Rational Asset Analyzer

Installation Guide

Version 6 Release 1

SC27-5446-05

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Note
Before using this information and the product it supports, read the information in "Notices," on page 51.

This edition applies to version 6.1 of Rational Asset Analyzer and to all subsequent releases and modifications until otherwise indicated in new editions.

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Installing Rational Asset Analyzer

This section contains the installation instructions for IBM® Rational® Asset Analyzer.

This guide contains information concerning the procedures associated with the installation and configuration of Rational Asset Analyzer. Included are sample installation verification procedures to ensure that the database loads correctly and instructions on how to set up the sample applications.

For PDF version, go to Rational Asset Analyzer 6.1 Installation Guide.

Installation introduction

This installation information provides instructions to install, update and uninstall Rational Asset Analyzer.

You can find the most recent version of this guide online at http://www.ibm.com/support/knowledgecenter/SS3JHP_6.1.0/com.ibm.raa.product.doc/helpindex_raa.html.

Note: For product support, see http://www.ibm.com/support/entry/portal/Overview/Software/Rational/Rational_Asset_Analyzer.

Installation conventions and terminology

Understanding these terms and conventions can help you take full advantage of the installation information and your product.

The following conventions are used in this installation information:

- The default installation directory is written as C:*installation_directory*\product\inst.file.
- The default log location for installation information is C:*log_file_dir*\log.txt.

These terms are used in the installation topics.

Installation directory
The location of product files after the package is installed.

Package
An installable unit of a software product. Software product packages are separately installable units that can operate independently from other packages of that software product.

Package group
A package group is a directory in which different product packages share resources with other packages in the same group. When you install a package using Installation Manager, you can create a new package group or install the packages into an existing package group. (Some packages cannot share a package group, in which case the option to use an existing package group is unavailable.)

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Repository
A storage area where packages are available for download. A repository can be disc media, a folder on a local hard disk, or a server or Web location.

Shared directory
In some instances, product packages can share resources. These resources are located in a directory that the packages share.

Planning the installation

Before you install or update the product, plan the installation. When you effectively plan and understand the key aspects of the installation process, you can ensure a successful installation.

You can install Rational Asset Analyzer from any of the following media:

- The product CDs
- A downloaded electronic image on your workstation
- An electronic image on a shared drive
- A repository on an HTTP or HTTPS server

In the latter three scenarios, you can choose to run IBM Installation Manager in silent mode to install Rational Asset Analyzer.

You can install updates at the same time that you install the base product package.

Installation roadmap

The installation roadmap list the high-level steps for installing your product.

To install Rational Asset Analyzer:

1. Verify that your computer meets the minimum hardware and software requirements for installing the product.
2. Verify that your user ID meets the requirements for installing the product.
3. Review the planning information.
4. Install or update IBM Installation Manager, if necessary.
5. Install the product.
   - If using the Setup disk to start, see “Installing using the launchpad program” on page 8.
   - If using Installation Manager, see “Installing Installation Manager” on page 3.
   - If upgrading from a previous version, see “Installing Rational Asset Analyzer as an update” on page 13
6. Verify that the installation is successful.
7. Perform any necessary post-installation task such as migrating an existing database and configuring the appropriate product license.

Installation Manager overview

You can use IBM Installation Manager to install, update, and modify IBM software packages. You can also track what you installed, determine what is available to install, and organize installation directories.

Installation Manager provides tools to update, modify packages, and uninstall packages and to manage the licenses for your packages:

- **Install packages**: Use the "Install" wizard to complete the installation process. You can install a package by accepting the defaults or you can modify the default settings to create a custom installation. Before you install the package, you can review a complete summary of your selections throughout the wizard. You can install one or more packages at one time.
- **Update packages**: Use the "Update" wizard to search for available updates to packages that you have installed. An update might be a released fix, a new feature, or a new version of the product. The wizard provides details of the update. You can choose whether to apply an update.
- **Modify packages**: Use the "Modify" wizard to modify certain elements of a package that you have installed. During the first installation of the package, you select the features to install. Later, if you need other features, you can use the modify packages wizard to add those features to your package. You can also remove features and add or remove languages.
- **Manage licenses**: Use the "Manage Licenses" wizard to set up the licenses for your packages. Use this wizard to change your trial license to a full license, set up servers for floating licenses, and select the type of license for each package.
- **Roll back to an earlier version**: The "Roll Back" feature is included in Installation Manager to revert to a previous version of a package.

  Note: This feature is not supported for Rational Asset Analyzer.
- **Uninstall packages**: Use the "Uninstall" wizard to remove a package from your computer. You can uninstall more than one package at a time.

For the most current information about Installation Manager, see http://www.ibm.com/support/knowledgecenter/SSDV2W/welcome.

Installing Installation Manager

Use IBM Installation Manager to install your software packages. If you do not have Installation Manager installed already it is automatically installed when you start the installation for your product. You can download and install Installation Manager before you start the installation process for Rational Asset Analyzer.

About this task

The latest version of Installation Manager might be required for your package. Updates are discovered automatically if you have not cleared the **Search service repositories for updates** check box on the Installation Manager preference page.

Starting Installation Manager

About this task

If you already installed Installation Manager, you can start it in one of these ways:

- Click **Start** > **All Programs** > **IBM Installation Manager** > **IBM Installation Manager**
- From a command line, change to *installation_manager_directory*/eclipse and run **IBMIM**.

If a new version of Installation Manager is found after starting Installation Manager, you are prompted to confirm that you want to install it before you can continue. Click **OK** to proceed. Installation Manager automatically installs the new version, stops, restarts, and resumes.

Installation requirements

To install the product, you must meet several requirements, including requirements for hardware, software, server environment and operating systems.

Hardware and software requirements

Before you install the product, verify that your hardware and software meet or exceed the minimum requirements. If your hardware and software do not meet the minimum requirements, you might not be able to install or run the product.

The machine on which you are installing Rational Asset Analyzer, must have a supported version of DB2® and a supported application server. Rational Asset Analyzer ships with DB2 and WebSphere® Application Server with licenses limited to use with Rational Asset Analyzer on Windows. In addition, Rational Asset Analyzer includes an embedded application server, implemented using the WebSphere Application Server Liberty Profile, that can be used instead of the full WebSphere Application Server.

For an up-to-date list of minimum requirements, see:

- System Requirements for Rational Asset Analyzer
- System Requirements for Rational Asset Analyzer for System z®

Requirements for installers

You must have a user ID that meets specific requirements before you can install Rational Asset Analyzer.

Verify that your user ID meets these requirements before you begin to install your product:

- Your user ID must not contain double-byte characters.
- Your user ID must have authorization to update the database manager configuration and to create a database, tables, indexes, and views.
- You must log in to the Administrator account (or run as Administrator; right-click the program file or shortcut and select **Run as Administrator**) and have SYSADM authority to perform the following tasks. In addition, the user ID you specify in the installation dialog must have DBADM authority to the RAA® database.
  - Install or update IBM Installation Manager
  - Install or update a product offering
  - Install an Authorized-User license key for your product by using IBM Installation Manager

  Important: To enable users who are not an Administrator to work with a product on Windows:
  - Do not install the product into a package group (installation location) in the Program Files directory (`C:\Program Files\`) and do not choose a shared resources directory in the Program Files directory.
  - If you are *extending* an existing Eclipse installation, then do not install Eclipse in the Program Files directory (`C:\Program Files\`).

Requirements for the embedded application server

If your Rational Asset Analyzer installation uses the embedded application server, which is implemented by using the WebSphere Application Server Liberty Profile, you need to adjust the maxConcurrentPageRequests value according to the number of anticipated users.

The maxConcurrentPageRequests property represents the maximum number of requests for pages that can be rendered simultaneously. This value is used to calculate the maximum allowable number of concurrent database connections. If the value is lower than the actual number of concurrent page requests, some requests might have to wait for an available database connection.

The default value for the maxConcurrentPageRequests property is 10.

To change the maxConcurrentPageRequests value, open the `installation_directory\config\Common.cfg` file and edit the value.

If the maxConcurrentPageRequests value is changed after the embedded application server is created, you must re-create the server. You can run `installation_directory\bin\server create` to re-create the server.

Installation considerations

As you plan your installation, determine the details of the installation.

Consider the following details:

- Where to install the product
- How the product must work with other applications
- How to migrate from another version
- How to configure the help content

Installation directories

IBM Installation Manager uses two directories when installing product artifacts: the shared resources directory and the package group.

Shared resources directory

The *shared resources directory* is where product resources are installed so that they can be used by multiple product package groups. You define the shared resources directory the first time that you install the first product package. For best results, use your largest disk drive for shared resources directories. You cannot change the directory location unless you uninstall all product packages.

Important: When installing products on the Windows operating system, do not create the shared resources directory in the Program Files directory (`C:\Program Files\`). Otherwise, users without Administrator privileges will be unable to use the product.

Package groups

During installation, you specify a *package group* into which to install a product. Rational Asset Analyzer is installed in its own package group. It does not share package group with other packages.

- A package group represents a directory in which products share resources.
- When you install a product using the Installation Manager, you either create a package group or install the product into an existing package group. A new package group is assigned a name automatically; however, you choose the installation directory for the package group.
- After you create a package group you cannot change the installation directory. The installation directory contains files and resources shared by the products installed into that package group.

- Product resources designed to be shared with other packages are installed in the shared resources directory. Not all products can share a package group, in which case the option to use an existing package group will be disabled.
- When you install multiple products at the same time, all products are installed into the same package group.

Important: When installing products on the Windows operating system, do not create package groups in the Program Files directory (`C:\Program Files\`). Otherwise, users without Administrator privileges will be unable to use the product.

Upgrade information

The process to upgrade Rational Asset Analyzer depends on your current version.

- If you have a version of Rational Asset Analyzer earlier than Version 6.0.0.1, you cannot use the update feature to upgrade. You will need to uninstall your current version and then install the new version.
- If you are updating from Version 6.0.0.1 or later, you can use the Installation Manager update feature.

If you have installed any of Rational Asset Analyzer product components, you need to uninstall them before installing Rational Asset Analyzer on your Windows system.

If you have an existing database, you can do one of the following with the database:

- To preserve the data in the database, you must migrate it to the current schema level using the Migration Utility. Download the utility from the following web site: http://www.ibm.com/support/fixcentral/.
- To not preserve the data in the database, manually drop the database before starting the installation process.

Note: Work request objects in the work queue may not be compatible between modification levels. For example, Impact Analysis work requests in the work queue may be discarded when a program temporary fix (PTF) is applied. Before stopping the Rational Asset Analyzer web applications to apply a PTF, therefore, you should ensure that all important work items in the work queue have been completed. Make sure work items shown in the queue are no longer in the queued or running state. If you do not care whether certain work items complete, you can either cancel them or leave them in the queued state. Canceling them will ensure that they will not be reloaded when the web applications restart. If you leave them in the queued state, they may or may not reload when the web applications restart (depending on what code changes have occurred in the applied PTF).

Performing silent installations

Read the silent installation documentation on the IBM Installation Manager Knowledge Center for information on installing the product silently on one or more machines.

The Installation Manager product documentation contains instructions for installing the product silently on one or more machines. The product documentation is located at the following web site: http://www.ibm.com/support/knowledgecenter/SSDV2W/welcome.

Preinstallation tasks

To prepare for and simplify the installation process, back up files, prepare databases and servers where required, and configure workstations.

Preinstallation checklist

Before you install Rational Asset Analyzer, ensure that the preinstallation steps are completed as required.

Procedure

__ 1. If you are installing from an electronic image that was downloaded, verify that you have the required parts and have extracted the download files correctly.

__ 2. Ensure that you are logged on to your computer with an appropriate user ID.

__ 3. Back up any necessary files.

Backing up files

Files that you create and maintain represent a considerable investment. Although the installation process is not designed to write over or delete files that you create, protect your investment by backing up these files. During installation the following directories and files are used: *install_directory*\scan\DmhScan.cfg, *install_directory*\config and *install_directory*\data. You should create a backup copy of these directories and files in case an error occurs and the backup copies created during the installation process are corrupted.

Verifying and extracting electronic images

If you download the installation files from IBM Fix Central, before you install the software, verify the completeness of the downloaded files and extract the electronic image from the files. If you select the Download Director option for downloading the installation files, the Download Director applet automatically verifies the completeness of each file that it processes.

About this task

To extract the installation files from the downloaded compressed file, follow these steps:

Procedure

1. Preserve the directory structure of the downloaded compressed files
2. Extract the contents of all the compressed files to the same directory

Installing Rational Asset Analyzer

To install Rational Asset Analyzer, follow the procedures in this section. Before you start the installation process, be sure to complete the planning and preinstallation tasks first.

About this task

There are two ways to start the installation process. You can start the process using the installation launchpad or IBM Installation Manager.

