MICRO FOCUS

ALM

Software Version: 15.5-15.5.1

Global Search Installation Guide

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Contents

Global Search Installation Overview

ALM Global Search is a search engine enabling you to query across several ALM modules. Global Search indexes items in the following modules: Defects, Requirements, Test Plan, Test Lab, and Analysis.

This guide describes how to install and configure ALM Global Search. After the search engine is enabled and the indexing process is completed, you can start searching your ALM project for specific information.

System requirements

This section describes the system requirements for installing ALM Global Search.

> **Note:** ALM Global Search must be installed on a dedicated machine, separate from the ALM server machine.

This section includes:

Hardware requirements

Operating System (Windows)	• Microsoft Windows Server 2008 R2 • Microsoft Windows Server 2012 R2 • Microsoft Windows Server 2016
Operating System (Linux)	Red Hat Enterprise Linux 6.5 (64-bit) or higher
CPU	Quad Core AMD64 processor or equivalent x86-compatible processor
Memory (RAM)	Recommended: 32 GB Supported: 16 GB
Free disk space	Ratio of 1:5 between the size of the ALM database and Global Search. For example, if your ALM database is 20 GB, then you need at least 100 GB of free disk space for Global Search. There is an option to change the location where Global Search data is stored, such as to a shared location. In this case, the above requirements would apply for the specified location where the data is saved.

Note: If you need to choose between faster CPUs or more cores, choose more cores. The extra concurrency that multiple cores offers will far outweigh a slightly faster clock speed.

Network requirements

To prevent network access to Global Search data, make sure that the Global Search machine is protected behind a firewall, and that only the ALM server and other trusted machines can access it.

Software requirements (Windows)

Software	Java 8

Permissions

Permissions (Windows)	Administrator
Permissions (Linux)	sudoer user

Installing Global Search (Windows)

This section describes how to install and configure Global Search.

> **Note:** You can install Global Search on a virtual machine with 4GB memory.

This section includes:

Installation workflow

The installation process includes the following procedures (briefly described here):

1. **Create a dedicated ALM user for Global Search in ALM Site Administration**: Before you install Global Search, you must first create a dedicated ALM user. During the installation process, you will be required to fill in the user name name and password of the Global Search user that was defined in ALM Site Administration. For more details, see "Create a dedicated user for Global Search" below.

2. **Install Global Search**: Download and install Global Search. Follow the installation wizard instructions to complete the required configurations. You can change the default installation directory and indexed data location, as required. For more details, see "Install Global Search" on the next page.

3. **Enable Global Search in ALM Site Administration**: Before you can use Global Search, you must first enable Global Search in ALM Site Administration. You can enable Global Search on a site level, on a particular project, or on multiple projects simultaneously. For more details, see "Enable Global Search in ALM Site Administration" on page 11.

4. **Monitor the indexing status**: Indexing a large project for the first time can take several hours. You may want to monitor the indexing progress. For more details, see "Monitor the indexing status" on page 12.

5. **Modify Global Search configurations**: After Global Search installation is complete, you can modify configuration settings, such as the indexed data location and ALM server URL. For more details, see "Modify Global Search configurations" on page 13.

6. **Change the user that runs the Global Search service**: By default, the Global Search service is run by the local system user. You can change the user that runs the Global Search service to a different Windows user. Make sure that the Windows user has permissions to run services, and permissions to access the specified data location. For more details, see "Change the user that runs the Global Search service" on page 14.

7. **Configure trust on the Global Search server**: This is required when Global Search connects to the ALM server through the HTTPS protocol. For more details, see "Configure trust on the Global Search server" on page 14.

Create a dedicated user for Global Search

Before you install Global Search, create a dedicated ALM user for Global Search.

To create a dedicated ALM user for Global Search:

1. Log in to ALM Site Administration (`http://<ALM server name>:<port number>/qcbin/SiteAdmin.jsp`).

2. Click the **Site Users** tab.

3. **Add the new user:**

a. Click the **New User** button . The New User dialog box opens.

b. Type a **User Name** (maximum length 60 characters). A user name cannot include the following characters: **( ) @ \ / : * ? " ` < > | + = ; , %**

c. Type additional user information: **Full Name**, **E-mail**, **Phone Number**, and a **Description**. The email information is important, since it enables users to receive project information directly to their mailboxes.

d. Click **OK**. The new user is added to the Users list.

