

SAP Sourcing 9.0 SP11 and Up

Database IBM DB2 for Linux, UNIX, and Windows

Document History



Caution

Before you start the upgrade, make sure that you have the latest version of this document. You can find the latest version on SAP Service Marketplace at service.sap.com/eso.

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

Table 1

Version	Date	Description
1.0	2012-04-19	Initial version
1.2	2012-05-17	Added Information about query tester as report.
1.3	2012-06-18	Updated instructions for language pack installation
1.4	2012-10-09	Added information about verifying the Region Value List Value.
1.5	2013-05-21	Corrected instructions related to WordService and Contract Generation.
1.6	2013-05-28	Reverted instructions about contract generation.
1.7	2013-05-30	Added prerequisite procedure to Upgrade Database.
1.8	2013-07-24	Updated Contract Generation
SP11 1.0	2013-08-12	Initial version for SP11
SP13 1.0	2013-09-25	Added new system properties.
SP13 1.1	2013-10-10	Updated Contract Generation
SP13 1.2	2013-11-15	Fixed DOCX / WordService
SP13 1.3	2013-11-21	Added disclaimer about Windows Server 2003
SP22 1.0	2015-04-16	Added reference to Config Guide for Global Search changes.

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1 Introduction

1.1 About This Document

This document describes the following:

- Upgrade from SAP E-Sourcing 5.x and higher to SAP Sourcing 9.0
- Upgrade from SAP Contract Lifecycle Management (SAP CLM) 2.0 to SAP CLM 9.0

More Information

For an overview of new and changed features in this release, see the release note on SAP Service Marketplace at service.sap.com/releasenotes ► [SAP Solutions](#) ► [SAP Sourcing](#) ►. The release note will help you to better understand which areas are affected in the upgrade.

See also the Master Guide for SAP Sourcing 9.0, on the SAP Service Marketplace at ► service.sap.com/eso ► [SAP Sourcing On-Premise](#) ► [Sap Sourcing 9.0](#) ►.

1.2 Before You Start

- Make a database backup to ensure that no data loss occurs if the upgrade fails.
- Ensure that the existing SAP Sourcing system is operational.
- Read through this guide and any further documentation referenced in it.



Caution

During the upgrade process, you will need to upgrade your database and NetWeaver implementation irreversibly. To avoid losing your data permanently, make sure you have appropriate backups.

Constructing an SAP Sourcing Login URL

At various points, this guide will instruct you to log in as a certain user. You can log in as a buy-side user, a sell-side user, the enterprise user, or the system user. You must connect to the system using a different URL depending on which user the instructions call for. This section explains how to construct the correct login URL for the specified user.

SAP Sourcing login URLs can be constructed as follows:

[protocol] ://[hostname] : [port] / [context] / [login type] / [login path]

Table 2

[protocol]	http or https . Typically https for customer productive systems.
[port]	The [port] element is optional.

[context]	This is the context you defined during installation.
[login type]	<p>Use one of the following, depending what user is called for in the instructions:</p> <ul style="list-style-type: none"> • If the instructions call for a buy-side user, use fsbuyer. • For a sell-side user, use fsvendor. • For the system user, use fssystem. • For the enterprise user, use fsenterprise.
[login path]	<p>For fsbuyer, fsenterprise, and fssystem, this is portal/login.</p> <p>For fsvendor, this is vendordesktop/login.</p>



Example

- `https://www.mycompany.com/mycontext/fsenterprise/portal/login`
- `https://www.mycompany.com/mycontext/fsvendor/vendordesktop/login`
- `https://www.mycompany.com:8080/mycontext/fssystem/portal/login`



Note

After the initial login, the system prompts you to change your password

1.2.1 New Features

This section describes new features that are not mentioned elsewhere in this guide.

Log On as System User via /fssystem Context

As of SAP Sourcing 7.0, you can log on as the system user only via the `/fssystem` context. You can no longer log on as the system user from the `/fsbuyer` context.

Log on as System User via /fsenterprise Context

As of SAP Sourcing 9.0, you can log on as the enterprise user only via the `/fsenterprise` context. You can no longer log on as the enterprise user from the `/fsbuyer` context.

Use System User to Create New Localized Resources When Moving Multi-Tenant Deployments

If you are moving multi-tenant deployments to SAP Sourcing 9.0, you must use the system user to create new localized resources if the resources are to be shared across all tenants. Previous to SAP Sourcing 7.0, you could use the enterprise/tenant user to do this.

Global Search

KM content search has been disabled as of SAP Sourcing 9.0. Use global search to carry out free-text content search on documents and attachments. This simplifies your landscape because global search does not require a TREX server. For information about global search, see SAP Library for SAP Sourcing on SAP Help Portal at

i Note

SAP recommends you deactivate the Global Search Channel if you are not using it, as this feature has been replaced with the Global Search button. Unlike earlier versions, the new Global Search filters the results to only those items that the user can open.

To be available for global search, any new or changed documents and attachments must be indexed. As of SAP Sourcing 9.0, the *Search XML Extract* scheduled task and the index refresh are coupled so that the index is refreshed as soon as the *Search XML Extract* scheduled task is complete. The index refresh is no longer a separate scheduled task. The *Search XML Extract* scheduled task is set to run once daily, starting around midnight.

Symantec Antivirus

If you have been using Symantec virus scanning and wish to continue doing so, you must update the location of the `SymJavaApi.jar` file in the configuration utility.

1.2.2 SAP Notes for the Upgrade

The following table lists relevant SAP Notes for the upgrade. Make sure that you have the current version of each SAP Note.

Table 3

SAP Note	Description
1690280	<p>SAP Sourcing 9.0 Release Information Note</p> <div>i Note</div> <p>There is a Release Information Note (RIN) for each support package of SAP Sourcing 9.0. See the RIN for the support package to which you are upgrading.</p>
1648338	<p>Variable library: Create new variables manually</p> <p>This SAP Note describes the process of creating two contract variables:</p> <ul style="list-style-type: none">• Agreement Header Price Conditions• Agreement Bid Formulas

2 Quick Guide

The following tables contain all actions that you have to perform. The actions are in chronological order so that you can work through them like a checklist.

Planning

Table 4

Completed?	Activity
	Make a database backup.

Preparation

Table 5

Completed?	Activity
	Make a database backup if you have not already done so.
	Install and configure DB2 Text Search [page 12].
	Verify database user account settings [page 13].
	Run preconversion reports [page 14].
	Resize company logo [page 14].
	Check system property for integration of SAP ERP [page 15].
	Carry out preparation for integration of SAP ERP and SAP Sourcing [page 15].

Upgrade Process

Table 6

Completed?	Activity
	Make a database backup if you have not already done so.
	Uninstall and reinstall SAP Sourcing [page 20].
	Upgrade database [page 21].
	Deploy SAP Sourcing SCA file to application server [page 23].
	Install language packs [page 25].
	Run upgrade workbooks [page 26].
	Update contract generation service to support Microsoft Office Word 2007 documents [page 28].
	Update optimizer [page 30].

Follow-Up Activities

Table 7

Completed?	Activity
	Update import statements in existing custom scripts and workflow scripts [page 33].
	Update existing custom scripts and existing custom JAR files [page 33].
	Update single sign-on directory configurations [page 37].
	Update theme [page 37].
	Carry out follow-up activities for integration of SAP ERP and SAP Sourcing [page 38].
	Update and validate custom queries [page 52].
	Clear browser cache [page 55].

3 Planning

When planning the upgrade, take the following into consideration:

SAP NetWeaver 7.3 SP03

SAP Sourcing 9.0 requires SAP NetWeaver 7.3 SP03. For more information, see [Before You Start \[page 5\]](#).

Hardware and Software Requirements

Database Backup

Be sure to make a database backup before starting the upgrade to ensure that no data loss occurs if the upgrade fails.

Write Down Current SAP Sourcing Version Number

In order to perform the steps in section 5.5 "Import Upgrade Workbooks," you will need to know the version number of the version of SAP Sourcing you are upgrading **from**. Determine and write down this version number now, so you will have the information you need at the correct time.



Caution

In Chapter 5, "Upgrade Process," you will delete your current SAP Sourcing installation. You must know your SAP Sourcing version number before then, or it will be too late. You will be unable to determine the correct SAP Sourcing version number using these instructions.

Follow these instructions to determine your current SAP Sourcing version number:

1. In SAP Sourcing, navigate to ► [Setup](#) ► [System Administration](#) ►.
2. From the [System Management](#) section, choose [System Information](#).
3. Your SAP Sourcing version number is located in the [Application Properties](#) table, in the row for [ESO Version](#). Write it down for use in section 5.5 "Import Upgrade Workbooks."

Upgrade Sequence

You must carry out the upgrade in the order given in the previous chapter, [Quick Guide](#).

Integration of SAP ERP and SAP Sourcing

This is relevant only if your source system is already integrated with SAP ERP.



Note

The `is_sapint_installed` system property indicates whether your SAP E-Sourcing system is already integrated with SAP ERP. You can check this system property as follows:

1. Log on to SAP Sourcing as the system user if you are upgrading from SAP E-Sourcing 5.x, or with the enterprise user if you are upgrading from SAP Sourcing 7.0.
2. Choose [Setup](#).
3. Choose [System Properties](#).
4. Locate the `is_sapint_installed` property below:

Table 8

System	Set
SAP E-Sourcing 5.x	SAPINT
SAP Sourcing 7.0	sapintegration

5. The value TRUE indicates that the system is enabled for integration.

Upgrade from SAP E-Sourcing 5.x

In SAP E-Sourcing 5.0 and 5.1, a package was available to integrate SAP E-Sourcing with SAP ERP. This package was based on custom development techniques, including the definition of extension fields and custom master data objects, and is not supported on releases beyond SAP E-Sourcing 5.1.


When you upgrade an SAP E-Sourcing 5.0 or 5.1 system that uses this integration package, a migration utility automatically converts the custom extension fields and data to the equivalent standard fields in SAP Sourcing 9.0. If the SAP E-Sourcing 5.0 or 5.1 system does not use the integration package, this migration does not occur.

The migration process marks all affected extension fields as inactive. After the upgrade is complete, reactivate any extension metadata that you want to retain.

After an upgrade acceptance test that includes a review of the migrated standard data, we recommend running a final script to delete the inactive extension data. For more information, see [Run DB Importer Script to Delete Obsolete Data \[page 50\]](#).

If you or your implementation consultant have customized the integration process by adding extension fields or scripts, or by editing the provided scripts, you may have to undertake further customization to be compatible with the integration design in SAP Sourcing 7.0 and higher. The migration process will not upgrade any non-standard fields or scripts.

Configure Global Search If Necessary

Due to enhancements as of SAP Sourcing 9.0 SP22, you may need to configure system properties and/or apply security profiles to configure Global Search functionality. For details, see the Configuration Guide for SAP Sourcing 9.0 at service.sap.com/eso > *SAP Sourcing On-Premise* > *SAP Sourcing 9.0* > *Configuration Guide for SAP Sourcing 9.0* .

4 Preparation

1. If you have not already done so, perform a database backup to ensure that no data loss occurs if the upgrade fails.
2. [Run the Query Tester before the upgrade \[page 12\]](#)
3. [Install and configure DB2 Text Search \[page 12\]](#).
4. [Verify database user account settings \[page 13\]](#).
5. [Run preconversion reports \[page 14\]](#).
6. [Resize company logo \[page 14\]](#).
7. [Check system property for integration of SAP ERP \[page 15\]](#).
8. [Carry out preparation for integration of SAP ERP and SAP Sourcing \[page 15\]](#).

4.1 Run Query Tester Before Upgrade

Procedure

While the previous release is still running, execute the query tester utility for custom query definitions before the upgrade, so that the queries that have problems can be diagnosed without taking into account any changes introduced by the new release. You must execute the query tester utility again after the upgrade, using the procedure described in [Run Query Tester After Upgrade \[page 52\]](#).

