Cisco Unified Web and E-Mail Interaction Manager Troubleshooting Guide

For Unified Contact Center Express

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Preface

- About this guide
- Document conventions
- Other learning resources
Welcome to Cisco® Interaction Manager™, multichannel interaction software used by businesses all over the world to build and sustain customer relationships. A unified suite of the industry’s best applications for web and email interaction management, it is the backbone of many innovative contact center and customer service helpdesk organizations.

Cisco Interaction Manager includes a common platform and one or both of the following applications:

- Cisco Unified Web Interaction Manager (Unified WIM)
- Cisco Unified E-Mail Interaction Manager (Unified EIM)

### About this guide

*Cisco Unified Web and E-Mail Interaction Manager Troubleshooting Guide* describes recommended actions for the most common issues related to Cisco Interaction Manager.

This guide is for installations that are integrated with Cisco Unified Contact Center Express (Unified CCX).

### Document conventions

This guide uses the following typographical conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>Labels of items on the user interface, such as buttons, boxes, and lists. Or text that must be typed by the user.</td>
</tr>
<tr>
<td>Monospace</td>
<td>The name of a file or folder, a database table column or value, or a command.</td>
</tr>
<tr>
<td>Variable</td>
<td>User-specific text; varies from one user or installation to another.</td>
</tr>
</tbody>
</table>

### Other learning resources

Various learning tools are available within the product, as well as on the product CD and our web site. You can also request formal end-user or technical training.
Online help

The product includes topic-based as well as context-sensitive help.

<table>
<thead>
<tr>
<th>Use</th>
<th>To view</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔄 Help button</td>
<td>Topics in <em>Cisco Unified Web and E-Mail Interaction Manager Help</em>, the Help button appears in the console toolbar on every screen.</td>
</tr>
<tr>
<td>F1 keypad button</td>
<td>Context-sensitive information about the item selected on the screen.</td>
</tr>
</tbody>
</table>

**Online help options**

**Documentation**

- The latest versions of all Cisco documentation can be found online at [http://www.cisco.com](http://www.cisco.com)
Troubleshooting tools

- List of loggers and appenders
- Configuring the size of log files
- Configuring cleanup of logs folder
- Debugging tools
This chapter describes common tools available for troubleshooting such as loggers. Configuration procedures, if any, for these tools.

### List of loggers and appenders

This section provides a list of the default appenders available in the system. For each appender, we list the loggers used by it and the name of the log file in which it records information.

<table>
<thead>
<tr>
<th>#</th>
<th>Component</th>
<th>Appender name</th>
<th>Log file name</th>
<th>Logger name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System monitoring and health check</td>
<td>dal_connpool</td>
<td>eg_log_dal_connpool.log</td>
<td>again.dal.connpool</td>
</tr>
<tr>
<td>2</td>
<td>System monitoring and health check</td>
<td>dal_query_timeout</td>
<td>eg_log_dal_query_timeout.log</td>
<td>again.dal.querytimeout</td>
</tr>
<tr>
<td>3</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_DSMController</td>
<td>eg_log_Services_Server_Name_DSMController.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>4</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_dsm-registry</td>
<td>eg_log_Services_Server_Name_dsm-registry.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>5</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_HostController</td>
<td>eg_log_Services_Server_Name_HostController.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>6</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_license-manager</td>
<td>eg_log_Services_Server_Name_license-manager.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>7</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_platform-rsm</td>
<td>eg_log_Services_Server_Name_platform-rsm.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>8</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_ServerMonitoring</td>
<td>eg_log_Services_Server_Name_ServerMonitoring.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>9</td>
<td>Distributed Services Manager (DSM)</td>
<td>Services_Server_Name_ServiceController</td>
<td>eg_log_Services_Server_Name_ServiceController.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>10</td>
<td>Application server</td>
<td>Application_Server_Name_Application Server</td>
<td>eg_log_Application_Server_Name_Application Server.log</td>
<td>com.egain</td>
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<tr>
<td>11</td>
<td>Agent Assignment service process</td>
<td>Services_Server_Name_agent-assignment-process</td>
<td>eg_log_Services_Server_Name_agent-assignment-process.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>12</td>
<td>Alarm service process</td>
<td>Services_Server_Name_alarm-rules-process</td>
<td>eg_log_Services_Server_Name_alarm-rules-process.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>13</td>
<td>Archive service process</td>
<td>Services_Server_Name_archive_process</td>
<td>eg_log_Services_Server_Name_archive_process.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>14</td>
<td>Activity Pushback service process</td>
<td>Services_Server_Name_auto-pushback-process</td>
<td>eg_log_Services_Server_Name_auto-pushback-process.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>15</td>
<td>Dispatcher service process</td>
<td>Services_Server_Name_dx-process</td>
<td>eg_log_Services_Server_Name_dx-process.log</td>
<td>com.egain</td>
</tr>
<tr>
<td>16</td>
<td>KB Import service process</td>
<td>Services_Server_Name_import-process</td>
<td>eg_log_Services_Server_Name_import-process.log</td>
<td>com.egain</td>
</tr>
</tbody>
</table>
Configuring the size of log files

If needed, you can change the size of log files generated in the system. You can set a different size for each log file. By default the size of files is set to 5 MB. It is recommended that you do not set the value higher than 10 MB.

To configure the size of log files:
1. Open the Cisco\Home\config\log\log4j.xml file in a text editor.
2. Locate the log file for which you want to change the log size. For the log file, locate the MaxFileSize property and set the size of the log file. The default value is set to 5 MB. You should not set the value higher than 10 MB.

Configuring cleanup of logs folder

As you keep using the product, the logs folder on the file server keeps accumulating log files. To manage the size of your installation folder, it is important to get rid of the old log files periodically.

By default the system keeps creating log files of 5 MB each, and once a log file reaches the maximum size (that is 5 MB), the current file is backed-up as “FileName.log.<number starting from 1>” (for example,
eg_log_V22W2_Application Server.log.1, eg_log_V22W2_Application Server.log.2, etc) and a new log file is created. If you want that the backed-up files should be automatically deleted after they have reached a certain number, you can set a property in the egpl_general.properties file. After the number of back-up copies of a log file reaches the specified number, the system starts deleting the oldest versions from the logs folder.

