

Operations Analytics Predictive Insights 1.3.5

Upgrade Guide

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 21.

Contents

| | | | |
|--|-----------|---|-----------|
| Preface | v | Adding new customizations to the probe rules file | 14 |
| Audience | v | | |
| Components | v | | |
| Chapter 1. Before you begin | 1 | Chapter 5. Starting the Operations Analytics Predictive Insights analytics component | 15 |
| Chapter 2. Upgrading the prerequisite software | 3 | Chapter 6. (Optional)Upgrading your visualization application to Dashboard Application Services Hub. | 17 |
| Upgrading Jazz for Service Management | 3 | Chapter 7. Rolling back an upgrade | 19 |
| Upgrading the OMNIBus ObjectServer. | 5 | Notices | 21 |
| Upgrading OMNIBus WebGUI | 6 | Trademarks. | 25 |
| Chapter 3. Upgrading Operations Analytics Predictive Insights. | 7 | | |
| Upgrade order for a distributed installation | 7 | | |
| Upgrading using GUI mode | 8 | | |
| Upgrading using console mode. | 10 | | |
| Upgrading the Mediation tool on Windows. | 12 | | |
| Chapter 4. Updating the OMNIBus probe rules file | 13 | | |
| Migrating customizations from a previous version of the probe rules file | 13 | | |

Preface

The purpose of this guide is to help you install Operations Analytics Predictive Insights.

After completing all steps documented in this guide, you will have a set of running Operations Analytics Predictive Insights components ready to configure into a fully functional system.

Audience

The audience for this manual is the network administrator or operations specialist responsible for installing Operations Analytics Predictive Insights.

To install Operations Analytics Predictive Insights successfully, a basic knowledge of the following is required:

- Administration of the Linux operating system.
- Administration of IBM InfoSphere Streams.
- Administration of the DB2 database management system.
- Administration of OMNIbus and OMNIbus WebGUI.
- Operations Analytics Predictive Insights

Components

IBM® Operations Analytics Predictive Insights consists of four main components.

The IBM Operations Analytics Predictive Insights components are:

- **The Database component:** is used to store configuration data, metadata and metric data.
- **The Analytic component:** performs data mediation and processes incoming data to discover any anomalies that are present.
- **The UI component:** presents any discovered anomalies through the IBM Dashboard Application Services Hub application or the IBM Tivoli Integrated Portal application.
- **The Mediation Tool:** is used to configure a data source and the data model that Operations Analytics Predictive Insights will monitor.

Operations Analytics Predictive Insights documentation includes the following guides:

- Release notes
- Installation Guide
- Upgrade Guide
- Administration Guide
- Error Messages Guide

Chapter 1. Before you begin

Read this information to find the prerequisites for upgrading to Operations Analytics Predictive Insights 1.3.5 and the steps involved.

Prerequisites

Before you can upgrade to Operations Analytics Predictive Insights 1.3.5, your existing Operations Analytics Predictive Insights environment must be at version 1.3.3 fix pack 3.

Summary of steps

Table 1. Summary of upgrade steps

| Step | Mandatory, Recommended or Optional | Notes® |
|--|------------------------------------|--|
| Upgrading the prerequisite software | Mandatory | You must upgrade Jazz™ for Service Management and configure it to use TLSv1.2, upgrade OMNIbus ObjectServer, and upgrade OMNIbus WebGUI before you upgrade Operations Analytics Predictive Insights. |
| Upgrading Operations Analytics Predictive Insights | Mandatory | If possible, use Installation Manager GUI to upgrade Operations Analytics Predictive Insights. Use console-mode only if a GUI-based upgrade is not possible.. |
| Upgrading the Mediation Tool on Windows | Optional | Only required if your Mediation tool is running on Microsoft Windows. |
| Migrating customized rules files | Optional | You need to complete this step if you customized the probe rules files in the previous installation. In version 1.3.3, the probe rules file was installed in: <code>\$PI_HOME/probe/omnibus/probes/linux2x86/stdin-tasp.rules</code> |
| Starting the Operations Analytics Predictive Insights analytics component | Mandatory | You must start Operations Analytics Predictive Insights after the upgrade completes. |
| Upgrading your visualization application to Dashboard Application Services Hub | Optional | If you did not use Dashboard Application Services Hub for visualization on your 1.3.3, system, you can upgrade to Dashboard Application Services Hub. |

Chapter 2. Upgrading the prerequisite software

Before you upgrade Operations Analytics Predictive Insights to version 1.3.5, you must upgrade Jazz for Service Management, OMNIbus ObjectServer, and OMNIbus WebGUI.