1. Log on to SAP Sourcing as a user with system administration rights, specifically with access to importing and exporting data.
2. Choose *Setup*.
3. On the *System Administration* tab, find the *Import and Export Tools* section and click *Import Data*.
4. Choose *New*.
5. Select *File Already Exists on Server*.
6. On the next page, enter `classpath:///scripts/upgrade/test_custom_queries.xml` as the server file path.
7. On the next page, select *Wait for Import to Finish*.
8. Review the `trace.txt` file for errors.

4.2 Install and Configure DB2 Text Search

Procedure

Install and configure DB2 Text Search for the version of your database server (see below). This is required for the platform to be installed successfully. It is also required if you want to use global search.

For information about global search, see SAP Library for SAP Sourcing on SAP Help Portal at ► help.sap.com/sourcing ► *SAP Sourcing 9.0* ► *Help for Purchasers* ► *[choose a language]* ► *Getting Started* ► *General Functions* ► *Global Search* ►.

Be sure to also install the DB2 Accessories Suite, which is required for the proper indexing of many formatted text documents such as Microsoft Word and Adobe PDF. Installation of the DB2 Accessories Suite is also described in the documentation specified below.

i Note

If you are unable to install DB2 Accessories Suite on Windows systems where DB2 is installed in the default installation directory under <drive>:\Program Files, make sure that DB2 is installed in a non-default installation directory without any spaces in the installation directory path, for example, c:\IBMDB2V97.

IBM DB2 Version 9.7

In the IBM DB2 9.7 for Linux, UNIX, and Windows Information Center, choose ► *Database Fundamentals* ► *Searching Text* ► *DB2 Text Search* ►.

More Information

For information about global search, see SAP Library for SAP Sourcing on SAP Help Portal at ► help.sap.com/sourcing ► *SAP Sourcing 9.0* ► *Help for Purchasers* ► *[choose a language]* ► *Getting Started* ► *General Functions* ► *Global Search* ►.

4.3 Verify Database User Account Settings

SAP Sourcing uses a database user account to connect to the database.

Procedure

1. Verify that at least the following database privileges are granted to this database user account:
 - CONNECT
 - CREATETAB
 - BINDADD
2. Verify that use of your tablespaces is granted to this database user account.

For more information, see "Create Tablespaces" in the **Installation Guide for SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

More Information

For information about server hardware and software requirements, see the **Installation Guide for SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

4.4 Run Preconversion Reports

It is rare for a release or support package to contain any preconversion reports. However, if it does, you must run all preconversion reports for the release in order to identify any data corrections that must be made in your current system before you start the upgrade.

Caution

If you do not make the necessary data corrections, the upgrade of the database will fail. If the upgrade of the database fails, you must start the upgrade process again using the database backup.

The preconversion reports are listed in the XML file `cnv_report_queries.xml` together with documentation for each report. The documentation describes how to interpret the results of the report.

To access any preconversion reports for SAP Sourcing 9.0, see SAP Note [1690280](#).

Procedure

If no preconversion reports are required, you can proceed with the upgrade preparation. Otherwise, run the preconversion reports according to the following procedure.

1. Import the files as follows:
 1. Choose *Setup* or *Administration*, depending on your release.
 2. Under ► *System Administration* ► *Import and Export Tools* ►, choose *Import Data*.
 3. Choose *Create* and follow the wizard.
2. Run the preconversion reports as follows:
 1. Under ► *System Administration* ► *Administrative Reports* ►, choose *Conversion Reports*.
 2. Run each report individually.
3. Compare the results of each report with the corresponding documentation for the report, and carry out any necessary actions.
4. Rerun the preconversion report to confirm that you have addressed all previously identified issues.
5. If you made changes to resolve issues, make a database backup again.

4.5 Resize Company Logo

Procedure

Note

This step is necessary only if you are upgrading from SAP E-Sourcing 5.x to SAP Sourcing 9.0.

If you have uploaded a company logo in your source release, you must resize the image to 200x29 pixels so that it is supported by the user interface.

1. Log on to SAP Sourcing as a user with system administration rights.
2. Choose *Setup*.

3. On the *Master Data* tab, find the *Organization and Accounting Information* section and click *Companies*.
4. Click the company.
5. Choose *Edit*.
6. In the *Logo* field, upload the resized image.

1 Note

If you added your company logo as a JAR file to the system property `buylogoimage` or `selllogoimage` in your source release, your company logo is no longer displayed after the upgrade. To restore your company logo, upload it in the correct size and to the correct location as described above.

Alternatively, you can restore your company logo as follows:

1. Choose *Setup*.
2. On the *System Setup* tab, find the *User Interface* section and click *Themes*.
3. Open your current default theme.
4. Upload your company logo under *Branding*.

4.6 Check System Property for Integration of SAP ERP

Some upgrade actions are necessary only if your source system is integrated with SAP ERP. If your source system is **not** integrated with SAP ERP, check that the following system properties do not exist, or that they are set to false.

- `SAPINT.is_sapint_installed`
- `sapintegration.is_sapint_installed`

Procedure

1. Log on with the system user.
2. Choose *Setup*.
3. On the *System Setup* tab, find the *Configuration* section and click *System Properties*.
4. If the property `is_sapint_installed` does not exist, no action is required.
If the property `is_sapint_installed` exists and has the value *FALSE*, no action is required.
If the property `is_sapint_installed` exists and has the value *TRUE*, set it to *FALSE*.

4.7 Preparation for Integration of SAP ERP and SAP Sourcing

This section is relevant only if your source system is already integrated with SAP ERP.

See also:

- [Planning \[page 10\]](#) ► *Integration of SAP ERP and SAP Sourcing* ►

- [Follow-Up Activities for Integration of SAP ERP and SAP Sourcing \[page 38\]](#)

4.7.1 Upgrade from SAP Sourcing 7.0

Procedure

If the system is enabled for integration, then the integrated SAP ERP system must be maintained in another system property. You can check this property as follows:

1. Log on as a user that has access to enterprise-level system properties.
2. Choose *Setup*.
3. On the *System Setup* tab, find the *Configuration* section and choose *System Properties*.
4. Locate the property with the following characteristics:
 - Set: odp.doc
 - Property: odp.doc.integration.external_system
5. The value must represent the integrated SAP ERP system.

Note

It is important that the above property is maintained with a valid value. A missing property or an invalid value will cause the upgrade to fail.

4.7.2 Upgrade from SAP E-Sourcing 5.x

4.7.2.1 Maintain Properties File

Procedure

In the <SAP Sourcing home directory>/config directory, place a properties file with the name `ES60ERPMigration.properties`.



Caution

If this file is not created or edited properly, the upgrade is likely to fail.

Map Value List Values to Transaction Types

Use the following procedure to map the `erp_oa_type` and `erp_po_type` value list values in SAP E-Sourcing 5.x to the transaction type and subtype in SAP Sourcing 9.0. During the upgrade, this mapping is used to convert these value list values to standard transaction types.

1. Log on to SAP E-Sourcing 5.x as the enterprise user.
2. Choose *Setup*.
3. Under *System Setup*, find *Master Data* and choose *Value List Types and Values* from the dropdown. Then choose *OK*.

4. Choose *Outline Agreement Type*.
5. For each value list value, note down the value in the *Display Name* column.
6. Decide if this outline agreement type is a quantity contract, value contract, or scheduling agreement.

Note

In general, values starting with K_ are contracts, and values starting with L_ are scheduling agreements, but verify this with your SAP ERP consultant.

7. For each value list value, enter one of the following key/value pairs in the `ES60ERPMigration.properties` file, depending on whether this outline agreement type is a quantity contract, value contract, or scheduling agreement. Replace <VALUE> with the value that you noted down in step 5.
 - `ERP_TRANSACTION_TYPE_<VALUE>=ContractValue`
 - `ERP_TRANSACTION_TYPE_<VALUE>=ContractQuantity`
 - `ERP_TRANSACTION_TYPE_<VALUE>=SchedulingAgreement`
8. Return to the value list type list and click *Purchase Order Type*.
9. For each value list value, note down the value in the *Display Name* column.
10. For each value list value, enter the following key/value pair in the `ES60ERPMigration.properties` file. Replace <VALUE> with the value that you noted down in step 9.

`ERP_TRANSACTION_TYPE_<VALUE>=PurchaseOrder`

Note

Ensure that all `erp_oa_type` and `erp_po_type` value list values are maintained in the `ES60ERPMigration.properties` file; otherwise the upgrade will fail.

Identify Primary Subcontext (If Necessary)

The context scope of the purchasing organization has changed from company scope in the SAP E-Sourcing 5.x integration to enterprise scope in the SAP Sourcing 9.0 integration. If there are multiple subcontexts within your enterprise (unlikely), only one subcontext can be the source of the SAP Sourcing 9.0 purchasing organization data. If there are multiple subcontexts, add the following single property representing the primary subcontext to the `ES60ERPMigration.properties` file. Note that the value is case-sensitive.

`ERP_PURCHASING_ORG_SCOPE=<subcontext_external_id>`



Example

`ERP_PURCHASING_ORG_SCOPE=manufacturing_company`

In this example, the subcontext external ID *manufacturing_company* is found in the schema at `FCI_SYS_CONTEXT.EXTERNAL_ID`.

Verify the Region Value List Value

SAP ERP Region master data was created as a value list value of type Region in the integration package in SAP Sourcing 5.x. The Display Name of this value list type was generated by concatenating the SAP ERP Region ID and Country ID in the following format: <RegionID>_<CountryID>.

In integration package 6.x, SAP ERP Region was created as a new master data object called *ERP Region*. Successful migration of the 5.x Region value list value to the new ERP Region object relies on the Display Name of the Region value list value being in the format <RegionID>_<CountryID>. Region value list values that do not follow this format might not be converted to the ERP Region objects during migration.

To ensure all 5.x Region value list values are converted to ERP Region objects during migration, verify that the Region value list values are in the format <RegionID>_<CountryID> in the 5.x system.

4.7.2.2 Identify Customizations and Plan Retrofit

Procedure

1. Identify any customizations that you made when integrating SAP E-Sourcing 5.x with SAP ERP, for example, customizations to SAP ERP or SAP NetWeaver Process Integration (SAP NetWeaver PI).
2. Evaluate any such customizations to determine which are still needed or no longer needed in SAP Sourcing 9.0, and contact your consultant to check these customizations.

After the upgrade, you may have to retrofit any customizations that are still needed.

4.7.2.3 Synchronize Published SAP E-Sourcing Documents with SAP ERP Documents

Procedure

If an SAP E-Sourcing 5.x document, such as a contract, is published to SAP ERP, and the SAP E-Sourcing document is subsequently changed, the changed document should be published to SAP ERP before the upgrade so that the fields in the SAP E-Sourcing document are synchronized with the corresponding fields in the SAP ERP document.

If the changed document is not published to SAP ERP until after the upgrade, the differences in some field values between the original publishing and the post-upgrade publishing of the document will be treated as a validation error by SAP ERP.

In the event of an SAP ERP validation error after the upgrade, you must import acceptable field values to SAP Sourcing 9.0 and then republish the document to SAP ERP. You cannot use the SAP Sourcing 9.0 user interface to restore these fields to values that SAP ERP will accept.

In addition, we recommend publishing any outstanding RFP awards from SAP E-Sourcing 5.x to SAP ERP before the upgrade.

4.7.3 Back Up Production System Schema

Procedure

Back up the production system schema so that you can restore it if the upgrade fails. The combination of the migration of the integration of SAP ERP and your SAP E-Sourcing 5.0, 5.1, or 7.0 source system together with all other SAP Sourcing 9.0 schema changes increases the chance of some unexpected combination of data leading to an upgrade failure.

4.7.4 Test Upgrade on Copy of Production System Schema

Procedure

The integration of SAP ERP and your SAP E-Sourcing 5.0, 5.1, or 7.0 source system is migrated as part of the SAP Sourcing 9.0 schema changes. You cannot rerun the script file to upgrade the schema. There is no independent script to migrate the integration.

