



# **Akana API Platform:**

# **Upgrade Guide**

## **Version 8.0 to 8.2**

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Upgrade Guide

Version 8.0 to 8.2

November, 2016 (update v2)

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## Overview

This technical note provides instructions for upgrading from Policy Manager 8.0 (PM80), or Policy Manager 8.0 with Community Manager, to Akana API Platform 8.2, which includes Policy Manager 8.2 and Community Manager 8.2.

In performing the upgrade, make sure you follow the steps in sequence.

Upgrade steps are broken into the sections below:

### Planning the upgrade

Includes information you should consider and actions you should complete before starting the upgrade process, including:

- Conditional pre-install steps
- Gathering ZIP files

### Performing the upgrade

A step-by-step guide through the entire upgrade process.

### Completing the API Platform post-upgrade tasks

Tasks to complete after the upgrade, to:

- Update your database schemas and data to the new version
- Make sure all new features are fully set up

**Note:** Some of the steps are optional, depending on variations in your installation, such as operating system, database, and optional components. Read through all the steps to make sure you don't miss anything that applies to your installation. For a high-level summary, refer to the table of contents.

## Changes Log

The table below shows changes made to this document since the initial release in July, 2016.

Date/release version	Changes
Aug 2016, update version 1	Add pre-upgrade step to remove <b>com.soa.oauth.interfaces</b> bundle. See <a href="#">Step 0-0: Conditional, Pre-Upgrade Task for upgrades from 8.0.5 or earlier</a> on page 9.
Nov 2016, update version 2	Update to instructions to <a href="#">Step 1-8: (Conditional): Unregister and re-register the Windows service</a> on page 17, since file name has changed in recent updates.

## Upgrading Policy Manager for DataPower

If you're upgrading Policy Manager for DataPower, follow the same steps in this document that you would use for upgrading Network Director.

## Planning the Upgrade

There are some steps you might need to take before starting the upgrade process, and some information you'll need to consider to determine how to proceed, including:

- Reviewing the Akana API Platform release notes (available from the Support site).
- Planning the upgrade for additional features.
- Gathering ZIP files from the Akana Support site.

### Reviewing release notes

Review the release notes so that you are aware of changes to the platform. Check for upgrade notes.

### Planning the upgrade for additional features

If you have a specific add-on feature installed, such as the Integration Services option pack, SiteMinder Security Provider, or SAML Web SSO Security Provider feature, it's important that you download the new release version package for the same feature.

**Note:** In version 8.2, some of the additional packages have been incorporated into the Akana API Platform along with Community Manager and Policy Manager. Depending on the additional features you're using, you might not have to install updates.

If one of the features is installed in a container that you copy over from the earlier version during the upgrade process, and you don't upgrade the add-on, container startup might fail after you complete the upgrade process. When you upgrade, make sure you have the latest version for any features you're using. See [Step 1-13: Verify that features were updated correctly](#) on page 20.

**Note:** The SAML Web SSO feature remains at version 8.0. There is no upgrade to version 8.2.

**Note:** If you're upgrading from an earlier version up to and including 8.0.5, you'll need to uninstall a specific bundle, **com.soa.oauth.interfaces**, as the first step before starting the upgrade procedure. For instructions, see [Step 0-0: Conditional, Pre-Upgrade Task for upgrades from 8.0.5 or earlier](#) on page 9.

### Gathering ZIP files from the Akana Support site

Before starting the upgrade, gather all the ZIP files and any other information you'll need for the entire process.

You'll need all the ZIP files listed below. They are listed in the order in which they should be installed.

All files listed below are available from the Akana Support site, Downloads page:  
<https://library.akana.com/display/MAIN/Downloads>.

You'll need to install files for:

- 1 **The Akana Platform:** an OSGI environment. Akana features run within this environment, obey its constraints, and make use of its facilities. The platform supports Windows and Unix (Linux, Solaris, AIX) environments.
- 2 **The Akana API Platform** (previously known as Policy Manager and Community Manager).
- 3 **Add-Ons:** Any platform add-ons you are using that are not included in the Akana API Platform.

**Note:** If your installation uses the Akana Integration Services add-on, you'll have to complete an extra step before beginning the upgrade process. Integration Services are now part of the main Akana API Platform installation ZIP file; there is no longer a separate bundle to install. However, you must uninstall the Akana Integration Services feature as the first step of the installation procedure. See [Step 1-0: Conditional, if Akana Integration Services feature is installed: uninstall the feature](#) on page 10.

### ***Gather ZIP files and create folder***

- 1 On your installation machine, create a folder for the new version: for example, **plat82** for API platform 8.2.
- 2 In this folder, copy all the ZIP files listed below. You should have at minimum two files, with additional files if there are updates and/or add-ons.