You must complete the upgrade of the prerequisite software in the following order:

1. Upgrade Jazz for Service Management and configure Jazz for Service Management to use TLSv1.2.
2. Upgrade OMNIbus ObjectServer.
3. Upgrade OMNIbus WebGUI.

Upgrading Jazz for Service Management

You must upgrade Jazz for Service Management to version 1.1.2.1 before you upgrade to Operations Analytics Predictive Insights 1.3.5.

Procedure

1. Download and extract the following files:
 - JAZZ_FOR_SM_1.1.2.1_FOR_LNX.zip
 - IBM_WAS_FOR_JSM_FOR_LNX_ML.zipExtract both files to a directory on the server on which you plan to install Jazz for Service Management.
2. Complete the following steps to run the prerequisite scanner.
 - a. Navigate to the directory in which you extracted the Jazz for Service Management zip file.
 - b. To start launchpad, enter the following command:
`./launchpad.sh`
 - c. Click **Tools > IBM Prerequisite Scanner > Run**
 - d. Resolve any failures in the following sections:
 - DSH - Dashboard Application Services Hub in JazzSM
 - ODP - Common prerequisites in JazzSM

Note: You can ignore failures in other sections of the scanner output. For example:

```
network.availablePorts.db2instance FAIL PortsInUse:631,6001,60001,5901,523... 50000
os.servicesTCPavailablePorts.db2instance FAIL PortsInUse:50000 50000
DBType FAIL DB2 DB2ShdNotBeInstalled
```

If you run the prerequisite scanner as a non-root user, you can ignore the following failure:

```
user.isAdmin FAIL False True
```

3. Complete the following steps to install Jazz for Service Management.
 - a. Change to the `/eclipse` subdirectory of the Installation Manager installation directory and use the following command to start Installation Manager.
`./IBMIM`

To record the installation steps in a response file for use with silent installations on other computers, use the `-record response_file` option. For example:

```
./IBMIM -record install_1.xml
```

- b. From the main menu, click **File > Preferences**.
- c. Click **Add Repository**. Click **Browse** and go to the `...JazzSM/JazzSMRepository/disk1/diskTag.inf` repository. Repeat to add the `...JazzSM/WAS/WASRepository/disk1/diskTag.inf` repository.
- d. Click **OK**.
- e. Click **Upgrade**.
- f. Complete the Installation. When prompted to choose a program to start, select **None**.

Note: The Jazz for Service Management installer creates the profile so you do not need to create a profile when prompted to do so at the end of the installation.

4. Complete the following steps to configure Jazz for Service Management to support TLS 1.2.
 - a. To log in to Dashboard Application Services Hub, type the following URL:
`https://<host>:<port>/ibm/console/logon.jsp`

where `<host>` is the host name of the Dashboard Application Services Hub server and `<port>` is the port number. The default port number is 16311.
 - b. Click **Console Settings > WebSphere Administrative Console**.
 - c. Click **Launch WebSphere Administrative Console**.
 - d. Click **Security > SSL certificate and key management > SSL configurations > NodeDefaultSSLSettings > Quality of protection (QoP) settings**
 - e. In the **Protocol** field, select **TLSv1.2**.
 - f. Click **Apply**.
 - g. Click **Save**.
 - h. Edit the `<JAZZ_PROFILE_HOME>/properties/ssl.client.props` file, where `JAZZ_PROFILE_HOME` is `/opt/IBM/JazzSM/profile` by default.
 - i. Update the value of the `com.ibm.ssl.protocol` field to **TLSv1.2**. For example:
`com.ibm.ssl.protocol=TLSv1.2`
5. To stop Jazz for Service Management enter the following command:
`<JAZZ_PROFILE_HOME>/bin/stopServer.sh server1`
where `<JAZZ_PROFILE_HOME>` is `/opt/IBM/JazzSM/profile` by default.
When prompted, enter the profile username and password.
6. To start Jazz for Service Management enter the following command:
`<JAZZ_PROFILE_HOME>/bin/startServer.sh server1`

Upgrading the OMNIBus ObjectServer

You must upgrade the OMNIBus ObjectServer to version 8.1.0.5 before you upgrade to Operations Analytics Predictive Insights 1.3.5.

Before you begin

1. Download and install the OMNIBus prerequisite scanner to make sure you have all the OMNIBus requirements in place before you begin the installation. The prerequisite scanner can be downloaded from Tivoli Netcool/OMNIBus Knowledge Center section *IBM Prerequisite Scanner*.
2. Run the prerequisite scanner to discover if there are any missing items that must be installed.
3. Install all packages which are marked as missing.

About this task

OMNIBus ObjectServer can be installed either by root or by a non-root user. If you choose to install as a non-root user, ensure the appropriate permissions on the install software and target location are given to the chosen non-root user. If you install as root, the ongoing management of OMNIBus must be done as root.