- "Installing using the launchpad program" on page 8

- "Installing using Installation Manager"

If you are upgrading from an earlier release of Rational Asset Analyzer Version 6.0.0.1 or later, you can use the steps in the "Installing Rational Asset Analyzer as an update" on page 13 topic.

Installing using the launchpad program

You can start the installation process from the launchpad program. The Setup disk image includes the launchpad program, which provides you with a location to start the installation process.

About this task

When you start the installation process from the launchpad program, IBM Installation Manager is automatically installed if it is not already on your computer. When the installation process starts, Installation Manager is already configured with the location of the repository that contains the installation package. If you install and start Installation Manager directly, then you must set repository preferences manually.

Important: Installation notes for the Windows operating system:

- If you plan to start the installation from the launchpad program, run the launchpad program as administrator. If the launchpad program starts automatically, stop the launchpad program, and restart it by using the **Run as administrator** option at the root level of the disk image. Right-click the `launchpad.exe` file, and click **Run as Administrator**.
- Do not select installation directories within the Program Files directory (`C:\Program Files`). If you select either an installation location or shared resources directory within the Program Files directory, only an administrator can run the installed packages.

Procedure

1. Open a command line and change to the directory in which you extracted the disk images. Run `launchpad.exe`.
2. When you are ready to begin the installation, click **Install Rational Asset Analyzer** > **Launch Rational Asset Analyzer**.
3. If IBM Installation Manager is not detected on your system or if an incompatible version is already installed, then you must continue with the installation of the latest release.
   a. Follow the instructions in the wizard to complete the installation of the Installation Manager.
   b. When the installation completes successfully, click **Finish** to close the wizard. After the installation is complete, Installation Manager opens automatically.
4. Complete the installation by following the steps in "Installing using Installation Manager."

Installing using Installation Manager

Install Rational Asset Analyzer by using IBM Installation Manager.

Before you begin

IBM Installation Manager must be running. Your computer must be connected to the repository location containing the Rational Asset Analyzer product image.

Procedure

1. Start Installation Manager.

   Note: If a new version of Installation Manager is found, you are prompted to confirm that you want to install it before you can continue. Click **OK** to proceed. Installation Manager automatically installs the new version, stops, restarts, and resumes.
2. Specify the repository that contains the product package.
   a. On the Start page of Installation Manager, click **File** > **Preferences**, and then click **Repositories**. The "Repositories" page opens, showing any available repositories, their locations, and whether they are accessible.
   b. On the "Repositories" page, click **Add Repository**.
   c. On the "Add repository"page, type the URL of the repository location or browse to it and set a file path.
   d. Click **OK**. If you provided an HTTPS or restricted FTP repository location, then you will be prompted to enter a user ID and password. The new or changed repository location is listed. If the repository is not accessible, a red x is displayed in the Accessible column.
   e. Click **OK** to close the "Preferences" page.
3. On the Installation Manager start page, click **Install**. If you have started the install process from the launchpad, this step is omitted.
4. The "Install" page of the Install Packages wizard lists the packages in the repositories identified on the Installation Manager "Preferences" page. The most recent version of the package is displayed. If you have started the install process from the launchpad, this step is omitted.
5. Select the Rational Asset Analyzer package that you want to install. If you have not done so already, read the release information by clicking **More info** > **Release information**. Click **Next** to continue.
6. On the "Licenses" page, read the license agreement for the selected package. If you agree to the terms of all of the license agreements, click **I accept the terms of the license agreements**. Click **Next** to continue.
7. On the "Location" page, type the path for the *shared resources directory* in the **Shared Resources Directory** field, or accept the default path. The shared resources directory contains resources that can be shared by one or more package groups. Click **Next** to continue.

   The default path for Windows is `C:\Program Files\IBM\IBMIMSShared`.

   Important: You can only specify the shared resources directory when you install the first package. Use your largest disk for this to ensure adequate space for the shared resources of future packages. You cannot change the directory location unless you uninstall all packages.
8. On the "Location" page, create a *package group* to install the product package into. If you are updating the package, use the existing package group. To create a new package group:
   a. Click **Create a new package group**.
   b. Type the path for the installation directory for the package group. The name for the package group is created automatically.

The default path is: `C:\Program Files\IBM\Rational Asset Analyzer`

Important: On Windows, the Program Files directory is virtualized so that users who are not running as the administrator have write access to this protected directory. However, the virtualization workaround is not compatible with the product.

If you want to enable users who do not have Administrator privileges to run the product, do not select an installation location or Shared Resources directory in the default path `C:\Program Files\IBM\`. Instead, select a directory in a different path, such as `C:\Program Files_IBM\`.

c. Click **Next** to continue.

9. On the Features page, Rational Asset Analyzer is preselected as the feature to install. The lower half of the panel provides details and disk space information. Click **Next** to continue.
10. A navigation tree on the left lists the required components that must be configured for the installation. A white X in a red circle appears next to the components that do not have required information entered; a white check mark in a green square appears next to components that have all required information entered. The Installation Manager will pre-populate the fields with available configuration information. To enter or change required information, click the appropriate components in the navigation list on the left side of the window.
    - Database Properties

      DB2 Home or DB2 Connect™ Home
      The location where DB2 is installed on your system.

      TCP/IP port
      The port number of the DB2 instance. The default value is 50000 on Windows and AIX®.

      Database name
      The name used for Rational Asset Analyzer inventory database. The default is DMHDB.

      Table schema name
      The high-level qualifier for the tables. The default is DMH.

      Username
      The user ID of a database administrator who has the proper DB2 authority (DBADM) for creating database objects like tables, indexes, views, and triggers.

      When a new database is created on Windows, and the username of the person performing the installation is different from the database username specified in the installation panel, the database username is granted DBADM authority on the new database.

      Password
      The database password for the user ID specified above. This value is encoded when the Rational Asset Analyzer enterprise application is started and the values are read from the configuration file.

      Users with administrator privileges
      List of user IDs with the authority to perform administrative functions in Rational Asset Analyzer, such as deleting definitions. The default value of * allows all users to access these functions. To

restrict administrator authority, list user IDs to be granted administrator access, separated by commas.

To validate your DB2 settings, enter the username and password and click **Validate Settings**. When your settings are validated, the **Validate Settings** button will become disabled and the **Next** button becomes enabled.

If you receive a warning message that the database already exists, this is not a problem unless you are refreshing your Rational Asset Analyzer with a later version and you have not been instructed that the later version requires that the database be dropped and recreated.

- Hostname

  The host name or IP address of the machine on which you are currently installing Rational Asset Analyzer. If you use `localhost` for the value, your Rational Asset Analyzer system will not be accessible from other systems. It will only be accessible from your local system.

- Site Information

  The site name and description that identify the system on which you are installing Rational Asset Analyzer in the inventory database and user interface.

- Application Server

  To change your application server information, select from the following options:

  Use the embedded application server
  Select this option to indicate that your Rational Asset Analyzer installation use the embedded application server, which is implemented using the WebSphere Application Server Liberty Profile. This option is available only when installing on Windows. When selected, the following settings apply:

  Port The port number through which deployed enterprise applications are accessible by a browser It can be any available port number, for example, 9080.

  Protocol
  The protocol through which deployed web applications are accessible through a browser. If https is chosen, SSL is used to ensure secure communications.

  Note: When Rational Asset Analyzer is installed using the embedded application server, there is no corresponding Windows service installed for the embedded application server. As a result, the embedded application server shuts down when the user who started the embedded application server logs off of the server system. To avoid this, you can use the Task Scheduler in Windows to start the embedded application server and keep it running even when no user is logged on to Windows. For more information, see "Starting the embedded application server using the Task Scheduler" on page 15.

  Use WebSphere Application Server (best for enterprise installations)
  Select this option to indicate that yourRational Asset Analyzer installation use WebSphere Application Server. This option displays only when installing on Windows. When installing on AIX, this option assumed. When selected, or in the case of AIX, when assumed, the following settings apply.

Note: The WebSphere Application Server information is not populated automatically. Click **Retrieve server information** for the Installation Manager program to detect your server settings automatically. After the settings are detected, the remaining fields are populated with the appropriate information. Verify that the correct server was detected. Click **Test Connection** to validate the settings before proceeding with the installation.

Application server home directory
Type the name of the directory in which WebSphere Application Server is installed or click **Browse** to select a new home directory. The home directory can be the *was_installation_directory*\AppServer directory, or the directory of a server profile, for example, *was_installation_directory*\AppServer\profiles\<*profileName*>. The directory must include the \bin\wsadmin.bat file.

Global security settings
If a username and password are required to access WebSphere Application Server, enter them in the **Username** and **Password** fields.

Cell name
The name of the cell containing the node containing the application server that will host the web applications.

Node name
The name of the node containing the application server that will host the web applications. The name can be determined by looking at the WebSphere Application Server Administrative Console under **Server** > **Application servers** > *servername* > **Node**.

Server name
The name of the application server that will host the web applications. The name can be determined by looking at the WAS Administrative Console under **Server** > **Application servers**.

Web container port
The port number through which deployed web applications are accessible by a browser. The value can be determined by looking at the Websphere Application Server Administrative Console under **Server** > **Server types** > **Websphere Application Servers** > *servername* > **Ports**.

Web container protocol
The protocol through which deployed web applications are accessible through a browser. This is typically http or https.

- Scanning Framework

  The port to be used by the scanner daemon. Click **Next** to accept the default value of 8088, or specify the value of an available port.

- Java Home Location (AIX-only)

  The Installation Manager attempts to detect the location of the Java™ home directory. If you want to use a different installation of these products, you can change the home directory for Java by clicking **Browse** and selecting another directory from the directory selection window.

- Log and Temp directories

  If you want to change the default location of the Rational Asset Analyzer log and temp files, type new directories on this page, or click Browse and select another directory from the directory selection window.

Click **Next** to continue.

11. On the Summary page, review your choices before installing the product package. If you want to change choices that you made on previous pages, click **Back** and make your changes. When you are satisfied with your installation choices, click **Install** to install the package. A progress indicator shows the percentage of the installation that is completed.
12. When the installation process is complete, a message confirms the success of the process. Check the log file for errors.
    a. To open the installation log file, click **View log file**. The log file will open in a new window. You must close the Installation Log window to continue.
    b. Click **Finish** to close Installation Manager.
13. If you are using WebSphere Application Server, restart it before launching Rational Asset Analyzer.

Installing Rational Asset Analyzer as an update

Install Rational Asset Analyzer by using IBM Installation Manager.

Procedure

1. Start Installation Manager.

   Note: If a new version of Installation Manager is found, you are prompted to confirm that you want to install it before you can continue. Click **OK** to proceed. Installation Manager automatically installs the new version, stops, restarts, and resumes.
2. Specify the repository that contains the product package.
   a. On the Start page of Installation Manager, click **File** > **Preferences**, and then click **Repositories**. The "Repositories" page opens, showing any available repositories, their locations, and whether they are accessible.
   b. On the "Repositories" page, click **Add Repository**.
   c. On the "Add repository"page, type the URL of the repository location or browse to it and set a file path.
   d. Click **OK**. If you provided an HTTPS or restricted FTP repository location, then you will be prompted to enter a user ID and password. The new or changed repository location is listed. If the repository is not accessible, a red x is displayed in the Accessible column.
   e. Click **OK** to close the "Preferences" window.
3. On the start page of Installation Manager, click **Update**.
4. In the Update packages wizard, select the package group name containing the installation location for Rational Asset Analyzer and click **Next**. A search is performed for updates in the Rational Asset Analyzer repository on the Web and in all of the repository locations that you specified. The search progress is displayed.
5. On the "Update Package" page, the updates are displayed and selected. Select the version of Rational Asset Analyzer that you want to install, then click Next.

6. On the "Licenses" page, read the license agreement for the selected package. If you agree to the terms of all of the license agreements, click **I accept the terms of the license agreements**. Click **Next** to continue.
7. Click **Next** on the "Features" page.
8. Review the summary information and click **Update**. A progress indicator shows the percentage of the installation that is completed.
9. When the update process is complete, a message confirms the success of the process. Check the log file for errors.
   a. To open the installation log file, click **View log file**. The log file will open in a new window. You must close the Installation Log window to continue.
   b. Click **Finish** to close Installation Manager.
10. If you are using WebSphere Application Server, restart it before launching Rational Asset Analyzer.

Post-installation tasks

After you have installed your product, complete the installation verification tasks listed in the checklist.

About this task

If during the process, you encounter any error, refer to the “Known problems” on page 27 for possible solutions.

Post-installation checklist

After you have installed your product, complete several tasks to configure and verify the installation.