### ***ZIP files for update to version 8.2***

- 1 To upgrade the Akana platform, first locate the appropriate file for the operating system you're using (see [http://docs.akana.com/sp/platform\\_install/installing\\_akana\\_platform.htm#download\\_platform\\_zip\\_82](http://docs.akana.com/sp/platform_install/installing_akana_platform.htm#download_platform_zip_82), section **For Version 8.2**). You'll see the below or a later version (online doc not yet updated):
  - a) **Windows (includes JRE):** **akana-platform-win-jre-8.2.xxx.zip**
  - b) **Linux only (includes JRE):** **akana-platform-linux-jre-8.2.xxx.zip**
  - c) **Windows, Linux, or Solaris (does not include JRE; provide your own JRE, version 1.8):** **akana-platform-8.2.xxx.zip**

**Note:** When using this JRE you must modify the **bin/setDEMS.sh** script and comment out lines that relate to your JRE and then ensure you have JAVA set correctly.

- 2 Check if there are any Akana platform updates, and if so download the latest ZIP file.

**Note:** Akana API Platform 8.2 requires Akana Platform 8.2.

- 3 To upgrade the Akana API platform to version 8.2, locate the file below:
  - a) **akana-api-platform-8.2.xxx.zip** (contains all necessary files for Akana API Platform installation, including Policy Manager and Community Manager installation)
- 4 Check if there are any Akana API platform updates, and if so download the latest ZIP file.

### ***ZIP files for add-ons***

Check the Akana Support site, Downloads page: <https://library.akana.com/display/MAIN/Downloads> for the latest ZIP file for any additional add-ons you are using in your installation. Get all applicable update files for your installation. You'll extract these after the other files.

For product compatibility information, refer to the applicable matrix on the Akana support site:  
<https://library.akana.com/display/MAIN/Product+Compatibility+Matrices>.



# Performing the Upgrade

**Note:** The instructions in this chapter are for upgrade from Policy Manager 8.0 to Akana API Platform 8.2. If you're upgrading from a version earlier than 8.0, you'll need to perform additional steps first, to upgrade to Policy Manager 8.0. For instructions, see [http://docs.akana.com/ag/assets/AAP\\_08\\_00\\_Upgrade\\_Guide.pdf](http://docs.akana.com/ag/assets/AAP_08_00_Upgrade_Guide.pdf).

There is a conditional first step, see [Step 0-0: Conditional, Pre-Upgrade Task for upgrades from 8.0.5 or earlier](#) below.

Then, at a high level, to perform the upgrade, you'll complete the following actions:

- 1 Install the Akana API Platform 8.2 in a new location.
- 2 Copy the PM80 container instances to the instances folder for the AP82 installation.
- 3 Perform the upgrade steps from the AP82 installation, following the exact sequence given below.

## **Step 0-0: Conditional, Pre-Upgrade Task for upgrades from 8.0.5 or earlier**

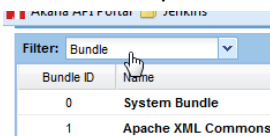
If you're upgrading from an earlier version up to and including 8.0.5, and using Community Manager, and didn't perform this step during a 7.2 to 8.0 upgrade, you'll need to uninstall a specific bundle, **com.soa.oauth.interfaces**, as the first step before starting the upgrade procedure.

Complete this step before any other tasks.

Follow this procedure on all Policy Manager containers with Community Manager, or any Community Manager add-on features, installed.

### ***To uninstall the com.soa.oauth.interfaces bundle***

- 1 Identify the ID of the **com.soa.oauth.interfaces** bundle:
  - a) Log in to the Akana Administration Console for the container.
  - b) Click the **Installed Features** tab.
  - c) From the drop-down menu at the top left, choose **Bundle**, as shown below.



Bundle ID	Name
0	System Bundle
1	Apache XML Commons

- d) Look for the **com.soa.oauth.interfaces** bundle.
  - e) Note the ID of the bundle (in the Bundle ID column).
- 2 Install the TUI for the container (see [docs.akana.com/sp/container\\_management/using\\_tui.htm](http://docs.akana.com/sp/container_management/using_tui.htm)).

- 3 Open up the TUI command prompt for the container, and run the following command to uninstall the bundle:

```
uninstall {bundleID}
```

- 4 Repeat Steps 1–3 for any additional containers that have Policy Manager plus any Community Manager features installed.

Once these steps are complete, proceed with the standard upgrade process.

### **Step 1-0: Conditional, if Akana Integration Services feature is installed: uninstall the feature**

If your previous installation included the Akana Integration Services feature, for integration with the Lifecycle Manager product, you won't need to install that feature separately in 8.2. However, you'll need to uninstall the existing version of the feature before continuing with the installation process.

#### ***To uninstall the Akana Integration Services feature***

- 1 Log in to the version 8.0 Akana Administration Console using Administrator credentials.
- 2 Click the **Installed Features** tab.
- 3 Click the **Akana Integration Services** feature.
- 4 In the right column, click the Uninstall icon.
- 5 Follow the prompts to uninstall the feature.

The next step is to start the upgrade.

### **Step 1-1: Turn off scheduled jobs**

Before upgrading, you must turn off scheduled jobs in the configuration settings, including:

- com.soa.scheduler.quartz
- simple.scheduler.enabled

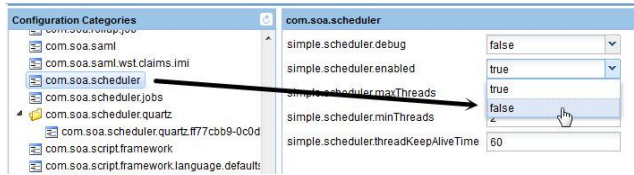
When upgrade is complete, you'll turn these properties back on again (see [Step 1-17: Turn scheduled jobs back on](#) on page 23).