4. **Set the user password:**

a. Select the user and click the **Password** button. The Set User Password dialog box opens.

b. In the **New Password** box, type a new password (maximum length 20 characters).

c. In the **Retype Password** box, retype the new password.

d. Click **OK**.

By default, when the new user is created, the new user's permissions are set to "Viewer". This is what is required for Global Search for security reasons. So at this point, you do not need to change the settings. When required, the user groups and permissions can be modified in the ALM Project Customization window in the Groups and Permissions page. For more details, see "Assigning Users to Groups" in the *Micro Focus Application Lifecycle Management Administrator Guide*.

Install Global Search

This section describes the steps required to install Global Search.

To install Global Search:

1. Download ALM Global Search.

2. Run the program. The InstallAnywhere wizard will guide you through the rest of the installation process.

   The Global Search Welcome page opens.

3. Click **Next** to continue. The Installation Folder Selection page opens.

4. Click **Next** to proceed to install the files into the Program Files directory (recommended), or click **Choose** to install to a different directory.

   The Configurations page opens.

   > **Note:** If you have not created a dedicated Global Search user in ALM Site Administration, make sure that you do so, before continuing to the next step. For details, see "Create a dedicated user for Global Search" on the previous page.

5. Fill in the fields, as described in the table below.

UI Element	Description
Data location	The location of the indexed data. Use the default location which is set to store the indexed data on the local Global Search machine, or change the location, as required. For example, to save the indexed data to a shared location, click **Choose** and enter the shared location in the **Data location** box. Changing the data location will prevent the indexed data from being deleted upon Global Search upgrade or uninstallation.
ALM server URL	Enter the URL of the ALM server **Note:** If ALM is configured with SSL and the connection verification fails, check the ALM server URL and port, and proceed with the installation. After installation is completed, you will be able to add the required SSL certificate. For details, see "Configure trust on the Global Search server" on page 14.
Global Search user name	Type the name of the dedicated Global Search user, as defined in ALM Site Administration. **Note:** You can use API key to connect to the ALM server.
Global Search password	Type the password of the dedicated Global Search user. **Note:** You can use API key to connect to the ALM server.
Enable Server to Server Authentication	To add server to server authentication using a LWSSO token, select this option and add the **InitString**. The InitSring should be the same value as the defined for the COMMUNICATION_SECURITY_PASSPHRASE parameter. **Tip:** You can modify this option after installing Global Search by changing the iris-service file in **<Global Search installation folder>\apache-tomcat-9.0.22\webapps\iris-service\WEB-INF\classes**.

6. Click **Next** to continue. The Pre-Installation Summary page opens. Review the details before continuing.

7. Click **Install** to proceed with the installation. The Installing Global Search page opens, showing the installation progress.

   The installation validation page opens, prompting you to wait while Global Search is being configured.

   If the installation completes successfully, the following message is displayed. Click **Done** to exit the installation wizard.

   If the installation completes with errors, check the installation log for details, and restart the computer to complete the installation.

Enable Global Search in ALM Site Administration

This section describes how to enable Global Search on a site level, on a particular project, and on multiple projects in ALM Site Administration.

Before you can enable Global Search in ALM Site Administration, you must first do the following prerequisite steps.

Prerequisites

1. Create a dedicated Global Search user. For more details, see "Create a dedicated user for Global Search" on page 8.

2. Set viewer permissions for the dedicated Global Search user (this is required for security reasons). By default, upon new user creation, the user's permissions are set to "Viewer". View and modify user groups and permissions in the ALM Project Customization window in the Groups and Permissions page. For more details, see "Assigning Users to Groups" in the *Micro Focus Application Lifecycle Management Administrator Guide*.

3. Set the ALLOW_WEBUI_ACCESS site parameter in ALM Site Administration. In Site Administration, click the **Site Configuration** tab. Set the ALLOW_WEBUI_ACCESS parameter value to 'Y'.