Important: It is recommended that you do set the value more than 50.

Also, note that when the application is restarted, a folder with date and timestamp (for example, logs_09152008_927) is created in the logs folder and all the existing log files are moved to that folder and new log files are created in the logs folder. The files from the backup folders are never deleted automatically. You must plan to clean-up these folders manually.

To configure the cleanup of logs folder:
1. On the file server, browse to Cisco_Home\config.
2. Open the egpl_general.properties file in a text editor.
3. In the file, locate logger.max.backup.index. The current value of the property is set to -1, which means that the log files are never deleted from the Cisco_Home\logs folder. If you want to delete the old files, specify a number for the value. It is recommended that you should set the value more than 50.

After the number of versions of a log file reaches the specified number, the system starts deleting the oldest backed-up copy of the log file from the logs folder.

Debugging tools

UI debugging tools

There are two UI debugging tools available. They are:

- Microsoft Script Debugger
- Cisco Interaction Manager Debugger

Microsoft Script Debugger

Microsoft Script Debugger allows you to debug client side and server side scripts.

Script debugging is turned off by default in Internet Explorer. Enable this tool when you see script errors while using the application. Once the tool is on, every time you see a script error, you are given an option to debug the problem. If you select the option, the tool points you to the exact line in code, which is causing the problem.

To enable script debugging in Internet Explorer:
1. Close all open Internet Explorer browsers.
2. Reopen Internet Explorer.
3. Go to Tools (menu) > Internet Options.
4. In the Internet Options window, on the Advanced tab, go to the Browsing section. Make the following changes:
   a. Clear the **Disable script debugging (Internet Explorer)** option.
   b. Clear the **Disable script debugging (Other)** option.
   c. Select the **Display notification about every script error** option.
5. Close Internet Explorer.
6. Reopen Internet Explorer and launch the application.

**Cisco Interaction Manager Debugger**

The Cisco Interaction Manager Debugger helps you debug issues like application hang problems. Use this tool with Microsoft Script Debugger.

**To troubleshoot with the Cisco Interaction Manager Debugger:**
1. Launch the application and log in to the console that has the issue.
2. Press **CTRL + SHIFT + W** to launch the Debugger.
3. In the debugger window, configure the following options.
   a. Select the debug command. If you choose the **Select=** option, then from the dropdown list, select a command for debugging. If you select the **Type=** option, then provide the name of the object and operation you want to debug. The most useful debug commands are:
      - Trace On
      - Set Default Cursor
      - Launch Global Debugger
   b. In the **Timer log** field, select the option to hide or display the timer log.
4. Click the **Run** button to start debugging.

**Sun Java Console**

Sun Java Console provides useful information about issues related to the messaging applet, such as users don’t receive internal messages or internal notifications, or agents or customers don’t receive chat messages.

**To enable Sun Java Console:**
1. Go to **Start > Control Panel**.
2. Double-click Java.
3. In the Java Control Panel window, go to the Advanced tab, and make the following changes.
   a. In the Java console section, select **Hide console**.
   a. In the Miscellaneous section, select **Place Java icon in system tray**.
Setup and general

- Installation
- Starting application
- Logging in
- Localization
- Performance and miscellaneous items
Installation

Database creation failed error during installation

**Symptom**

While installing Cisco Interaction Manager, the following error message is displayed:

DB creation failed.

**Possible cause**

The database server has less than five GB free space.

**Solution**

- Make sure that the database server has at least five GB free space.

Error during installation

**Symptom**

While installing Cisco Interaction Manager on the same server where the file server was installed in some previous Cisco Interaction Manager installation, the following error message is displayed:

An unknown error occurred.

**Case 1**

**Possible cause**

When Cisco Interaction Manager is uninstalled, the `Cisco_Home\Storage` folder on the file server is not uninstalled. When a user attempts to install Cisco Interaction Manager on the same file server, the installation fails.

**Solution**

1. On the file server, browse to `Cisco_Home`.
2. If required, take a backup of the `Cisco_Home\Storage` folder.
3. Delete the `Cisco_Home` folder.
Case 2

Possible cause
There can be other problems, which need further analysis.

Recommended action
- Open the Cisco_Home\eService\installation\egpl_install_err.log log file in a text pad. Search for “error”. The error message describes the problem that occurred during installation. If you need help with analyzing the logs, contact Cisco TAC.

Starting application

Unable to start application

Symptom
Unable to start Cisco Interaction Manager.

Case 1

Possible cause
Application server is not able to communicate with the Licence Manager, Remote Session Manager, and the database.

Recommended actions

Option 1
1. Check the Cisco_Home\logs\eg_log_services_Server_Name_ServerMonitoring.log log file for the following messages.
   - Platform Session Manager:ready=false
   - eGain Local App Server Started:ready=false
   - Database Server:ready=false
2. Check the Cisco_Home\logs\eg_log_services_Server_Name_ServerMonitoring.log log file for the following messages.
   - Info[Wait4Any2Start.waitUntilReady](Platform Session Manager):ready=false,m_maxTries=-1,iterCount=2
   - Info[Wait4Any2Start.waitUntilReady](eGain Local App Server Started):ready=false,m_maxTries=-1,iterCount=0
Info [Wait4Any2Start.waitUntilReady]; (Database Server) ready=false, m_maxTries=-1, iterCount=0

3. If the log files contain the messages described in Step 1 and Step 2, then wait for five minutes for the application to start. If it does not start after five minutes, then restart the application.

Option 2

- Check the network connection between all the servers in the deployment. If there is a network problem, contact your IT administrator and resolve it.

Option 3

- From the command prompt, run the following command:
  
  ```
  netstat -an -p tcp
  ```

  It shows a list of servers, the ports used by the server (in the format: `server name: port number`), and the status of the port. If the application is not running, then the connection status of the ports used by the application should not be Established, Listening, or Time_wait. If the ports are being used, then restart the server to free the ports. The default ports used by the application are: 80, 403, 9001, 9002, 139, 445, 12345, 12346, 9999, 1443, 1024-65535.