**Note:** Perform this step for all PM80 containers with Policy Manager features installed.

#### ***To turn off scheduled jobs***

- 1 Log in to the Akana Administration Console using Administrator credentials.
- 2 Click the **Configuration** tab.
- 3 Turn off **com.soa.scheduler.quartz**:
  - a) In the **Configuration Categories** section, find **com.soa.scheduler.quartz**.
  - b) Locate the **org.quartz.scheduler.enabled** property and change it to **false**.
  - c) Click **Apply Changes**.

- 4 Turn off **com.soa.scheduler**:
  - a) In the **Configuration Categories** section, find **com.soa.scheduler**.
  - b) Locate the **simple.scheduler.enabled** property and change it to **false**, as shown below.



- c) Click **Apply Changes**.

## **Step 1-2: Back up Policy Manager 8.0 and stop containers**

The next step is to back up your PM80 and stop containers, before you upgrade. Follow the steps below.

### ***To back up Policy Manager 8.0 and stop containers***

- 1 Back up your PM80 database.
- 2 Stop any containers that are currently running.

This is required to update the database schema to AP82. Stopping the containers ensures that the database is not locked while the update is in progress. For more information, refer to **Starting and Stopping a Container Instance** on the Akana docs site:

[http://docs.akana.com/sp/container\\_management/start\\_stop\\_container\\_instance.htm](http://docs.akana.com/sp/container_management/start_stop_container_instance.htm).

- 3 Back up your PM80 release directory, using your database management tool, and save the backup file to a safe location. For example, if you're using MySQL, the backup command might look something like the below:

```
C:\Program Files\MySQL\MySQL Server 5.1\bin>mysqldump.exe -e -u root -p -h localhost pm71 >
C:\backups\pm80-20160101
```

## **Step 1-3: Extract new ZIP files in sequence**

Now you're ready to install the new version. Make sure you install from the various ZIP files in the correct sequence.

**Note:** the filenames used below are examples. When you download files from the Support site, you might have an updated variation.

### ***To extract the new ZIP files***

**Note:** When unzipping files, if you are prompted to replace a file, choose **All** to accept all the new files.

- 1 Go to the folder with the downloaded ZIP files, which you created earlier. See [Gather ZIP files and create folder](#) on page 7.

Make sure the folder includes all the ZIP files you'll need for upgrade. You should have at least two files, and possibly more, as detailed in [ZIP files for update to version 8.2](#) on page 7.

- 2 Extract the Akana platform file:
  - a) **akana-platform-win-jre-8.2.xxx.zip** or comparable file for Linux or other operating system.
  - b) If there are any updates for the Akana Platform, extract the update file next.
- 3 Extract the Akana API Platform file (contains all necessary files for Policy Manager and API Platform/Community Manager installation):
  - a) **akana-api-platform-8.2.xxx.zip**
  - b) If there are any updates for the Akana API Platform, extract the update file next.
- 4 Extract the ZIP files for any add-ons you're using.

**Note:** After the installation is complete, **do not** launch the Configure Container Instance Wizard/configure the API Platform container until you've completed the next step, below.

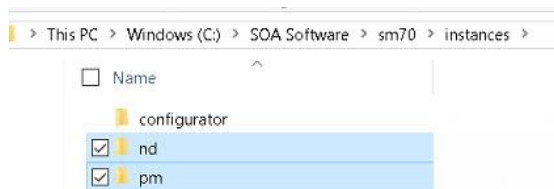
### **Step 1-4: Copy PM80 container instances to AP82**

The next step is to copy container instances to your new installation.

#### ***To copy PM80 Container Instances to AP82***

- 1 Go to the PM80 backup directory, and locate the PM80 container instances. For example:
  - pm80/instances/{pm\_instance}
- 2 Copy the PM80 container instances. Note:
  - **Include** PM80, Network Director, and Agent container instances.
  - **Do not include** the PM80 configurator or the PM80 default container folder.

An example is shown below.



- 3 In the PM82 container instances folder (PM82/instances/{pm\_instance}), paste the container instances that you copied.
- 4 Delete the log folder so that the logs will only include information for the new version, not for the old version.

### **Step 1-5: Clear Configurator cache (if needed)**

Before performing the upgrade, make sure the configurator cache is clear. At this point, there won't be any cache unless you launched the Configurator at the end of Step 1-3. To be sure, follow the steps below.

**To clear configurator cache**

- 1 Locate the configurator cache folder: \instances\configurator\cache, as shown below.



- 2 Delete the folder if it exists (if there is no cache, the folder will not be there).

**Step 1-6: Upgrade container**

You'll need to perform the upgrade procedure on each container you're upgrading to AP82, using the **Configure Container Instance** wizard.

First upgrade the Policy Manager container, then Network Director, and then any other containers.

**Note:** Before you upgrade, make sure you've completed all previous steps, including copying the container instances (see [Step 1-4: Copy PM80 container instances to](#) on page 12).