Procedure

__ 1. Verify that you can start Rational Asset Analyzer. For details see “Starting Rational Asset Analyzer.”
__ 2. Learn how to start and stop the application server. For more information, see “Starting and stopping the application server” on page 15.
__ 3. Verify that several key functions are working. For details see “Verify the product usage” on page 17.
__ 4. Configure your product license. For more information, see “Manage licenses” on page 21.
__ 5. Import product-suppled queries. See “Import product-supplied custom queries” on page 20.
__ 6. Migrate your existing data base scheme to the new level using the Rational Asset Analyzer Migration Utility if you want to continue using your existing data base. See “Migrating database data” on page 21 for more information.
__ 7. Update the data base User ID and password. See “Updating the database user ID and password” on page 21

Starting Rational Asset Analyzer

You can start your product from the desktop environment or a command-line interface.

About this task

For Microsoft Windows operating systems: Click **Start** > **Programs** > **IBM** > **Rational Asset Analyzer**.

When prompted for a user name and password, make sure you enter a name that was identified as having administrative privileges on the DB2 database information page of the installation wizard.

Starting and stopping the application server

The method of starting and stopping the application server depends on which application server is used.

About this task

Rational Asset Analyzer supports two types of application servers -- the embedded application server and WebSphere Application Server. The embedded application server is only available in certain operating environments, and is chosen during installation.

Starting and stopping the embedded application server using shortcuts

Procedure

To start and stop the embedded application server using shortcuts:

1. Click **Start** > **All Programs** > **IBM Rational Asset Analyzer**.
2. Click **Start the server** or **Stop the server**, as appropriate. The shortcuts must be run as administrator.

Starting and stopping the embedded application server using a command prompt

Procedure

To start and stop and otherwise administer the embedded application server from a command prompt window that was started as administrator, run the following commands:

1. To start the server: *installation_directory*\bin\server.bat start
2. To stop the server: *installation_directory*\bin\server.bat stop
3. To restart the server: *installation_directory*\bin\server.bat restart
4. To check the status of the server: *installation_directory*\bin\server.bat status

Starting the embedded application server using the Task Scheduler

Procedure

When Rational Asset Analyzer is installed using the embedded application server, there is no corresponding Windows service installed for the embedded application server. As a result, the embedded application server shuts down every time a Rational Asset Analyzer user logs out of the operating system session on the server system. To avoid this, you can use the Task Scheduler in Windows to start the embedded application server and keep it running even when no user is logged on to Windows.

1. Click **Start** and enter `Task Scheduler` in the search box to find and start the Task Scheduler.
2. In the Task Scheduler, click **Action** > **Create task**.
3. On the **General** tab:
   a. For **Name**, provide a task name (for example, `Start RAA Server`).
   b. Under **Security options**, select **Run whether user is logged on or not** and select **Run with highest privileges**.
4. On the **Triggers** tab:
   a. Click **New**.
   b. In the **Begin the task** drop down, select **At startup**.
   c. Click **OK** to save the trigger changes.
5. On the **Actions** tab:
   a. Click **New**.
   b. In the New Action dialog, click **Browse** and browse to and select the `<installDir>\bin\server.bat` file (for example, `C:\Program Files\IBM\Rational Asset Analyzer\bin\server.bat`).
   c. In the **Add arguments** field, enter: `start`
   d. Click **OK** to save the action changes.
   e. Click **OK** to save the task.
6. When prompted, enter the **User name** and **Password** information for the user account that will run this task.

Starting and stopping WebSphere Application Server using shortcuts

Procedure

To start and stop the WebSphere Application Server on Windows using shortcuts:

1. Click **Start** > **IBM WebSpere Application Server** > **Application Server** > **Profiles** > *profile*.
2. Click **Start the server** or **Stop the server**, as appropriate.

Starting and stopping WebSphere Application Server using a command prompt

Procedure

To start and stop the WebSphere Application Server on Windows from a command prompt, run the following commands:

1. To start the server: *wasAppServerDir*`\bin\startServer.bat` *serverName*
2. To stop the server: *wasAppServerDir*`\bin\stopServer.bat` *serverName*

Starting and stopping enterprise applications using the WebSphere Application Server administrative console

Procedure

To start and stop enterprise applications using the WebSphere Application Server administrative console on Windows, perform the following steps. The applications should be started in the following order because of dependencies:

- wsaahelp
- com.ibm.dmh.rest
- wsaa

1. Click **Start** > **All Programs** > **IBM WebSphere Application Server** > **Application Server** > **Profiles** > *profile* > **Administrative console**.
2. In the left pane, click **Applications** > **Application types** > **WebSphere enterprise applications**.
3. Choose the application and click **Start** or **Stop**, as appropriate.

WebSphere Application Server on z/OS

Procedure

For WebSphere Application Server on z/OS®:

See the WebSphere Application Server for z/OS documentation for the related commands.

Verify the product usage

After the installation process is complete and there are no errors, start Rational Asset Analyzer and verify several key functions.

- "Verifying the web interface"
- "Verify distributed asset inventory"
- "Verify CICS regions" on page 20
- "Verify z/OS asset inventory" on page 19

Verifying the web interface

After you start Rational Asset Analyzer, verify that the web interface is working properly.

Procedure

1. Start Rational Asset Analyzer if it is not already started. Enter your user ID and password and click **OK** to continue.
2. After the Rational Asset Analyzer Home page opens. Verify that there is a timestamp, such as Wednesday, August 13, 2003 5:30:28 PM PDT, in the bottom right corner of the window. If there is no timestamp, Rational Asset Analyzer is not accessing the database properly and other Rational Asset Analyzer operations will fail. The most likely cause of this problem is with JDBC.

   To determine the cause of the problem, check the logs that were produced when you started the embedded application server or WebSphere Application Server and the HTTP Server. Look for DB2 connection errors in the log files, such as messages indicating that JDBC is not configured properly, or is otherwise not communicating properly with DB2. Correct any errors before proceeding.

Verify distributed asset inventory

Verify that the inventory for distributed assets data is working.

Procedure

Complete the following steps to start the distributed scanner and collect asset inventory to validate.

1. Click **Database** > **Collect inventory**.
2. In the "Choose an inventory activity" panel, select **Windows File System** scan option. Click **Next**.
3. In the "Choose a site" panel, select a site from the drop-down list or click **New** to create a site. Click **Next**.

4. In the "Specify the container" panel, complete the following:
   a. In the **Windows Directory** field, type *installation_directory*\sample\j2ee.
   b. Select **Scan specified directory and all subdirectories**.
   c. Select **Scan inside zip files** and click **Next**.
5. In the "COBOL scanning options" panel, take the default setting and click **Next**.
6. In the "PL/I scanning options" panel, take the default setting and click **Next**.
7. In the "Assign to application" panel, select **Assign to a new application** from the drop-down list and enter the name of the new application, for example RAAIVP. Click **Next**. If you use the same application name for distributed and z/OS assets, both sets of assets can be viewed under the same application in the "Application details" view.
8. In the "Assign default concatenation sets" panel, ensure that all the drop-down options are set to **none** and click **Next**.
9. In the "Add to the queue" panel, review the information for your scan request, and click **Next**.
10. In the "Process queued requests" panel, click **Finish** for the scan to run.
11. View your inventory collection progress using the **Database** > **Analysis queue** menu option. Refresh the page periodically to see the postprocessing progress.

Results

After performing inventory collection for the IVP data for distributed assets, validate that you have the correct content by clicking **Explore** > **Distributed assets**. Compare the content displayed in your window to the contents in Table 1. Generally, it is okay if the numbers are slightly different because of the nature of the tool and the fact that it is changing. However, it is not okay if you do not see basically the content that appears below.

If you do not see this information, go to the “Known problems” on page 27 section to review possible solutions.

Table 1. Sample distributed asset data

Containers	Total	Java	Total	Web	Total	Other	Total
Enterprise application	2	Java package	41	EJB	11	Archive manifest file	10
Web application	2	Java bytecode class	730	HTML file	4	C++	0
EJB-JAR	2	Java bytecode method	6563	JSP file	12		
J2EE client	0	Java bytecode field	3157	XML file	35		
Connector archive	0			Servlet	3		
JAR file	3			JSP tag	226		
Java bytecode root	2			JSP tag library	12		
				Tag library validator	0		
				Servlet event listener	0		
				Filter	0		

Verify z/OS asset inventory

Verify that the z/OS asset inventory data collection is working.

Procedure

Complete the following steps to collect z/OS asset inventory to validate.

1. Click **Database** > **Collect inventory**.
2. In the "Choose an inventory activity" panel, select **Windows File System** scan option. Click **Next**.
3. In the "Choose a site" panel, select a site from the drop-down list or click **New** to create a site. Click **Next**.
4. In the "Specify the container" panel, complete the following:
   a. In the **Windows Directory** field, type *installation_directory*\sample\source.
   b. Select **Scan specified directory and all subdirectories**.
   c. Select **Scan inside zip files** and click **Next**.
5. In the "COBOL scanning options" panel, take the default setting and click **Next**.
6. In the "PL/I scanning options" panel, take the default setting and click **Next**.
7. In the "Assign to application" panel, select **Assign to a new application** from the drop-down list and enter the name of the new application, for example RAAIVP. Click **Next**. If you use the same application name for distributed and z/OS assets, both sets of assets can be viewed under the same application in the "Application details" view.
8. In the "Assign default concatenation sets" panel, ensure that all the drop-down options are set to **none** and click **Next**.
9. In the "Add to the queue" panel, review the information for your scan request, and click **Next**.
10. In the "Process queued requests" panel, click **Finish** for the scan to run.
11. View your inventory collection progress using the **Database** > **Analysis queue** menu option. Refresh the page periodically to see the postprocessing progress. Following successful inventory collection, five entries will remain in the Analysis queue, Step name "Establish PSB for run unit". This is by design and can be ignored for the purposes of install verification.

Results

After performing inventory collection for the IVP data for z/OS assets, validate that you have the correct content by clicking **Explore** > **z/OS assets**. Compare the content displayed in your window to the contents in Table 2. Generally, it is okay if the numbers are slightly different because of the nature of the tool and the fact that it is changing. However, it is not okay if you do not see basically the content that appears below.

If you do not see this information, go to the “Known problems” on page 27 section to review possible solutions.

Table 2. Sample z/OS asset data

Run time	Total	Program	Total	Data	Total
Batch job	29	BMS map definition	1	Data element	2958
CICS® group	2	BMS map set definition	1	Data set	140
CICS online region	1	Concatenation set	1	Data store	70

Table 2. Sample z/OS asset data (continued)

Run time	Total	Program	Total	Data	Total
CICS transaction	4	DB2 stored procedure	0	DB2 column	9
DB2 system	2	Entry point	25	DB2 table	2
IMS™ DBD	0	IBM PSB	0	DD name	899
IMS subsystem	0	Program	16	I/O record description	126
IMS transaction	0				
Run unit	36				

Verify CICS regions

To help you verify that Rational Asset Analyzer recognizes CICS regions and includes associated transactions in the database inventory, Rational Asset Analyzer provides a logical CICS region.

About this task

Use the "Collect inventory" wizard to load the logical CICS region into the database.

Procedure

1. Edit the `DMHREG01` file which is located in the *`installation_directory`*`\sample\imports\` directory.
2. Update the SITE record and replace SYSWAS4 with the name of the site that was used for scanning the sample source (for example, MYSITE) and save your changes.

   ```
   FMT  REGION 1
   TOOL 0001000011
   SITE MYSITE "z/OS"
   START REGION ATC3
   ...
   ```
3. Save your changes.
4. Click **Database** > **Collect inventory**.
5. In the "Choose an inventory activity" panel, select **Queue local import files for loading**. Click **Next**.
6. In the "Queue local import files" panel, click **Browse**, choose the file *`installation_directory`*`\sample\imports\DMHREG01`, and click **Open**. Click **Next**.
7. In the"Process queued requests" panel, click **Finish** for the scan to run.
8. View your inventory collection progress using the **Database** > **Analysis queue** menu option. Refresh the page periodically to see the postprocessing progress. Following successful inventory collection, five entries will remain in the Analysis queue, Step name "Establish PSB for run unit". This is by design and can be ignored for the purposes of install verification.

Results

Click **Explore** > **z/OS assets** to view the scan results. You should see counts for the CICS assets.

Import product-supplied custom queries

A set of customer queries are included when you install Rational Asset Analyzer. You can optionally import these product-supplied custom queries into your environment.

About this task

To import, complete the following steps:

Procedure

1. Click **Explore** > **Custom queries**
2. From the Custom queries panel, click **Import custom queries** from the **Actions** list to open the Custom query import wizard.
3. Select **URL** which contains the location of the product-supplied custom queries. Enter the user ID and password if required and click **Next** to continue.
4. Select one or more custom queries to import and click **Finish**.

Migrating database data

If you have an existing databases, you can optionally migrate your data to use with the new version of Rational Asset Analyzer. If you choose not to migrate an existing database, you will need to define a new database to use with the product.

About this task

To preserve the data in an existing database, you must migrate it to the current schema level using the Migration Utility. Download the utility from http://www.ibm.com/support/fixcentral/.

