

Upgrading webMethods and Intelligent Business Operations Products

Version 9.7

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This document applies to webMethods Product Suite Version 9.7 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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About this Guide

This guide explains how to upgrade webMethods and Intelligent Business Operations products from 8.2, 9.0, 9.5, or 9.6 to 9.7.

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Narrowfont	Identifies storage locations for services on webMethods Integration Server, using the convention <i>folder.subfolder:service</i> .
UPPERCASE	Identifies keyboard keys. Keys you must press simultaneously are joined with a plus sign (+).
<i>Italic</i>	Identifies variables for which you must supply values specific to your own situation or environment. Identifies new terms the first time they occur in the text.
Monospace font	Identifies text you must type or messages displayed by the system.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the symbol.
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Documentation Installation

You can download the product documentation using the Software AG Installer. The documentation is downloaded to a central directory named `_documentation` in the main installation directory (SoftwareAG by default).

Online Information

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at <http://documentation.softwareag.com>. The site requires Empower credentials. If you do not have Empower credentials, you must use the TECHcommunity website.

Software AG Empower Product Support Website

You can find product information on the Software AG Empower Product Support website at <https://empower.softwareag.com>.

To submit feature/enhancement requests, get information about product availability, and download products and certified samples, go to [Products](#).

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the [Knowledge Center](#).

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at <http://techcommunity.softwareag.com>. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

1 Preparing for Upgrade

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Upgrade Overview

This guide explains how to upgrade webMethods and Intelligent Business Operations products from 8.2, 9.0, 9.5, or 9.6 to 9.7 using a side-by-side procedure. The tasks in the procedure are required for all releases unless specifically noted as being required for a certain release only.

You can only upgrade a product from its latest release. For example, if the latest release of a product in product suite 8.2 was 8.2 SP2, you can only upgrade that product from 8.2 SP2.

If you want to upgrade to 9.7 from a release prior to 8.2, see the *Supported Upgrade Paths* document.

Release Numbering

In most cases, products follow the product suite numbering. Exceptions are as follows:

- 9.6 upgrade: In product suite 9.7, the webMethods Broker release is still 9.6 and is the same release that was available with product suite 9.6.
- 8.2 upgrade: In product suite 8.2, the OneData release was 8.4. You can upgrade from that release.
- 9.6 upgrade: In product suite 9.6, the Presto release was 3.7. You can upgrade from that release to the release in product suite 9.7, which is 3.8.
- In product suite 9.7, the Terracotta release is 4.1.4. You can upgrade to that release.

Terms Used in this Chapter

For simplicity, this guide uses these terms:

- For most products, the product suite releases from which you can upgrade are referred to as 8.2, 9.0, 9.5, or 9.6. However, you can upgrade to 9.7 only from the latest release of each 8.2, 9.0, 9.5, or 9.6 product.
- The product suite release to which you can upgrade is referred to as 9.7. However, the instructions in this guide are for upgrading to the latest release of each 9.7 product.

Guides Needed to Perform Upgrades

You will always need the guides listed below to perform this procedure.

- *Using the Software AG Installer* (October 2014 release)

- *Installing webMethods and Intelligent Business Operations Products 9.7*
- *Using the Software AG Update Manager*

Depending on the products you are upgrading, you might need the 9.7 guides and other guides listed below to perform this procedure.

- *webMethods BPM Task Development Help*
- *Using Blaze Rules with BPM and CAF*
- *CentraSite documentation*
- *webMethods Deployer User's Guide*
- *webMethods Integration Server Administrator's Guide, webMethods Service Development Help, and webMethods Integration Server Clustering Guide*
- *Administering webMethods Optimize and Configuring BAM*
- *Presto documentation*
- *Getting Started with the webMethods Product Suite and Terracotta and Terracotta BigMemory Max documentation*

Requirements and Recommendations

- You must upgrade products and migrate data in the order the instructions are presented in this guide. If you do not follow the prescribed order, you will experience unpredictable results.
- Software AG strongly recommends that you upgrade in a controlled test environment and test that environment for proper operation before upgrading your production environment.
- Software AG tests migration across machines that have the same hardware and operating systems. Integration Server also tests migration across machines that have different hardware or different operating systems. However, for other products, migration across machines that have different hardware or operating systems might have unpredictable results, especially when one machine is Windows and the other UNIX.

Upgrades Not Covered in This Guide

- If you want to upgrade to 9.7 from a release prior to 8.2, see the *Supported Upgrade Paths* document.
- If you want to upgrade ApplinX, see the 9.7 product documentation.
- If you want to upgrade Content Service Platform, contact Software AG Global Consulting Services.

- If you want to upgrade MashZone or Process Performance Manager, see the 9.7 product documentation.
- The procedure for upgrading Mobile Administrator explains how to upgrade an installation on a physical machine. If you want to upgrade an installation on a virtual machine, uninstall Mobile Administrator from the virtual machine and install the 9.7 release. For instructions, see *Installing webMethods and Intelligent Business Operations Products 9.7*.
- If you want to upgrade Mobile Designer, you can use an automatic update option. For instructions, see the Mobile Designer 9.7 documentation.
- If you want to upgrade Presto from releases prior to 9.6, see the 9.7 product documentation.
- The procedure for upgrading Terracotta explains how to upgrade a Terracotta Server Array that has a single server or a mirror group consisting of an active server and a mirror server. For all other setups, see the Terracotta BigMemory Max 4.1 documentation.

2 Upgrading Products to the New Release

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Overview

This chapter explains how to upgrade products in product suite 8.2, 9.0, 9.5, or 9.6 to 9.7 using a side-by-side procedure. For some products, you must perform additional tasks to complete the upgrade or to migrate data. Subsequent chapters provide instructions for those tasks.

Before You Install 9.7 Products

This section provides information to consider before installing the indicated products.

9.6 Upgrade: Before You Install webMethods Broker

In product suite 9.7, the webMethods Broker release is still 9.6 and is the same release that was available with product suite 9.6.

- If the existing webMethods Broker 9.6 from the 9.6 release is installed on its own machine, you can continue using it with your 9.7 products.
- If you want to upgrade to a machine that is running a different operating system or has different hardware than the old machine, or if you want webMethods Broker to exist with other 9.7 products in the same installation directory, install webMethods Broker 9.6 from the 9.7 release. You can install webMethods Broker 9.6 on a machine that is running the same or higher operating system and has the same hardware (for example, both have AMD, or both have Intel) as the old machine.

In both cases, make sure to follow the appropriate instructions in "[Create Broker Server 9.6 and Use the Old Storage](#)" on page 50 after completing the instructions in this chapter.

Broker Server 9.6 is compatible with webMethods Broker 9.5, 9.0, and 8.2 command-line utilities; Broker client APIs for C, C#, Java, and JMS; and clients for JMS. Broker Server 9.5, 9.0, and 8.2 are compatible with webMethods Broker 9.6 command-line utilities, Broker client APIs for C, C#, and Java; and the webMethods Broker user interface in My webMethods.

Before You Install CentraSite

If you want to install the CentraSite Application Server Tier and CentraSite Registry Repository on different machines, or in the same directory but at different times, you must install the Registry Repository first.

If you install CentraSite 9.7 on the same machine as the old CentraSite, you will not be able later to run both products at the same time, even if they use different ports, because of conflicts for IPC and shared memory resources.

Before You Install Integration Server

If you are going to upgrade a cluster of Integration Servers, Software AG recommends the procedure below.

1. Install a matching set of 9.7 Integration Servers. For example, if you have a cluster of three old Integration Servers named IS1_old, IS2_old, and IS3_old, with an external load balancer to distribute client requests, install IS1_new, IS2_new, and IS3_new.
 2. Perform the steps in ["Prepare OneData " on page 23](#) for each Integration Server in the cluster.
 3. Shut down IS1_old.
 4. Migrate IS1_old data to IS1_new and customize the IS1_new startup files using the instructions in ["Completing the Integration Server and Hosted Products Upgrade" on page 59](#).
 5. Shut down IS2_old and IS3_old.
 6. Do the following for IS1_new:
 - a. Start IS1_new.
 - b. If IS1_old was not configured to use a Terracotta-based clustering solution, configure IS1_new to use a Terracotta-based clustering solution. Make sure IS1_new is processing client requests. For instructions, see *webMethods Integration Server Clustering Guide* 9.7.
- Important:** Support for Coherence was discontinued in release 9.0.
- c. Update WSDLs, connect functions to database components, and set up central user management on IS_new as described in ["Completing the Integration Server and Hosted Products Upgrade" on page 59](#).
7. Repeat steps 4 and 6 for IS2_new and then for IS3_new.

Before You Install My webMethods Server

For your old release, you might have identified a default My webMethods Server installation in the global path of the installation's host machine using the environment variable WM_HOME. If you are going to install the new release on the same machine as the old release, the existence of this variable could cause problems, so you must remove the environment variable from the global path.

Do not redefine the environment variable after installing My webMethods Server 9.7.

The My webMethods Server migration utility allows you to migrate specific server instances within the old My webMethods Server installation to the new My webMethods Server installation. You only need to install one My webMethods Server 9.7 on each machine in the cluster.

Install the 9.7 Products

If you are installing on the same machine as your old release, the installer often allows you to assign ports used by an old product to the new product as well, even if the old product is running. Assigning the same ports means you will not need to edit port values in assets and clients when you begin using the new release.

Follow the instructions in *Using the Software AG Installer* (October 2014 release) and *Installing webMethods and Intelligent Business Operations Products 9.7* to install your new products, with the additional guidelines below.

1. For installation directory, specify a new Software AG installation directory.
2. On the product tree, select the 9.7 products to install. Also select Database Configuration and Update Manager.

Note: In product suite 8.2, the Blaze design tool is Blaze Advisor. In 9.0, it is a Blaze plug-in to Software AG Designer. In 9.5 and 9.6, for compatibility reasons, the Blaze plug-ins are delivered in a self-contained workbench that is based on Eclipse 3.6 and is separate from Software AG Designer 9.5, 9.6, and 9.7, which are based on Eclipse 4.3.

3. For the product panels, follow the instructions in *Installing webMethods and Intelligent Business Operations Products 9.7*, with the additional guidelines below.

Product	Guidelines
ActiveTransfer Server	Point the database connection at the ActiveTransfer database component you want to use with ActiveTransfer Server 9.7.
webMethods Broker	Choose to <i>not</i> create a Broker Server configuration.
Integration Server	Point the database connection at the ISInternal database component you want to use with Integration Server 9.7.
My webMethods Server	Choose to <i>not</i> create a My webMethods Server instance. Note: You will migrate old server instances later in this procedure. You will also migrate the My webMethodsServer database component you want to use with My webMethods Server 9.7, then point to that database component later in this procedure.
OneData	Enter the values you noted earlier for port, repository ID, and repository name, and database component connection. Make

Product	Guidelines
	<p>sure the database connections point to the OneData database components you want to use with OneData 9.7.</p> <p>Note: Reusing port values means that Web service clients of the old OneData will not have to change URLs to access OneData 9.7.</p>
Trading Networks	<p>Point the database connection at the TradingNetworks database component you want to use with Trading Networks 9.7.</p>
Universal Messaging	<p>Enter the name that matches the name of a server instance in the old Universal Messaging installation and bind to that server instance's IP address and port. Point the data directory to a location in the new installation (that is, do not point to the old data directory).</p> <p>Note: If you accept the default location for the data directory, it will be migrated automatically later. If you use a different location, you will have to migrate it manually.</p>

- After installation is complete, if you installed on a Windows system, and you installed products as Windows services, the default startup for the services is Automatic. Set the services to Manual. If you installed on a UNIX system, and you have scripts that automatically start daemons, disable the scripts.
- 9.6 upgrade: *Installing webMethods and Intelligent Business Operations Products 9.7* explains that you can create additional Integration Server instances after installation. However, you can also have the Integration Server migration utility create 9.7 instances for you from the old instances (see "[Overview](#)" on page 60).

Important: Do not start any 9.7 products at this point, or before migrating database components or data. Do not start 9.7 products before the instructions in this guide tell you to do so, or your database components could become corrupted.

Prepare the Old Environment for Upgrade

Prepare Databases

Some products, like CentraSite, Monitor, Optimize, and Trading Networks, offer features to archive or purge data from product database components. You can reduce the amount of time needed to back up and migrate the product database components by archiving or purging them first.

Apply Fixes to Products

Apply the latest fixes to the old CentraSite, the old Optimize, and the old Infrastructure Data Collector using the Software AG Update Manager. For instructions, see *Using the Software AG Update Manager*. After you apply a fix to a product, start the product.

8.2 Upgrade: Prepare webMethods Broker

In release 8.2 SP1 and SP2, webMethods Broker and Deployer stored Broker assets in XML format. Starting in release 9.0, webMethods Broker and Deployer began storing Broker assets in ADL format. You must use webMethods Broker 8.2 SP3 and Deployer 8.2 to migrate the assets from XML format to ADL format. For instructions on using Deployer in the steps below, see *webMethods Deployer User's Guide* 8.2.

1. If the assets are available only in the source .xml files and do not exist in webMethods Broker 8.2 SP3, use Deployer 8.2 to deploy the assets from the source .xml files to webMethods Broker 8.2 SP3.
2. Update the My webMethods Messaging user interface to 8.2 SP3. Go to the *old_Software AG_directory\MWS\bin* directory and run this command:


```
mws -s server_instance update -Dcomponents.override=true
```
3. Export the assets to ADL format as follows:
 - a. In My webMethods Messaging user interface 8.2 SP3, go to the **Administration > Messaging > Broker Servers > Servers** page and click the Broker Server from which to export assets.
 - b. Click the **Brokers** tab, and then click the Broker from which to export assets. If the Broker does not appear in the list, use the search functionality to locate it.
 - c. On the **Broker Details** page, click the **Export to File** tab, select the assets to export, and then click **Export to File**.
4. Start the Software AG Installer and install **Infrastructure > Libraries > Broker and JMS Libraries 8.2 SP3** in the installation directory that contains Deployer 8.2 and Asset Build Environment 8.2.
5. Use Deployer 8.2 to build the assets in ADL format for repository-based deployment. For instructions, see building assets for deployment in *Administering webMethods Broker* 9.6 and *webMethods Deployer User's Guide* 9.7.

Prepare CentraSite

1. If you changed settings for CentraSite Control from their defaults, note those settings so you can make the same changes in the new CentraSite installation.
2. 8.2 upgrade: The metamodel that defines the internal structure of ApplinX object types changed in release 9.0 and is not compatible with the old metamodel. CentraSite 9.7 does not support the use of object type instances that are based on the old ApplinX object types.

CentraSite 9.7 does not allow ApplinX object types or instances from old product releases to be imported, and there is no procedure to migrate old instances to the new metamodel. If you want to use ApplinX object type instances from the old product release in CentraSite 9.7, you will have to manually re-create the instances after you install CentraSite 9.7. Note the definitions of all your ApplinX object type instances.

Prepare Software AG Designer

Export Integration Server Definitions

1. In the old Software AG Designer, go to **Window > Preferences**. On the **Preferences** dialog box, in the left navigation bar, go to **Software AG > Integration Servers**.
2. Click **Export** and complete the dialog box. Software AG Designer will save the file with the extension .properties.

Export CloudStreams Server Definitions and Projects

1. In the old Software AG Designer, go to the **CloudStreams Development** perspective.
2. To export CloudStreams Server definitions, go to **Window > Preferences**. On the **Preferences** dialog box, in the left navigation bar, go to **Software AG > CloudStreams Servers**. Click **Export** and complete the dialog box. Software AG Designer will save the file with the extension .properties.
3. Open the CloudStreams Development perspective. In the CloudStreams Governance list, right-click **CloudStreams Governance projects to export**, click **Export**, and complete the dialog box.
4. Repeat the previous step to export CloudStreams Provider projects.

Export Event Bus Console Configurations

1. In the old Software AG Designer, open the **File > Export** wizard. In the Select panel, go to **Run/Debug > Launch Configurations** and click **Next**.
2. In the tree, select the Event Bus Console configurations. In the **Location** field, specify the directory to which to export. Software AG Designer will save each file with the extension .launch.

Export Preferences

If you want to migrate your preferences to Software AG Designer 9.7, you export them from the old Software AG Designer and then import them into Software AG Designer 9.7. To export the preferences, do the following:

1. In the old Software AG Designer, open the **File > Export** wizard. In the Select panel, go to **General > Preferences** and click **Next**.
2. In the **To preference file** field, specify the name of the file to which to export your preferences. Software AG Designer will save the file with the extension .epf.