We strongly recommend testing the upgrade on a copy of the production system schema. There is no standard acceptance test for the migration, other than that the schema upgrade completes with no error messages. Review the migrated data that you care most about, especially any retrofitted customizations. One way to review the migrated data is to go to the list page of each object that was affected by the migration, and view one or more of the listed objects.

5 Upgrade Process

1. If you have not already done so, make a database backup to ensure that no data loss occurs if the upgrade fails.
2. SAP Sourcing 9.0 requires SAP NetWeaver 7.3 SP03. If your present release of SAP Sourcing is not installed on SAP NetWeaver 7.3 SP03, you must uninstall your current version of SAP NetWeaver and install SAP NetWeaver 7.3 SP03 as follows:
 1. Uninstall your current version of SAP NetWeaver.
For more information, see the installation guide for SAP NetWeaver 7.3 on SAP Service Marketplace at service.sap.com/installNW73.
 2. Install SAP NetWeaver 7.3 SP03.
For more information, see the installation guide for SAP NetWeaver 7.3 SP03 on SAP Service Marketplace at service.sap.com/installNW73.
 3. Create two separate database schemas (or even two separate databases) – one for SAP Sourcing and one for SAP NetWeaver 7.3 SP03.
 4. Restore your extracted application data to the new database schema; configure SAP NetWeaver 7.3 SP03 on the other schema.
3. [Upgrade database \[page 21\]](#).
4. [Deploy SAP Sourcing SCA file to application server \[page 23\]](#).
5. [Run upgrade workbooks \[page 26\]](#).
6. [Install language packs \[page 25\]](#).
7. [Update contract generation service to support Microsoft Office Word 2007 documents \[page 28\]](#).
8. [Update optimizer \[page 30\]](#).

5.1 Uninstall Current SAP Sourcing Installation and Install SAP Sourcing 9.0

Procedure

i Note

Make a note of what version of SAP Sourcing you are upgrading from. Later, you will need to select workbooks specific to your old SAP Sourcing version.

1. Back up the `Sourcing_home` directory.
Also back up any folders where you may have saved custom JAR files, for example, the `custom` directory or `lib` directory.
2. If you have not already done so, undeploy SAP Sourcing.
3. To uninstall the existing SAP Sourcing software and install the new SAP Sourcing software, follow the instructions in “Uninstalling and Reinstalling SAP Sourcing” in the **Installation Guide for SAP Sourcing 9.0**,

located on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►

i Note

As of SAP Sourcing 9.0 SP17, SAP Sourcing no longer supports the native protocol for Symantec. Sourcing will only support the ICAP protocol going forward. Customers must set Symantec to use the ICAP protocol before installing this release. If customers change the port when changing to the ICAP protocol for Symantec, they must update the `system.avscanner.port` system property.

4. This step is necessary only if both of the following conditions are true:
 - Your source system is already integrated with SAP ERP.
 - You are upgrading from SAP Sourcing 5.0

If you have not done so already, place a properties file with the name `ES60ERPMigration.properties` in the <SAP Sourcing home directory>/config directory.

5.2 Upgrade Database

Prerequisites

You have made a database backup to ensure that no data loss occurs if the upgrade fails.

It is necessary to run the upgrade in the same locale (*Region and Language*) as will be used to run the application server. On Windows, NetWeaver is run as a service. Therefore it runs in the System Locale, this can be checked by bringing the *Region and Language* settings in the Control Panel. The language and location of the System Locale is found on the *Administrative* tab. The language and location of the current account can be found on the *Formats* and *Location* tabs respectively. On a Linux or UNIX system, the check is done by comparing the outputs of the “locale” command for each of the accounts.

Revert Customized Properties to Standard Values

i Note

This procedure is necessary only if `isc_template` and `isc_config` have been customized.

1. In SAP Sourcing, navigate to ► *Setup* ► *System Setup* ► *Integration* ► *Integrated System Configuration* ►.
2. Under *All Integrated System Templates* change the customized templates to the default/standard.
3. Under *All Integrated Systems* change the customized configs to default/standard.

Procedure

Run Script Files for SAP Sourcing

1. Run the `sourcing_upgrade_schema.xml` script file as follows.

Caution

If you encounter errors when running the `sourcing_upgrade_schema.xml` script file, stop the upgrade and contact SAP Support. Do not rerun this script file.

1. From a command prompt, go to the `/bin` installation directory and enter **dbimport** to start the DB Importer utility.
2. On the **Setup** tab, select the `fcieso.jar` file.
3. Navigate to the `com/sap/eso/odp/install/scripts/upgrade` directory and select the `sourcing_upgrade_schema.xml` script file.
4. Open the input help dropdown for the **Context** field and choose **System Context**.
5. As user name, enter the system manager user **system** and enter the appropriate password.
6. Choose **Run**.
7. On the **Script** tab, verify whether the script run was successful (green check marks) or whether there were any errors (red crosses).

If there were any errors, stop the upgrade and contact SAP Support. Do not rerun the `sourcing_upgrade_schema.xml` script file.

Note

When this step has successfully completed, a large green check mark appears in the bottom right corner of the window. Even if you see check marks next to all items in the main body of the window, if you do not see the large green check mark at the bottom right of the window, this step has not executed successfully.

8. Exit the DB Importer.
2. Run the `sourcing_upgrade_data.xml` script file as follows.
 1. From a command prompt, go to the `/bin` installation directory and enter **dbimport** to start the DB Importer utility.
 2. On the **Setup** tab, select the `fcieso.jar` file.
 3. Navigate to the `com/sap/eso/odp/install/scripts/upgrade` directory and select the `sourcing_upgrade_data.xml` script file.
 4. Open the input help dropdown for the **Context** field and choose **System Context**.
 5. As user name, enter the system manager user **system** and enter the appropriate password.
 6. Choose **Run**.
 7. On the **Script** tab, verify whether the script run was successful (green checkmarks) or whether there were any errors (red crosses). You can try the following to identify and remove errors:
 - Check and address any warnings or errors on the **Errors** tab.
 - Check the log files under the `/logs` folder in the home directory. Warnings are not saved to the error log.

After resolving the errors, rerun the `sourcing_upgrade_data.xml` script file, making sure that the context is set to system.

Note

When this step has successfully completed, a large green check mark appears in the bottom right corner of the window. Even if you see check marks next to all items in the main body of the window, if

you do not see the large green check mark at the bottom right of the window, this step has not executed successfully.

Recovery After Correction of queries.xml File Import Errors

If errors occur during the import of any *queries.xml files, a red X will appear for those import bundles and the *Product Queries DB Cleanup* action at the end of the query object import will not be executed, but the overall upgrade data script will continue. The schema will not have all the current query objects that are needed, and obsolete standard query objects from previous releases will still be active.

As an example of an error, a report that had its access restricted in a previous release to certain users or groups, which are then added to the report's access list, could fail to be imported if the only user who previously had edit privileges for the report is no longer an active user. A possible workaround for this is to temporarily reactivate the user so that a subsequent import attempt would succeed, and then to replace that user with a currently active one after the import.

If the conditions leading to the errors that are logged by the query importer are corrected in the schema being upgraded, a subsequent step is necessary to complete the imports and to run the *Product Queries DB Cleanup* action. This step is to run the com/sap/eso/odp/install/scripts/product/import_all_queries_data.xml script. This script must complete successfully for a successful upgrade.

5.3 Deploy SAP Sourcing SCA File to Application Server

Prerequisites

You are familiar with the Java Support Package Manager (JSPM). For information about the JSPM, see SAP Help Portal, as follows:

1. Navigate to help.sap.com > *SAP NetWeaver* > *SAP NetWeaver 7.3*.
2. In the *SAP NetWeaver Platform* section choose *SAP NetWeaver 7.3*.
3. In the *System Administration and Maintenance Information* section, choose your language for the Technical Operations Guide.
4. In the *Constraints* section, choose *Solution Lifecycle Management* from the *SAP NetWeaver Operations — General Information* row of the table.
5. Choose *Software Logistics* from the table.
6. In the *Software Maintenance* section, choose *Java Support Manager* from the *Importing support packages* row of the table.

Procedure

Note

Step 1 is necessary only if you copy the SCA files. If you point the JSPM to the directory with the SCA files instead of copying them, you can skip step 1.

1. Copy `esoserver.sca` from <SAP Sourcing home directory>/fsapp/ to the folder from which the JSPM reads the software components for deployment to the SAP NetWeaver application server. For example, <Drive>\usr\sap\trans\EPS\in (Windows) or \usr\sap\trans\EPS\in (UNIX).

This is the folder from which the JSPM reads the software components for deployment to the SAP NetWeaver 7.3 SP03 application server.

2. This step depends on whether you have copied the SCA files in step 1, or whether you want to point the JSPM to the directory with the SCA files.
 - If you have copied the SCA files in step 1, use the JSPM to deploy the SCA files to SAP NetWeaver 7.3 SP03 as follows:
 1. Navigate to <Drive>\usr\sap\<SID>\J00\j2ee\JSPM (Windows) or \usr\sap\<SID>\J00\j2ee\JSPM (UNIX) and launch the JSPM from `go.bat` (Windows) or `go` (UNIX).
 2. Log on to the JSPM using the SAP NetWeaver Administrator and password.
 3. In the *Select Package Type* step, select *New Software Components* and choose *Next*.
 4. In the *Specify Queue* step, select `esouser`. Choose *Skip* to omit any other entities you do not wish to deploy.
 5. Choose *Next*.
 6. In the *Check Queue* step, choose *Start*.
 - If you want to point the JSPM to the directory with the SCA files, run the `go` script file as follows when you start the JSPM.

Only valid for: Windows |

```
go.bat "-config=\jspm\inbox=<path_to_sca_files>"
```

End of: Windows |

Only valid for: UNIX |

```
go '-config=/jspm/inbox=<path_to_sca_files>'
```

End of: UNIX |

Only valid for: UNIX |



Example

```
go '-config=/jspm/inbox=/usr/sap/<SID>/esourcing/fsapp'
```

End of: UNIX |

3. Start the SAP Sourcing application from the SAP NetWeaver Administrator as follows:
 1. Launch the SAP NetWeaver Administrator.
 2. On the *Operation Management* tab, choose ► *Systems* ► *Start & Stop* ► *Java EE Applications* ►.
 3. Use the filter to find *E-Sourcing*.
 4. Select *Sourcing* and choose *Start*.
4. Launch the following URL and verify that the application is running:
`http://<host_name>:<port>/<context>/fssystem/portal/login`

More Information

In the **Installation Guide for SAP Sourcing** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►:

- “Undeploying SCA Files”
- “Starting and Stopping SAP Sourcing”

5.4 Install Language Packs

In SAP Sourcing, translated user interface strings are delivered as packages that you manually import using the DB Importer utility. If you are either already using translated strings or planning to add language support as part of your upgrade, follow these steps for each language that you require in your system.

SAP Sourcing supports the following languages:

- English
- Chinese, Simplified
- Czech
- Danish
- Dutch
- Finnish
- French
- German
- Hungarian
- Italian
- Japanese
- Korean
- Polish
- Portuguese (Brazilian)
- Russian
- Serbian (as of SP15)
- Slovak
- Spanish
- Swedish
- Turkish

Procedure

Note

It is best to stop SAP Sourcing when executing this procedure. If you choose not to stop SAP Sourcing, then after you finish you need to refresh localized resources, as follows:

1. Log in as the system user.
2. Navigate to ► *System Information* ► *Cache* ▾ tab.
3. Choose *Refresh All*

1. From a command prompt, go to the `/bin` installation directory and enter **dbimport** to start the DB Importer utility.
2. On the *Setup* tab, select the `fci<language>.jar` file (where `<language>` is the language that you want to install).