Note: If OMNIBus and the Operations Analytics Predictive Insights Analytics component are on the same server and owned by the same user, do not set the NCHOME variable. This is in line with the Tivoli Netcool/OMNIBus Knowledge Center section *Setting Tivoli Netcool/OMNIBus environment variables (UNIX and Linux)*. The NCHOME environment variable specifies the home location for Tivoli Netcool/OMNIBus. Setting NCHOME may cause the probe to point to the wrong location and not run.

Procedure

1. Copy the OMNIBus ObjectServer installation software, OMNIBus-v8.1.0.5-Core.linux64.zip , to an empty directory.
2. Extract the zip file:

```
unzip OMNIBus-v8.1.0.5-Core.linux64.zip
```

Note: The package filename is correct for .

3. Change to the /eclipse subdirectory of the Installation Manager installation directory and use the following command to start Installation Manager.

```
./IBMIM
```

To record the installation steps in a response file for use with silent installations on other computers, use the -record response_file option. For example:

```
./IBMIM -record install_1.xml
```

4. From the main menu, click **File > Preferences**.
5. Click **Add Repository**. Click **Browse** and go to the ...OmnibusCore/OMNIBusRepository/repository.config repository.
6. Click **OK**.
7. Click **Upgrade**
8. Follow the installation wizard to complete the upgrade, selecting the default options.

Note: When prompted, to choose which program to start, select **None**.

What to do next

1. After you have completed the upgrade, use the following command to test if all prerequisites are met for the OMNIBus ObjectServer:

```
ldd /opt/IBM/tivoli/netcool/omnibus/platform/linux2x86/bin*/nco* | grep "not found"
```
2. To ensure that the **ldd** command resolves all dependent libraries, set the `LD_LIBRARY_PATH` both in the current shell and in `~/.bashrc`.
The following is an example of how this might be done:

```
export LD_LIBRARY_PATH=/usr/lib64:/lib64:/opt/IBM/tivoli/netcool/omnibus/platform/linux2x86/lib64  
/opt/IBM/tivoli/netcool/platform/linux2x86/lib64:/usr/lib:/lib:  
/opt/IBM/tivoli/netcool/omnibus/platform/linux2x86/lib:  
/opt/IBM/tivoli/netcool/platform/linux2x86/lib:$LD_LIBRARY_PATH
```
3. Install any prerequisites that are identified as missing.

Upgrading OMNIBus WebGUI

You must upgrade OMNIBus WebGUI to version 8.1.0.4 before you upgrade to Operations Analytics Predictive Insights 1.3.5.

Before you begin

You must install IBM WebSphere SDK Java Technology Edition Version 7.0 before you upgrade OMNIBus WebGUI. For more information, see [Installing IBM WebSphere SDK Java Technology Edition Version 7.0 in the WebSphere Application Server Knowledge Center](#).

About this task

You must use the same user that you used to install and upgrade Jazz for Service Management. OMNIBus WebGUI can be installed by root or a non-root user. Ensure the appropriate permissions on the installation software and target location are given to the non-root user if you want to install as non-root.

Procedure

1. Ensure that both Jazz for Service Management and the OMNIBus ObjectServer are running.
2. Copy the OMNIBus WebGUI installation software, `OMNIBus-v8.1.0.4-WebGUI.linux64.zip`, to an empty directory.
3. Extract the zip file:

```
unzip OMNIBus-v8.1.0.4-WebGUI.linux64.zip
```
4. Change to the `/eclipse` subdirectory of the Installation Manager installation directory and use the following command to start Installation Manager

```
./IBMIM
```

To record the installation steps in a response file for use with silent installations on other computers, use the `-record response_file` option. For example:

```
./IBMIM -record install_1.xml
```
5. From the main menu, click **File > Preferences**.
6. Click **Add Repository**. Click **Browse** and go to the `...WebGUI/OMNIBusWebGUIRepository/repository.config` repository.
7. Click **OK**.
8. Click **Upgrade**.
9. Follow the installation wizard to complete the upgrade. Select the default options and record any users and passwords that you enter.

Chapter 3. Upgrading Operations Analytics Predictive Insights

Instructions on how to upgrade Operations Analytics Predictive Insights from version 1.3.3 to version 1.3.5.

The upgrade process for Operations Analytics Predictive Insights covers the upgrade of all installed Operations Analytics Predictive Insights components. If you wish to make any topology change, you must do so as a separate installation task after you complete the upgrade.

If you installed Operations Analytics Predictive Insights components on multiple servers, you must perform the upgrade on each individual server. You can perform the upgrade in graphical mode, using the IBM Installation Manager, or in console mode.