The Migration Utility is a Java-based tool for automatically migrating the Rational Asset Analyzer database to a newer schema level.

Note: Always download the current version of the migration utility before using it to ensure that you are using the latest version.

Updating the database user ID and password

If the database user ID or password are changed after the product has been installed, you must update the `Common.cfg` file manually by doing the following:

Procedure

1. Find the `Common.cfg` file located in `installation_directory/config`,
2. Locate the section containing information used to access the database.
3. Update the values for username and password by replacing the values right of the equal sign with the new values.

   ```
   [Database]
   username=user_name
   password=password
   ```

4. Save the changes.
5. If you are using the embedded application server, run the command *installation_directory*`\bin\server restart`. Otherwise, from the WebSphere Application Server administrative console, restart the Rational Asset Analyzer enterprise applications.

Manage licenses

Licenses for Rational Asset Analyzer are managed using IBM Rational Common Licensing. IBM Rational Common Licensing uses a license manager to monitor license access and usage. The license manager runs on a license server.

After installing Rational Asset Analyzer, you must import the entitled licenses into a license server. A license server can be shared with other products, you do not need a separate license server for Rational Asset Analyzer. To prevent lost of product usage, import licenses before the built-in trial license expires.

Note: You cannot use Installation Manager to manage licenses for Rational Asset Analyzer.

There are a number of sources for more information on managing licenses for your Rational product.

- For additional information about IBM Rational Common Licensing and the license server, see http://www.ibm.com/support/knowledgecenter/SSSTWP_8.1.4/com.ibm.rational.license.doc/topics/c_managing_lic.html.
- For information about dealing with Rational product activation, see the technote at http://www.ibm.com/support/docview.wss?uid=swg21250404 .
- For more information on managing licenses for your Rational product, see the Rational licensing support page at http://www.ibm.com/software/rational/support/licensing/.

Accessing license keys

The Rational License Key Center is an online licensing tool that allows you to generate and return IBM Rational product license keys. Licenses entitlements are established as part of purchasing the Rational product from IBM. You must be a member of the IBM Rational License Key Center account for your company to access license keys. The person placing the order is setup as the account administrator and is sent a Welcome e-mail containing a temporary password for logging into the Rational License Key Center.

About this task

The license administrator can request license keys in Rational License Key Center. To purchase licenses and enable your product, complete the following steps:

Procedure

1. Access the License Key Center at: https://licensing.subscribenet.com/control/ibmr/login and click **Continue**.
2. Log in to the IBM Rational License Key Center using the license administrator e-mail address and License Key Center password. If you do not have an ID, you will need to complete the New Customer information by clicking **Don't have a password**. The information needed to complete the form is located in the IBM Proof of Entitlement (PoE) certificate, received by the person who ordered the product.
3. Click **Get keys** from the action list on the left and then select **IBM Rational Asset Analyzer**. You will be presented with instructions for completing the registration process. The License Key Center provides links to instructional videos and a getting started guide to help you download and install your license keys

License types and order used

There are two types of licenses available that allow for handling of frequent and occasional users: authorized user and floating licenses.

Authorized User licenses permits a single, specific individual to use the product on the client specified by the license. The Authorized User license does not entitle a second person to use the product at any time, even if the licensed individual is not actively using it. However, the license account administrator can replace the original assignee on a long-term or permanent basis.

Floating licenses are for a single software product that can be shared among multiple team members. However, the total number of concurrent users cannot exceed the number of entitled floating licenses. For example, if there is one floating license any user in your organization may use the product at any given time. Another person who wants to access the product must wait until the current user logs off. The license server responds to end-user requests for access to the license keys and will grant access to the number of concurrent users that matches the number of licenses the organization is entitled.

To use authorized or floating licenses, the license keys must be installed on a Rational License Server. The Rational License Server does not serve a specific type of license to a user when a user requests use of the product. It simply returns the next available license for the requesting product. The type of license returned to a requestor depends on the sequence of the licenses found in the *license key file*. The license key file is created based on the data that is provided in IBM Rational License Key Center. The license key definition contains information about the server nodes and vendor daemons. The license key definition also contains at least one line of data for each licensed product.

Combining license types

If there is a combination of authorized user and floating entitlements, the Rational License Key Center creates the file with floating licenses first and the authorized user licenses second. To ensure optimal order for authorizing access for both the frequent and occasional user, the license key file must be changed so that authorized user licenses are served first and floating licenses are served second.

About this task

The following procedure highlights the changes you can make to ensure that an authorize user license is served to the assigned user.

Procedure

1. After generating your license keys, a license key file separate INCREMENT statements are generated for floating and authorized user licenses. The INCREMENT statement for floating licenses appears before the INCREMENT statement for authorized user licenses regardless of the order in which your request for the entitlement were made. Also, both the authorized user and floating licenses are identified as a floating type license.
2. To change the order of the INCREMENT lines so that authorized user licenses are served first, cut and paste the lines in a text editor before the floating license INCREMENT statement. Save the file.
3. Import the text file into the license server.
4. On the "Edit Options File" window, click **Yes** to edit the options file. The options file is used to define authorized users. You can also limit the number of licenses each user or group can access. This file is used by the license server to determine if the key request can be served by using an authorized key or floating key.
5. Click **Settings** > **Client/Server Configuration** > **Show Licenses** to see the licenses on the server. Select the appropriate server and click **OK**.

Modifying software

With the Modify Packages wizard in IBM Installation Manager, you can change the language and feature selections of an installed product package. You can also use the Modify Packages wizard to install new features that might be included in a package update, such as a refresh pack.

Before you begin

By default, Internet access is required unless the repository preferences points to a local update site. See the Installation Manager help for more information.

Note: Close all programs that were installed using Installation Manager before modifying.

About this task

To modify an installed product package:

Procedure

1. From the Start page of the Installation Manager, click the **Modify** icon.
2. In the Modify wizard, select the installation location for the product, and click **Next**.
3. On the Modify page, under Languages, select the languages for the package group; then click **Next**. The corresponding national language translations for the user interface and documentation for the packages are installed. Note that your choices apply to all packages that are installed under this package group.
4. On the Features page, select the features to install or remove. Some products do not have optional features.
   a. To learn more about a feature, click the feature and review the brief description under **Details**.
   b. If you want to see the dependency relationships between features, select **Show Dependencies**. When you click a feature, any features that depend on it and any features that are its dependents are shown in the Dependencies window. As you select or exclude features in the packages, Installation Manager will automatically enforce any dependencies with other features and display updated download size and disk space requirements for the installation.
5. When you are finished selecting features, click **Next**.
6. On the Summary page, review your choices before modifying the installation package, and then click **Modify**.
7. Optional: When the modification process is completed, click **View Log File** to see the complete log.

Updating software

You can search for product updates and install the updates for your IBM product.

Before you begin

By default, Internet access is required unless your repository preferences points to a local update site.

Each installed package has the location embedded for its default IBM update repository. For Installation Manager to search the IBM update repository locations for the installed packages, select the preference **Search service repositories during installation and updates** on the Repositories preference page. This preference is selected by default.

See the Installation Manager help for more information.

Important:

- Close all programs that were installed using Installation Manager before updating.
- During the update process, Installation Manager might prompt you for the location of the repository for the base version of the package. If you installed the product from CDs or other media, they must be available when you use the update feature.

About this task

To find and install product package updates:

Procedure

1. From the Start page of the Installation Manager, click **Update**.
2. If IBM Installation Manager is not detected on your computer, continue with the installation of the latest release. Follow the instructions in the wizard to complete the installation.
3. In the Update wizard, select the location of the package group where the product you want to update is installed or select **Update All**, and then click **Next**. Installation Manager searches for updates in its repositories and the predefined update sites for the product. A progress indicator shows the search is taking place.
4. If updates for a package are found, then they are displayed in the **Updates** list on the Update Packages page after the corresponding package. Only recommended updates are displayed by default. Click **Show all** to display all updates found for the available packages.
   a. To learn more about an update, click the update and review its description under **Details**.
   b. If additional information about the update is available, a **More info** link is included at the end of the description text. Click the link to display the information in a browser. Review this information before installing the update.
5. Select the updates that you want to install or click **Select Recommended** to restore the default selections. Updates that have a dependency relationship are automatically selected and cleared together.
6. Click **Next**.
7. On the Licenses page, read the license agreements for the selected updates. On the left side of the **License** page, the list of licenses for the updates you select is displayed
8. Click each item to display the corresponding license agreement text.
   a. If you agree to the terms of all the license agreements, click **I accept the terms of the license agreements**.
   b. Click **Next** to continue.
9. On the Summary page, review your choices before installing the updates.

a. If you want to change the choices you made on previous pages, click **Back**, and make your changes.
b. When you are satisfied, click **Update** to download and install the updates. A progress indicator shows the percentage of the installation completed.

10. Optional: When the update process is completed, a message that confirms the process is displayed near the top of the page. Click **View log file** to open the log file for the current session in a new window. Close the Installation Log window to continue.
11. Click **Finish** to close the wizard.
12. Optional: Only the features that you already have installed are updated using the **Update** wizard. If the update contains new features that you want to install, run the **Modify** wizard, and select the new features to install from the feature selection panel.

Uninstalling software

Use the IBM Installation Manager to uninstall your product. If no other products are installed, you can uninstall Installation Manager also.

Uninstalling Rational Asset Analyzer

To uninstall Rational Asset Analyzer, use Installation Manager.

Procedure

1. Start Installation Manager.
2. On the Start page, click **Uninstall**.
3. On the Uninstall Packages page, from the **Installation Packages** list, select the product package to uninstall, and click **Next**.
4. On the Summary page, review the list of packages that will be uninstalled, and click **Uninstall**. The Complete page is displayed after the packages are removed.
5. Click **Finish**.

Results

Note: Uninstalling Rational Asset Analyzer does not drop the database.

Uninstalling Installation Manager

Follow these steps to remove IBM Installation Manager from your workstation.

Before you begin

Before you can uninstall IBM Installation Manager, you must uninstall all of the packages and products that were installed with Installation Manager. Close the Installation Manager before attempting to uninstall the program.

You must be logged onto your workstation with a user account that has the same privileges as the one used to install Installation Manager.

About this task

To uninstall Installation Manager, complete the following steps:

Note: If you receive an error after uninstalling Installation Manager on Solaris, close the dialog box with the error message and manually delete the following empty directories: `/var/ibm/InstallationManager/uninstall` and `/var/ibm/InstallationManager`.

Procedure

To uninstall Installation Manager:

1. From the **Start** menu, click **Control Panel** > **Add or Remove Programs**.
2. On the "Change or Remove Programs" page, select **IBM Installation Manager** and click **Remove**.
3. In the **Add or Remove Programs** window, click **Yes** to continue with the removal.

Results

You have removed IBM Installation Manager from your workstation.

Known problems

Many problems can be attributed to an incorrect or incomplete installation or configuration of prerequisite products. Before installing and using your product, review the known problems.

Use the following tips to ensure that you have eliminated the cause of common problems:

- Verify the correct installation and configuration of prerequisite products before you proceed with installation and configuration of Rational Asset Analyzer.
- Verify proper installation and configuration of the Rational Asset Analyzer product itself.

Known problems are grouped into the following categories:

- "DB2"
- "Home page problems" on page 28
- "Install problems" on page 29
- "Licensing problems" on page 30
- "Inventory problems" on page 31
- "Scanning problems" on page 31

DB2

DB2 errors occur when accessing data in the Rational Asset Analyzer interface

When you access data in the Rational Asset Analyzer interface, DB2 might fail. To avoid this problem, make sure that the latest DB2 fix packs are installed.

Home page problems

Error occurs when opening the Rational Asset Analyzer Home page

When navigating to the Rational Asset Analyzer Home page, you might receive the following messages:

DMH5252E
The **jdbc/DMHDB** data source could not be located. Make sure that the name has been defined to WebSphere Application Server.

DMH7883E
The appropriate method to access the database could not be found

To determine more about the problem, do the following tasks:

1. Check that a DB2 connection can be established outside of Rational Asset Analyzer. Use the DB2 command window to connect to DB2. Use the user ID and password specified during installation. For example, run the following commands.

   ```
   db2cmd
   db2connect to DMHDB user myuserid password mypassword
   db2connect reset
   ```

2. Check the `SystemErr.log` and the `SystemOut.log` log files for more details. These log files can be found in the `\AppServer\logs\<serverName>` directory.
3. Check the Admin Console to see if there is a DataSource defined in **Resources** > **JDBC Providers** (filling in cell, node and server info as appropriate).
4. Check that WebSphere Application Server was restarted after installing Rational Asset Analyzer.
5. Check the installation log for further information. To view the log file, start IBM Installation Manager and click **File** > **View log file**. Ensure that you select the correct log file from the list if Installation Manager was closed after the installation completed

If none of the above tasks provide an explanation, or if you find that you do not have the appropriate Data Source defined to WebSphere Application Server, install Rational Asset Analyzer again.