Option 4

- Run the following command to verify that the ports used by the application are open:
  
  ```
  telnet Server_Name Port_Number
  ```

  Where `Server_Name` is the name of the server and `Port_Number` is the port used to access the server.

- If you get a “Connect failed” error, it indicates that the server is not accessible on that port. Contact your system administrator to get the ports opened.

Case 2

Possible cause

WebLogic Server domains for secondary application servers are not configured properly.

Recommended action

1. Check the log file for the following WebLogic Server exceptions:

   ```
   java.rmi.ConnectException: The connection manager to ConnectionManager for: 'weblogic.rjvm.RJVMImpl@74ccf82 - id: '8218534549432914157S:10.4.0.173:[9001,9001,9002,9002,9001,9002,9001,9002,-1:mydomain:myserver' connect time: 'Thu Jul 06 00:05:48 GMT 2006'' has already been shut down
   
   ###<22-Jul-06 21:29:23 BST> <Warning> <RJVM> <EMS00812> <myserver> <ExecuteThread: '38' for queue: 'default'> <kernel identity> <> <D00519> <Unable to connect to a remote server on address 10.4.0.172 and port 9001 with protocol t3. The Exception is java.net.ConnectException: Connection refused: connect
   ```
2. Verify that a unique WebLogic Server domain has been created for each application server. A maximum of five secondary application servers are supported in a deployment.

Case 3

Possible cause
The License Manager is not starting.

Recommended action
1. Check the Cisco_Home\logs\eg_log_services_server_Name_license-manager.log log file for the following exceptions.
   18N_EGPL_LICENSE-FAIL_TO_LOAD_LICENSE_FILES -- Check if licenses files are in place.
   I18N_EGPL_LICENSE-LICENSE_UNITS_EXCEEDED - License files changed over the period. Contact administrator.
   I18N_EGPL_LICENSE-ACTION_LICENSE_MAPPING_CORRUPT - Contact administrator.
   I18N_EGPL_LICENSE-LICENSE_EXPIRED - Licenses expired. Contact administrator.
   I18N_EGPL_LICENSE-LICENSES_NOT_ISSUED_FOR_PARTITION -- Missing license files for a particular partition.
2. If exceptions are found, then send the Cisco_Home\logs\eg_log_services_server_Name_license-manager.log log file to Cisco TAC and restart the application.

Case 4

Possible cause
No license files are available on the Unified CCX server.

Recommended action
1. On the Unified CCX server, from the Unified CCX AppAdmin window, upload the Cisco Interaction Manager licenses. If the licence files are not available, then contact Cisco TAC.
2. Restart the Unified CCX servers (both primary and secondary) and then start Cisco Interaction Manager.
Case 5

Possible cause
The socket connection between Cisco Interaction Manager and Unified CCX is broken due to network timeout issues.

Recommended action
- Check the network connection. If there is a problem, contact your IT administrator.

Case 6

Possible cause
The primary or secondary Unified CCX server is not running.

Recommended action
- Check if the Unified CCX servers are running. If they are not running, then first start the Unified CCX servers (both primary and secondary) and then restart Cisco Interaction Manager.

Logging in

File or directory not found

Symptom
The following error is displayed:

HTTP Error 404 - File or directory not found.

Possible cause
The 404 error occurs when the requested file does not exist on the server.

Recommended action
Check the IIS log files on the web server to find the location of the missing file and add it.
1. Go to Start > All Programs > Administration Tools > Internet Information Services (IIS) Manager.
2. In the Internet Information Services (IIS) Manager window, browse to Web Sites > Default Web Site.
3. Right-click Default Web Site and click Properties.
4. In the Default Web Site Properties window, go to the Web Site tab.

5. On the Web Site tab, in the Connections section, in the **Enable logging** field, click the **Properties** button.

6. In the Logging Properties window, locate and note the following values for the log file.
   - Log file directory
   - Log file name

7. Next, browse to the log file and open it in a text pad.

8. In the log file, search for “404”. From the log message, note down the path of the missing file.

9. Go to the location of the file and check if the file is missing. If the file is missing, you need to add it. You can get the files from the backup of the web server.

**Not authorized to view page**

**Symptom**

The following error is displayed:

HTTP 403 (Forbidden): You are not authorized to view this page.

**Case 1**

**Possible cause**

The error usually occurs due to issues with Internet Information Services (IIS). The *iisproxy.dll* and *iisproxy.ini* files could be missing.

**Recommended action**

1. On the primary application server, browse to `BEA_Home > weblogic81 > server > bin`.

2. Locate the following two files.
   - *iisproxy.dll*
   - *iisproxy.ini*

3. If the two files exist, then you need to check the properties of the *iisproxy.ini* file. Open the *iisproxy.ini* file in a text pad. In the file, locate **WebLogicHost** and check if the value of the WebLogic host is correct.

4. If the two files are missing, then add them. You can get the files from a backup of the primary application server.
Case 2

Possible cause
The error usually occurs due to issues with Internet Information Services (IIS). The mapping for the extensions, .controller, .egain, and .jsp might be missing.

Recommended action
1. Go to Start > Settings > Control Panel > Administrative Tools > Internet Information Services.
2. In the Internet Information Services (IIS) Manager window, browse to Web Sites > Default Web Site.
3. Right-click Default Web Site and click Properties.
4. In the Default Web Site Properties window, go to the Home Directory tab.
5. On the Home Directory tab, in the Application Settings section, click the Configurations button.
6. In the Application Configuration window, on the Mappings tab, in the Application extensions section, locate the following extensions.
   - .controller
   - .egain
   - .jsp
7. If the extension mappings are missing, then add them. On the Mappings tab, in the Application extensions section, click the Add button.
8. In the Add/Edit Application Extension Mapping window that opens, provide the following details and click OK.
   - Executable: Provide the path to the file containing the WebLogic plugin for IIS. For example, Drive_Name\Inetpub\wwwroot\egain\iisproxy.dll.
   - Extension: Provide the extension as .egain.
   - Verbs: Select the Limit to option and provide the get, head, post, and trace verbs.
   - Select the Script engine option.
   - Clear the Verify that files exists option.
9. In the Mappings tab, click the Add button again. Then, repeat Step 8 to add the .controller extension. Make sure that in the Extension field you specify the .controller extension. Likewise, add the extension mapping for .jsp.