3. Navigate to the `/i18n/ODP/<xx>` directory (where `<xx>` is the language that you want to install) and select the `install_language.xml` script file.
4. On the **Setup** tab, open the input help dropdown for the **Context** field and choose **System Context**.
5. As user name, enter the system manager user **system** and enter the appropriate password.
6. Choose **Run**.
7. On the **Script** tab, verify whether the script run was successful (green checkmarks) or whether there were any errors (red crosses). You can try the following to identify and remove errors:
 - Check and address any warnings or errors on the **Errors** tab.
 - Check the log files under the `/logs` folder in the home directory. Warnings are not saved to the error log.
8. On the **Setup** tab, select the `fci<language>_eso.jar` file (where `<language>` is the language that you want to install).
9. Navigate to the `/i18n/ESO/<xx>` directory (where `<xx>` is the language that you want to install) and select the `install_language.xml` script file.
10. Carry out steps 4 through 7 above.
11. Repeat as required for additional languages.

5.5 Import Upgrade Workbooks

Each new release delivers a set of upgrade workbooks that outline the changes to various master data and configuration objects. The upgrade workbooks are intended as a sample for you to tailor to your own implementations. You can access the upgrade workbooks from the index page of the Reference Guide. (To access the list of upgrade workbooks on the Reference Guide, log on to SAP Sourcing and choose ► **Reference Guide** ► **Upgrade Workbooks** 📄)

Each item in the resulting list of workbooks indicates the version number of SAP Sourcing it is relevant for. This is the SAP Sourcing version number you wrote down in chapter 3 "Planning," the version number of the SAP Sourcing version you are upgrading from.

For information about workbooks, including working with deployment workbooks, see "Workbooks" in the **Configuration Guide for SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► **SAP Sourcing On-Premise** ► **SAP Sourcing 9.0** 📄.

Procedure

1. Determine the version number of the SAP Sourcing system you are upgrading FROM. This is the version number you wrote down in chapter 3 "Planning."
2. Log on as the enterprise user and navigate to ► **Reference Guide** ► **Upgrade Workbooks** 📄.
3. Choose the Enterprise_Upgrade workbook that is labeled for the version of SAP Sourcing you are upgrading from.
4. Review the Enterprise_Upgrade workbook to ensure that all sample data is appropriate for your enterprise, then save it to your local system.
5. Import the Enterprise_Upgrade workbook as follows:
 1. Navigate to ► **Setup** ► **System Administration** ► **Import Data** 📄.
 2. Choose **New**.

3. Select [Upload to Server](#), then choose [Next](#).
4. If desired, enter a description in the [Description](#) field.
5. Use the file picker to browse to the Enterprise_Upgrade workbook you saved, then choose [Next](#).
6. Choose [Wait for import to finish](#), then choose [Next](#).
7. Wait until [Status](#) is [Complete](#) the [Percent Complete](#) is [100](#), then choose [Next](#).
8. Review the details presented, noting and correcting any failures.
6. Log off, then log on as a normal buy-side user and navigate to ► [Reference Guide](#) ► [Upgrade Workbooks](#) ►.
7. Choose the Company_Upgrade workbook that is labeled for the version of SAP Sourcing you are upgrading from. Review the Company_Upgrade workbook to ensure that all sample data is appropriate for your company.
8. Import the Company_Upgrade workbook as follows:
 1. Navigate to ► [Setup](#) ► [System Administration](#) ► [Import Data](#) ►.
 2. Choose [New](#).
 3. Select [Upload to Server](#), then choose [Next](#).
 4. If desired, enter a description in the [Description](#) field.
 5. Use the file picker to browse to the Company_Upgrade workbook you saved, then choose [Next](#).
 6. Choose [Wait for import to finish](#), then choose [Next](#).
 7. Wait until [Status](#) is [Complete](#) the [Percent Complete](#) is [100](#), then choose [Next](#).
 8. When the message indicating the import is complete appears, choose [Finish](#) to view the import results.
 9. Review the details presented, noting and correcting any failures.

i Note

You do not need to import workbooks from releases prior to the release from which you are upgrading.

5.6 Convert .DOC and .DOT files to .DOCX and .DOTX

Procedure

In addition to supporting .doc, and .dot file formats, SAP CLM supports .docx and .dotx file formats. Typically, files in these formats are created with Microsoft Office 2007 or later. Since Microsoft soon will not support the .doc and .dot file formats, SAP recommends that SAP CLM users convert their existing .dot and .doc documents to the .docx and .dotx formats, and use only .docx and .dotx formats henceforth.

Please note also that, with new SAP Sourcing DOCX Generation service, CLM supports only .docx and .dotx formats.

Convert the legacy .doc and .dot files to .docx and .dotx respectively with the conversion script provided in DB Importer.

1. Find DB Importer on the Sourcing server, in the [Sourcingbin](#) subdirectory.
2. Invoke the DB Importer tool. For Linux servers, invoke [dbimport.sh](#). For Windows servers, invoke [dbimport.bat](#).
3. On the [Setup](#) tab, select the [fcieso.jar](#) file. Navigate to the `com/sap/eso/odp/install/scripts/upgrade` directory, and select the [convert_doc_to_docx.xml](#) script file.

4. Run the upgrade script, [convert_doc_to_docx](#). This script converts all the existing contract .doc and .dot files to .docx and .dotx respectively.

Alternate Conversion Process

Note

Use this process only if the script execution via DB Importer as guided above has been unsuccessful.

Follow these steps to convert the legacy .doc and .dot files to .docx and .dotx formats with the conversion script via a Scheduled Task of the type `Explicitly Called Script`.

1. Log in to SAP Sourcing as a purchaser.
2. Navigate to ► [Setup](#) ► [System Setup](#) ► [System Properties](#) ►.
3. Create or edit the system property `contractgen.wordservice.enabled` and set its value to `TRUE`.
4. Create or edit the system property `contractgen.serviceurl` and set its value to the correct Windows-based wordservice URL.
5. Navigate to ► [Setup](#) ► [System Setup](#) ► [Explicitly Called Script](#) ►.
6. Create a script to call the IAPI-enabled method `convertDocToDocx()` of the `ContractBeanHomeIfc` class. Here is a sample script:



Example

```
log = Logger.createLogMessage(session);
log.setLogMessage("Begin Conversion");
Logger.info(log);
maHome =
IBeanHomeLocator.lookup(session,com.sap.eso.api.contracts.ContractIBeanHomeIfc.SH
OME_NAME);
maHome.convertDocToDocx();
log.setLogMessage("End Conversion");
Logger.info(log);
```

7. Navigate to ► [Setup](#) ► [System Setup](#) ► [Scheduled Task](#) ►.
8. Choose [New](#).
9. On the next screen choose [Explicitly Called Script Execution](#).
10. Choose [Continue](#).
11. Fill in all required fields. Make sure to set the *Frequency* field to [Run Once](#). For the *Explicitly Called Script* field, choose the script created above.
12. Choose [Done](#).

5.7 Update Contract Generation Service

SAP Sourcing can use either the Microsoft .NET-based WordService or the SAP Sourcing DOCX Generation Service to generate structured clause documents, collection variables documents, and contract document templates.

The Microsoft .NET-based WordService requires setup of an additional Windows server. Due to this overhead and additional TCO, SAP Sourcing now also supports WordService based on JAVA technology, the SAP Sourcing

DOCX Generation Service. SAP Sourcing DOCX Generation Service does not require an additional Windows server. You must enable SAP Sourcing for either the .NET service or the SAP Sourcing DOCX Generation Service, not for both services.

i Note

Customers new to SAP Sourcing, and those who have not yet configured WordService, should set up the SAP Sourcing DOCX Generation Service.

We recommend also that customers with SAP Sourcing already installed and WordService already configured should update directly to the SAP Sourcing DOCX Generation Service as well. However, these customers may instead update Microsoft .NET WordService to the latest version.

Microsoft no longer supports Windows Server 2003. If your WordService currently runs on Windows Server 2003, we encourage you to use the new DOCX Contract Generation Service instead.

- To update your Microsoft .NET WordService installation to the current version, see **Update Microsoft .NET WordService** below.
- To update your contract generation service to the SAP Sourcing DOCX Generation Service, see **Update Contract Generation Service to SAP Sourcing DOCX Generation Service** below.

i Note

Microsoft .NET WordService generates documents in .doc, .docx, .dot, or .dotx formats. The SAP Sourcing DOCX Generation Service generates and works with documents in .docx and .dotx formats only. For example, you cannot upload .doc or .dot files to the SAP Sourcing DOCX Generation Service. Therefore, to use the SAP Sourcing DOCX Generation Service, you must convert your legacy .doc and .dot files to .docx and .dotx formats.

Prerequisites

You have installed Microsoft Office Word 2007 (12.0.6612.1000) SP3 MSO 12.0.6607.1000 or Microsoft Office Word 2010 14.0.6129.5000 on the contract generation server.

Procedure

Update Microsoft .NET WordService to Latest Version

1. Take a backup of the web.config file from WordService installation directory.
2. Uninstall the existing WordService server.
3. Install the latest WordService server as follows:
 1. Log on as a member of the administrator group.
The setup program for contract generation is provided on the distribution media.
 2. Run the `WordServiceInstaller.msi` install program.
 3. Enter the virtual directory and site where the Web service is to be installed.
The location is selected automatically based on the site you select. On the Internet Information Services (IIS) server, the default site is created in the following folder:
`c:\inetpub`

This information is required to properly configure the FCI application to communicate with the service.

4. Update the new web.config file with any custom changes you may have made to the earlier web.config file. Most importantly, update the identity section of the new web.config file.

Update Contract Generation Service to SAP Sourcing DOCX Generation Service

To use the SAP Sourcing DOCX Generation Service, you must first convert all legacy contract clauses, collection variables documents, and contract document templates to .docx and .dotx formats. Therefore, you must have the .NET WordService enabled in order to convert these document types. Make sure .NET WordService has been upgraded to version 9.0 SP11 or higher. After the conversion, disable .NET WordService.

➔ Recommendation

Before converting the files, take a backup of your entire database.

Do not disable the .NET WordService until you have tested the SAP Sourcing DOCX Generation Service and checked your documents thoroughly.

1. Log on as a member of the administrator group.
2. Make sure WordService is enabled by selecting ► *Setup* ► *System Properties* ► *Contractgen.wordservice.enabled* ►.

i Note

If Contractgen.wordservice.enabled is not listed, create the property by clicking *New* and adding it. Then, if the DB Importer is run with the system context, set this property in the system portal.

3. Select *Edit*. In the *Value* field, type **TRUE**, then choose *Save*.
4. Convert the legacy.doc and .dot files to .docx and .dotx, respectively, with the conversion script provided in the DB Importer. For more information, see [Convert .DOC and .DOT files to .DOCX and .DOTX \[page 27\]](#).

i Note

This step is mandatory for all existing customers, because collection and advance object reference variable template files might exist in .DOC format as originally delivered with SAP Sourcing.

5. After testing the SAP Sourcing DOCX Generation Service thoroughly, and after checking your documents, disable WordService by selecting ► *Setup* ► *System Properties* ► *Contractgen.wordservice.enabled* ►.
6. Select *Edit*. In the *Value* field, type **FALSE**, then choose *Save*.

5.8 Update Optimizer

Procedure

This is necessary only if you used the optimizer in your source release.

1. Uninstall the existing SAP Sourcing software on the optimizer server.
2. Install the new SAP Sourcing software on the optimizer server.

-
3. Redeploy the Optimizer SCA file, as described in “Install Optimizer” in the **Installation Guide for SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

6 Follow-Up Activities

1. [Update import statements in existing custom scripts and workflow scripts \[page 33\].](#)
2. [Update existing custom scripts and existing custom JAR files \[page 33\].](#)
3. [Update single sign-on directory configurations \[page 37\].](#)
4. [Update theme \[page 37\].](#)
5. [Carry out follow-up activities for integration of SAP ERP and SAP Sourcing \[page 38\].](#)
6. [Update and validate custom queries \[page 52\].](#)
7. [Clear browser cache \[page 55\].](#)

6.1 Synchronize SAP Sourcing Timezone with OS, DB, and JVM Timezones

To avoid data loss, one of the following must be true:

- The timezones in SAP Sourcing, your OS, your database, and your JVM all accommodate daylight savings time; or
- None of those timezones accommodate daylight savings time.

