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OpenText™ Documentum™ Content Services for SAP® Solutions

Installation Guide

Deploy and configure OpenText Documentum Content Services for SAP Solutions.

EDCCOSAPCS250400-IGD-EN-01

OpenText™ Documentum™ Content Services for SAP® Solutions
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This documentation has been created for OpenText™ Documentum™ Content Services for SAP® Solutions CE 25.4.
It is also valid for subsequent software releases unless OpenText has made newer documentation available with the product, on an OpenText website, or by any other means.

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Chapter 1

Preparing to install Documentum Content Services for SAP Solutions

This chapter provides information about preparing to install Documentum Content Services for SAP Solutions (CS SAP).

1.1 Intended audience

In order to address the manuals to the correct audience, the roles of the users of the manuals have been defined as follows:

- System Administrator – This role covers users who install and configure Documentum Content Services for SAP Solutions. The Documentum Content Services for SAP Solutions application integrates OpenText™ Documentum™ Content Management and the SAP R/3 or ECC system. Therefore, system administrators must have experience with the software products listed in the *OpenText Documentum Content Services for SAP Solutions Release Notes*.

- Content Services Administrator – This role covers users who manage Documentum Content Services for SAP Solutions using WebAdmin.

- Document Controller – This role covers those who release documents to SAP and maintain the links to those documents.

- Standard User – This role covers users who view documents using the SAP GUI and the View component of Documentum Content Services for SAP Solutions.

This manual forms part of a documentation suite designed to support those who install, configure, and use Documentum Content Services for SAP Solutions. The product and documentation suite can be found on OpenText My Support (support.opentext.com).

1.2 Prerequisites

The person installing Documentum Content Services for SAP Solutions should have administrative experience with the software products. Documentum Content Services for SAP Solutions depends on specific versions of OpenText Documentum CM; and third-party products, as described in *OpenText Documentum Content Services for SAP Solutions Release Notes* on OpenText My Support (support.opentext.com).

> **Notes**
>
> - Unless the person installing the product has the prerequisite experience, it is recommended that you do *not* perform installations by using only OpenText Documentum Content Management (CM) manuals as guidance.

- OpenText Documentum CM Support can assist only with systems which were installed by qualified persons following the specific instructions outlined in both the documentation and the training manual.

1.3 Installation scenarios

Documentum Content Services for SAP Solutions is an integrated suite of products that provide document management, imaging, and archiving services. Services can be installed on different physical machines in different locations as long as the required functional components for each specific service are on the same machine. The following table provides an overview of possible system configurations and the functional component dependencies for each service or function.

Note: SAP GUI is not required when using only server components and agents.

Table 1-1: System configuration and dependencies

System configuration	Functional component dependencies
Documentum Content Services for SAP Solutions administration including automated linking and data replication.	Content Services for SAP Solutions HVP Worker
Browser enabled viewing client – View documents by selecting a link in SAP GUI.	SAP GUI plus View component – Installed with Webtop integration
OLE viewing client – View documents by selecting a link in SAP GUI or by calling a DRL directly from the repository.	SAP GUI plus View component
OLE viewing client – View documents by calling a DRL directly from the repository.	View component

1.4 Installing required OpenText Documentum CM software

This section contains information about OpenText Documentum CM software that must be installed prior to installing Documentum Content Services for SAP Solutions.

1.4.1 Installing Documentum Administrator

After the database and OpenText™ Documentum™ Content Management Server have been installed, install Documentum Administrator as described in the *OpenText Documentum Content Management - Server and Server Extensions Installation Guide (EDCSY250400-IGD)*.

After the Documentum Administrator installation is complete, install the preferred Documentum Content Services for SAP Solutions components as described in "Installing Documentum Content Services for SAP Solutions server components" on page 11.

1.5 SAP R/3 or ECC server (Windows or Linux)

Manual configuration of SAP ArchiveLink and SAP DMS are prerequisites for installation of Documentum Content Services for SAP Solutions, as described in the *OpenText Documentum Content Services for SAP Solutions - Configuration Guide (EDCCOSAPCS250400-CGD)*.

> **Caution**
>
> OpenText Documentum CM is not responsible for problems encountered during installation due to SAP-related issues, such as empty or wrongly configured tables, or needed support packages, hot fixes, or OSS Notes. OpenText Documentum CM requires that you read and apply all ArchiveLink and DMS-related OSS Notes and patches prior to Documentum Content Services for SAP Solutions installation. OpenText Documentum CM support is not responsible for answering SAP configuration questions or problems.

1.6 Pre-installation checklist

You must follow the information in the pre-installation checklist before you install Documentum Content Services for SAP Solutions. If the preinstallation tasks are not done, your system will not function properly.

1. Launch SAP GUI from the intended Documentum Content Services for SAP Solutions server or client and log in to the SAP system you want to support. If this test fails, you must resolve the connection between Documentum Content Services for SAP Solutions and the SAP system before proceeding.

2. Be sure all previous versions of DocLink and Content Services are removed or deactivated.

3. The repository should be up, running, and performing before installing Documentum Content Services for SAP Solutions. Documentum Content Services for SAP Solutions requires a fully functioning repository and writes configuration objects into the chosen repository during the install. The installation creates an SAP cabinet and writes Documentum Content Services for SAP Solutions administrative objects under the system cabinet.

4.   Create a directory on the SAP server. This directory will be used by SAP to store files temporarily until they are transported into OpenText Documentum CM.

5.   To use Documentum Content Services for SAP Solutions with HTTP archiving services, install Documentum Archive Services for SAP Solutions as described in the *OpenText Documentum Archive Services for SAP Solutions - Installation Guide (EDCCOSAPAR250400-IGD)*.

6.   Create an SAP user ID. Designate the user as a Dialog User. This user ID will be used to connect to SAP to run queries. Give the user account sufficient access to all SAP data that will be queried during Documentum Content Services for SAP Solutions operations.

7.   Make sure the application server and Documentum Administrator is up and running.

Note: From 6.5 release, the administration console for both Documentum Archive Services for SAP Solutions and Documentum Content Services for SAP Solutions is the same.

The Documentum Content Services for SAP Solutions needs HVPS component in addition to what Documentum Archive Services for SAP Solutions requires for executing the Document Management System related activities.

Chapter 2

Installing Documentum Content Services for SAP Solutions server components

This chapter describes the procedure for installing Documentum Content Services for SAP Solutions.

> **Note:** The components of Documentum Content Services for SAP Solutions are configured by using WebAdmin, which is installed with the other components. Instructions for using WebAdmin are provided in the *OpenText Documentum Content Services for SAP Solutions - Administration Guide (EDCCOSAPCS250400-AGD)*

2.1 Obtaining current version of software

To ensure that you install the current version of this product, visit OpenText My Support and review the product versions available for your platform.

For Windows, download `Content_Services_for_SAP_<version>_server_ Windowsfile.zip`, which contains the following files:

- `Enterprise_Integrations_Core.zip`: Contains the Enterprise Integrations Core DAR file and relevant script files for installing the DAR using the command line.

- `hvps.zip`: Contains the `HVPS DAR` file and relevant script files for installing the DAR using the command line. It contains `hvp.properties` file.

- `HvpWorker.zip`: The HVPWorker component. This is the agent that performs the DMS operations. It contains `HvpWorker.war` component and `hvp.properties` file.

- `dmei_custom_installer.zip`: The Customer Installer used for any customizations of the objects types in Documentum Content Services for SAP Solutions.

2.2 Installing Enterprise Integration Core DAR file

This section provides instructions for installing `Enterprise_Integrations_Core.dar` files on all Documentum Composer supported operating system.

> **Notes**
>
> - Use the information in this section to install other `.dar` files.
>
> - Ensure that the `dfc.properties` of the Documentum Composer utility has the Global repository details specified.

- The Documentum Composer can be located in the system where OpenText Documentum Content Management (CM) Server 6.5 or later is installed. In Windows Operating System, the Documentum Composer could be located in `%DOCUMENTUM%\product\<version folder>\install\composer` on the system where Documentum CM Server is installed. Alternatively, the latest version of the Documentum Composer can be downloaded from OpenText My Support.

- Users comfortable with the GUI mode, can make use of the Documentum Composer GUI to install DARs. The Documentum Composer GUI is specific to Windows environment. If the Documentum CM Server is running on a Linux environment, you could still connect to the repositories from the Documentum Composer GUI installed on your Windows system making the needed changes to `dfc.properties` of the Documentum Composer:

To install Enterprise Integration Core DAR file:

1. Extract the contents of the following to a temporary directory:

   - `Enterprise_Integrations_Core.zip` for Windows

   - `Enterprise_Integrations_Core.tar` for Linux

   The temporary directory should now contain the following files:

   - `dmant.bat` (Windows)

   - `dmant.sh` (Linux)

   - `DARInstallScript.xml` (Documentum Composer ANT install script)

   - `install.properties` (installation properties)

   - `Enterprise_Integrations_Core.dar` (DAR filename)

2. The `Enterprise_Integrations_Core.dar` can be installed using the DAR Installer GUI in Windows environments as described in Appendix A, Installing a DAR file using the DAR Installer GUI on page 59.

   Alternatively, the DAR file can be installed using the Headless Composer as described in the next step.

3. To install the DAR file using the Headless Composer, perform the following steps:

   a. Update the `install.properties` file with the repository name, credentials and the location of the DAR file, as follows:

      - `dar.docbase` = *<repository_name>*

      - `dar.username` = *<repository_install_owner_username>*

      - `dar.password` = *<repository_install_owner_password>*

      - `dar.domain` = *<domain>* (optional)

- dar.core.file = *<absolute path>*

b. The `DARInstallScript.xml` should have an `emc.install ant` task for every DAR file.

c. Specify the location of the Headless Composer and workspace in the `dmant.bat` file:

- Set the ECLIPSE environment variable to the Headless Composer directory on your machine.

- Set the WORKSPACE environment variable to a clean directory.