Prepare Integration Server

1. If you are using webMethods Broker, shut down the new Broker Monitor if it is running. Restart the old Broker Monitor, and then start the old Broker Server.
2. Start the old Integration Server.
3. Suspend document retrieval for all triggers and make sure all guaranteed messages have finished processing, as follows:
 - a. Open Integration Server Administrator and point to the old Integration Server.
 - b. Go to **Packages > Management**. Click **View Locked Elements**, click **Unlock Elements**, select all elements of triggers, and then click **Unlock Selected Elements**.
 - c. 8.2 or 9.0 upgrade: Go to the **Settings > Messaging > Broker/Local Trigger Management** page. In the **Individual Trigger Controls** area, in the **Active** column under **Document Retrieval**, click **edit all** and set **Retrieval State** to **Suspended**. Refresh the page until the **Persisted Queue Counts** field shows 0 for every trigger.
 - d. 9.5 or 9.6 upgrade: Go to the **Settings > Messaging > webMethods Trigger Management** page. In the **Individual Trigger Controls** area, in the **Active** column under **Document Retrieval**, click **edit all** and set **Retrieval State** to **Suspended**. Refresh the page until the **Current Queue Counts** field shows 0 for every trigger.
4. If you are using webMethods Broker, make sure all outbound Broker messages in the client side queue have been sent, as follows:
 - a. Make sure Integration Server is connected to the Broker.
 - b. 8.2, 9.0, or 9.5 upgrade: Go to the **Settings > Resources > Store Settings** page. In the **Outbound Document Store** area, make sure the **Current Documents in Outbound Store** field shows 0.
 - c. 9.6 upgrade: Go to the **Settings > Messaging > webMethods Messaging Settings** page. Make sure the **CSQ Count** field shows 0 for the Broker connection alias.

Note: The **CSQ Count** field contains the same information as the **Current Documents in Outbound Store** field on the **Settings > Resources > Store Settings** page. You need only check the **CSQ Count** field.

5. 9.6 upgrade: If you are using Universal Messaging, make sure all outbound Universal Messaging messages in the client side queue have been sent, as follows:
 - a. Make sure Integration Server is connected to each Universal Messaging server that is acting as a webMethods messaging provider.
 - b. Go to the **Settings > Messaging > webMethods Messaging Settings** page. Make sure the **CSQ Count** field shows 0 for the Universal Messaging connection aliases.
6. Make sure all outbound JMS messages in the client side queue have been sent, as follows:
 - a. Make sure Integration Server is connected to the JMS providers.

- b. Go to the **Settings > Messaging > JMS Settings** page. In the **JMS Connection Alias Definitions** area, make sure the **CSQ Count** field shows 0 for every JMS connection alias.
7. If you are going to upgrade business processes, and you have business process models that use volatile transition documents and process instances of those models are in a Started state, allow the Started processes instances to complete or suspend them before you upgrade.

Important: If you do not allow Started process instances to complete or suspend before you upgrade, you could lose data.

Note: Started process instances of models that use guaranteed transition documents do not have to complete or be suspended before you upgrade.

Prepare OneData

1. In the old OneData, go to the **Home > Administer > Job Center** page. On the **Filter** page, for each job type, filter by **Active** or **Pending Active**. If a job has one of these statuses, terminate the job or wait for it to complete.
2. In the file system, go to the *old_Software AG_directory \profiles\ODE\configuration \tomcat\conf* directory and open the context.xml file. Note the connection prefix located at the beginning of the schema user name (for example, in the metadata schema user name dev2_md, the connection prefix is dev2). Also note the database connection parameters for the metadata, work area, and release area database schemas.
3. Note the port numbers, as follows:
 - a. 8.4 upgrade: Go to the *old_Software AG_directory \profiles\ODE\configuration \tomcat\conf* directory and open the server.xml file. Note the HTTP and HTTPS port numbers in the port attribute of the Default CTP HTTP Connector and Default CTP HTTPS Connector files, respectively.
 - b. 9.0, 9.5, or 9.6 upgrade: Go to the *old_Software AG_directory \profiles\ODE \configuration\com.softwareag.platform.config.propsloader* director. Open the com.softwareag.catalina.connector.http.pid-*port*.properties and com.softwareag.catalina.connector.https.pid-*port*.properties files and note the port numbers.

Prepare Optimize

1. If you want to reuse your Central Configuration System (CCS) Environment definition, export the environment to an XML file. In My webMethods, go to the **Administration > System-Wide > Environments > Define Environments** page. Select the check box next to the environment, click **Export**, and provide a file name and location for the exported environment.

2. 8.2 upgrade: If you have Integration Servers that are clustered using Oracle Coherence, you will reconfigure them later in this guide to use a Terracotta-based clustering solution instead. Prepare for this change as follows:
 - a. If you are monitoring the clustered Integration Servers, stop monitoring them.
 - b. If you have KPIs for the clustered Integration Servers, go to the **Applications > Administration > Analytics > Infrastructure Components > Monitored Components** page. In the Monitored Components list, click **IS Cluster**. Note the KPIs listed in the **Selected KPIs** box, delete the KPIs, and then click **Save**.

Note: KPI data that was gathered from the clustered Integration Servers will not be available in Optimize 9.7.
3. If you want to cluster Analytic Engines in the new installation, you will need a Terracotta Server Array. For planning information, see *Getting Started with the webMethods Product Suite and Terracotta9.7*, *Configuring BAM9.7*, and the Terracotta BigMemory Max 4.1 documentation.

Shut Down the Old Products

Shut down your old products. For a UNIX system, use the instructions in the product documentation for your old release. For a Windows system:

Products running as...	Shut down from...
Services	Windows Services window. Services are listed as Software AG <i>product release</i> .
Applications	Windows Start menu. Applications are listed as Software AG > Stop Servers > product .

If you are upgrading CentraSite, and the old and new CentraSite are on the same machine:

- 8.2 upgrade: Shut down all old Application Server Tiers by stopping the CentraSite Apache and Tomcat Server services.
- 9.0 or 9.5 upgrade: Shut down all old Application Server Tiers by stopping the Software AG Runtime services.
- Shut down the old Registry Repository by stopping its service.

If you are upgrading EntireX, also shut down all Brokers, RPC Servers, and customer applications that use EntireX libraries. See the instructions in the product documentation for your old release.

If you are upgrading Mobile Administrator, stop it by running the command `/etc/init.d/appfresh-mobile stop`

If you are upgrading a cluster of My webMethods Servers, shut down all cluster nodes. A cluster is defined as multiple nodes that point to the same MywebMethodsServer database component. Nodes can be My webMethods Server installations on different machines or server instances within a single My webMethods Server installation.

Migrate Database Components

Back Up the RDBMSs

Back up the RDBMSs that contain your database components using the vendor instructions for your RDBMS.

If you are upgrading My webMethods Server, back up the My webMethods Server installation directory at the same time you back up the MywebMethodsServer database component. If you have problems, you will need data from the backup to restore the database.

Upgrade the RDBMSs

Check your RDBMSs against *webMethods and Intelligent Business Operations System Requirements 9.7*. If the RDBMS version you are using is not supported by your 9.7 products, you must upgrade to a supported RDBMS version before you continue with the instructions in this chapter.

Shut Down Products that Connect to Database Components

If you have not already done so, shut down all old Integration Server, My webMethods Server, OneData, Optimize, and Presto instances that connect to database components.

Before You Migrate Trading Networks Database Components

1. Use your data editor to delete all data from the ARCHIVE_WORKTABLE table in the TradingNetworksArchive database component.
2. If you created custom indexes for your Trading Networks database components, check whether those custom indexes conflict with indexes that will be created when you run the Trading Networks migration scripts in the next step. If so, drop the custom indexes. The migration scripts are located in the `9.7_Software AG_directory\common\db\scripts\RDBMS\tradingnetworks\migrate` directory, under the directories listed below.

Old Release	Directories
8.2	\39_40, 40_to_45, and 45_to_50
9.0	\40_to_45 and 45_to_50
9.5 or 9.6	\45_to_50

Special Considerations for Migrating Other Database Components

If you are using business processes, you have stored information about in-progress, completed, or failed business process instances. This stored information is called business process run-time data. If you do not want to finish running in-progress process instances or resubmit completed or failed process instances from your old installation in product suite 9.7, do not migrate your business process run-time data (see table below).

If you are using Optimize with a DB2 RDBMS, there are special considerations for the URL you specify on the database component migration command. You must do the following:

- Specify the schema name in the URL using all capital letters.
- Specify the options `CreateDefaultPackage=true`, `ReplacePackage=true`, and `DynamicSections=3000`. These settings will affect all database components in the same schema or database.

Apply Fixes to Database Scripts

Apply the latest fix to the old database scripts using the Software AG Update Manager. The names for database script fixes follow the convention `DC_9.7_DBS_Fixn`. For instructions on applying fixes, see *Using the Software AG Update Manager*.

Database Component Names

Database component names you might use in the migration command are as follows:

If you are migrating this data...	Specify these <i>database_component</i> values
ActiveTransfer Server	ActiveTransfer
Business process run-time	ProcessAudit, ProcessEngine, Archive, Staging, Reporting

If you are migrating this data...	Specify these <i>database_component</i> values
Business rules	BusinessRules
Integration Server	ISInternal, ISCoreAudit, CrossReference, DocumentHistory, DistributedLocking
My webMethods Server	MywebMethodsServer
OneData	OneDataMetadata, OneDataReleaseArea, OneDataWorkArea
Optimize	Analysis, ProcessTracker, ProcessAudit, DataPurge
Trading Networks	TradingNetworks, TradingNetworksArchive

Migrate Database Components

Important: After you migrate database components to 9.7, you can no longer use them with your old environment.

On the machine on which you installed Database Configuration 9.7, open a command window, go to the *9.7_Software AG_directory \common\db\bin* directory, and migrate database components by running the commands below. After you run each command, check the log file *dcc_yyyymmddhhmmss* in the *9.7_Software AG_directory \common\db\logs* directory.

- If you want to migrate all your database components, run this command:

```
dbConfigurator.{bat|sh} -a migrate -d {oracle|sqlserver|db2luw} -c all
-v latest -l db_server_URL -u existing_db_user -p password
```

If you are using an Oracle or DB2 RDBMS, and you are not using the default tablespace, also specify the *-tsdata data_tspace_name* and *-tsindex index_tspace_name* parameters.

Note: Since you most likely do not have all database components (because you do not have all products in the product suite), you will see messages in the log file that say migration failed for the database components you do not have. You can ignore these messages.

- If you do not want to migrate all your database components, run this command for each database component you need to migrate:

```
dbConfigurator.{bat|sh} -a migrate -d {oracle|sqlserver|db2luw}
-c database_component_name -v latest -l db_server_URL -u existing_db_user
```

-p *password*

Complete the Side-by-Side Upgrade

To complete the side-by-side upgrade procedure, perform the steps in the product-specific chapters that follow. For many products, the steps you perform in these chapters include running a migration utility that automatically migrates data from the old installation to the new installation. The section below describes the general behavior of the migration utilities. Any exceptions to the general behavior are noted in the product-specific chapters.

Migration Utilities

Some migration utilities for some products run without prompting you for any information. Migration utilities for other products ask you to select the data to migrate, and offer these options:

- You can run a custom migration, in which you select the data to migrate. The utility gathers your settings through a series of prompts, then migrates the selected data. You can export your settings and use them in other upgrades.
- You can run a migration with imported settings. The imported settings can come from settings you exported from a custom migration, or from the default migration provided with the product installation. The settings for default migrations are described in the product-specific chapters.

Note: When you run migration utilities, you provide the full path to the old installation, and sometimes the path to the 9.7 installation. If you supplied a symbolic link as the installation directory when you installed the old or 9.7 product, the path you provide to the migration utility must be the same symbolic link path you supplied during installation.

If a migration utility fails to migrate a piece of data, the utility asks whether to continue with the next piece of data or abort the migration. If you choose to abort, the utility exits. The utility does not revert the 9.7 product installation. You can address the issue and rerun the utility.

Migration utilities write detailed migration information to the command window and to the migrationLog.txt file in the *9.7_Software AG_directory \install\logs* directory. By default, utilities write INFO, ERROR, and FATAL messages to the log. If you want to increase the logging level for a product's migration to DEBUG, go to the product directory that contains the log4j.properties file (for example, the *9.7_Software AG_directory \product \bin \migrate* or *\migrate\bin* directory), open the file in a text editor, set the `log4j.logger.Migration` property to `DEBUG, MigrationFile`, and save and close the file.

Use of Zip File as Source of Data to Migrate

If your old and new installations for a product are on different machines, migration utilities can use a Zip file of the old product installation as the source of the data to migrate for all products except My webMethods Server. (For My webMethods Server, see the instructions at the end of this section.)

The instructions below use the Java Archive tool to create the Zip file. Specify the location of the Java Archive tool in the JAVA_HOME and PATH system variables on the machine that hosts the old product installation. The tool is located in the *Software AG_directory \jvm\jvm\bin* directory.

Note: On some systems, the lower-level jvm directory name includes additional information, such as *\jvm\jvm160_32*, or *\jvm\jvm170*, or *\jvm\jvm_64*.

To create the Zip file for a product, go to the product's old machine, open a command window, and go to the directory indicated in the table below. You might need to go to *C:\old_Software AG_directory* or */opt/old_Software AG_directory*, or to *C:\old_Software AG_directory\product_name* or */opt/old_Software AG_directory/product_name*. The table indicates which is necessary.

Enter the command indicated in the table. If multiple commands are listed, use the same Zip file name in each command.

Product	Go to this directory...	Run this command...
Command Central	Software AG directory for old Command Central	<pre>jar cfM Zip_file_name.zip common\conf jar ufM Zip_file_name.zip profiles\CCE jar ufM Zip_file_name.zip install \products</pre>
EDA/NERV	Software AG directory for old EDA/NERV	<pre>jar cfM Zip_file_name.zip install \products jar ufM Zip_file_name.zip common\conf jar ufM Zip_file_name.zip common \EventTypeStore jar ufM Zip_file_name.zip common\nerv \bundles</pre>

Note: The *common\nerv\bundles* directory will exist only if you deployed NERV bundles in the old release.

Product	Go to this directory...	Run this command...
		If you deployed NERV bundles or the Event Type Store to non-default locations, add the bundles to the Zip file to preserve the file structure shown in the commands above.
8.2 or 9.0 upgrade: Infrastructure	Software AG directory for old Software AG Runtime	<pre>jar cfM Zip_file_name.zip common \conf install\products profiles\CTP</pre> <p>Note: You might see the message profiles \CTP: no such file or directory. You can ignore this message.</p>
Infrastructure Data Collector	Old Infrastructure Data Collector directory	<pre>jar cfM Zip_file_name.zip common \conf install\products profiles \InfraDC</pre>
Integration Server	Old Integration Server directory	<pre>jar cfM Zip_file_name.zip *</pre>
OneData	Software AG directory for old OneData	<pre>jar cfM Zip_file_name.zip profiles/ ODE/bin/onedata/config/*</pre>
9.6 upgrade: Platform Manager	Software AG directory for old Platform Manager	<pre>jar cfM Zip_file_name.zip common\conf jar ufM Zip_file_name.zip profiles\SPM jar ufM Zip_file_name.zip install \products</pre>
Universal Messaging	Old Universal Messaging directory	<pre>jar cfM Zip_file_name.zip server lib</pre>

Copy the product's Zip file to any directory on the 9.7 machine that hosts the product. Use the binary file transfer mode/type when copying. If you use another mode/type, the Zip file might become corrupted.

My webMethods Server does not support the use of a Zip file. For My webMethods Server, do one of the following:

- Map a drive on the 9.7 machine to the old machine.

- Copy the *old_Software AG_directory \MWS* directory and the *old_Software AG_directory \install\products* directory to the 9.7 machine, and recreate the old directory structure. For example, if the old directory structure was C:\SoftwareAG\MWS and C:\SoftwareAG\install\products, you could create the directory structure C:\oldMWS\MWS and C:\oldMWS\install\products on the 9.7 machine.

3 Complete the Product Suite Infrastructure Upgrade

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Overview

Infrastructure components are automatically installed with many products. If you cannot find files that are referenced in the sections in this chapter, your products did not require those infrastructure components, and those steps are not necessary for your upgrade.

Important: The instructions in this chapter might tell you to run the Infrastructure migration utility. The migration utility supports migration from a Windows system to another Windows system, and from a UNIX system to another UNIX system that is using a JVM from the same vendor. The utility does not support migration from any operating system to a different operating system (for example, does not support Windows system to a UNIX system, or vice versa). For a list of systems supported by the 9.7 release of webMethods and Intelligent Business Operations, see the *webMethods and Intelligent Business Operations System Requirements*.

Before Migrating Data

Make sure all products in the old and new installations are shut down.

8.2 Upgrade: Complete the Infrastructure Upgrade

Overview

Infrastructure components are automatically installed with many products. If you cannot find files that are referenced in the sections in this chapter, your products did not require those infrastructure components, and those steps are not necessary for your upgrade.

You complete the infrastructure upgrade by:

- Applying the latest fixes to the 9.7 Infrastructure.
- Running the Infrastructure migration utility. The utility migrates the following:
 - The infrastructure configuration.
 - If present, the Software AG Runtime configuration.
 - Port and JAAS configurations, and the user repository.
- Manually migrating other configurations and customizations.

Apply Fixes

Apply the latest fixes to the 9.7 Infrastructure. The fix names will look like wMFix.OSGI.Migration. For instructions, see *Using the Software AG Update Manager*.

Run the Infrastructure Migration Utility

Follow the instructions in ["Run the Infrastructure Migration Utility" on page 36](#), except use `migrate822sbs.dat` instead of `migrate901sbs.dat` in the commands.