Set the SAP Sourcing Timezone if Necessary

Bring the SAP Sourcing timezone into agreement with the timezones for your OS, your DB, and your JVM by setting the `system.master_timezone` system property, as follows:

1. Log in as the system user.
2. Choose [System Properties](#).
3. Do one of the following:
 - If the `system.master_timezone` is already in the list, click on its name, then choose [Edit](#).
 - If the `system.master_timezone` property is not already in the list, add it as follows:
 1. Choose [New](#).
 2. In the [Set](#) dropdown, select `system`.
 3. In the [Name](#) dropdown, select `system.master_timezone`.
4. In the [Value](#) field, enter a Java timezone value that aligns with your OS, your DB, and your JVM with regards to observation of Daylight Savings Time.
5. Choose [Done](#).

6.2 Update Import Statements in Existing Custom Scripts and Workflow Scripts

Procedure

As of SAP Sourcing 7.0, all classes in the system have been repackaged from `com.frictionless` to `com.sap.odp` or `com.sap.eso`.

To use the new packages, you must update all import statements in any existing custom scripts, workflow scripts, or custom JAR files.

You can use the `convert_workflows_script_definitions_OnD.xml` script file to replace `com.frictionless` with `com.sap.odp` or `com.sap.eso` in custom scripts and workflow scripts in the database. The script file does not handle custom JAR files.



Caution

We do not guarantee 100% accuracy with the `convert_workflows_script_definitions_OnD.xml` script file because it is not possible for us to know how you have created your custom scripts and workflow scripts.

You can run the `convert_workflows_script_definitions_OnD.xml` script file as follows.

1. From a command prompt, go to the `/bin` installation directory and enter `dbimport` to start the DB Importer utility.
2. On the **Setup** tab, select the `fciinstall.jar` file.
3. Navigate to the `/scripts/upgrade` directory and select the `convert_workflows_script_definitions_OnD.xml` script file.
4. Back on the **Setup** tab, open the input help for the **Context** field and choose **System Context**.
5. As user name, enter the system manager user `system` and enter the appropriate password.
6. Choose **Run**.
7. On the **Script** tab, verify whether the script run was successful (green checkmarks) or whether there were any errors (red crosses). You can try the following to identify and remove errors:
 - Check and address any warnings or errors on the **Errors** tab.
 - Check the log files under the `/logs` folder in the home directory. Warnings are not saved to the error log.

After resolving the errors, rerun the `convert_workflows_script_definitions_OnD.xml` script file, making sure that the context is set to system.

6.3 Update Existing Custom Scripts and Existing Custom JAR Files

Procedure

When you upgrade from SAP Sourcing 5.x to SAP Sourcing 9.0, the following localized master data is converted to multi-string master data to reduce the resource cache and to provide more direct access to the localized values.

- Company code

- Currency
- Currency ISO code
- ERP region
- External category
- External system
- Incoterm
- Location
- Material
- Payment term
- Plant
- Product category
- Purchasing group
- Purchasing organization
- Transaction type
- Unit of measure
- Unit of measure ISO code
- Vendor account group

In the integration application programming interfaces (IAPIs) for the business objects, the following APIs have been replaced with new IAPIs, as shown in the tables below.

Changes in IAPIs from SAP Sourcing 5.x to SAP Sourcing 7.0

Table 9

Method in SAP E-Sourcing 5.1	Method in SAP Sourcing 7.0
getDisplayNamedId	getMultiStringName
setDisplayNamedId	setMultiStringName
getDocumentDescriptionId	getMultiStringDescription
setDocumentDescriptionId	setMultiStringDescription

Changes in IAPIs from SAP Sourcing 7.0 to SAP Sourcing 9.0

Table 10

New Methods in SAP Sourcing 9.0	
Business Object	Added Methods
Plant	LocalizedObjectReferenceIfc getLocationObjRef() setLocationObjRef(LocalizedObjectReferenceIfc)
	ObjectReferenceIfc getCompanyObjRef() setCompanyObjRef(ObjectReferenceIfc)
	String getStreet()

New Methods in SAP Sourcing 9.0	
Business Object	Added Methods
	setStreet (String)
	String getCity() setCity (String)
	LocalizedObjReferenceIfc getCountryObjRef() setCountryObjRef (LocalizedObjectReferenceIfc)
	LocalizedObjReferenceIfc getErpRegionObjRef() setErpRegionObjRef (LocalizedObjectReferenceIfc)
	String getPostalCode() setPostalCode (String)
Purchasing Group	String getTelephone() setTelephone (String)
	String getFax() setFax (String)
	String getEmail() setEmail (String)
Payment Term	SubordinateCollectionIfc getCollnDiscount()
Material	LocalizedObjectReferenceIfc getValueList1() setValueList1 (LocalizedObjectReference)
	LocalizedObjectReferenceIfc getValueList2() setValueList2 (LocalizedObjectReference)
	String getMisc1() setMisc1 (String)
	String getMisc2() setMisc2 (String)
	AmountIfc getEstimatedQty() setEstimatedQty (AmountIfc)
	String getProductType() setProductType (String)
Internal Category	LocalizedObjectReference getBusinessSystem() setBusinessSystem (LocalizedObjectReference)
Text Id	TextIdEnumType getTextIdType() setTextIdType (TextIdEnumType)

New Methods in SAP Sourcing 9.0	
Business Object	Added Methods
Transaction Type	TransactionTypeEnumType getTransactionTypeObject() setTransactionTypeObject(TransactionTypeEnumType)

Table 11

Replaced Methods in SAP Sourcing 9.0		
Business Object	Removed Methods	Added Methods
Company Code	getLogicalSystemObjRef() setLogicalSystemObjRef()	LocalizedObjectReferenceIfc getBusinessSystem() setBusinessSystem(LocalizedObjectReferenceIfc)
	getExternalCompanyCode() setExternalCompanyCode()	String getExternalId() setExternalId(String)
Vendor Account Group	getLogicalSystemObjRef() setLogicalSystemObjRef()	LocalizedObjectReferenceIfc getBusinessSystem() setBusinessSystem(LocalizedObjectReferenceIfc)
	getExtVendAcctGrpId() setExtVendAcctGrpId()	String getExternalId() setExternalId(String)
Purchasing Organization	getLogicalSystemObjRef() setLogicalSystemObjRef()	LocalizedObjectReferenceIfc getBusinessSystem() setBusinessSystem(LocalizedObjectReferenceIfc)
	getExternalPorgId() setExternalPorgId()	String getExternalId() setExternalId(String)
Price Condition	getLogicalSystemObjRef() setLogicalSystemObjRef()	LocalizedObjectReferenceIfc getBusinessSystem() setBusinessSystem(LocalizedObjectReferenceIfc)

As of SAP Sourcing 9.0, the following methods (which previously had input and return parameters of type SysDateTimeIfc) have parameters of type SysDateIfc:

Table 12

Business Object	Methods
RFx Document	SysDateIfc getErpEndDate() setErpStartDate(SysDateIfc)
Scenario	SysDateIfc getErpEndDate()

Business Object	Methods
	setErpStartDate(SysDateIfc)

Update Existing Custom Scripts

Test each part of the system where you have implemented custom scripts. If there are any problems with the execution of the script, update the script definition. Errors in the script definition can be found in the SAP Sourcing log files. To access the script definition, view the scripts via the SAP Sourcing user interface and edit them there.

Update Existing Custom JAR Files

If you have deployed a custom JAR file that includes custom code, recompile the JAR file using SAP Sourcing 9.0. Correct any compilation errors. You can contact SAP Professional Services to help you if necessary.

If you are using a custom JAR file that includes either a project import capability or a contract document import capability, you can stop using the custom JAR file, and begin using the standard product functionality to import projects and contract documents.

6.4 Update Single Sign-On Directory Configurations

Procedure

Since SAP Sourcing 7.0, the use of an authenticator for SAP NetWeaver single sign-on is no longer necessary. Use the SAP User Management Engine (SAP UME) driver instead. For information about configuring the SAP UME driver, see "Set Up Directory Configurations and Cluster" in the **Configuration Guide for SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

6.5 Update Theme

Procedure

1 Note

This step is necessary only if you are upgrading from SAP E-Sourcing 5.0 or 5.1 to SAP Sourcing 9.0.

If you have customized the user interface (UI) of your source release by customizing the theme, the theme will be set back to the default theme during the upgrade. This is to avoid incompatibilities between existing themes and new UI styles. In addition, the theme library has been restructured to make it easier and faster to customize themes.

You can duplicate the default theme, customize it, and then set it as the default, as described in SAP Library for SAP Sourcing on SAP Help Portal at ► help.sap.com/sourcing ► *SAP Sourcing 9.0* ► *Help for Purchasers* ► *[choose a language]* ► *Setup* ► *System Setup* ► *User Interface* ► *Themes* ►. Your existing theme is retained for you to consult. You must also customize the theme if you want to customize the branding images.

6.6 Follow-Up Activities for Integration of SAP ERP and SAP Sourcing

This section is relevant only if your source system is already integrated with SAP ERP.

See also:

- [Planning \[page 10\]](#) ► *Integration of SAP ERP and SAP Sourcing* ►
- [Preparation for Integration of SAP ERP and SAP Sourcing \[page 15\]](#)

6.6.1 Upgrade from SAP Sourcing 7.0

This section is relevant only if you are upgrading from SAP Sourcing 7.0.

6.6.1.1 Implement Standard Integration Components

Procedure

The SAP ERP standard integration components are delivered with support packages or via SAP Notes, and are listed in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

If your SAP ERP release and support package are lower than those shown in the configuration guide, implement the standard integration components either by implementing the corresponding support package or by implementing the SAP Notes.

6.6.1.2 Import Process Integration Content to Integration Repository

Procedure

Follow the steps in “Import Process Integration Content to Integration Repository” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

6.6.1.3 Configure SAP NetWeaver Process Integration

Procedure

You can configure SAP NetWeaver Process Integration 7.1 (SAP NetWeaver PI 7.1) or higher either by creating a new configuration scenario or by modifying the existing configuration objects. Choose one of the procedures below.

To configure SAP NetWeaver Process Integration 7.0 (SAP NetWeaver PI 7.0), we recommend creating a new configuration scenario.

Create New Configuration Scenario

1. Delete all existing configuration objects in the configuration scenario for the integration of SAP ERP and SAP Sourcing, and delete the configuration scenario itself.
2. In the change list, activate all configuration objects in the configuration scenario, and activate the configuration scenario. To do this, expand the change lists on the *Change Lists* tab, right-click your change list, and choose *Activate*. In the dialog box that appears, choose *Activate*.
3. Create a new configuration scenario for the integration of SAP ERP and SAP Sourcing. To do this, follow the steps in "Configure Integration Scenarios" in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.
4. Create configuration objects for each required integration scenario. To do this, follow the steps to configure each integration scenario and steps to configure communication channels for each integration scenario in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

Example

To create configuration objects for the **Send Material Master from SAP ERP to SAP Sourcing** scenario, follow the steps in the sections entitled "Configure Integration Scenario for Send Material Master from SAP ERP to SAP Sourcing" and "Configure Communication Channel for Send Material Master."

Modify Existing Configuration Objects

Note

The following procedure describes SAP NetWeaver PI 7.1 or higher. For SAP NetWeaver PI 7.0, we recommend creating a new configuration scenario (see above).

1. In the process integration tools (transaction `SXMB_IFR`), log on to the Integration Builder.
2. For each receiver determination in the following table, change the software component version to *E-SOURCING SRM JSERVER OP 9.0*.

Table 13

Sender Communication Component	Sender Interface
SAP Sourcing system	MI_OB_Award_To_Purchase_Order
SAP Sourcing system	MI_OB_Agreement
SAP Sourcing system	MI_OB_Award_To_OA

Sender Communication Component	Sender Interface
SAP Sourcing system	MI_OB_Configuration_Test
SAP Sourcing system	MI_OB_RFx_Response
SAP Sourcing system	MI_OB_Supplier

3. For each interface determination in the following table, do the following:
 1. Change the software component version of the sender interface to *E-SOURCING SRM JSERVER OP 9.0*.
 2. Click the value help for the *Operation Mapping* field, select the operation mapping for the software component version *E-SOURCING SRM JSERVER OP 9.0*, and choose *Apply*.