4. Download and install Global Search. For more details, see "Install Global Search" on page 9.

To enable Global Search on a site level (on all projects at once):

1. In ALM Site Administration, select **Tools > Global Search**. The Global Search Settings dialog box opens.

2. Select **Enable**.

3. In **Global Search Server**, type the URL of the Global Search server. Click **Test** to verify the URL.

4. In **User Name**, select the dedicated user name for Global Search from the dropdown list.

To enable Global Search on a project:

1. In ALM Site Administration, select the **Site Projects** tab.

2. In the Projects list, select a project.

3. In the right pane, select the **Project Details** tab.

The project's details are displayed.

4. In the **Global Search** area, click the **Enable Global Search** button.

To enable Global Search on multiple projects:

1. In ALM Site Administration, in the **Site Users** tab, from the Users list in the left pane, select the relevant Global Search user, and in the right pane, select the **User Projects** tab. The Projects list for the selected user is displayed.

2. Click the **Select Projects** button. The ALM Projects list is displayed in a new pane to the right of the **User Projects** tab.

3. To select projects from the Projects list, expand the directory, and select the projects that you want to assign to the user.

4. Click the **Add current user to the selected projects** button ⬅. The selected projects are added to the User Projects list.

   After the user is added to all the selected projects, Global Search is enabled on these projects, and the indexing process starts.

> **Note:** After enabling Global Search on a project or on multiple projects, an indexing process is started, and it can take a few hours to complete, depending on the amount of data. Once the process is done, the project data is ready to be searched. For details on how to monitor the status of the indexing process, see "Monitor the indexing status" below.

Monitor the indexing status

Indexing a large project for the first time can take several hours. Changing the data location after Global Search is installed will require a similar amount of time as initial indexing, since all the data will be re-indexed and the indexing process will start over. You may want to monitor the progress of the indexing process.

To monitor the status of the indexing process:

1. Send an HTTP GET request to the URL:

   ```
   http://<global search server>:<port>/alm-fetcher-service/api/health/
   ```

2. When the indexing process has finished, the status changes from "RUNNING" to "WAITING". This indicates that the indexing has finished and is waiting for the next time new data is pooled. Every few hours, the system will query if there is new data to index.

> **Note:** When _nextRuntime has a value other than "-1", this indicates that the indexing process has completed and the project data is ready to be searched with Global Search. (If _nextRuntime is "-1", this indicates that the indexing has not yet started or is still in progress, and has not yet completed for the first time.)

Modify Global Search configurations

After Global Search is installed, you can modify configuration settings, such as data location or ALM server URL, as required.

For example, you may decide to store the data in a shared location, or in a folder outside the installation directory to prevent it from being deleted upon Global Search upgrade or uninstallation.

> **Note:** Changing configuration settings may cause some downtime until the Global Search service restarts. If you change the data location after Global Search is installed, all the data will be re-indexed. The indexing process will start over and will take a similar amount of time as when indexing the project for the first time.

To modify and update Global Search configurations:

1. From the Windows **Start** menu, select **All Programs > Micro Focus > Global Search > Update Configurations**.

   The Global Search Configurations page opens.

2. Edit the required settings.

3. Click **Save**. The Global Search service restarts.
   You may have to wait a few moments for Global Search to be available. A message is displayed, indicating that the Global Search service is ready.

Change the user that runs the Global Search service

By default, the Global Search service is run by the local system user. You can change the user that runs the Global Search service to a different Windows user. Make sure that the Windows user has permissions to run services.

> **Note:** If you decide change the location where Global Search data is stored, such as to a shared location, make sure that the Windows user running the Global Search machine has permissions to access the specified location.

To change the Global Search service user:

1. On the machine where Global Search is running, press Win+R, and in the Run command box, type **services.msc** and press **Enter**. The **Services** window opens.
2. Stop both the **Global Search** and **Global Search ES** services.
3. Double-click each service. The Search Properties dialog box opens.
4. In the **Log On** tab, change the user for each service.
5. Start both services.

Configure trust on the Global Search server

After installing Global Search, you can configure trust on the Global Search server. This is required when Global Search connects to the ALM server through the HTTPS protocol.