The Rational Asset Analyzer Home page does not display

Check that the correct URL is being used to access Rational Asset Analyzer.

Unable to access other pages from the Rational Asset Analyzer Home page

If you can get to the Home page, but you cannot get to any other page, you likely are experiencing a communications or connection problem.

When installing the product, if you entered an IP address rather than a host name, and your system is assigned a dynamic IP address (using DHCP), the IP address could have since changed and now be invalid. If that is what has happened, perform the following steps:

1. Edit the *installation_directory*`\config\Common.cfg` file and change the old IP address to a valid host name for the system, or to a static IP address. Save the file.

2. Edit the *installation_directory*\scan\DmhScan.cfg file and change the old IP address to the same host name or IP address. Save the file.
3. Restart WebSphere Application Server.
4. From a browser, go to the Home page and click on the **Sites** count. For each site that has the old IP address in the **Scanner daemon URL** value, click on the site name to go to the detail page, choose **Actions** > **Update the site details**, and then update the value with the correct host name or IP address.

The Rational Asset Analyzer Home page opens, but nothing is displayed

- Verify that a date stamp and a timestamp are displayed on the Home page.
- There is likely a problem with your JDBC communications. Verify the correct installation and configuration of JDBC, DB2, and WebSphere Application Server.

Install problems

Installation errors occur during the install step

Verify that prerequisites are installed and gather more information to determine the source of the problem.

- Check that all the required prerequisite software is installed.
- Check that the application server is running. If the configuration uses the embedded application server, the status can be checked using the command *installation_directory*\bin\server.bat status. If not running, the embedded application server can be started with the command *installation_directory*\bin\server.bat start.

  Note: When Rational Asset Analyzer is installed using the embedded application server, there is no corresponding Windows service installed for the embedded application server. As a result, the embedded application server shuts down every time a Rational Asset Analyzer user logs out of the operating system session on the server system. To avoid this, you can use the Task Scheduler in Windows to start the embedded application server and keep it running even when no user is logged on to Windows. For more information, see “Starting the embedded application server using the Task Scheduler” on page 15.

  Otherwise, make sure that the WebSphere Application Server is running.
- Check the installation log for additional information. To view the log file, start IBM Installation Manager and click **File** > **View Log**. If the IBM Installation Manager was closed when the installation process completed, ensure that the correct log file is selected.

Errors occur when creating the database

Check the installation log for the following message:

```
Error during "post-install configure" phase:
Error executing installation_directory\SetupDB.bat operation (status=1).
See agent output log for more information:<path to log file>
```

To view the log file, start IBM Installation Manager and click **File** > **View Log**. If the IBM Installation Manager was closed when the installation process completed, ensure that the correct log file is selected.

If the message is found, locate the log file specified in the message found in the installation log. Check the contents of the log file for the following text:

```
SQL1013N The database alias name or database name "DMHDB" could not be found.
SQLSTATE=42705 Database "DMHDB" does not already exist.
Creating new database...
SQL1005N The database alias "DMHDB" already exists in either the local database
    directory or system database directory.
```

If you find the above text, then the DMHDB database has been uncataloged from DB2, but has not been dropped. This could occur, for example, if you installed a new DB2 but did not clean up your databases first and did nothing to catalog them after the new install of DB2. You will need to add the DMHDB database back to DB2, drop it, and then create it again. To add the database back to DB2, do the following:

1. Open up the DB2 Control Center
2. Expand the **database** folder.
3. Right-click on the **database** folder and select **Add**.
4. Add the DMHDB database (the directions vary depending upon the version of DB2 you have installed). If you are sure that the database has the correct schema, you are done. If the database is not needed, right-click on the DMHDB database and select **Drop** to drop the database.
5. Run *installation_directory*`\install\SetupDB.bat DMHDB DMH` to create the database.

Installation fails trying to update web applications or Java resources

The failure might be a result of a problem with communications between the tool and the WebSphere Application Server. The installation process is designed to start the WebSphere Application Server automatically, but sometimes the start does not succeed.

If you are not using the embedded application server, verify that WebSphere Application Server is started prior to starting the installation process. Start the WebSphere Application Server and run the installation process again.

Licensing problems

License key is not recognized

If you have downloaded Rational Asset Analyzer Authorized User license keys and installed them in a Rational License Server prior to 21 June 2011, these licenses have been returned in the License Key Center on your behalf in favor of a new named-user license key template. You should replace the nodelocked keys with named-user keys acquired from the Rational License Key Center and clean out the nodelocked entries in your license servers.

See the following technote for details for installing the new license and removing the old type license from the license server: http://www.ibm.com/support/docview.wss?uid=swg21503967.

Inventory problems

The Collect inventory menu is missing in the Rational Asset Analyzer interface

Check that the user ID being used to access the interface has administrator authority. Identification is made through the administrators property located in the *installation_directory*/config/Common.cfg file. Specify each user ID that should have administrator privileges. Use an asterisk (*) to specify that all users are administrators. After updating the property, the application must be restarted. If you are using the embedded application server, run the command *installation_directory*\bin\server.bat restart. Otherwise, restart the enterprise applications using the WebSphere Application Server administrative console.

Scanning problems

No Container or File assets are created, when scanning the *installation_directory*\sample\source library

If after running the scan on the *installation_directory*\sample\source library, you do not see the appropriate results, edit the dmh6000.log and dmh6000_1.log files to find any errors. These files are found in the log directory specified during installation and identified by the logDir property in the *installation_directory*\config\Common.cfg file.

If there are errors, attempt to correct any problems. If you find errors that you do not understand or cannot correct, consult the Rational Asset Analyzer support page at http://www.ibm.com/support/entry/portal/Overview/Software/Rational/Rational_Asset_Analyzer.

A C++ error indicating an abnormal program termination occurs during scanning of distributed assets

This error occurs when the Java virtual machine attempts to allocate more than the page size. Check that the Windows virtual memory page size is set to a value greater than 500 MB. See the online help for more details.

After scanning a COBOL or PL/I source file, the file has an Analysis status of Completed with the following analysis message: RC=1 TYPE=COBOL DMH1921E: Source analyzer failed,no data collected from file:*file_name*

Open the *installation_directory*/config/Common.cfg file and in the [ScanningInfo] section, check the **cobolLibrary** and **pliLibrary** properties. A value of **enabled** indicates that the particular compiler is set up for use by Rational Asset Analyzer.

If the value is blank, the particular compiler is not available. If the property is set to **enabled**, then the environment must have been set up so that the compiler can be located during postprocessing.

Next, look at the DMH6000_1.log file found in the directory specify by the **logDir** property in Common.cfg. See if it contains any statement like the following:

```
\'cob2.exe' is not recognized as an internal or external command,
operable program or batch file.
DMH1929W: COBOL analyzer return code: 1
DMH1921E: Source analyzer failed, no data collected from file: file_name
```

This indicates that the postprocessor attempted to invoke the COBOL compiler (`cob2.exe`), but the compiler wasn't available. If the compiler really is not available on the server, then the compiler-based scanning support needs to be disabled, and you need to scan your files again using the proprietary scanner.

1. Disable the compiler-based scanning by doing the following:
   a. Edit *installation_directory*`/config/Common.cfg`.
   b. In the [ScanningInfo] section, set **cobolLibrary** and **pliLibrary** to blank values.
   c. If you are using the embedded application server, run the command *installation_directory*`\bin\server.bat restart`. Otherwise, restart the enterprise applications using the WebSphere Application Server administrative console.
2. Choose the proprietary scanner for files, container, applications, and sites by doing the following:
   a. Using the browser, go to **Database** > **COBOL and PL/I scanning options**.
   b. On the **Files** tab, search for any files that have scanning options set.
   c. Select every asset that says it is configured to use the compiler.
   d. Click **Configure scanning options**.
   e. Choose an option other than the compiler-based scanner, and complete the wizard.

Regardless of which action you take, it is necessary to queue the affected files again and reanalyze them by doing the following:

1. Queue affected files again.
   a. Using the browser, go to **Database** > **COBOL and PL/I scanning options**.
   b. Click **Files with errors**.
   c. Change the Analysis status search criteria to Completed.
   d. In the **Activity log messages** field, type: *DMH1921E*
   e. Click **Go**.
   f. Select all the matching files and then click **Queue** selected to requeue the files for analysis.
2. Complete the following steps to run the processor:
   a. Using the browser, go to **Database** > **Analysis queue** .
   b. From the Actions dropdown, select **Start postprocessor**.

IGYDS0210 with SQL1060N message using compiler-based scanner

A message similar to `RC=12 TYPE=COBOL IGYDS0210: PROGRAM1, line:0) SQL1060N User "SYSTEM" does not have CONNECT privilege. SQLSTATE=08004` might be encountered when using Enterprise compiler-based scanning to inventory COBOL assets.

If you encounter a similar message, determine the user id that is configured in Microsoft Windows as the **Log On As** user id (the Local System account, or another account) for the WebSphere Application Server service where the Rational Asset Analyzer (RAA) application is running. This user id must have privileges to

access the RAA DB2 database, for example, DMHDB, in order for the COBOL compiler to work correctly during Enterprise compiler-based scanning. The database privileges assigned to the **Log On As** id for the WebSphere Application Server service must be the same privileges as assigned to RAA users and administrators.

Connection problems

Connectionwaittimeoutexception

This exception occurs when the JDBC connection pool reaches the maximum number of database connections that are allowed, and subsequent database connection requests cannot be serviced. Check the system log for the following messages:

- J2CA0045E: Connection not available while invoking method createOrWaitForConnection for resource jdbc/*your_data_source*
- DSRA9400E: Fatal error occurred during Connection reassociation: com.ibm.websphere.ce.j2c.ConnectionWaitTimeoutException: Connection not available, Timed out waiting for ######

If you encounter these messages, increase the maximum number of concurrent database connections by using one of the following approaches:

- If you are using the embedded application server, which is implemented by using the WebSphere Application Server Liberty Profile, open the `installation_directory/config/Common.cfg` file and edit the maxConcurrentPageRequests value. For more information, refer to "Requirements for the embedded application server" on page 4.
- If you are using WebSphere Application Server Full Profile, use the WebSphere Application Server Administrative Console. Select **Resources** > **JDBC** > **Data Sources** > ***your_data_source*** > **Connection pools**, and update the Maximum connections property.

For more information about configuration and tuning, refer to the WebSphere Application Server IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter/SSAW57/mapfiles/product_welcome_wasnd.html).

Planning, installing, and configuring z/OS scanning

Planning, installing, and configuring z/OS scanning.

Planning to install z/OS scanning

Rational Asset Analyzer remote z/OS scanning capability makes it possible to perform remote scans of assembler source as well as DB2, CICS, and IMS subsystems on a z/OS system. The z/OS scanning function allows a system administrator to configure a Rational Asset Analyzer system to scan assets on z/OS. The scan results can then be imported into Rational Asset Analyzer to give a more complete view of assets.

About this task

Before you install z/OS Scanning for Rational Asset Analyzer, the following must be available:

z/OS system settings

- High-level qualifier for temporary installation data sets

- VOLSER where temporary installation data sets will reside (approximately 230 tracks)
- High-level qualifier for target product data sets
- VOLSER for target product sets (approximately 260 tracks)
- USS directory names for target product files and configuration files
- Hostname of the z/OS system to which installation files will be transferred using FTP
- User ID and password to use with file transfer

z/OS system authority needed

1. Transfer files using FTP to the z/OS system, creating data sets with high-level qualifiers of the temporary and target data sets on the specified volumes
2. Transfer files using FTP to the z/OS system, creating USS directories and files in the specified USS directory
3. Submit a batch job that performs TSO RECEIVE for target data sets
4. Run **BPXBATCH** in a batch job to extract the files from a TAR file
5. Configure the HTTP server
6. Restart the HTTP server
7. Create USS directories and files

Windows authority

1. Use FTP to transfer the files to z/OS.
2. Update the Rational Asset Analyzer *installation directory*\config\Common.cfg file.
3. Restart the application server.

Installing z/OS scanning

During the installation of z/OS scanning, binary sequential data sets are transferred to the z/OS system and then expanded to the target data sets.

About this task

1. "Specifying configuration parameters"
2. "Transfer the installation files to the z/OS server" on page 35
3. "Receiving the host files" on page 36

Specifying configuration parameters

Before you can transfer the necessary files to the z/OS system, the z/OS config.bat configuration files must be updated with values specific to your environment.

The config.bat file contains information that is used during the installation process.

Edit the config.bat file which is located in *installation directory*\install\zosscan directory and provide values for the following configuration parameters that are specific to your environment.

Host
Host name or IP address of the target z/OS system.

HLQ
High level qualifier of all the expanded target data sets on z/OS.

VOL
Volume where the expanded target data sets should be created.

BINHLQ
High level qualifier of the temporary binary (*.BIN) sequential data sets on z/OS.