Table 14

Sender Communication Component	Sender Interface	Operation Mapping
SAP Sourcing system	MI_OB_Award_To_Purchase_Order	IM_Award_To_Purchase_Order
SAP Sourcing system	MI_OB_Agreement	IM_Agreement_To_OA
SAP Sourcing system	MI_OB_Award_To_OA	IM_Award_To_OA
SAP Sourcing system	MI_OB_Configuration_Test	IM_Configuration_Test_To_RFC_PING
SAP Sourcing system	MI_OB_RFx_Response	IM_RFx_To_PurchaseRequisition
SAP Sourcing system	MI_OB_Supplier	IM_Supplier_To_Vendor

4. For each interface determination in the following table, click the value help for the *Operation Mapping* field, select the operation mapping for the software component version *E-SOURCING SRM JSERVER OP 9.0*, and choose *Apply*.

Table 15

Sender Communication Component	Sender Interface	Operation Mapping	Name
SAP ERP system	CREMAS.CREMAS05	IM_ERP_Vendor_To_ES_Supplier	MI_IB_Supplier
SAP ERP system	MATMAS.MATMAS05	IM_ERP_Material_To_ES_Material	MI_IB_Material
SAP ERP system	REQOTE.ORDERS05	IM_ORDERS05_To_RFx	MI_IB_RFx

5. For each sender agreement in the following table, change the software component version of the sender interface to *E-SOURCING SRM JSERVER OP 9.0*.

Table 16

Sender Communication Component	Sender Interface
SAP Sourcing system	MI_OB_RFx_Response
SAP Sourcing system	MI_OB_Supplier
SAP Sourcing system	MI_OB_Agreement
SAP Sourcing system	MI_OB_Award_To_OA
SAP Sourcing system	MI_OB_Award_To_Purchase_Order
SAP Sourcing system	MI_OB_Configuration_Test

6. For each receiver agreement in the following table, change the software component version of the receiver interface to *E-SOURCING SRM JSERVER OP 9.0*.

Table 17

Sender Communication Component	Sender Interface
SAP ERP system	MI_IB_Material
SAP ERP system	MI_IB_RfX
SAP ERP system	MI_IB_Supplier

7. In the change list, activate all configuration objects and the configuration scenario. To do this, expand the change lists on the *Change Lists* tab, right-click your change list, and choose *Activate*. In the dialog box that appears, choose *Activate*.

6.6.1.4 Remove Implementation of Business Add-In BADI_BBP_ES_CHANGE_DATA

As of SAP Sourcing 7.0, suppliers can be integrated with more than one SAP ERP System. Integrating SAP Sourcing suppliers with multiple SAP ERP systems previously required implementing the BAdI BADI_BBP_ES_CHANGE_DATA to change the external ID of Company Code and Purchasing Organization master data. That manipulation of external ID is no longer needed in SAP Sourcing 9.0. Remove the BAdI implementation done for this purpose.

6.6.1.5 Update Names and Descriptions of Price Conditions

Procedure

Your price condition IDs are transferred from SAP Sourcing 7.0 to 9.0 during the upgrade. However, the price condition names are replaced by a dummy name, which you should update after the upgrade. In addition, there is now a description field, which you can use, for example, to explain to your suppliers how the price condition is used in the RFx process. For information about how to update the name and add a description, see “Create Price Conditions in SAP Sourcing” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

Alternatively, you can extract the pricing condition types from SAP ERP, and import them to SAP Sourcing. Note that only the IDs and names are extracted and imported to SAP Sourcing because there is no description field in SAP ERP. For information about how to do this, see “Extract Customizing Data from SAP ERP” and “Carry Out Initial Load of Customizing Data to SAP Sourcing” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

➔ Recommendation

For each price condition, we recommend entering a description in SAP Sourcing. This description can be longer than the name that is extracted from SAP ERP.

6.6.2 Upgrade from SAP E-Sourcing 5.x

This section is relevant only if you are upgrading from SAP E-Sourcing 5.x.

6.6.2.1 Retrofit Customizations (If Necessary)

The SAP E-Sourcing — SAP ERP integration package in SAP E-Sourcing 5.x was based on custom development techniques, including the definition of extension fields and custom master data objects. Most of the extension fields and custom master data objects have been replaced by new standard fields and standard master data objects in higher releases starting from SAP Sourcing 6.0. Customers could have added additional extension fields to support their integration in SAP E-Sourcing 5.x. This extension data and metadata won't be directly affected by the upgrade, but further customization work might have to be done to be compatible with the SAP Sourcing 9.0 integration design. There could be custom scripting and/or extensions that depend on the SAP E-Sourcing 5.x integration extensions.

Procedure

Adapt Your Own Scripting or Other Code to Changed Object Type

The migration will attempt to change the class ID of your own extension object references to the SAP E-Sourcing 5.x integration objects whose object type is changed, for example, purchasing organization. If you have any scripting or other code that processes these extension fields, you will probably need to adapt them to handle the changed object type.

Move Desired Extension Fields to Object That Will Not Be Deleted

If any SAP E-Sourcing 5.0 or 5.1 extension field values are owned by objects that will be deleted, but that you want to save (even if they will be ignored by the SAP Sourcing 9.0 integration code), you should move them to an object that will not be deleted. Of particular concern are any of your own extension fields that are owned by the material object. They will be lost for any material whose plants were re-parented during material consolidation.

6.6.2.2 Update Business System Object

During the upgrade, a new master data object *Business System* is created. This master data object represents the single SAP ERP system that is integrated with the SAP E-Sourcing system being upgraded. During the upgrade, default values are entered in the *External ID* and *Display Name* fields of this object. After the upgrade, you should update these values to more meaningful values representing the integrated SAP ERP system.

Procedure

1. Log on to the SAP ERP system that is integrated with the SAP E-Sourcing system being upgraded.
2. In transaction `SALE`, choose ► *Basic Settings* ► *Logical Systems* ► *Assign Logical System to Client* .

3. Select the client representing the integrated SAP ERP system and choose [Details](#).
4. Note the value of the [Logical System](#) field. Generally, it is in the format <System ID>CLNT<Client Number>.

i Note

Keep this value handy. You will need it below and later on.

5. Log on to SAP Sourcing as the enterprise user.
6. Choose [Setup](#).
7. On the [System Setup](#) tab, find the [Integration](#) section and click [Business Systems](#).
8. Click the single business system that is listed and choose [Edit](#).
9. In the [External ID](#) field, enter the value noted in step 4.
10. For the [Name](#) and [Description](#) fields, choose the desired language from the dropdown and enter a name and description in that language.
11. Save your entries.
12. Repeat steps 5 to 11 for each enterprise context.

6.6.2.3 Define System Property for Default Integrated Business System

In this step, you define a system property for the business system to be used as the default integrated SAP ERP system.

If integration of suppliers from multiple SAP ERP systems is enabled, this system represents the SAP ERP system that is integrated with SAP Sourcing for business documents.

Procedure

1. Log on to SAP Sourcing with any user that has access to enterprise-level system properties.
2. Choose [Setup](#).
3. On the [System Setup](#) tab, find the [Configuration](#) section and click [System Properties](#).
4. Choose [New](#).
5. Create the system property as shown in the following table.

Table 18

Field	Value
Set	Odp.doc
Name	odp.doc.integration.external_system
Value	Enter the value from step 4 of Update Business System Object [page 42].

6. Save your entries.

6.6.2.4 Define System Properties for SAP NetWeaver Process Integration Namespace

Procedure

Follow the steps in “Define System Properties for SAP NetWeaver Process Integration Namespace” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at [▶ service.sap.com/eso](https://service.sap.com/eso) ▶ *SAP Sourcing On-Premise* ▶ *SAP Sourcing 9.0* ▶.

6.6.2.5 Maintain Number Range for Vendor Account Groups

As of SAP Sourcing 7.0, the vendor account group is modeled as a master data object with a *Number Range* field. Since number range data was not previously available in vendor account groups, the number range is set to the default value *External* during the upgrade. After the upgrade, you must revisit each vendor account group and make sure that the number range is set to the same value as in SAP ERP.

Procedure

1. Log on to SAP ERP.
2. In Customizing for *Financial Accounting (New)* (transaction `SPRO`), choose ▶ *Accounts Receivable and Accounts Payable* ▶ *Vendor Accounts* ▶ *Master Data* ▶ *Preparations for Creating Vendor Master Data* ▶ *Assign Number Ranges to Vendor Account Groups* ▶.
3. For each vendor account group that is integrated with SAP Sourcing, check whether the number range is set to internal or external.

Note

You can identify which vendor account groups are integrated with SAP Sourcing by comparing the vendor account groups in SAP ERP with the vendor account groups in SAP Sourcing.

1. Note the number range (for example, *01*) of the vendor account group.
2. Open the value help (F4) for the *Number Range* field.
3. In the value help, locate the number range and check the value in the *Ext* column for that number range. If the value is *X*, the number range is external. If the value is blank, the number range is internal.
4. Log on to SAP Sourcing with any user that has authorization to change vendor account groups.
5. Choose *Setup*.
6. On the *Master Data* tab, find the *Organization and Accounting Information* section and click *Vendor Account Group*.
7. For each vendor account group, check whether the value in the *Number Range* column matches the value in SAP ERP. If it does not, click the vendor account group, choose *Edit*, and select *Internal* or *External* to match the value in SAP ERP.
8. Save your entries.

6.6.2.6 Implement Standard Integration Components

Procedure

The SAP ERP standard integration components are delivered with support packages or via SAP Notes, and are listed in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on the SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►.

If your SAP ERP release and support package are lower than those shown in the configuration guide, implement the standard integration components either by implementing the corresponding support package or by implementing the SAP Notes.

6.6.2.7 Configure Integration of SAP ERP and SAP Sourcing

Procedure

Basic Configuration in SAP Sourcing

Follow the steps in "Basic SAP Sourcing Configuration" in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►, with the following exceptions.

- In *Edit Integrated System Configuration*, copy the values from the SAP E-Sourcing 5.0 or 5.1 integration configuration object to the corresponding fields in the SAP Sourcing 9.0 integrated system configuration object. The following table lists the fields in the SAP E-Sourcing 5.0 or 5.1 integration configuration object and the corresponding fields in the SAP Sourcing 9.0 integrated system configuration object.

Table 19

Field Name in SAP E-Sourcing 5.0 or 5.1 Integration Configuration	Field Name in SAP Sourcing 7.0 Integrated System Configuration
External ID	External ID
Display Name	Display Name
Use FTP	Use FTP
Export Directory	Export Directory
FTP Host	FTP Server
Tenant Account	FTP User
XI Host	PI URL
XI Port	Enter the SAP E-Sourcing 5.0 or 5.1 values where indicated below.
XI Namespace	http://<XI Host>:<XI Port>/sap/xi/adaptor_plain?
XI Service	namespace= http://sap.com/xi/ESourcing/SRMJS/
XI User	OP&service=<XI
XI Client	Service>&scheme=&QOS=BE&queueid=httpclient&sap-
	user=<XI User>&sap-client=<XI Client>&sap-
	language=<XI Language>

Field Name in SAP E-Sourcing 5.0 or 5.1 Integration Configuration	Field Name in SAP Sourcing 7.0 Integrated System Configuration
XI Language	

Basic Configuration in SAP NetWeaver Process Integration

Follow the steps in “Basic Configuration in SAP NetWeaver Process Integration” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at service.sap.com/eso **SAP Sourcing On-Premise** **SAP Sourcing 9.0** with the following exceptions.