Manually Migrate Configurations and Customizations

Follow the instructions in ["Manually Migrate Configurations and Customizations" on page 36](#), except do not update files for debug, security authorization, security LDAP, single sign-on service, and watchdog configurations.

In the copied `axis2.xml` file, remove or comment out the `transportReceiver` element whose name attribute is `http` and the `transportReceiver` element whose name attribute is `https`. Add the parameter `<parameter name="enableSoapValidation">true</parameter>` above the rest of the parameters in the file.

Update Paths in Configuration Files

Update paths in the configuration file listed below to point to the 9.7 installation instead of the old installation.

Configuration	File Name in 9.7 Software AG Directory
Journal logger	<code>\profiles\CTP\configuration\logging\log_config.xml</code>

9.0 Upgrade: Complete the Infrastructure Upgrade

Overview

Infrastructure components are automatically installed with many products. If you cannot find files that are referenced in the sections in this chapter, your products did not require those infrastructure components, and those steps are not necessary for your upgrade.

You complete the infrastructure upgrade by:

- Applying the latest fixes to the 9.7 Infrastructure.
- Running the Infrastructure migration utility. The utility migrates the following:
 - The infrastructure configuration.
 - If present, the Software AG Runtime configuration.
 - Port and JAAS configurations, and the user repository.
- Manually migrating other configurations and customizations.
- Updating paths in configuration files.

Apply Fixes

Apply the latest fixes to the 9.7 Infrastructure. The fix names will look like `wMFix.OSGI.Migration`. For instructions, see *Using the Software AG Update Manager*.

Run the Infrastructure Migration Utility

For a general description of migration utility behavior, see ["Migration Utilities" on page 28](#).

The Infrastructure migration utility runs without prompting you for any information. If an error occurs, the utility exits.

1. On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory\common\migrate\osgi\bin` directory, and run this command:

```
migrate.{bat|sh} {-srcDir|-srcFile} full_path_to_{old_Software
AG_directory|Zip_file} -destDirfull_path_to_9.7_Software
AG_directory -importFile 9.7_SoftwareAG_directory\common\migrate\osgi
\bin\migrate901sbs.dat -silent
true
```

2. If you see a `Software AG_directory\profiles\CTP` directory in both the old and the 9.7 installation directories, go to the `9.7_Software AG_directory\profiles\CTP\bin\migrate` directory and run this command:

```
migrate.{bat|sh} {-srcDir|-srcFile} full_path_to_{old_Software
AG_directory|Zip_file} -destDirfull_path_to_9.7_Software
AG_directory -importFile 9.7_SoftwareAG_directory\profiles\CTP \bin
\migrate\migrate901sbs.dat -silent
true
```

Manually Migrate Configurations and Customizations

1. If you customized the old Software AG Runtime Java Service Wrapper, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7

custom_wrapper.conf file. The files are located in the *Software AG_directory*\profiles\CTP\configuration directory.

- Migrate the HTTP and HTTPS ports for System Management Hub. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value.

File Name in Old and 9.7 Software AG Directories

\profiles\CTP\workspace\webapps\smh\index.html

\profiles\CTP\workspace\webapps\smh\login.htm

\InstanceManager\smh\login.htm

Note: If the InstanceManager directory does not exist in both the old and 9.7 directory, ignore this step.

- For each type of configuration below, copy the file from the indicated directory in the old installation to the same directory in the 9.7 installation.

Configuration File Name in Old and 9.7 Software AG Directories

Configuration	File Name in Old and 9.7 Software AG Directories
Password manager	\profiles\CTP\configuration\security\passman \defaultPassStore.dat and mpw.dat
Web Services Stack	\profiles\CTP\workspace\wsstack\repository\conf \axis2.xml Open the copied axis2.xml file and add the parameter <parameter name="enableSoapValidation">true</parameter> above the rest of the parameters in the file.

- For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value.

Configuration File Name in Old and 9.7 Software AG Directories

Configuration	File Name in Old and 9.7 Software AG Directories
Debug	\profiles\CTP\configuration \com.softwareag.platform.config.propsloader \com.softwareag.platform.debug.properties
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties

Configuration	File Name in Old and 9.7 Software AG Directories
Security LDAP	<i>same directory</i> \com.softwareag.security.ldap.pid.properties
Single sign-on service	<i>same directory</i> \com.softwareag.sso.pid.properties
Watchdog	<i>same directory</i> \com.softwareag.config.watchdog.pid.properties
Password manager	\profiles\CTP\configuration\security\passman \scPassMan.config.xml

Update Paths

Update paths in the files listed below to point to the 9.7 installation instead of the old installation.

Configuration	File Name in 9.7 Software AG Directory
Journal logger	\profiles\CTP\configuration\logging\log_config.xml
NERV	\profiles\CTP\configuration \com.softwareag.platform.config.propsloader \com.softwareag.platform.eda.nerv.properties Make sure the JMS provider references point to your 9.7 JMS provider and the file system paths point to the 9.7 installation. If they do not, update them.
Security authorization	\profiles\CTP\configuration \com.softwareag.platform.config.propsloader \com.softwareag.security.authz.pid.properties If the <code>shiro</code> property is set to a value that is relative to the Software AG directory (that is, the value begins with a forward slash (/)), replace the value with the URL token <code>osgi.configuration.area</code> , which points to <i>9.7_Software AG_directory</i> \profiles\CTP\configuration directory. The property is shown below with its default value for 9.7. <code>shiro=@url\:osgi.configuration.area/shiro.ini</code>
Single sign-on service	\common\conf\keystore.jks and platform_truststore.jks

Configuration	File Name in 9.7 Software AG Directory
	<p>If a <code>com.softwareag.security.idp</code> property is set to a value that is relative to the Software AG directory (that is, the value begins with a forward slash (/)), replace the value with the path token <code>sag.install.area</code>, which points to the root Software AG 9.7 directory, or <code>osgi.configuration.area</code>, which points to the <code>9.7_Software AG_directory\profiles\CTP\configuration</code> directory. The properties are shown below with their default values for 9.7.</p> <ul style="list-style-type: none"> ■ <code>com.softwareag.security.idp.keystore.location=@path\n:sag.install.area/common/conf/keystore.jks</code> ■ <code>com.softwareag.security.idp.truststore.location=@path\n:sag.install.area/common/conf/platform_truststore.jks</code> ■ <code>com.softwareag.security.idp.ehcache.location=@path\n:osgi.configuration.area/ehcachesin.xml</code>

9.5 or 9.6 Upgrade: Complete the Infrastructure Upgrade

Overview

Infrastructure components are automatically installed with many products. If you cannot find files that are referenced in the sections in this chapter, your products did not require those infrastructure components, and those steps are not necessary for your upgrade.

You complete the infrastructure upgrade by:

- Migrating port configurations.
- Migrating other configurations and customizations.
- Updating paths in configuration files.

Migrate Port Configurations

1. Migrate your HTTP port configurations as follows:
 - a. Go to the `old_Software AG_directory\profiles\CTP\configuration\com.softwareag.platform.config.propsloader` directory. If you see a single `com.softwareag.catalina.connector.http.pid-port.properties` file, open that file. If you see multiple files with that name, open the file that specifies the port you want to designate as the default port in 9.7.

- b. Go to the same directory in the 9.7 installation and open the `com.softwareag.catalina.connector.http.pid-port.properties` file.
 - c. If any values in the two files are different, copy the old value over the 9.7 value.
 - d. Check for additional `com.softwareag.catalina.connector.http.pid-port.properties` files for HTTP ports in the above-mentioned old directory. Copy all such files to the 9.7 directory and then add these elements to each copied file:
 - `alias=unique_identifier`. This Software AG-specific attribute uniquely identifies each connector when you view its configuration in the Platform Manager. The alias for the default HTTP connector you set up above is `defaultHttp`. You could use that alias as a base, and add a unique suffix to create the alias for each additional connector (`alias=defaultHttp2`, `alias=defaultHttp3`, and so on).
 - `enabled=true`. This Software AG-specific attribute and value are required for this connector to be started.
2. Repeat the previous step to migrate your HTTPS port configurations, but use the `com.softwareag.catalina.connector.https.pid-port.properties` file, and add `alias=defaultHttps` to the default HTTPS connector.
 3. Migrate your JMX port configurations. Open the `com.softwareag.jmx.connector.pid-port.properties` files in the old and 9.7 *Software AG_directory*\profiles\CTP\configuration\com.softwareag.platform.config.propsloader directories. If any values in the two files are different, copy the old value over the 9.7 value.

Migrate Other Configurations and Customizations

1. If you customized the old Software AG Runtime Java Service Wrapper, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7 `custom_wrapper.conf` file. The files are located in the *Software AG_directory*\profiles\CTP\configuration directory.
2. Migrate the HTTP and HTTPS ports for System Management Hub. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value.

File Name in Old and 9.7 Software AG Directories

\profiles\CTP\workspace\webapps\smh\index.html

\profiles\CTP\workspace\webapps\smh\login.htm

\InstanceManager\smh\login.htm

Note: If the InstanceManager directory does not exist in both the old and 9.7 directory, ignore this step.

3. For each type of configuration below, copy the file from the indicated directory in the old installation to the same directory in the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
JAAS	\profiles\CTP\configuration\jaas.config
Password manager	\profiles\CTP\configuration\security\passman \defaultPassStore.dat and mpw.dat
Single sign-on service	\common\conf\keystore.jks and platform_truststore.jks
User repository	\common\conf\users.txt, roles.txt, and groups.txt
Web Services Stack	\profiles\CTP\workspace\wsstack\repository\conf \axis2.xml

9.5 upgrade: In the copied axis2.xml file, add the parameter `<parameter name="enableSoapValidation">true</parameter>` above the rest of the parameters in the file.

4. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value.

Configuration	File Name in Old and 9.7 Software AG Directories
Debug	\profiles\CTP\configuration \com.softwareag.platform.config.propsloader \com.softwareag.platform.debug.properties
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties
Security LDAP	<i>same directory</i> \com.softwareag.security.ldap.pid.properties
Single sign-on service	<i>same directory</i> \com.softwareag.sso.pid.properties
SSH	<i>same directory</i> \com.softwareag.sshd.pid.properties

Configuration	File Name in Old and 9.7 Software AG Directories
Watchdog	<i>same directory</i> \com.softwareag.config.watchdog.pid.properties
Journal logger	\profiles\CTP\configuration\logging\log_config.xml
Password manager	\profiles\CTP\configuration\security\passman\scPassMan.config.xml

Update Paths

Update paths in the files listed below to point to the 9.7 installation instead of the old installation.

Configuration	File Name in 9.7 Software AG Directory
HTTPS ports	\profiles\CTP\configuration \com.softwareag.platform.config.prop loader \com.softwareag.catalina.connector.https.pid-port.properties
JMX port	<i>same directory</i> \com.softwareag.jmx.connector.pidport.properties
NERV	<i>same directory</i> \com.softwareag.platform.eda.nerv.properties Update JMS provider references to point to your 9.7 JMS provider. Update file system paths to point to the 9.7 installation. Open the same file in the old installation. If any values in the two files other than the path values mentioned above are different, copy the old value over the 9.7 value.
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties If the <code>shiro</code> property is set to a value that is relative to the Software AG directory (that is, the value begins with a forward slash (/)), replace the value with the URL token <code>osgi.configuration.area</code> , which points to <i>9.7_Software AG_directory</i> \profiles\CTP\configuration directory. The property is shown below with its default value for 9.7. <code>shiro=@url\:osgi.configuration.area/shiro.ini</code>

Configuration	File Name in 9.7 Software AG Directory
JAAS	\jaas.config
Journal logger	\profiles\CTP\configuration\logging\log_config.xml
Single sign-on service	<p>\common\conf\keystore.jks and platform_truststore.jks</p> <p>If a <code>com.softwareag.security.idp</code> property is set to a value that is relative to the Software AG directory (that is, the value begins with a forward slash (/)), replace the value with the path token <code>sag.install.area</code>, which points to the root Software AG 9.7 directory, or <code>osgi.configuration.area</code>, which points to the <i>9.7_Software AG_directory</i> \profiles\CTP\configuration directory. The properties are shown below with their default values for 9.7.</p> <ul style="list-style-type: none"> ■ <code>com.softwareag.security.idp.keystore.location=@path\n:sag.install.area/common/conf/keystore.jks</code> ■ <code>com.softwareag.security.idp.truststore.location=@path\n:sag.install.area/common/conf/platform_truststore.jks</code> ■ <code>com.softwareag.security.idp.ehcache.location=@path\n:osgi.configuration.area/ehcachesin.xml</code>

4 Complete the EDA/NERV, Terracotta, and Messaging Upgrades

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Complete the EDA/NERV Upgrade

Overview

You complete the upgrade of your event driven architecture by running the EDA/NERV migration utility. The utility migrates the following:

- 9.0, 9.5, or 9.6 upgrade: Software AG Designer Event Bus Console connection configurations that use NERV.
- 9.0, 9.5, or 9.6 upgrade: NERV configuration bundles, if you deployed any.
- Event Type Store.

Run the EDA/NERV Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on page 28. The EDA/NERV migration utility runs without prompting you for any information. If an error occurs, the utility exits.

On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \common \migrate \EDA \bin* directory and run this command:

```
migrate.{bat|sh}
{-srcDir|-srcFile} full_path_to_{old_Software AG_directory|Zip_file}
-destDir full_path_to_9.7_Software AG_directory
-importFile 9.7_Software AG_directory\common\migrate\EDA
\bin\migrate{822|901|951|960}sbs.dat
-silent true
```

Update Paths

Go to the *9.7_Software AG_directory \common \conf* directory and open the `com.softwareag.eda.nerv.properties` file. Verify that the JMS provider references point to your 9.7 JMS provider and the update file system paths to point to the 9.7 installation. If they do not, update them.

Complete the Terracotta Upgrade

The old Terracotta license key and `tc-config.xml` file are not compatible with the Terracotta 4.1.4 release. Make sure you follow the instructions in *Getting Started with the webMethods Product Suite and Terracotta* to install the 4.1.4 license key and `tc-config.xml` file.

The procedures below explain how to complete the upgrade for a pre-4.1.4 Terracotta Server Array that has a single server or a mirror group consisting of an active server

and a mirror server. For all other setups, see the Terracotta BigMemory Max 4.1 documentation.

- If you have a single server, shut down your old Terracotta Server Array and start the 4.1.4 Terracotta Server Array.
- If you have a mirror group consisting of an active server and a mirror server, shut down the old mirror server and then shut down the old active server. Start active server 4.1.4 and then start mirror server 4.1.4.

Complete the Universal Messaging Upgrade

Overview

You complete the Universal Messaging upgrade by:

- Running the Universal Messaging migration utility. When you install Universal Messaging, the installer creates a default server instance named `umserver`. After installing the old Universal Messaging, you might have created additional server instances. The migration utility migrates the data for the default server. Then, for each user-created server instance in the old installation, the utility creates a corresponding server instance in the 9.7 installation and migrates the old instance's data directory and license file to the 9.7 installation.
- Manually migrating custom changes in configuration files.
- If the old data directory, license file, or both for a server instance was not in the default location, the migration utility will not migrate them. You will have to manually migrate them to the 9.7 server instance.

Before Migrating Data

Make sure all old Universal Messaging server instances are shut down. If any server instances are running in the 9.7 installation (for example, the default server instance `umserver`), make sure those are shut down as well.

Run the Universal Messaging Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on page 28. The Universal Messaging migration utility does not offer a default migration.

Perform a Custom Migration

1. On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory\UniversalMessaging\tools\migrate` directory, and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to one of the following:

- The old Universal Messaging installation (for example, `C:\old_Software AG_directory \UniversalMessaging` or `/opt/old_Software AG_directory / UniversalMessaging`).
 - The Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter N.
 4. The utility asks whether to migrate each old server instance. If the utility cannot determine whether the instance was running as an application or service, it asks for that information as well.

If the data directory or license file for an old server instance is not in the default location (`Software AG_directory \UniversalMessaging\server\server_instance\data` and `Software AG_directory \UniversalMessaging\server\server_instance,` respectively), or the utility cannot determine where the data directory or license file is located, you will have to migrate them manually after the migration utility finishes, as explained later in this procedure.

If a server instance already exists in the 9.7 installation, the utility does the following:

- If the 9.7 instance has the same name as an old instance, the utility asks whether to migrate the old instance over the 9.7 instance. If you enter Y, the utility backs up the 9.7 instance to the `9.7_Software AG_directory \UniversalMessaging \migrationbackup` directory before migrating the old instance.
 - If the 9.7 instance has a different name than any of the old instances, the utility ignores the 9.7 instance.
5. The utility asks whether to export your settings. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.

Migrate Using Imported Settings

Imported settings come from settings you exported from a custom migration. These settings are stored in a file named `migrate.dat` in the `9.7_Software AG_directory \UniversalMessaging\tools\migrate` directory from which you ran the custom migration. Copy the `migrate.dat` file to any directory on machines that host Universal Messaging 9.7 installations to which you want to migrate data.