To configure SSL in Global Search:

1. Prepare the keystore file with your certificate chain and place it in the relevant folder (for example, `<Global_Search\_install_dir>apache-tomcat-8.0.30\conf`). To learn more, see the Certificate Authority (CA) documentation.
2. Configure Apache Tomcat to use HTTPS:
   a. Navigate to `<Global_Search\_install_dir>apache-tomcat-8.0.30\conf and onen server.xml`.
   b. Add:

   ```
   <Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
   maxThreads="150" SSLEnabled="true" scheme="https" secure="true"
   clientAuth="false" sslProtocol="TLS" keystoreFile="conf/keystore.jks" keystorePass="changeit"
   sslEnabledProtocols="TLSv1,TLSv1.1,TLSv1.2"/>
   ```

The following table describes the above properties:

Property	Description
port	The SSL port that will be used to connect from ALM
protocol	For protocol details, see Apache Tomcat documentation
keystoreFile	The path to your keystore
keystorePass	The password to your keystore
sslEnabledProtocols	The allowed SSL protocols

3. Add the primary, intermediate, and CA certificates used in ALM to the Global Search keystore. The default location is ...\Global Search\jdk\jre\lib\security\cacerts.

   "%JAVA_HOME%\bin\keytool" -import -trustcacerts -alias mydomain -file sertificate.crt -keystore "C:\Program Files\Micro Focus\Global Search\jdk\jre\lib\security\cacerts"

4. Restart Global Search and verify the installation:

   https://<GS_server>:<PORT>/iris-service/

   A message is displayed, confirming that the configuration is correct.

5. Add the primary, intermediate, and CA certificates used in Global Search to the ALM keystore. The default location is C:\Program Files\Micro Focus\ALM\ALM\java\jre\lib\security\cacerts.

   "%JAVA_HOME%\bin\keytool" -import -trustcacerts -alias mydomain -file sertificate.crt -keystore "C:\Program Files\Micro Focus\ALM\ALM\java\jre\lib\security\cacerts"

6. Restart ALM and configure Global Search using SSL.

   For more details, see https://tomcat.apache.org/tomcat-8.0-doc/ssl-howto.html.

Installing Global Search (Linux)

This section describes how to install and configure Global Search.

> **Note:** You can install Global Search on a virtual machine with 4GB memory.

This section includes:

Installation workflow

The installation process includes the following procedures (briefly described here):

1. **Create a dedicated ALM user for Global Search in ALM Site Administration**: Before you install Global Search, you must first create a dedicated ALM user. During the installation process, you will be required to fill in the user name name and password of the Global Search user that was defined in ALM Site Administration. For more details, see "Create a dedicated user for Global Search" below.

2. **Install Global Search**: Download and install Global Search. Follow the installation wizard instructions to complete the required configurations. You can change the default installation directory and indexed data location, as required. For more details, see "Install Global Search" on the next page.

3. **Enable Global Search in ALM Site Administration**: Before you can use Global Search, you must first enable Global Search in ALM Site Administration. You can enable Global Search on a site level, on a particular project, or on multiple projects simultaneously. For more details, see "Enable Global Search in ALM Site Administration" on page 20.

4. **Monitor the indexing status**: Indexing a large project for the first time can take several hours. You may want to monitor the indexing progress. For more details, see "Monitor the indexing status" on page 21.

5. **Configure trust on the Global Search server**: This is required when Global Search connects to the ALM server through the HTTPS protocol. For more details, see "Configure trust on the Global Search server" on page 22.

Create a dedicated user for Global Search

Before you install Global Search, create a dedicated ALM user for Global Search.

To create a dedicated ALM user for Global Search:

1. Log in to ALM Site Administration (`http://<ALM server name>:<port number>/qcbin/SiteAdmin.jsp`).

2. Click the **Site Users** tab.

3. **Add the new user:**

   a. Click the **New User** button ![new user icon]. The New User dialog box opens.

   b. Type a **User Name** (maximum length 60 characters). A user name cannot include the following characters: **( ) @ \ / : * ? " ` < > | + = ; , %**

   c. Type additional user information: **Full Name**, **E-mail**, **Phone Number**, and a **Description**. The email information is important, since it enables users to receive project information directly to their mailboxes.

   d. Click **OK**. The new user is added to the Users list.

4. **Set the user password:**

a. Select the user and click the **Password** button. The Set User Password dialog box opens.

b. In the **New Password** box, type a new password (maximum length 20 characters).

c. In the **Retype Password** box, retype the new password.

d. Click **OK**.