- In *Set Up System Landscape Directory*, skip the step to register the SAP ERP system in the System Landscape Directory (SLD) and the step to create a business system for the SAP ERP system because they already exist in your SLD.
- Follow the steps to register the SAP Sourcing system in the SLD and to create a business system for the SAP Sourcing system. As the new SAP Sourcing business system name, reuse the business service name that you used for your SAP E-Sourcing 5.0 or 5.1 system.
- Skip *Define RFC Destination and Port* because the RFC destination and port already exist.

➔ Recommendation

After you have configured the new integration scenarios, we recommend deleting the SAP E-Sourcing 5.0 or 5.1 integration scenarios before you test the new integration scenarios because the SAP E-Sourcing 5.0 or 5.1 integration scenarios may conflict with the new integration scenarios.

Master Data Integration

Follow the steps listed below from “Material Master Data Integration from SAP ERP to SAP Sourcing” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at service.sap.com/eso **SAP Sourcing On-Premise** **SAP Sourcing 9.0**.

- “Maintain RFC Destination for Material Transfer”
- “Maintain Port Definition for Material Transfer”
- In “Maintain Partner Profile,” modify the existing partner profile as follows:
 - Skip steps 1 and 2. In step 3, modify the receiver port for message type MATMAS to choose the new port for material that you created in “Maintain Port Definition.”
 - SAP ERP 6.0 and above support only IDoc basic MATMAS05. If a lower IDoc type was used for your SAP E-Sourcing 5.0 or 5.1 integration, change the basic type to MATMAS05.
- “Configure Integration Scenario for Send Material Master from SAP ERP to SAP Sourcing”
- “Configure Communication Channel for Send Material Master”
- “Create Scheduled Tasks to Import XML Messages for Materials”

Follow the steps listed below from “Vendor Master Data Integration from SAP ERP to SAP Sourcing” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at service.sap.com/eso **SAP Sourcing On-Premise** **SAP Sourcing 9.0**.

- “Maintain RFC Destination for Vendor Transfer”
- “Maintain Port Definition for Vendor Transfer”
- In “Maintain Partner Profile,” modify the existing partner profile as follows:
 - Skip steps 1 and 2. In step 3, modify the receiver port for message type CREMAS to choose the new port for the vendor that you created in “Maintain Port Definition.”

- SAP ERP 6.0 and above support only IDoc basic CREMAS05. If a lower IDoc type was used for your SAP E-Sourcing 5.0 or 5.1 integration, change the basic type to CREMAS05.
- “Configure Integration Scenario for Send Vendor Master from SAP ERP to SAP Sourcing”
- “Configure Communication Channel for Send Vendor Master from SAP ERP to SAP Sourcing”
- “Create Scheduled Tasks to Import XML Messages for Vendors”
- Follow the steps under “Publishing Suppliers from SAP Sourcing to SAP ERP” if you want to publish suppliers from SAP Sourcing to SAP ERP.

Business Process Integration

Follow all of the steps in “Maintain Customizing Data for Business Document Integration” other than the step “Create Transaction Types for SAP ERP” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►

Follow all of the steps in “Check RFC Connection Between SAP NetWeaver PI and SAP ERP” in the **Configuration Guide for the Integration of SAP ERP and SAP Sourcing 9.0** on SAP Service Marketplace at ► service.sap.com/eso ► *SAP Sourcing On-Premise* ► *SAP Sourcing 9.0* ►

Follow the steps in “Configure SAP ERP RFQ to SAP Sourcing RFP” with the following changes:

- In “Configure IDoc for RFQ”, skip steps 1, 2, and 3 because the ABAP RFC destination for the SAP NetWeaver Process Integration (SAP NetWeaver PI) system, logical system for the SAP NetWeaver PI system, and transactional RFC port already exist from your previous integration. In step 4, use the existing partner profile for message type REQOTE and modify it with the values provided in the configuration guide.
- In “Configure RFQ Output”, skip steps 1 to 4 because your existing configuration for output control will work.
- Skip the step “Create RFx Template for SAP ERP Integration,” as your template from SAP E-Sourcing 5.0 or 5.1 integration will continue to be used.

Follow all steps in “Configure SAP Sourcing RFP Award to SAP ERP Purchase Order.”

Follow all steps in “SAP Sourcing RFP Award to SAP ERP Outline Agreement.”

Follow all steps in “Configure SAP Sourcing Agreement to SAP ERP Outline Agreement.”

6.6.2.8 Run Report BBP_ES_MIGRATE_OA_DOC

Procedure

Run report BBP_ES_MIGRATE_OA_DOC in your SAP ERP system. This report sets the status to *M* for outline agreements that are replicated from SAP Sourcing.

6.6.2.9 Update Product Categories

The SAP E-Sourcing 5.x product categories do not contain any data that identifies them as SAP ERP-integrated product categories. Therefore, all these product categories are treated as local product categories during upgrade. After upgrade, the SAP ERP-integrated product categories must be updated with the appropriate SAP ERP business system information.

In SAP Sourcing 9.0, the CSV importer of the master data object is able to convert the local data to the replicated ERP data.

Procedure

1. Identify the list of Product Category objects in the system that are currently local and should be replicated objects from ERP by the customer's knowledge.
2. Construct a CSV file with the following fields:

Table 20

Field	Description
CATEGORY_ID	This field should have the external IDs of the product categories that are currently local and that need to be converted to replicated data from certain external business system.
BUSINESS_SYSTEM	This field should have the external business system's ID, to which the data is converted.
CONVERT_TO_REPLICATED	This is a flag to indicate whether the data in the current row needs to be converted. TRUE means conversion is needed. If this field is empty, the default value is FALSE.

3. Log on to system setup as a user who has master data super user rights with the permission to edit integrated master data.
4. Navigate to ► [System Administration](#) ► [Import Data](#) ►.
5. Create a new import, and the import process is the same as normal data import:
 1. Choose the constructed CSV.
 2. Select the [Product Category](#) object.
 3. Start the data import.

During the import process, the specified data in the CSV is converted to replicated data from the specified business system.

6.6.2.10 Update Payment Terms

In SAP E-Sourcing 5.x, payment terms do not contain any data that identifies them as SAP ERP-integrated payment terms. Therefore, all these payment terms are treated as local payment terms during upgrade. After upgrade, the SAP ERP-integrated payment terms must be updated with the appropriate SAP ERP business system information.

Procedure

1. Identify the list of Payment Term objects in the system that are currently local and should be replicated objects from ERP by customer's knowledge.

2. Construct a CSV file with the following fields:

Table 21

Field	Description
EXTERNAL_ID	This should have the external IDs of the payment terms that are currently local and that need to be converted to replicated data from certain external business system.
BUSINESS_SYSTEM	This should have the external business system's ID, to which the data is converted.
CONVERT_TO_REPLICATED	This is a flag to indicate whether the data in the current row needs to be converted. TRUE means conversion is needed. If this field is blank, the default value is FALSE.

3. Log in to system setup as a user who has master data super user rights with the permission to edit integrated master data.
4. Navigate to ► [System Administration](#) ► [Import Data](#) ►.
5. Create a new import, and the import process is the same as normal data import:
 1. Choose the constructed CSV file.
 2. Choose the [Payment Term](#) object.
 3. Start the data import.

During the import process, the specified data in the CSV is converted to replicated data from the specified business system.

6.6.2.11 Update References to Business System Object

After you have updated the business system object, you must update all references to this object with the new display name.

Procedure

1 Note

If you can, shut down the SAP Sourcing server before executing these steps, because it is possible for users to overwrite changes made by the processor and for the processor to overwrite changes made by a user when interactive users and the processor run concurrently. If you can't shut down the SAP Sourcing server, you should execute these steps at a time when you have minimal interactive user activity.

1. From a command prompt, go to the `/bin` installation directory and enter `dbimport` to start the DB Importer utility.
2. On the [Setup](#) tab, select the `fciinstall.jar` file.
3. Navigate to the `/scripts/product` directory and select the `synchronize_object_references.xml` script file.
4. Back on the [Setup](#) tab, open the input help for the [Context](#) field and choose the enterprise context for which you want to update the references to the external system.

5. As user name, enter the enterprise manager user **enterprise** and enter the appropriate password.
6. On the *Script* tab, right-click *Synchronize External System References* and choose *Run*.
7. On the *Script* tab, verify whether the script run was successful (green checkmarks) or whether there were any errors (red crosses).

i Note

When this step has successfully completed, a large green check mark appears in the bottom right corner of the window. Even if you see check marks next to all items in the main body of the window, if you do not see the large green check mark at the bottom right of the window, this step has not executed successfully.

If there were any errors, stop the upgrade and contact SAP Support.

6.6.2.12 Reactivate Extension Fields or Objects That You Want to Retain

Procedure

The deletion utility will delete any data in inactive SAP E-Sourcing 5.x integration extension fields. If you want to retain any of this data, this is your only opportunity to reactivate the extension fields to prevent the data from being deleted. This also applies to inactivated objects that are integration artifacts such as scripts.

If desired, you can also retain materials with re-parented plants, though we do not recommend this. (A re-parented plant is a plant that has been reassigned in SAP Sourcing 9.0 to a different material object so that the material/plant assignment in SAP Sourcing is identical to the material/plant assignment in SAP ERP).

6.6.2.13 Run DB Importer Script to Delete Obsolete Data

When you are confident of the integrity of the data, we recommend running a DB Importer script to delete the inactive integration extension data. You are not compelled to run this script, though performance will be affected if you do not run it.

There are two bundles in this script. Neither of them has to be run, and you can run them individually. If you run both, you must run the first bundle before the second bundle because the second bundle deletes work tables that are needed by the first bundle. The only reason to run them separately is to examine the material data after the reparented materials are deleted, using the contents of the work tables to understand better what was deleted. (Reparented materials are the duplicate materials that were consolidated into one material object during the material migration.)

Procedure

i Note

None of the scripts mentioned below are rerunnable. If you encounter errors, contact SAP Support.

1. Stop the application server.
2. Run the DB Importer script `erp_inactivated_data_deletion.xml` to delete the inactive integration extension data. You can find this script in the `fcidoccommon_es.jar` file in the following folder:

`com/sap/eso/doccommon/converters/migration51/script`

The script `erp_inactivated_data_deletion.xml` imports the following scripts:

- `extension_data_deletion.xml`

This script drops the extension tables with inactivated integration extension fields if there are no active fields in the table. If there are active fields in the table, only the columns associated with the inactive fields are dropped. The extension metadata for the dropped tables and columns is removed.

Each bundle in this script represents one object type. You can run each bundle independently of the others.

- `material_data_deletion.xml`

This script deletes rows from the database table `FCI_MAS_MATERIAL` that represent the inactivated, reparented materials. This script then drops two temporary tables that were created during material migration.

3. Restart the application server.

6.6.3 Consider Manual Change to Default Queries

The default query of each of your query groups is retained during the upgrade. Suggestions for changing the default query are listed below. If you want to make a change, you can do so manually via the UI.

- In the *Purchasing Group* buy-side picker query group, the default query has changed from “All Purchasing Groups” to “Search Purchasing Groups by ID.”
- In the *Payment Term* buy-side picker query group, the default query has changed from “All Payment Terms” to “Search Payment Terms by ID or Name.”

6.6.4 Maintain Number Range for Business Documents in SAP ERP and SAP Sourcing

To ensure that the number determination on the SAP ERP system continues to work as before, you need to do one of the following:

- Apply SAP Note [1653988](#) on your SAP ERP system.
- Make sure that you have installed the SAP ERP support package corresponding to that SAP note.

Once you have done so, you can make use of the external number assignment for ERP business documents. This helps ensure that business documents shared between SAP Sourcing and SAP ERP will have the same ID in both systems.

6.7 Updating and Validating Custom Queries

6.7.1 Run Query Tester After Upgrade

Running the query tester will identify custom queries that have basic problems accessing the database.

This procedure should be followed for each enterprise context.