Migrating Using Imported Settings with Prompting

1. On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \UniversalMessaging\tools\migrate` directory, and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to the old Universal Messaging installation or to the Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the `migrate.dat` file.

Migrate Using Imported Settings without Prompting

On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \UniversalMessaging\tools\migrate* directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|sh}
{-srcDir|-srcFile} full_path_to_{old Universal Messaging_directory|Zip_file}
-importFile full_path_to_migrate.dat -silent true
```

Migrate Custom Changes, Data Directory, and License File

1. If you made any custom changes to the `nserver.conf` or `nserverdaemon.conf` file for an old server instance, make the same changes to the same file for the corresponding 9.7 server instance.
2. If the old data directory for a server instance was not in the default location, copy it from the old server instance to the 9.7 server instance. The default location for the data directory is the *9.7_Software AG_directory \UniversalMessaging\server\server_instance\data* directory. Then do the following:

To run server instance as...	Edit this file to point to the new (copied) data directory...
Application	New server instance's <code>nserver.conf</code> file
Service	New server instance's <code>nserverdaemon.conf</code> file

3. If the old license file for a server instance was not in the default location, copy it from the old server instance to the 9.7 server instance. The default location for the file is the *Software AG_directory \UniversalMessaging\server\server_instance* directory.

Complete the webMethods Broker Upgrade**Overview**

8.2 upgrade: Migrate Broker assets from XML format to ADL format, and then follow the instructions in ["Create Broker Server 9.6 and Use the Old Storage" on page 50](#).

9.0 or 9.5 upgrade: Follow the instructions in ["Create Broker Server 9.6 and Use the Old Storage" on page 50](#).

9.6 upgrade: If you continued using your webMethods Broker 9.6 from the 9.6 release, point your Broker clients, including Integration Server 9.7, to the old webMethods Broker 9.6 installation. If you installed webMethods Broker 9.6 from the 9.7 release, follow the instructions in ["Create Broker Server 9.6 and Use the Old Storage" on page 50](#).

If you installed webMethods Broker 9.6 on a machine that is running a different operating system or has different hardware than the old machine, or on an IBM System z machine that is running SUSE Linux Enterprise Server or Red Hat Enterprise Linux, create new storage and then migrate Broker Server configuration information from the old storage to the new storage using the webMethods Broker export/import utilities. For instructions, see *Administering webMethods Broker 9.6*.

8.2 Upgrade: Migrate Broker Assets from XML Format to ADL Format

In "8.2 Upgrade: Prepare webMethods Broker " on page 20, you migrated Broker assets from XML format to ADL format. Now use Deployer 9.7 to deploy the assets to webMethods Broker 9.6. For instructions on using Deployer 9.7, see *webMethods Deployer User's Guide 9.7*.

Create Broker Server 9.6 and Use the Old Storage

1. Back up the old data directory.
2. Go to the *old_Software AG_directory*\Broker\bin directory and back up the old awbrokermon.cfg file.
3. Stop the old Broker Server, go to the *old_Software AG_directory*\Broker\bin directory, and run this command:

```
server_config remove full_path_to_old_data_directory
```

When asked whether to remove the Broker Server from the Broker Monitor configuration, enter Y.

4. If you need to copy the data directory to a new location (for example, because the old and new webMethods Broker installations are on different machines), do the following:
 - a. Copy the old data directory to the new location. If any storage files were located outside the data directory (for example, .stor and .data files), also copy those files.

- b. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*\Broker\bin directory, and run the command below. If you also copied old storage files, specify the `qs_map_file` parameter for each file.

```
server_config relocate full_path_to_new_data_directory  
[-qs_map_file full_path_to_old_file full_path_to_new_file]
```

5. Create a Broker Server 9.6. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*\Broker\bin directory, and run the command below. Broker Server 9.6 details are automatically added to the Broker Monitor 9.6 startup configuration. Make sure the host name and port number for Broker Server 9.6 are the same as they were for the old Broker Server.

```
server_config add full_path_to_old_data_directory -k 9.6_license_file  
-p old_release_port
```

Note: If you are migrating on multi-home machines, and the command fails due to a port binding error, see "[Migrate on Multi-Home Machines](#)" on page 51.

6. Make sure Broker Server 9.6 is running as follows:

System	Steps
Windows	<ol style="list-style-type: none"> Open the Windows Services window and make sure the status of the Software AG Broker Server 9.6(<i>port</i>) service is Started. Right-click the service and click Properties. Make sure the Path to Executable field points to the awbroker file for 9.6.
UNIX	<ol style="list-style-type: none"> Run the command <code>ps -ef grep awbroker</code>, which prints all running Broker processes including the path to the executable. Make sure the output text shows a line like this: <code>full_path_to_9.7_Software_AG_directory/Broker/bin/awbroker -d full_path_to_old_data_directory</code> Make sure the awbroker process is running and that it is running from the 9.6 awbroker file.

Migrate on Multi-Home Machines

If you are migrating from and to multi-home machines (that is, machines that have multiple network interfaces and IP addresses), the `Brokerserver_config add` command will disregard the migrated Broker Server settings from the old release, ignore specific IP bindings, and try to bind to the IP address 0.0.0.0. If the command fails due to a port binding error, follow the steps below.

- Go to the `9.7_Software_AG_directory/Broker/bin` directory, open the `awbrokermon.cfg` file, and add the entries below.

```
server-6849.datadir=full_path_to_data_directory
server-6849.exec=Software_AG_directory/Broker/bin/awbroker
server-6849.version=9.6
server-6849.port=6849
```

- Go to the `9.7_Software_AG_directory/Broker/data/awbrokerrelease_number/default` directory, open the `awbroker.cfg` file, and add the entries below.

```
executable=Software_AG_directory/Broker/bin/awbroker
version=9.6
```

- Start the Broker Monitor and use the `broker_status` command to make sure the Broker Server is running and contains history statistics.

5 Completing the My webMethods Server Upgrade

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Overview

You complete the My webMethods Server upgrade by:

- Running the My webMethods Server migration utility. The utility migrates server instances within the old installation to the new installation.
- Starting My webMethods Server.
- Updating host names.

Before Migrating Data

Make sure the old My webMethods Server is shut down.

If you are upgrading a cluster of My webMethods Servers, make sure all cluster nodes are shut down before migrating data for any My webMethods Server in the cluster. A cluster is defined as multiple nodes that point to the same MywebMethodsServer database component. Nodes can be My webMethods Server installations on different machines or server instances within a single My webMethods Server installation.

Run the My webMethods Server Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on page 28. Exceptions:

- The My webMethods Server migration utility does not offer a default migration.
- You cannot use a Zip file of the old product installation as the source of the data to migrate.
- The log4j.properties file for My webMethods Server is located in the *9.7_Software AG_directory\MWS\bin\migrate\resources* directory.

Perform a Custom Migration

1. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory\MWS\bin\migrate* directory, and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to the old My webMethods Server installation (for example, *C:\old_Software AG_directory\MWS* or */opt/old_Software AG_directory/MWS*).
3. The utility asks whether to import migration settings. Enter N.
4. The utility asks about migrating server instances. If the installation has multiple server instances, the utility will ask separately about each instance.

- a. The utility asks whether to migrate a server instance in the old My webMethods Server installation. Enter Y.
- b. If the server instance name already exists in the My webMethods Server 9.7 installation directory, the utility asks whether to delete the 9.7 server instance so migration of the old server instance can proceed. Enter Y.
- c. The utility asks for the MywebMethodsServer database component to use with the migrated server instance. If you choose to use a copy of the production database, the utility prompts for the database URL, user name, and password.

Note: You cannot use a new database that contains no data.

5. The utility asks whether to export your settings from this session. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.
6. The utility asks whether to begin migration. If you enter Y, the utility migrates the data you selected. If migration completes successfully, the utility also does the following:
 - Deletes old configuration files that are not used by My webMethods Server 9.7, and deletes old properties that are not used by My webMethods Server 9.7 from the 9.7 configuration files.
 - If the old My webMethods Server used the embedded database, copies the database tables from the old My webMethods Server to My webMethods Server 9.7 and converts the tables to the new format.
7. 8.2 upgrade: If you are using CAF, and you added custom Jetty settings to the 8.2 mws-web.xml file for one or more CAF applications, the migration utility migrated those files. However, the schema and the name of the WebApplicationContext class in those files changed starting in 9.0, so you must manually migrate your custom Jetty settings.

For each CAF application, open the 8.2 mws-web.xml file and the 9.7 jetty-mws.xml file in the 8.2 and 9.7 WEB-INF directories. Copy the 8.2 custom Jetty settings to the Jetty section of the 9.7 file. Then configure the copied settings using the new schema and the name of the WebApplicationContext class format. The following example shows how the Jetty setting `maxFormContentSize` was configured in 8.2, and how it should be configured in 9.7. The format for the rest of the custom Jetty settings will be similar.

Sample configuration setting in My webMethods Server 8.2:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE Configure PUBLIC "-//Mort Bay Consulting//DTD Configure//EN"
"http://jetty.mortbay.org/configure.dtd">
<Configure class="com.webmethods.portal.webapp.jetty6.MwsWebApplicationContext">
<Set name="maxFormContentSize">500000</Set>
</Configure>
```

Sample configuration setting in My webMethods Server 9.7:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE Configure PUBLIC "-//Jetty//Configure//EN"
"http://www.eclipse.org/jetty/configure.dtd">
<Configure class="org.eclipse.jetty.webapp.WebApplicationContext">
<Set name="maxFormContentSize">500000</Set>
```

```
</Configure>
```

Migrate Using Imported Settings

Imported settings come from settings you exported from a custom migration. These settings are stored in a file named `migrate.dat` in the `9.7_Software AG_directory \MWS \bin \migrate` directory. Copy the `migrate.dat` file to any directory on machines that host My webMethods Server 9.7 installations to which you want to migrate data.

Migrate Using Imported Settings with Prompting

1. On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \MWS \bin \migrate` directory, and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to the old My webMethods Server installation.
3. The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the `migrate.dat` file.

Migrate Using Imported Settings without Prompting

On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \MWS \bin \migrate` directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|sh}
-srcDir full_path_to_old_My
webMethods_Server_directory
-importFile full_path_to_migrate.dat
-silent true
```

Migrate the My webMethods Server Infrastructure

Follow the steps below for each server instance.

1. Migrate your JMX port configurations. Open the `com.softwareag.jmx.connector.pidport.properties` files in the old and 9.7 `SoftwareAG_directory \profiles \MWS_instance_name \configuration \com.softwareag.platform.config.propsloader` directories. If any values in the two files are different, copy the old value over the 9.7 value.
2. If you customized the old My webMethods Server Java Service Wrapper, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7 `custom_wrapper.conf` file. The files are located in the `SoftwareAG_directory \profiles \MWS_instance_name \configuration` directory.

Initialize My webMethods Server

Initialize My webMethods Server 9.7 by going to the *9.7_Software AG_directory \MWS \bin* directory and running the command `mws.{bat|sh} -s instance_name init`. The 9.7 components are deployed, and then My webMethods Server shuts down automatically. Restart My webMethods Server.

Update Host Names

If the old and new My webMethods Server installations are on different machines, verify the host names for the new installation as follows:

1. Log on to My webMethods Server 9.7 as Administrator and go to the **Administration > My webMethods > Cluster Settings > Advanced Web and Cluster Configuration for MWS** page.
2. If the host name is not correct in the **Host** field for each cluster node and in the **MWS Front End URL** field for all nodes, update the host names.
3. Go to the **Cluster Status and Control** page and restart all cluster nodes.

6 Completing the Integration Server and Hosted Products Upgrade

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Overview

You complete the Integration Server upgrade by:

- Running the Integration Server migration utility. The utility migrates:
 - Custom and user-defined packages, configuration files, and, starting in 9.5, custom jar files.
 - If the old Integration Server hosted products (for example, Trading Networks) and those products also exist on Integration Server 9.7, the utility migrates data for those products.
- Performing manual migration tasks for Integration Server, such as customizing startup files and updating WSDLs.
- Performing manual migration tasks for some products hosted by Integration Server.

If you are upgrading a Integration Server cluster, read "[Prepare Integration Server](#)" on [page 22](#) before you continue.

If you are upgrading an Integration Server that hosts Deployer, read "[Complete the Deployer Upgrade](#)" on [page 86](#) before you continue.

Before Migrating Data

1. Make sure Integration Server is shut down.
2. If you are going to migrate packages that you created, and you gave a package a name that starts with Wm, go to the `9.7_Software AG_directory\IntegrationServer\bin\migrate` directory, open the `packages.cnf` file, and add a `<value name></value>` tag that identifies that package. If you are going to migrate run-time data for business processes, also add any run-time packages generated from Software AG Designer that you gave a name starting with Wm.

Note: To simplify future upgrades, and as a general best practice, do not give packages names that start with Wm.

Run the Integration Server Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on [page 28](#).

9.6 upgrade: If the old Integration Server installation has multiple instances, you run the migration utility once for each instance you want to migrate. You can have the utility migrate an old instance to a 9.7 instance you created after installation or to a new instance the utility creates for you.

Perform a Custom Migration

1. On the 9.7 machine, open a command window and go to the *9.7_Software AG_directory\IntegrationServer\bin\migrate* directory.
2. 8.2 upgrade: If the old and new Integration Server installations are on different operating systems, run the appropriate command below.

When upgrading from...	Run this command...
Windows to UNIX/ Linux	<code>export JAVA_TOOL_OPTIONS=-Dfile.encoding=Cp1252</code>
UNIX/Linux to Windows	<code>set JAVA_TOOL_OPTIONS=-Dfile.encoding=UTF-8</code>

3. Run the command `migrate.{bat|sh}`.
4. The utility asks for the full path to one of the following:
 - The old Integration Server installation (for example, *C:\old_Software AG_directory\IntegrationServer* or */opt/old_Software AG_directory/IntegrationServer*).
 - The Zip file you made earlier.
5. 9.6 upgrade: If the old Integration Server installation has more than one instance, the utility lists the instances and asks which instance to migrate from.
6. The utility asks for the name of the 9.7 instance to which to migrate. If you want to create a 9.7 instance and migrate to it, enter an instance name that does not exist in the 9.7 installation. If you want to migrate to an instance that does exist in the 9.7 installation, enter that instance name.

When you installed Integration Server 9.7, the Software AG Installer copied all packages and language packs you selected during installation into a package repository. If packages exist on the old instance, and the same packages exist in the 9.7 package repository, the utility will install those packages on the 9.7 instance. If you are creating an instance, and language packs exist in the package repository, the utility will install those language packs on the 9.7 instance.

Note: The migration utility can only install the ActiveTransfer Support package on the default Integration Server 9.7 instance.

7. The utility asks whether to import migration settings. Enter N.
8. The utility asks whether to migrate custom packages. If you choose to migrate all custom packages, the utility migrates the following:

- User-created and business process run-time packages. If the name of any of these packages starts with Wm, it will only be migrated if you added the package to the packages.cnf file earlier.
- The WmChemPayloads, WmPapinetPayloads, WmRNPIps, and WmFINMessages packages, if present. Each of these packages contains IS documents for its eStandards Module and the schemas for those documents.
- If you are migrating Mobile Support, the packages that contain the business document type and the download and upload services specified for the mobile sync components configured in the mobileSyncComponents.cnf file.

If you choose to migrate selected packages only, the utility lists each of the packages listed above and asks whether to migrate it.

9. The utility asks whether to migrate Integration Server configuration files. If you choose to migrate selected configuration files only, the utility lists each configuration file and asks whether to migrate it. There are about 50 configuration files. You must enter Y to all prompts that list config\jdbc files.
10. 9.5 upgrade: The utility asks whether to migrate custom jar files. If you choose to migrate selected custom jar files only, the utility lists each custom jar file and asks whether to migrate it.
11. The utility asks you to specify the behavior to use for new Integration Server 9.7 properties and Integration Server 9.7 properties that have new defaults. If you choose to select behavior, the utility lists each property and asks whether to use new behavior or preserve existing behavior.
12. If the Integration Server hosts other products (for example, ActiveTransfer, Mediator, adapters, and eStandards Modules), the migration utility asks whether to migrate the data for those products.

Note: If the Integration Server hosts Deployer, the migration utility will ask whether to migrate Deployer data. Do not do so unless you have read "[Complete the Deployer Upgrade](#)" on page 86 and completed all necessary pre-migration tasks.

13. The utility asks whether to migrate Trading Networks data. If you enter Y, the utility asks the following:
 - a. Whether to migrate the Trading Networks configuration file. If you enter Y, the utility copies the configuration properties from the old Trading Networks installation directory, adds them to the new configuration properties in Trading Networks 9.7, and replaces the properties.cnf file in the `9.7_Software AG_directory\IntegrationServer\instances\instance_name\packages\WmTN\config` directory.

Note: If you have a cluster of Trading Networks instances, you must migrate the configuration file for each instance.

