which are resolved to specific navigation targets.

Each application within the launchpad has a resource locator (URL) by which it can be loaded. Instead of encoding the technical name of the target application into the URL hash, the launchpad performs an redirection through the intent.

You must configure the application targets in the target mapping as a combination of a semantic object and an action mapped to the navigation target. Since target mappings are assigned to users as part of a catalog, they are assigned to PFCG roles. An intent is independent of a role, therefore it can be resolved differently based on the role of the user that triggers the navigation.

For more information, see also “[Using intent-based navigation](#)” on page 184.

Prerequisites for customizing navigation

- The user who performs the customizing must be assigned the composite role `SAP_UI2_ADMIN` or its related sub roles, and the `SAP_UI2_USER_700` role.

Table 17-2 list all values that are needed in different configuration contexts. Define meaningful values and make a note of them as you need them later in the process.

Table 17-2: Sample Values for Navigation

Object	Action or Tool	Value	Needed later for
Semantic object	SAP Netweaver > UI Technologies > SAP Fiori > Adding Apps to SAP Fiori Launchpad > Define Semantic Objects	For example <code>ZZXECM_SO</code>	Defining target mapping, defining the tile
Catalog	Launchpad Designer > Catalog > Add catalog	OpenText Content Management Catalog, <code>XECM_TEST_CAT</code>	Defining the PFCG role
Tile	Launchpad Designer > Catalog > Tiles > Create	Title: OpenText Test Launcher	Defining the group

Object	Action or Tool	Value	Needed later for
Group	Launchpad Designer > Add Group	OpenText Content Management Group, XECM_TEST_GROUP	Defining the PFCG role

17.4.3.1 Defining a semantic object

The semantic object is used later when you configure the target mapping for the tile catalog.

To define a semantic object:

1. In the IMG, navigate to the **SAP Netweaver > UI Technologies > SAP Fiori > Configuring Launchpad Content > Adding Apps to SAP Fiori Launchpad > Define Semantic Objects for Navigation** activity and click Execute.
2. Click **New Entries** and add a semantic object, for example ZZXECM_SO.
3. Enter a semantic object name and a semantic object description.
4. Click Save.

The navigation target is defined in the LPD_CUST transaction. There, you create a new launchpad and add applications to it. Alternatively, you can add the OpenText Test Launcher application to an existing launchpad, for example, if you already have a launchpad for testing.

17.4.3.2 Defining catalogs, target mapping, groups and tiles

In the SAP Fiori Launchpad Designer, you define the following:

- A catalog that contains target mapping, groups and tiles. Later, you assign the catalog to the PFCG role.
- A target mapping for the catalog. For each application you define an intent (semantic object) and a target (defined by the launchpad).
- A tile for each of your apps, for example the OpenText Test Launcher.
- A group within the catalog. Later, you assign the group to the PFCG role.
You can add tiles to the group.

To start the Launchpad Designer:

- in the IMG, navigate to **SAP Netweaver > UI Technologies > SAP Fiori > Configuring Launchpad Content > Adding Apps to SAP Fiori Launchpad (Using SAP Fiori Launchpad Designer > Configure Target Mappings and Tiles > SAP Fiori Launchpad Designer (Current Client))**. Alternatively, start the /UI2/FLPD_CONF (cross-client) or /UI2/FLPD_CUST (client-specific) transaction.



Note: Maintain catalogs and groups either only in current client or only across clients. Maintaining catalogs and groups mixed in current client and across clients can lead to inconsistencies.

To create a catalog:

1. In the Launchpad Designer, on the **Catalogs** tab, in the footer, click **+ Add**.
2. Add a title, for example OpenText Content Management Test, and an ID, for example XECM_TEST_CAT.
3. Click **Save**.

To define target mapping:

1. In the new catalog, click **Target Mapping**.
2. In the footer, click **Create Target Mapping**.

Device Types:	<input checked="" type="checkbox"/> Desktop	<input checked="" type="checkbox"/> Tablet	<input checked="" type="checkbox"/> Phone			
Parameters:	<input checked="" type="checkbox"/> Name	Mandatory	Value	Is Regular Expression	Default Value	Target N...
	<input checked="" type="checkbox"/> SalesOrder	<input type="checkbox"/>		<input type="checkbox"/>	kp	

3. Define the following in the **Intent** section:

- **Semantic Object:** Enter the ID of the semantic object that you defined previously, for example ZZXECM_SO

- **Action:** Define a unique name in the context of the semantic object, for example launcher.
4. Define the following in the **Target** section:

Application Type	SAPUI5 Fiori App
Title	for example, Business Documents
URL	/sap/bc/ui5_ui5/otx/rmf_launch
Component	otx.ecmlink.launcher
Title	Enter a meaningful title, for example, Business Documents.
Component	otx.ecmlink.launcher

To create a tile:

1. In the catalog, click **Tiles** to open the list of tiles.
2. In the footer, click **Create**
3. Enter at least the following:
 - **Title and Subtitle:** Enter the titles of the tile that are displayed for the user.
 - **Icon:** Specify an icon that is displayed in the tile.
 - **Use semantic object navigation:** Select.
 - **Semantic Object:** Enter the ID of the semantic object that you defined previously, for example ZZXECM_SO.
 - **Action:** Define a unique name in the context of the semantic object, for example launcher.
4. Click **Save**.
5. Click the **Back** arrow to return to the catalog.

To create a group:

1. In the Launchpad Designer, on the **Groups** tab, in the footer, click **+ Add**.
2. Define the following:
 - **ID:** Enter an ID, for example XECM_TEST_GROUP. You use this ID later when defining the PFCG role.
 - **Title:** For example OpenText Test Group
3. Click **Save**.
4. To add tiles to the group, click **+ Add Tile**
5. Click the search icon. In the window, enter the title of the tile that you defined before, for example OpenText Test Launcher and filter the list for it.

6. The catalog list displays all catalogs that contain the tile. Click the catalog.
7. In the list of contained tiles, select the tile that you want to add, for example **OpenText Test Launcher**.
8. Click the **Back** arrow to return to the group.

17.4.4 Frontend: Configuring access

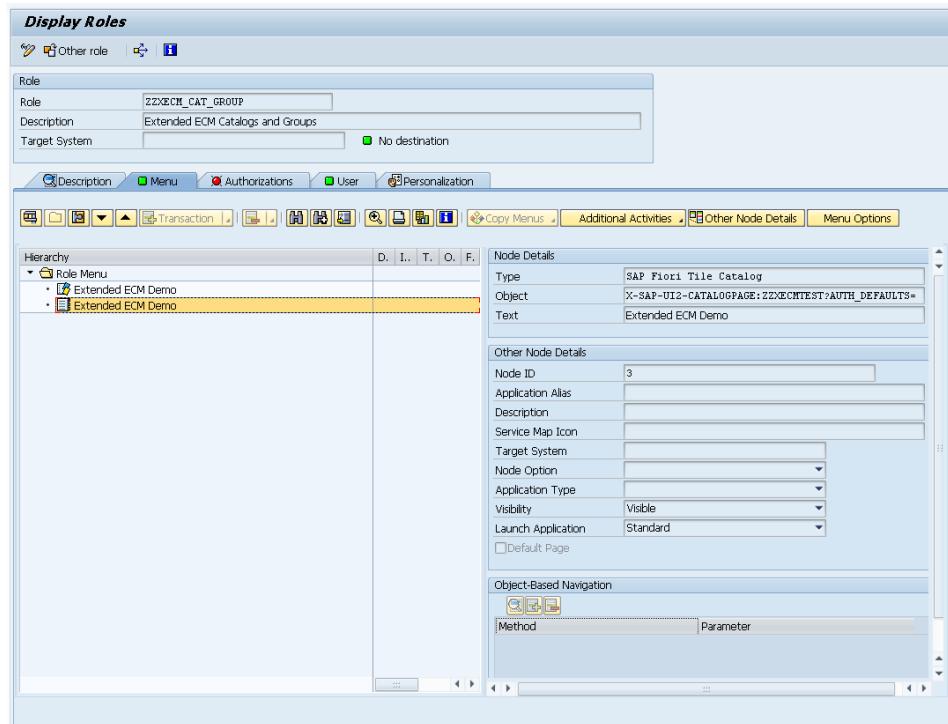
To grant the users access to the application, you create a new single role and do the following:

- Add the catalog and group that you created before to the role menu.
- Add Start authorizations for the OData services
- Assign users to the role.

After creating the role you assign it to the users.

To create a role for the Test Launcher:

1. Start the PFCG transaction.
2. Create a new single role and open the **Menu** tab.
3. On the **Menu** tab, open the menu of the button for adding objects (probably labeled **Transaction**), and click **SAP Fiori Tile Catalog**. Select or enter the following:
 - **Catalog Provider: Fiori Launchpad Catalogs**
 - **Catalog ID:** ID of the group created before, for example XECM_TEST_CAT



4. On the **Menu** tab, open the menu of the button for adding objects and click **SAP Fiori Tile Group**.
 5. In the **Assign Group** window, enter the following:
 - **Group ID:** ID of the group created before, for example XECM_TEST_GROUP
 6. On the **Menu** tab, open the menu of the button for adding objects and click **Authorization Default**.
 7. In the **Service** window, in the **Authorization Default** list, click **Tadir Service**. Specify the following values:
 - **Program ID:** R3TR
 - **Object Type:** IWSG
 8. In the table, enter the name of the OData service you have activated. Enter the name as follows: technical name_<four-digit version number with leading zeros>:
 - . Relates to the OData services of Fiori control for business documents of Archiving and Document Access: ZALDS_ODATA_SRV_0001.
 9. On the **User** tab, assign the role containing the catalogs, groups, and OData start authorizations to a user by specifying the user ID.
- Thereby, the user has UI access to the apps in the catalogs and the start authorizations for the respective OData services on the frontend server.

10. On the **Authorization** tab, click the button next to **Profile Name** to generate the authorization profile for the role.
11. Click **Change Authorization Data**, and then **Generate**.

17.4.5 Backend: Configuring access

To grant the users access to the application on backend, you create a new single role and do the following:

- Add Start authorizations for the OData services
- Assign users to the role.

After creating the role you assign it to the users.

To create a role for the backend:

1. Start the PFCG transaction.
2. Create a new single role and open the **Menu** tab.
3. On the **Menu** tab, open the menu of the button for adding objects and click **Authorization Default**.
4. In the **Service** window, in the Authorization Default list, click TADIR Service. Specify the following values:
 - **Program ID:** R3TR
 - **Object Type:** IWSV
5. In the table, enter the name of the OData service you have activated. Use the F4 value help to get the name in the correct spelling

/OTX/RM_WSC_ODATA_SRV	0002
/OTX/ALDS_ODATA_SRV	0001
This relates to the OData services of Fiori control for business documents of Archiving and Document Access.	

6. On the **Authorization** tab, click the button next to **Profile Name** to generate the authorization profile for the role.
7. Click **Change Authorization Data**, and then **Generate**.

The following authorization objects are used:

- S_RFC: Activity=16; RFC_NAME=/IWBEPM/FGR_MGW_CLIENT_IF, SYST*; RFC_TYPE=FUGR
- S_RFCACL: ACTVT=16; RFC_EQUSER=Y; all other values = * or a more restricted value, if necessary

After you have edited the authorization data, click Save and then Generate.

8. On the **User** tab, assign the role containing the catalogs, groups, and OData start authorizations to a user by specifying the user ID.

17.5 Using intent-based navigation

With the intent-based navigation mechanism, you can call applications in different views or modes depending on the runtime parameters and roles of the user. Rather than encoding the name of the target app into the URL fragment, you can provide a navigation intent.

The SAPUI5 functions for intent-based navigation can also be implemented in your own custom app. Furthermore, the SAPUI5 functions `sap.ui.comp.navpopover`, `SmartLink` and `sap.ui.comp.navpopover.NavigationPopoverHandler` make use of target mappings and semantic navigation.



Note: If you followed this guide, you have already created intent-based navigation for the OpenText Test Launcher. This section explains how to configure intent-based navigation especially for OpenText apps for business documents.

For more information, see “Frontend: Configuring the launchpad navigation” on page 177.

The screenshot shows the SAP Fiori application 'Manage Sales Orders'. At the top, there is a search bar and a 'Manage Sales Orders' dropdown. Below the header, there is a filter section with fields for 'Sales Order', 'Sold-To Party', 'Customer Reference', 'Requested Delivery Date', 'Overall Status', and 'Document Date'. There are also 'Adapt Filters' and 'Go' buttons. The main area displays a list of sales orders. A context menu is open over the first item in the list, which has the number '823'. The menu includes options like 'Sales Order', 'Reject All Items', 'Set Delivery Block', and 'More Links'. The 'More Links' option is highlighted. The list shows three items: '823' (selected), '822', and '821'. Each item has details like 'Net Value: 351,00 USD' and 'Document Date: 12.07.2019'.

Figure 17-1: Intent-based navigation with Smart Link

Figure 17-1 shows the standard SAP app “Manage Sales Orders” with intent-based navigation using SmartLink. It lists link targets of the semantic object SalesOrder. You are free to add your own target mappings in the customizing of the Fiori Launchpad Content.

Intent-based navigation can be leveraged in SAP Fiori Elements-based apps:

- In some SAP Fiori Elements applications, the **Related Apps** button is already enabled: only configuration in the Fiori Launchpad Content is required.
- Many SAP Fiori Elements apps use smart fields with UI annotations or the `@Consumption.semanticObject`, which automatically creates SmartLink controls at runtime: only configuration in the Fiori Launchpad Content is required
- Even if metadata extensions are not allowed, new attributes may be appended to an existing Core Data Services (CDS) view, this way allowing to use annotations.

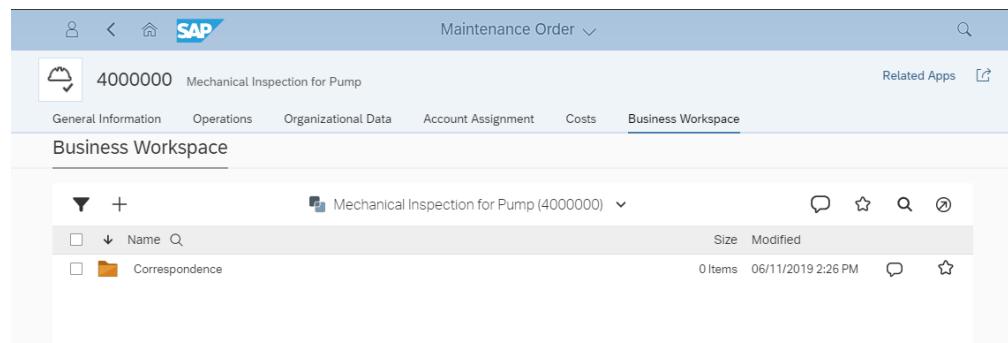


Figure 17-2: Intent-based navigation with Fiori Elements

Further reading:

- Intent-based Navigation on the SAP Help Portal (<https://help.sap.com/viewer/52715f71adba4aaeb480d946c742d1f6/2.0.01/en-US/5ff538515a2a455696f9c203939d9360.html>).
- Guided Answers - How to extend Fiori elements apps (<https://ga.support.sap.com/dtp/viewer/index.html#/tree/1910/actions/24709>)

Many SAP delivered apps already use SmartLink, RelatedApps or a similar navigation function. Then you only need do some customizing. This guide shows examples for the following approaches:

- SAP Fiori Elements-based apps: “Example: “Sales Order” app for S/4HANA” on page 189.
- Older apps not based on SAP Fiori Elements: “Example: “Manage Journal Entries” app” on page 190.