  For example:

  ```
  echo off
  setlocal
  set ECLIPSE=C:\ComposerHeadless
  set WORKSPACE=C:\ComposerHeadless\workspace
  set BUILDFILE=%1
  java -Xmx1024m -XX: MaxPermSize=128m -cp %ECLIPSE%\
  startup.jar org.eclipse.core.launcher.Main
   -clean -data %WORKSPACE%
  application org.eclipse.ant.core.antRunner
  -buildfile %BUILDFILE%
  ```

  📄 **Note:** Ant tasks do not pick up the settings in the `eclipse.ini` file. This means those parameters have to be set on the command line when invoking Java.

  For Linux environments, add `–Dlogpath=<path>` to the Java command.

d. Run the Ant task, as follows:

- For Windows: `cd` *<directory path of batch file and xml file>*

  ```
  dmant.bat DARInstallScript.xml
  ```

- For Linux: change `sh` script mode:

  ```
  $ chmod a+rx dmant.sh
  ```

  `cd` *<directory path of batch file and xml file>*

  ```
  $./dmant.sh DARInstallScript.xml
  ```

2.3 Installing the High Volume Processing Server

High Volume Processing Server (HVPS) is a parallel processing platform with enterprise class scalability and performance for building services such as:

- Policy orchestration

- High volume ingestion

- Indexing

- Data replication

- Store synchronization

Installing HVPS includes:

- HVP Controller

  This server component is packaged as the hvps.dar file.

  HVP Controller runs in the realm of the method server and delegates the jobs executed from the WebAdmin to the registered HVP workers.

- HVP Worker

  The `HvpWorker.war` file can be installed on any supported application server (refer Release notes for the supported application servers). The jobs delegated by the controller are executed by the HVP Worker. The HVP Worker packages OpenText™ Documentum™ Content Management Foundation Java API libraries that is used to communicate with the repository. It communicates with SAP using the SAP JCo libraries. The JCo libraries have to be downloaded from the SAP marketplace into the lib directory of HVP Worker.

  > **Note:** The *OpenText Documentum Content Services for SAP Solutions - Administration Guide (EDCCOSAPCS250400-AGD)* has complete information about registering an HVP worker.

2.3.1   Installing the hvps.dar file

To install the hvps.dar file on all operating systems:

1. Extract the contents of the following to a temporary directory:

   - `hvps.zip` for Windows
   - `hvps.tar` for Linux

   The temporary directory should now contain the following files:

   - `darinstall.bat` (Windows)
   - `darinstall.sh` (Linux)
   - `DARInstallScript.xml` (Documentum Composer ANT install script)
   - `darinstall.properties` (installation properties)
   - `hvps.dar` (DAR filename)
   - `hvp.properties`

2. The `hvps.dar` can be installed using the DAR Installer GUI in Windows environments as described in .

   Alternatively, the DAR file can be installed using the Headless Composer as described in the next step.

3. To install the DAR file using the Headless Composer:

a. Update the `install.properties` file with the repository name, credentials and the location of the DAR file, as follows:

- `dar.docbase` = *<repository_name>*

- `dar.username` = *<repository_install_owner_username>*

- `dar.password` = *<repository_install_owner_password>*

- `dar.domain` = *<domain>* (optional)

- `dar.name` = `hvps.dar` (DAR name)

b. The `DARInstallScript.xml` should have an emc.install ant task for every DAR file.

c. Specify the JDK path, location of the Headless Composer, and workspace in the `darinstall.bat` file:

- Set the ECLIPSE environment variable to the Headless Composer directory on your machine.

- Set the WORKSPACE environment variable to a clean directory.

  For example:

  ```
  echo off
  setlocal
  set JAVA_HOME=C:\"Program Files"\Java\jdk1.5.0_15
  set ECLIPSE=C:\ComposerHeadless
  set WORKSPACE=C:\ComposerHeadless\workspace
  set BUILDFILE=%1
  call %JAVA_HOME%\bin\java.exe -cp %ECLIPSE%\
  startup.jar org.eclipse.core.launcher.Main
   -clean -data %WORKSPACE%
   -application org.eclipse.ant.core.antRunner
   -buildfile %BUILDFILE%
  ```

  📄 **Note:** Ant tasks do not pick up the settings in the `eclipse.ini` file. This means those parameters have to be set on the command line when invoking Java.

  For Linux environments, add *–Dlogpath=<path>* to the Java command.

d. Run the Ant task, as follows:

- For Windows: `cd` *<directory path of batch file and xml file>*

  ```
  darinstall.bat DARInstallScript.xml
  ```

- For Linux: Change `sh` script mode:

  ```
  $ chmod a+rx darinstall.sh
  ```

  `cd` *<directory path of batch file and xml file>*

  ```
  $./darinstall.sh DARInstallScript.xml
  ```

2.3.2   Deploying the HvpWorker.war file

The following procedure describes how to prepare the `HvpWorker.war` file for installation.

To prepare the HvpWorker.war file for installation:

1. Extract the contents of the following to a temporary directory:

    *   `HvpWorker.zip` for Windows

    *   `HvpWorker.tar` for Linux

2. The temporary directory should now contain the following files:

    *   `HvpWorker.war`

    *   `hvp.properties`

3. Create a directory named HvpWorker.

    > **Note:** The directory name is case–sensitive.

4. Copy the `HvpWorker.war` file to the HvpWorker directory created in step 3.

5. Extract the file using the following jar command:

    ```
    jar –xvf HvpWorker.war
    ```

    The WAR file is extracted to a directory called `HvpWorker`.

6. Edit the `dfc.properties` file in the `HvpWorker/WEB-INF/classes` folder as follows:

    *   Type the repository hostname. For example:

        ```
        dfc.docbroker.host[0]=100.100.100.100
        ```

    *   Type the connection broker port number. For example:

        ```
        dfc.docbroker.port[0]=1489 optional, default 1489
        ```

    *   Optionally, type the OpenText Documentum Content Management (CM) Foundation Java API data directory. For example:

        ```
        dfc.data.dir=C:/Documentum
        ```

    *   Optionally, type the OpenText Documentum CM Foundation Java API global BOF registry repository name. For example:

        ```
        dfc.bof.registry.repository= cssap65_dev_HvpWorker
        ```

    *   Type the Foundation Java API global BOF registry repository user name. For example:

        ```
        dfc.bof.registry.username=dm_bof_registry
        ```

    *   Type the Foundation Java API global BOF registry repository user-encrypted password. For example:

```
dfc.bof.registry.password=kBb9DmXB6pQ\=
```

7. Based on the operating system being used, edit the `log4j2.properties` to have the correct path for the following variable:

    ```
    appender.file.fileName=${sys:catalina.home}/logs/hvpWorker.log
    ```

8. Based on the operating system being used, edit the `hvp.properties` to have the correct path for the following variable:

    ```
    hvp.log.base=<path_to_logs_dir>/logs
    ```

9. If Documentum Content Services for SAP Solutions is being used to connect to an Extended ECM, edit the `SOAPConfig.properties` as follows:

    a. Type the endpoint to fetch otds in the following format:

        ```
        otdsEndPoint=http://<ip-host>:<port>/otdsws/services/
        Authentication
        ```

    b. Type the user name:

        ```
        authentication.user=<OTDS_User>@<OTDS_Partition>
        ```

    c. Type the password:

        ```
        authentication.password=password
        ```

    d. Type the end point to invoke creation of folder in the following format:

        ```
        createUpdateWorkspaceEndPoint=http://<ip-host>:<port>/otsapxecm/
        services/ECMLink
        ```

10. Recreate the `HvpWorker.war` from the temporary folder using the `jar -cvf` command.

11. Deploy the `HvpWorker.war` file using the application server procedure appropriate for your installation.

12. Create the OpenText Documentum CM environment variable and the folder (`$DOCUMENTUM/share`) if it does not exist on the HvpWorker system. Edit the `hvp.log.base` of the properties file to get the worker logs.

> **Note:** If HvpWorker and Documentum Administrator are installed on the same application server, then add the `java.library.path` for both. Make sure the SAP JCo dll files is present in both HVPWorker and Documentum Administrator virtual directories and the `java.library.path` is specified to each of them.

2.3.2.1   Deploying HvpWorker.war on Apache Tomcat

To deploy HvpWorker.war on Apache Tomcat:

1. Ensure Apache Tomcat is configured to deploy the `HvpWorker.war` file in unpacked mode.

    This is the Apache Tomcat default setting.

2. Copy the repackaged `HvpWorker.war` file to the *`<Tomcat>`*`/webapps` folder.

3. Restart the Apache Tomcat server.

To update `catalina.bat` if JDK version is 17 or 21:

Check your JDK version. If the JDK version is 17 or 21, add the following parameters in the `catalina.bat` file:

```
set "JAVA_OPTS=-Dprogram.name=%PROGNAME% %JAVA_OPTS%"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.net=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.lang.ref=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.naming/
com.sun.jndi.toolkit.url=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.provider=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/sun.security.pkcs=ALL-
UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/sun.security.x509=ALL-
UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/sun.security.util=ALL-
UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.tools.keytool=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.xml.crypto/
com.sun.org.apache.xml.internal.security=ALL-UNNAMED"
set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.lang=ALL-UNNAMED"
```

2.3.2.2   Configuring IBM WebSphere Liberty

Check your JDK version. If the JDK version is 17 or 21, perform the following tasks.