Case 3

Possible cause
If the web server and file server are configured on two separate machines, there may be a problem with access permissions of the virtual directories on the web server.

Recommended action
1. Go to Start > Settings > Control Panel > Administrative Tools > Internet Information Services.
2. In the **Internet Information Services (IIS) Manager** window, browse to **Web Sites > Default Web Site.**

3. Browse to the virtual directory of the partition where you are getting the 403 error.

4. Right-click the virtual directory and click **Properties.**

5. In the properties window, on the Virtual Directory tab, make sure the **Read** permission is selected. And, in the Application settings section, make sure that the execute permissions are set as **Scripts and Executables.**

### Runtime errors occur at login

**Symptom**

A runtime error occurs at the time of login.

**Possible cause**

The *license.js* file is empty.

**Recommended action**

1. On the file server, browse to `Cisco_Home\web\view\platform\common`.

2. In the *common* folder, locate the *license.js* file. Open the file in a text pad. If the file is empty, restart the application and check again if the file is empty. If the file is still empty, then contact Cisco TAC.

### Session expired error after login

**Symptom**

After logging in to the application, the user sees a message “Your session is no longer active. Please log in again.”

**Case 1**

**Possible cause**

Another user logged in to the application with the same user name and password.

**Recommended action**

- Try to log in to the application again.
Case 2

Possible cause
Remote Session Manager has crashed.

Recommended action
1. Open the log file Cisco_Home\logs\wl_console_Application_Server_Name.log in a text pad.
2. In the file, search for “Command null\bin\platform\startsm.bat”. If you find the exception in the log file, then send the following two log files to Cisco TAC. The exception stack traces in the log files provide the file name and line number of the module where the exception occurred. Using this information, the conditions that caused the exception to occur can be identified.
   o Cisco_Home\logs\wl_console_Application_Server_Name.log
   o eg_log_Application_Server_Name_Application Server.log
3. Restart the application.

Licenses unavailable error during login

Symptom
When a user tries to log in to the application, a message shows “No application licenses are currently available for you to log in to the system. Try again later or contact your system administrator.”

Possible cause
License Manager has crashed.

Recommended action
1. Open the log file Cisco_Home\logs\wl_console_Application_Server_Name.log in a text pad.
2. In the file, search for “Command null\bin\platform\startlm.bat”. If you find the exception in the log file, then send the following two log files to Cisco TAC. The exception stack traces in the log files provide the file name and line number of the module where the exception occurred. Using this information, the conditions that caused the exception to occur can be identified.
   o Cisco_Home\logs\wl_console_Application_Server_Name.log
   o Cisco_Home\logs\eg_log_Services_Server_Name_license-manager.log
   o Cisco_Home\logs\eg_log_Application_Server_Name_Application Server.log
3. Restart the application.
Login takes a long time

**Symptom**

User login takes a long time.

**Possible cause**

When a user logs in to the application, two requests are sent to the web server. First request is sent by the messaging applet and the other is sent by the user connection. Because the messaging applet uses a persistent connection to the web server, the user connection has to wait until the messaging applet is downloaded, causing slowness at the time of user login.

**Recommended action**

1. Open Internet Explorer.
2. Go to **View** (menu) > **Java Console**.
3. In the Java Console window, if you see the following error message, it indicates that the messaging applet is not configured properly.

```
IOException Loading Archive: http://Server_Name
/default/lib/int/platform/egpl_messaging_applet.jar
java.io.FileNotFoundException: Server_Name:80//default/lib/int/platform/egpl_messaging_applet.jar
```

```
    at com/ms/net/wininet/http/HttpInputStream.connect
    at com/ms/net/wininet/http/HttpInputStream.<init>
    at com/ms/net/wininet/http/HttpURLConnection.createInputStream
    at com/ms/net/wininet/WininetURLConnection.getInputStream
    at com/ms/vm/loader/JarArchiveSet.loadNextJar
    at com/ms/vm/loader/JarArchiveSet.getResourceBits
    at com/ms/vm/loader/JarArchiveSet.getClassData
    at com/ms/vm/loader/JarArchiveSet.getClassData
    at com/ms/vm/loader/ResourceLoader.getClassData
    at com/ms/vm/loader/URLClassLoader.findClass
    at com/ms/vm/loader/URLClassLoader.loadClass
    at com/ms/vm/loader/URLClassLoader.loadClass
    at com/ms/applet/AppletPanel.securedClassLoad
    at com/ms/applet/AppletPanel.processSentEvent
    at com/ms/applet/AppletPanel.processSentEvent
    at com/ms/applet/AppletPanel.run
```
4. If the messaging applet has configuration problems, then do the following:
   a. From your IT administrator, get a new IP address for the primary web server.
   b. On the master and active databases, run the following query:

```sql
UPDATE EGPL_PREF_GLOBALSETINGS
SET Setting_ACT_Val = 'New_IP_Address', Setting_DEF_Val = 'New_IP_Address'
```
WHERE SETTING_NAME = 'Common.messaging.applethost'

If you are using SSL to access the application, then for detailed steps for configuring the messaging applet, see the “SSL for secure connection” chapter in the Cisco Unified Web and E-Mail Interaction Manager Installation Guide.

5. Restart the application.

Localization

Some text is not localized

Symptom

While accessing the application in a language other than English, some text in the user interface (UI) appears in English.

Cause

Some of the text may not have been translated.

Solution

› Contact Cisco TAC to log a case for getting the text translated.

Runtime error occurs while accessing some consoles

Symptom

While accessing the application in a language other than English, a run time error occurs in some consoles.

Cause

In the Cisco_Home\l10n folder, in the properties files, the property keys for some of the strings may be incorrect or mis-spelled.