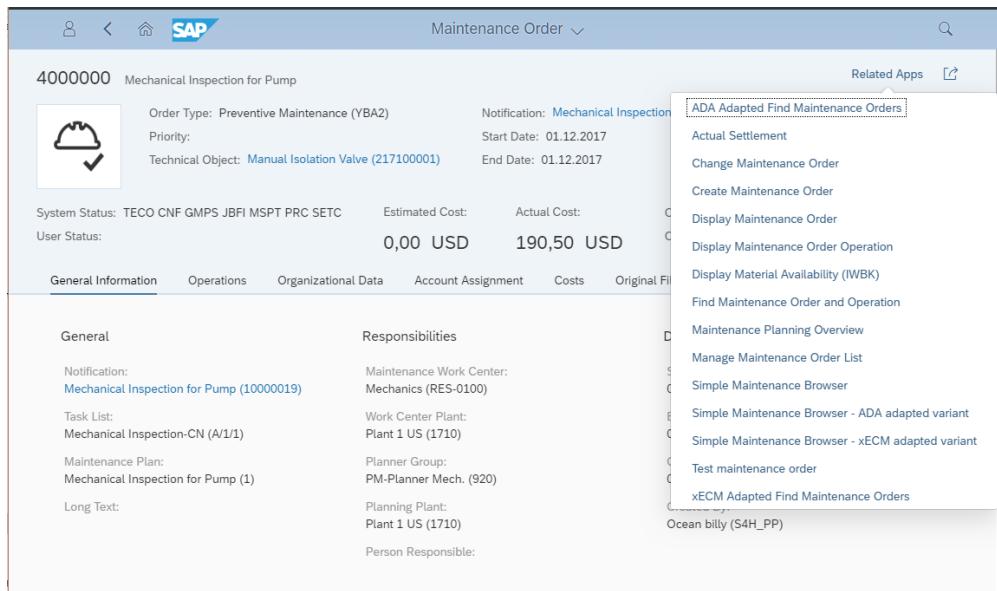


Figure 17-3: Intent-based navigation with Related Apps

For a distinct business object, for example a sales order, a semantic object `SalesOrder` is used to make a list of actions available. For this, SAP already defined several target mappings in Fiori UI tile catalogs. If the corresponding authorization role is assigned to a user, the user can see and use the target mapping.

As each target mapping allows to map URL parameters, a specific parameter as `SalesOrder` can be mapped to a parameter, like `kv1`.

17.5.1 Customizing intent-based navigation for business documents

This section explains the basic steps to create an intent-based navigation for business documents on the SAP Fiori Launchpad:

To customize intent-based navigation:

1. Semantic object

Choose an existing semantic object, for example `SalesOrder`, or alternatively, create a new semantic object:

- In the IMG, navigate to **SAP Netweaver > UI Technologies > SAP Fiori > Configuring Launchpad Content > Adding Apps to SAP Fiori Launchpad > Define Semantic Objects for Navigation**.
- Create a new semantic object, for example, `ZZMySalesOrder`.

2. Catalog

In the Launchpad designer select a catalog or create a new one:

- a. To launch the Launchpad Designer, in the IMG, navigate to **SAP Netweaver > UI Technologies > SAP Fiori > Configuring Launchpad Content > Adding Apps to SAP Fiori Launchpad (Using SAP Fiori Launchpad Designer) > Configure Target Mappings and Tiles > SAP Fiori Launchpad Designer (Current Client)**. Alternatively, you can directly open the URL to the Launchpad Designer in your browser, if you bookmarked it.

- b. Click the **Create Catalog** button.
- c. Enter **Title** and **ID** for the new catalog and click **Save**.

3. Target Mapping

Create a new target mapping:

- a. Click the **Target Mapping** icon  in the header bar.
- b. Click **Create Target Mapping** in the footer bar.
- c. Provide the following information to define a new target mapping for business documents:

Intent – Semantic Object	ID of the semantic object, for example, SalesOrder
Intent – Action	businessdocuments
Target – Application Type	SAPUI5 Fiori App
Target – Title	Enter a meaningful title, for example, Business Documents.
Target – URL	Enter the relative ICF URL of the Fiori app /sap/bc/ui5_ui5/otx/alf_doc_ui for business documents
Target – Component	otx.alplus.documents for business documents

- d. In the area **Device Types** select the **Desktop**, **Tablet**, or **Phone** checkboxes.
- e. In the **Parameters** table of the target mapping, set the real key parameter of the app, for example **kv1** in the target name of a parameter name like **SalesOrder**. Use the default value of parameter **SapObject** to predefined the BOR object type. And use a default value for parameter **kp** to predefined the concatenation and formatting of key values.

4. Role

Start the **PFCG** transaction to create a role, which can use the catalog, that contains the target mappings.

Now the new target mappings can be access with the URL's like:

- Business Documents app:

`http://frontend01.sapcustomer.com:8000/sap/bc/ui5/ui5/ushell/shells/abap/FioriLaunchpad.html#SalesOrder-businessdocuments`

The Business Documents apps require the startup parameters `SapObject` and `ObjectId` or `SapObject`, `kp` and `kv1`, `kv2`, ... to define the SAP BOR object instance for which the business documents or business workspace are displayed.

For the example of SAP business object type `BUS2032` and object ID `0000011660` the intent-based URL's with parameters look like:

- Business Documents app:

```
http://frontend01.sapcustomer.com:8000/sap/bc/ui5/ui2/ushell/shells/abap/
FioriLaunchpad.html#SalesOrder-businessdocuments?
SapObject=BUS2032&objectId=0000011660
```

Notes

Application parameter length

The application parameter length including `SemanticObject/Action` should not exceed 512 bytes when serialized as UTF-8.

Security

The transfer of the SAP business object type and SAP business object ID are not security critical: The OData services of Archiving and Document Access for SAP Solutions check the user's authorization to see contents of the business documents or call services, which do such an authorization check. The business object ID does not reveal any specific data.

As mentioned above, the Archiving and Document Access for SAP Solutions applications perform no sanity check of the values entered for SAP business object type and object ID.

What happens with mistakenly added or used data, for example, `?SapObject=BUS2032&objectId=11660`?

- If the user can do so on the OpenText Content Server, a business workspace with this reference can be created. Any data or files added to this business workspace are not lost because they are stored on the Content Server. In the case any business data shall be transferred, like category attributes filled by a property provider, the mistake can be discovered.
- If the user can add documents with the wrong object ID to ArchiveLink, then data is not lost. In the case, such wrongly assigned data is discovered, it can be still moved to link entries with the correct object ID.
- The `kv1`, `kv2`, ... and `kp` parameter can be used to map to more than one key value.

Cellphone Integration – If the **Phone** checkbox under **Device Types** is selected, the target mapping is also available on cellphones. OpenText offers OpenText Content Management Mobile for Android phones and iPhones.

The component `ctx.ecmlink.businessworkspace_cc` for business workspaces supports the convenience parameter `mobileOpenDirectly`. The behavior is as follows:

- `mobileOpenDirectly` has no effect on Desktop or Tablet devices. You do not require an extra target mapping for phone devices only.

- If `mobileOpenDirectly` is set to `false` or omitted, and the app runs on an Android phone or iPhone, then the integration widget on the Content Server takes over, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.
- If `mobileOpenDirectly` is set to `true`, and the app runs on an Android phone or iPhone, then OpenText Content Management Mobile opens directly if it is installed. If the business workspace does not exist, the redirect is disabled. If OpenText Content Management Mobile is not installed, Google Play or App Store opens. `mobileOpenDirectly=true` does this without loading the integration widget from Content Server.

17.5.2 Example: “Sales Order” app for S/4HANA

The SAP Fiori Elements app **Sales Order FactSheet** with app ID F1814 and predefined intent `SalesOrder-displayFactSheet` has functions like a list of related apps. In this case, all links of related apps are called in the following way:

- The intent (target mapping) belongs to semantic object `SalesOrder`
- The user needs to be authorized to use the target mapping
- When calling the intent, the parameter `SalesOrder=(integer)`, for example `SalesOrder=2` is added.

Configure the following:

Catalog	For this example, you can create your own Fiori UI catalog in the Fiori Launchpad Designer.
Authorization role	Use the PFCG transaction to create an authorization role to expose the target mappings of your catalog to users.
Intent – Semantic Object	<code>SalesOrder</code>
Intent – Action	<code>displayMyBusinessDocuments</code>
Target – Source of Navigation Target	SAPUI5 Fiori App
Target – Title	For example, Display Sales Order Business Documents
Target – URL	<code>/sap/bc/ui5_ui5/otx/alf_doc_ui</code>
Target – Component	<code>otx.alplus.documents</code>

Parameters

Name	...	Default Value	Target Name
<code>SalesOrder</code>			<code>kv1</code>
<code>SapObject</code>		<code>BUS2032</code>	

Name	...	Default Value	Target Name
kp		010i	

With this configuration, an action with the title “Display Sales Order Business Documents” will be available in the list of related apps and at other areas, where actions for **SemanticObject = SalesOrder** are used.

Important

The combination of semantic object and action must be unique.

Intent-based navigation lies in the mapping of one or more parameters for key values as populated by the calling app to the list of key values **kv1**, **kv2**. The default value for **SapObject** is set to BOR object type **BUS2032**. And the value of **kp** is used to set the leading zeros of the 10 digits long BOR-key.

17.5.3 Example: “Manage Journal Entries” app

The SAP Fiori **Manage Journal Entries** app with app ID F017 and predefined intent **AccountingDocument-manage** is an older app, which is not yet based on SAP Fiori Elements, but already uses smart functions like `sap.ui.comp.navpopover.SmartLink` related to semantic object **AccountingDocument**.

The links are called in this way:

- The target mapping belongs to the semantic object **AccountingDocument**
- The user needs to be authorized to use the target mapping
- When calling the intent, the parameters **CompanyCode**, **FiscalYear** and **AccountingDocument** are filled.

In this example, you can create your own Fiori UI catalog in the Fiori Launchpad Designer. Use transaction PFCG to create an authorization role to expose the target mappings of your catalog to users.

A target mapping may then look like:

Name	...	Default Value	Target Name
CompanyCode			kv1
AccountingDocume nt			kv2
FiscalYear			
SapObject		BKPF	
kp		04i_010i_04i	

Then an action with the title “Display Accounting Business Workspace” will be available in the list of related apps and at other areas, where actions for **SemanticObject = AccountingDocument** are used.

! **Important**

The combination of semantic object and action must be unique.

Intent-based navigation lies in the mapping 1 or more parameters for key values as populated by the calling app to the list of key values **kv1**, **kv2**, **kv3**, ... The default value for **SapObject** is set to BOR object type **BKPF**. And the value of **kp** is used to concatenate the three sorted and formatted values as expected for BKPF:

1. CompanyCode with a length of 4 and leading zeros.
2. AccountingDocument with a length of 10 and leading zeros.
3. FiscalYear with a length of 4 and leading zeros.

17.5.4 Example in a custom app

You can extend a leading SAPUI5 (Fiori) app to call the Business Documents apps with their intent-based URLs.

In the case of a freestyle SAPUI5 app, you implement either directly in the original app or extend the app.

The main difference is that the apps are not integrated as single UI elements, but are called via link as other apps.

Recommended readings:

- SAP Fiori Launchpad for Developers - Architecture Overview (<http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/a0b41949-b803-3210-6bba-dc97da1ac623?QuickLink=index&overridelayout=true&59511067181158>)
- SAP Fiori Launchpad for Developers - Navigation Concepts (<http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/907ae317-cb47-3210-9bba-e1b5e70e5c79?QuickLink=index&overridelayout=true&59575491523067>)
- See also class `sap.ushell.services.CrossApplicationNavigation` for a description of methods.
- In the case SAP Fiori Elements-based apps this navigation concept of app to app navigation can also be used. But then, it may be more elegant to use UI annotations, instead.

Below is a code snippet to give you an idea how this integration method can be used programmatically:

```
/*
 * Your application needs the right ID's
 * of the semantic object and action
 * Here the values are referring to the
 * target mapping definition which was
 * defined for the xECM business workspace app
 * in the previous chapter
 */
```

```
var sSemanticObject = "ZZXECM_SO";
var sAction = "businessworkspace";
/*
 * Your application needs to calculate the
 * parameters in the right format
 */
var sSapObject = "BUS2032";
var sObjectId = "0000011660";

if (sap.ushell && sap.ushell.Container) {
    // your

    var oCrossApplicationNavigation =
        sap.ushell.Container.getService("CrossApplicationNavigation");
    /* Navigate to the external target
     * of our xECM business workspace app
     */
    oCrossApplicationNavigation.toExternal(
        {
            target:
                {
                    semanticObject : sSemanticObject,
                    action: sAction
                },
            params :
                {
                    SapObject : sSapObject,
                    ObjectId : sObjectId
                }
        }
    );
}
```

17.5.5 Starting a workflow from the integration widget in a Fiori app

You can configure Content Server Workflow to be started from the integration widget in a Fiori app.

To configure a Content Server workflow for usage in a Fiori app:

1. Design your workflow in Content Server. For more information, see xxx
2. On the **General** tab, select **Initiate in Smart View**.

Users can now select **Start workflow** from the menu integration widget in a Fiori app.

17.6 Creating your own extension of an SAP Fiori app

One way to integrate the OpenText Documentum CM functionality is to create an application that requires no modifications in the SAP-delivered standard application.

A typical SAP-delivered standard application consists of bootstrap files, views, view controllers, and internationalization files. A custom application extends an SAP-delivered standard application and consists of the bootstrap file `Component.js`, which extends the `Component.js` of the SAP standard application, internationalization file, view fragments, views, and view controllers.

Resources

For more information, see the following resources:

- SAP help: Extending SAPUI5 apps (<https://sapui5.hana.ondemand.com/#/topic/a264a9abf98d4caabb9b027bc1005d8>)
- OpenText Content Management for SAP Solutions SDK Guide on OpenText My Support. The latest version of the SDK Guide provides information for Fiori developers and sample implementations.

Prerequisites

- You have development tools installed:
 - SAP Web IDE cloud edition: <https://cloudplatform.sap.com/capabilities/product-info.SAP-Web-IDE.9e5c9d90-e8e0-4e82-aed2-09087a10c973.html>
 - Offline tools: <https://tools.hana.ondemand.com/#sapui5>
- You have installed the following development tools: ABAP Development Tools for SAP NetWeaver, SAPUI5 Application Development Tool for Eclipse.
- SAPUI5 version as stated in the Release Notes
- For offline development, ensure the local Tomcat web server is configured to work with SAPUI5 Eclipse.
- You have installed the relevant OpenText Documentum CM Add-on packages for Fiori integration and customized the system for the SAP Fiori integration.

For offline development, the main steps are:

- Download the SAP-delivered standard application from the ABAP system.
- Test the SAP-delivered standard application in your local Launchpad sandbox environment.
- Create a custom application that extends an SAP-delivered standard application.
- Check the SAP-enabled extension options.
- Define the extensions metadata.
- Test the custom application in your local Launchpad sandbox environment.
- Upload the custom application to the ABAP system.
- Test the custom application on the ABAP system.
- Configure the custom application on Fiori Launchpad.
- Test the custom application on Fiori Launchpad.

For more information, search for **UI Extensibility Workflow** at <https://help.sap.com>.

After all steps to extend an SAP-delivered standard application were done successfully, you see a custom tile on the SAP Fiori Launchpad.

17.7 Extending your own custom SAPUI5 app

If you wanted to create your own SAPUI5 app, you basically have the following options:

- App built with SAP Fiori Elements: check <https://sapui5.hana.ondemand.com/#/topic/358cf2598d71462b8ac2bd8c944efbf>
Change to your SAPUI5 version to make sure, the technique is already supported.
- App, which you “freely” implemented with SAPUI5.
 - If you want your original app unchanged, use the extension techniques as already mentioned in previous section. This means you create a new custom app that integrates the UI control of .
 - Alternatively, you directly insert the code into your original application to integrate the UI control of .