To configure IBM WebSpere Liberty:

*   In the `server.bat` file, add the following parameters:

```
set "JAVA_OPTS=%JAVA_OPTS% --add-opens=java.base/java.lang=ALL-UNNAMED"
    set "JAVA_OPTS=%JAVA_OPTS% --add-opens=java.base/java.io=ALL-UNNAMED"
    set "JAVA_OPTS=%JAVA_OPTS% --add-opens=java.base/java.util=ALL-UNNAMED"
    set "JAVA_OPTS=%JAVA_OPTS% --add-opens=java.base/java.util.concurrent=ALL-
UNNAMED"
    set "JAVA_OPTS=%JAVA_OPTS% --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.net=ALL-
UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.lang.ref=ALL-
UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.naming/
com.sun.jndi.toolkit.url=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.provider=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.pkcs=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.x509=ALL-UNNAMED"
```

```
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports java.base/
sun.security.util=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-exports=java.base/
sun.security.tools.keytool=ALL-UNNAMED"
    set "JDK_JAVA_OPTIONS=%JDK_JAVA_OPTIONS% --add-opens=java.base/java.lang=ALL-
UNNAMED"
```

- In the `server.xml` files:

  - Add the following parameter:

    <applicationMonitor updateTrigger="disabled"/>

  - Update the `featureManager` with the following content:
    ```
    <featureManager>
          <feature>jakartee-10.0</feature>
      </featureManager>
    ```

To configure IBM Liberty while deploying SAP Connectors to SSL enabled Documentum CM Server:

1. Run the following command to create a new KeyStore file:

   ```
   -> <server_path>\bin>securityUtility createSSLCertificate --server=<server_name>
   --password=<Password>--validity=365
   ```

2. Copy and paste the output in the `server.xml` file.

   Output example:

   ```
   <featureManager>
   <feature>transportSecurity-1.0</feature>
   </featureManager>
   <keyStoreid="defaultKeyStore" password=<password>
   ```

3. Replace the existing KeyStore file with the newly generated KeyStore file in the following path: `<server_path>\usr\servers\<server_name>\resources\security\key.p12`

4. Add the following tags to the `server.xml` file for non-SSL and SSL connection.

   ```
   <feature>servlet-6.0</feature>
   <feature>jsp-3.1</feature>
   ```

5. Go to `<server_path>\usr\servers\<server_name>\resources\security` and run the following commands to add the docbroker and docbase certificates to the KeyStore file:

   - For docbroker certificate:

     ```
     keytool -import -trustcacerts -file C:\brokercrt.der -alias broker1 -keystore
     key.p12 -storepass <Password>
     ```

   - For docbase certificate:

     ```
     keytool -import -trustcacerts -file C:\servercrt.der -alias server1 -keystore
     key.p12 -storepass <Password>
     ```

2.3.2.3   Configuring WildFly Application Server

To configure WildFly Application Server:

Check your JDK version. If the JDK version is 17 or 21, add the following parameters in the `standalone.conf.bat` file:

```
set "JAVA_OPTS=%JAVA_OPTS% -Djava.locale.providers=COMPAT,SPI --add-opens=java.base/
java.lang=ALL-
UNNAMED --add-opens=java.base/java.lang.invoke=ALL-UNNAMED --add-
exports=java.base/sun.security.provider=ALL-UNNAMED --add-exports=java.base/
sun.security.pkcs=ALL-
UNNAMED --add-exports=java.base/sun.security.x509=ALL-UNNAMED --add-
exports=java.base/sun.security.util=ALL-UNNAMED --add-exports=java.base/
sun.security.tools.keytool=ALL-
UNNAMED"
```

2.3.2.4   Deploying HVPWorker.war on WildFly Application Server

To deploy HVPWorker.war on WildFly Application Server:

1. Copy the `HvpWorker.war` file to the `<wildfly>`/standalone/deployments folder.

    Note: The directory name is case-sensitive.

2. Create a file named `HvpWorker.war.dodeploy` in the `<wildfly>`/standalone/deployments folder.

3. Make sure the SAP JCo libraries are copied to `C:\Windows\System32` folder.

4. Restart the WildFly application server.

Check your JDK version. If the JDK version is 17 or 21, perform the following tasks:

To repackage HvpWorker.war if the JDK version is 17 or 21:

1. Add the following lines in the `<WebApp_Root>`/WEB-INF/jboss-deployment-structure.xml file:

    ```xml
    <?xml version="1.0"?>
    <jboss-deployment-structure>
      <deployment>
        <exclude-subsystems>
          <subsystem name="jaxrs"/>
          <subsystem name="webservices"/>
          <subsystem name="logging"/>
        </exclude-subsystems>
        <exclusions>
          <module name="org.apache.logging.log4j.api"/>
        </exclusions>
      </deployment>
    </jboss-deployment-structure>
    ```

2. Run the following command at `<WebApp_Root>` to repackage the Documentum Content Services for SAP Solutions WAR file:

    ```
    jar -cvf HvpWorker.war *
    ```

2.3.2.5 Deploying HVPWorker.war JBoss application server

To deploy HVPWorker.war on the JBoss application server:

1. Copy the `HvpWorker.war` file to the `<jboss>`/standalone/deployments`.

    📄 **Note:** The directory name is case–sensitive.

2. Create a file named `HvpWorker.war.dodeploy` in the `<jboss>`/standalone/ deployments`.

3. Add the following entry in the `module.xml` file located in the `<jboss>`\modules\ system\layers\base\sun\jdk\main` folder:

    ```
    path name="sun/security/tools/keytool"/
    ```

4. Make sure that the SAP JCo libraries are copied to the `C:\Windows\System32` folder.

5. Restart the JBoss server.

Check your JDK version. If the JDK version is 17 or 21, you must configure the Red Hat JBoss EAP web application servers.

To configure Red Hat JBoss EAP web application servers:

1. Download the JBoss EAP 8 Update 4 patch file named `jboss-eap-8.0.4-runtime-maven-repository.zip` from the Red Hat website.

2. Extract the `jboss-eap-8.0.4-runtime-maven-repository.zip` file to a temporary location.

3. Apply the JBoss EAP 8 Update 4 patch.

    Windows

    For example, from `<JBoss EAP_Home>`\bin`, run the following command as an administrator:

    ```
    jboss-eap-installation-manager.bat update perform ^
      --dir C:\jboss-eap-8.0 ^
      --repositories mrrc::file:C:\jboss-eap-8.0.4.GA-runtime-maven-repository
    \maven-repository ^
      --offline
    ```

    Linux

    For example, from `<JBoss EAP_Home>`/bin`, run the following command as an administrator:

    ```
    ./jboss-eap-installation-manager.bat update perform \
    >    --dir ../../jboss-eap-8.0 \
    >    --repositories mrrc::file:C:\jboss-eap-8.0.4.GA-runtime-maven-repository
    \maven-repository \
    >    --offline
    ```

4. Modify the existing contents of the `<WebApp_Root>`/WEB-INF/jboss-deployment-structure.xml` file to have the following lines only:

```
<?xml version="1.0"?>
<jboss-deployment-structure>
  <deployment>
    <exclude-subsystems>
      <subsystem name="jaxrs"/>
      <subsystem name="webservices"/>
      <subsystem name="logging"/>
    </exclude-subsystems>
    <exclusions>
      <module name="org.apache.logging.log4j.api"/>
    </exclusions>
  </deployment>
</jboss-deployment-structure>
```

5. Run the following command at *<WebApp_Root>* to repackage the Documentum Content Services for SAP Solutions WAR file:

```
jar -cvf HvpWorker.war *
```

2.3.2.6   Significant system objects

This section contains information about significant system objects installed during `HvpWorker.war` file deployment.

2.3.2.6.1   dfc.properties

To allow the HVP worker communication with the HVP controllers, all HVP controllers connection brokers must be added into the `dfc.properties` file, as follows:

```
# Refer dfcfull.properties for details
dfc.data.dir=C\:/Documentum
dfc.search.ecis.enable=false
dfc.search.ecis.host=
dfc.search.ecis.port=

### GR info
dfc.bof.registry.repository=<myGRDocbase>
dfc.bof.registry.username=dm_bof_registry
dfc.bof.registry.password=<encryptedPasswd>
dfc.bof.registry.preload.enabled=false
dfc.bof.cacheconsistency.interval=60

### HVP controller docbroker DNS names
dfc.docbroker.host[0]=<mydocbroker1.mycompany.com>
dfc.docbroker.port[0]=1489
dfc.docbroker.host[1]=<mydocbroker2.mycompany.com>
dfc.docbroker.port[1]=1489
```

2.3.2.6.2   log4j2.properties

In the properties, HVP worker container log file is specified in *bold*:

```
rootLogger.level=WARN
appenders=console,file,hvp

#------------------ CONSOLE -------------------------
appender.console.type=Console
appender.console.name=STDOUT
appender.console.filter.threshold.type=ThresholdFilter
appender.console.filter.threshold.level=WARN
appender.console.layout.type=PatternLayout
appender.console.layout.pattern=%d{ABSOLUTE} %5p [%t] %c - %m%n

#------------------ FILE -------------------------
appender.file.type=RollingFile
appender.file.name=fileRoll
appender.file.fileName=${sys:catalina.home}/logs/hvpWorker.log
appender.file.filePattern=${sys:catalina.home}/logs/hvpWorker-backup-%d{MM-dd-yy-HH-mm-
ss}-%i.log
appender.file.layout.type=PatternLayout
appender.file.layout.pattern=%d{ABSOLUTE} %5p [%t] %c - %m%n
appender.file.policies.type=Policies
appender.file.policies.size.type=SizeBasedTriggeringPolicy
appender.file.policies.size.size=1OMB
appender.file.strategy.type=DefaultRolloverStrategy
appender.file.strategy.max=1O

logger.eilog.name=com.documentum.ei
logger.eilog.level=INFO
```

> 📄 **Note:** Change the `logger.eilog.level=INFO` to `DEBUG` if you need detailed logs for troubleshooting.

2.3.2.6.3   HVP.properties

These are the HVP worker–specific properties:

```
hvp.log.base=C:\Documentum\logs
hvp.log.format=%d{DATE} [%-5p] [%t] %c - %m%n
hvp.log.level=INFO
hvp.log.retain=retainAlways
hvp.job.copyOnRepSapAction=false
hvp.job.encryptSapUser=false
hvp.installOwnerUser=administrator
hvp.installOwnerPass= *encryptedpassword*
```

> 📄 **Note:** Set `hvp.log.level=DEBUG` for detailed logs.

The `hvp.log.base` has a path for the Agent activity logs. For example, in Windows: `hvp.log.base=C:\Documentum\logs`

Property	Description
`hvp.log.base`	Provides information about the log path. The log file that is generated is created in the "job name" folder. For example, execution of a job named "myjob" would create the log files in the `C:\Documentum\logs\myjob location\`.