Solution

› Contact Cisco TAC to log a case for getting the property keys fixed.
Some text flows out of its area

**Symptom**
While accessing the application in a language other than English, some text in the user interface (UI) flows out of its area.

**Cause**
Some of the areas in the UI do not resize automatically according to the length of the text.

**Solution**
- Contact Cisco TAC to log a case for getting the issue fixed.

---

**Performance and miscellaneous items**

Application is slow to respond

**Symptom**
Application is very slow or does not respond.

**Case 1**

**Possible cause**
High CPU utilization on the database server. This happens when the database grows large in size, the hardware is not sufficient, and during this time one of the following jobs or service is running.
- Reports summary jobs
- Maintenance jobs (reindexing of database)
- Auto pushback service

**Recommended action**
- Run SQL Profiler Trace to find out the queries which are taking a long time to run.
- Run custom performance trace templates to find out the reason for deadlocks and locks.
- Analyze the logs in the `Cisco_Home\logs\eg_log_dal_query_timeout.log` file. Look for queries that may be taking more than 10 seconds to execute completely.
For the SQL Enterprise Manager, verify the mode of authentication.

On the database sever, run `sp_configure` to check the value of network packet size. It should be set to 4096. If it is not, run the following command:

```
exec sp_configure network packet size (B)', 4096
```

The fill factor (%) should be set to 80. It makes sure that 20% of free space is left in the data pages of the indexes to reduce page splitting in SQL Server, which adds additional I/O on the SQL Server. If it is not, run the following command:

```
exec sp_configure 'fill factor (%)', 80
```

The max degree of parallelism should be set to the number of physical processors. For example, a Windows 2003 server with four physical processors should have the max degree of parallelism set to four. If a server has two physical processors, set the max degree of parallelism to 2. If it is not, run the following command:

```
exec sp_configure 'max degree of parallelism', Number_Of_Physical_Processors
```

### Case 2

**Possible cause**

Locks or deadlocks in the database.

**Recommended action**

- Follow the steps recommended for Case 1.

### Case 3

**Possible cause**

High CPU and memory utilization on the application server. This happens when many users are running searches in parallel.

**Recommended action**

1. Generate thread dumps and send them to Cisco TAC for further analysis. For details on taking thread dumps, see the following article on the BEA Support web site.

   [http://support.bea.com/application_content/product_portlets/support_patterns/wls/UnexpectedHighCPUUsageWithWLSPattern.html](http://support.bea.com/application_content/product_portlets/support_patterns/wls/UnexpectedHighCPUUsageWithWLSPattern.html)

2. After taking the thread dumps, restart the application.
**Case 4**

**Possible cause**

On the application server, the number of concurrent web requests (user requests from the user interface) to WebLogic are more than the number of threads allocated to process web requests.

**Recommended action**

1. Open `Cisco_Home\config\weblogic\config_hostname.xml`
2. Locate the following line:
   ```xml
   <ExecuteQueue Name="default" ThreadCount="50" ThreadsIncrease="1"/>
   ```
   To ensure that an adequate number of threads have been allocated to the `default` pool, set the number of worker threads for WebLogic to at least 60% of the number of concurrent users. For example, if you have 100 concurrent users, set `ThreadCount` to 60; and if you have 150 users, set `ThreadCount` to 90.
3. Restart the application.

**Unable to start or stop services**

**Symptom**

From the System Console, user is not able to start or stop the services.

**Case 1**

**Possible cause**

The port number for the services server is not correct.

**Recommended action**

1. Open the `Cisco_Home\bin\platform\setenv_Services_Server_Name.bat` file in a text pad. Locate and note the value for `RMI_Registry_Port`.
2. Open the `Cisco_Home\config\egpl_dsm.xml` file in a text pad and verify the value of RMI server name and port number. It should match the value of `RMI_Registry_Port` found in Step 1. If the values don’t match, update the value in `egpl_dsm.xml` and restart the application.
3. Check the value of the RMI registry port in the master database.
   a. Run the following query on the master database.
      ```sql
      Select * from egpl_dsm_host
      ```
   b. From the query results, check the value of Host controller, RMI Registry Server, and Port. It should match the value of `RMI_Registry_Port` found in Step 1.
   c. If the values don’t match, run the following query on the master database.
update egpl_dsm_host

set port = RMI_Registry_Port where host_ID = Host_Controller_Host_ID or host_ID = RMI_Registry_Server_Host_ID

4. Restart the application.

Case 2

Possible cause
RMI or RMID registry has crashed.

Recommended action

- Run the List RMI objects utility.
  a. Run the utility Cisco_Home\web\view\platform\debug\listrmiobjects.jsp.
  b. From the results window, check the values in the Connection Status column. At least for one object the column should have the value Remote object or Alive. If it is not so, restart the application.
- Run the dsmshell.bat utility.
  a. Run the utility Cisco_Home\bin\platform\dsmshell.bat.
  b. For Enter Command, provide the value printregistry.
  c. For Enter ID, provide the value RMI_Port_Number.

5. It provides a list of all the remote objects, their state, and connection status. If the connection status for any of the objects is “Remote object is dead”, then restart the application.

Case 3

Possible cause
Services server has crashed.

Recommended action

- Follow the steps recommended for Case 2.

Users are not able to send or receive internal messages

Symptom
Users are not able to send or receive internal messages, chat messages, and internal notifications.
**Possible cause**
An issue with the messaging configuration.

**Recommended action**
1. Open the `Cisco_Home\config\egpl_evs_handler.xml` file in a text pad.
2. Search for “host name” and check the value for it. It should be the name of the primary application server. If the information is not correct, update it.
3. Restart the application.

**Changes made to the settings don’t take effect**

**Symptom**
When the partition level, department level, or user level settings are edited from the Administration Console, the changes don’t take effect.

**Possible cause**
The Distributed Cache Manager is not able to communicate with the primary application server and the secondary application servers (if the deployment has secondary application servers).