BINVOL
Volume where the temporary binary (*.BIN) sequential data sets are created.

DMH_HOME
USS directory that will be the root of the USS files.

LANG
Language being used such as, en=English, ja=Japanese, ko=Korean.

Note: The BINHLQ and BINVOL values are used for temporary data sets that can be cleaned up after the installation is completed. If you want to use the same volume for both the permanent data sets and temporary ones, set the VOL and BINVOL settings to the same value.

For example:

```
SET HOST=dev.abccorp.com
SET HLQ=DMH.ZOSSCAN
SET VOL=WSAA01
SET BINHLQ=DMH.ZOSSCAN.TEMP
SET BINVOL=WSAA01
SET DMH_HOME=/usr/lpp/dmh/zosscan
SET LANG=en
```

Transfer the installation files to the z/OS server

After the `install\zosscan\config.bat` file has been customized for your system, the installation files can be transferred to the z/OS server.

About this task

Before transferring the files, verify the command files.

Procedure

1. Open a command prompt window and switch to the *`installation_directory`*`\install\zosscan` directory to verify the command files.

   It should contain at least the following:

   ```
   11/07/2011  12:39 PM    <DIR>
   11/07/2011  12:39 PM    <DIR>
   11/08/2011  04:17 PM    1,501 config.bat
   11/07/2011  12:39 PM    <DIR>      files
   11/07/2011  05:15 AM             8,955 upload.bat
   ```

2. Transfer the files to z/OS by issuing the **upload.bat** command and specifying a user ID and password authorized to transfer the files.

   ```
   > upload MYUSERID MYPASSWORD
   Preparing to FTP installation files to dev.abccorp.com
   Temp data sets=DMH.ZOSSCAN.TEMP on WSAA01
   Target data sets=DMH.ZOSSCAN on WSAA01
   Target HFS files=/usr/lpp/dmh/zosscan
   Press any key to continue . . .
   ```

   The following messages appear while the files are transferred to the z/OS server.

   ```
   Uploading installation files...
   ```

3. After the transfer completes, a log file is created in the directory. The `upload.log` file indicates that, in addition to the installation files, RECEIVE and CLEANUP jobs were transferred to the z/OS server. The log file also contains the requests and responses for the various files sent. Browse the `upload.log` file to ensure that there are no unexpected errors. If the `DMH_HOME` directory specified in the `installation_directory\install\zosscan\config.bat` file already exists, you will see the following error which can be ignored:

```
ftp> mkdir "/usr/lpp/dmh/zosscan"
550 MKDIR failed: EDC5117I File exists. (errno2=0x05520038)
```

Receiving the host files

After the files have been transferred to the z/OS server, you can use TSO to view the data sets and USS files. You will need to create the target data sets and USS files on the z/OS server.

Procedure

1. Log onto TSO and verify that at least the following data sets and HFS files are listed:

```
DMH.ZOSSCAN.TEMP.SDMH.CLEANUP.JCL
DMH.ZOSSCAN.TEMP.SDMH.RECEIVE.JCL
DMH.ZOSSCAN.TEMP.SDMHCNTL.BIN
DMH.ZOSSCAN.TEMP.SDMHDATA.BIN
DMH.ZOSSCAN.TEMP.SDMHLOAD.BIN
DMH.ZOSSCAN.TEMP.SDMHMCHS.BIN (Simplified Chinese-only)
DMH.ZOSSCAN.TEMP.SDMHMJPN.BIN (Japanese-only)
DMH.ZOSSCAN.TEMP.SDMHMKOR.BIN (Korean-only)
DMH.ZOSSCAN.TEMP.SDMHMLIB.BIN
DMH.ZOSSCAN.TEMP.SDMHPCHS.BIN (Simplified Chinese-only)
DMH.ZOSSCAN.TEMP.SDMHPJPN.BIN (Japanese-only)
DMH.ZOSSCAN.TEMP.SDMHPKOR.BIN (Korean-only)
DMH.ZOSSCAN.TEMP.SDMHPLIB.BIN
DMH.ZOSSCAN.TEMP.SDMHREXC.BIN (Simplified Chinese-only)
DMH.ZOSSCAN.TEMP.SDMHREXJ.BIN (Japanese-only)
DMH.ZOSSCAN.TEMP.SDMHREXK.BIN (Korean-only)
DMH.ZOSSCAN.TEMP.SDMHREXX.BIN
DMH.ZOSSCAN.TEMP.SDMHSCHS.BIN (Simplified Chinese-only)
DMH.ZOSSCAN.TEMP.SDMHSIMP.BIN
DMH.ZOSSCAN.TEMP.SDMHSJPN.BIN (Japanese-only)
DMH.ZOSSCAN.TEMP.SDMHSKOR.BIN (Korean-only)
DMH.ZOSSCAN.TEMP.SDMHSLIB.BIN
-rwxr-xr-x 1 ADMIN1 DMHGRP 102400 Jul 31 12:27 dmhhfs.tar
-rwxr-xr-x 1 ADMIN1 DMHGRP 243 Jul 31 12:27 dmhuntar.scr
```

2. Update the JCL for the job that performs a TSO RECEIVE for each of the SDMH*.BIN data sets and expands the TAR file to create the target data sets and USS files
   a. Edit the SDMH.RECEIVE.JCL data set and update to provide a correct JOB card, and make any other modifications needed to conform to your local standards.
   b. Submit the SDMH.RECEIVE.JCL job.
   c. After the job completes, verify that all steps finished with a RC=0.
3. Verify that the RECEIVE job successfully created the following data sets and HFS:

```
DMH.ZOSSCAN.SDMHCNTL
DMH.ZOSSCAN.SDMHDATA
DMH.ZOSSCAN.SDMHLOAD
DMH.ZOSSCAN.SDMHMCHS (Simplified Chinese-only)
DMH.ZOSSCAN.SDMHMJPN (Japanese-only)
DMH.ZOSSCAN.SDMHMKOR (Korean-only)
DMH.ZOSSCAN.SDMHMLIB
```

```
DMH.ZOSSCAN.SDMHPCHS (Simplified Chinese-only)
DMH.ZOSSCAN.SDMHPJPN (Japanese-only)
DMH.ZOSSCAN.SDMHPKOR (Korean-only)
DMH.ZOSSCAN.SDMHPLIB
DMH.ZOSSCAN.SDMHREXC (Simplified Chinese-only)
DMH.ZOSSCAN.SDMHREXJ (Japanese-only)
DMH.ZOSSCAN.SDMHREXK (Korean-only)
DMH.ZOSSCAN.SDMHREXX
DMH.ZOSSCAN.SDMHSCHS (Simplified Chinese-only)
DMH.ZOSSCAN.SDMHSIMP
DMH.ZOSSCAN.SDMHSJPN (Japanese-only)
DMH.ZOSSCAN.SDMHSKOR (Korean-only)
DMH.ZOSSCAN.SDMHSLIB
```

Configuring z/OS scanning

After the data sets and files have been installed, both the z/OS system and Windows server must be configured to use the z/OS scanning function.

Configuring the z/OS server

Procedure

1. Run the **DMHMINI** command. The **DMHMINI** command is used to configure various settings needed by the z/OS scan function.
   a. From TSO, issue the **DMHMINI** command. The format of the command is different depending on the language on the `config.bat` configuration file.
      - For English use, **exec 'DMH.ZOSSCAN.SDMHREXX(DMHMINI)'**
      - For Japanese, use, **exec DMH.ZOSSCAN.SDMHREXJ(DMHMINI)**
      - For Korean use, **exec DMH.ZOSSCAN.SDMHREXK(DMHMINI)**
   b. Complete the fields of the panel and press PF3 to save your changes. When PF3 is pressed, your entries are validated and then the CONFIG data sets and IMPORT data sets are created. In addition, the HFS configuration directory is created and updated with the latest configuration files.

Table 3. Configuration files

Field name	Configuration file name
High-level qualifier of user DSN	DMH.ZOSSCAN.USER
HFS base directory	/usr/lpp/dmh/zosscan
HFS configuration directory	/etc/zosscan
HFS temporary directory	/var/zosscan
LE runtime library	CEE.SCEERUN
HLASM library	ASM.SASMMOD1

   c. After saving your changes, a message displays indicating that the server must be restarted for the changes you made to take affect. You can wait to do the restart until after you have performed the Windows server configuration updates in a following step.

      Verify that you now have the following additional data sets:

```
DMH.ZOSSCAN.CONFIG.CNTL
DMH.ZOSSCAN.CONFIG.DATA
DMH.ZOSSCAN.CONFIG.DMHMSGEC
DMH.ZOSSCAN.CONFIG.LOAD
DMH.ZOSSCAN.CONFIG.REXX
```

```
DMH.ZOSSCAN.USER.ASM.IMPORT
DMH.ZOSSCAN.USER.CICS.IMPORT
DMH.ZOSSCAN.USER.DB2.IMPORT
DMH.ZOSSCAN.USER.IMS.IMPORT
```

Note: Rational Asset Analyzer installers and administrators require post-installation authority to update, and possibly re-create, the &hlq.CONFIG.** data sets. For example, on the following occasions the installers and administrators need the authority:

- The setup options for DMHMINI or DMHINSTL would be saved upon exiting after an option value change or to refresh `Common.cfg` and DMHPARMS.
- A &hlq.CONFIG.** data set was unexpectedly deleted and must be reinstated.

2. All z/OS source scanning performed by Rational Asset Analyzer is processed as batch jobs created through the browser and submitted by the HTTP server. The default job card that is provided to the browser resides in the *yourHLQ*`.CONFIG.REXX(DMHPARMS)` file. To configure the default JOB card for clients, complete the following steps.
   a. Exit from the DMHMINI install program.
   b. Edit DMHPARMS to change the values. Notice that DMHJBDF1 does not have the full syntax of a job card, just the text that follows the JOB keyword. Thus, for example, for the following full syntax:

      ```
      //FOO1 JOB ,MSGLEVEL=(1,1),CLASS=K,
      ```

      use the following for DMHJBDF1:

      ```
      DMHJBDF1 = ",MSGLEVEL=(1,1),CLASS=K,"
      ```

      The job name and JOB keyword are implied.
   c. Save your changes.
   d. Run the **DMHMINI** command again. Press F3 to save and exit. This causes your job card changes to be written to the proper configuration files.

   Note that whenever you change configuration options using the DMHMINI command, you must restart the application server on Windows.

   If you find that DMHPARMS does not exist, you have done the configuration steps out of order. The **DMHMINI** command must first be performed.
3. IBM HTTP Server is a prerequisite product and must be installed and configured on your system. Before proceeding, ensure that HTTP Server is working properly and that it works properly with the other required products. Before you can use the z/OS scanners, you must make additional configuration changes to IBM HTTP Server so that it can run the z/OS scanner CGI.

   Either the Apache-based IBM HTTP Server V8.5 or the Domino-based IBM HTTP Server V5R3 can be configured for use with Rational Asset Analyzer. If you want to use the IBM HTTP Server V8.5 and do not already have it, you can find ordering information for the unpriced feature at http://www.ibm.com/systems/z/os/zos/features/unix/ported/ihs/ihsv85.html.

   Note: When configuring the HTTP server, you can use the `/usr/lpp/dmh/zosscan/bin/dmh_httpd.conf` file as a guide. It contains samples of most of the statements you need for both versions of HTTP server. You can copy portions of this file to your own `httpd.conf` file.

   To configure IBM HTTP Server, follow the steps for your particular version of HTTP server:

- "Configuring the Apache-based IBM HTTP Server"
- "Configuring the Domino-based IBM HTTP Server"

Configuring the Apache-based IBM HTTP Server:

Perform these steps to configure the Apache-based IBM HTTP Server V8.5.

Procedure

1. Run the following RACF® commands or their equivalent to support the `SAFRunAs` directive that will be used in the `httpd.conf` file:

```
RDEFINE FACILITY BPX.SERVER UACC(NONE)
PERMIT BPX.SERVER CLASS(FACILITY) ID(<ihs_user_id>) ACC(READ)
SETROPTS RACLIST(FACILITY) REFRESH
```

2. Ensure the following statements are in the `LoadModule` section of the `httpd.conf` file:

```
LoadModule auth_basic_module modules/mod_auth_basic.so
LoadModule authz_user_module modules/mod_authz_user.so
LoadModule authnz_saf_module modules/mod_authnz_saf.so
LoadModule authz_default_module modules/mod_authz_default.so
```

3. Add the following statements after the first `ScriptAlias` comment in the `httpd.conf` file:

```
# ================================================================== #
# Rational Asset Analyzer CGI location
# ================================================================== #
ScriptAlias /dmhzosscan-cgi/ "/usr/lpp/dmh/zosscan/bin/"

# ================================================================== #
# Prompt for userid/password for access to Rational Asset Analyzer
# ================================================================== #
<Location "/dmhzosscan-cgi/">
 AuthName "Rational Asset Analyzer"
 AuthType Basic
 AuthBasicProvider saf
 Require valid-user
  SAFRunAs %%CLIENT%%
</Location>

<Directory "/usr/lpp/dmh/zosscan/bin/">
 AllowOverride None
 Options None
 Order allow,deny
 Allow from all
</Directory>
```

4. Determine if your system requires Secure Sockets Layer (SSL). If SSL is required, customize your HTTP server configuration using the "Securing applications and their environment" topic in the "IBM HTTP Server for WebSphere Application Server, Version 8.5" section of the WebSphere Application Server documentation at: http://www.ibm.com/support/knowledgecenter/SSEQTJ_8.5.5/com.ibm.websphere.ihs.doc/ihs/welc6top_securing_ihs_container.html.
5. Restart the HTTP server.