There are three ways you can upgrade the container:

- **Via the user interface:** see [Upgrade container to Akana API Platform 8.2 \(GUI\)](#) on page 13.
- **Silent install:** see [Upgrade container to Akana API Platform 8.2 \(silent upgrade\)](#) on page 15
- **Command line install:** [Upgrade container to Akana API Platform 8.2 \(command line\)](#) on page 16

***Upgrade container to Akana API Platform 8.2 (GUI)***

Upgrade via the GUI launches the Configurator wizard, which walks you through the upgrade process.

***To upgrade the container to Akana API Platform 8.2 (via the GUI)***

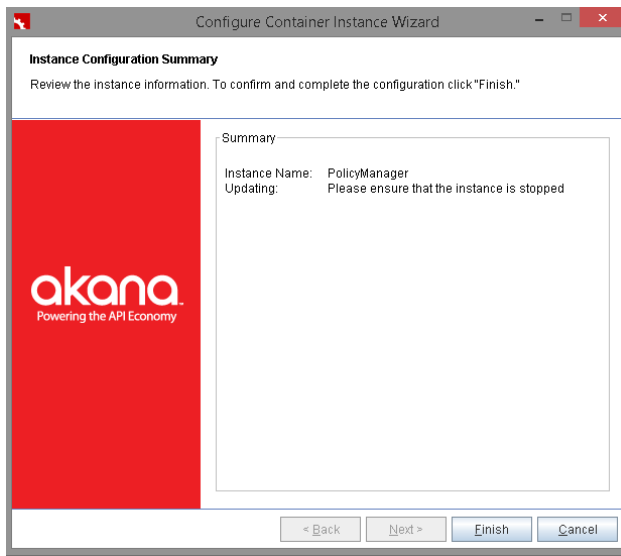
- 1 Open up a command prompt.
- 2 Go to the new folder where you unzipped the version 8.2 files, then navigate to the \bin subfolder and run the following command:  
  
**startup configurator**
- 3 The Configurator starts, and the **Welcome to Configure Container Instance Wizard** page displays. Click **Next**.

- 4 At the **Instance Name** screen, specify the name of the Akana container instance the upgrade will be applied to, as shown in the example below (same name as previous installation). Leave the **Container Key** field blank; the upgrade process will use the container key for the container being upgraded. Click **Next**.

- 5 At the **Instance Already Exists** page, to apply the PM80 to AP82 upgrade, click **Update**, as shown below, and then click **Next**.

**Note:** This updates the instance you copied over in [Step 1-4: Copy PM80 container instances to](#) on page 12.

- 6 At the **Instance Configuration Summary** page, shown below, verify that the instance has been stopped, and then click **Finish**.



- 7 When the container update process is complete, the **Update Complete** page displays with a summary of the number of bundles that were updated.
- 8 Click **OK** to close the wizard.

## ***Upgrade container to Akana API Platform 8.2 (silent upgrade)***

You can set up the **Configure Container Instance Wizard** update process to run in an automated mode (silent mode).

To do this you essentially need to set up a properties file that contains a set of property values that the wizard uses to automatically configure a container instance.

### ***To upgrade to Akana API Platform 8.2 using silent mode***

- 1 Define a properties file for upgrade in silent mode:
  - a) Choose a file name; for example, **upgrade.properties**.
  - b) In the file, add the following default content:

```
container.instance.name=[container_instance_name]
wizard.mode=update
```

For example:

```
container.instance.name=policymanager
wizard.mode=update
```

- 2 Determine system properties you want to use when running the upgrade in silent mode. There are two possible properties, which together are used to perform the silent upgrade:
  - a) **silent** (If **true**, silent configuration will be performed)
  - b) **properties** (path/filename for properties file to be used for configuration)

- 3 Run the upgrade in silent mode, using either of the following commands, depending on the operating system:

- Windows:

```
\bin>startup.bat configurator "-Dsilent=true" "-Dproperties={property file directory location}\upgrade.properties"
```

- Unix:

```
/bin>startup.sh configurator -Dsilent=true -Dproperties=opt/{property file directory location}/upgrade.properties
```

- 4 Repeat for Network Director or Agent containers:
  - a) Before upgrading each instance, repeat [Step 1-5: Clear Configurator cache](#) on page 12.
  - b) Then, for each container, repeat the steps above.
- 5 Optional post-upgrade step for silent mode users not using the Admin Console:
  - If you will not be using the Akana Administration Console, you can install the Policy Manager 8.2.0 schema manually using a third-party database schema management tool.
  - For assistance in installing the schema, contact Akana Customer Support.

**Note:** If you are not using the Akana Administration Console, you are done with the upgrade; skip the rest of the upgrade steps.

## ***Upgrade container to Akana API Platform 8.2 (command line)***

You can also perform the upgrade process from the command line. Follow the steps below.