**Recommended action**
1. On the primary application server, browse to the `Cisco_Home\config\egpl_cachedefaultconfig.properties` file.
2. Open the file in a text pad.
3. Search for `discoveryaddress` and check the values for it. It should have information about the primary application server and secondary application servers, if there are any. The information of the servers should be in the format `Server_Name:Port_Number`. If the information is not correct, update it.
4. Restart the application.

**Unable to search email content**

**Symptom**
When a user searches email content, the following error message is displayed:

`Enable fulltext catalogues`
Possible cause

Full text catalogue search is not running.

Recommended action

Option 1

On the database server, check if the Microsoft Search service is running.

1. Go to Start > Programs > Administrative Tools > Services.
2. Ensure that the Microsoft Search service is running.

Option 2

- On the database server, run the following command on all the active databases.

  run EXEC sp_fulltext_database 'enable'
Retriever service

- Retrieving emails
- Parsing emails
Retrieving emails

Emails are not being retrieved

Symptom

Emails are not being retrieved.

Case 1

Possible cause

The retriever service process and instance is not running.

Recommended action

From the System Console check if the retriever processes and instances are running.

Case 2

Possible cause

The retriever service hangs because of out of memory issues, database deadlocks, or because of no response from the Mail Server.

Recommended action

- Retriever instances may have hung. Check the following log file for java exceptions and time out messages. Retriever instance may have crashed due to some out of memory errors. Search the following log file for “Instance failed”. There may be alias related errors such as login failures, alias being inactive or disabled, etc. Search the following log file for “Retriever”. If you need help with analyzing the logs, contact Cisco TAC.

  - *Cisco_Home\logs\eg_log_services_Server_Name_rx-process.log*

  From the System Console start the retriever service process and instance.
Case 3

Possible cause
The alias is not configured properly or there is some problem with the alias.

Recommended action
- Check the validity of the alias details. Telnet to POP3 server using the following command (110 is the port number of the POP3 server) and input alias credentials at login prompt.
  
  `telnet Server_Name 110`

- From the System Console, configure and run monitors for the retriever instances. (See System Console User’s Guide for steps to create a monitor). From the monitor, check the following attributes.
  - Check if the value of the Last Run Time attribute is much less than the Start Time attribute. If it is so, it indicates that the instance is hung due to some problematic email or the retriever has connection problems.
  - For the aliases configured for the retriever, check the state of the alias. If you notice that the state of the alias is one of the following, then fix the problem.
    - Active: The alias is set as active and is working fine.
    - Inactive: The alias is set as inactive from the Administration Console.
    - Login failed: Authentication failures while connecting to the mailbox.
    - Disabled: If there are consecutive authentication failures while connecting to the mailbox, the alias is disabled.
    - Connection failed: Not able to connect to the mail server.

Some emails are not retrieved

Symptom
While retrieving emails, Retriever skips some emails.

Possible cause
If the partition level setting “Action for large emails” is configured to skip large emails and send a notification, the retriever skips such emails and sends a notification to the address configured in the partition level setting “To: address for notifications from services”.

Recommended action
- Check the value of the following partition level settings and configure them according to your needs.
  - Maximum email size for retriever (bytes)
  - Action for large email
Attachments are missing

**Symptom**
Attachments are missing from the incoming emails. Either the attachments don’t show with the email, or they show as blocked attachments.

**Possible cause**
The particular file extensions are blocked for a department and the department level settings are configured to delete the attachments or quarantine them.

**Recommended action**
- In the Administration Console, in the Tree pane, browse to *Department_Name > Email > Blocked File Extensions*. Check the list of blocked file extensions.
- Check the department level setting “Action on blocked attachments”. If the value of the setting is **Delete**, then all the blocked attachments are deleted. If the value of the setting is **Quarantine**, then the attachments get saved at a different location and can be restored or deleted. In the Tree pane, browse to *Department_Name > Email > Blocked File Extensions*. From the List pane toolbar, click the **Blocked attachments** button, to see a list of activity IDs and files names of the blocked attachments. If required, restore the blocked attachments or delete them.

Parsing emails

Retriever is not able to parse emails

**Symptom**
Retriever is not able to parse emails. Emails are getting inserted in the

*Cisco_Home*\storage\Partition_ID\mail\Exception Emails\RxExcepEmails.txt file.

**Possible cause**
- If the messages are not according to RFC 822 message standards. For example, **Content type** field is missing from the message header.
- Message ID is missing.
- There is no start boundary.
- The mail header character set value is not recognized by Java Mail. For example, it contains characters like “iso-8859-1” where as the correct format is “iso 8859-1”.

Retriever service 37
**Recommended action**

Contact Cisco TAC.

Retriever is not able to insert emails in the database

**Symptom**

Retriever is not able to insert emails in database. Emails are getting inserted in the

```
Cisco_Home\storage\Partition_ID\mail\Exception Emails\RxExcepEmails.txt
```

file.

**Possible cause**

Insertion fails due to duplicate message ID.

**Recommended action**

- Compare the timestamp and server names in the delivery path (in the initial few lines of the header) with that of the mail in the database. If they are exactly the same, it indicates that there is some problem with deleting emails from the server. It can happen when there is a network failure while closing the mailbox folder. If they are different, it is a problem at the mail server level, and can be ignored. Contact Cisco TAC.

Emails in rich text format are displayed in plain text

**Symptom**

Emails in rich text format are displayed in plain text.

**Possible cause**

Microsoft Exchange Server properties are not configured properly.

**Recommended action**

- On the Microsoft Exchange Server, check the setting for converting rich text to HTML.
Dispatcher service

- Setup and performance
- Dispatching emails
Setup and performance

Dispatcher service hangs or crashes

Symptom
The Dispatcher service crashes or hangs.

Case 1

Possible cause 1
The service hangs because of out of memory issues.

Recommended action
- From the System Console, restart the Dispatcher service processes and instances.

Case 2

Possible cause 2
The Dispatcher service hangs due to database deadlocks, or after waiting indefinitely for a response from the Mail Server.

Recommended action
- From the System Console, restart the Dispatcher service processes and instances.

Unable to connect to the SMTP or ESMTP server

Symptom
Dispatcher service is not able to connect to the SMTP or ESMTP server.