Configuring the Domino-based IBM HTTP Server:

Perform these steps to configure the Domino-based IBM HTTP Server V5R3.

Procedure

1. Edit the server configuration file.

2. Rational Asset Analyzer requires each user to be uniquely identified. The IBM HTTP Server `UserId` and `Protection` directives can force the user to provide a valid userid and password. Check that the settings for the `UserId` directive are in accordance with the access guidelines for your site. The `UserId` directive controls access to the Rational Asset Analyzer CGI on your z/OS system. Follow one of the following two examples, depending on your site security guidelines for HTTP server access.

   If your site guidelines require each user to log on with his or her own userid, then use the directive `UserId %%CLIENT%%`, which tells the server to require that the requester has a local z/OS userid and password.

   ```
   EDIT /etc/httpd.conf
   # Default: %%CLIENT%%
   # Syntax: UserId <user name>
   # Example:
   # UserId PUBLIC
   UserId %%CLIENT%%
   # UserId %%CERTIF%%
   # UserId %%SERVER%%
   # UserId %%CLIENT%%
   ```

   If your site guidelines specify that all users share access with a single userid, such as `UserId PUBLIC`, then you must establish additional protection scheme directives for the Rational Asset Analyzer application. Add these additional protection scheme directives to the configuration file preceding any `Exec` directives that reference Rational Asset Analyzer web addresses.

   ```
   # ================================================================#
   # Prompt for userid/password for access to AA
   # ================================================================#
   Protection DMH_Prot {
    UserId  %%CLIENT%%
    ServerId "Asset Analyzer"
    AuthType Basic
    PasswdFile %%SAF%%
    Mask  All
   }
   Protect /dmhzosscan-cgi*  DMH_Prot
   ```

3. Define an `Exec` directive that associates the web addresses used by Rational Asset Analyzer with the directory that contains the Rational Asset Analyzer z/OS scanning CGI scripts. Add the `Exec` directive to the Mapping Rules section of the `httpd.conf` file. For example, if Rational Asset Analyzer z/OS scanning is installed in `/usr/lpp/dmh/zosscan`, the `httpd.conf` file would contain the following line:

   ```
   #
   Exec /dmhzosscan-cgi/* /usr/lpp/dmh/zosscan/bin/*
   #
   ```

   The path, such as `dmhzosscan-cgi`, that you specify must be protected by the protection scheme directives that are shown in step 2.

4. Determine if your system requires Secure Sockets Layer (SSL). If so, use the IBM Key Management Utility (IKEYMAN) to create, process, and manage the files that are needed for secure connections.
5. Restart the HTTP server.

Configuring the Windows server

The Windows server configuration must be updated so that it can communicate with the CGI running under the HTTP server on z/OS. To make that connection, update the *installation directory*`\config\Common.cfg` file.

Procedure

1. Update the [RemoteRequest] section to reflect your configuration. Make sure that the webPath value is the same name as that used above when configuring the HTTP server.

```
#-------------------------------------------------------------
# ---RemoteRequest---
# This specifies the attributes used for remote CGI requests.
#-------------------------------------------------------------
[RemoteRequest]
protocol = http
hostname = dev.abccorp.com
port = 80
webPath = dmhzosscan-cgi
```

2. Update the [MVS] section to reflect the high-level qualifier where the target data sets reside on your z/OS server. This is the same value specified as the HLQ variable in the `config.bat` file when files were uploaded to z/OS server.

```
[MVS]
HLQ = DMH.ZOSSCAN
```

3. After updating the configuration file, restart the application server. If you are using the embedded application server, run the command *installation_directory*`\bin\server restart`. Otherwise, restart WebSphere Application Server.

Securing data sets, directories, and files on z/OS for Rational Asset Analyzer

About this task

Rational Asset Analyzer z/OS scanning relies on an SAF-compliant security product for its operating system security interfaces. The configuration for Rational Asset Analyzer z/OS scanning assumes the use of z/OS Security Server (RACF). If you use another security product, consult the vendor for more information.

Rational Asset Analyzer has the following user types:

- Admin users
- Non-admin users
- Installer who configures the product

Note: When "all users" is used, it includes all the types of users.

Procedure

1. Review the settings for the various product data sets and directories by browsing the values provided to the DMHMINI Minimal set up panel.
2. Create RACF groups:
   - Define a RACF group, such as DMH1, that protects product resources that all users require.
   - Define a RACF group, such as DMHCFG1, that protects product resources that the installer needs, in addition to the resources that they get from the DMH1 RACF group.
3. Protect data sets:
   - Ensure that the product data sets can be read.
   - Ensure that the product configuration data sets created by the DMHMINI Minimal set up panel can be updated. Two exceptions are the

CONFIG.LOAD and CONFIG.REXX data sets. Admin and non-admin users should have only read access to the data sets. However, the installer needs to be able to create and delete them.

- Ensure that the high-level qualifier for user data sets is protected in such a way that all users (including those whose ID is used by the loading and postprocessing jobs) can create and delete temporary data sets.

4. Add users to RACF groups:
   - Add all Rational Asset Analyzer users to the DMH1 RACF group.
   - For any installer who configures the product by running the DMHMINI Minimal set up panel, add their ID to the DMHCFG1 RACF group in addition to the DMH1 RACF group.
5. Ensure that list-of-groups (GRPLIST) checking is enabled. For more information about GRPLIST support, see *z/OS Security Server RACF Security Administrators Guide*.
6. Protect USS directories and files:
   - Ensure that the product USS directories and files can be read by all users.
   - Ensure that the product configuration USS directories and files created by the DMHMINI Minimal set up panel can be read by all users, but can be created and updated by the installer.
   - Ensure that all users can create and delete files in the USS directory for temporary files.

   Note: If the Rational Asset Analyzer data sets or directories are ever deleted and re-created, the steps to secure data sets, directories, and files must be repeated.

Example

Table 4. Settings used in the following examples

Description	Value
High-level qualifier where the product is installed	`DMH610.SYS1`
High-level qualifier for configuration data sets. This is relative to the high-level qualifier where the product is installed. It's always <*hlq*>.CONFIG	`DMH610.SYS1.CONFIG`
“High-level qualifier of user DSN” specified in the DMHMINI Minimal set up panel	`DMH610.SYS1.USR`
USS directory where the product is installed	`/usr/lpp/dmh610sys1`
“HFS configuration directory” specified in the DMHMINI Minimal set up panel	`/etc/dmh610sys1`
“HFS temporary directory” specified in the DMHMINI Minimal set up panel	`/var/dmh610sys1`
RACF group being used to protect product data sets, directories, and files so that they can be used by all users. It must have an OMVS segment.	`DMH1`
RACF group being used to protect product data sets that are used by the installer	`DMHCFG1`
Admin or non-admin Rational Asset Analyzer user	`USER1`

Table 4. Settings used in the following examples (continued)

Description	Value
ID of the installer who is configuring Rational Asset Analyzer	INSTUSR

Table 5. Example data sets, directories, and files

Description	Example data sets, directories, and files	Protection
Product data sets from SMP/E installation, and then copied to DMH610.SYS1.**	DMH610.SYS1.SDMHCNTL DMH610.SYS1.SDMHDATA DMH610.SYS1.SDMHDBRM DMH610.SYS1.SDMHLOAD DMH610.SYS1.SDMHMLIB DMH610.SYS1.SDMHPLIB DMH610.SYS1.SDMHREXX DMH610.SYS1.SDMHSIMP DMH610.SYS1.SDMHSLIB DMH610.SYS1.SDMHSSRC Chinese only: DMH610.SYS1.SDMHMCHS DMH610.SYS1.SDMHPCHS DMH610.SYS1.SDMHSCHS Japanese only: DMH610.SYS1.SDMHMJPN DMH610.SYS1.SDMHPJPN DMH610.SYS1.SDMHSJPN	All users need READ access.
Product USS directories and files from SMP/E installation, and then copied to /usr/lpp/dmh610sys1	/usr/lpp/dmh610sys1/bin /usr/lpp/dmh610sys1/config /usr/lpp/dmh610sys1/lib	All users need READ access.
Product configuration data sets. Their names are always relative to the product data sets. They are created by the DMHMINI Minimal set up panel.	DMH610.SYS1.CONFIG.CNTL DMH610.SYS1.CONFIG.DATA DMH610.SYS1.CONFIG.DMHMSGEC DMH610.SYS1.CONFIG.LOAD DMH610.SYS1.CONFIG.REXX	All users need UPDATE access to the CNTL, DATA, and DMHMSGEC data sets, and READ access to the LOAD and REXX data sets. The installer needs ALTER for all the product configuration data sets.

Table 5. Example data sets, directories, and files (continued)

Description	Example data sets, directories, and files	Protection

User data sets. They're qualified by the "High-level qualifier of user DSN" setting in the DMHINSTL `Set up` option. The initial set of data sets listed here is created by that option. When users perform various actions in the product, other user data sets are created, used, and deleted.	`DMH610.SYS1.USR.ASM.IMPORT`
	`DMH610.SYS1.USR.CICS.IMPORT`
	`DMH610.SYS1.USR.DB2.IMPORT`
	`DMH610.SYS1.USR.IMS.IMPORT`
		In general, all users need ALTER access to user data sets. However, they only need UPDATE access for the data set that listed here.
		
		The installer needs ALTER for all the user data sets.

HFS configuration directory. This is specified in and created by the DMHMINI Minimal set up panel.	`/etc/dmh610sys1/Common.cfg`
	`/etc/dmh610sys1/SetupJavaHome.sh`
	`/etc/dmh610sys1/dmh.keystore`
	`/etc/dmh610sys1/i18n/Common.properties`
	Japanese only:
	`/etc/dmh610sys1/i18n/Common_ja.properties`
	Chinese only
	`/etc/dmh610sys1/i18n/Common_zh.properties`
		All these directories and files need group permission bits of 750 so that all group members can READ and EXECUTE.
		
		The installer needs all permissions on the directories and files.

HFS temporary directory. This is specified in and created by the DMHMINI Minimal set up panel.	`/var/dmh610sys1/log`
	`/var/dmh610sys1/temp`
	`/var/dmh610sys1/work`
		All these directories and files need group permission bits of 770 so that all group members have full permissions to create and delete files.
		
		The installer needs all permissions on the directories and files.

Example RACF commands run from TSO

```
ADDGROUP DMH610
ADDGROUP DMH1    SUPGROUP(DMH610) OMVS(GID(nnnnnn))
ADDGROUP DMHCFG1 SUPGROUP(DMH610)
ADDSD  'DMH610.SYS1.*'           UACC(NONE) OWNER(DMH1)
ADDSD  'DMH610.SYS1.CONFIG.*'    UACC(NONE) OWNER(DMH1)
ADDSD  'DMH610.SYS1.CONFIG.LOAD' UACC(NONE) OWNER(DMH1)
ADDSD  'DMH610.SYS1.CONFIG.REXX' UACC(NONE) OWNER(DMH1)
ADDSD  'DMH610.SYS1.USR.*'       UACC(NONE) OWNER(DMH1)
PERMIT 'DMH610.SYS1.*'           ACCESS(READ)   ID(DMH1)
PERMIT 'DMH610.SYS1.CONFIG.*'    ACCESS(UPDATE) ID(DMH1)
PERMIT 'DMH610.SYS1.CONFIG.LOAD' ACCESS(READ)   ID(DMH1)
PERMIT 'DMH610.SYS1.CONFIG.REXX' ACCESS(READ)   ID(DMH1)
PERMIT 'DMH610.SYS1.USR.*'       ACCESS(ALTER)  ID(DMH1)

PERMIT 'DMH610.SYS1.*'           ACCESS(ALTER)  ID(DMHCFG1)
PERMIT 'DMH610.SYS1.CONFIG.*'    ACCESS(ALTER)  ID(DMHCFG1)
PERMIT 'DMH610.SYS1.CONFIG.LOAD' ACCESS(ALTER)  ID(DMHCFG1)
PERMIT 'DMH610.SYS1.CONFIG.REXX' ACCESS(ALTER)  ID(DMHCFG1)
```

```
CONNECT USER1   GROUP(DMH1) AUTHORITY(USE)
CONNECT WSSRU1  GROUP(DMH1) AUTHORITY(USE)
CONNECT INSTUSR GROUP(DMH1 DMHCFG1) AUTHORITY(USE)
SETROPTS GENERIC(DATASET) REFRESH
SETROPTS GRPLIST
```

Note: If a user is added to a RACF group as a result of a CONNECT command while the user is logged on, the user must log off and log on again to use that authority to access resources in classes that were RACLISTed.
The following example commands can be used before or after you run the DMHMINI Minimal set up panel. When the commands are used before you run the DMHMINI Minimal set up panel, the configuration and temporary directories do not yet exist and can be created with the **mkdir** commands shown in the example below. When the commands are used after running the DMHMINI Minimal set up panel, the **mkdir** commands can be skipped. The remaining **chgrp** and **chmod** commands can be used when the directories are initially created, or after you run the DMHMINI Minimal set up panel.