For information on the Operations Analytics Predictive Insights version 1.3.5 requirements, see the *Operations Analytics Predictive Insights Installation Guide*.

Upgrade order for a distributed installation

If the Operations Analytics Predictive Insights components are distributed on multiple servers, you must upgrade components in a particular order depending on how the components are distributed.

Note: When you select the database component for upgrade, the upgrade process updates the version number for the database component in the installation manager record but does not upgrade the database component itself. The upgrade of the database component is done automatically when you upgrade the Analytics component.

- If the Database and UI components were installed on the same server by the same user and, therefore, managed by the same Installation Manager instance, complete the upgrade in the following order:
 - Analytics component
 - UI component

In this configuration, the version number for the Database component is automatically updated in the installation manager record when you upgrade the UI component.

- For all other distributed installations, upgrade the components in the following order:
 - Database component
 - Analytics component
 - UI component

Upgrading using GUI mode

Upgrading Operations Analytics Predictive Insights using the GUI mode.

Before you begin

1. Create a directory for the upgrade software. For example:

```
mkdir ~/PredictiveInsights_1.3.5
```
2. Download and extract the Operations Analytics Predictive Insights package from the media to the new directory.
3. On each server that has the Analytics component running, log in as the analytics user, for example, `scadmin`, and stop the Analytics instance:

```
$PI_HOME/bin/stop.sh
```
4. Stop any instance of the Mediation Tool that is running.
5. If Operations Analytics Predictive Insights version 1.3.3 was configured to use LDAP authentication, you must replace the LDAP authentication with the authentication method that was in place when you installed Operations Analytics Predictive Insights 1.3.3.

For example, if you used the `ncoadmin` user from an ObjectServer user repository to install version 1.3.3 and later replaced the ObjectServer user repository with an LDAP user repository, then you must switch to authenticating against an ObjectServer user repository before you start the upgrade.

To switch from LDAP to ObjectServer authentication, complete the following steps:

- a. Make a backup copy of the following configuration files:
 - `<installdir>/UI/wlp/usr/servers/piserver/ldapRegistry.xml`
 - `<installdir>/UI/wlp/usr/servers/piserver/server.xml`
 - `<installdir>/UI/wlp/usr/servers/piserver/taspConfig.xml`where `<installdir>` is `/opt/IBM/scanalytics` by default.
- b. To remove the LDAP integration and configure the UI server to use the ObjectServer user repository, restore the `<installdir>/UI/wlp/usr/servers/piserver/server.xml` that you backed up in step 5 of the Configuring the LDAP User Registry procedure.

- c. To configure the WebGUI to point to the ObjectServer, enter the following commands:

```
cd <WEBGUI_HOME>/configtool/linux.gtk.x86_64
./ncwConfigUI -WASUserID smadmin -WASPassword smadmin
```

where `<WEBGUI_HOME>` is `/opt/IBM/netcool/omnibus_webgui` by default

About this task

You must complete the upgrade procedure on each server on which an Operations Analytics Predictive Insights component is installed. To upgrade each component, you must use the user account that was initially used to install that component. If multiple components were installed by different user accounts on the same server, ensure that you switch accounts before you upgrade individual components.

Note: If the Operations Analytics Predictive Insights Analytics and UI components were installed by different users on the same server or on different servers, you must upgrade the Analytics component before you upgrade the UI component.

Procedure

1. As the user that was used to install the component or components you are upgrading, change to the `predictiveInsightsInstaller1.3.5` directory in the directory in which you extracted the upgrade software.
2. To start the installer, run the following command:
`./install.sh`
3. Select the **Update** option and click **Next**.
4. Select all of the components present on the server for upgrade. The **Update Packages** screen displays all Operations Analytics Predictive Insights components that are installed on the server.
5. If the displayed version is the version to which you want to upgrade, click **Next**.
6. Accept the terms of the license agreement and click **Next**.
7. For each component, enter the required parameters and click **Validate**. After the values you enter are validated, click **Next**.
8. Click **Update**.

During the upgrade, changes are made to your Operations Analytics Predictive Insights Database, Analytics component, Mediation tool, and UI. The validation ran in step 7 ensures that your Operations Analytics Predictive Insights system is in a good state before the upgrade.

Note: Any component that is running is stopped during the upgrade.