Property	Description
`hvp.log.format`	Provides information about the logger statements format. For example, `%d{DATE} [%-5p] [%t] %c - %m%n` can result in a logger statement such as "INFO 14 Apr 2009 11:05:20,078 Request executed."
`hvp.log.level`	Indicates the log level of the logs generated. Set `hvp.log.level=DEBUG` for detailed logs.
`hvp.log.retain`	The values are: • `true`: Job logs are not deleted as long as the application server and JMS are running. • `false`: Job logs are deleted as soon as they are uploaded to Documentum CM Server. • `retainAlways`: Job logs are never deleted.
`hvp.job.copyOnRepSapAction`	One of the functionalities of the Replicate SAP action is to move a document from one folder to another. Instead of moving a document, you can copy the document from one folder to another by setting the value of the *hvp.job.copyOnRepSapAction* parameter in `hvp.properties` to `true`. The default value is `false`.
`hvp.job.encryptSapUser`	Indicated the complexity of the password stored in the `sap_user_config` objects. If the value is set to `true`, the complexity of the password is high and you must reset the existing users' passwords. The default value is `false`.
`hvp.installOwnerUser`	The user name of the install owner. For example, Administrator. This is the same install owner as the Documentum CM Server.
`hvp.installOwnerPass`	The password of the install owner. 📄 **Notes** • If vault enabled, the vault key of the install owner password is same as the OpenText Documentum CM install owner password. • If vault disabled, the password is the encrypted password of the install owner.

2.3.2.7 SOAPConfig.properties

The `SOAPConfig.properties` file is used when Documentum Content Services for SAP Solutions is used to connect to Extended ECM. The following are the properties that are used:

- `otdsEndPoint=http://<ip-host>:<port>/otdsws/services/Authentication`

- `createUpdateWorkspaceEndPoint=http://<ip-host>:<port>/otsapxecm/services/ECMLink`

- `authentication.user=<OTDS_User>@<OTDS_Partition>`

- `authentication.password=<password>`

2.4 Deploying HvpWorker.war using IBM Liberty

1. Extract the `HvpWorker.war`.

2. Update `dfc.properties` and `log4j2.properties`.

3. Archive the `cssap` folder to `HvpWorker.war`.

4. Copy the war file into the `dropins` folder of configured server.

5. Add the following parameter in the `server.xml` file of server:

    `<applicationMonitor updateTrigger="disabled"/>`

6. In `server.xml`, add the entry `host="*"` in tag `httpEndpoint`.

7. Copy the `SAP JCo` JAR to `C:\Windows\System32`.

8. Start the Liberty server.

2.5 Post installation configuration

Download SAP JCo library version 3.1.X from the SAP marketplace for the operating system being used. Copy the `sapjco.jar`, and the `.dll` files (Windows) or `.so` files (Linux), to the `/WEB-INF/lib` directory of the installed Documentum Content Services for SAP Solutions HvpWorker application. The following sections describes the environment variables to be set on the operating system being used.

2.5.1   Setting Windows environment variables

Set the Windows environment variable as follows:

- Documentum Administrator

  Specify JVM parameter `java.library.path=`*`<Application Server-Installation-Directory>`*`\...\`*`<DA—Virtual—Directory>`*`\WEB-INF\lib`

- HvpWorker

  Specify JVM parameter `java.library.path=`*`<Application Server-Installation-Directory>`*`\...\`*`<HvpWorker—Virtual—Directory>`*`\WEB-INF\lib`

- If HVPWorker and Documentum Administrator are installed on the same application server, then add the `java.library.path` for both. In this case, make sure the SAP JCo dll files are not copied to the System32 folder and the following is specified as a JVM parameter.

  `java.library.path=`*`<Application Server-Installation-Directory>`*`\...\`*`<DA-Virtual-Directory>`*`\WEB-INF\lib;`*`<Application Server-Installation-Directory>`*`\...\`*`<HvpWorker—Virtual-Directory>`*`\WEB-INF\lib`

  > **Note:** If both Documentum Administrator and HVP Worker are running on the same application server, then the `java.library.path` should point to both the `WEB—INF/lib` directories of Documentum Administrator and HVPWorker.

For example, in Tomcat, edit the `catalina.bat` file to set:

```
JAVA_OPTS=%JAVA_OPTS% -java.library.path=C:\Program Files\Apache Software
Foundation\Tomcat 6.0\webapps\da\WEB-INF\lib
```

> **Note:** If the JVM parameter `java.library.path` is not set, then the `.dll` files can also be placed in `C:\WINDOWS\system32\`.

2.6   Customization using dmei_custom_installer utility

Content Services for SAP Solutions supports customization of SAP query types and SAP object types.

> **Note:** The `custom.xml` is supported only on SAP R/3 or ECC systems.

To enable customization:

1. Browse to the directory where you extracted the contents of the Documentum Content Services for SAP Solutions installer archive.

2. Extract the contents of `dmei_custom_installer.zip` into a temporary folder.

3. Open the `custom.xml` file in the text editor or the XML editor for editing.

4. Locate the `dfc.properties` file in the temporary folder, and edit the file with the Foundation Java API directory information and connection broker information (`dfc.docbroker.host` and `dfc.docbroker.port`).

5. Locate the `installer.properties` file in the temporary folder and edit the file with the information shown in the following table:

Table 2-1: Installer properties file values

Value	Definition
user.language	The default is en_US (English).
docbase.name	Name of the repository that you want to configure.
docbase.user.name	Type repository install owner name.
domain	Name of the domain in which the repository is located.
custom.xml.path	The custom XML file path.

6. Locate the `log4j2.properties` file in the temporary folder and edit to change the directory location of the log files.

> **Note:** By default, log files are generated in the current (temporary) folder.

7. Issue the following command from the command line to run the custom XML file installer:

```
java -jar dmei_custom_installer.jar
```

> **Note:** The file `dmei_custom_installer.jar` is in the temporary folder where you extracted the contents of the `dmei_custom_installer.zip` file.

8. Type the password for the repository specified in the `installer.properties` file.

   File processing begins and the following message appears when processing completes:

```
                Processing Successfully Completed!
```

> **Note:** If the following message appears, look in the log files to determine the problem with the `custom.xml` file installation:

```
                Processing Failed!
```

   You have now customized values for `sap_query_type_plm` query types and object types. The customized values that you configured here are accessible from the Rule Documentum Composer section of the Link

Documentum and Replicate OpenText Documentum CM nodes in WebAdmin.

If you are using JDK version 17 or 21, set the Environment Variable before using `dmei_custom_installer` utility.

```
JDK_JAVA_OPTIONS = --add-opens=java.base/java.net=ALL-UNNAMED --add-opens=java.base/
java.lang.ref=ALL-UNNAMED --add-opens=java.naming/com.sun.jndi.toolkit.url=ALL-UNNAMED --
add-exports java.base/sun.security.provider=ALL-UNNAMED --add-exports java.base/
sun.security.pkcs=ALL-UNNAMED --add-exports java.base/sun.security.x509=ALL-UNNAMED --
add-exports java.base/sun.security.util=ALL-UNNAMED --add-exports=java.base/
sun.security.tools.keytool=ALL-UNNAMED --add-opens=java.base/java.lang=ALL-UNNAMED
```

Chapter 3

Installing Documentum Content Services for SAP Solutions client components

This chapter describes procedures required to install the client component View of Documentum Content Services for SAP Solutions.

3.1 Obtaining current version of software

To ensure that you install the current version of this product, visit OpenText My Support and review the product versions available for your platform.

Download the current version of `Content_Services_for_SAP_Solutions_<version>_client.zip`, which contains the following files:

- `ContentServicesforSAPSolutionsClient.exe`
- `webview.zip`

3.2 System configuration and dependencies

Documentum Content Services for SAP Solutions is an integrated suite of products that provide document management, imaging, and archiving services. Services can be installed on different physical machines in different locations as long as the required functional components for each specific service are on the same machine. The following table provides an overview of possible system configurations and the functional component dependencies for each service or function.

Table 3-1: System configuration and dependencies

System configuration	Functional component dependencies (must be on same physical machine)
Browser enabled viewing client – View documents by selecting a link in SAP GUI.	SAP GUI plus View – Installed with Webtop integration
OLE viewing client – View documents by selecting a link in SAP GUI or by calling a DRL directly from the repository.	SAP GUI plus View
OLE viewing client – View documents by calling a DRL directly from the repository.	View

3.3   User roles and client components

The client components of Documentum Content Services for SAP Solutions are installed according to the role of the user. The defined role is Administrator.

This role covers users who want to view documents that are archived in the OpenText Documentum CM repository. They will have access to the View component of Documentum Content Services for SAP Solutions.

3.4   Installation prerequisites

Installation prerequisites include:

* Windows 10, Windows 11, Windows 2022 Server

* SAP GUI

* Supported Java

  After you install Java, make sure to configure the following:

  – Make sure that you set `JAVA_HOME` in the environment variables.

  – Make sure that you set `%JAVA_HOME%\bin` in the PATH environment variable.

* Each user should have user account in SAP and in the repository that is integrated with SAP.

* Content Services users should be "Power users" on the Windows operating system, not "Restricted users." Restricted users attempting to use Content Services components will get an error indicating that the registry cannot be accessed or update.

  📄 **Note:** The Documentum CM Server chapter in *OpenText Documentum Content Management - Cloud Deployment Guide (EDCSYCD250400-IGD)* contains more information about using SSL communication with Oracle JDK/OpenJDK.

3.5   Customizing installation

By default, the View component is installed into the SAP directory. If SAP directory is not present, it gets installed into `C:\DMVIEW`. Alternatively, change your SAP application setting to remove the application path for DmView.

Document types can be customized at the client stations through the View component.

3.6 Installing Documentum Content Services for SAP Solutions client components

Documentum Content Services for SAP Solutions Client installer allows you to connect to Documentum CM Server. This application supports Documentum CM Server which run on the following mode:

- Native

- Secure

- Native or Secure

This application is built on `dmcl.dll`, which internally refers to `dfc.jar`. Hence, the DmView uses `dfc.properties` for any configurations instead of `dmcl.ini`.

> **Note:** The Windows user installing DmView must have an administrator access to allow the installer add all the environment variables. If the installer is unable to add the environment variables, see the following procedure.