Example USS configuration commands run from OMVS

```
mkdir /etc/dmh610sys1
mkdir /etc/dmh610sys1/i18n
mkdir /var/dmh610sys1
chgrp -R DMH1 /usr/lpp/dmh610sys1
chgrp -R DMH1 /etc/dmh610sys1
chgrp –R DMH1 /var/dmh610sys1
chmod -R 750 /usr/lpp/dmh610sys1
chmod -R 750 /etc/dmh610sys1
chmod -R 770 /var/dmh610sys1
```

Note: The person who installs or updates (eg. INSTUSR) needs to be the owner of the `/etc/dmh610sys` directory and files, or they need to have root authority so that the DMHMINI Minimal set up panel can create and update files in that directory.

Allowing other users to update the configuration

To allow multiple users access to the DMHMINI Minimal set up panel for maintaining RAA, complete the following steps:

1. Ensure that Access Control Lists (ACLs) are enabled in the Unix System Service environment. With RACF, ACLs are enabled by a RACF administrator by enabling the FSSEC class, for example: `SETROPTS CLASSACT(FSSEC)`
2. Update the ACLs for all the configuration directory files so that users in the DMHCFG1 group have full authority for the configuration files. For example, the owner of the configuration files or a user with root authority would update the ACLs using the following code:

   ```
   setfacl -m g:DMHCFG1:+rwx /etc/dmh610sys/*
   setfacl -m g:DMHCFG1:+rwx /etc/dmh610sys/i18n/*
   ```
3. Add the users to the DMHCFG1 RACF group.

For more information, see *z/OS Security Server RACF Command Language Reference* and *z/OS Security Server RACF Security Administrator's Guide* in IBM Knowledge Center.

You can find information about activating list-of-groups checking (GRPLIST Option) and using RACF with z/OS UNIX in *z/OS Security Server RACF Security Administrator's Guide*.

Verifying the z/OS scanning installation

To ensure that the z/OS and Windows installation and configuration steps were successful, you should perform the following verification steps.

- "Verifying the CGI, part I"
- "Verifying the CGI, part II" on page 47

Verifying the CGI, part I

To verify that the Common Gateway Interface (CGI) for the product is operating correctly

Procedure

1. Type the following address in your browser:

   ```
   http://hostname:cgiport/dmhzosscan-cgi/dmhremotefunctions.rexx?action=
   getSettings&hlq=yourHLQ
   ```

   hostname
   Host name of your z/OS system, such as dev.abccorp.com,

   cgiport
   The port number for the IBM HTTP Server, such as 80 and yourHLQ is the high-level qualifier for the Rational Asset Analyzer z/OS data sets, such as DMH.ZOSSCAN.

   Take the following action for the response that you receive:

   - You are not prompted to supply your TSO userid and password, ensure that the following conditions are met:
     - Your `httpd.conf` file has the correct UserID and Protection directives as specified in configuring HTTP server.
     - The HTTP server has been restarted.
   - An XML representation of the `Common.cfg` file is returned: no action required; the CGI is working.
   - HTTP 500, Cannot find the server: Verify that the following conditions are met:
     - You correctly typed the address.
     - The HTTP server is started.
     - You do not have any error messages that reflect a security problem in the HTTP Server configuration. Such problems can appear in the HTTP Server log or in the MVS™ console and can usually be addressed by permitting access to the resource that is reported in the security error message.
   - HTTP 404, Page cannot be found: Verify that the following conditions are met:
     - You correctly typed the address, especially the web path portion after the hostname:cgiport.
     - You updated your `httpd.conf` file with the Rational Asset Analyzer Exec directive, and the HTTP server was restarted.
2. Type the following address into your browser:

   ```
   http://hostname:cgiport/dmhzosscan-cgi/dmhremotefunctions.rexx?
   action=checkContainer&container=SYS1.MACLIB&hlq=yourHLQ
   ```

   hostname
   Host name of your z/OS system, such as dev.abccorp.com,

cgiport
The port number for the IBM HTTP Server, such as 80 and yourHLQ is the high-level qualifier for the Rational Asset Analyzer z/OS data sets, such as DMH.ZOSSCAN.

Note: Type the address as one line; it is broken here to fit the page width.

Take the following action for the response you receive:

- An XML response that has no errors in the Trace element is returned, and the Exists element has a value of 1 to indicate the SYS1.MACLIB data set exists: No action required; the CGI is working.
- An XML response that lists errors in the Trace element is returned: ensure that your `httpd.conf` file was updated as specified in configuring HTTP server.

Note: If the Trace element is collapsed, click it to see the content.

Verifying the CGI, part II

This verification must be performed for the installation if the database was newly created or has already been migrated. If a database from a prior level of Rational Asset Analyzer is being used, and has not been migrated, then perform this step after the database has been migrated.

Procedure

1. Verify the database version is correct. choose the **Database** > **Execute a query** choice from the Rational Asset Analyzer menu and run the following query.

   ```
   SELECT * FROM ${tschema}.dmh_system_attr WHERE sys_attr_id = 500
   ```

   The response from the query should contains a value of 552 or greater for SYS_INT_ATTR
2. Verify the inventory wizard options, to ensure that all the scanning options are available. From the Rational Asset Analyzer menu, choose the **Database** > **Collect inventory** option. Ensure that the "Collect Inventory" page contains the following scanning options:
   - Assembler Source
   - CICS Online Region
   - DB2 System
   - IMS Subsystem
   - Windows File System

   If these scanning options are not listed, do the following steps:
   - Make sure that your `Common.cfg` file was updated with the RemoteRequest and MVS section changes from the Windows configuration section.
   - Verify that the database is at the latest level.
   - Ensure that the application server was restarted.
3. To ensure the server on Windows is able to communicate with the CGI running on z/OS, do the following steps:
   a. Choose the **Assembler Source** option.
   b. After the page refreshes, specify a valid z/OS user ID and password and click **Next**.
   c. Verify that the Inventory wizard advances to the **Analyze an assembler file** page, and click **Cancel** to close the wizard.

   If an error occurs, the initial wizard page is displayed again with the relevant message.

Cleaning up temporary installation data sets and files

After verifying the z/OS scanning installation, clean up temporary data sets and files by doing the following steps.

Procedure

1. Update the SDMH.CLEANUP.JCL data set to provide a correct JOB card, and make any other modifications needed to conform to your local standards.
2. Exit the data set so that it is not in-use.
3. Submit the SDMH.CLEANUP.JCL job. When it completes, verify that all steps finished with RC=0.

Results

The following temporary data sets and files are deleted:

- Temporary SDMH*.BIN data sets
- SDMH.RECEIVE.JCL
- SDMH.CLEANUP.JCL
- TAR file
- Script file

Maintenance considerations for the import file data set

After the z/OS scanning has been installed and configured, and users begin to scan assets, it is important to periodically perform maintenance on the data sets containing the import files output from the scanners.

Managing your import file data sets

The **DMHMINI** command creates the data sets:

```
DMH.ZOSSCAN.USER.ASM.IMPORT
DMH.ZOSSCAN.USER.CICS.IMPORT
DMH.ZOSSCAN.USER.DB2.IMPORT
DMH.ZOSSCAN.USER.IMS.IMPORT
```

DMH.ZOSSCAN.USER is the value you specified for the **High-level qualifier of user DSN** setting in the DMHMINI.

Compressing data sets

When scanning is performed, new members are added to these data sets and existing members are replaced. Depending on the number of scans being performed, you should periodically compress these data sets to avoid any E37 abends.

Reallocating data sets

Likewise, if scans of large amounts of data are performed, it could be necessary to reallocate these data sets. You can safely reallocate the data sets to increase the directory or space as long as you maintain the same data set attributes for the DSORG, RECFM, LRECL, and BLKSIZE.

Deleting members

There are no actions that delete members from these import data sets. If a member of the import data set is no longer needed, maybe because it has already been loaded into the Rational Asset Analyzer database, you can safely delete the member from the IMPORT data set.

Installing Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z

For information on using the Rational Asset Analyzer, refer to the topic in the product help or the Rational Asset Analyzer information center.

Installation prerequisites

The Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z has the following prerequisites for local scanning:

- Rational Asset Analyzer
- Rational Developer for System z

For an up-to-date list of the minimum required levels of these prerequisites, see:

- System Requirements for Rational Asset Analyzer
- System Requirements for Rational Asset Analyzer for System z

If you plan to search remote instances of Rational Asset Analyzer on z/OS, the remote instances must be at the latest available service level.

After the prerequisites have been installed on your workstation, proceed with the installation process.

Installing Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z

Before you begin

Rational Developer for System z must be closed in order to perform this installation. Installation Manager will prompt you to exit Rational Developer for System z if it is running when you initiate this installation.

Procedure

1. If the Rational Asset Analyzer product DVD is not already in your Windows system, insert the DVD. The Rational Asset Analyzer launchpad opens automatically if autorun is enabled on your system. If autorun is not enabled, you need to start **`launchpad.exe`** in the installer directory to start the launchpad.
2. Click the **Install Rational Asset Analyzer** link. The Install Packages page opens
3. Ensure **IBM Rational Asset Analyzer Plug-in for IBM Rational Developer for System z 6.0** is checked, and click **Next**
4. Scroll through and read the license agreement. When you have completed reading the agreement, select the **I accept the terms in the license agreement** radio button, and click **Next**.
5. In the Location panel, select the package group that contains IBM Rational Developer for System z. Click **Next**.

6. On the **Features** panel, **Rational Asset Analyzer Plug-in for IBM Rational Developer for System z 6.1** is preselected as the feature to install. The lower half of the panel provides details and disk space information. Click **Next** to continue.
7. Check the options and values listed on the Summary page. If you need to make any changes, click **Back** to return to previous pages. Otherwise, click **Install** to finish the installation.
8. When the installation completes, click **Finish.** If any installation errors occur, click the **View log file** link for more information.

Verifying the installation

To verify that the Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z has been successfully installed, go to **Window -> Preferences**, and ensure that Asset Analyzer is present.

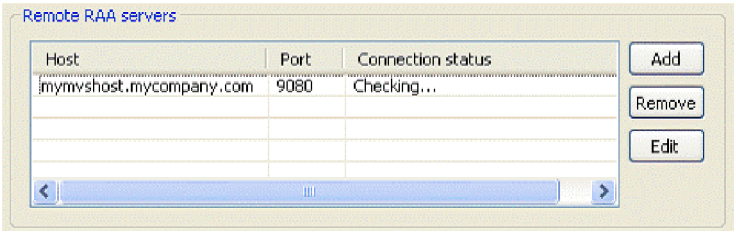
If you want to be able to scan files in your local workspace, select the **Enable Local Scanning** option in the Asset Analyzer preferences page, specify the location where Rational Asset Analyzer is installed on your local system, and then click **Apply**. If successful, the **Connection status** is Connected. If the status is not Connected, refer to Troubleshooting in the online help.

If you only plan on using the Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z to search remote instances of Rational Asset Analyzer, you can disable the **Enable Local Scanning** option.

(Optional) In the section **Remote RAA Servers**, specify the location of any remote instances of Rational Asset Analyzer running on z/OS that you would like to be able to perform searches against in the Eclipse user interface.

Results

The specified hosts should have Remote System Explorer daemons running on them and registered in the Remote Systems view in Rational Developer for System z. The Remote System Explorer is used to retrieve remote source code. If you do not have an Remote System Explorer daemon set up on the z/OS machine, you will be able to access most functionality in the Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z, but you will not be able to view the source code of assets in the remote Rational Asset Analyzer repository. It is also important that the same host name is used for both the Rational Asset Analyzer server name and the RSE host name.



The connection status should read Connected if the Rational Asset Analyzer Eclipse plug-in for Rational Developer for System z was able to successfully access the remote instance of Rational Asset Analyzer. If the connection status shows any warnings or errors, see “Known problems” on page 27 for possible solutions.

Appendix. Notices

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