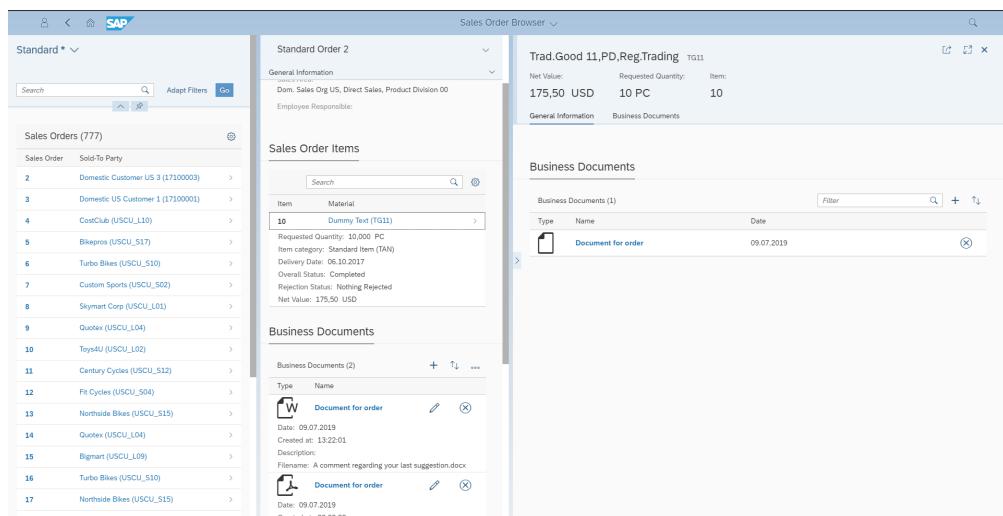


Figure 17-4: Custom Fiori app based on Fiori elements

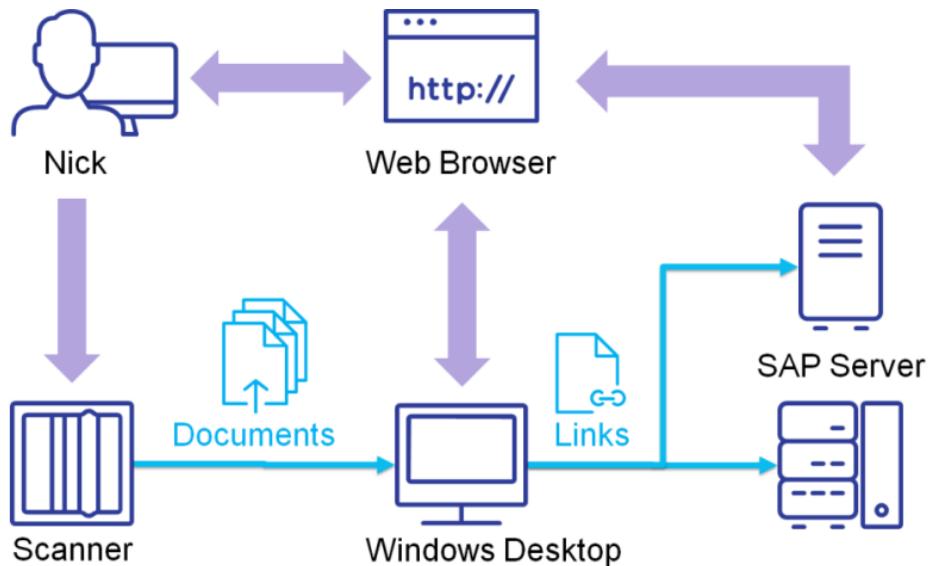
17.8 Using OpenText™ Imaging Enterprise Scan Web Scanning in a Fiori app

Web Scanning, a light-weight scan application based on HTML5 and Javascript has an SAP web plug-in to provide its functionality in an SAP app. After scanning, the SAP app controls what happens to the documents, for example, where they are stored. The basic functionality of Web Scan is the same for Content Server, OCC or SAP integration. For more information, see *OpenText Imaging Enterprise Scan Web Scanning - User Guide (CLESW-UGD)* and *OpenText Imaging Enterprise Scan Web Interface - Installation Guide (CLESW-IGD)*.

Scan Business Document OpenText exposes ArchiveLink attachments enriched with ArchiveLink PLUS attributes in an SAPUI5 based control **Business Documents**, to integrate in all kinds of SAP Fiori apps. Users release scanned documents and the “Business Documents” app stores and assigns them using ArchiveLink.

17.8.1 Understanding the use case

Business specialist scans documents and stores them as ArchiveLink documents



- Nick, the SAP business specialist uses the SAP Fiori Sales Order app to maintain and browse business data.
- The app is extended with the OpenText Business Documents control. The control has now the new action to scan documents with Imaging Enterprise Scan Web Scanning
- Imaging Enterprise Scan Web Scanning exchanges data with the OpenText Business Documents control through the SAP web plug-in.

- When released, scanned documents are stored and get ArchiveLink entries

17.8.2 Setting up the Imaging Enterprise Scan Web Scanning integration

Installation prerequisites

- Imaging Enterprise Scan Web Scanning must be installed, preferably on the server where Archive Center installed or any other host with Apache Tomcat. For more information, see *OpenText Imaging Enterprise Scan Web Scanning - User Guide (CLESW-UGD)* and *OpenText Imaging Enterprise Scan Web Interface - Installation Guide (CLESW-IGD)*.
- Archiving and Document Access for SAP Solutions 20.4 or later must be installed on the SAP system. Make sure the following is available:

On the SAP gateway server:

- ABAP Add-On OTEXBASF (20.4) including OpenText Fiori app “Business Documents”(otx.alplus.documents – /sap/bc/ui5/otx/alf_doc_ui) with Web Scan
- SAPUI5 1.71 or later is required

On the SAP backend server

- OpenText Business Documents OData service /OTX/ALDS_ODATA_SRV, Service Version 0001 (as delivered with OTEXBASO 20.4 or later)
- Archiving and Document Access for SAP Solutions Base, (as delivered in ABAP Add-On OTEXBAS 20.4 or later)

On the server where Archive Center is installed or any other host with Apache Tomcat

- The Web Scan WAR (Web Application Resource) file. You can get it from the download area on OpenText My Support.

Customizing prerequisites

- Users must have S_WFAR_OBJ permission to create at least one ArchiveLink document type related to a document class with MIME type image/tiff or application/pdf.
- Users must have permission to a Fiori Catalog with a target mapping that includes the Semantic Object OTADA and action startWebScan, which defines the URL of the Web Scan app. An SAP authorization role on the SAP Gateway server assigns this to users.

To get the actual start URL from the Fiori Launchpad Content, a method in the SAPUI5 framework is used, which only exists in SAPUI5 version 1.71 or newer. If the SAPUI5 version is older, the action is disabled and hidden.

For more information on how to use Web Scanning in a Fiori app, see *OpenText Archiving and Document Access for SAP Solutions - User Guide (ER-UGD)*.

To customize the Fiori system for Web Scanning:

1. On the gateway server, run the /UI2/SEMOBJ transaction.
2. Create a semantic object OTADA, for example with English description "Special Intents for OpenText Archiving and Document Access".
3. Run the /UI2/FLPD_CUST transaction on the SAP gateway server.
4. Define a Fiori Catalog, for example Z_ADA_WEBSCAN.
5. In the Fiori catalog in tab **Target Mappings**, create a new Target Mapping:
 - **Semantic Object:** OTADA
 - **Action =** startWebScan
 - **Application Type = URL**
 - **URL =** index.html file of the web scan app
 - **Device Types =** only for Desktop
 - Optionally, **Parameter =** parentProduct as mandatory with **value = sap**

To install PixTools for Web Runtime:

1. In for example OpenText Sales Order Browser, select a sales order.
2. Click **+ Add**, and then select **Scan Business Document**.
3. In the **Captiva Cloud Runtime** dialog box, click **Download**, and then save the setup.exe file.
4. In the **SHA-256** dialog box, you can copy the checksum to verify the checksum of the downloaded PixTools for Web Runtime setup file. Click **Close**.
5. Run setup.exe.
6. In the **Introduction** dialog box, click **Next**.
7. Accept the license agreement, and then click **Next**.
8. In the **Configure Remote Access** dialog box, select if you want to disable remote access or allow remote access for users from the group "Captiva Cloud Toolkit Users", and then click **Next**.
9. In the **Ready to Install the Program** dialog box, click **Install**.
10. In the **Installation Complete** dialog box, click **Finish**.
11. Reload the browser page.

PixTools for Web Runtime uses ports to communicate with Web Scanning. It chooses the first available port for each protocol in following range:

- http: 49732, 49733, 49734
- https: 49735, 49736, 49737

If none of the listed ports is available, then an error is logged in the Microsoft Windows System event log.

Chapter 18

Integrating OpenText Documentum CM into SAP SRM

To use the OpenText Documentum CM functionality in SAP SRM, you add OpenText Documentum CM specific Web Dynpro components for business objects like suppliers, purchase orders or shopping carts.



Note: In Content Server, the business references property tab of a given document lists all business objects that the document refers to. For each business object, there is a display link to show the corresponding SAP display transaction. Such links do not work properly for SRM Shopping Carts and SRM Business Partners.

Relevant packages for integration

The following packages are relevant for the integration and must be installed:

- OTEXBAS
- OTEXRL
- OTEXRLS

18.1 Customizing the component configuration

You first create an enhancement for a component configuration and then you add the workspace and business attachment tabs to the respective component configurations.



Tip: OpenText Documentum CM also provides a Content Server appearance that provides an SAP-like skin for business workspaces in Content Server. For more information, see “[Checking the appearance of the SAP integration](#)” on page 128.

You can use OpenText Documentum CM, for example, in the following component configurations:

- Supplier: /SAPSRM/WDCC_FPM_OIF_BUPA_SUPPL and /SAPSRM/WDACC_FPM_OIF_RDONLY_SUP
- Purchase Order: /SAPSRM/WDCC_FPM_OIF_PO_PURCH
- Shopping Cart: /SAPSRM/WDCC_FPM_OIF_SC_PROFNL
- Confirmation: /SAPSRM/WDCC_FPM_OIF_CONF_PURCH
- Contract: /SAPSRM/WDCC_FPM_CTR_PURCH
- RFx: /SAPSRM/WDCC_FPM_OIF_RFQ_PR_PU

- RFx for Bidder: /SAPSRM/WDCC_FPM_OIF_RFQ_BDR
- RFx Response for Strategic Purchaser: /SAPSRM/WDCC_FPM_OIF_QTE_PURCH
- RFx Response for Bidder: /SAPSRM/WDCC_FPM_OIF_QTE_BIDDER

To create an enhancement for the component:

1. Use transaction SE80 to open the ABAP Development Workbench.
2. In the **Repository Information System**, go to **Web Dynpro > Component Configurations**.
3. Find the component configurations that you want to enhance and repeat the following steps for each of it.
Double-click the component configuration to open and edit it.
4. Click **Start Configurator** to open the **Editor for the Web Dynpro ABAP Component Configuration** in a browser window.
5. Click **Other Functions > Create Enhancement**.
6. Create the new enhancement.
7. Click **OK** and make sure you get the verification message that the enhancement was created successfully.

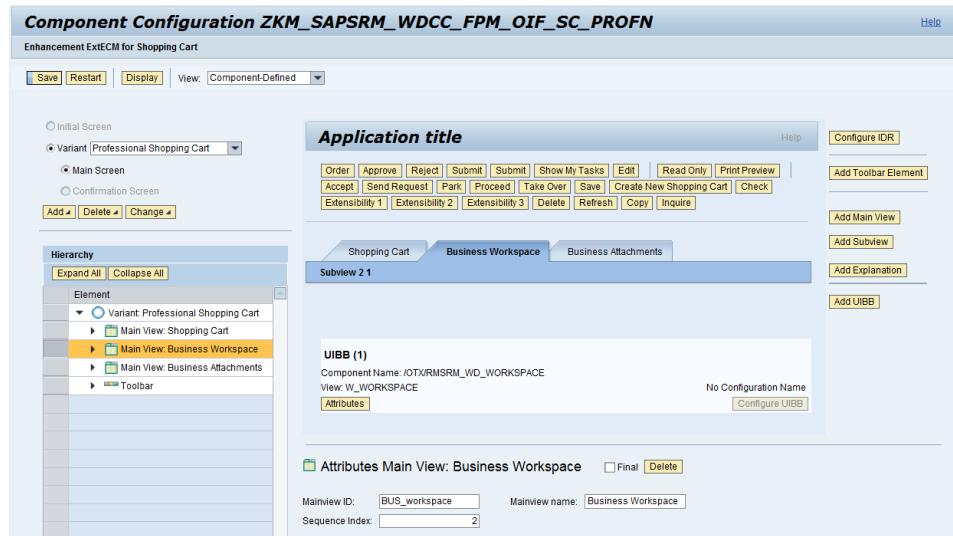
In the next steps, you modify each component configuration to show tabs for business workspaces and business objects.

! **Important**

Make sure, you use the enhanced configuration and not the original.

To add tabs for business workspaces and business attachments to the component:

1. In the Editor for the Component configuration, click **Change** for the enhanced version and not the original.
2. Click **Add Main View**. A new main view is added to the **Hierarchy** area.



3. Edit the attributes of the new main view:

- **Mainview ID:** A unique ID
- **Mainview name:** Name that appears on the tab.

 **Tip:** To refresh the preview, select another main view.

 **Note:** If you are using multiple languages, log on in each language and define the title in the corresponding language.

4. In the **Hierarchy** area, open the node of the newly created main view and click the user-interface building block (UIBB).
5. Edit the UIBB attributes:

- **For Business Workspaces**

Component: /OTX/RMSRM_WD_WORKSPACE

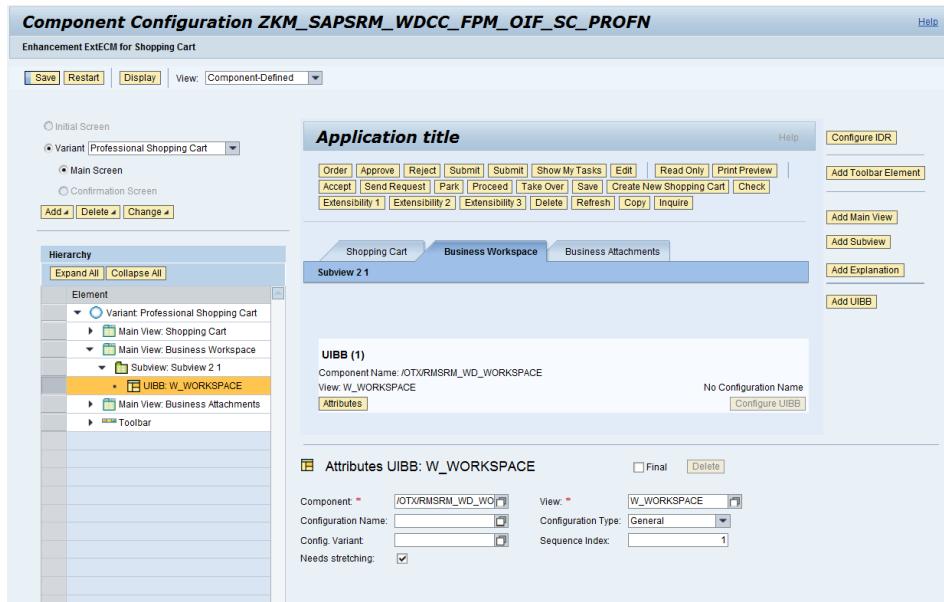
View:

- W_WORKSPACE_CC_FB: Create and Complete widget with “folderBrowse” mode
- W_WORKSPACE_CC_FP: Create and Complete widget with “fullPage” mode
- W_WORKSPACE: deprecated. Do not use anymore

- **For Business Attachments**

Component: /OTX/RMSRM_WD_BUSREF

View: W_BUSINESSREFERENCE



6. Click **Save** and wait for the verification message.

The browser view for your business object now contains the new tabs.