9. Click **Finish** when the update completes.
10. If Operations Analytics Predictive Insights version 1.3.3 was configured to use LDAP authentication, complete the following steps to set up LDAP authentication for version 1.3.5.
 - a. Copy the files that you backed up in step 5 of the *Before you begin* section to their original location.
 - b. To grant users in the LDAP directory access to Operations Analytics Predictive Insights User Interface, do the following:
 - 1) Change to the `<Liberty_Install_Home>/UI/bin` directory. The default path for `<Liberty_Install_Home>` is `/opt/IBM/scanalytics`.
 - 2) Enter the following command
`./addAccess.sh <user | group> <LDAP user or group name>`
For example, to grant access to an LDAP group called operators, enter the following command:
`./addAccess.sh group operators`

Note: After the upgrade completes, you must clear the web browser cache before you log in to your visualization tool.

What to do next

On the Analytics server, the upgrade procedure does not remove older JAR files when it installs later versions of the files. To resolve these file conflicts, complete the following steps:

1. Enter the following commands to remove the older JAR files:

```
rm -f $PI_HOME/lib/commons-lang3-3.1.jar
rm -f $PI_HOME/lib/commons-math3-3.0.jar
rm -f $PI_HOME/lib/org.eclipse.emf.common_2.8.0.v20130125-0546.jar
```

```
rm -f $PI_HOME/lib/org.eclipse.emf.common.ui_2.7.0.v20130125-0826.jar
rm -f $PI_HOME/lib/org.eclipse.emf.ecore_2.8.3.v20130125-0546.jar
rm -f $PI_HOME/lib/org.eclipse.emf.ecore.xmi_2.8.1.v20130125-0546.jar
```

2. To compile each topic, enter the following commands:

```
cd $PI_HOME/sp1/instances/Analytics<topic>
./compile.sh
```

Where <topic> is the name of the topic.

Upgrading using console mode

Upgrading Operations Analytics Predictive Insights using console mode.

Before you begin

1. Create a directory for the upgrade software, for example:

```
mkdir ~/PredictiveInsights_1.3.5
```

2. Download and extract the Operations Analytics Predictive Insights package from the media to the new directory.
3. On each server that runs the Analytics component, log in as the analytics user, for example, scadmin, and stop the Analytics instance.

```
$PI_HOME/bin/stop.sh
```
4. Stop any instance of the Mediation Tool that is running.
5. If Operations Analytics Predictive Insights version 1.3.3 was configured to use LDAP authentication, you must replace the LDAP authentication with the authentication method that was in place when you installed Operations Analytics Predictive Insights 1.3.3.

For example, if you used the ncoadmin user from an ObjectServer user repository to install version 1.3.3 and later replaced the ObjectServer user repository with an LDAP user repository, then you must switch to authenticating against an ObjectServer user repository before you start the upgrade.

To switch from LDAP to ObjectServer authentication, complete the following steps:

- a. Make a backup copy of the following configuration files:

- <installdir>/UI/wlp/usr/servers/piserver/ldapRegistry.xml
- <installdir>/UI/wlp/usr/servers/piserver/server.xml
- <installdir>/UI/wlp/usr/servers/piserver/taspConfig.xml

where <installdir> is /opt/IBM/scanalytics by default.

- b. To remove the LDAP integration and configure the UI server to use the ObjectServer user repository, restore the <installdir>/UI/wlp/usr/servers/piserver/server.xml that you backed up in step 5 of the Configuring the LDAP User Registry procedure.

- c. To configure the WebGUI to point to the ObjectServer, enter the following commands:

```
cd <WEBGUI_HOME>/configtool/linux.gtk.x86_64
./ncwConfigUI -WASUserID smadmin -WASPassword smadmin
```

where <WEBGUI_HOME> is /opt/IBM/netcool/omnibus_webgui by default

About this task

You must upgrade each Operations Analytics Predictive Insights component on the server on which the component is installed. Therefore, if Operations Analytics

Predictive Insights components are installed on multiple servers, you must run the upgrade on each server.

Procedure

1. As the user that was used to install the component or components you are upgrading, change to the `predictiveInsightsInstaller1.3.5` directory within the directory in which you extracted the upgrade software.
2. To start the installer, enter the following command:
`./install.sh -c`
3. Enter **2** to **Update - Find and install updates and fixes to installed software packages.**
4. Enter **1** to select the Operations Analytics Predictive Insights package. All of the Operations Analytics Predictive Insights components present on the server are selected for upgrade.
5. Enter **N** to continue. The installer prepares and validates the set of updates.
6. Enter **A** to accept the license agreement.
7. Enter **N** to continue.
8. Enter the requested parameters for each component.
9. Enter **N** to continue.
10. Enter **U** to update.
11. Enter **F** to finish.
12. Enter **X** to exit.
13. If Operations Analytics Predictive Insights version 1.3.3 was configured to use LDAP authentication, complete the following steps to set up LDAP authentication for version 1.3.5.
 - a. Copy the files that you backed up in step 5 of the *Before you begin* section to their original location.
 - b. To grant users in the LDAP directory access to Operations Analytics Predictive Insights User Interface, do the following:
 - 1) Change to the `<Liberty_Install_Home>/UI/bin` directory. The default path for `<Liberty_Install_Home>` is `/opt/IBM/scanalytics`.
 - 2) Enter the following command
`./addAccess.sh <user | group> <LDAP user or group name>`
For example, to grant access to an LDAP group called operators, enter the following command:
`./addAccess.sh group operators`

Note: After the upgrade completes, you must clear the web browser cache before you log in to your visualization tool.