- b. 8.2 upgrade: Whether to migrate Trading Networks data. If you enter Y, the utility does the following:

- Adds an onboarding IDTYPE to the IDTYPE table in the TradingNetworks database component. Trading Networks uses the new onboarding IDTYPE when you create partners using the Trading Networks Partner Onboarding feature.
- Imports onboarding system template data into the TEMPLATE, TEMPLATEFIELD, TEMPLATEFIELDDEFS, and TEMPLATEFIELDGROUPDEFS tables in the TradingNetworks database component. The data appears in the default questionnaire templates that accompany invitations you send to new partners using the Partner Onboarding feature.

Note: If you have a cluster of Trading Networks instances, Trading Networks data is shared by all instances in the cluster, so only migrate the data for one instance.

14. The utility asks whether to export your settings. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.
15. The utility asks whether to begin migration. If you enter Y, the utility migrates the data you selected. If migration completes successfully, the utility also performs the actions in ["Other Actions Performed by the Migration Utility" on page 64](#).

Migrate Using Imported Settings

Imported settings can come from the following:

- Settings you exported from a custom migration. These settings are stored in a file named migrate.dat in the *9.7_Software AG_directory* \IntegrationServer\bin\migrate directory from which you ran the custom migration. Copy the migrate.dat file to any directory on machines that host Integration Server 9.7 installations to which you want to migrate data.
- Settings in the default migrations provided with Integration Server. For each old release, the settings are stored in a file named migraterelase sbs.dat file in the *9.7_Software AG_directory* \IntegrationServer\bin\migrate directory. The settings tell the migration utility to migrate the data listed in ["Overview" on page 60](#). For Integration Server properties that are new or that have new defaults, the default migration chooses the behavior that best preserves backwards compatibility.

Migrate Using Imported Settings with Prompting

1. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory* \IntegrationServer\bin\migrate directory, and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to the old Integration Server installation or to the Zip file you made earlier.

3. 9.6 upgrade: If the old Integration Server installation has more than one instance, the utility lists the instances and asks which instance to migrate from.
4. The utility asks for the name of the 9.7 instance to which to migrate. If you want to create a 9.7 instance and migrate to it, enter an instance name that does not exist in the 9.7 installation. If you want to migrate to an instance that does exist in the 9.7 installation, enter that instance name.

When you installed Integration Server 9.7, the Software AG Installer copied all packages and language packs you selected during installation into a package repository. If packages exist on the old instance, and the same packages exist in the 9.7 package repository, the utility will install those packages on the 9.7 instance. If you are creating an instance, and language packs exist in the package repository, the utility will install those language packs on the 9.7 instance.

Note: The migration utility can only install the ActiveTransfer Support package on the default Integration Server 9.7 instance.

5. The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the migrate.dat file or the migrate{822|901|951|960}sbs.dat file.

Migrate Using Imported Settings without Prompting

On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \IntegrationServer \bin \migrate* directory, and run the command below. The `-instanceName` option specifies both the old instance to migrate from and the 9.7 instance to migrate to; if the 9.7 instance does not exist, the utility will create it. If an error occurs, the utility exits.

```
migrate.{bat|sh}
{-srcDir|-srcFile} full_path_to_{old_Integration_Server_directory|Zip_file}
-instanceName instance_name
-importFile full_path_to_{migrate.dat|migrate{822|901|951|960}sbs.dat}
-silent true
```

Other Actions Performed by the Migration Utility

When migration completes successfully, the migration utility also does the following:

- Deletes old configuration files that are not used by Integration Server 9.7, and deletes old properties that are not used by Integration Server 9.7 from the 9.7 configuration files.
- If the old Integration Server used the embedded database, the utility copies the database tables from the old Integration Server to Integration Server 9.7 and converts the tables to the new format.
- Adds a new property named "Validate schemas using Xerces" to existing Web service descriptors, and sets the new property to the value the `watt.server.wsdl.validateWSDLSchemaUsingXerces` parameter had in the old Integration Server. The new property replaces the functionality provided by

that parameter. For information about the new property, see *webMethods Service Development Help* 9.7.

- If the old Integration Server was part of a cluster that used Coherence as its caching software, the utility removes the clustering settings so you can reconfigure the cluster to use a Terracotta-based solution. Support for Coherence was discontinued in release 9.0. For more information, see *webMethods Integration Server Clustering Guide* 9.7.
- 8.2 upgrade: Updates the SoftwareAG-IS-Core.xml caching file to include caches added for Integration Server 9.7.
- Sets the `watt.art.connection.nodeVersion` property=2, which means adapter passwords are stored unencrypted in the Integration Server passman store and the password handle is stored in the adapter connection. In the previous release, adapter connection passwords were encrypted and then stored in the adapter connection. If you want to return to the previous behavior, set the `watt.art.connection.nodeVersion` property=1.
- If you are using Business Rules and chose to migrate rule data, the utility upgrades Business Rule projects. You might see XML parsing messages due to a Java bug; you can ignore these messages.

Complete the Integration Server Upgrade

Migrate the Flat File Package Properties File

If you used the Flat File package on the old Integration Server, you might have created a `properties.cnf` file to control some flat file behavior. Go to the `old_SoftwareAG_directory\IntegrationServer\instances\instance_name\packages\WmFlatFile\config` directory. If the `properties.cnf` file is present, copy it to the same directory in the 9.7 installation.

Customize Integration Server Startup Files

The Integration Server startup scripts have been changed in release 9.7. If you customized the old scripts, see the *webMethods Integration Server Administrator's Guide* and the Integration Server readme for instructions on how to duplicate those customizations for 9.7.

Update WSDLs

If you have Provider Web services that have an operation with field names starting with `xm1` in the input signature, output signature, header, or faults, do the following:

1. Start Integration Server 9.7.

2. Review the migrationLog.txt file in the *9.7_Software AG_directory\install\logs* directory. If you see this error:

A property `watt.server.xml.ncname.encode.backward.compatibility` exists in `config/server.cnf` with value as `true`. Make sure you make the required changes as specified in the upgrade documentation. Not doing so could have adverse effects as support for this property may be dropped in a future release.

Update your WSDLs as follows:

- a. Open Integration Server Administrator and point to Integration Server 9.7.
- b. Go to the **Settings > Extended** page. If you have the extended setting `watt.server.xml.ncname.encode.backward.compatibility` and it is set to `true`, reset it to `false`.
- c. Regenerate the clients for all Provider Web services that have an operation with field names starting with `xml` in the input signature, output signature, header, or faults.

Connect Integration Server Functions to Database Components

Connect Integration Server and the products it hosts to their database components. For instructions, see *Installing webMethods and Intelligent Business Operations Products 9.7*.

Update Host Names

If the old and new Integration Servers are on different machines, update the host names for 9.7 as follows:

1. If you want to resubmit failed business processes in the 9.7 installation, update the host name in the ISCoreAudit database component.
2. Go to the *9.7_Software AG_directory \IntegrationServer\instances \instance_name \config* directory, open the AuditConfig.xml file, and update the `<server-id>` element to reflect the Integration Server 9.7 host name.
3. Update the host name in the TARGET column in the IS_USER_TASKS database table.
4. Update the SERVERID column in the database tables below.
 - IS_USER_TASKS, WMDOCUMENT, WMERROR, WMRULEDIST, WMSECURITY, WMSESSION, WMTXIN, WMTXOUT, WMTXOUTWMCONTROL
 - WMSERVICE, WMSERVICE4X, WMSERVICEACTIVITYLOG, WMSERVICEASSOC, WMSERVICECUSTOMFLDS

9.0, 9.5, or 9.6 Upgrade: Update the Integration Server NERV Configuration

1. Go to the `9.7_Software AG_directory\profiles\IS_instance_name\configuration\com.softwareag.platform.config.propsloader` directory and open the `com.softwareag.platform.eda.nerv.properties` file. Update JMS provider references to point to your 9.7 JMS provider. Update file system paths to point to the 9.7 installation.
2. Open the same file in the old installation. If any values in the two files other than the path values mentioned above are different, copy the old value over the 9.7 value.

Complete the ActiveTransfer Upgrade

For instructions on all steps below, see *Managing File Transfers with webMethods ActiveTransfer 9.7*.

1. Copy keystore files and the `security.cnf` file from the old installation to the ActiveTransfer 9.7 installation. Update the keystore file paths.
2. Make sure that port values, host names and IP addresses, and local and remote file paths in event file operations and the virtual file system (VFS) are correct for the ActiveTransfer 9.7 installation.
3. If you used temporary accounts and shared files with the old ActiveTransfer, you can copy that information so you can use it with ActiveTransfer 9.7. Go to the `old_Software AG_directory\IntegrationServer\instances\instance_name` directory for the Integration Server instance that hosts ActiveTransfer and copy the `TempAccounts` directory to the same location in the 9.7 installation.

Complete the CloudStreams Upgrade

You complete the CloudStreams upgrade by running the public service `pub.cloudstreams.migration:migrate`, which is available in the `WmCloudStreams` package. The service migrates old CloudStreams artifacts in custom packages that depend on the `WmCloudStreams` package and updates them to be compatible with CloudStreams 9.7. Artifacts include SOAP and REST connector services and connections.

Back up any custom packages that contain CloudStreams artifacts, then run the `pub.cloudstreams.migration:migrate` service. The utility logs the results of migration to the Integration Server server log.

The input signature for the service is as follows:

Parameter	Description
<code>allPackages</code>	Boolean string. Optional. Set to:

Parameter	Description
	<ul style="list-style-type: none"> ■ <code>true</code> to migrate CloudStreams artifacts from all custom packages that are dependent on <code>WmCloudStreams</code>. ■ <code>false</code> to migrate CloudStreams artifacts from only custom packages specified on the <code>packages</code> parameter. This is the default.
<code>packages</code>	Object. String array containing the names of custom packages to migrate. You must specify at least one package name.

The output signature of the service is a parameter named `Result` that consists of an array of `iData` records. The array contains a record for each custom package specified in the input signature. The fields in each record are as follows:

Field	Description
<code>packageName</code>	String. Name of the custom package.
<code>success</code>	String. Value that indicates whether migration succeeded (<code>true</code>) or failed (<code>false</code>).
<code>message</code>	String. Information about the migration, such as number of CloudStreams artifacts found in the package and number of CloudStreams artifacts that were successfully migrated.
<code>info</code>	Object. Optional. If the service issued info messages during the migration, string array of the messages.
<code>errors</code>	Object. Optional. If the service issued errors during the migration, string array of the errors.

Complete Adapter Upgrades

If the old Integration Server hosted adapters and you installed the same release or a later release of those adapters on Integration Server 9.7, you migrated data for those adapters as part of the Integration Server migration. For the adapters below, however, you must also complete the indicated tasks.

webMethods Adapter for JDBC

If the adapter connects to an Oracle RDBMS using an OCI driver, set these environment variables on the Integration Server 9.7 machine:

Platform	Environment Variable Setting
Solaris	LD_LIBRARY_PATH=/ORACLE_HOME/lib
HP	SHLIB_PATH=/ORACLE_HOME/lib
AIX	LIBPATH=/ORACLE_HOME/lib
Linux	LD_LIBRARY_PATH=/ORACLE_HOME/lib

webMethods Package for Microsoft .NET

If you modified the `wmSystem.exe.config` file in the old installation, make the same changes to the same file in the new installation. The file is located in the *Software AG_directory* \IntegrationServer\DotNetHost directory.

webMethods PeopleSoft EnterpriseOne Adapter

If the adapter connects to an Oracle RDBMS, go to the *old_Software AG_directory* \IntegrationServer\lib\jars directory and copy the Oracle JDBC driver file to the *9.7_Software AG_directory* \IntegrationServer\lib\jars\custom directory.

webMethods SAP Adapter

- If the Integration Server 9.7 machine uses UNIX, set these environment variables on the machine:

Platform	Environment Variable Setting
Linux, Solaris	LD_LIBRARY_PATH
HP	SHLIB_PATH
AIX	LIBPATH

- Go to the *old_Software AG_directory \IntegrationServer\lib* directory and copy all files whose file name contains the phrase **sapjco*.** to the *9.7_Software AG_directory \IntegrationServer\lib\jars\custom* directory.
- If the Integration Server 9.7 machine uses Windows, go to the *C:\WINDOWS\system32\drivers\etc* directory on the old Integration Server machine, open the services file, and copy all entries that contain the phrase "sapgw" into the same file in the 9.7 installation. Examples of these entries are *sapgw00 3300/tcp*, *sapgw01 3301/tcp*, *sapgw02 3302/tcp*, *sapgw03 3303/tcp*, *sapgw04 3304/tcp*, and *sapgw05 3305/tcp*.

webMethods WebSphere MQ Adapter

If the adapter is installed on a Windows system, and the WebSphere MQ back end is installed on a remote machine, go to the *WebSphereMQ_directory \java\lib* directory and copy the *mjbndnn.dll* file into a local directory that is in your path system environment variable.

Complete eStandards Module Upgrades

If the old Integration Server hosted eStandards Modules and you installed the same release or a later release of those modules on Integration Server 9.7, you migrated data for those modules as part of the Integration Server migration. For the modules below, however, you must also complete the indicated tasks.

webMethods FIX Module

If you installed the same release of FIX Module on Integration Server 9.7, go to the *old_Software AG_directory \IntegrationServer\packages* and copy the *WmFIXMessages* package to the *9.7_Software AG_directory \IntegrationServer\instances \instance_name \packages* directory.

webMethods SWIFT FIN Module

If you installed the same release of SWIFT FIN Module on Integration Server 9.7, go to the *old_Software AG_directory \IntegrationServer\packages* and copy the *WmFINMessages* package to the *9.7_Software AG_directory \IntegrationServer\instances \instance_name \packages* directory.

webMethods SWIFTNet Module

Reconfigure the module. For instructions, see the *webMethods SWIFTNet Module Installation and User's Guide*.

7 Completing the Designer, Business Process Run-time, and Blaze Upgrades

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Migrate Software AG DesignerData

Before Migrating Data

1. Open Software AG Designer 9.7 and point to a new 9.7 workspace. For example, you can accept the default workspace97.
2. Install any third-party features you need (for example, support for Subversion). The Eclipse release installed with Software AG Designer 9.7 is Eclipse 4.3, so make sure any features you add are compatible with Eclipse 4.3.
3. If you are upgrading Events, go to the **File > Import** wizard. In the Select panel, go to **Run/Debug > Launch Configurations** and click **Next**. In the **From Directory** field, go to the directory to which you exported your Event Bus Console configurations in [Export Event Bus Console Configurations](#) and select all files with the extension .launch. Click **Finish**.
4. If you exported your preferences before upgrading, do the following:
 - a. Go to the **File > Import** wizard. In the Select panel, go to **General > Preferences** and click **Next**. In the **From preference file** field, specify the .epf file to which you exported your preferences. Click **Finish**.
 - b. Go to **Window > Preferences**. In the preferences window, go to the **Java > Installed JREs > Execution Environments** page, if multiple JREs are listed, make sure JRE 1.7 is selected as the default, or remove JRE 1.6 from the list. Also update settings that point to old product installations to point to 9.7 product installations instead. For example, for My webMethods Server, update the **Server > Runtime Environments** settings.

Migrate Business Process and Business Rule Projects

1. Start Software AG Designer 9.7.
2. If your projects are stored in a source control system, use the import wizard for that system (for example, **Import SVN > Project from SVN**). If your projects are stored in the Software AG Designer workspace, do the following:
 - a. Go to the **File > Import** wizard.
 - b. In the Select panel, go to **General > Existing Projects into Workspace** and click **Next**.
 - c. In the Import Projects panel, do the following:
 - i. Click **Select Root Directory** and go to the workspace that contains a type of project you want to import, or click **Select Archive File** and go to the directory that contains a type of project you want to import.
 - ii. In the **Projects** box, select the projects to import. Select **Copy projects into workspace**. Click **Finish**.
3. Verify the following:

- All imported business process projects appear in the **Solutions** tab under the Processes node.
 - All imported business rules projects appear in the **Solutions** tab under the Rules node.
4. If you imported business rule projects, right-click each project in the Rules Explorer and then click **Upgrade Project**.

Migrate Task Application Projects

1. In Software AG Designer 9.7, go to **Window > Preferences > Server > Runtime Environments**. If the **Installed server runtimes** list does not include a My webMethods Server 9.7, add one.
2. Go to **Software AG > Task Development**. In the preferences window, make sure all your other task-related Software AG Designer preferences are correct, and then click **OK**.
3. Go to the **File > Import** wizard.
 - a. In the Select panel, go to **Software AG > Existing CAF Projects into Workspace** and then click **Next**.
 - b. In the Import Projects panel, click **Select Root Directory** and go to the workspace or source control system that contains your task application projects, or click **Select Archive File** and go to the directory that contains your task application projects. In the **Projects** box, select the projects to import.
 - c. Select **Copy projects into workspace** and then click **Finish**.
4. Make sure all imported task application projects appear in the **Solutions** tab, under the Tasks node.
5. If errors appear in the **Problems** tab, click the **Navigator** tab. Right-click each task application project, click **CAF Tools**, and click **Repair CAF Project**. If errors still appear, restart Software AG Designer.
6. Publish the migrated task application projects to My webMethods Server 9.7. For instructions, see *webMethods BPM Task Development Help* 9.7.