Display Shopping Cart:1000000299

Number 1000000299	Document Name ANUERNB 23.02.2012 14:17	Status Approved																			
<input type="button" value="Show My Tasks"/> <input type="button" value="Edit"/> <input type="button" value="Close"/> <input type="button" value="Print Preview"/> <input type="button" value="Refresh"/> <input type="button" value="Copy"/> <input type="button" value="System Information"/> <input type="button" value="Create"/>																					
<input type="button" value="Shopping Cart"/> <input type="button" value="Business Workspace"/> <input type="button" value="Business Attachments"/>																					
▼ General Data <table border="1"> <tr> <td>Buy on Behalf Of:</td> <td>ANUERNB</td> <td>Approval Note</td> </tr> <tr> <td>Name of Shopping Cart:</td> <td>ANUERNB 23.02.2012 14:17</td> <td></td> </tr> <tr> <td>Default Settings:</td> <td colspan="2">Set Values</td> </tr> <tr> <td>Approval Process:</td> <td colspan="2">Display / Edit Agents</td> </tr> <tr> <td>Budget:</td> <td colspan="2">Display</td> </tr> <tr> <td>Document Changes:</td> <td colspan="2">Display</td> </tr> </table>			Buy on Behalf Of:	ANUERNB	Approval Note	Name of Shopping Cart:	ANUERNB 23.02.2012 14:17		Default Settings:	Set Values		Approval Process:	Display / Edit Agents		Budget:	Display		Document Changes:	Display		
Buy on Behalf Of:	ANUERNB	Approval Note																			
Name of Shopping Cart:	ANUERNB 23.02.2012 14:17																				
Default Settings:	Set Values																				
Approval Process:	Display / Edit Agents																				
Budget:	Display																				
Document Changes:	Display																				
▼ Item Overview <table border="1"> <tr> <td><input type="button" value="Details"/></td> <td><input type="button" value="Add Item"/></td> <td><input type="button" value="Copy"/></td> <td><input type="button" value="Paste"/></td> <td><input type="button" value="Duplicate"/></td> <td><input type="button" value="Delete"/></td> <td><input type="button" value="Process All Items"/></td> </tr> <tr> <th>Line Number</th> <th>Item Type</th> <th>Product ID</th> <th>Description</th> <th>Product Category</th> <th>Product Category Description</th> </tr> <tr> <td>0001</td> <td>Material</td> <td></td> <td>Optical Mouse</td> <td>002</td> <td>Electronics</td> </tr> </table>			<input type="button" value="Details"/>	<input type="button" value="Add Item"/>	<input type="button" value="Copy"/>	<input type="button" value="Paste"/>	<input type="button" value="Duplicate"/>	<input type="button" value="Delete"/>	<input type="button" value="Process All Items"/>	Line Number	Item Type	Product ID	Description	Product Category	Product Category Description	0001	Material		Optical Mouse	002	Electronics
<input type="button" value="Details"/>	<input type="button" value="Add Item"/>	<input type="button" value="Copy"/>	<input type="button" value="Paste"/>	<input type="button" value="Duplicate"/>	<input type="button" value="Delete"/>	<input type="button" value="Process All Items"/>															
Line Number	Item Type	Product ID	Description	Product Category	Product Category Description																
0001	Material		Optical Mouse	002	Electronics																

18.2 Customizing automatic creation of business workspaces

If you want to create business workspaces automatically whenever a business object is created, you can use the standard SAP SRM BAdI BBP_DOC_SAVE_BADI. You find the sample implementation /OTX/RMSRM_UI_SAVE of that BAdI in package /OTX/RMSRM_UI. You must activate this BAdI before use.

For SAP SRM business objects that do not respond to the BBP_DOC_SAVE_BADI BAdI, for example, BUS1006 for Supplier or Bidder, see “[Configuring events for business workspaces](#)” on page 131.

To activate the sample BAdI implementation:

1. Start transaction SE80 and open package /OTX/RMSRM_UI.
2. In the Repository Browser, go to **Enhancements > Classic BAdIs**.
3. Double-click /OTX/RMSRM_DOC_SAVE.
4. Switch to edit mode and click  **Activate**.

18.3 Customizing the log-off from Content Server

If users log off from the SRM NetWeaver Portal, you have to make sure that they are not only logged off from SAP NetWeaver Portal but also from Content Server. For this, you create a custom log-off page and configure NetWeaver User Management Engine (UME) to redirect to this HTML page during SAP NetWeaver Portal log-off.

To deploy the log-off from Content Server:

1. Download the required software packages from OpenText My Support and install them on your systems.
 - Extended ECM for SAP Solutions 16 Patch SAPRM-7954 (transport D5GK900803) (<https://knowledge.opentext.com/knowledge/lbisapi.dll/Open/62642381>)
 - Connected Workspaces 16 Patch pat160000099 (<https://knowledge.opentext.com/knowledge/lbisapi.dll/Open/62373995>)
2. On the SAP system, enable HTTPS for the connection to Content Server. For more information, see Section 21.2.6 “Maintaining OpenText Content Management connections” in *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.
3. Activate the SICF node `rm_wdgenlo`, which is the BSP application to log off from Content Server.
 - a. Run transaction `SICF` and click  **Execute**:
 - b. Navigate to the following service: `sap > bc > bsp > otx > rm_wdgenlo`.
 - c. Right-click and select **Activate Service**.
4. Configure the URL redirection on the SAP NetWeaver Portal:
 - a. Log on to the SAP NetWeaver Portal as administrator.
 - b. Navigate to **System Administration > System Configuration > UME Configuration**.
 - c. Click **Open Expert Mode**.
 - d. Filter for `ume.logoff.redirect`.
 - e. Click **Modify**.
 - f. Set the following parameters:
 - `ume.logoff.redirect.url`: URL pointing to the Content Server logout page that you created previously:
`<Portal server>:<port>/sap/bc/bsp/otx/rm_wdgenlo/default.htm?elib_id=<connection ID>`
For example, `http://mucxx.opentext.net:8000/sap/bc/bsp/otx/rm_wdgenlo/default.htm?elib_id=CONN1`
 - `ume.logoff.redirect.silent`: `false`.

5. Maintain the white list to ensure that the log out is only possible from the specific URL:
 - a. In the SM30 transaction, open the /OTX/RM_THTWHITE table.
 - b. Click **New Entries** and enter the following:
 - **Whitelist Entry Type:** Referrer URL
 - **Sort Key:** 02
 - **Protocol of URL:** http or https
 - **Host Name:** Name of the portal server as defined before
 - **Port:** Port of portal server as defined before
 - **URL Template:** /IRJ/PORTAL*
 - c. Save your settings.

18.4 Using version-independent business objects

To identify a single business object, normally the GUID is used as the business object key. However, for business objects that support versioning, each change of the business object creates a new version, and thus a new GUID, and subsequently a new business workspace for this version.

To circumvent this, you can define that instead of the original version-dependent business object, a version-independent object is used for OpenText Content Management. With this, changes in the business object may create a new version of the business object but *do not* create a new business workspace but update the metadata of the existing business workspace.



Tip: To customize if SRM business objects are versionable in your SRM system, use IMG activity **SAP Supplier Relationship Management > SRM Server > Cross-Application Basic Settings > Switch On Version Control for Purchasing Documents**.

The sample property providers for version-independent business object types are available in OpenText My Support (<https://knowledge.opentext.com/knowledge/Ilisapi.dll/Overview/25089410>).

Business object types	Version independent	Property Provider
RFX (BUS2200)	/OTX/RMRFX	/OTX/ RMSRM_CL_WSPP_RMRFX
RFX Response (BUS2202)	/OTX/RMRSP	/OTX/ RMSRM_CL_WSPP_RSP
Contract (BUS200113)	/OTX/RMCNT	/OTX/ RMSRM_CL_WSPP_CNT
Purchase Order (BUS2201)	/OTX/RMPO	/OTX/ RMSRM_CL_WSPP_PO

Business object types	Version independent	Property Provider
Invoice (BUS2205)	/OTX/RMINV	/OTX/ RMSRM_CL_WSPP_INV
Auction (BUS2208)	/OTX/RMAUC	/OTX/ RMSRM_CL_WSPP_AUC

To use version-independent business objects:

1. In the IMG, navigate to the **Business Configuration > SRM Settings > Maintain Version Independent Objects** activity and click  Execute.
2. Create a new entry for the business object that you want to use version-independent and select **Version Independent Object**.



Note: Use the version-independent object in all other configuration and customizing in the SAP system and in Content Server, which use the business object, for example business object types and business object declarations.

Chapter 19

Mapping SAP roles to OTDS groups or Content Server groups

In Content Server, permissions define who can access a business workspace. Typically, this is handled with groups to which the users are assigned. Content Server users and groups are managed in Directory Services (OTDS).

You can fill OTDS groups with users from the SAP system depending on their role assignment. The OTDS users and groups are synchronized to the Content Server groups.

For the mapping, you create the OTDS groups in a separate non-synchronized partition. You configure the Content Server resource in OTDS, define the partition and a mapping in the SAP system, run it and configure events. Permissions for groups in Content Server must be defined separately by the Content Server administrators. For information about all relevant settings, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.



Note: For earlier versions, a Solution Accelerator was available for the mapping of SAP roles to Directory Services groups. If you have been using this Solution Accelerator, you can either stay with your former implementation or switch to the new implementation. If you want to switch to the new implementation, copy the mapping from the Solution Accelerator table to the product table.

19.1 Defining the user partition for group mapping

OTDS groups All users that you want to add to an OTDS group must be in one single partition. When adding a user to an OTDS group, the defined partition is appended to the SAP user name. This requires that there is a one-to-one relationship of users in SAP with users in OTDS.

For more information about setting up user mapping, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.



Note: The OTDS group can be in a different partition which must be non-synchronized.

Content Server groups For Content Server groups, the partition is only appended if OTExternalID2, OTExternalID3, or OTExternalID4 is defined as _NAME_ attribute. In this case, define the partition.

To define the partition:

1. In the IMG, navigate to the **OpenText Content Management for SAP Solutions > Infrastructure > Maintain OpenText Content Management for SAP Solutions Connections** activity, and then click  **Execute**.
2. Select the connection in the list, and then click **Change**.
3. In the **OpenText Directory** section, in the **Partition** field, enter information according to your scenario:
 - When synchronizing SAP roles to OTDS groups, enter the partition name.
 - When synchronizing SAP roles to Content Server groups or business policies, do the following:
 - With a non-synchronized partition, enter the partition name in the partition field.
 - With a synchronized partition, fill the partition field as follows:

NAME Resource Mapping	Partition_field_
oTExternalID1	Leave empty
oTExternalID2	Domain name
oTExternalID3	Partition name
oTExternalID4	NetBIOS domain name



Tip: To find the OTDS attribute value for the **_NAME_** resource attribute, go to **Directory Services Integration Administration > Configure Directory Services > Resources > Properties (for Content Server) > User Attributes Mappings**.

19.2 Configuring SAP group mapping

You can add SAP users to either an OTDS group or a Content Server group by using an SAP transaction. The assignment is based on the assignment of the user to an SAP role. In addition, you can also define that other users are removed from the OTDS or Content Server group during the mapping so that the OTDS or Content Server group only contains users that are currently assigned to the specified SAP role (strict group membership).



Note: For information about all relevant settings, see *OpenText Content Management for SAP Solutions - User Management and Access Control Scenarios (ERLK-CUM)*.

Mapping to OTDS groups: You must be an administrator of the partition and a member of the **otdsreadonlyadmins** group in OTDS to start the mapping transaction.

Mapping to Content Server groups: You must be a member of the **otdsreadonlyadmins** group to start the mapping transaction. In Content Server, you must have the permission to create, modify and delete groups and users.

To configure and run the mapping:

1. Start the **/OTX/RM_RO_TO_GRP** transaction.
2. Enter the connection ID. If only one connection is configured, this step is not necessary.
3. Select where you want to map the roles to, an **OTDS group** or a **Content Server group**.
4. Click **Execute**.
5. Enter the following:
 - **SAP Role:** Enter the name of the SAP role.
 - **OTDS Group ID:** Enter the ID of the OTDS group including its partition, for example `GroupForMapping@NonSynchronizedPartition`. For each OTDS group, you can only define one mapping. You can only map one SAP roles to one OTDS group.

Content Server Group Name: Enter the name of the Content Server group. If this group does not yet exist, it will be created.

- **Strict Group Membership:** If you do not select this option, the SAP users are added to the existing members of the OTDS or Content Server group.



Warning

If you select the **Strict Group Membership** option, you delete all OTDS or Content Server users from the group, who are not also members of the SAP role. Only OTDS or Content Server users, who have an equivalent in the SAP role remain in that group.

SAP Role	OTDS Group ID	Strict Group Membership	Connection ID
/OTX/RM_CS_SAP_USER	TestGroup@TM2	<input type="checkbox"/>	ECMLINK16D
/OTX/RM_USER	Bidder@TM2	<input checked="" type="checkbox"/>	ECMLINK16D
/OTX/RM_USER	Supplier@TM2	<input checked="" type="checkbox"/>	ECMLINK16D

6. Click **New** to add a new row to the table.
7. Define the settings for all roles that you want to map to OTDS or Content Server groups, respectively.

8. Click **Test Mapping**.
9. In the list, check how the users are added or removed to OTDS or Content Server groups, respectively.
10. If the mapping is correct, click **Start Mapping**.

19.2.1 Mapping SAP role users to OTDS groups using an SAP job

You can also map SAP role users to OTDS groups using an SAP job:

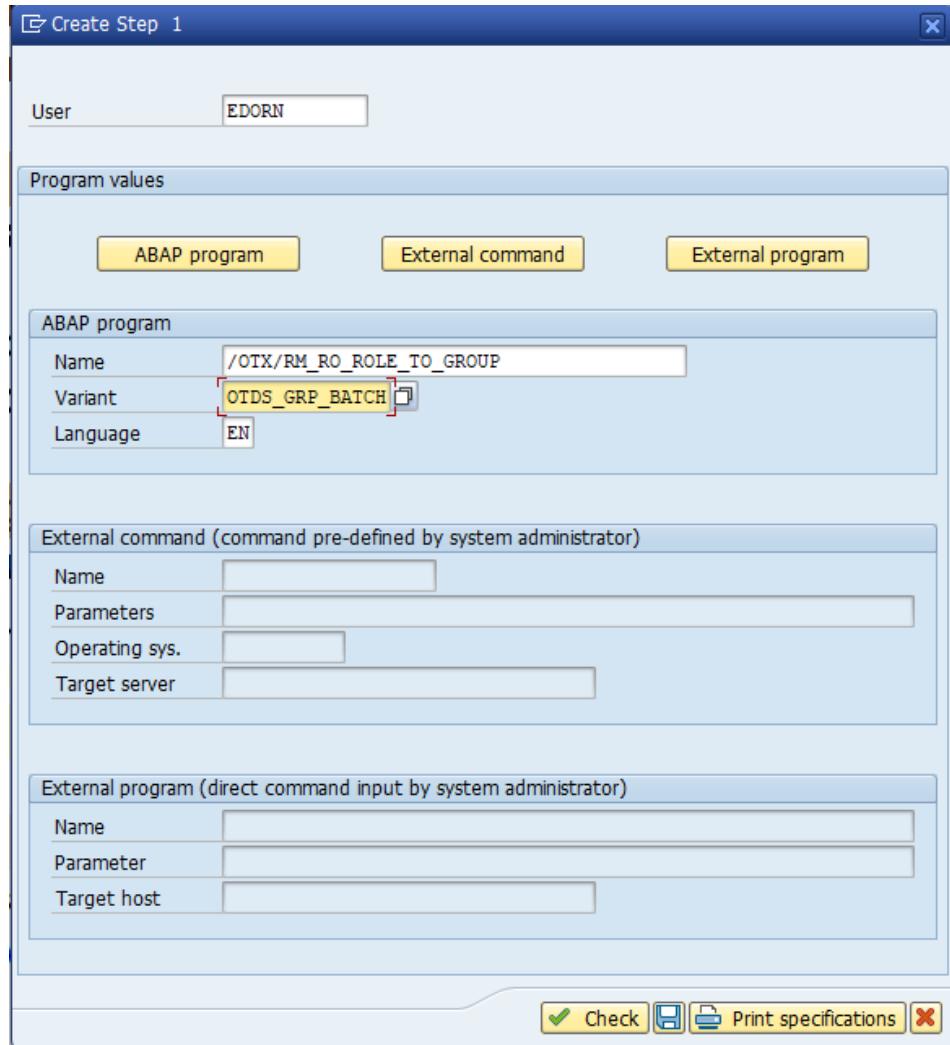
1. Run the /OTX/RM_RO_TO_GRP transaction.
2. Enter your **Connection ID** and select the **OTDS group** option.



Mapping SAP role users to Content Server groups

You can also map SAP role users to Content Server groups. Select the Content Server group option and then follow the same steps as for the OTDS group option.