By default, when the new user is created, the new user's permissions are set to "Viewer". This is what is required for Global Search for security reasons. So at this point, you do not need to change the settings. When required, the user groups and permissions can be modified in the ALM Project Customization window in the Groups and Permissions page. For more details, see "Assigning Users to Groups" in the *Micro Focus Application Lifecycle Management Administrator Guide*.

Install Global Search

This section describes the steps required to install Global Search.

> **Note:** Only users with root user permissions can execute the Global Search installation. The installation can be run in console mode only.

To install Global Search:

1. Download ALM Global Search.

2. Log in to the Linux machine. Add a user (not a root user) with root user permissions:

   "`<created user name> ALL=(ALL) ALL`" to the sudoers file under **"root ALL=(ALL) ALL")**

3. Install Global Search using this user. Run the following `chmod` command to allow permissions for the installation files:

   ```
   su <created user name>

   sudo chmod a+x gs_install.bin

   sudo chown –R admin "your installation path" (for example: /var/opt)

   sudo chmod a+rwx "init.d folder path" (for example: /etc/init.d)

   ./gs_install.bin
   ```

4. Run the installer (**gs_install.bin**) and follow the on-screen instructions. The wizard will guide you through the rest of the installation process.

5. Press **Enter** to continue.

6. Choose a destination folder for this installation. The default installation folder is:

   `/var/opt/Micro Focus/Global Search`.

7. Press **Enter** to continue.

> **Note:** If you have not created a dedicated Global Search user in ALM Site Administration, make sure that you do so, before continuing to the next step. For

details, see "Create a dedicated user for Global Search" on page 17.

8. Configure Global Search settings, as described in the table below.

Data location	The location of the indexed data. Use the default location which is set to store the indexed data on the local Global Search machine, or change the location, as required. For example, to save the indexed data to a shared location, click **Choose** and enter the shared location in the **Data location** box. Changing the data location will prevent the indexed data from being deleted upon Global Search upgrade or uninstallation.
ALM server URL	Enter the URL of the ALM server **Note:** If ALM is configured with SSL and the connection verification fails, check the ALM server URL and port, and proceed with the installation. After installation is completed, you will be able to add the required SSL certificate. For details, see "Configure trust on the Global Search server" on page 22.
Global Search user name	Type the name of the dedicated Global Search user, as defined in ALM Site Administration. **Note:** You can use API key to connect to the ALM server.
Global Search password	Type the password of the dedicated Global Search user. **Note:** You can use API key to connect to the ALM server.
Enable Server to Server Authentication	To add server to server authentication using a LWSSO token, select this option and add the **InitString**. The InitSring should be the same value as the defined for the COMMUNICATION_SECURITY_PASSPHRASE parameter. **Tip:** You can modify this option after installing Global Search by changing the iris-service file in **<Global Search installation folder>\apache-tomcat-9.0.22\webapps\iris-service\WEB-INF\classes**.

9. Press **Enter** to continue.
10. Review the pre-installation summary details before continuing.

11. Press **Enter** to proceed with the installation.

    The installation progress is displayed. You are prompted to wait while Global Search is being configured.

    If the installation completes successfully, the following message is displayed.

    Press **Enter** to exit the installer.

    If the installation completes with errors, check the installation log for details, and restart the computer to complete the installation.

    After the installation is completed successfully, Global Search should be up and running.

12. To start and stop the installed services, use the following command:

    ```
    service <MF_GS/MF_GS_ES> <start / stop >
    ```

Enable Global Search in ALM Site Administration

This section describes how to enable Global Search on a site level, on a particular project, and on multiple projects in ALM Site Administration.

Before you can enable Global Search in ALM Site Administration, you must first do the following prerequisite steps. (At this stage, it is assumed that you have already done these prerequisite steps in the previous procedures.)

Prerequisites

1. Create a dedicated Global Search user. For more details, see "Create a dedicated user for Global Search" on page 17.

2. Set viewer permissions for the dedicated Global Search user (this is required for security reasons). By default, upon new user creation, the user's permissions are set to "Viewer". View and modify user groups and permissions in the ALM Project Customization window in the Groups and Permissions page. For more details, see "Assigning Users to Groups" in the *Micro Focus Application Lifecycle Management Administrator Guide*.