Migrate CloudStreams Server Definitions and Projects

1. Start Software AG Designer 9.7.
2. Import CloudStreams Server definitions as follows:
 - a. Go to the **CloudStreams Development** perspective, then go to **Window > Preferences**. On the **Preferences** dialog box, in the left navigation bar, go to **Software AG > CloudStreams Servers**.
 - b. Click **Import**, select the .properties file you exported, and click **Open**. Software AG Designer asks whether to overwrite existing servers. Click **OK**, and then click **OK** again to close the **Preferences** dialog box.

3. Import CloudStreams Governance projects as follows:
 - a. Go to the **File > Import** wizard. In the Select panel, go to **Software AG > CloudStreams Governance Project** and then click **Next**.
 - b. In the Import CloudStreams Governance Project panel, specify the directory that contains the projects you exported in the **Select Root Directory** field. In the **Projects** box, select the projects to import.
 - c. Select **Copy projects into workspace** and then click **Finish**.
 - d. In the **CloudStreams Development** perspective, make sure all imported governance projects appear in the **CloudStreams Governance** tab.
4. Repeat the previous step to import CloudStreams Provider projects.

Migrate Integration Server Definitions

1. In Software AG Designer 9.7, go to **Window > Preferences**. On the **Preferences** dialog box, in the left navigation bar, go to **Software AG > Integration Servers**.
2. Click **Import**, select the .properties file you exported, and click **Open**. Software AG Designer asks whether to overwrite existing servers. Click **OK**, and then click **OK** again to close the **Preferences** dialog box.

Complete the Business Process Run-time Upgrade

Note: If you have running process instances that are based on a process model created before you upgraded to 9.7, and you now want to regenerate that process model in Software AG Designer 9.7, change the version number of the process model to the next sequence number before regenerating it. If you do not do so, the process instances will not behave as expected. When you enable the new version of the process model for execution in My webMethods Server, you will be asked if you want to upgrade running processes; respond No.

1. If you upgraded webMethods Broker, make sure the new Broker that will be used by the Process Engines has the same name in 9.6 that it had in the old release. To do so, open Integration Server Administrator and point to Integration Server 9.7. Go to the **IS Settings > Messaging > webMethods Messaging Settings** page and check the Broker name.
2. If you migrated process run-time packages (see ["Run the Integration Server Migration Utility" on page 60](#)), make sure the packages exist in the `9.7_Software AG_directory\IntegrationServer\instances\instance_name\packages` directory. The package names are the project names or custom names you specified in Software AG Designer.
3. Open Integration Server Administrator and point to Integration Server 9.7. Go to the **Settings > JDBC Pools** page and connect the ProcessEngine and ProcessAudit functions to their

database components. For instructions, see *Installing webMethods and Intelligent Business Operations Products 9.7*.

4. Make sure document retrieval for all webMethods messaging triggers is enabled on Integration Server 9.7. For instructions, see *webMethods Integration Server Administrator's Guide 9.7*.

Update Host Names

If the old and new business process product installations are on different machines, update the host name in the SERVERID column in the database tables below.

- PRTINSTANCEITER, PRTPROCESS, PRTPROCLOCK, PRTQUEUE, PRTSTEPLOCK, PRTSTEPSTATE, PRTSTEPSUSPENSION
- PRA_ERROR
- PRA_PROCESS, PRA_PROCESS_AT_REST, PRA_PROCESS_CUSTOM, PRA_PROCESS_STEP, PRA_PROCESS_STEP_LOOP
- PRA_STEP_LOGGED_FIELD, PRA_STEP_LOOP_LOGGED_FIELD, PRA_STEP_MESSAGE, PRA_STEP_TRANSITION
- WMSTG_PROCESS_CONTROL, WMSTG_PROCESS_STEP, WMRULEDIST

Complete the Blaze Rules Upgrade

Migrate Blaze rules using the instructions in *Using Blaze Rules with BPM and CAF 9.7*.

8 Completing the Optimize Upgrade

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Overview

You complete the Optimize upgrade by:

- Configuring and starting the Terracotta Server Array.
- Updating connections to other products.
- Updating host names.
- Migrating Infrastructure Data Collector data.
- Deploying the Optimize environment.
- Connecting to Universal Messaging 9.7, if you were using webMethods Broker as your JMS provider in the old release and are now using Universal Messaging.


Configure and Start the Terracotta Server Array

If you are clustering Analytic Engines in release 9.7, you must configure and start the Terracotta Server Array. For instructions, see *Getting Started with the webMethods Product Suite and Terracotta9.7*, *Configuring BAM9.7*, and the Terracotta BigMemory Max 4.1 documentation.

Update Connection to Other Products

Update Connection to Process Engine

If you are using Optimize for Process, do the following:


1. Open Integration Server Administrator and point to an Integration Server 9.7 that hosts a Process Engine.
2. Go to the **Packages > Management** page and click  for the WmPRT package.
3. Click **Settings** in the left navigation bar and then click **Edit Process Engine Settings**.
4. In the **JMS Server URL** field, identify the JMS provider host name and port as follows:

JMS Provider	URL Format
webMethods Broker	broker://host :port /Broker_name . The default port is 6849.
Universal Messaging	nsp://host :port . The default port is 9000.

5. Click **Submit** and then reload the WmPRT package.
6. Repeat these steps for every Integration Server that hosts a Process Engine.

Update Connection to Optimize Support Package

If you are using Optimize built-in services, do the following:

1. Open Integration Server Administrator and point to the Integration Server 9.7 that hosts an Optimize Support package.
2. Go to the **Packages > Management** page and click  for the WmOptimize package.
3. Identify the Analytic Engine host machine and port. The default port is 12503.
4. In the **JMS Server URL** field, identify the JMS provider host name and port as follows:

JMS Provider	URL Format
webMethods Broker	broker://host :port /Broker_name . The default port is 6849.
Universal Messaging	nsp://host :port . The default port is 9000.

5. Click **Submit** and then reload the WmOptimize package.
6. Repeat these steps for every Integration Server that hosts an Optimize Support package.

Complete the Infrastructure Data Collector Upgrade

Overview

You complete the Infrastructure Data Collector upgrade by:

- Migrating customizations to the Infrastructure Data Collector Java Service Wrapper.
- 8.2 Upgrade: Restarting monitoring of clustered Integration Servers.
- Running the Infrastructure Data Collector migration utility. The utility migrates asset configuration files and the JAAS configuration for Infrastructure Data Collector.

8.2 Upgrade: Restarting Monitoring of Clustered Integration Servers

If you had Integration Servers that were clustered using Oracle Coherence, you reconfigured them earlier to use a Terracotta-based clustering solution instead. You can now rediscover the clustered Integration Servers you want to monitor, re-select the KPIs

you noted in ["Prepare Optimize" on page 23](#), and restart monitoring. For instructions, see *Administering webMethods Optimize 9.7*.

Migrate Customizations to the Java Service Wrapper

If you customized the old Infrastructure Data Collector Java Service Wrapper, copy the customizations from the old wrapper_conf or custom_wrapper.conf files to the 9.7 custom_wrapper.conf file. The files are located in the *Software AG_directory \profiles \InfraDC\configuration* directory.

Run the Infrastructure Data Collector Migration Utility

For a general description of migration utility behavior, see ["Migration Utilities" on page 28](#).

Before Migrating Data

1. Make sure the old Infrastructure Data Collector is shut down.
2. Go to the *old_Software_AG_directory \bin\migrate\release* directory and open the migrateConfigFile.properties file. Identify each asset configuration file or directory that contains asset configuration files to migrate using the format shown in the migrateConfigFile.properties file.

Perform a Custom Migration

1. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \infrastructurec\bin\migrate* directory and run the command `migrate.{bat|sh}`.
2. The utility asks for the full path to one of the following:
 - The old Infrastructure Data Collector installation (for example, C: *\old_Software AG_directory \infrastructurec* or */opt/old_Software AG_directory /infrastructurec*).
 - The Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter N.
4. The utility asks whether to migrate SNMP asset configuration files. The migration utility will migrate the old files you identified in the migrateConfigFile.properties file in ["Before Migrating Data" on page 80](#).
5. The utility asks whether to migrate the JAAS configuration for Infrastructure Data Collector. If you enter Y, the utility asks whether to replace references to the old directory in the JAAS configuration file with references to the 9.7 directory.
6. The utility asks whether to export your settings. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.

- The utility asks whether to begin migration. If you enter Y, the utility migrates the data you selected.

If you chose to migrate asset configuration files, and a file that has the same name as an old file already exists in the Infrastructure Data Collector 9.7 installation, the utility backs up the 9.7 file to the `9.7_Software AG_directory \infrastructuredc \migrationbackup` directory before migrating the old file. The same is true for the JAAS configuration file.

Migrate Using Imported Settings

Imported settings can come from the following:

- Settings you exported from a custom migration. These settings are stored in a file named `migrate.dat` in the `9.7_Software AG_directory \infrastructuredc\bin\migrate` directory from which you ran the custom migration. Copy the `migrate.dat` file to any directory on machines that host Infrastructure Data Collector 9.7 installations to which you want to migrate data.
- Settings in the default migrations provided with Infrastructure Data Collector. For each old release, the settings are stored in a file named `migraterelase sbs.dat` file in the `9.7_Software AG_directory \infrastructuredc\bin\migrate` directory. The settings tell the migration utility to migrate the data listed in ["Complete the Infrastructure Data Collector Upgrade" on page 79](#).

Migrate Using Imported Settings with Prompting

- On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \infrastructuredc\bin\migrate` directory, and run the command `migrate.{bat|sh}`.
- The utility asks for the full path to the old Infrastructure Data Collector installation or to the Zip file you made earlier.
- The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the `migrate.dat` file or the `migrate{822|901|951|960}sbs.dat` file.