What to do next

On the Analytics server, the upgrade procedure does not remove older JAR files when it installs later versions of the files. To resolve these file conflicts, complete the following steps:

1. Enter the following commands to remove the older version of the JAR files:
`rm -f $PI_HOME/lib/commons-lang3-3.1.jar`
`rm -f $PI_HOME/lib/commons-math3-3.0.jar`
`rm -f $PI_HOME/lib/org.eclipse.emf.common_2.8.0.v20130125-0546.jar`

```
rm -f $PI_HOME/lib/org.eclipse.emf.common.ui_2.7.0.v20130125-0826.jar
rm -f $PI_HOME/lib/org.eclipse.emf.ecore_2.8.3.v20130125-0546.jar
rm -f $PI_HOME/lib/org.eclipse.emf.ecore.xmi_2.8.1.v20130125-0546.jar
```

2. To compile each topic, enter the following commands:

```
cd $PI_HOME/sp1/instances/Analytics<topic>
./compile.sh
```

Where <topic> is the name of the topic.

Upgrading the Mediation tool on Windows

Instructions on how to upgrade the Operations Analytics Predictive Insights Mediation tool on Windows.

About this task

If you installed the Mediation tool on windows, you upgrade the Mediation tool by executing a fresh install of the tool.

Procedure

Instructions on how to upgrade the Mediation tool on Windows.

1. Log on to the Windows environment to which you want to install the Mediation tool.
2. Extract the Operations Analytics Predictive Insights package from the media.
3. Open the windowsMediationTool folder within the extracted package. This folder contains the file PredictiveInsights-MediationTooling-1.3.5-win32.zip.
4. Extract the ZIP file to your desired installation location.
5. Open the folder to which you extracted the ZIP file, and in turn open the contained eclipse folder.
6. Double click on the eclipse.exe icon. When you open the tool, you will be asked to choose a workspace. Choose a directory unique to the Mediation tool.

Chapter 4. Updating the OMNibus probe rules file

The OMNibus probe rules file defines how the OMNibus probe processes event data to create alerts. You must migrate any customizations in the 1.3.3 probe rules file to the version 1.3.5 file. You can also add customizations for new features in version 1.3.5

Migrating customizations from a previous version of the probe rules file

Instructions on how to migrate updated rules files.

About this task

If you customized the `stdin-tasp.rules` file for the previous version of Operations Analytics Predictive Insights, you must manually re-insert these changes into the version 1.3.5 `stdin-tasp.rules` file. The version 1.3.5 `stdin-tasp.rules` file is located in the `$PI_HOME/probe/omnibus/probes/linux2x86/` directory.

Procedure

1. Navigate to the directory containing the back up of the pre-upgrade `stdin-tasp.rules` file.

This file can be found at: `<installer_home>/installer/TASPBK/<version number>_<backup_timestamp>/probe/omnibus/probes/linux2x86/stdin-tasp.rules`

Where

`<installer_home>` is `/opt/IBM/scanalytics/install_scadmin` if version 1.3.3 was installed to the default installation path.

`<version number>` is the version number of the previous version of Operations Analytics Predictive Insights that was installed.

2. Copy the customizations you made to the pre-upgrade `stdin-tasp.rules` file and insert them into the `$PI_HOME/probe/omnibus/probes/linux2x86/stdin-tasp.rules` file.

Example

The following is example code from a customized `stdin-tasp.rules` file.

```
# Compute alarm severity depending on whether the potentially anomalous KPI(s)
# contain a service-impacting KPI.
# You will need to update this statement to reflect your Predictive Insights implementation
if (int($TASPCorrelationId) >= 0) {
    if (regmatch($TASPAnomalousMetrics, "Service_Impacting_KPI_1")
        || regmatch($TASPAnomalousMetrics, "Service_Impacting_KPI_2")
    ) {
        @Severity = 4
    } else {
        @Severity = 3
    }
} else if (int($TASPCorrelationId) == -1) {
    # Consolidated alarms - many problems in one alarm.
    @Severity = 4
} else if (int($TASPCorrelationId) == -2) {
    # Data Availability alarms
```

```

        @Severity = 5
    } else if (int($TASPCorrelationId) == -3) {
        # Information Events should have a lower severity.
        @Severity = 2
    } else if (int($TASPCorrelationId) == -4) {
        # System health alarms are very important.
        @Severity = 5
    }

    # Map the data source severity directly, if it exists.
    # (Note: resolution events should be set to severity 1, the generic clear will
    set them to 0 later)
    update(@Severity)

```

Adding new customizations to the probe rules file

You must customize the probe rules file to forward attribute names and values, that are mediated with the data, to the Active Event List.