3. Set the `ALLOW_WEBUI_ACCESS` site parameter in ALM Site Administration. In Site Administration, click the **Site Configuration** tab. Set the `ALLOW_WEBUI_ACCESS` parameter value to 'Y'.

4. Download and install Global Search. For more details, see "Install Global Search" on page 18.

To enable Global Search on a site level (on all projects at once):

1. In ALM Site Administration, select **Tools > Global Search**. The Global Search Settings dialog box opens.

2. Select **Enable**.

3. In **Global Search Server**, type the URL of the Global Search server. Click **Test** to verify the URL.

4. In **User Name**, select the dedicated user name for Global Search from the dropdown list.

To enable Global Search on a project:

1. In ALM Site Administration, select the **Site Projects** tab.

2. In the Projects list, select a project.

3. In the right pane, select the **Project Details** tab.

   The project's details are displayed.

4. In the **Global Search** area, click the **Enable Global Search** button.

To enable Global Search on multiple projects:

1. In ALM Site Administration, in the **Site Users** tab, from the Users list in the left pane, select the relevant Global Search user, and in the right pane, select the **User Projects** tab. The Projects list for the selected user is displayed.

2. Click the **Select Projects** button. The ALM Projects list is displayed in a new pane to the right of the **User Projects** tab.

3. To select projects from the Projects list, expand the directory, and select the projects that you want to assign to the user.

4. Click the **Add current user to the selected projects** button ⟸ . The selected projects are added to the User Projects list.

   After the user is added to all the selected projects, Global Search is enabled on these projects, and the indexing process starts.

> **Note:** After enabling Global Search on a project or on multiple projects, an indexing process is started, and it can take a few hours to complete, depending on the amount of data. Once the process is done, the project data is ready to be searched. For details on how to monitor the status of the indexing process, see "Monitor the indexing status" below.

Monitor the indexing status

Indexing a large project for the first time can take several hours. Changing the data location after Global Search is installed will require a similar amount of time as initial indexing, since all the data will be re-indexed and the indexing process will start over. You may want to monitor the progress of the indexing process.

To monitor the status of the indexing process:

1. Send an HTTP GET request to the URL:

   `http://<global search server>:<port>/alm-fetcher-service/api/health/`

2. When the indexing process has finished, the status changes from "`RUNNING`" to "`WAITING`". This indicates that the indexing has finished and is waiting for the next time new data is pooled. Every few hours, the system will query if there is new data to index.

   > **Note:** When `_nextRuntime` has a value other than "-1", this indicates that the indexing

> process has completed and the project data is ready to be searched with Global
> Search. (If `_nextRuntime` is "`-1`", this indicates that the indexing has not yet started or
> is still in progress, and has not yet completed for the first time.)

Configure trust on the Global Search server

After installing Global Search, you can configure trust on the Global Search server. This is required when Global Search connects to the ALM server through the HTTPS protocol.

To configure SSL in Global Search:

1. Prepare the keystore file with your certificate chain and place it in the relevant folder (for example, `<Global_Search\_install_dir>apache-tomcat-8.0.30\conf`). To learn more, see the Certificate Authority (CA) documentation.

2. Configure Apache Tomcat to use HTTPS:
   a. Navigate to `<Global_Search\_install_dir>apache-tomcat-8.0.30\conf and onen server.xml`.
   b. Add:

      ```
      <Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
      maxThreads="150" SSLEnabled="true" scheme="https" secure="true"
      clientAuth="false" sslProtocol="TLS" keystoreFile="conf/keystore.jks" keystorePass="changeit"
      sslEnabledProtocols="TLSv1,TLSv1.1,TLSv1.2"/>
      ```

      The following table describes the above properties:

Property	Description
port	The SSL port that will be used to connect from ALM
protocol	For protocol details, see Apache Tomcat documentation
keystoreFile	The path to your keystore
keystorePass	The password to your keystore
sslEnabledProtocols	The allowed SSL protocols

3. Add the primary, intermediate, and CA certificates used in ALM to the Global Search keystore. The default location is `...\Global Search\jdk\jre\lib\security\cacerts`.

   `"%JAVA_HOME%\bin\keytool" -import -trustcacerts -alias mydomain -file sertificate.crt -keystore "C:\Program Files\Micro Focus\Global Search\jdk\jre\lib\security\cacerts"`

4. Restart Global Search and verify the installation:

   `https://<GS_server>:<PORT>/iris-service/`

A message is displayed, confirming that the configuration is correct.