### ***To upgrade to Akana API Platform 8.2 from the command line***

- 1 Execute the following in the \bin folder depending on your operating system:

- Windows:

```
startup.bat configurator "-Dsilent=true" "-Dcontainer.instance.name={Instance name}" "-Dwizard.mode=update"
```

- Unix:

```
startup.sh configurator -Dsilent=true -Dcontainer.instance.name={instance name} -Dwizard.mode=update
```

## ***Step 1-7: Upgrade additional containers***

Repeat the upgrade process for all additional containers:

- First, any additional containers running Policy Manager and/or the API Platform.
- Then, any Network Director or Agent containers.

### ***To upgrade additional containers***

- 1 Before upgrading each instance, repeat [Step 1-5: Clear Configurator cache](#) on page 12.
- 2 Then, for each container, repeat [Step 1-6: Upgrade container](#) on page 13.



## **Step 1-8: (Conditional): Unregister and re-register the Windows service**

If your containers are registered as a Windows service, so that the container will start automatically when Windows starts, you must unregister the old version and register the new version, for each container.

If you're not sure which containers are registered as a Windows service, you can check in the Windows Control Panel (**Administrative Tools > Services**). To change the services, you must run as Administrator.

### ***To unregister and re-register the Windows service***

- 1 Open a command prompt in Administrator mode (If you don't use Administrator mode, Windows prompts for Admin permission before unregistering/registering the service, but doesn't actually start the service).
- 2 Unregister the existing Windows Service from the previous installation. For the specific command, see [Command to unregister and re-register the Windows service](#) below.
- 3 Register the new version as a Windows service. For the specific command, see [Command to unregister and re-register the Windows service](#) below.

If you're running in Administrator mode, Windows registers the service and also starts it.

- 4 Repeat steps 2 and 3 for each additional container that's registered as a Windows service.

### ***Command to unregister and re-register the Windows service***

The exact command/filename for unregistering/registering the Windows service might be different depending on the version of the product that you're upgrading to.

#### **Versions up to 8.1.6 or 8.2.1**

For upgrade of versions up to 8.1.6 or 8.2.1, use the older commands:

- To unregister the Windows service:

```
.\\sm70\\bin\\unregisterContainerService.bat {instance_name}
```

- To register the Windows service:

```
.\\{plat_82_foldername}\\bin\\registerContainerService.bat {instance_name}
```

#### **Versions 8.1.7 and later or 8.2.2 and later**

For upgrade of versions 8.1.7 and later or 8.2.2 and later, use the new commands:

- To unregister the Windows service:

```
.\\sm70\\bin\\unregisterContainerServiceYAJWS.bat {instance_name}
```

- To register the Windows service:

```
.\\{plat_82_foldername}\\bin\\registerContainerServiceYAJWS.bat {instance_name}
```

## **Step 1-9: Start the containers**

**Note:** If you registered your containers as Windows services, in the previous step, the containers should already be running.

There are several ways you can start a container: Windows, as Windows service, or Unix. Follow the applicable procedure below.

### ***To start the container (Windows)***

- 1 Navigate to the \bin folder.
- 2 Type the following:

```
startup {instance_name}
```

### ***To start the container (as Windows service)***

- 1 Launch the Program Group (**Settings > Control Panel > Administrative Tools > Services**).
- 2 Select the Akana Container Instance (the instance name is displayed as the Container Key).
- 3 From the **Actions** menu, select **Start**.

### ***To start the container (Unix)***

- 1 Navigate to the /bin folder.
- 2 Type the following:

```
startup.sh {instance_name}
```

### ***To start the container (Unix, Background)***

- 1 Navigate to the /bin folder.
- 2 Type the following:

```
startup.sh {instance_name} -bg
```

## **Step 1-10: Clear browser cache**

Before launching the Akana Administration Console, clear the browser cache and then refresh the page, or start a new session in a browser private window. This ensures that you see the user interface changes included in the Policy Manager updates.

This completes the product installation. The next steps walk you through additional updates you'll need to make to complete the process, including updating database schemas and data.

## **Step 1-11: Launch the Akana Administration Console**

Now it's time to launch the Administration Console and complete the installation tasks.

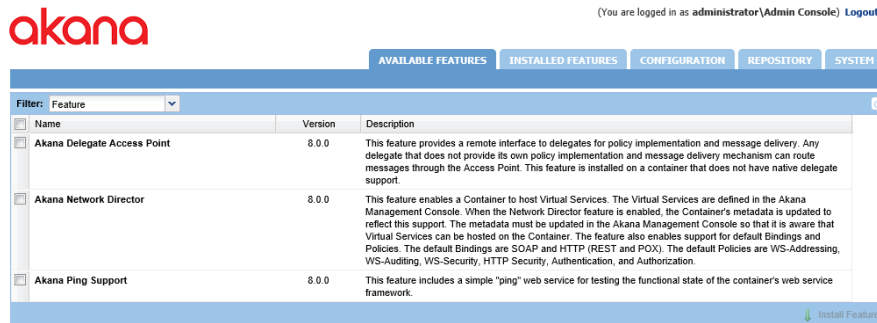
**Note:** The rest of the installation tasks are completed on containers running PM/CM only. There is no need to run them on Network Director containers.

## To launch the Akana Administration Console

- 1 Launch the Akana Administration Console for the updated container instance:

`http://{hostname}:{port}/admin`

- 2 Log in to the Akana Administration Console as an Administrator. The Akana Administration Console launches and displays the **Available Features** tab, as shown below.