Procedure

1. Log in as the administrative user, typically scadmin.
2. Open the probe rules file which is located in the `$PI_HOME/probe/omnibus/probes/linux2x86/stdin-tasp.rules` file.
3. Insert the following text at the end of the file:

```

if(exists($TASPAttributeNames)) {
    @TASPAttributeNames = $TASPAttributeNames
    update(@TASPAttributeNames)
}

if(exists($TASPAttributeValues)) {
    @TASPAttributeValues = $TASPAttributeValues
    update(@TASPAttributeValues)
}

```

Chapter 5. Starting the Operations Analytics Predictive Insights analytics component

Use the start.sh script to start the Operations Analytics Predictive Insights Analytics component.

Procedure

1. Change to the \$PI_HOME/bin directory.
2. As the administrative user, typically scadmin, enter the following command to start the Analytics component:

```
./start.sh [-t=<topic_name>]
```

The command starts the Operations Analytics Predictive Insights processing framework and any topic you specify. If you omit the **-t** parameter, the command starts all topics on the server.

3. To start extracting data from the data source, enter the following command:
`$PI_HOME/bin/admin.sh run_extractor_instance -t=<topic> -l=<latency>`

For more information, see run_extractor_instance.

Chapter 6. (Optional) Upgrading your visualization application to Dashboard Application Services Hub

Operations Analytics Predictive Insights version 1.3.5 supports Tivoli Integrated Portal and Dashboard Application Services Hub as visualization applications for the UI.

About this task

Operations Analytics Predictive Insights version 1.3.5 supports both Dashboard Application Services Hub and Tivoli Integrated Portal for visualization purposes. Moving your visualization from Tivoli Integrated Portal to Dashboard Application Services Hub is an optional step.

If you are considering moving from Tivoli Integrated Portal to Dashboard Application Services Hub, it is recommended that you first get your Dashboard Application Services Hub system up and running before you decommission your Tivoli Integrated Portal environment.

There are two routes you can take to migrate from Tivoli Integrated Portal to Dashboard Application Services Hub. Pick one of the following scenarios:

Procedure

- **Scenario 1:** Install Dashboard Application Services Hub on a separate server, which allows you to run both Tivoli Integrated Portal and Dashboard Application Services Hub in parallel.

Pursue this procedure if you want to first confirm that your Dashboard Application Services Hub functions as expected and you are ready to decommission the existing Tivoli Integrated Portal visualization component.

1. Complete the installation of Operations Analytics Predictive Insights so that you have a working 1.3.5 system.
2. Install on a separate server as per the installation instructions within the *Installing Jazz for Service Management* section of the *Installing* documentation.
3. Install the fix pack.
4. Install WebGUI on the same server as Jazz for Service Management. For more information on how to install WebGUI, see the section *Installing OMNIBus WebGUI* in the "Installing" documentation.
5. Install the Operations Analytics Predictive Insights version 1.3.5 UI component on the same server as Jazz for Service Management, configuring it to work with the new Dashboard Application Services Hub. This process is described in the *Installing the UI component* section of the "Installing" documentation.
6. When you are ready to decommission the existing Tivoli Integrated Portal visualization component, uninstall the following:
 - Operations Analytics Predictive Insights UI component, that is configured to work with Tivoli Integrated Portal
 - OMNIBus WebGUI 7.4
 - Tivoli Integrated Portal 2.2

- **Scenario 2:** Install Dashboard Application Services Hub to the server on which you currently run Tivoli Integrated Portal.

Complete this procedure if you know you want to move to Dashboard Application Services Hub, and the new Dashboard Application Services Hub must exist on the server which currently hosts Tivoli Integrated Portal.

1. Stop Tivoli Integrated Portal. For more information on how to stop Tivoli Integrated Portal, see the *Stopping Tivoli Integrated Portal* section of the "Administering" documentation.
2. Install on the Tivoli Integrated Portal server. To install Jazz for Service Management, you should use a different user other than that which was used to install Operations Analytics Predictive Insights as per the installation instructions within the *Installing Jazz for Service Management* section of the "Installing" documentation.
3. Install the fix pack.
4. Uninstall Operations Analytics Predictive Insights version 1.3.3 and install version 1.3.5. When you are installing the UI component, configuring it to work with the new Dashboard Application Services Hub.