3. Click the **Save as a variant...** button.
4. In the **Variant Attributes** screen, enter a **Variant Name**, for example, OTDS_GRP_BATCH. Enter a description and click the **Save** button.
5. Run the sm36 transaction.
6. In the **Define Background Job** screen, enter a **Job name**, for example, SAP_ROLE_TO_GROUP_OTDS:
Click the **Step** button.
7. In the ABAP program section, enter /OTX/RM_RO_ROLE_TO_GROUP in the **Name** box.
In the **Variant** box, enter the name of the variant you have created in step 4.



Click the  Save button.

8. In the **Define Background Job** screen, click the **Start condition** button.
In the **Start Time** screen, configure a job schedule.

 **Example 19-1:**

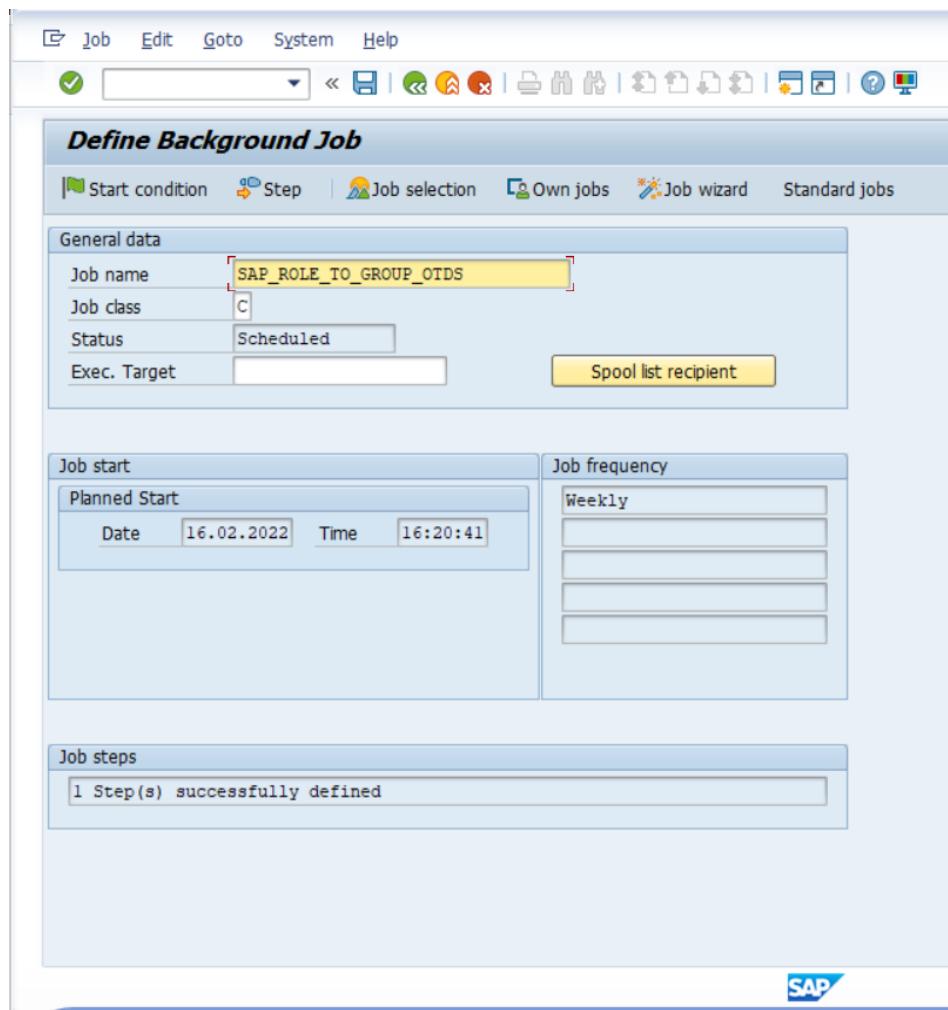
If you want to start the job weekly at a given time, click **Date/Time**.

1. For the **Scheduled start** setting, enter a start date and time and select the **Periodic job** option.
2. Click **Periodic values > Weekly**. Click the **Save** button.



9. In the **Start Time** screen, click the **Save** button.

10. In the **Define Background Job** screen, click the **Save** button.



11. To check the successful job run, run the sm37 transaction, enter the job name and view the job with status Finished. For more information about SAP jobs, see the corresponding SAP help.

Chapter 20

Analyzing and troubleshooting

20.1 Analyzing the SAP system

20.1.1 Understanding the SAP Diagnostic Program

You can use the Diagnostic Program to analyze your installation.

! **Important**

You can run the infrastructure diagnostic program after specifying at least the OpenText Content Management connection in the Infrastructure section of the IMG.

The diagnostic program is aimed at two different target groups:

- The *Infrastructure part* is for technical consultants who set up the connection between the SAP system and the OpenText servers. The report contains the following types of information: the connection to Content Server, Web service communication such as the OTDS service, REST services, or HTML controls.
- The *OpenText Content Management* contains the infrastructure information in addition to information about the customizing, like business object declarations, document declarations, or item types.

This information only displays if you start the activity from **OpenText Content Management for SAP Solutions > Business Configuration > Diagnostic Program**.

A green light icon indicates that everything is in order. For checks with a red light icon, a recommendation is displayed. For more information about each check, see “[Understanding the details of the Diagnostic Program](#)” on page 214.

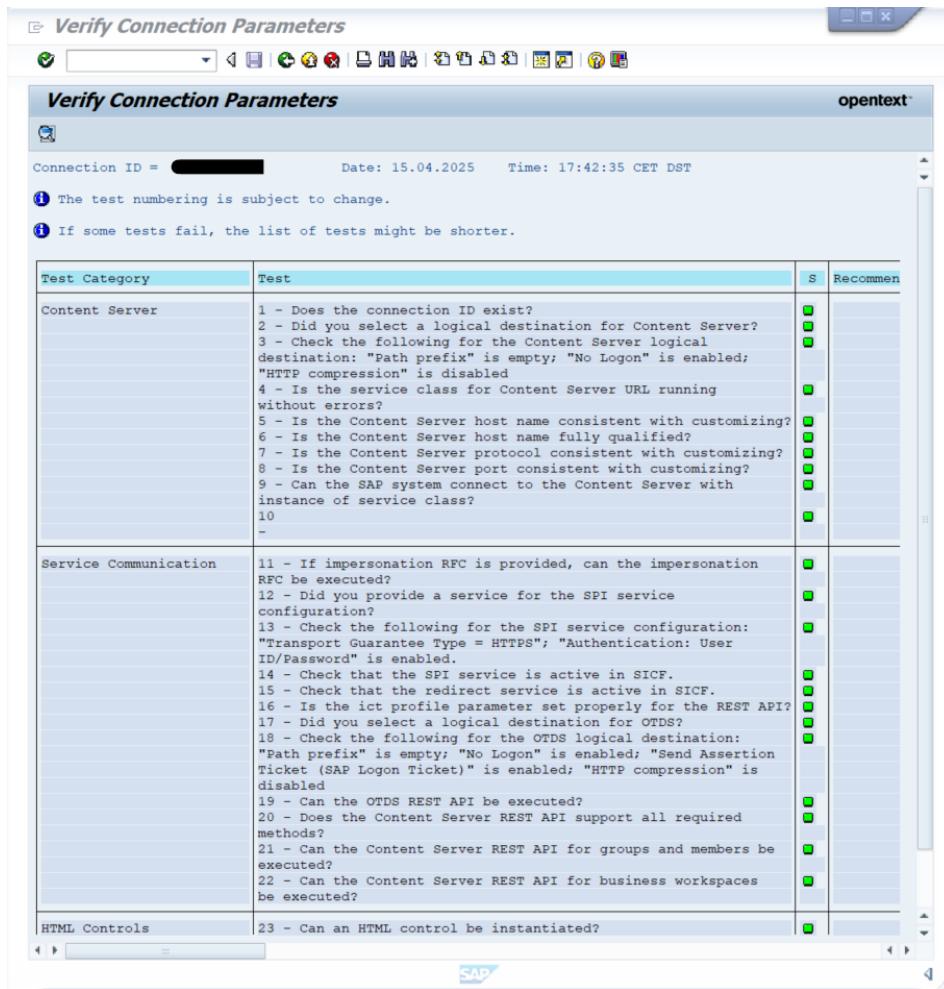


Note: You can also run the Diagnostic Program as a background job.

To run the Diagnostic Program manually:

1. If you are only interested in infrastructure information, in the IMG, navigate to the **OpenText Content Management for SAP Solutions > Infrastructure > Diagnostic Program**, and then click **Execute**.
If you are also interested in the OpenText Content Management specific information, in the IMG, navigate to the **OpenText Content Management for SAP Solutions > Business Configuration > Diagnostic Program** activity.
2. If there is only one OpenText Content Management connection configured, the diagnosis is started immediately. If there are more connections configured, perform the following steps, enter the connection ID.

3. Click  Execute.



20.1.2 Understanding the details of the Diagnostic Program

This section lists the various tests of the Diagnostic Program and refers to sections in this guide which contain helpful information.



Note: For the Infrastructure part of the Diagnostics Program, see Section 25.1.2 "Understanding the details of the Diagnostic Program" in *OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)*.

BO Declarations		
Are there business object declarations for this connection ID?	OpenText Content Management > Maintain Business Object Declarations	<i>OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)</i>

Document Declarations		
Are there document declarations for this connection ID?	OpenText Content Management > ArchiveLink Document ... > Maintain Document Declarations	This is not relevant for OpenText Documentum CM for SAP Solutions.
Are there assignments for these document declarations?	OpenText Content Management > ArchiveLink Document ... > Assign Declaration ID to Object Type and Document Type	
Are there automatic assignments?	OpenText Content Management > ArchiveLink Document ... > Assign Declaration ID to Object Type and Document Type	
Use Widgets in UI		<i>OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)</i>
Is the "Support Directory" provided for business objects declarations using Widgets in UI?	Infrastructure > Maintain OpenText Content Management Connections	<i>OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)</i>
Are parameters for Widgets available?	See detailed error message if applicable.	
Is the OTDS REST Service available?		
For SAP CRM only: Is the WEBCUIF 701 component available?		<i>OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)</i>
Roles		
Does the current SAP user have sufficient permissions in SAP to declare records?	Checks the permissions of the current user	<i>OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)</i>
Does the current SAP user have sufficient permissions in SAP to view record details?	Checks the permissions of the current user	<i>OpenText Content Management for SAP Solutions - Installation and Upgrade Guide (ERLK-IGD)</i>

20.1.3 Understanding the Configuration Report

You can use the SAP Configuration Report to summarize your OpenText Documentum CM configuration. The report displays system and configuration parameters coming from customizing transactions and tables. You can use this information for reference and for debugging. You can export the list to a file.

To run the SAP Configuration Report:

1. In the IMG, navigate to the **OpenText Content Management > Configuration Report** activity, and then click **Execute** .
- The report opens. You can use standard SAP functions to view details, browse the report, or filter separate lists in the report.
2. To save the report to a local file in, for example in HTML format or as a spreadsheet, click  **Local file ...**, and select the format that you want.

20.1.4 Using the Error Queues

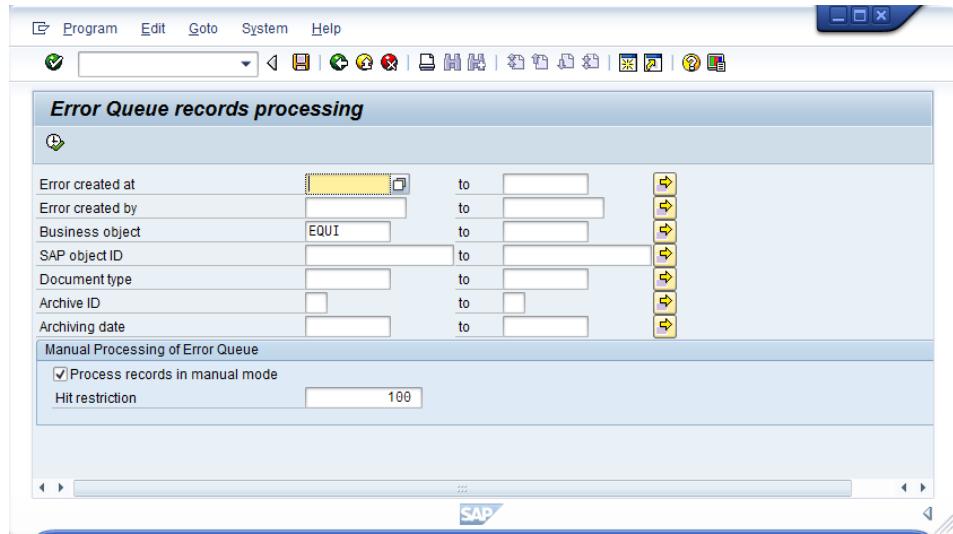
Errors occurring during the declaration either of ArchiveLink entries, print lists, or business workspaces are tracked in an error queue. This queue can be accessed with the following transactions:

/OTX/RMPEQ	ArchiveLink entries
/OTX/RMPEQPRINTL	Print lists
/OTX/RM_WSC_PEQ	Business workspaces and business attachments. Errors of creating business workspaces in the course of creating a document are written to / OTX/RMPEQ. This is not relevant for OpenText Content Management.

All errors that occur during document declaration in batch mode are stored. Also update declaration errors are tracked. The error queue then allows reprocessing the entries that failed. Errors that occur during the processing of the asynchronous queue can be monitored there. They are not logged in an error queue. For more information about the asynchronous queue, see *OpenText Content Management for SAP Solutions - Customizing Guide (ERLK-CGD)*.

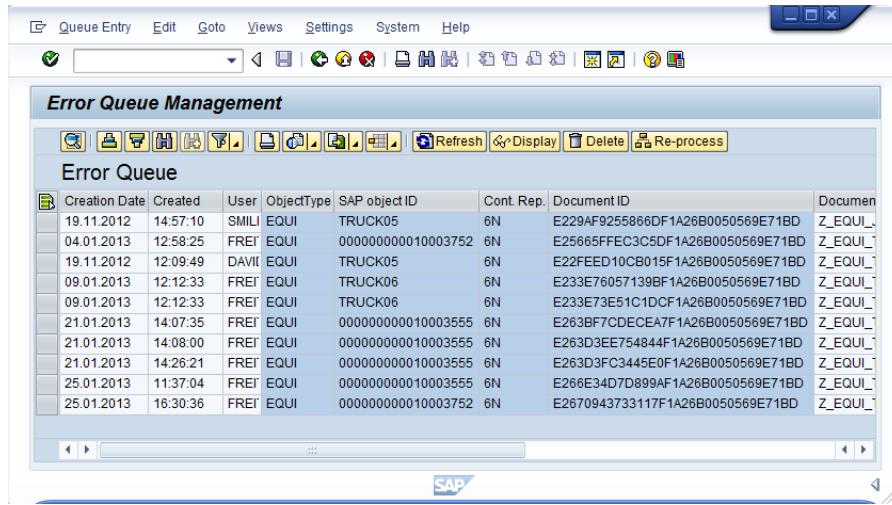
To open the ArchiveLink records error queue:

1. Start the /OTX/RMPEQ transaction.

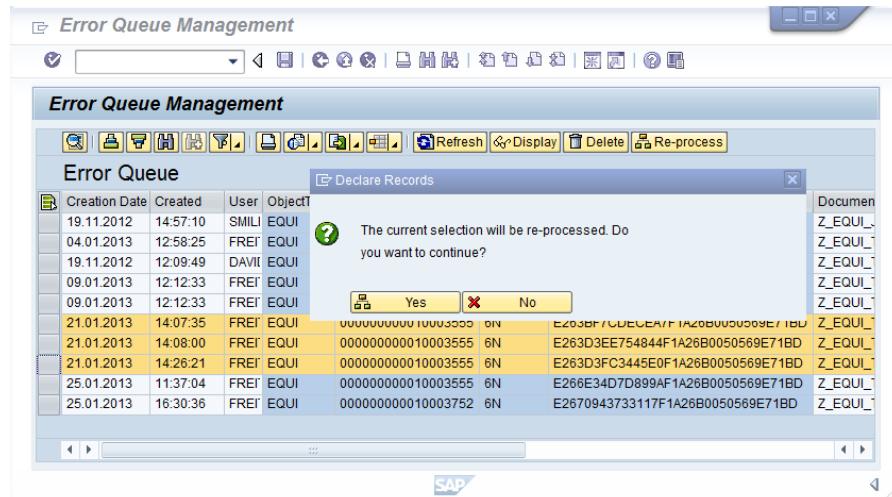


2. Restrict the entries to be listed by specifying the required parameters.
In addition to the standard ArchiveLink values you can also enter the user who failed in the declaration process (**Error created by** field) and the date of the error entry (**Error created at** field).
You may process the records either in the manual or in the automatic mode. For more information, see [step 4](#):
3. **Processing records in manual mode**
 - a. If you want to first have a look at the error entries and afterwards re-process these entries, select the **Process records in manual mode** check box and specify the maximum number of entries in the **Hit restriction** field.
 - b. Click **Execute**.