Migrate Using Imported Settings without Prompting

On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \infrastructuredc\bin\migrate` directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|sh}
{-srcDir|-srcFile} full_path_to_{old_Infrastructure_Data
Collector_directory|Zip_file}
-importFile full_path_to_{migrate.dat|{821|901|951|960}sbs.dat}
-silent true
```

Deploy the Optimize Environment

Unless otherwise noted, see *Configuring BAM9.7* for detailed instructions on the Optimize steps in the sections below.

To Not Reuse the Old Optimize CCS Environment Definition

If you do not want to reuse your old Central Configuration System (CCS) Environment definition, start My webMethods Server 9.7, open My webMethods, and configure your Optimize 9.7 environment.

For Infrastructure Data Collector, when you define hosts, enter the same value in the **Host Name or IP Address** field of the Add/Edit Host dialog box that you had in the old release.



Note: If the 9.7 value is not identical to the old value, you will have to stop monitoring existing assets, rediscover them, and reselect them for monitoring after you finish upgrading.

Skip to the step for deploying the Optimize 9.7 environment, below.

To Reuse the Old Optimize CCS Environment Definition

To reuse the old CCS environment definition that you exported to file before installing Optimize 9.7, follow the steps below.

1. Start My webMethods Server 9.7 and open My webMethods.
2. Import the old CCS environment, as follows:
 - a. Go to the **Applications > Administration > System-Wide > Environments > Define Environments** page.
 - b. Click **Import Environment**. On the Import Environments dialog box, click **Browse**, go to the file to which you exported the old CCS environment, and click **OK**. When prompted, confirm the migration.
 - c. When asked "Do you wish to migrate the environment to the latest version?", click **Yes**. The CCS imports the old environment and migrates it to Optimize 9.7 Logical Servers.
3. Update the database pool connection settings for the database pool definition associated with the environment you imported, as follows:
 - a. Go to the **Applications > Administration > System-Wide > Environments > Database Pool Configuration** page.
 - b. In the **Pool** column, click the imported database pool.

- c. In the **Pool Settings** area, set the **Minimum Connections** field to 8, and the **Maximum Connections** field to 60.
 - d. Make sure the database connection information is correct. In the **Database Connection** area, click **Test** and make sure the message `Test Passed` displays at the bottom of the page.
 - e. Click **Save**.
4. Go to the **Applications > Administration > System-Wide > Environments > Define Environments** page. Under **Environment Name**, click the environment you imported.
 5. If you are using a different JMS provider with the 9.7 release than you used with the old release, do the following:
 - a. Click the **Configure Servers** tab. Under **Configuration**, open the **Default Settings** tree and click **JNDI Configuration**.
 - b. In the **Naming Factory Type** list, click the JMS provider you are using with the 9.7 release. If you are using webMethods Broker, complete the **Broker Name** field. If you are using Universal Messaging, clear the field.
 - c. Click the **Map Endpoints** tab. In the first **Incoming Connections** field for the JMS Provider, type `broker` if you are using webMethods Broker or `nsp` if you are using Universal Messaging. In the second field, type the port number.
 - d. Click **Save**.
 6. Validate the environment as follows:
 - a. Click each tab that shows the icon  except the **Validate** tab. If you change any settings on a tab, and the tab has a **Save** button, click **Save**.
 - b. When all tabs except the **Validate** tab show , click the **Validate** tab.
 7. Click **Finish**.

Deploy the Optimize 9.7 Environment

1. Start the Optimize 9.7 components you installed. These components can include the Analytic Engine, Infrastructure Data Collector, and the Web Services Data Collector.
2. Start the JMS provider you are using with the 9.7 release.
3. Deploy your Optimize 9.7 environment. For instructions, see *Configuring BAM9.7*.
4. In My webMethods, go to the **My webMethods > System Settings > Servers** page.
 - If you have BPMS installed, select the **BPM and BAM** option and identify the upgraded Analytic Engine and the Integration Server that hosts Monitor. You can identify the hosts using DNS name or IP address.
 - If you have BPMS installed, but are not using BPM (that is, you are using only Optimize), select the **BAM only** option and identify the upgraded Analytic Engine. You can identify the host using DNS name or IP address.

Click **Check Server Status** and make sure the server is available (green icon). It might take some time for the server to become available (for example, 15 minutes). Then click **Save**.

Switching from webMethods Broker to Universal Messaging

If you were using webMethods Broker as your JMS provider in the old release, and are using Universal Messaging in 9.7, do the following:

1. Start Universal Messaging and open Universal Messaging Enterprise Manager.
2. Connect to a server instance, then click it.
3. Click the **Config** tab. Expand **Global Values** and set AllowRealmAdminFullAccess to true.

9 Completing the Asset Build Environment and Deployer Upgrades

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■ Complete the Deployer Upgrade	86

Complete the Asset Build Environment Upgrade

Go to the *old_Software AG_directory \common \AssetBuildEnvironment \master_build* directory and open the *build.properties* file. Copy the property values to the same file in the 9.7 installation.

Complete the Deployer Upgrade

Overview

You have two options for migrating Deployer data:

- You can migrate all Deployer global (default) settings, aliases, target groups, and projects using the Integration Server migration utility.
- You can choose whether to migrate global (default) settings, and you can choose which aliases, target groups, and projects to migrate using the Deployer migration feature.

Each option is explained below.

For instructions on tasks you must perform in Deployer, see the *webMethods Deployer User's Guide*.

Before Migrating Data

1. Make sure you have upgraded all source and target product servers that were defined in the old Deployer to their 9.7 releases, and have migrated all product data and assets to the 9.7 releases, as instructed in this guide.
2. Make sure you have upgraded the Integration Server 9.7 that hosts Deployer 9.7 and migrated its data using the instructions in this guide.
3. Make sure you are a member of the Administrators ACL, or of the Internal, Developer ACLs, and DeployerAdmin ACLs, for both the Integration Server that hosts the old Deployer and the Integration Server that hosts Deployer 9.7. For instructions, see *webMethods Integration Server Administrator's Guide* 9.7.
4. In the old Deployer, edit all connections to old source and target product servers to point to the new 9.7 source and target product servers. You do not have to supply user names and passwords if you do not know them.
5. If you installed Deployer 9.7 on the same machine as the old Deployer, you might want Deployer 9.7 to use the ports that were used by the old Deployer. If so, do the following:
 - a. In Integration Server Administrator, point to the Integration Server that hosts the old Deployer and go to the **Security > Ports** page.

- b. Click **Add Port**, click **webMethods/HTTP**, and click **Submit**. Enter the port details, click **Yes** for **Enable**, click **WmRoot** under the package name, and click **Save Changes**.
- c. Click **Change Primary Port**, click the new port, and click **Update**.
- d. In the **Access Mode** column of the new port, click **Edit**. In the **Edit Access Mode** page for the port, click **Set Access Mode to Allow by Default**. Click **OK** on the warning pop-up. The message `Successfully changed access mode for Port Service Access Settings` appears.
- e. Disable the old port by clicking **Yes** in the **Enabled** column for that port.

Migrate All Deployer Data Using the Integration Server Migration Utility

In the previous section, you upgraded the Integration Server that hosts Deployer 9.7 and migrated its data. Do not start the host Integration Server before you migrate Deployer data. If you do, a file named `MIGRATION_DONE` is created in the `WmDeployer` package, and you will not be able to migrate Deployer data. If you did start the host Integration Server, delete this file.

Migrate Deployer data using the instructions in ["Completing the Integration Server and Hosted Products Upgrade" on page 59](#).

Migrate Selected Data Using the Deployer Migration Feature

Start the Old Deployer and Deployer 9.7 and Migrate Global (Default) Settings

1. Start the old Deployer and Deployer 9.7.
2. In Deployer 9.7, go to the **Tools > Migrate Data** page. In the **Host** and **Port** fields, identify the old Deployer to migrate from. In the **User** and **Password** fields, provide the user name and password to use to log onto the old Deployer.
3. Deployer 9.7 lists the aliases, target groups, or projects to migrate in the right-hand pane. In the **Page Size** list, click the number of aliases or projects to list at a time.
4. In Deployer, you set defaults for all projects, such as defaults for dependency checking, project locking, and general deployment. You also set defaults for Integration Server and Trading Networks projects, such as defaults for suspending assets during deployment, overwriting existing assets, and activating assets after deployment. If you want to migrate these default settings, in Deployer 9.7, click **Migrate Default Settings**.

Migrate Connection Information (Server Aliases)


You can choose the aliases to migrate. However, if you want to migrate a target group, you must either migrate all aliases in that target group, or remove the aliases you do not want to migrate from the target group.

1. In Deployer 9.7, click **Migrate Server Aliases**. In the **Select Server** list, click the type of server whose aliases to migrate.
2. In the **Select** column, select the check boxes next to the server aliases you want to migrate. In the **Point Selected Aliases to Servers** list, click **9.7**.
3. Click **Migrate Server Aliases**. Deployer migrates the selected aliases, then disables those rows and displays **Yes** in the **Migrate** column for the aliases.
4. Repeat the steps above for each type of server whose aliases to migrate.
5. You cannot migrate Integration Server HTTPS server aliases from Deployer. Manually recreate these aliases in the host Integration Server.

Migrate Target Groups

1. If you did not migrate all aliases in the target groups you want to migrate, in the old Deployer, remove those aliases from the target groups.


Important: If target groups include invalid aliases, deployment of projects that use those target groups fails.

2. In Deployer 9.7, click **Migrate Target Groups**. In the **Select Server** list, click the type of server whose target groups to migrate.
3. In the **Simulate Migration** column, click  in the row for each target group to migrate.
Deployer displays a message that indicates whether the aliases that are referenced by the target group have been migrated. If any aliases have not been migrated, migrate them or remove them from the indicated target group.
4. In the **Select** column, select the check boxes next to target groups to migrate. In the **Point Selected Aliases to Groups** list, click **9.7**.
5. Click **Migrate Target Groups**. Deployer migrates the selected target groups, then disables those rows and displays **Yes** in the **Migrate** column for the groups.

Migrate Deployment Projects

1. Start all 9.7 source product servers referenced by Deployer projects.

Note: If a server referenced by a Deployer project is not running, or the connection settings for a server referenced by a project are not correct, you will have to rebuild the project later. Deployer will display messages to this effect.

2. In Deployer 9.7, click **Migrate Projects**.
3. In the right-hand pane, in the **Simulate Migration** column, click  row for each project to migrate. Deployer displays a message that indicates whether the source servers that are referenced by the project are running. If the message indicates that any of the referenced source servers are not running, start those servers.

4. In the **Select** column, select the check boxes next to the projects to migrate, and then click **Migrate Projects**. Deployer displays a new window with a dynamic migration report. You can display the migration report for each project in the **Report** column in the original window. You can display the latest migration report by clicking **View Latest Migration Report**.

10 Completing the Command Central and Platform Manager Upgrades

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Overview

You complete the Command Central upgrade by:

- Migrating the Command Central infrastructure.
- Running the Command Central migration utility. The utility migrates the following:
 - Environment configurations, which include metadata about the environment, nodes (installations), and products that Command Central is managing.
 - Users, roles, and groups.
 - 9.5 or 9.6 upgrade: License tools and templates.
 - 9.6 upgrade: JAAS configuration and password manager data.

Before Migrating Data

Make sure the old Command Central is shut down.

Migrate the Command Central Infrastructure

1. Migrate HTTP port configurations as follows:
 - a. Go to the *old_Software AG_directory*\profiles\CCE\configuration\com.softwareag.platform.config.propsloader directory. If you see a single com.softwareag.catalina.connector.http.pid-*port*.properties file, open that file. If you see multiple files with that name, open the file that specifies the port you want to designate as the default port in 9.7.

Go to the same directory in the 9.7 installation and open the com.softwareag.catalina.connector.http.pid-*port*.properties file. If any values in the two files are different, copy the old value over the 9.7 value.
 - b. Check for additional com.softwareag.catalina.connector.http.pid-*port*.properties files for HTTP ports in the above-mentioned old directory. Copy all such files to the 9.7 directory and then add these elements to each copied file:
 - `alias=unique_identifier`. This Software AG-specific attribute uniquely identifies each connector when you view its configuration in the Platform Manager. The alias for the default HTTP connector you set up above is defaultHttp. You could use that alias as a base, and add a unique suffix to create the alias for each additional connector (`alias=defaultHttp2`, `alias=defaultHttp3`, and so on).
 - `enabled=true`. This Software AG-specific attribute and value are required for this connector to start.

2. Repeat the previous steps to migrate HTTPS port configurations, but use the `com.softwareag.catalina.connector.https.pid-port.properties` file, and add `alias=defaultHttps` to the default HTTPS connector.
3. If you customized the Command Central Java Service Wrappers, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7 `custom_wrapper.conf` file. The files are located in the *Software AG_directory*\profiles\CCE\configuration directory.
4. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value. In addition, update file system paths in the 9.7 files to point to the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
Debug	\profiles\CCE\configuration \com.softwareag.platform.config.propsloader \com.softwareag.platform.debug.properties
JMX ports	<i>same directory</i> \com.softwareag.jmx.connector.pid- <i>port</i> .properties
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties
Security LDAP	<i>same directory</i> \com.softwareag.security.ldap.pid.properties
Single sign-on service	<i>same directory</i> \com.softwareag.sso.pid.properties
SSH	<i>same directory</i> \com.softwareag.sshd.pid.properties
Watchdog	<i>same directory</i> \com.softwareag.config.watchdog.pid.properties
Journal logger	\profiles\CCE\configuration\logging\log_config.xml
9.0 or 9.5 upgrade: Password manager	\profiles\CCE\configuration\security\passman \scPassMan.config.xml

5. 9.0 or 9.5 upgrade: For each type of configuration below, copy the file from the indicated directory in the old installation to the same directory in the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
JAAS	\profiles\CCE\configuration\jaas.config file
Password manager	\profiles\CCE\configuration\security\passman\defaultPassStore.dat and mpw.dat

- For each case below, open the file in the indicated directory and update file system paths to point to the 9.7 installation.

Configuration	File Name in 9.7 Software AG Directories
JAAS	\profiles\CCE\configuration\jaas.config
Password manager	\profiles\CCE\configuration\security\passman\defaultPassStore.dat and mpw.dat

Run the Command Central Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on page 28.

Perform a Custom Migration

- On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*\CommandCentral\migrate\bin directory, and run the command `migrate.{bat}`.
- The utility asks for the full path to one of the following:
 - The Software AG directory that contains the old Command Central installation (for example, *C:\old_Software AG_directory* or */opt/old_Software AG_directory*).
 - The Zip file you made earlier.
- The utility asks whether to import migration settings. Enter N.
- The utility asks whether to migrate environment configuration data and users, roles, and groups.
- 9.5 or 9.6 upgrade: The utility asks whether to migrate license tools and templates.
- 9.6 upgrade: The utility asks whether to migrate the JAAS configuration and password manager data.

7. The utility asks whether to export your settings. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.
8. The utility asks whether to begin migration. If you enter Y, the utility migrates the data you selected.

Migrate Using Imported Settings

Imported settings can come from the following:

- Settings you exported from a custom migration. These settings are stored in a file named `migrate.dat`. The file is stored in the `9.7_Software AG_directory \CCE\migrate \bin` directory from which you ran the custom migration. Copy the `migrate.dat` file to any directory on machines that host Command Central 9.7 installations to which you want to migrate data.
- Settings in the default migrations provided with Command Central. For each old release, the settings are stored in a file named `migraterelase sbs.dat` file in the `9.7_Software AG_directory \CCE\migrate \bin` directory. The settings tell the migration utility to migrate the data listed in ["Overview" on page 92](#).

Migrate Using Imported Settings with Prompting

1. On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \CCE \migrate \bin` directory, and run the command `migrate.{bat|}`.
2. The utility asks for the full path to the Software AG directory that contains the old Command Central installation or to the Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the `migrate.dat` file or the `migrate{901|951|960}sbs.dat` file.

Migrate Using Imported Settings without Prompting

On the 9.7 machine, open a command window, go to the `9.7_Software AG_directory \CCE \migrate \bin` directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|}
{-srcDir|-srcFile} full_path_to_{old_Software_AG_directory|Zip_file}
-importFile full_path_to_{migrate.dat|migrate{901|951|960}sbs.dat}
-silent true
```

Update the Command CentralNERV Configuration

Go to the `9.7_Software AG_directory \profiles\CCE\configuration \com.softwareag.platform.config.propsloader` directory and open the `com.softwareag.platform.eda.nerv.properties` file. Update JMS provider references to point to your 9.7 JMS provider, if they do not already. Update file system paths to point to the 9.7 installation.

11 Complete the Platform Manager Upgrade

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■ 9.6 Upgrade: Complete the Platform Manager Upgrade	100

9.0 or 9.5 Upgrade: Complete the Platform Manager Upgrade

Overview

You complete the Platform Manager upgrade by migrating the Platform Manager infrastructure and user repository.

Before Migrating Data

Make sure the old Platform Manager is shut down.

Migrate the Platform Manager Infrastructure

1. Migrate HTTP port configurations as follows:
 - a. Go to the *old_Software AG_directory*\profiles\SPM\configuration\com.softwareag.platform.config.propsloader directory. If you see a single `com.softwareag.catalina.connector.http.pid-port.properties` file, open that file. If you see multiple files with that name, open the file that specifies the port you want to designate as the default port in 9.7.

Go to the same directory in the 9.7 installation and open the `com.softwareag.catalina.connector.http.pid-port.properties` file. If any values in the two files are different, copy the old value over the 9.7 value.
 - b. Check for additional `com.softwareag.catalina.connector.http.pid-port.properties` files for HTTP ports in the above-mentioned old directory. Copy all such files to the 9.7 directory and then add these elements to each copied file:
 - `alias=unique_identifier`. This Software AG-specific attribute uniquely identifies each connector when you view its configuration in the Platform Manager. The alias for the default HTTP connector you set up above is `defaultHttp`. You could use that alias as a base, and add a unique suffix to create the alias for each additional connector (`alias=defaultHttp2`, `alias=defaultHttp3`, and so on).
 - `enabled=true`. This Software AG-specific attribute and value are required for this connector to start.
2. Repeat the previous step to migrate HTTPS port configurations, but use the `com.softwareag.catalina.connector.https.pid-port.properties` file, and add `alias=defaultHttps` to the default HTTPS connector.
3. If you customized the Platform Manager Java Service Wrapper, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7 `custom_wrapper.conf` file. The files are located in the *Software AG_directory*\profiles\SPM\configuration directory.

4. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value. In addition, update file system paths in the 9.7 files to point to the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
Debug	\profiles\SPM\configuration \com.softwareag.platform.config.propsloadcom.softwareag. platform.debug.properties
JMX ports	<i>same directory</i> \com.softwareag.jmx.connector.pid- <i>port</i> .properties
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties
Security LDAP	<i>same directory</i> \com.softwareag.security.ldap.pid.properties
Single sign-on service	<i>same directory</i> \com.softwareag.sso.pid.properties
SSH	<i>same directory</i> \com.softwareag.sshd.pid.properties
Watchdog	<i>same directory</i> \com.softwareag.config.watchdog.pid.properties
Journal logger	\profiles\SPM\configuration\logging\log_config_.xml
Password manager	\profiles\CCE\configuration\security\passman \scPassMan.config.xml

5. Go to the *old_Software AG_directory*\common\conf directory. Copy the user.txt, roles.txt, and groups.txt files to the *9.7_Software AG_directory*\profiles\SPM\configuration\security directory.
6. For each type of configuration below, copy the file from the indicated directory in the old installation to the same directory in the 9.7 installation. Then open the copied (9.7) files and update file system paths to point to the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
JAAS	\profiles\SPM\configuration\jaas.config file

Configuration	File Name in Old and 9.7 Software AG Directories
Password manager	\profiles\SPM\configuration\security\passman \defaultPassStore.dat and mpw.dat

Update the Platform ManagerNERV Configuration

Go to the *9.7_Software AG_directory* \profiles\SPM\configuration\com.softwareag.platform.config.propsloader directory and open the com.softwareag.platform.eda.nerv.properties file. Update JMS provider references to point to your 9.7 JMS provider, if they do not already. Update file system paths to point to the 9.7 installation.

9.6 Upgrade: Complete the Platform Manager Upgrade

Overview

You complete the Platform Manager upgrade by:

- Migrating the Platform Manager infrastructure.
- Running the Platform Manager migration utility. The utility migrates the following:
 - Password manager configuration and data.
 - Users, roles, and groups.
 - JAAS configuration.

Before Migrating Data

Make sure the old Platform Manager is shut down.

Migrate the Platform Manager Infrastructure

1. Migrate HTTP and HTTPS port configurations as described in "[Migrate the Platform Manager Infrastructure](#)" on page 98.
2. If you customized the Platform Manager Java Service Wrapper, copy the customizations from the old wrapper_conf or custom_wrapper.conf files to the 9.7 custom_wrapper.conf file. The files are located in the *Software AG_directory* \profiles\SPM\configuration directory.
3. For each case below, open the file in the indicated directory in the old installation and in the 9.7 installation. If any values in the two files are different, copy the old value over the 9.7 value. In addition, update file system paths in the 9.7 files to point to the 9.7 installation.

Configuration	File Name in Old and 9.7 Software AG Directories
Debug	\profiles\SPM\configuration \com.softwareag.platform.config.propsloadecom.softwareag. platform.debug.properties
JMX ports	<i>same</i> <i>directory</i> \com.softwareag.jmx.connector.pid- <i>port</i> .properties
Security authorization	<i>same directory</i> \com.softwareag.security.authz.pid.properties
Security LDAP	<i>same directory</i> \com.softwareag.security.ldap.pid.properties
Single sign-on service	<i>same directory</i> \com.softwareag.sso.pid.properties
SSH	<i>same directory</i> \com.softwareag.sshd.pid.properties
Watchdog	<i>same</i> <i>directory</i> \com.softwareag.config.watchdog.pid.properties
Journal logger	\profiles\SPM\configuration\logging\log_config.xml

4. For each case below, open the file in the indicated directory and update file system paths to point to the 9.7 installation.

Configuration	File Name in 9.7 Software AG Directories
JAAS	\profiles\SPM\configuration\jaas.config
Password manager	\profiles\SPM\configuration\security\passman \defaultPassStore.dat and mpw.dat

Run the Platform Manager Migration Utility

For a general description of migration utility behavior, see "[Migration Utilities](#)" on page 28.

Perform a Custom Migration

1. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*\PlatformManager\migrate\bin directory, and run the command `migrate.{bat}`.
2. The utility asks for the full path to one of the following:
 - The Software AG directory that contains the old Platform Manager installation (for example, *C:\old_Software AG_directory* or */opt/old_Software AG_directory*).
 - The Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter N.
4. The utility asks whether to migrate users, roles, and groups; the JAAS configuration; and password manager data.
5. The utility asks whether to export your settings. If you want to perform other migrations by importing the settings from this session, enter Y. If not, enter N.
6. The utility asks whether to begin migration. If you enter Y, the utility migrates the data you selected.

Migrate Using Imported Settings

Imported settings can come from the following:

- Settings you exported from a custom migration. These settings are stored in a file named `migrate.dat`. The file is stored in the *9.7_Software AG_directory* \PlatformManager\migrate directory from which you ran the custom migration. Copy the `migrate.dat` file to any directory on machines that host Platform Manager 9.7 installations to which you want to migrate data.
- Settings in the default migrations provided with Platform Manager. For each old release, the settings are stored in a file named `migraterelease sbs.dat` file in the *9.7_Software AG_directory* \PlatformManager\migrate directory. The settings tell the migration utility to migrate the data listed in ["Overview" on page 98](#).

Migrate Using Imported Settings with Prompting

1. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*\PlatformManager\migrate directory, and run the command `migrate.{bat}`.
2. The utility asks for the full path to the Software AG directory that contains the old Platform Manager installation or to the Zip file you made earlier.
3. The utility asks whether to import migration settings. Enter Y and, when prompted, provide the full path to the `migrate.dat` file or the `migrate{901|951|960}sbs.dat` file.