To add environment variables:

1. Set `JAVA_HOME` to the supported version of JDK.

2. In the `PATH` variable, set the bin path of `jdk` and the `Shared` library path:

   `C:\Program Files\Documentum\Doclink\Shared`

3. Add the following paths in the `CLASSPATH` variable according to your installation:

   - `C:\Program Files\Documentum\Doclink\dfc.properties`

   - `C:\Program Files\Documentum\Doclink`

   - `C:\Program Files\Documentum\Doclink\dctm.jar`

   - `C:\Program Files\Documentum\Doclink\Shared\dfc.jar`

4. Set the `DOCUMENTUM` environment variable.

To install Documentum Content Services for SAP Solutions Client:

1. Download and unzip the current release of Documentum Content Services for SAP Solutions installation files to a temporary directory on your local machine.

   You can download the installation files from OpenText My Support.

2. Navigate to `..\Content_Services_for_SAP_Solutions_<release_version>_Client\ContentServicesforSAPSolutionsClient.exe` in the directory where you unzipped the release.

3. Double-click **ContentServicesforSAPSolutionsClient.exe**.

   The **Welcome** screen appears.

4.   Click **Next**.

The **Choose Destination Location** dialog box appears.

The default installation folder is `C:\Program Files\Documentum\DocLink`. Click **Browse** to select a different folder. The SAP interfaces must be able to locate the View component. For best performance, it is recommended to continue with the default directory. The default directory for **View** and **Archivelink View** is `C:\Program Files\SAPpc\sapgui`; this is also the resident directory for SAP GUI.

5.   Click **Next**.

The **Docbroker Host Name** screen appears, enter the connection broker host and proceed.

6.   Click **Next**, and then click **Install**.

The files are copied and the installation is completed. The **Setup Complete** dialog box appears.

7.   Click **Finish**.

3.6.1   Configuring WebView

To prepare the web application server to support WebView:

1.   Shut down the web application server that will support WebView.

2.   Deploy `wdk.war` to that web application server.

The `wdk.war` file is in the temporary directory where you downloaded and unzipped `webview.zip`.

3.   Locate the `dfc.properties` file in the `wdk/WEB-INF/classes` folder.

4.   Edit the `dfc.properties` file with your repository login parameters. For example:

dfc.docbroker.host[0]=<myDocbroker>

dfc.globalregistry.repository=<myGRDocbase>

dfc.globalregistry.username=<userName>

dfc.globalregistry.password=<encryptedPasswd>

5.   Restart the web application server.

3.6.1.1 Installing Daeja ViewerOne Pro

Daeja ViewerOne Pro is not delivered with WebView, but is compatible with WebView and supports the following formats:

- PDF
- Tiff
- JPEG
- BMP
- GIF

To use the Daeja plug–in, download and install the plug–in from the Daeja website at:

```
http://www.daeja.com/
```

Follow the website instructions for installing the plug–in.

To enable WebView to use the Daeja plug–in:

1. Shut down the web application server that supports WebView.

2. Locate the `dmei_webview–unobfs.jar` file in the `wdk/ WEB–INF/lib` folder.

3. Open the `webview.properties` file that is in the `dmei_webview-unobfs.jar` file.

4. Set the following parameter from `false` to `true`:

```
DaejaViewer = true
```

> **Note:** By default, the *DaejaViewer* parameter is set to `false`.

5. Restart the web application server.

3.6.1.1.1 Installing the image services .dar file

You must install the `image_services.dar` file for WebView and the Daeja plug–in to work correctly together.

> **Note:** To avoid exception in the log, the DAR file has to be installed on the global repository also.

Use the installation information in Appendix A, Installing a DAR file using the DAR Installer GUI on page 59 as guidance to install the `image_services.dar` file.

3.6.2   Configuring the View component for Webtop or WebView

To configure the View component so that you can view and edit content using Webtop or WebView:

1.   Install Documentum Content Services for SAP Solutions.

2.   Launch the View client using **Start** > **Programs** > **Content Services for SAP Solutions Client**.

3.   Select **Edit** > **Preferences**.

     You will be prompted to log in to a repository.

4.   Select the repository configured for Documentum Content Services for SAP Solutions.

5.   Select a document format type, for example, Microsoft Word or FOLDER (at the end of the list).

     Note: WebView supports the following formats:

     - PDF
     - TIFF
     - GIF

6.   Select the **View Using Webtop** or **View Using WebView**.

7.   Click **Apply**.

3.6.3   Configuring Brazilian Portuguese Language Pack for WebView

1.   Shut down the web application server where WebView is installed.

2.   Unzip `WebView_Language_Pack_Portuguese_pt_BR.zip` to a temporary directory.

3.   Copy the unzipped contents to `<application_server_home>`/webapps/wdk.

4.   Update the language element in `<application_server_home>`/webapps/wdk/`app.xml` by adding Brazilian Portuguese locale support in the supported locale section (shown in **bold text**):

```
<language>
  <!-- List of Locales supported by this application -->
    <supported_locales>
        <locale>en_US</locale>
        <locale>pt_BR</locale>
    </supported_locales>
```

5.   Restart the web application server.

6. Install the Brazilian Portuguese data dictionary in the repository as described in the Documentum CM Server documentation.

3.6.4 Configuring Korean Language Pack for WebView

To enable Korean support for WebView:

1. Shut down the web application server where WebView is installed.

2. Unzip `WebView_Language_Pack_Korean_ko_KR.zip` to a temporary directory.

3. Copy the unzipped contents to `<application_server_home>/webapps/wdk`.

4. Update the language element in `<application_server_home>/webapps/wdk/app.xml` by adding Korean locale support in the supported locale section (shown in **bold text**):

```
<language>
  <!-- List of Locales supported by this application -->
    <supported_locales>
        <locale>en_US</locale>
        <locale>ko_KR</locale>
    </supported_locales>
```

5. Restart the web application server.

6. Install the Korean data dictionary in the repository as described in the Documentum CM Server documentation.

3.6.5 Silent installation

You may want to roll out a particular client install across several workstations. This is what is known as a "silent" install. One important requirement is that the installation is identical from workstation to workstation. For example, if the installer detects a file and displays a dialog box, you must ensure that the same file is detected on all workstations using that silent install file (for example, `DMCL.INI`). If not, the order of, and perhaps responses to, the dialog boxes will change.

To run a silent installation:

1. Ensure no previous installation exists.

2. Before you start, end the `dmapi.exe` from the Task Manager or Close Programs window (press **Ctrl** + **Alt** + **Delete** to open the window).

3. Run a sample installation with the following command line option:

   `ContentServicesforSAPSolutionsClient.exe -r`

   This creates an installation script in the windows directory (`C:\WINNT` or `C:\WINDOWS`). The name of the script is *"setup.iss"*. Make sure the client machines are identical to the recording machine. The environment should be exactly the same. If the environments are not the same, you will get `resultcode=–12` in the `setup.log`, which means the dialog box order has changed.

   This file records the installation dialog boxes in sequence. Do not click the dialog box Back buttons during the installation. Whatever options are chosen

---

(for example, the connection broker) will be used during all the silent installs. You can open the file and view the options.

4.   Copy *"setup.iss"* into the setup kit (from where you run *"ContentServicesforSAPSolutionsClient.exe"*).

5.   To test on the same machine, end the `dmapi.exe` and uninstall any client software. Run silent installer: Run *"ContentServicesforSAPSolutionsClient.exe –s"*.

Other meaningful result codes in the log file include:

- 0 Success.
- 1 General error.
- 2 Invalid mode.
- 3 Required data not found in the Setup.iss file.
- 4 Not enough memory available.
- 5 File does not exist.
- 6 Cannot write to the response file.
- 7 Unable to write to the log file.
- 8 Invalid path to the InstallShield Silent response file.
- 9 Not a valid list type (string or number).
- 10 Data type is invalid.
- 11 Unknown error during setup.
- 12 Dialog boxes are out of order.
- 51 Cannot create the specified folder.
- 52 Cannot access the specified file or folder.
- 53 Invalid option selected.

3.7   Post-installation tasks

3.7.1 Licensing Documentum Content Services for SAP Solutions

OpenText Documentum CM uses OpenText Directory Services (OTDS) to apply licenses for all the OpenText Documentum CM components. For more information about procuring the license file and configuring OTDS and license, see *OpenText Documentum Content Management - Server and Server Extensions Installation Guide (EDCSY250400-IGD)*.

3.7.2 Documentum Content Services for SAP Solutions Client view

To verify Documentum Content Services for SAP Solutions Client view post installation:

1. Go to install folder and verify that the following files exist:

   - `Shared/dfc.jar`

   - `DCTM.jar`

   - `Shared`

   - `dfc.properties`

2. Verify that the environment variable `CLASSPATH` is appended with the preceding list of JAR files from the installed location. If not, manually edit the `CLASAPATH` and point to location of installed folder.

3.7.3 Disabling tag pooling for WebView

WebView does not support tag pooling.

To disable tag pooling for all web applications on the Tomcat instance:

1. Add the following lines to the *<servlet>* element in the *<Tomcat Install Directory>*\conf\web.xml file:

```
<init-param>
<param-name>enablePooling</param-name>
<param-value>false</param-value>
</init-param>
```

2. Delete the cache from:

```
..\ work\Catalina\localhost
```

3. Restart the Tomcat server.

Chapter 4

Upgrading Documentum Content Services for SAP Solutions

Before upgrading Documentum Content Services for SAP Solutions, depending on existing infrastructure and your needs, you should determine how you want to deploy the application in your enterprise.

📄 **Note:** To upgrade to the latest version of Documentum Content Services for SAP Solutions, you need to have 24.4 version or later.

4.1 Upgrading the Documentum Content Services for SAP Solutions server

This section lists the upgrade procedures for Documentum Content Services for SAP Solutions 5.3 SPx, Documentum Content Services for SAP Solutions 6.0, and Documentum Content Services for SAP Solutions 6.0 SP1.

📄 **Notes**

- The default action configurations, Server and User configurations that come with Documentum Content Services for SAP Solutions are overwritten whenever a newer version or a patched version of the Enterprise Integrations Core DAR is installed.

- Any customizations done to the existing object model using custom.xml or manually through Documentum Administrator will have to be executed again after upgrading.

- For example, customizations done to Document Info Record PLM object, using custom.xml, in 5.3 SPx or 6.0 SPx or 6.5 SPx will have to be repeated after upgrading till 24.2 version.