Case 1

Possible cause
The SMTP or ESMTP server is down.
Recommended action

- Start the SMTP or ESMTP server.

Case 2

Possible cause 2
The connections to the SMTP or ESMTP server have exceed the maximum number of connections allowed for that server.

Recommended action

- At the SMTP or ESMTP server, check the maximum number of connections allowed for the server.

Case 3

Possible cause 3
Connection times out, while connecting to the SMTP or ESMTP server.

Recommended action

- In the `Cisco_Home\config\dispatcher\egpl_dispatcherconfig.properties` file, increase the value of the DX.SocketTimeout setting. The default value is 300 seconds.

Dispatching emails

Emails are not getting dispatched

Symptom

Emails are not getting dispatched.

Case 1

Possible cause
Services server IP address is not added to ACL for allowing SMTP relay. The `eg_log_Services_Server_Name_dx-process.log` log file contains following messages.

- 550 5.0.0 Please call the helpdesk for access to this mail relay.
- 550 5.7.1 Unable to relay for …
Recommended action

- Contact your IT administrator.

Case 2

Possible cause

Emails are refused by the SMTP server because they are considered as spam emails, or if they have attachments, which are restricted at the server. The eg_log_Services_Server_Name_dx-process.log file contains message “554 Message refused”.

Recommended action

- Contact your IT administrator.

Case 3

Possible cause

Email contains attachment perceived as malicious by the SMTP server. The eg_log_Services_Server_Name_dx-process.log log file contains message “550-Potentially executable content. If you meant to send this file then please package it up as a zip file and resend it”.

Recommended action

- Run the following query on the Active DB to delete the attachment, so that email gets delivered without the attachment.

  update egpl_casemgmt_activity set num_attachments=0 where activity_ID = Activity_ID

Case 4

Possible cause

Server rejecting mails higher than allowed size (The allowed size is controlled by the Max body size for dispatcher partition setting). The eg_log_Services_Server_Name_dx-process.log log file contains message “552 Message size exceeds maximum permitted.”

Recommended action

- Mails keep getting retried - so increase size limit or delete large attachment.

  Connect at port 25; EHLO, 250-SIZE XXX, MAIL FROM: Email_Address SIZE=XXX
Case 5

Possible cause
The server expects ESMTP protocol while alias is configured for SMTP. The 
\texttt{eg\_log\_services\_Server\_Name\_dx-\text{process}\_log} log file contains message “550 Unauthenticated relaying not allowed(#5.7.1)”.

Recommended action
\begin{itemize}
  \item Check the alias configuration.
\end{itemize}
Workflows

- Setup and performance
- Routing activities
- Alarm workflows
Setup and performance

Changes made to workflows are not reflected in activity processing

**Symptom**

Changes made to workflows are not reflected in activity processing.

**Possible cause**

The `.ser` files in the `Cisco_Home\config\routing\cache` directory are not updated.

**Recommended action**

- Check the modified date of the following serialized (.ser) files in the `Cisco_Home\config\routing\cache` folder to make sure they were updated when you made changes to workflows. If the files were not updated, restart the Workflow Cache and Workflow Engine processes and instances.
  - `AttributeCache^1.ser`
  - `AttributeObjectCache^1.ser`
  - `RuleCache^1.ser`
  - `KBCache^1.ser`
  - `QueueCache^1.ser`

Routing activities

Unable to process activities

**Symptom**

Workflow is not able to process activities. Activities are in 3100, 3200, 3300, 3400 sub-status.

**Case 1**

**Possible cause**

Workflow Engine service process and instance is not running.
**Recommended action**

1. Find the Windows process ID for the Workflow Engine process from one of the following files:
   - rules_process_log: Open the `Cisco_Home\logs\eg_log_services_SERVER_Name_rules-process.log` file in a text pad, and search for "Workflow_Engine_Service_Process_Name<@>". Note down the number next to the searched text. This is the windows process ID of the workflow engine process.
   - egpl_process_ids.properties: Open the `Cisco_Home\config\egpl_process_ids.properties` in a text pad, and search for "Workflow_Engine_Service_Process_Name". Note down the windows process ID for the service process.

2. Using the Windows process ID obtained in step 1, from the Windows Task Manager check if the process is running.

3. Restart the Workflow Engine service process and instance.

**Case 2**

**Possible cause**
The .ser files are missing from `Cisco_Home\config\routing\cache`.

**Recommended action**
- Restart the Workflow Engine and Workflow Cache service processes and instances.

**Case 3**

**Possible cause**
There are activities that are part of an expired batch.

**Recommended action**

1. To find the batch of expired activities, run the following query on the active database.
   ```sql
   SELECT min_id, max_id, working_status from egpl_routing_wat
   ```
   In the results, if the `working_status` column shows values other than zero, it indicates that the corresponding batch of activities has expired.

2. To find the service instance ID associated with the expired batch, run the following query on the master database.
   ```sql
   SELECT * from egpl_dsm_instance where instance_name = 'Workflow_Engine_Service_Instance_Name'
   ```

3. To update the status of the batch to “not expired”, run the following query on the active database.
   ```sql
   UPDATE egpl_routing_wat SET working_status = 0 where instance_id = Workflow_Engine_Service_Instance_ID and min_id = Min_ID and max_id = Max_ID
   ```
   Where:
   ```sql
   Workflow_Engine_Service_Instance_ID = obtained in Step 2
   ```
\( \text{Min} \_ID \) and \( \text{Max} \_ID \) = obtained in Step 1

4. To avoid the problem for future batches, increase the value of the partition setting “Batch Expiry Duration”.

**Case 4**

**Possible cause**

The work allocation thread is not running.

**Recommended action**

1. In the `Cisco_Home\logs\eg_log_Services_Server_Name_rules-process.log` log file, search for “Work Allocation running”. If the thread is not running, restart the Workflow Engine service process and instance.

2. Check the `EGPL_ROUTING_VARIABLE` table and ensure that the `last_processed_ID` is one lesser than the value of ID (`egpl_routing_work ID` and not `activity_ID`).