What to do next

Follow the post install configuration steps in the *Initial configuration of Operations Analytics Predictive Insights* section of the *Administering* documentation to complete the set up of Dashboard Application Services Hub. In particular, ensure that you:

- Add the Operations Analytics Predictive Insights launch scripts for the Active Event List.
- Update your system so that your Dashboard Application Services Hub is prepared for an unplanned shut down

Chapter 7. Rolling back an upgrade

Installation Manager can roll back the upgrade that it performed. The roll back reverts your Operations Analytics Predictive Insights system from version 1.3.5 to version 1.3.3.


Before you begin

Before you roll back the upgrade, do the following

- Stop Operations Analytics Predictive Insights: `$PI_HOME/bin/stop.sh`.
- Stop any instance of the Mediation Tool that is running.
- Complete the following steps to change Jazz for Service Management SSL configuration from TLSv1.2 to SSL_TLS.
 1. To log in to Dashboard Application Services Hub, type the following URL:
`https://<host>:<port>/ibm/console/logon.jsp`
where `<host>` is the host name of the Dashboard Application Services Hub server and `<port>` is the port number. The default port number is 16311.
 2. Click **Console Settings > WebSphere Administrative Console**.
 3. Click **Launch WebSphere Administrative Console**.
 4. Click **Security > SSL certificate and key management > SSL configurations > NodeDefaultSSLSettings > Quality of protection (QoP) settings**.
 5. In the **Protocol** field, select `SSL_TLS`.
 6. Click **Apply**.
 7. Click **Save**.
 8. Edit the `<JAZZ_PROFILE_HOME>/properties/ssl.client.props` file, where `JAZZ_PROFILE_HOME` is `/opt/IBM/JazzSM/profile` by default.
 9. Update the value of the `com.ibm.ssl.protocol` field to `SSL_TLS`.
For example:
`com.ibm.ssl.protocol=SSL_TLS`
 10. To stop Jazz for Service Management enter the following command:
`<JAZZ_PROFILE_HOME>/bin/stopServer.sh server1`
where `<JAZZ_PROFILE_HOME>` is `/opt/IBM/JazzSM/profile` by default.
When prompted, enter the profile username and password.
 11. To start Jazz for Service Management enter the following command:
`<JAZZ_PROFILE_HOME>/bin/startServer.sh server1`

Procedure

1. Change to the Installation Manager installation directory.
2. Use the following command to start the Installation Manager wizard:
`./IBMIM`
3. In the main Installation Manager window, click **Roll Back**.
4. Follow the installation wizard instructions to complete the roll back.
5. The rollback does not delete the Service Diagnosis Dashboard and any custom dashboards you created. To delete the dashboards:

- a. In Dashboard Application Services Hub, click the **Console Settings** icon, , in the menu bar.
 - b. Under **General**, click **Pages**.
 - c. Expand the **Incident** page.
 - d. Click the check box beside the Service Diagnosis Dashboard.
 - e. Click **Delete** and click **OK** to confirm.
 - f. If you created custom dashboards, expand the page under which you created the dashboards. If you did not change the default location, custom dashboards are created under the **Default** page.
 - g. Click the check box beside each custom dashboard.
 - h. Click **Delete** and click **OK** to confirm.
6. If you created one or more topics after you upgraded to version 1.3.5, enter the following command to delete each topic:
- ```
$PI_HOME/bin/admin.sh delete_topic <topic name>
```

For example:

```
$PI_HOME/bin/admin.sh delete_topic network
```

You must recreate this topic in version 1.3.3, deploy a model to the topic and start data extraction. For more information, see *Configuring mediation* and *Analyzing data* in the *Configuration and Administration Guide*.

7. If you upgraded the Mediation Tool on Windows, uninstall and reinstall the Mediation Tool provided in version 1.3.3.

## What to do next

If you customized the OMNIbus probe rules file, `stdin-tasp.rules`, after the upgrade, copy the 1.3.3 version of the file from `<installer_home>/installer/TASPBK/1.3.3.0_<backup_timestamp>/probe/omnibus/probes/linux2x86/stdin-tasp.rules` to `$PI_HOME/probe/omnibus/probes/linux2x86/stdin-tasp.rules`.

`<installer_home>` is `/opt/IBM/scanalytics/install_scadmin` if version 1.3.3 was installed to the default installation path.

`<backup_timestamp>` is the timestamp for the time the backup was created.

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