4.1.1   Upgrading from Documentum Content Services for SAP Solutions 5.3 SPx server

To upgrade directly from Documentum Content Services for SAP Solutions 5.3 SPx to 24.2 version:

1. Make sure there are no pending agent jobs. Deactivate jobs and reactivate the jobs upon upgrade completion.

2. Stop Windows IIS Service.

3. Uninstall the existing software using Microsoft `ADD/REMOVE` programs, as follows:

   a. Log off of and close all Content Services applications.

   b. Stop all Content Services for SAP Solutions services (AGENT and RFC).

   c. Open **Control Panel** > **Add/Remove Programs**.

   d. Remove **Documentum Content Services for SAP Solutions Server Components**.

   e. If you receive messages stating that DLLs are in use, open the Task Manager and end them as indicated in the message. If something is still preventing removal of the programs, reboot the server and try again.

   f. After you have run the uninstaller, you must navigate to the server installation directories and manually delete any leftover files.

      For example, the Doclink folder, which is installed in the OpenText Documentum CM folder in the server installation directory.

4. Install the server software as directed in this guide.

5. Clear the OpenText Documentum CM cache on the Documentum CM Server system, restart the repository, and method server.

   > **Note:** Installing EI Core DAR throws a warning which can be ignored.

4.1.2   Upgrading till 24.2 version

The `hvp.properties` location is changed in Documentum CM Server and HvpWorker machines from `$DOCUMENTUM` to `$DOCUMENTUM/share`.

4.1.3 Upgrading from Documentum Content Services for SAP Solutions 6.0, 6.0 SP1 server

You can upgrade directly from Documentum Content Services for SAP Solutions 6.0 and 6.0 SP1 to 24.2 version.

> 📄 **Note:** Do not try to install custom configuration using Application builder (docapp installation) because the DocApp automatically installs some TBOs and even though they will be replaced by the DAR file installation they will still be in use, which will cause the jobs to fail. Instead use the `dmei_custom_installer` tool or Headless Composer.

1. Make sure there are no pending agent jobs. Deactivate jobs and reactivate the jobs upon upgrade completion.

2. Stop Windows IIS Service.

3. Uninstall the existing software using Microsoft `ADD/REMOVE` programs, as follows:

   a. Log off of and close all Content Services applications.
   b. Stop all Content Services for SAP Solutions services (AGENT and RFC).
   c. Open **Control Panel** > **Add/Remove Programs**.
   d. Remove **Documentum Content Services for SAP Solutions Server Components**.
   e. If you receive messages stating that DLLs are in use, open the Task Manager and end them as indicated in the message. If something is still preventing removal of the programs, reboot the server and try again.
   f. After you have run the uninstaller, you must navigate to the server installation directories and manually delete any leftover files.

      For example, the Doclink folder, which is installed in the OpenText Documentum CM folder in the server installation directory.

4. Delete the dependency and bof modules that were installed by Documentum Content Services for SAP Solutions 6.0 or 6.0 SP1 docapp at `/System/Modules` by logging into the repository using Documentum Administrator:

   a. Execute the following query:

      ```
      –select * from dmc_java_library where object_name='dmei_core_lib'
      ```

      ```
      –select * from dmc_java_library where object_name='dmei_doclink_lib'
      ```

      ```
      –select * from dmc_java_library where object_name='hvps_lib'
      ```

      > 📄 **Note:** Record the `r_object_id` of the preceding folders.

   b. Execute the following query to remove any dependencies:

      ```
      –delete dm_relation objects where parent_id='<r_object_id
      for each of the preceding three folders>'
      ```

---

    c.   Delete the three folders listed in step 4a manually or by executing the following DQL:

—delete dmc_java_library objects where object_name='<folder_name>'

> **Note:** All the subfolders and their files must be deleted first. The folders will be at the following locations:
> ```
> Cabinets/System/Modules/com.documentum.ei.doclink.task.ExecuteQuery
> Cabinets/System/Modules/com.documentum.ei.doclink.task.MapAttributes
> ```

    d.   Delete the `com.documentum.ei.doclink.task.ExecuteQuery` and `com.documentum.ei.doclink.task.MapAttributes` folders from `Cabinets/System/Modules` folder.

5.   Install `Enterprise_Integrations_Core.dar` and the server software as directed in this guide.

6.   Clear the OpenText Documentum CM cache on the Documentum CM Server system, restart the repository, and method server.

> **Note:** You cannot upgrade Content Services for SAP 6.0 or 6.0 SP1 HVPS directly to the latest version of HVPS.

4.1.4 Upgrading from Documentum Content Services for SAP Solutions 6.5, 6.5 SPx, 6.7, 6.7 SPx, 7.x server

To upgrade from Documentum Content Services for SAP Solutions 6.5, 6.5 SPx, 6.7, 6.7 SPx, 7.x server to 24.2 version:

1.   Make sure there are no pending agent jobs. Deactivate jobs and reactivate the jobs upon upgrade completion.

2.   Stop the application server on which Documentum Content Services for SAP Solutions `HvpWorker.war` are being run, and then delete the Documentum Administrator and HvpWorker application.

3.   Install `Enterprise_Integrations_Core.dar` and the server software as specified, in this document.

4.   Clear the OpenText Documentum CM cache on Documentum CM Server system, restart the repository and method server.

> **Note:** Ensure the Documentum Composer used to install the DAR files matches the version of the Documentum Content Services for SAP Solutions service pack being installed.

When a new version of the Enterprise Integrations Core DAR file is installed, the default action configurations, agent configurations, Server and User configurations bundled with Documentum Content Services for SAP Solutions are overwritten.

4.1.4.1 Parameter update

> **Note:** You can skip this section is you are upgrading from Documentum Content Services for SAP Solutions 7.x server to the latest version.

If the custom query types or object types installed for Content Services for SAP 5.3 SPx or 6.0, 6.0 SPx use *query_parameters* or *result_ parameters* similar to the following listed types, then update the parameters to upgrade to 6.5, 6.5 SPx, 6.7, and 6.7 SPx:

Table 4-1: Parameter update when upgrading

SAP query type	5.3 SPx or 6.0, 6.0 SPx parameter	6.5, 6.5 SPx parameter
sap_query_type_rfc • Financial document • Archive data • Purchasing document	*result_ parameters* Client=CLIENT,0,3 ObjectType=OBJECTTYPE,3,10	*result_ parameters* Client=MANDT,0,3 ObjectType=SAP_OBJECT,3,10
sap_query_type_rfc • Personnel links	*query_parameters* ObjectType=OBJECTTYPE,10 Client=CLIENT,3 *result_ parameters* Client=CLIENT,0,3 ObjectType=OBJECTTYPE,3,10	*query_parameters* ObjectType=SAP_OBJECT,10 Client=MANDT,3 *result_ parameters* Client=MANDT,0,3 ObjectType=SAP_OBJECT,3,10
sap_query_type_rfc • Cost Center	*result_ parameters* Name=NAME,14,20	*result_ parameters* Name=COCNTR_TXT,14,20

SAP query type	5.3 SPx or 6.0, 6.0 SPx parameter	6.5, 6.5 SPx parameter
sap_query_type_plm • Document Info Record PLM	*query_parameters* Description=DOCUMENTDATA.DESCRIPT_D,40 DataCarrier1=DOCUMENTDATA.DATA_CARR,2 WSApplication1=DOCUMENTDATA.DISP_APPL,10 DocFile1=DOCUMENTDATA.ORIGINAL,255 STATUSEXTERN=DOCUMENTDATA.DOC_STATUS,2	*query_parameters* Description=DOCUMENTDATA.DESCRIPTION,40 DataCarrier1=DOCUMENTDATA.DATACARRIER1,2 WSApplication1=DOCUMENTDATA.WSAPPLICATION1,10 DocFile1=DOCUMENTDATA.DOCFILE1,255 STATUSEXTERN=DOCUMENTDATA.STATUSEXTERN,2
sap_query_type_plm • Functional location by text PLM • Equipment by short text PLM	*query_parameters* Location_Descr_low=FUNCLOC_RA.DESCR_LOW,40 Location_Descr_high=FUNCLOC_RA.DESCR_HIGH,40 Description_Descr_low=DESCRIPT_RA.DESCR_LOW,40 Description_Descr_high=DESCRIPT_RA.DESCR_HIGH,40	*query_parameters* Location_Descr_low=FUNCLOC_RA.LOW,40 Location_Descr_high=FUNCLOC_RA.HIGH,40 Description_Descr_low=DESCRIPT_RA.LOW,40 Description_Descr_high=DESCRIPT_RA.HIGH,40
sap_query_plm_type_table • Asset master PLM	*key_attributes* CompanyCode=Company code Asset=Asset SubNumber=Sub-number	*key_attributes* CompanyCode=BUKRS,4 Asset=ANLN1,12 SubNumber=ANLN2,4

> **Note:** The parameters can be updated directly from Documentum Administrator as:

1. Login to the repository using Documentum Administrator.

2. Navigate to `Cabinets/System/DocLink/SAP/Bapi`.

3. Click **Show All Objects and Versions** from the drop down at the right side.

4. Select the custom type and right click to view properties.

5. Select the **Show all properties** checkbox.

6. Edit the *query_paramaters* or *result_parameters*.

OR

By running `custom.xml` using `dmei_custom_installer` utility. For example, for custom query type similar to Personnel links, edit *query_parameters* in `custom.xml` from:

```
<VALUE>ObjectType=OBJECTTYPE,10</VALUE>
```

```
<VALUE>Client=CLIENT,3</VALUE>
```

to

```
<VALUE>ObjectType=SAP_OBJECT,10</VALUE>
```

```
<VALUE>Client=MANDT,3</VALUE>
```

And edit *result_ parameters* in `custom.xml` from:

```
<VALUE>Client=CLIENT,0,3</VALUE>
```

```
<VALUE>ObjectType=OBJECTTYPE,3,10</VALUE>
```

to

```
<VALUE>Client=MANDT,0,3</VALUE>
```

```
<VALUE>ObjectType=SAP_OBJECT,3,10</VALUE>
```

4.2 Upgrading Documentum Content Services for SAP Solutions client components

To upgrade directly from Documentum Content Services for SAP Solutions 5.3 SPx, 6.0 and 6.0 SP1 to Documentum Content Services for SAP Solutions 6.5 SPx OR to upgrade from Documentum Content Services for SAP Solutions 7.x to 24.2 version:

1. Ensure DMAPI.exe is stopped using the Task Manager or Close Programs:

    a. Press **Ctrl** + **Alt** + **Delete**.
    b. Locate and highlight the `DMAPI.EXE` program.
    c. Click **End** or **End Task**.