The **Error Queue Management** dialog displays the selected entries. In this manual mode, the number of hits is restricted to the value specified before.



- c. Select the entries you want to reprocess and click **Re-process**.



- d. Click **Yes**.

A result list of the re-processed ArchiveLink entries is displayed.

- e. To view the SAP log of the error that caused the entry in the error queue, click the number in the **Log number** column.

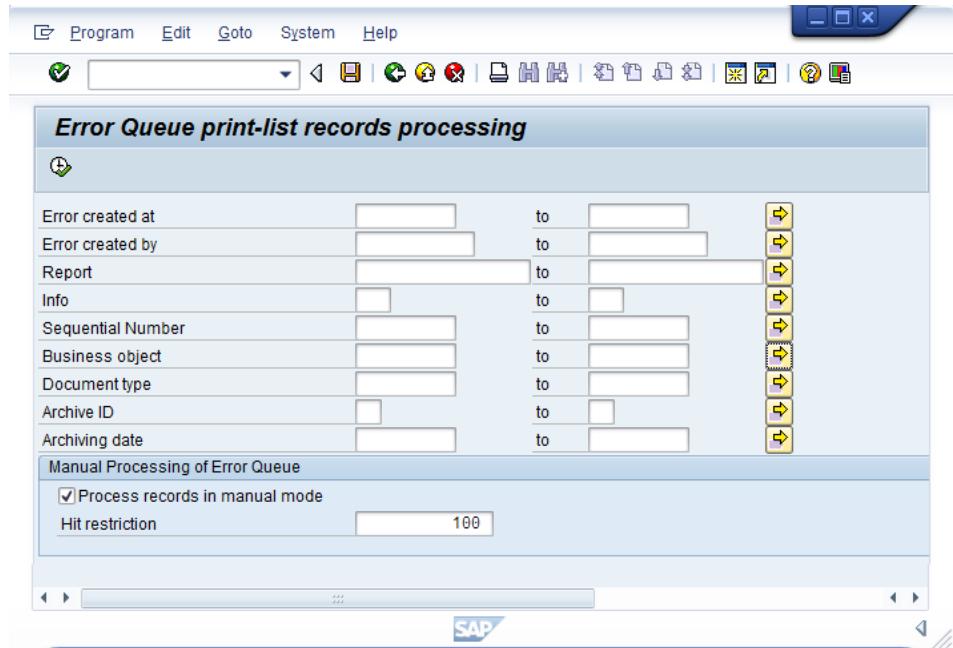
4. Processing records in automatic mode

Deselect the **Process records in manual mode** check box and run the report either in the background or directly.

The result list is the same as in the manual re-processing, with all entries of the error queue filtered according to your selection mask entries.

To open the print list record error queue:

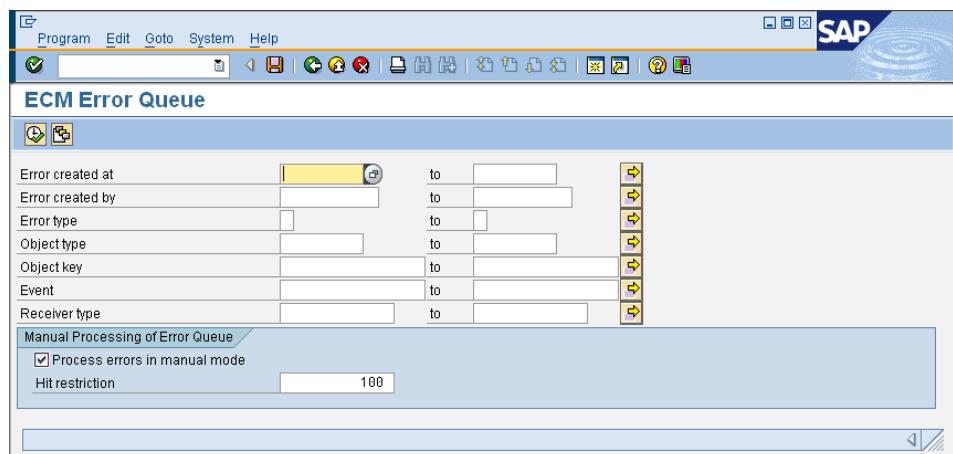
1. Start the /OTX/RMPEQPRINTL transaction.



2. Restrict the entries to be listed by specifying the required parameters.
In addition to the standard print list values you can also enter the user who failed in the declaration process (**Error created by** field) and the date of the error entry (**Error created at** field).
3. You may process the records either in the manual or in the automatic mode:
Proceed as described under [step 3 on page 217](#) or [step 4 on page 218](#), respectively.

To open the business workspaces error queue:

1. Start the /OTX/RM_WSC_EQ transaction.



2. Restrict the entries to be listed by specifying the required parameters.

In addition to the standard values you can also enter the user who failed in the declaration process (**Error created by** field) and the date of the error entry (**Error created at** field).

3. You may process the records either in the manual or in the automatic mode:
Proceed as described under [step 3 on page 217](#) or [step 4 on page 218](#), respectively.
4. To view the SAP log of the error that caused the entry in the error queue, click the number in the **Log number** column.

20.1.5 Analyzing the application log

OpenText Content Management for SAP Solutions tracks errors and warning situations in the SAP standard application log.

The application object for OpenText Content Management for SAP Solutions is /OTX/RM.

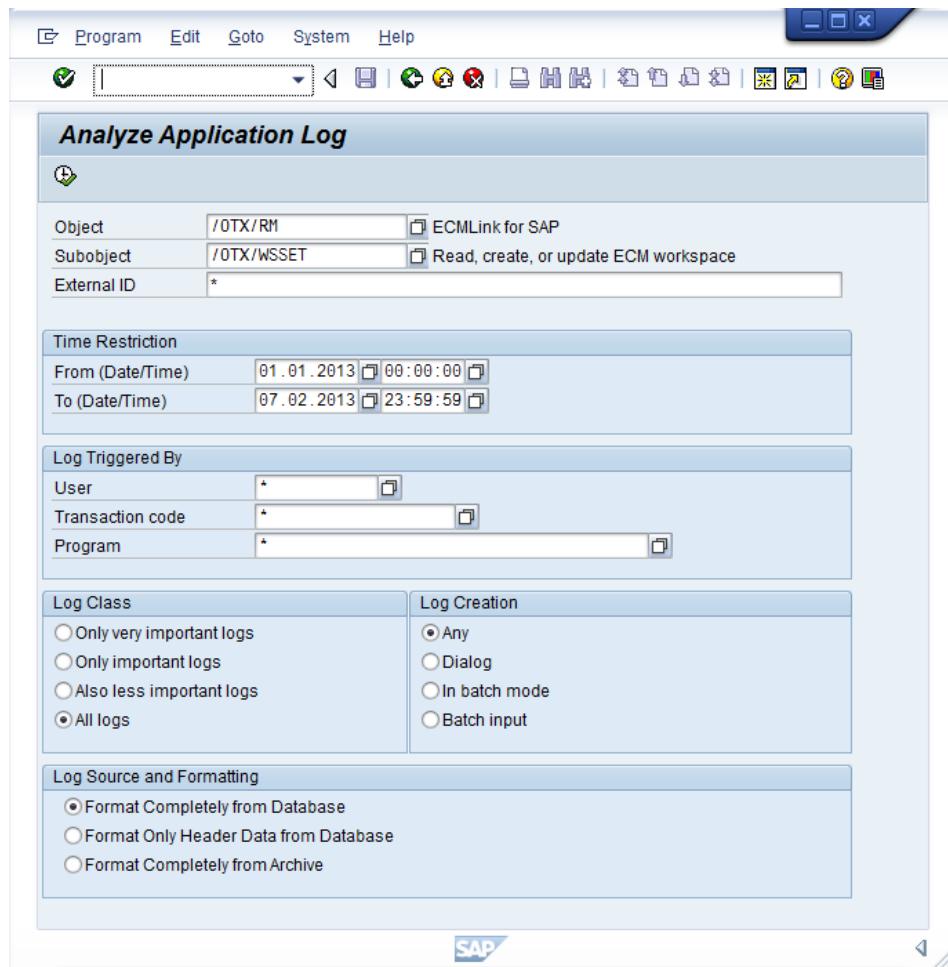
Depending on the scenario, the following subobjects are available:

/OTX/AUTH	Authorization check
/OTX/BRUPD	Business attachment update. Not relevant for OpenText Content Management for SAP Solutions.
/OTX/CONFIG	Configuration
/OTX/DECUI	Record declaration UI
/OTX/DISP	Disposition report
/OTX/ERRQ	Error queue failure
/OTX/GOS	GOS attachment list
/OTX/GOSENH	Modify GOS items via enhancement
/OTX/GOSMENU	GOS menu
/OTX/HTTPSRV	HTTP server failure
/OTX/LINKE	Link entry changed
/OTX/MIGR	Migrate report
/OTX/MIG_IDS	Migrate Content Server IDs report
/OTX/RMDOL	Content Server Business Attachments. Not relevant for OpenText Content Management for SAP Solutions.
/OTX/RMWSA	Workspace Policies
/OTX/RMWSS	Business Object Search
/OTX/SEAB	Full-text Search Base
/OTX/SEAPI	Full-text search API. Not relevant for OpenText Content Management for SAP Solutions.

/OTX/SEARCH	Search report. Not relevant for OpenText Content Management for SAP Solutions.
/OTX/SEAX	Full-text search connector. Not relevant for OpenText Documentum CM for SAP Solutions.
/OTX/TEST	Test
/OTX/UPD	Update events
/OTX/WSSET	Read, create, or update business workspace
/OTX/CRM	SAP CRM related issues

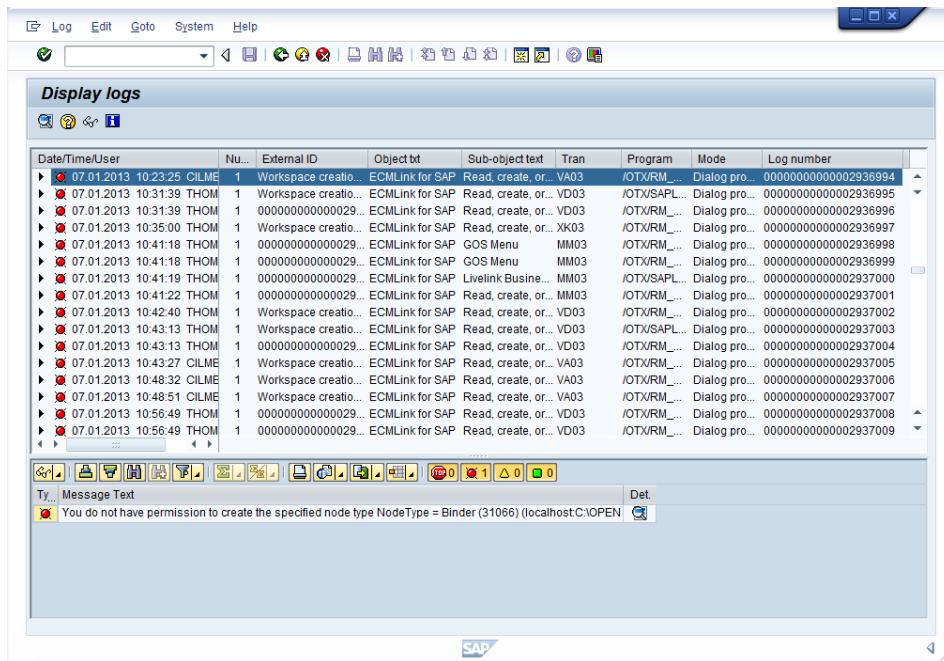
To view the SAP application log:

1. Start the SLG1 transaction.

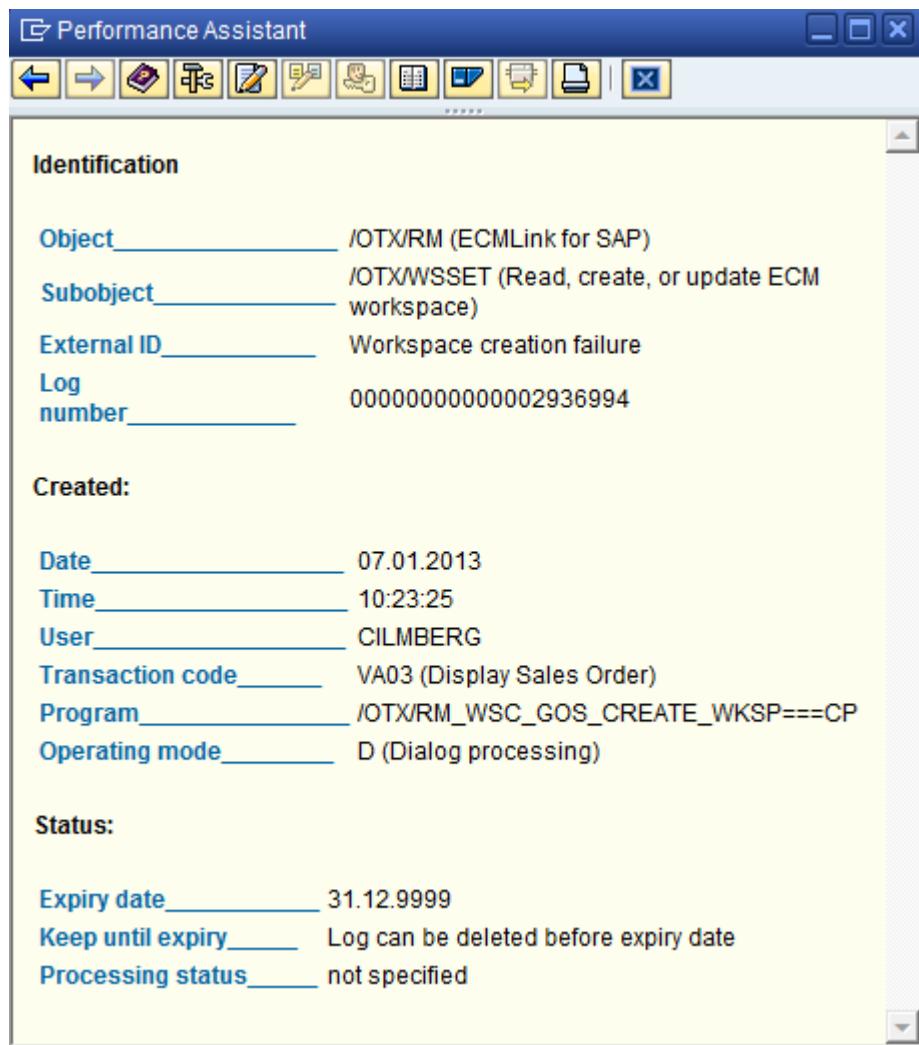


2. Enter the application object /OTX/RM in the **Object** field and specify additional parameters as required. Use a subobject to filter the log.