## Step 1-12: Refresh repository

Verify that the repository is there. Refresh if needed.

## To verify/refresh the repository

- 1 Click the **Repository** tab and verify that the **Akana API Platform Repository 8.2.0** and **Akana Platform Repository 8.2.0** are both present. An example is shown below.



- 2 Conditional: if you don't see both these repositories, click **Refresh** to update.

### Further installation steps are conditional:

- If your container doesn't have Policy Manager features installed (Akana Policy Manager Console and Akana Policy Manager Services), the upgrade is complete.
- If your container **does** have Policy Manager features installed (Akana Policy Manager Console and Akana Policy Manager Services), continue.

## **Step 1-13: Verify that features were updated correctly**

At this point, check that all the features installed in your implementation have been correctly upgraded to the new version you're installing.

If there are any issues, check that you followed all steps correctly.

If needed, contact Technical Support.

## **Step 1-14: Run pending installation tasks and restart container**

Once you've installed and configured the Policy Manager features (Akana Policy Manager Console and Akana Policy Manager Services) on your Community container, the next step is to run any pending installation tasks.

Pending Installation tasks should include at least the below:

- **Manage Schemas:** Updates the database schemas for the new version. This task needs to be done only once.
- **Provisioning:** Initializes resources associated with the feature set you're installing. This task needs to be done on each container.

### ***To run pending installation tasks***

**Note:** Pending installation tasks might vary according to your upgrade process. When you click **Complete Configuration**, the upgrade process leads you through any tasks that are needed.

- 1 In the Akana Administration Console, go to **Installed Features > Pending Installation Tasks**. At the bottom left, click **Complete Configuration**, as shown below.

The screenshot shows the Akana Administration Console interface. The top navigation bar includes tabs for 'AVAILABLE FEATURES', 'INSTALLED FEATURES', 'CONFIGURATION', 'DEPENDENCIES', and 'SYSTEM'. The 'INSTALLED FEATURES' tab is active, displaying a table of installed features. The table has columns for Name, Version, Description, and an Uninstall button. Below the table, the 'Pending Installation Tasks' section is visible, indicating that there are 2 installation tasks pending completion. The tasks listed are 'Manage Schemas' and 'Provisioning'. A red circle highlights the 'Complete Configuration' button at the bottom left of the interface.

Name	Version	Description	Uninstall
Akana Admin Console	8.1.1	The Admin Console is used to manage the features and configuration of an Akana container instance. It provides a simple browser-based user interface that allows an administrator to control most aspects of the container including all configuration properties, access to remote and local repositories, addition and removal of product features, and the ability to update installed features.	
Akana Managed Services	8.0.0	Installs the Policy Manager system services. This feature is used for multi-container deployments and is also installed as part of the Akana Policy Manager Services feature (for single container deployments) along with Akana Security Services, and Akana Scheduled Jobs features.	
Akana Scheduled Jobs	8.0.0	Installs a series of system background jobs that are executed by the Policy Manager job scheduler. This feature is used for multi-container deployments and is also installed as part of the Akana Policy Manager Services feature (for single container deployments) along with Akana Managed Services, and Akana Security Services features.	
Akana Security Services	8.0.0	Installs Policy Manager security-related services. This feature is used for multi-container deployments and is also installed as part of the Akana Policy Manager Services feature (for single container deployments) along with Akana Scheduled Jobs, and Akana Managed Services features.	
Akana Policy Manager Console	8.0.0	This feature includes a web based user interface for the central Policy Manager governance application. The user interface provides a dashboard and the primary interface for configuration, management and administration of Policy Manager and Service Manager. The console must interact with a Container (may be the same container) configured with the Akana Policy Manager Services to fulfill the core central governance application requirements.	
Akana Policy Manager Services	8.0.0	This feature includes services provided by the central Policy Manager governance application. These services include, but are not limited to, UDDIv2 and UDDIv3, WS-MetadataExchange, container Configuration, an XACML Policy Decision Point, a WS-Ticket Security Token Service, Alert reporting, and RESTful interfaces to the governance model. In addition, this feature includes engines for performing Quality of Service calculations and health and status monitoring.	
Akana Community Manager APIs	8.0.3	This feature deploys Community Manager APIs in the container.	
Akana Community Manager Scheduled Jobs	8.0.3	This feature enables Community Manager scheduled jobs on the container.	
Akana Community Manager	8.0.3	This feature includes the complete Community Manager developers portal including the APIs that can be used by applications wanting to integrate with Community Manager. This feature should be configured with the same database that Policy Manager services feature is configured with though Policy Manager services feature and Community Manager need not be deployed in the same container.	
Akana Community Manager Default Theme	8.0.3	This feature provides the Default Theme for API Platform and can only be deployed in the same container as the Akana API Platform feature.	
Akana OAuth Provider Agent	8.0.3	OAuth Provider Agent offers OAuth Provider capabilities in the Network Director container.	
Akana OAuth Provider	8.0.3	This feature offers OAuth Provider capabilities in an Akana container.	
Akana Community Manager OAuth Provider Agent	8.0.3	Akana API Platform OAuth Provider Agent. This feature is used when OAuth Provider is needed in a container without database access.	
Akana Community Manager OAuth Provider	8.0.3	This feature is an Akana API Platform add-on for the OAuth Provider that installs on top of the Akana API Platform feature.	
Akana API Platform Plug-In	8.0.3	This feature adds Community Manager extensions to other features where Community Manager extensions are needed. For example, this plug-in adds XACML add-on to PM Services and OAuth application support to OAuth provider.	
Akana API Security Policy Handler	8.0.3	This feature includes Network Director extensions supporting API Platform security policies for application and end user authentication. This feature needs to co-exist with Akana Network Director feature.	
Akana Community Manager Policy Console	8.0.3	This feature includes Policy Manager Console extensions supporting Community Manager security policies for application and end user authentication. This feature needs to be installed in containers that have the Akana Policy Manager Console feature already installed or along with the Akana Policy Manager Console feature.	