2. Uninstall the existing software using Microsoft `ADD/REMOVE` programs, as follows:

    a. Log off of and close all Content Services applications.
    b. Open **Control Panel** > **Add/Remove Programs**.
    c. Remove **Documentum Content Services for SAP Solutions Client**.
    d. If `DmView.exe` was manually copied to a directory other than the default installation directory after the client installation, make sure these files are deleted before reinstalling the new clients. The Installshield uninstaller will not remove these files during the uninstall.

3. After running the uninstaller, navigate to the Documentum Content Services for SAP Solutions installation directories and manually delete any files that were missed.

4. If the dmview file was moved after installation, the uninstaller will not remove this file. Ensure you remove this file before upgrading Documentum Content Services for SAP Solutions clients.

5. Install client software as directed in this guide.

> **Note:** When using the Documentum Content Services for SAP Solutions client installation program to upgrade an existing client installation, make sure DMAPI.EXE is stopped.

> **Notes**
>
> • Since 6.5 Documentum Content Services for SAP Solutions does not support CAD-based queries, objects, actions and agents, create PLM based queries, objects, actions and agents. The CAD queries that are retained when CS for SAP is upgraded from 5.3 SPx or 6.0 or 6.0 SP1 are not supported.
>
> • To upgrade to the latest version of Documentum Content Services for SAP Solutions, you need to have 24.4 version or later.

4.3   Post-upgrade task

4.3.1   Licensing Documentum Content Services for SAP Solutions

OpenText Documentum CM uses OpenText Directory Services (OTDS) to apply licenses for all the OpenText Documentum CM components. For more information about procuring the license file and configuring OTDS and license, see *OpenText Documentum Content Management - On-Premises Upgrade and Migration Guide (EDCCS250400-UMD)*.

Chapter 5

Testing the installation

The WebAdmin tool is used to set up and run an SAP query in order to test the SAP connection. The *OpenText Documentum Content Services for SAP Solutions - Administration Guide (EDCCOSAPCS250400-AGD)* has full details on using the WebAdmin tool.

After installing Documentum Content Services for SAP Solutions, test the installation with the procedures included in this chapter.

5.1   Logging in to WebAdmin through Documentum Administrator

Log in to Documentum Administrator before using WebAdmin to configure Documentum Content Services for SAP Solutions.

📄   **Note:** The *OpenText Documentum Content Management - Administrator User Guide (EDCAC250400-UGD)* has complete information about using Documentum Administrator.

To connect to WebAdmin through Documentum Administrator:

1.   Start a web browser on a client machine.

2.   Connect to the following URL, where *<host>* is the host where Documentum Administrator is installed and *<portnumber>* is a port number provided during application server installation:
```
http://<host>:<portnumber>/da/
```

3.   Type your login name and password on the Documentum Administrator Login page.

4.   Choose a repository from the list box.

    If you change the repository, retype your password.

5.   In the **Location** list (if available), select the location on your organization network from which you are accessing Documentum Administrator.

    This allows you to access content from the nearest storage area in the network. Depending on your organization's setup, this location might be a fixed value.

6.   To view additional options, click **More Options**:

    • To connect to the repository using a particular server, choose that server from the **Server** list box.
      The default is **Any Running Server**.

_____

- If the repository is running in domain–required mode, type the domain name.

- To set the session locale to another language, choose the language from the list box.

  📄 **Note:** Do not click the **Additional Accessibility Options** link on the login page. Documentum Administrator does not support the accessibility options.

- To change your password in a repository, click **Change Password**, select a repository, and type your old and new passwords, and then click **Change Password**.

7. Click **Login**.

   The System Information page appears with information about the system.

   The *OpenText Documentum Content Management - Administrator User Guide (EDCAC250400-UGD)* has complete information about using Documentum Administrator and logging in to repositories available in Documentum Administrator.

5.2   Configuring the SAP server

To create, view, or edit connections to an SAP server:

1. Connect to **WebAdmin**, as described in .

2. Click to expand the **SAP** subnode and select the **Server** subnode.

   The **SAP Server** screen appears.

3. Select **File** > **New** > **SAP Server** from the menu at the top of the **SAP Server** screen.

   The **New SAP Server** screen appears.

4. Type a name for the Server in the **New Server's Name:** field.

5. To log in to an SAP server type the hostname or IP address for the server. When an SAP router is used, fill in the complete SAP router string in the following format:

   ```
   /H/router1/H/<host_name_or_IP_address>
   ```

6. If you want to log in to an SAP group, which is associated with an SAP R/3 or ECC server, select *Enable load balancing* and type the *<SAP_group>* in SAP Logon group field.

> 📄 **Note:** For SAP Server, enable load balancing configuration for Windows OS we need to add an entry "sapms<*SID*>3600/tcp # SAP System Message Port" in `C:\WINDOWS\system32\drivers\etc–>` services file. This entry should not be added at the end of the file, instead add it somewhere in between like just before sapdp00 3200/tcp.
>
> This file should be edited on the system where Documentum Content Services for SAP Solutions WebAdmin is running.
>
> Also, try restarting the system if the changes do not work.

7. Type the system name and number in the appropriate fields.

8. Click **OK** to save the SAP server configuration.

5.3 Configuring an SAP user

To create, view or edit an SAP user:

1. Connect to **WebAdmin**, as described in .

2. Click to expand the **SAP** subnode and select the **User** subnode.

   The **SAP User** screen appears.

   > 📄 **Note:** To enable worklist and links creation in Documentum Content Services for SAP Solutions WebAdmin, the recommended authorization profiles for SAP users are:
   >
   > • SAP_ALL
   >
   > • SAP_NEW

3. Select **File** > **New** > **SAP User** from the menu at the top of the SAP User screen.

   The **New SAP User** screen appears.

4. Type the username in the **Name:** field.

5. Type the SAP username in the **SAP User Name:** field.

6. Type a password for the user.

7. Type the client number.

8. Click **OK** to save the SAP user configuration.

5.4   Creating an SAP query

To create, view, or edit a new query:

1. Connect to **WebAdmin**, as described in "Logging in to WebAdmin through Documentum Administrator" on page 47.

2. Click to expand the **SAP** subnode and select the **Query** subnode.

    The **Query** screen appears.

3. Select **File** > **New** > **SAP Query** from the menu at the top of the **Query** screen.

    The **New SAP Query** screen appears.

4. Type the query name in the **Query Name:** field.

5. Choose an SAP query type from the **SAP Query Type:** list. Your choices are described in the following table.

    Note: With CAD Interface queries, you can only query SAP R/3 version 4.6c. The PLM Interface enables you to query SAP R/3 version 4.7 and 4.6c.

Table 5-1: Query types

Old interface query types (for SAP R/3 version 4.6c)	New interface query types (for SAP R/3 version 4.7 and 4.6c)
Document info record	No Object PLM (Formerly Document info record)
Equipment by short text	Equipment by short text PLM
Functional location by text	Functional location by text PLM
Material by description	Material by description PLM **Note:** The material by description PLM query type has three query conditions: • *MATERIALSHORTDESCSEL_low* • *MATERIALSHORTDESCSEL_Sign* • *MATERIALSHORTDESCSEL_ Option* All three query conditions are required if the query is to return a result.
Archive data	Archive data
Cost center	Cost center
Financial document	Financial document
Personnel links	Personnel links
Personnel master	Personnel master

Old interface query types (for SAP R/3 version 4.6c)	New interface query types (for SAP R/3 version 4.7 and 4.6c)
Purchasing document	Purchasing document
Customer	Customer Table PLM
Print list	Print list
Vendor	Vendor Table PLM
WBS Element	WBS Element PLM
Asset Master	Asset Master GetList PLM

6. Build the query condition.

   For each query condition to be defined:

   a. Choose a parameter from the **Query Condition Composer:** list box and type a value for the parameter in the text box.

   b. Click the down arrow to add the parameter and value to the Query Condition: field.

      Note: Highlight an entry in the Query Condition field and click **x** to delete an entry.

   c. Continue to select parameters and enter values to build the query condition.

      Note: The conditions are AND linked.

7. Click **OK** to save SAP Query configuration.

   The **Query** screen reappears with the newly created SAP query.

5.5 Testing an SAP query

To test the query:

1. Connect to **WebAdmin**, as described in .

2. Click to expand the **SAP** subnode and select the **Query** subnode.

   The **Query** screen appears.

3. Select the SAP query for testing.

4. Select **File** > **Test** from the menu at the top of the **Query** screen.

   The SAP query test fields appear.

   Note: Leave the default selections in the list boxes.

5. Click **Test**.

   If the connection is made, a list of SAP data appears. If the connection fails, review your settings in WebAdmin for SAP Server and SAP User. Make sure that they identically match the settings used to connect to SAP using a SAP GUI logon session. Also ensure that the minimum configuration steps were carried out for SAP DMS.

5.6 Configuring an Agent

To configure an Agent, you will need a previously configured Action as well as a previously defined SAP Server and SAP user. For Action configuration refer *OpenText Documentum Content Services for SAP Solutions - Administration Guide (EDCCOSAPCS250400-AGD)*.

To create, view, or edit an Agent:

1. Connect to WebAdmin. See .

2. Click to expand the **Auto Manage** subnode and select the **Agents** subnode.

   The **Agents** screen appears.

3. Select **File** > **New** > **Agent** from the menu at the top of the Agent screen.

   The **New Agent** screen appears.

4. Enter a name for the Agent in the **New Agent Name:** field.

5. Choose the SAP system type from the **SAP System Type:** drop–down list.

6. Choose the action required by the Agent from the **Action:** drop–down list.

7. Choose the SAP server where the Agent is running from the **SAP Server:** drop–down list.

8. Choose the SAP user with the rights to run the Agent from the **SAP User:** drop–down list.

9. Click **OK** to save the Agent configuration.

5.7 Registering an HVP worker

To register HVP worker:

1. Connect to WebAdmin. See .

2. Click to expand the **Auto Manage** subnode and select the **HVPS** subnode.

   The **HVPS** screen appears.