3. Click  **Execute**.

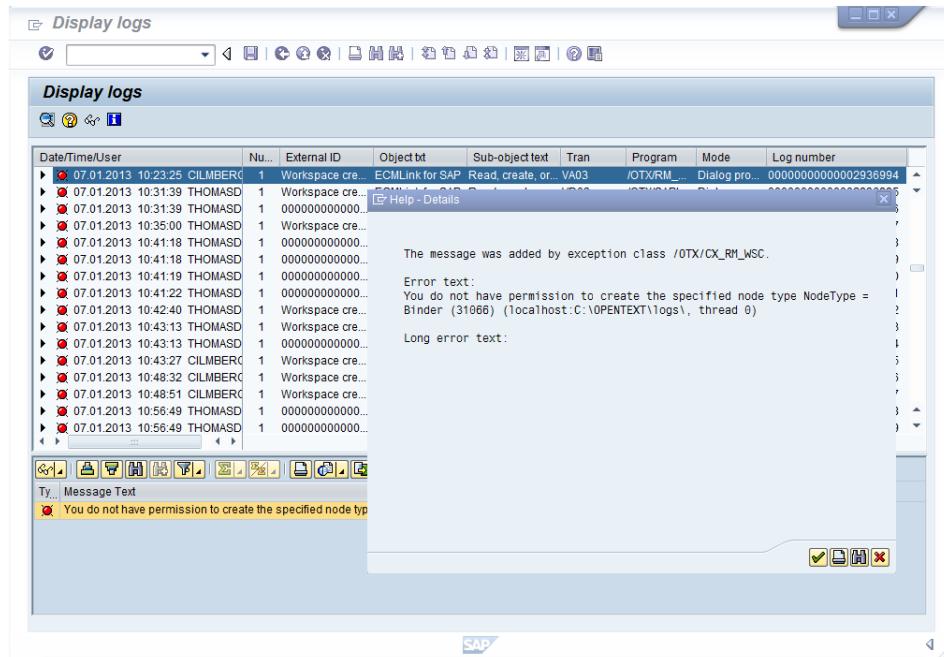


4. Select a log entry, and then click  **Technical Information** to display the entry's technical context information.



In an error situation with a specific ArchiveLink entry, you can view the property values **Client**, **Object Type**, and **SAP object ID**.

5. Click **Detailed Information** to show the calls stack where the error or warning occurred. Expand the selected log entry to get more detailed information.



6. Double-click on the subentry to show a detailed error message. If available, click **Detailed Information** to display the details of the error message.

Part 3

Configuring the Documentum CM Server and Documentum

Chapter 21

Creating custom types for business objects

To create custom types for business objects

1. In Documentum Administrator, click **Types**.

2. Create a new type:

a. Add a **Type Name**.

b. Click **Select Super Type** and select `xecm_workspace`.

All required attributes for the connection to the SAP system and the OpenText Documentum CM for SAP Solutions are available in the `xecm_workspace` workspace.

c. On the **Attribute** tab, add further attributes of your individual business object.



Caution

Do not use Integer attributes. Integer ranges differ in both applications.

Chapter 22

Preparing Documentum CM Server cabinet and folders

To enable OpenText Documentum CM for SAP Solutions on the Documentum CM Server, you create a cabinet and folders for each workspace type.

To create folders with sufficient permissions:

1. Cabinet and folders

In your repository create a cabinet for OpenText Content Management, for example ExtendedECM. In this cabinet, create folders for each workspace type that you will create in Content Server.

Example:

- Purchase orders = /ExtendedECM/Purchase Orders
- Invoices = /ExtendedECM/Invoices



Note: The folder structure naming must be consistent with your autonaming rules. For more information, see *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.

2. Permissions

Assign the required permissions to the folders. You can have, for example a **finance_users** group, which has write access to both folders, whereas the **managers** group has only read access to both folders.

Chapter 23

Adding a search based on SAP attributes

SAP metadata is synchronized into attributes of business workspaces.

The business workspaces contain different documents. These documents itself do not have any of the SAP metadata values assigned. But the user usually wants to be able to search for documents, based on attributes. The described setting enables to find the business workspace and the documents.

To get search results which display documents, you must configure a full text search that is based on SAP attributes. The search result must not only display the business workspace which has the attributes assigned but also the documents that are stored in the business workspace.

To define a search based on SAP attributes:

Example: Usually a company orders certain material from a vendor called C.E.B. New York. A employee wants to check if they contacted C.E.B. New York for carriage bolts of stainless steel before.

In the search form, the employe can perform the following search:

Vendor: New York

The text field searches in the property vendor for a vender containing New York in the name.

Material: Stainless steel

The text field searches in the property material for stainless steel.

Text Search: carriage bolts

The text field searches for carriage bolts in all properties

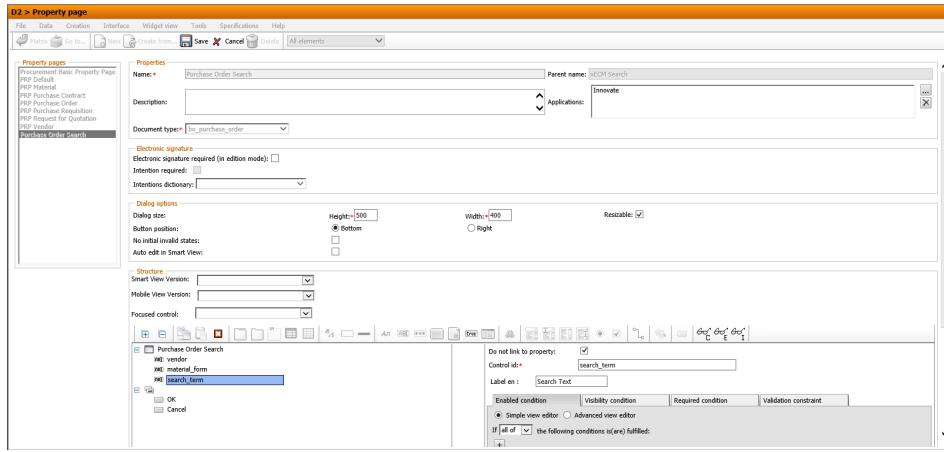
The search result will display all documents that are available.

1. Create a **Properties** page in Documentum Config.

Add the business workspace that holds the content as Document type.

For more information, see *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.

Example: In our example, we add the fields vendor, material_form and search_term. For all fields, you have to add the **Control id** and a **label**. The search_term enables the search for "carriage bolt". You have to enable the **Do not link to property** check box for it, to provide a search in all properties. The other fields are linked to their corresponding property that contains the search value.



2. Create a **Query form** for the **Property page**.

For more information, see *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.

- a. Select the **Property page** that you created.
- b. Activate the **Ignore Empty Attributes** check box. Thus, you can search for something without filling all fields.
- c. Configure the search query, using DQL.

Example: In our example, we need three search statements for our three fields to define the search.

```

SELECT * FROM dm_document SEARCH DOCUMENT CONTAINS '$value(search_term)' where any i_folder_id in
(select r_object_id from dm_folder where any i_ancestor_id in (select r_object_id from bo_purchase_order where LOWER(vendor) like LOWER('%$value(vendor)%'))) UNION SELECT * FROM dm_document SEARCH DOCUMENT
CONTAINS '$value(search_term)' where any i_folder_id in (select r_object_id from dm_folder where any i_ancestor_id in (select r_object_id from bo_vendor where LOWER(name) like LOWER('%$value(vendor)%'))))
UNION
SELECT * FROM dm_document SEARCH DOCUMENT CONTAINS '$value(search_term)' where any i_folder_id in (select r_object_id from dm_folder where any i_ancestor_id in (select r_object_id from bo_purchase_order where any LOWER(material) like LOWER('%$value(material_form)%'))))
UNION
SELECT * FROM dm_document SEARCH DOCUMENT CONTAINS '$value(search_term)' where any i_folder_id in (select r_object_id from dm_folder where any i_ancestor_id in (select r_object_id from bo_purchase_requisition where any LOWER(material) like LOWER('%$value(material_form)%'))))

```

Chapter 24

Configuring the client

Following are the steps to configure a client:

- Configure a Smart View Client Landing Page. See *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.
- Design a Smart View. See *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.
- Configure the Relations widget
- Provide permissions to access the Relations widget
- Add Relations to Smart View Landing Page
- Add Relations menu item to Smart View Menu

24.1 Configuring the Relations widget

Internal widgets are user interface components used to display internal repository information.

1. Navigate to **Widget view > Widget** from the menu bar.
2. Click **New** to create a widget.

If you want to create a child widget that inherits the properties of an existing widget, select a widget and click **Create from**.

3. Fill out the form as described in the following table:

Field	Description
Name	Type a name to appear in the configuration matrix. Example: Relations Widget
Description	Type a description.
Label < <i>language</i> >	Type a label.
Description < <i>language</i> >	Type a description.
Widget type	Select DetailsRelationsWidget.

4. To configure a customized set of default columns for a selected widget, select the **Customize default widget columns** check box.



Note: You can only configure the widgets that allow users to customize column preferences in the client.

5. In the **Type** list, select **xecm_workspace** and move the required columns to the right.



Note: Use the operation buttons to reorder the list of sort columns.
`object_name` should be the first column.

6. Click **Save**.

24.2 Defining permissions for the Relations widget

You should define the permissions for the Relations widget.

On the Configuration Matrix, expand **Widgets**. For the configuration element(Relations), select the applicable check box to define the permissions to the context (Default or any other context).

24.3 Adding Relations widget to Smart View Landing Page

You must add the Relations widget to the Smart View Landing Page configuration to view the widget on the Smart View Landing page.

To add the Relations widget to Smart View:

1. On the Configuration Matrix, select **All elements** to view all the configuration elements.
2. Click the Landing Page configuration element to view its configuration.
3. In the **Landing Structure File** area, click **Download** to download the Smart View Landing Page configuration .xml file.
4. Add the following line in the .xml file and save the file.

```
<relation-widget>Relations widget</relation-widget>
```

Example: The following is an example of a default-widgets implementation:

```
<default-widgets>
    <version-widget>Innovate Versions</version-widget>
    <relation-widget>Innovate Relations</relation-widget>
    <rendition-widget>Innovate Renditions</rendition-widget>
    <doclist-searchresults-widget>Innovate Doclist</doclist-searchresults-
widget>
    <doclist-widget>Innovate Doclist</doclist-widget>
    <favorites-widget>Innovate Favorites</favorites-widget>
    <collection-widget>Innovate Collections</collection-widget>
    <bravacsr-widget>Innovate BravaCSR</BravaCSR-widget>
    <vdoc-widget>Innovate Virtual Documents</vdoc-widget>
    <tasks-widget>Innovate Tasklist</tasks-widget>
    <task-attachments-widget>Innovate WF Task Attachments</task-attachmen-
ts-
widget>
    <bravaenterprise-widget>Innovate Brava Enterprise Viewer</bravaenterpri-
se-
widget>
    <otiv-widget>Innovate OTViewer</otiv-widget>
    <all-workflows-widget>Innovate WF Overview</all-workflows-widget>
    <my-workflows-widget>Innovate WF SV My Workflows</my-workflows-widget>
```

```
<audits-widget>Innovate Audit</audits-widget>
<locations-widget>Innovate Locations</locations-widget>
</default-widgets>
```



Note: The order of the default widget tags in the .xml file is strict. Departing from the example listed below might cause Landing Page elements to malfunction, or cause errors when you attempt to upload the .xml in client configuration.

5. Import the .xml file and save the configuration.

24.4 Adding Relations menu item to the Smart View menu

You must add the Relations menu to the Smart View menu for it to be accessible through contents' Property pages. You can modify the display conditions and contents of this menu.

To add the Relations menu item to the Smart View menu:

1. Navigate to **Go to > Menu Smart View** from the menu bar or click the Default Smart View Menu on the Configuration Matrix to configure a menu.
2. In the **Contextual menus** area, click **Action Toolbars** and then click **Create relation**.
3. In the **Conditions** box, select the **Selection is document** condition and click the **Remove** button.
4. Save the changes.

Chapter 25

Configuring the update of SAP data in Documentum

To automatically update SAP data, you must configure the `rest-api-runtime.properties` file. If you plan to use Google Chrome you can also set the SameSite attribute in this file. For more information, see “[Supporting the SameSite attribute](#)” on page 253.

To configure the update of SAP data:

1. In the Documentum installation navigate to . . . \D2-Smartview\WEB-INF\classes.
2. Open the `rest-api-runtime.properties` file.
3. Set `rest.security.csrf.check.disabled.user.agents=OpenText Content Server/<version>`.
For example, `rest.security.csrf.check.disabled.user.agents=OpenText Content Server/25.4`.
4. Open your **Content Server** system and change the **Public Server URL** to `https` in the **Enterprise Application Integration** page.

Chapter 26

Geolocation attributes

The Documentum Sever maintains two geolocation attributes. These attributes are set to `false` by default and must not be changed.

The attributes are contained in the `<Tomcat-Home>\webapps\Documentum\WEB-INF\classes\settings.properties` file:

- `geolocation.enabled=false`
- `geolocation.required=false`

Chapter 27

Defining Folder Structure import

You import content from SAP to Documentum via OpenText Content Management. For this content you have to define the folder type and structure that is used.

To define the Folder Structure import:

1. In Documentum Client Configuration, click **Go to > Folder Structure import**.
2. Click **New** to create a folder structure import setting.
3. Select a folder structure import setting, and then click **Create from**.
4. Fill out the form as described in the following table:

Field	Description
Name	Mandatory: Type a name to appear in the configuration matrix.  Note: If you are creating a folder structure import setting to configure the document template synchronization job to OpenText Documentum CM, enter DM_Folder_Config as the Name.
Description	Optional: Type a description.
Applications	Optional: Add or remove the applications to which this folder structure import setting applies.
Label	Mandatory: Type a label name to appear in the Folder Import dialog. This name is added in OpenText Content Management to set the connection.

5. Set import settings as described in the following table:

Field	Description
Root folder type	Mandatory: Select the folder type applied to the root folder.  Note: If you are creating a folder structure import setting to configure the document template synchronization job to OpenText Documentum CM, select dm_folder as the Root folder type.
Root folder autolink	Optional: Select the autolink rule you want to use for placing the folder.
Sub-folder type	Optional: Select the folder type applied to subfolders.
Sub-folder structure security	Optional: Select the security configuration you want used on the root folder and all subfolders. Usually you set the security in OpenText Content Management when creating a template.
Creation Profile	Mandatory: Select appropriate creation profile.

Field	Description
Convert folder structure to virtual document automatically after import	Optional: Select to automatically initiate a virtual document conversion after folder structure import.

6. Click **Save**.

Chapter 28

Adding links to open OpenText Content Management interface from Smart View client

You can add a link within a tile to open the OpenText Content Management interface from the OpenText Documentum CM. The link can be integrated into a Landing Page widget or into the context menu of a business workspace.

To add a tile with a link to OpenText Content Management page on the Documentum Landing page:

For more information, about how to create and add widgets, see Section 13.21 “Configuring an Internal Widget” in *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.

1. Create a new widget with the following settings:

Name

Your internal name.

Label

The label that is visible to the user.

Application

Your application that shows the landing page.

Widget Type

OpenURLWidget

URL

The URL of your OpenText Content Management system.

2. Add the widget to your landing page.

For more information, see *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)* and *OpenText Documentum Content Management - Client Configuration Guide (EDCCL-AGD)*.

Chapter 29

Enable workspace creation in OpenText Documentum CM

A user can create so called early workspaces, which are not linked to a SAP object at time of creation. The items of the workspace and the workspace are later connected to an SAP object.

To enable the creation of workspaces in OpenText Content Management from the OpenText Documentum CM interface, you must configure the OpenText Content Management settings for workspace creation and the OpenText Documentum CM location and menu item name of the feature.

To configure the OpenText Content Management plugin in the Documentum Client Configuration:

1. In **Documentum Client Configuration**, navigate to **OpenText Content Management > Options**.
2. In the **Extended ECM server URL** field, add the URL of your OpenText Documentum CM for SAP Solutions system.

Template config name

Add a name for the OpenText Documentum CM for SAP Solutions template that you use in your OpenText Documentum CM system.

Menu label

Add a menu label for the workspace creation in Documentum. This label is used for the **Add Business Workspace** menu item and the **Business Workspace Creation** dialog title.

Template path in Extended ECM

If the template is located in the **Document Template** folder of OpenText Content Management, add the name of the Document Template.