**Pending Installation Tasks**  
There are 2 installation task(s) pending completion.

- Manage Schemas
- Provisioning

**Complete Configuration**

- 2 The **Manage Schemas Wizard** starts. In the **Available Schemas** section, add the schemas listed. It should look something like the below. There might be variations depending on the features you're using. Click **Finish**.



- 3 The schemas are installed. At the summary page, click **Next Task**.
- 4 Conditional: Depending on the container scenario, the **Provisioning** wizard might start, as shown below. Make sure **Perform Provisioning** is checked, and then click **Finish**. The provisioning task runs, and the Provisioning Summary displays.



- 5 Restart the container.

**Note:** If the container doesn't restart automatically, restart it manually.

## **Step 1-14: Upgrade all containers before installing the upgrade tool**

Before you install the Akana Upgrade Tool 8.2 (next step), make sure:

- All containers are upgraded.
- Pending installation tasks are complete for all containers.

Essentially, make sure all steps, from [Step 1-5: Clear Configurator cache \(if needed\)](#) on page 12 through to [Step 1-14: Run pending installation tasks and restart container](#) on page 20, are complete for every container.

## **Step 1-15: Install Akana PM 8.2 upgrade tool to upgrade database**

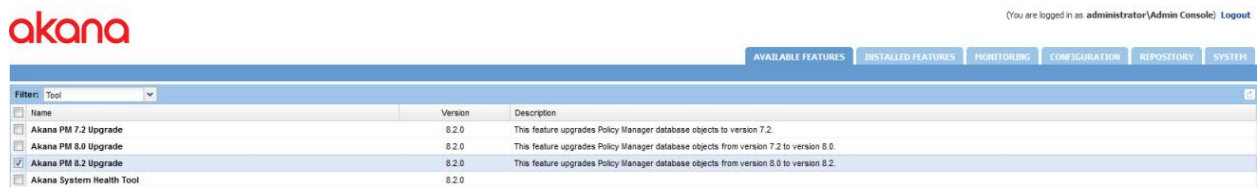
**Note:** Perform this step only once, on one container that has database connectivity and has Policy Manager Service installed.

After the container has successfully restarted, the next step is to install the 8.2 upgrade tool. This upgrades the database to the new version. Follow the steps below.

### ***To install the upgrade tool***

- 1 Launch the Akana Administration Console for AP82 using Administrator credentials.
- 2 Click the **Available Features** tab.
- 3 From the **Filter** drop-down, select **Tool**.

- 4 Select **Akana PM 8.2 Upgrade** and click **Install Feature**, as shown below. The upgrade tool is installed.



- 5 Click **Configure**. The 8.0 to 8.2 upgrade wizard appears, as shown below.



- 6 To complete the configuration, click **Finish**.
- 7 At the prompt, restart the container.

## **Step 1-16: After installing upgrade tool, complete configuration**

Once you've installed and run the upgrade tool, there are three more tasks to run to complete the configuration:

- 1 An additional pending configuration task: Upgrade Database Objects to the 8.2 Model. See [To upgrade database objects to 8.2](#) below.
- 2 Run the provisioning task again, once for each Policy Manager container. See [To run provisioning on all containers](#) below.
- 3 Restart all containers. See [To restart all containers](#) below.

### ***To upgrade database objects to 8.2***

- 1 Run the pending configuration task (once per installation):
- 2 In the Akana Administration Console, go to the **Configuration** tab.
- 3 At the bottom left, click **Upgrade Database Objects to 8.2 model**.
- 4 Follow the steps of the wizard.
- 5 Then, run the provisioning task again, once for each Policy Manager container.
- 6 Restart all containers.

### ***To run provisioning on all containers***

- 1 In the Akana Administration Console for the first Policy Manager container, click the **Configuration** tab.
- 2 At the bottom left, under **Configuration Actions**, click **Provisioning**.
- 3 Make sure the checkbox is checked, and then click **Finish**.

- 4 Repeat steps 1–3 for each Policy Manager container.

### ***To restart all containers***

Shut down all the containers.

Restart the containers. The recommended sequence is to start PM first, then CM, then ND.

### **Step 1-17: Turn scheduled jobs back on**

Now it's time to turn back on the properties that you turned off in Step 1-1.