3. Select **File** > **New** > **Register HVP Worker** from the menu at the top of the HVPS screen.

The **New Register HVPS Worker** screen appears.

4. Enter a name for the Worker in the **Name:** field.

5. Enter the web address for the Worker in the **Worker URL:** field as:

```
http://<host>:<port>/HvpWorker/hvpCommand/
```

or

```
http://<host>:<port>/HvpWorker/hvpCommand
```

6. Select **Is Available:** if required.

7. Click **OK** to save the Worker registration information.

5.8 Configuring Documentum Content Services for SAP Solutions job

To configure a Job, you will need a previously configured Agent.

To create, view, or edit jobs:

1. Connect to WebAdmin. See .

2. Click to expand the **Auto Manage** subnode and select the **Jobs** subnode.

   The **Jobs** screen appears.

3. Select **File** > **New** > **SAP Job** from the menu at the top of the **Jobs** screen.

   The **New Job** screen appears with four tabs across the top.

4. In the **Info** tab:

   a. Enter a job name in the **Name:** field.

   b. Enter a job type in the **Job Type:** field.

   c. Choose a trace level for the job in the **Trace Level:** list box. The trace level detail depends on the log level set in the hvp.properties of the HVP Worker.

   d. Select **Active** or **Inactive**, if required.

   e. Select **Deactivate upon failure, Run after Update, or Save if invalid,** if required.

   f. Click **Next** or **Schedule** to continue the job configuration.

5. In the **Schedule** tab:

   a. Choose a job start date and time with the **Start Date And Time:** calendar pop-up and time list boxes.

   b. Choose a metric for job to repeat in the **Repeat:** list box.

   c. Enter how often the job will repeat in the **Frequency:** list box.

      d.   Choose a job end date and time with the **End Date And Time:** calendar pop-up and time list boxes, or enter a specific number of time for the job to run.

      e.   Click **Next** to continue the job configuration.

6.   In the **SAP Job** tab:

      a.   Choose job agents from the **Agents:** list box.

      b.   Click **Add** to add the agent to the **Agents to Run** field.

      Use the up and down arrows to adjust the order that agents run.

7.   Click **Finish** to save the Job configuration.

The newly created job appears in the **Jobs** screen showing the job Object Name, job Last Run, current State, and Status of the job.

8.   Right-click on the desired job and select:

      a.   Run: To immediately run the job.

      b.   Refresh: To refresh the Jobs screen.

      c.   View Trace File: To view a report based on the trace level set for the job run.

      d.   Delete: To delete the job and all its settings.

Chapter 6

Uninstalling Documentum Content Services for SAP Solutions

This chapter describes the procedures required to uninstall the Documentum Content Services for SAP Solutions server and client components.

> **Note:** Uninstalling does not remove folders and files that were created after the initial installation. Uninstalling does not remove cabinets, folders, or data from the Documentum CM Server. This task can also be accomplished manually.

6.1 Uninstalling Documentum Content Services for SAP Solutions server components

> **Note:** The operation of uninstalling Documentum Content Services for SAP Solutions is not recommended for a production repository. It is included here for test and development activities that require a refreshed repository.

To uninstall 6.5 version of Documentum Content Services for SAP Solutions from host server follow the standard uninstallation procedure as described by the respective application server.

This procedure only deletes programs. To remove the Content Services configuration objects or SAP linked objects from the repository, use the instructions in the next section, "Deleting default SAP configuration information or data" on page 55.

6.1.1 Deleting default SAP configuration information or data

> **Note:** This operation is not recommended for a production repository. It's included here for test and development activities that require a refreshed repository. If deletion will include objects that are linked to SAP, the links must be removed from both SAP and the repository before deleting those objects. Not doing so will cause corruption of the SAP or OpenText Documentum CM databases. The procedures for removing links varies according to the type of link and the SAP interface used (Incoming documents, Outgoing documents, Print Lists, Data Archiving, Automated linking, Document Management linking).

To delete the default SAP configuration information or data:

1. Log in to the repository using repository owner username.

2. Delete the SAP cabinet (where the example data is stored).

3.   Locate and delete any other locations where SAP data has been stored.

> **Note:** SAP data can be stored outside of the SAP cabinet. The SAP cabinet is just the location recommended by the default configurations.

4.   Delete the Doclink folder located under the System cabinet. Where all of the SAP WebAdmin configurations are stored.

6.2   Uninstalling Documentum Content Services for SAP Solutions client components

Stopping `dmapi.exe` to release any existing programs from use, or you will receive errors indicating that files are in use.

To stop DMAPI.EXE:

1.   Press **Ctrl** + **Alt** + **Delete** to open the **Task Manager** or **Close Programs** window.

2.   Locate and highlight the `DMAPI.EXE` program.

3.   Click **End** or **End Task**.

To remove Documentum Content Services for SAP Solutions client components:

1.   Log in as a member of the administrator group to the machine where Documentum Content Services for SAP Solutions is installed.

2.   From the **Control Panel**, use **Add/Remove Programs** and select **Documentum Content Services for SAP Solutions Client**.

3.   Click **Remove**.

4.   Check to see that **dmview.exe** was removed from the SAP GUI directory (default location is *<Root–Directory>*:`\Program Files\SAP\FrontEnd\SapGui`). This is the default installation directory for DmView.

> **Note:** If these files have been copied or moved to another directory, they must be removed manually.

The references should now be deleted from the **Start** > **Programs** menu.

5.   Open REGEDIT, navigate to **HKEY_LOCAL_MACHINE** > **SOFTWARE** > **Documentum**, and delete the **Documentum Content Services for SAP Solutions Client** registry key.

6.   Remove the CLASSPATH entry for `dfc.properties`, referred by the Dmview application.

7.   Delete `dfc.properties`.

8.   Restart your computer.

Appendix A. Installing a DAR file using the DAR Installer GUI

You can use the DAR Installer GUI to install a DAR file to a repository if you do not want to use the interface within Documentum Composer.

📄 **Note:** The Dar Installer GUI is only supported for Windows environment.

The DAR Installer GUI requires Documentum Composer to be installed, but does not launch the full Documentum Composer IDE. The DAR Installer GUI is useful in cases where you want to de-couple the development of DAR files from the installation of DAR files. It is also useful in situations where installation of DAR files is required as part of a deployment process. When you open the DAR Installer GUI, it creates three folders in your Documentum Composer installation directory:

- `darinstallerconfig`: Contains configuration files for the DAR Installer GUI

- `darinstallerlogs`: Default location of the log files

- `darinstallerworkspaces`: Workspaces that are created and used by the DAR Installer GUI. The DAR Installer GUI does not delete these workspaces automatically, so you occasionally need to clean up this directory. The workspace directories are named in the following form: `darinstaller_workspace_yyyy-mm-dd-hh-mm-ss`

The DAR Installer requires you to fill in certain values that are marked with an asterisk (*). All other fields are optional. The following table provides a description of the fields for the DAR Installer plug-in.

To install a DAR file:

1. Download the DAR Installer ZIP file. You can find the DAR Installer at OpenText My Support. Headless Composer GUI is available within the Documentum CM Server installation also at the location: `C:\Documentum\product\<version>\install\composer\ComposerHeadless`.

2. Unzip the DAR Installer zip file to the root of your Documentum Composer or Headless Composer installation directory.

3. Run `darinstaller.exe`, which is located in the Documentum Composer root directory, to start the DAR Installer GUI.

4. In the **DAR Details** section, specify values for the fields.

5. In the **Connection Broker Details** section, specify values for **Connection Broker Host** and **Connection Broker Port** and click **Connect**.

6. In the **Repository Details** section, specify values for the fields and click **Install** to install the DAR file to the repository.

You can view the log for the DAR installation by selecting the log file from the Log File list box and by clicking Open.

Table A-1: DAR Installer fields

Parameter	Required	Description
DAR	Yes	The absolute file path to the .dar file that you want to install. The file path cannot contain any I18N characters or the installation will fail.
Input file	No	The absolute file path to the install-based parameter file.
Local folder	No	The absolute file path to localized .properties files. If you want to make your application available in other languages, you need to localize the project data such as labels, tabs, and descriptions.
Log file	No	The file to save the log to. If this is not specified, the file defaults to `<DAR>.log`.
Connection Broker Host	Yes	The address of the Connection Broker.
Connection Broker Port	Yes	The port of the Connection Broker Repository.
Repository	Yes	The name of the repository that you want to install the DAR file to. Click on the Connect button after entering the connection broker host and port to retrieve the available repositories.
User name	Yes	The login name for the repository.
Password	Yes	The password for logging into the repository.
Domain	No	The domain where the repository resides.

Appendix B. Troubleshooting

Refer to the *OpenText Documentum Content Services for SAP Solutions - Administration Guide (EDCCOSAPCS250400-AGD)* for troubleshooting information.

B.1 JBoss deployment error

When JBoss is deployed in Documentum Content Services for SAP Solutions, it fails with the following error:

```
java.lang.NoSuchFieldError: EMPTY_BYTE_ARRAY
```

To resolve error during JBoss deployment:

Add the `jboss-deployment-structure.xml` file in *<CSSAP_HOME>*`/WEB-INF/` with the following content:

```xml
<?xml version="1.0" encoding="UTF-8"?>
  <jboss-deployment-structure>
    <deployment>
      <exclusions>
        <module name="org.apache.logging.log4j.api"/>
      </exclusions>
    </deployment>
  </jboss-deployment-structure>
```

Where, *<CSSAP_HOME>* is `\apache-tomcat-9.0.65-cssap\webapps\cssap`.

B.2 Error appears on running Documentum Content Services for SAP Solutions jobs on Linux environment

When Documentum Content Services for SAP Solutions jobs are run on Linux environment, it fails with the following error:

```
InvalidActivityIDException
```

To resolve error on running Documentum Content Services for SAP Solutions jobs on Linux environment:

Add the `$HOME/.hvps` directory with relevant permissions.