Procedure

1. Log on to SAP Sourcing as a user with system administration rights. The enterprise account can be used.
2. Choose [Setup](#).
3. On the [System Administration](#) tab, in the [Administrative Reports](#) section, choose [Test Custom Query SQL Statements](#).
4. Wait for the report to finish execution. The report lists all custom queries that failed to execute, along with an SQL error message and the SQL string, if available. The [App Log](#) file can also be inspected for exception stack traces related to the errors.

6.7.2 Use FCI_GET_CONTEXT_RESOURCE_VALUE

Note

This step is required only if you are upgrading from SAP E-Sourcing 5.x. If you are upgrading from SAP Sourcing 7.0, you don't need to perform this step.

If you have used SQL function FCI_GET_RESOURCE_VALUE in the past to find the string value for a localized resource for a specific locale, you must now use SQL function FCI_GET_CONTEXT_RESOURCE_VALUE instead.

Procedure

Replace any existing usages of SQL function FCI_GET_RESOURCE_VALUE with FCI_GET_CONTEXT_RESOURCE_VALUE. Do not use the existing SQL function FCI_GET_RESOURCE_VALUE in any new custom query definitions or script definitions.

Note

If you use SQL function FCI_GET_CONTEXT_RESOURCE_VALUE in a query that returns more than 1000 rows, it is likely that the time to execute the query will become unacceptable.

6.7.3 Upgrade Composition of URLs to List Pages

Procedure

A custom query can compose URLs to various internal or external destinations. If a custom query composes a link to a list page of a business document, such as a query used in the TODO channel of a portal page, you follow these steps to ensure that the link to the list page works correctly:

1. Add the following URL parameter: `rqaction=loadsavedsearch`
2. Ensure that the named query (specified by `queryName`) is contained in the query group that represents the list page for the business document.

If you don't follow these steps, clicking the link will lead to an empty list page with the error message: *The query cannot be executed*



Example

Your source system contains the following URL:

```
/contracts/contractlist?queryName=FCI-MyContractsActiveReqAttn
```

For this URL to work correctly in SAP Sourcing 9.0, you must ensure that this query is contained by the query group that represents the master agreement list page and upgrade the link to the following:

```
/contracts/contractlist?rqaction=loadsavedsearch&queryName=FCI-MyContractsActiveReqAttn
```

In rare cases, the customization goal could be to execute a named query in a list page that does not have any other queries or that has a limited set of queries that are appropriate for the situation. A new query group could be created for the business document with the Query Use (i.e., *Purpose*) field set to *Search* rather than *List*. (A custom query group with purpose *List* or *Picker* should not be created.) This new query group would be invoked by its unique name in the URL, using a parameter in this form: `queryGroupName=<named-query-group>`.

6.7.4 Replace Use of Master Data Name and Description Resource IDs

i Note

This procedure is required only if you are upgrading from SAP E-Sourcing 5.x. If you are upgrading from SAP Sourcing 7.0, you don't need to perform this procedure.

When you upgrade from SAP Sourcing 5.x to SAP Sourcing 9.0, the following localized master data is converted to multi-string master data to reduce the resource cache and to provide more direct access to the localized values.

- Company code
- Currency
- Currency ISO code
- ERP region
- External category
- External system

- Incoterm
- Location
- Material
- Payment term
- Plant
- Product category
- Purchasing group
- Purchasing organization
- Transaction type
- Unit of measure
- Unit of measure ISO code
- Vendor account group

Due to the removal of the display name ID and document description ID from some of the localized master data, check and, if necessary, update all custom queries using DISPLAY_NAME_ID or DOCUMENT_DESCRIPTION_ID column names.

Procedure

1. Run the query tester to find out which queries fail.
For more information, see [Run Query Tester \[page 52\]](#).
2. Edit each failed query definition on the SAP Sourcing user interface.

More Information

SAP Library for SAP Sourcing on SAP Help Portal at ► help.sap.com/sourcing ► *SAP Sourcing 9.0* ► *Help for Purchasers* ► *[choose a language]* ► *Setup* ► *System Setup* ► *Queries and Reports* ► *Query Definition: Attribute Substitution* ► Scroll down to *Using Multi-String Related Attributes*.

6.8 Review and Adjust Newly Introduced System Properties

Note

Logon as a user with administrative privileges to modify these properties.

To Configure Columns in PDF Reports

You can adjust the number of columns used to generate reports in PDF format, by modifying the value of the system property `userinterface, pdf.max.querycolumn.count`. The default value is 16.

If your PDFs do not generate correctly, increase the value of this property to reflect the number of columns you need.

To Ensure Optimal AJAX Refresh and Update Times

Note

This step is necessary only if you are upgrading to SAP Sourcing 9.0 SP13 or higher.

Set the following system properties according to the values in this table:

Table 22

system, system.ui.ajax.chat.userListUpdateTime.millis	5000
system, system.ui.ajax.chat.messageListUpdateTime.millis	5000
system, system.ui.ajax.imageGen.imageUpdateTime.millis	3000
system, system.ui.ajax.fieldRefresher.refreshTime.millis	1000
system, system.ui.ajax.formpaneRefresher.refreshTime.millis	5000

6.9 Clear Browser Cache

Procedure

After the upgrade or application of a patch, notify all users to clear their browser cache.

Example

This example is for Microsoft Internet Explorer.

1. Choose ► **Tools** ► **Internet Options** .
2. On the **General** tab, find the **Browsing history** section and choose **Delete...**
Be sure to delete at least the temporary internet files.
3. Hit **F5** to refresh the browser.

6.10 Verify Page Customizations

With the the line item detail pane replacing separate detail pages, many fields and controls have been moved to new locations. If you have customized affected pages, you should check to verify that your customizations are still functioning properly.

The following pages are affected by the implementation of the line item detail pane:

Table 23

UI Page	Page ID
RFx Line Item	ontology.lineitemdoc.ui.buyside.default
RFx Line Item Response (Buy-Side)	ontology.lineitem_response_document.ui.buyside.default

UI Page	Page ID
RFx Line Item Response (Sell-Side)	ontology.lineitem_response_document.ui.sellside.default
Auction Single Line Item (Buy-Side)	doc.auction.lineitem.sl.ui.buyside.default
Auction Packaged Line Item (Buy-Side)	doc.auction.lineitem.mlp.ui.buyside.default
Auction Single Line Item (Sell-Side)	doc.auction.lineitem.sl.ui.sellside.default
Auction Packaged Line Item (Sell-Side)	doc.auction.lineitem.mlp.ui.sellside.default
Contract Line Item	contracts.lineitem.ui.buyside.default

6.11 Migrating from Axis2 to CXF

In some cases, you may have developed custom implementations to provide or consume web services using Apache Axis2. SAP Sourcing now uses Apache CXF. Because there are conflicting Java classes in Axis2 and CXF, the Axis2 libraries have been removed from SAP Sourcing. As a consequence, you will need to migrate any Axis2 implementations to Apache CXF. This section describes how to perform the necessary migrations.

For more information, see the Apache CXF Web site at cxf.apache.org/docs/overview.html.

Procedure

Migrate a Custom Web Service to Apache CXF

1. Remove Axis2 `services.xml` files from the `WEB-INF` folder.
2. Annotate the service with the `@WebService` annotation



Example

```
...
import javax.jws.WebService;
@WebService
public class CustomService {
    public Response someAction (Input Params) {...}
    ...
}
```

3. Declare the service description in `/WEB-INF/beans.xml`



Note

You should look this up in `web.xml`, as it can have a different file name.

Example

```
...  
<jaxws:endpoint id="customService"  
    implementor="package.CustomService"  
    address="/CustomService" />  
...
```

4. Rebuild the JAR.

Migrate a Web Service Client to Apache CXF

1. Remove Axis2 stubs.
2. Generate new stubs. There are several approaches for building the new stubs. The following example uses Ant build.xml.

1. Create build.xml.

Example

```
<?xml version="1.0"?>  
<project name="cxf wsdl2java" basedir="." default="cxfWSDLToJava">  
    <property name="cxf.home" location="/CXF" />  
    <path id="cxf.classpath">  
        <fileset dir="${cxf.home}/lib">  
            <include name="*.jar" />  
        </fileset>  
    </path>  
    <target name="cxfWSDLToJava">  
        <java classname="org.apache.cxf.tools.wsdlto.WSDLToJava"  
            fork="true">  
            <arg value="-client" />  
            <arg value="-d" />  
            <arg value="src" />  
            <arg value="CustomService.wsdl" />  
            <classpath>  
                <path refid="cxf.classpath" />  
            </classpath>  
        </java>  
    </target>  
</project>  
<property name="cxf.home" location="/CXF" />
```

Note

- Set the appropriate path to the CXF JARs.
- The WSDL file (<arg value="CustomService.wsdl">) will be used for each request to a Web service, so it must be reachable by the consumer at any time.

2. At the command prompt, execute the following command:

```
wsdl2java -ant -client -d ClientDir CustomService.wsdl
```

i Note

The WSDL file (`CustomService.wsdl`) will be used for each Web service request, so it must be reachable by the consumer at any time.

3. Adapt existing code to the CXF stubs.
4. Rebuild the JAR.

7 Appendix

7.1 Troubleshooting

Procedure

The following table contains tips for troubleshooting the upgrade.

Table 24: Troubleshooting

Issue	Solution
After the upgrade or application of a patch, there are UI problems, or problems persist that you had resolved.	Notify all users to clear their browser cache. For more information, see Clear Browser Cache [page 55] .
You get the error that the DB Importer failed with an out-of-memory exception generated in the <code>hs_err_pid</code> log file.	If your operating system is AIX, apply SAP Notes 323816 and 365314 . For all other operating systems, open the <code>dbimport.bat</code> or <code>dbimport.sh</code> file for editing and change the Java memory arguments to the following settings: "MEM_ARGS="-Xms256m -Xmx768m"
When running the <code>sourcing_upgrade_schema.xml</code> script file, you get errors.	Stop the upgrade and contact SAP Support. Do not rerun the script file.
When running the <code>sourcing_upgrade_data.xml</code> script file, you get errors.	In the DB Importer: <ul style="list-style-type: none">• Check and address any warnings or errors on the Errors tab.• Check the log files under the <code>/logs</code> folder in the home directory. Warnings are not saved to the error log.
When running the <code>test_custom_queries.xml</code> script file, you get errors.	Review the previously generated <code>trace.txt</code> file and correct any query errors. For more information, see Run Query Tester [page 52] .
When running the <code>install_language.xml</code> script file, you get errors.	In the DB Importer: <ul style="list-style-type: none">• Check and address any warnings or errors on the Errors tab.• Check the log files under the <code>/logs</code> folder in the home directory. Warnings are not saved to the error log.
When running the <code>synchronize_object_references.xml</code> script file, you get errors.	Stop the upgrade and contact SAP Support. Do not rerun the script file.
Your company logo is no longer displayed after the upgrade.	See Resize Company Logo [page 14] .
Your SAP Sourcing application is integrated with SAP ERP. When publishing an award or master agreement to SAP ERP	See SAP Note 1548040 .

Issue	Solution
after the upgrade, you get an error that the Incoterm <i>Sta</i> does not exist.	
Many images are missing on the user interface, even after you refresh the browser cache.	Check your application server's web.xml file history to ensure that it was updated in the upgrade. An obsolete web.xml file does not contain the new URL mapping for most images.
<p>The following error message is displayed in an RFx or Master Agreement in SAP Sourcing:</p> <p>"Item description is too long. It can only be a maximum of 40 characters."</p>	<p>The free text item description must be less than 40 characters for free text and not local items of ERP integrated document where <i>Use external validation</i> is selected in the document type.</p> <p>See SAP Note 1755360 for more information.</p>

Typographic Conventions

Table 25

Example	Description
<Example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your <User Name>".
► Example ► Example ▢	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
www.sap.com	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456	Hyperlink to an SAP Note, for example, SAP Note 123456
<i>Example</i>	<ul style="list-style-type: none"> Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. Cross-references to other documentation or published works
Example	<ul style="list-style-type: none"> Output on the screen following a user action, for example, messages Source code or syntax quoted directly from a program File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE
EXAMPLE	Keys on the keyboard

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