**Note:** Perform this step for all the PM80 containers with Policy Manager features installed, which have now been upgraded to AP82. Before performing this step, make sure the container was restarted.

### ***To turn scheduled jobs back on***

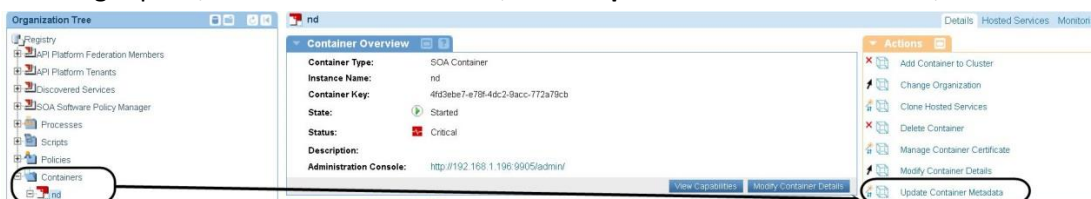
- 1 Log in to the Akana Administration Console using Administrator credentials.
- 2 Click the **Configuration** tab.
- 3 Turn on **com.soa.scheduler.quartz**:
  - a) In the **Configuration Categories** section, find **com.soa.scheduler.quartz**.
  - b) Locate the **org.quartz.scheduler.enabled** property and change it to **true**.
  - c) Click **Apply Changes**.
- 4 Turn on **com.soa.scheduler**:
  - a) In the **Configuration Categories** section, find **com.soa.scheduler**.
  - b) Locate the **simple.scheduler.enabled** property and change it to **true**.
  - c) Click **Apply Changes**.

### **Step 1-18: Update container metadata and authentication options**

The final step in the upgrade process is to update the Metadata URL and Authentication Options of each container you upgraded, in Policy Manager. This updates the container capabilities to support the latest features.

### ***To update container metadata and authentication options***

- 1 Log in to the Policy Manager Management Console as the Administrator.
- 2 In the left pane, from the **Containers** folder, select the AP82 container.
- 3 In the right pane, from the Actions Portlet, select **Update Container Metadata**, as shown below.



- 4 Enter the metadata URL for the container being updated (`http://{pm_host}:{pm_port}/metadata` or `http://{nd_host}:{nd_port}/metadata`), or the metadata path for the Network Director. An example is shown below.

**Metadata Import Options**

Select the mechanism for obtaining the container's metadata document.

☒ Metadata URL:

- 5 Conditional: If Authentication options are being used or updated, select the authentication options.
- 6 If the metadata URL is not accessible from Policy Manager, you can update the metadata from a file:
  - a) First, access the metadata URL from a machine that has access to the container and save the metadata document to a file.
  - b) Then, upload the file to Policy Manager.

That completes the upgrade.

After upgrading, run the post-install tasks on one of the containers with the Akana API Platform feature installed, as covered in the next chapter.



# Completing the API Platform Post-Upgrade Tasks

Once you've completed the product version update, there are additional post-upgrade tasks you'll need to complete if you're running the Akana API Platform developer portal. Run these tasks on one of the containers with the Akana API Platform feature installed. Some of these steps are conditional depending on platform features you're using. They include:

- [Step 2-1: Upgrade CM Models](#) on page 25
- [Step 2-2: Update CM API](#) on page 25
- [Step 2-3: \(Conditional\): Update OAuth API](#) on page 25
- [Step 2-4: \(Conditional\): Rebuild CM Styles](#) on page 26

## **Step 2-1: Upgrade CM Models**

After upgrading, run the **Upgrade CM Models** post-upgrade task on one of the containers with the Akana API Platform feature installed:

- 7 In the Akana Administration Console, on the **Configuration** tab, under **Configuration Actions**, choose **Upgrade CM Models**.
- 8 When done, click **Close**.

## **Step 2-2: Update CM API**

Run the Update CM API task on one of the containers with the Akana API Platform feature installed. This task updates APIs that were already provisioned.

- 1 In the Akana Administration Console, on the **Configuration** tab, under **Configuration Actions**, choose **Update CM API**.
- 2 When done, click **Close**.

## **Step 2-3: (Conditional): Update OAuth API**

Conditional, if the OAuth Provider feature is installed: run the **Update OAuth API** upgrade task. This task updates any changes to two key API services needed for OAuth:

- **AuthorizationServerAgentAPI**: Used when the OAuth Provider Agent feature is deployed in a container without database access.
- **ResourceServerAPI**: Used by the API Gateway to validate OAuth access tokens when processing API requests.

### ***To update OAuth API***

- 1 In the Akana Administration Console, on the **Configuration** tab, under **Configuration Actions**, choose **Update OAuth API**.
- 2 When done, click **Close**.

### **Step 2-4: (Conditional): Rebuild CM Styles**

As part of every upgrade, if you are using the developer portal, you'll need to run the **Rebuild CM Styles** post-install task. This makes sure that you have the latest style updates, for all themes and tenants.

### ***To rebuild CM styles***

- 1 In the Akana Administration Console, on the **Configuration** tab, under **Configuration Actions**, choose **Rebuild CM Styles**.
- 2 When done, click **Close**.