Migrate Using Imported Settings Without Prompting

On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \PlatformManager\migrate* directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|}  
{-srcDir|-srcFile} full_path_to_{old_Software AG_directory|Zip_file}  
-importFile full_path_to_{migrate.dat|migrate{901|951|960}sbs.dat}  
-silent true
```

Update the Platform ManagerNERV Configuration

Go to the *9.7_Software AG_directory \profiles\SPM\configuration \com.softwareag.platform.config.propsloader* directory and open the *com.softwareag.platform.eda.nerv.properties* file. Update JMS provider references to point to your 9.7 JMS provider, if they do not already. Update file system paths to point to the 9.7 installation.

12 Completing the CentraSite Upgrade

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Overview

You complete the CentraSite upgrade by:

- Running CentraSite scripts that do the following:
 - Migrate configuration data from the old CentraSite and assets from the old Registry Repository to the new CentraSite installation.
 - Transform and migrate the LDAP configuration from the old Registry Repository to the new CentraSite JAAS configuration.
- If necessary, performing manual tasks to recreate settings or object types, and to install GUI extension plug-ins.

Before Migrating Data

1. Make sure the old CentraSite and CentraSite 9.7 are shut down.
2. Export configuration data from the old CentraSite and assets from the old Registry Repository into a Zip file. On the old machine, open a command window, go to the *old_Software AG_directory*/CentraSite/utilities directory, and run this command:


```
sbsExport.{cmd|sh} /full_path_to_zip_file
```

An example of this command is `./sbsExport.sh /tmp/sbs_cs82_data.zip`
3. If the old and new CentraSite installations are on different machines, copy the Zip file to any directory on the 9.7 machine.

Migrate the Data

1. Import configuration data and assets from the Zip file you created earlier. On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory*/CentraSite/utilities directory and run this command:


```
sbsImport.{cmd|sh} /full_path_to_zip_file
```

An example of this command is `./sbsImport.sh /tmp/sbs_cs82_data.zip`
2. Start CentraSite 9.7.
3. Transform and migrate the LDAP configuration to the new JAAS configuration by running this command:


```
CentraSiteCommand.{cmd|sh} generate JaasConfiguration -url CentraSite_9.7_URL -user CentraSite_9.7_admin_user -password password
```

The script generates JAAS LoginModule entries that correspond to the old LDAP configuration and saves the entries in the `jaas.config` file in the *9.7_Software AG_directory*/CentraSite/profiles/CTP/configuration directory.

For each LDAP domain, the script creates user and group files that map internal (CentraSite) properties to external (LDAP) properties and saves the files in the `9.7_Software AG_directory/CentraSite/profiles/CTP/configuration/com.softwareag.platform.config.propsloader` directory.

4. If you use single sign-on with CentraSite, do the following:
 - a. Open the `jaas.config` file in the old and new `Software AG_directory/CentraSite/profiles/CTP/configuration` directories. Copy the following from the old file to the 9.7 file:
 - `ServletHeaderLoginModule` for extracting the user ID from the incoming HTTP header.
 - `SimpleNameMappingLoginModule`, if you are using it.
 - Any other entries you are using to process the extracted user ID.

The 9.7 `jaas.config` file should look like this:

```
CentraSite {
  com.softwareag.security.jaas.login.internal.InternalLoginModule sufficient
  ...
  com.softwareag.security.sin.is.ldap.lm.LDAPLoginModule sufficient
  ...
  com.softwareag.security.jaas.login.modules.ServletHeaderLoginModule
required
  ...
  com.softwareag.security.jaas.login.modules.SimpleNameMappingLoginModule
required
  ...
  com.softwareag.security.sin.is.ldap.lm.LDAPLoginModule required
  ...
};
```

The initial `InternalLoginModule` is normally only for users in the INTERNAL domain, and the initial `LDAPLoginModule` is for LDAP users that are logging in directly and not via single sign-on. If you need only single-sign on logins, you can remove the initial `InternalLoginModule` and `LDAPLoginModule`.

- b. Set up your LDAP configuration to resolve the extracted user ID via LDAP. Modify the generated LDAP login module to enable single sign-on-related options, such as technical user. Apply LDAP single sign-on technical user credentials if necessary.

Complete the Upgrade

1. Change any settings in CentraSite Control that you noted in [Prepare CentraSite](#) .
2. 8.2 upgrade: If you want to use instances of ApplinX object types from CentraSite 8.2 in CentraSite 9.7, manually re-create them using the definitions you noted in [Prepare CentraSite](#) .
3. If you installed plug-ins that are GUI extensions for CentraSite Control in the old CentraSite installation, install them in the CentraSite 9.7 installation.

13 Complete the Mobile Administrator Upgrade

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Overview

You complete the Mobile Administrator upgrade by:

- Running the Mobile Administrator updater to upgrade the Mobile Administrator source code and migrate the Mobile Administrator database.
- Verifying that all features required by your use case are configured.
- Updating any build nodes you used with the old Mobile Administrator.
- Updating the App Store Client.

Run the Updater and Verify Configurations

1. Go to the *Software AG_directory*/MobileAdministrator directory and run the updater by running the command `./update.sh` as root.
2. From the same directory, start Mobile Administrator by running the command `/etc/init.d/appfresh-mobile start`.
3. In Mobile Administrator, click **Settings**, click **Sites**, and click a domain. On the domain page, click **Configuration Assistant**. Make sure all the features you need are configured. If necessary, follow the instructions to configure any features that are missing. Repeat this step for each domain.

Update Build Nodes

1. If you used the Mac OS build node with the old Mobile Administrator, update the build node as follows:
 - a. Go to the **Mobile Administrator > Build Nodes** page at https://Mobile Administrator_URL/build_nodes. Download the `appfresh-build-node-version.zip` file, and extract the files to any directory.
 - b. Launch the build node application. On the **Install** tab, in the **Build Node** field, make sure the displayed build node version corresponds to the version of the build node you just downloaded (that is, `appfresh-build-node-version.zip`).
2. If you used the Windows 8 build node with the old Mobile Administrator, update the build node as follows:
 - a. Go to the Windows Control Panel and uninstall the previous build node.
 - b. Go to the **Mobile Administrator > Build Nodes** page at https://Mobile Administrator_URL/build_nodes. Download and run the `AppFreshBuildNode-version.exe` file.
 - c. Launch the build node application. On the **Build Node** tab, start the build node by clicking **Start**.

Update the App Store Client

1. Go to the https://Mobile Administrator_URL/apps/appfresh-mobile-client/build page.
2. On the **Build Configurations** tab, start the build jobs for the App Store Client by selecting the platforms for which to update the client and clicking **Launch Selected Build Configs**.
3. On the **Build Jobs** tab, verify that the build jobs have completed successfully. Corresponding build nodes should appear on the https://Mobile Administrator_URL/build_nodes page. If they do not, click on the build job to display the details that will help you diagnose the problem.

14 Complete the OneData Upgrade

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- [Overview](#)
- [Run the OneData Migration Utility](#)

Overview

You complete the OneData upgrade by:

- Running the OneData migration utility. The utility migrates configuration data.
- Migrating customizations to the OneData Java Service Wrapper.
- 8.4 upgrade: Enabling new logging method.

Run the OneData Migration Utility

Make sure the old OneData is shut down.

On the 9.7 machine, open a command window, go to the *9.7_Software AG_directory \profiles\ODE\bin\migrate* directory, and run the command below. If an error occurs, the utility exits.

```
migrate.{bat|sh}
{-srcDir|-srcFile} full_path_to_{old_Software AG_directory|Zip_file}
-silent true
```

Before migrating data, the utility backs up the files that contain the 9.7 configuration data in the *9.7_Software AG_directory \profiles\ODE\bin\onedata\config* directory. The backup files have the extension `.bck`.

Migrate Customizations to the Java Service Wrapper

If you customized the old OneData Java Service Wrapper, copy the customizations from the old `wrapper_conf` or `custom_wrapper.conf` files to the 9.7 `custom_wrapper.conf` file. The files are located in the *Software AG_directory \profiles\ODE\configuration* directory.

8.4 Upgrade: Enable New Logging Method

In OneData 8.4, log entries for an action might have been distributed across multiple files. Starting in OneData 9.0, to improve debugging, log entries for an action are written to a single file. You must enable the new method of logging for OneData modules. Follow the examples in the `sample_log4j_config.txt` file in the *9.7_Software AG_directory \profiles\ODE\bin\onedata\config* directory.

15 Completing the Presto Upgrade

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Overview

Presto stores all of its data, including mashups, mashables, apps and workspaces, in the Presto repository. To upgrade, you set up Presto 3.8 to use the Presto 3.7 repository. If you deployed extensions to Presto 3.7 features (for example, if you used scripting in mashups and the scripts are stored in files), you also copy the extensions to the Presto 3.8 installation.

Set Up the Presto Repository

Set Up Repository When Using the Embedded Derby Database

If you used the embedded Derby database for your Presto 3.7 repository, follow the instructions below.

1. Presto 3.8 comes with a prepopulated Derby Presto repository in the `prestorepository` directory. Go to the `9.7_Software AG_directory /Presto/apache-tomee-jaxrs/bin` and rename the `prestorepository` directory (for example, rename the directory `prestorepository_orig`).
2. Go to the `old_Software AG_directory /Presto/apache-tomee-jaxrs/bin` and copy the `prestorepository` and `mashzonerepository` directories to the `9.7_Software AG_directory /Presto/apache-tomee-jaxrs/bin` directory.

Set Up Repository When Using Any Other Database

If you used MySQL, Oracle, PostGres, or SQL Server for your Presto 3.7 repository, follow the instructions below.

1. Go to the `old_Software AG_directory /Presto/apache-tomee-jaxrs/lib` directory and copy the JDBC driver jar file for your database to the same directory in the Presto 3.8 installation.

Database	JDBC Driver Jar File
MySQL	mysql-connector-java-5.1.31.jar
Oracle	ojdbc6.jar
PostGres	postgresql-9.2.1004.jdbc4.jar
SQL Server	jtds-1.3.1.jar

2. If you used MySQL, Oracle, or SQL Server for your Presto 3.7, do the following:

- a. Go to the *9.7_Software AG_directory/Presto/apache-tomee-jaxrs/webapps/presto/WEB-INF/lib* directory and delete the `jackbe-presto-rds-postgre-derby-3.8.jar` file.
 - b. Go to the *9.7_Software AG_directory/Presto/prestorepository* directory and copy the `jackbe-presto-rds-oracle-mysql-mssql-3.8.jar` file to the *9.7_Software AG_directory/Presto/apache-tomee-jaxrs/webapps/presto/WEB-INF/lib* directory.
3. Go to the *old_Software AG_directory/Presto/apache-tomee/jaxrs/conf* directory and copy the `tomee.xml` file to the same directory in the Presto 3.8 installation.

Update the Snapshots Repository Connection Information

If you used Snapshots in Presto 3.7 and you stored the data in a separate Snapshots repository, follow the steps below.

1. Open the Presto 3.8 Admin Console.
2. If the JDBC driver you used with the 3.7 Snapshots repository is not the same driver you used for the Presto 3.7 repository, go to the *old_Software AG_directory/Presto/apache-tomee-jaxrs/lib* directory. Copy the JDBC driver jar file for the database that contains the Snapshots repository over the same file in the same directory in the Presto 3.8 installation.

Database	JDBC Driver Jar File
Derby	<code>derby-embedded-10.5.3.jar</code>
MySQL	<code>mysql-connector-java-5.1.31.jar</code>
Oracle	<code>ojdbc6.jar</code>
PostGres	<code>postgresql-9.2.1004.jdbc4.jar</code>
SQL Server	<code>jtds-1.3.1.jar</code>

3. Update the Snapshots 3.8 configuration to point to the Snapshots 3.8 repository as follows:
 - a. Open the **JDBC Configuration** menu, click **Datasources**, click **SnapshotDataSource**, and then click **Edit**.
 - b. Edit the configuration properties as needed. For information on the properties, see the section on adding a data source in the Presto Administration documentation.
 - c. Click **Save**.

Update the Presto Configuration and Copy Extensions

Most of the Presto configuration is stored in the Presto repository. This section explains how to copy the parts of the 3.7 configuration that were not maintained in the repository, including extensions such as custom security profiles that you deployed in Presto 3.7. The procedure varies depending on whether you used an external configuration directory with Presto 3.7.

Update When an External Configuration Directory Was Used

1. Update the classpath in the application server that hosts Presto 3.8 to work with the external configuration directory and any subdirectories. For instructions, see the topic on setting up an external configuration directory in the Presto Administration documentation.
2. Manually migrate the changes you made in the 3.7 configuration files listed below from Presto 3.7 to the corresponding files in Presto 3.8. Because of the complexity of the configuration, the easiest method is to use the difference tool offered by many text editors.
 - All files listed in the topic on configuration files that must be internal in the Presto Administration documentation.
 - The `userRepositoryLdap.properties` file, located in the external configuration directory.

Update When No External Configuration Directory Was Used

1. Copy any extensions you deployed from Presto 3.7 to the corresponding directory for Presto 3.8. See the Presto Administration documentation for a complete list of extensions you might need to copy.
2. Manually migrate the changes you made in the 3.7 configuration files listed below from Presto 3.7 to the corresponding files in Presto 3.8. Because of the complexity of the configuration, the easiest method is to use the difference tool offered by many text editors.
 - All files listed in the section on configuration files that must be internal in the Presto Administration documentation.
 - The `userRepositoryLdap.properties` file, located in the `old_Software AG_directory / Presto/webapps/presto/WEB-INF/classes` directory.
3. If you used database mashables, go to the `old_Software AG_directory / Presto/apache-tomee-jaxrs/presto/WEB-INF/config/db/jdbc` directory. Copy the database driver jar files to the same directory in the Presto 3.8 installation.

Point to the 3.8 Online Help

Point Presto 3.8 at the 3.8 help documentation. For instructions, see the section on updating help or using offline help in the Presto Administration documentation, and use the URL <http://mdc.jackbe.com/prestodocs/v3.8/>.

Upgrade the Integrated MashZone Server and RTBS Server Configurations, and MashZone Feeds

Presto's Integrated MashZone Server stores additional data. Follow the instructions below to copy the data to the Presto 3.8 installation.

1. Go to the *old_Software AG_directory*/Presto/mashzone/data/resources directory and copy the files to the same directory in the Presto 3.8 installation.
2. Go to the *old_Software AG_directory*/Presto/mashzone/data/jdbcdrivers directory and copy the files to the same directory in the Presto 3.8 installation.
3. Go to the Admin Console in Presto Hub. Expand the MashZone Server section, click **Server Settings**, and click the **Resources** tab. Review the paths to resource directories. If any paths point to directories in the Presto 3.7 installation, copy those directories to the Presto 3.8 installation and then update the paths in MashZone Administration to point to the correct location in the Presto 3.8 installation.

Update Mashups that Use RAQL Queries

Presto 3.8 contains significant changes and additions to the RAQL query syntax that you use in mashups. Some Presto 3.7 mashups that include RAQL queries will not run in Presto 3.8, and you will need to update them. For other Presto 3.7 mashups, you might want to take advantage of new RAQL query syntax. For complete information, see the topic about migrating RAQL queries from 3.7 to 3.8 in the Presto documentation.

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Completing Final Upgrade Tasks for Multiple Products, and Troubleshooting

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Complete Final Upgrade Tasks for All Products

- Configure your products as described in the 9.7 product documentation.
- If you installed your 9.7 products on a different machine than your old products, make sure to update host names in your 9.7 products, in the connections between your products, and in your database tables. This guide indicates many locations in which to update host names, but make sure you also specify the correct host names when you configure your 9.7 products using the instructions in the product documentation. Also make sure any absolute paths in the 9.7 configuration files point to valid locations, or change them to be correct for the new machine. If the machine has a different operating system or hardware, make sure your JVM settings are correct.
- Use the Software AG Update Manager you installed with the 9.7 products to apply the latest fixes to the 9.7 products you installed. For instructions, see *Using the Software AG Update Manager*.
- In each release, changes are made to product behavior, services, parameters, properties, and APIs. You might need to modify product files or assets to accommodate these changes. For detailed information about the changes, read the product readmes for each of the releases from your old release through the 9.7 release. For example, if you are upgrading from release 8.2, read the product readmes for releases 8.2, 9.0, 9.5, 9.6, and 9.7. Also read the product release notes for those releases to understand new functionality. Readmes and release notes are available on the Software AG Documentation website.
- After installation, you might have set Windows services for products to Manual, and disabled scripts that start UNIX daemons, to avoid automatically starting both old and new products. When your new environment is ready, after you stop running the old products and when you want to start running the new ones, you can reset the Windows services to Automatic, and re-enable the UNIX scripts.

Troubleshooting

If you encounter errors during the upgrade, try the troubleshooting methods below.

- Look in log files.

Type of Log	Location
Installation and uninstallation	9.7_ <i>Software AG_directory</i> \install\logs directory

Type of Log	Location
Product	In a logs directory in the product file structure, or in the <i>9.7_Software AG_directory \profiles\product \logs</i> directory.
Data migration	<i>9.7_Software AG_directory \install\logs</i> directory and product directories indicated by the upgrade procedures
Database migration	<i>9.7_Software AG_directory \common\db\logs</i> directory.

- Go to the [Knowledge Center](#) on the Empower Product Support Website and search using keywords such as upgrade.
- Look up error messages in the *webMethods Error Message Reference*.
- Go to the [Software AG Developer Community](#) and join the upgrade discussion forum.

If you cannot resolve the problem using the methods above, contact Software AG Global Support.