If the template is located in a folder within the **Document Template**, add the sub path, for example `ERP Templates/Equipment`. For more information, see “[Defining a workspace template in Smart View](#)” on page 72.



Note: In case of incorrect template path configuration, you cannot create a new Business Workspace.

Apply to folder path

Add the path in OpenText Documentum CM where you want to see the menu to create new Business workspaces. The path is shown in the breadcrumb of the folder in OpenText Documentum CM.

3. To enable the OTDS communication with OpenText Documentum CM in Browsers, add the Documentum Smartview URL:
 - a. In OTDS, click **Setup > Trusted Sites > Add**.
 - b. Click **Add**.
 - c. Add the URL of your Smart View client system.
 - d. Add the domain (ex: `https://<>:8443/*`) of your Smart View client system.
4. **Optional** To support the early workspace creation in Chrome, apply the OTDS hotfix, to support OTDS session cookies. For more information, see <https://knowledge.opentext.com/knowledge/cs.dll/kcs/kbarticle/view/KB15024252>.

Chapter 30

Enabling the REST API for OpenText Content Management workspace clean-up in Documentum

To support the Documentum REST API call from Content Server for workspace cleanup, ensure that the following property is configured: rest.context.config.location=com.emc.d2.rest.context.jc,com.opentext.d2.rest.context.jc

To configure the property:

1. In the Documentum Client installation open the ...\\D2-Smartview\\WEB-INF\\classes\\rest-api-runtime.properties file.
2. To the rest.context.config.location key, add the value com.opentext.d2.rest.context.jc separated by comma.
3. Save the changes and restart the respective tomcat.

Part 4

Configurations in several systems

Chapter 31

Enabling OpenText Directory Services(OTDS)

You integrate OpenText Directory Services to synchronize users and groups between the SAP system, Content Server and Documentum CM Server.

1. Enable OTDS integration on Documentum Server. For more information, see *OpenText Documentum Content Management - Server Administration and Configuration Guide (EDCCS-AGD)*



Note: Create the attribute `client_capability` in **User Attribute Mappings** for the Documentum Resource that you created in OTDS.

Set it to the level of access to be granted to the users.

Example: 1 for “Consumer” role

2 for “Contributor” role

3 for “Coordinator” role

4 for “System Administrator” role

2. Provide additional OTDS parameters in the properties file:

```
wildfly9.0.1\server\DtcmServer_MethodServer\deployments\ServerApps.ear  
\OTDSAAuthentication.war\WEB-INF\classes\otdsauth.properties  
  
otds_rest_ticket_url=http://<OTDShost>:<port>/otdswebs/rest/authentication/resource/  
validation  
Repotest_resource_id=<Created Documentum Resource Id>  
Repotest_secretKey=<Created Documentum Resource Secret Key>
```

3. Configure OTDS integration on Documentum:

- a. Edit the WEB-INF/classes/rest-api-runtime.properties file inside the D2-Smartview.war file.
- b. Use `ct-otds_ticket-otds_token` as the value for the `rest.security.auth.mode` property:

Following is the required configuration:

```
rest.security.auth.mode=ct-otds_ticket-otds_token  
rest.security.realm.name=com.documentum.rest  
rest.security.otds.login.url=https://<OTDS_Server>/otdswebs/login?  
&response_type=token&client_id=<OAuth_Client_Id>
```

4. Configure Impersonation settings on the Content Server resource:

- a. Navigate to **Resources**.
- b. Next to the **OTCS Resource**, click **Actions**.
- c. Select **Impersonation Settings**.

- d. Select the **Allow this resource to impersonate users** check box , to enable workspace creation from CSSAP.

31.1 Fixing the https connection problems of Documentum and OTDS

Some of the intermediate certificates are not accepted by Documentum.

If your SSL certificate is not accepted, you have to replace your PEM (base64) certificate by an DER (X.509) encoded certificate. You additionally need to create a new keystore for the certificate.

The following error, indicates that you have to update your certificate:

```
java.security.InvalidAlgorithmParameterException: the trustAnchors parameter must be non-empty
```

To enable https communication of Documentum and OTDS:

1. Open OTDS in a browser and export the certificate with DER encoded binary X. 509 (.CER) setting:
 - a. Edge:
 - i. Click the security icon in the address bar and click **View Certificates**.
 - ii. Select the root certificate
 - iii. Click **Export to** and save the certificate.
 - b. Internet Explorer:
 - i. Click the security icon in the address bar and click **View Certificates**.
 - ii. Open the **Certification Path** tab and select the root certificate.
 - iii. Click **View Certificate**.
 - iv. Open the **Details** tab
 - v. Click **Copy file to** and save the certificate.

2. Import the certificate into the keystore for the trusted certificates. You can use the following command:

```
keytool -import -trustcacerts -alias root -file Thawte.crt -keystore keystore.jks
```

3. Open the `wildfly startMethodServer.cmd` file, to add the keystore to the `JAVA_OPTS` parameter: `-Djavax.net.ssl.trustStore=keystore.jks`

You can find the `wildfly` startup script on your server: `\Documentum\wildfly17.0.1\server\startMethodServer.cmd`.

Chapter 32

Supporting the SameSite attribute

Google Chrome implemented the SameSite attribute for third-party cookies. The Documentum folder browse widget requires the following system adoptions, if you want to use a recent version of Google Chrome.

To adopt Documentum Smart-View for SameSite attribute:

1. In the Documentum Client installation navigate to . . . \D2 - Smartview\WEB-INF\classes.
2. Open the `rest-api-runtime.properties` file.
3. Set `rest.security.client.token.cookie.samesite=None`.
4. Open your Content Server system and add and https link for your Documentum system.

For more information, see “[To connect a Documentum Content Server:](#)” on page 31.



Tip: SameSite setting does not work on HTTP. You have to update the Documentum URL settings to ensure that it uses HTTPS.

5. Open your OTDS system.
6. In **OAuth Clients**, adapt or create the https **Redirect URLs**.

Chapter 33

Configuring the Content Security Policy header

You must configure the Content Security Policy header to view Documentum embedded view OpenText Content Management in workspaces.

To configure Content Security Policy header:

1. In the Documentum Client installation navigate to . . . \D2-Smartview\WEB-INF\classesnav.
2. Open the `rest-api-runtime.properties` file.
3. Set `rest.security.headers.csp.allowed_frame_ancestors=self,http://my.allowed.domain#`. For example, `rest.security.headers.csp.allowed_frame_ancestors=self,https://xecmwsrv50.otxlab.net,https://saphtmlphtmlviewer.sap.com`
where `xecmwsrv50.otxlab.net` is the OpenText Content Server domain and `saphtmlphtmlviewer.sap.com` is the SAP domain.
4. Save the changes.

Part 5

Configuring Archive Link

Chapter 34

Configuring the query to search for documents stored in the Documentum repository via ArchiveLink

You can integrate documents, which already exist in the Documentum repository in a business workspace. The documents must have been stored using the existing Archive and Content Services for SAP.

To integrate the documents, you create a query to enrich the archived documents with metadata from their business object in SAP.

Prerequisites

- Install the `Enterprise_Integrations_Samples.dar` of Archive or Content Services for SAP Solutions version 16.7.

A query named “Archive Generic - For xECM jobs” is installed.

To create the query:

1. Navigate to **Administration > Content Services for SAP > SAP > Query**.
2. Right click the **Archive Generic - For xECM jobs** query and edit the properties, or create a duplicate.
3. Adapt the `ObjectType`, `ArchiveId` and `DocumentType` to find the documents that you want to display in the business workspace.

Example: With the following example, an Admin can archive one or more test files and verify if the configured job is working as expected or not. The documents added in the archive folder through SAP should also be linked to the new xECM folder path, for example, `/xECM/<Object Type>/<Object Id>/Business Documents`. Metadata must be populated on the `<Object Id>` folder, which is of type `xecm_workspace`.

```
ArchiveId=ZZ  
ObjectType=BUS2012  
DocumentType=Z_PDF  
FromDate=$TODAY
```

4. Once the verification is done, you can remove all the parameters except `ObjectType` and `ArchiveId`. Optionally, you can keep the `DocumentType` as well.
5. Run the job.
Depending on the number of documents, the time taken to complete this job may vary.
6. Once the job is completed successfully, add the `FromDate` parameter.

If you want to reprocess the documents based on their time of archival, set the condition to \$TODAY - 1 (FromDate=\$TODAY - 1). This ensures that no new document is missed.

If the job is scheduled to run at the end of a day, set the FromDate to \$TODAY. No documents must be archived when a run is in progress.

Example: Processing of documents based on their time of arrival:

```
ArchiveId=ZZ  
ObjectType=BUS2012  
DocumentType=Z_PDF  
FromDate=$TODAY-1
```

7. Repeat these steps for every business object.

Chapter 35

Creating replicate actions, agents, and jobs

To replicate SAP metadata information into the corresponding Documentum object, you create a replicate action. Each action is linked to an agent. A job runs one or more agents in a defined order.

OpenText Documentum CM for SAP Solutions delivers sample actions that you can use to define your actions.



Note: Creating Business Workspaces with the replicate actions job is currently not supported when multiple repositories are configured on OpenText Documentum CM.

Prerequisites

- Create a query. For more information, see “[Configuring the query to search for documents stored in the Documentum repository via ArchiveLink](#)” on page 259.
- Install `Enterprise_Integrations_Samples.dar` of Archive or Content Services for SAP Solutions version 16.7.
- Configure SOAP Properties for OpenText content server. For more information search for OpenText Documentum Content Services for SAP Solutions (Version 16.7) Installation Guide on My Support (https://support.opentext.com/csm/?id=kb_article_view&sysparm_article=KB0652272).

35.1 Creating a replicate action

OpenText Documentum CM for SAP Solutions delivers two sample actions that you adapt to your needs. Both actions map SAP data with Documentum items.

1. Replicate xECM Action 1 - Create Business Documents folder

Use the action if you have not configured your Content Server template to create the folder.

2. Replicate xECM Action 2 - Link documents to xECM Workspace

Use the action if you want to link and map SAP data with Documentum objects. Use only this one action if your Content Server template already creates the destination folder for these objects.

To create a replicate action:

1. In Documentum Administrator, go to **Administration > Content Services for SAP > Actions > Replicate SAP**.
2. Right-click and select **Properties**, to configure the replicate actions that are delivered with OpenText Documentum CM for SAP Solutions.

3. Configure the parameters.

a. The following settings are used for both actions:

- **SAP System Type:** select R/3
- **Object type:** Select which type is created.
- **SAP Query:** select the query you created earlier.
- **Link Workflow:** No Workflow.
- **OpenText Content Management:** Enable
- **Update Condition:** Leave blank
- **Defined Map Rules:** Change `xECM.ext_Sys_Id` to the SAPSysName with the system name of SAP. Ex: D7K

b. If you configure **Replicate xECM Action 1 - Create Business Documents folder** action:

Use the following settings to create a target folder:

- **Update object:** Not selected.
- **Create object:** Selected.
- **Object key:**

Adapt the **Format** of the **object_name** variable, add for example Business Documents.

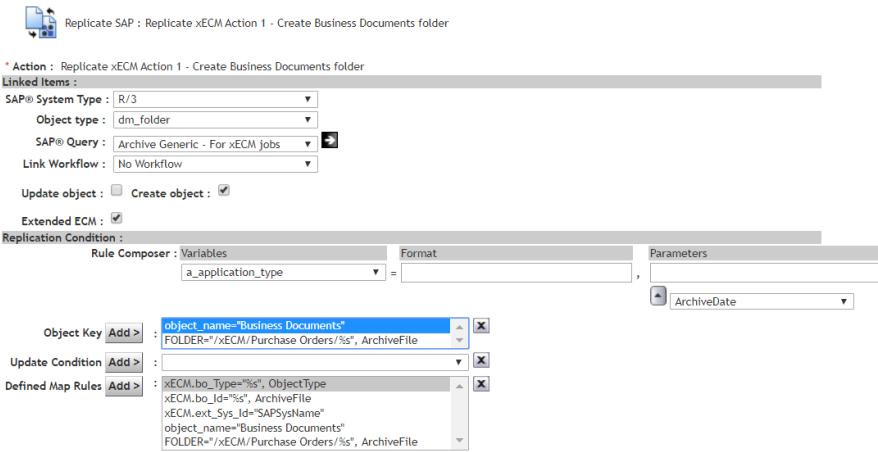
Adapt the **Format** and **Parameters** for the **Folder** structure that is created.



Note: Make sure that the value for the **Folder** parameter is consistent with your auto-naming rules. For more information see “[Editing workspace names](#)” on page 48.

Map the newly created folder:

- **Defined Map Rules:**
 - Adapt the **object_name** to the entries that you selected for the **Object key**, for example Business Documents.
 - Adapt the **Format** and **Parameters** for the **Folder** structure to the entries that you selected for the **Object key**.
 - Leave the mapping for Content Server (`xECM.bo_Type` and `xECM.bo_Id`) as it is.



- c. If you configure **Replicate xECM Action 2 - Link documents to xECM Workspace**, use the following settings.

You either use an already existing folder from the content Server Template or create the folder with **Replicate xECM Action 1**.

- **Update object:** Selected.
- **Create object:** Not selected.
- **Object key:**

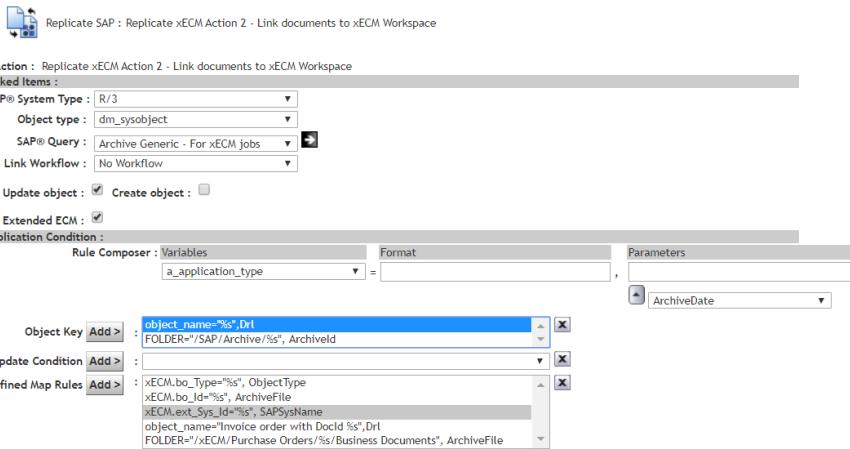
Adapt the **Folder** variable to its path. The path is created, using the Content Server template or the **Replicate xECM Action 1**.

Adapt the **object_name** variable and configure the **Format**. You could, for example, add the business object type and a date:

```
"Incoming Order %s of %s", Drl, ArchiveDate
```

• **Defined Map Rules:**

- Adapt the **object_name** to the name that you already entered for the **Object key**. You can, for example, add the business object type and a date: `Incoming Order %s of %s", Drl, ArchiveDate`.
- Adapt the **Folder**, to the path that you already entered for the **Object key**.
- Leave mapping for Content Server (`xECM.bo_Type` and `xECM.bo_Id`) as it is.



4. Click OK.

35.2 To create agents for the actions

1. In Documentum Administrator, go to **Administration > Content Services for SAP > Auto Manage > Agents**.
2. Create an agent for each action:
 - **Agent Name:** Any meaningful name
 - **SAP System Type:** Select one
 - **Action:** One of the actions you created earlier
 - **SAP Server:** select SAP server
 - **SAP User:** Enter a user

! Important

Once this job runs, the documents in the Archive folder will be linked to newly created folder of the respective OpenText Content Management path.

35.3 To create a job, which executes the agents

1. In Documentum Administrator, go to **Administration > Content Services for SAP > Auto Manage > Jobs**.
2. Create a job. Fill in the required fields and schedule the job.
3. On the **SAP Job** tab, enter the agents so that the actions run in the following order:

 **Note:** If you create the folder with the Content Server template, Action 1 is not needed.

1. Action 1: Create Business Documents folder
2. Action 2: Link documents to xECM Workspace