5. Add the primary, intermediate, and CA certificates used in Global Search to the ALM keystore. The default location is `C:\Program Files\Micro Focus\ALM\ALM\java\jre\lib\security\cacerts`.

"%JAVA_HOME%\bin\keytool" -import -trustcacerts -alias mydomain -file sertificate.crt -keystore "C:\Program Files\Micro Focus\ALM\ALM\java\jre\lib\security\cacerts"

6. Restart ALM and configure Global Search using SSL.

For more details, see https://tomcat.apache.org/tomcat-8.0-doc/ssl-howto.html.

Launching Global Search

You can launch Global Search upon ALM startup from the Application Lifecycle Management Options window, or from the ALM Desktop Client.

To launch Global Search from the Application Lifecycle Management Options window:

1. Open your Web browser and type your ALM URL:

    `http://<ALM server name>[<:port number>]/qcbin`
    The ALM Options window opens.

2. In the Application Lifecycle Management Options window, click the **Global Search** link.

3. In the ALM login window, enter user name and password, click **Authenticate**, and click **Login**.

    Global Search opens, and you can begin to globally search for ALM data. For details on how to globally search for ALM data, see the *Micro Focus Application Lifecycle Management User Guide*.

To launch Global Search from the ALM Desktop Client:

1. Open your Web browser and type your ALM URL:

    `http://<ALM server name>[<:port number>]/qcbin`
    The ALM Options window opens.

2. In the Application Lifecycle Management Options window, click the **ALM Desktop Client** link.

3. In the ALM Desktop Client, open one of the following modules: **Defects**, **Requirements**, **Tests**, **Test Sets**, or **Analysis**.

4. On the module's toolbar, click **Global Search** .

    Global Search opens, and you can begin to search for data in the selected ALM module.

> **Note:** Logging out of Application Lifecycle Management does not log you out of Global Search. To end the Global Search session, you need to logout manually by clicking the **Logout** button within Global Search itself.

Uninstalling Global Search

This section describes how to uninstall Global Search. It also describes how to deactivate or delete the dedicated Global Search user in ALM Site Administration.

This section includes:

Uninstalling Global Search (Windows)

1. From the Windows **Start** menu, select **All Programs > Micro Focus > Global Search > Uninstall Global Search**. The Uninstall Global Search page opens.

2. Click **Uninstall**. The Uninstall Complete page opens. All the components that were installed during Global Search installation are removed. Files and folders created after Global Search was installed are not removed.

3. Click **Done** to exit the wizard.

4. Restart the computer to complete the uninstallation.

> **Note:** The uninstall process deletes all data stored in the default Global Search installation directory. Indexed data that is stored in a different location (outside the installation directory) will not be deleted as part of the uninstall process.

After uninstalling Global Search, deactivate or delete the dedicated Global Search user in ALM Site Administration.

To deactivate or delete the Global Search user in ALM Site Administration:

In the **Site Users** tab, in the Users list in the left pane, right-click the Global Search user and select **Deactivate** or **Delete**, and proceed with the relevant steps.

Uninstalling Global Search (Linux)

1. Navigate to the installation folder. The default folder is: `/var/opt/Micro Focus/Global Search/_Global Search_installation`.

2. Run the uninstaller. Enter the command:

   `./Uninstall Global Search`

3. Follow the instructions.

   All the components that were installed during Global Search installation are removed. Files and folders created after Global Search was installed are not removed.

4. Restart the computer to complete the uninstallation.

> **Note:** The uninstall process deletes all data stored in the default Global Search installation directory. Indexed data that is stored in a different location (outside the installation directory) will not be deleted as part of the uninstall process.

After uninstalling Global Search, deactivate or delete the dedicated Global Search user in ALM Site Administration.

To deactivate or delete the Global Search user in ALM Site Administration:

In the **Site Users** tab, in the Users list in the left pane, right-click the Global Search user and select **Deactivate** or **Delete**, and proceed with the relevant steps.

Send Us Feedback

Let us know how we can improve your experience with the Global Search Installation Guide.

Send your email to: docteam@microfocus.com