**Case 5**

**Possible cause**

The workflow engine thread is not running.

**Recommended action**

1. Browse to `Cisco_Home\logs` folder.

2. Locate the `eg_log_Services_Server_Name_rules-process.log` log file. If the file does not exists, it indicates that the workflow engine thread was not able to start at the time of the application startup.

3. If the `eg_log_Services_Server_Name_rules-process.log` log file exists, then open the log file in a text pad and check if the workflow engine thread stopped at some later time. The exception stack traces in the log files provide the file name and line number of the module where the exception occurred. Using this, identify the possible conditions that caused the exception to occur. If you need help with debugging the exception stack traces, contact Cisco TAC.

4. From the System Console, restart the Workflow Engine service process and instance.
Case 6

Possible cause
There was a problem when DSM tried to restart the Workflow Engine process and instance.

Recommended action
1. Search the following log files for “remote” and “exception”. The exceptions indicate that the RMI server was not able to start, because of which the Workflow Engine service process and instance could not start. The exception stack traces in the log files provide the file name and line number of the module where the exception occurred. Using this, identify the possible conditions that caused the exception to occur. If you need help with debugging the exception stack traces, contact Cisco TAC.
   - eg_log_services_Server_Name_DSMController.log
   - eg_log_services_Server_Name_ServiceController.log
   - eg_log_services_Server_Name_platform-rsm.log
2. From the System Console, restart the Workflow Engine service process and instance.

Case 7

Possible cause
There are out of memory errors in the Cisco_Home\logs\eg_log_services_Server_Name_rules-process.log file.

Recommended action
1. Open the Cisco_Home\config\egpl_dsm.xml file in a text pad.
2. Search for </JVMParams> and after it, add the following:
   <JVMParams>
     <default>-Xmx128m</default>
     <Workflow_Engine_Process_Name>-256m</Workflow_Engine_Process_Name>
   </JVMParams>
   Where Workflow_Engine_Process_Name is the name of the workflow engine process for which you want to increase the JVM size.
3. Restart the application.

Activities are getting routed to the exception queue

Symptom
Activities are getting routed to the Exception queue.
Possible cause

Activities are in 3900 state, and the Workflow Engine service process and instance was restarted by the DSM, because the batch processing exceeded the restart time interval.

Recommended action

- On the active database, run the following query on the egpl_notes table to find out the workflow which is routing activities to the exception queue, and the reason for it.

```
SELECT note_data FROM egpl_notes
```

- Check the error messages in the \Cisco_Home\logs\eg_log_Services_Server_Name_rules-process.log file.
  - Look at the SEVERE logs containing the activity ID of the activity routed to the exception queue.
  - Also, check the Work Allocation INFO level logs for messages like “Range of activities in current work...” and “Deleting range...”.

- Launch the application. Log in as an agent and go to the Agent Console. Search for the activities getting routed to the Exception queue. From the search results, view the audit trail details of the activities. It displays the path taken by the activity and the reason why it got routed to the Exception queue.

- If the Workflow Engine service is taking a long time to process activities, then run a SQL profiler trace or other performance tools, to investigate the reason for slowness of the system. Possible reasons could be database needs re-indexing or archive needs to be run.

Workflows skip some activities

Symptom

While processing the activities, some activities are skipped by the workflows. On the active database, run the following query. If it fetches any results, it indicates that there is some problem with the workflows.

```
select count(*) from egpl_casemgmt_activity
where activity_status = 4000 and
activity_sub_status = 4100
and activity_mode = 100
and isnull(queue_id, 0)=0
and isnull(assigned_to,0)=0
```

Case 1

Possible cause

Workflows have not been activated.
Recommended action

- From the Administration Console, check if the workflows are in active state.

Case 2

Possible cause

The .ser files in the Cisco_Home\config\routing\cache directory are not updated.

Recommended action

- Restart the Workflow Engine and Workflow Cache service processes and instances.

Activities do not get assigned to agents

Symptom

Activities do not get assigned to agents.

Case 1

Possible cause

Activities are to be assigned to a sticky agent and the agent is not available to receive the email, has reached the maximum load for emails, or is from a different department.

Recommended action

- Check if the activity should have been routed to the sticky agent. If yes, check the following conditions:
  - If the activities are assigned to agents only when they are available, check if the agent is available for receiving emails. Also, check if the agent has already reached the maximum load for receiving emails.
  - Check if the agent belongs to the same department to which the activity belongs.

Case 2

Possible cause

The email push routing methods, load balancing and round robin, are not working properly.

Recommended action

- Check why load balancing and round robin are not working properly.
  - Check if the agents are logged in to the application.
If the activities are assigned to agents only when they are available, check if the agents is available for receiving emails. Also, check if the agent has already reached the maximum load for receiving emails.

There should be no row for the user_ID and activity_ID combination in the EGPL_ROUTING_USER_ACT table. An entry is made in this table if an activity is auto pushed back or transferred from an agent without selecting the “Allow these activities to be assigned to me by system” option.

Some activities are skipped during assignment to users

**Symptom**

While assigning activity to user, some of the activities are skipped by the workflows.

**Possible cause**

There is an expired batch in the egpl_routing_assign_wat table, and the skipped activities are part of the expired batch.

**Recommended action**

1. Run the following query on the active database to find the list of expired batches.
   
   ```sql
   select * from egpl_routing_assign_wat where aborted=1
   ```
   
2. Run the following query on the active database to get a list of activities that belong to the expired batches.
   
   ```sql
   select * from EGPL_ROUTING_ASSIGN_WORK
   where ID between Min_Seq_ID and Max_Seq_ID
   ```
   
   If there is an expired batch, it gets picked up for processing only after 4 hours.
Alarm workflows

Alarm workflows are not executed

Symptom

Alarm workflows are not getting executed.

Case 1

Possible cause

Alarm workflow service instance and process are not running.

Recommended action

1. From the System Console, check if the Alarm workflow service instance and process are running.

Case 2

Possible cause

Alarm workflow schedule has not been met.

Recommended action

1. From the System Console, set the trace level for the alarm workflow logs to “DEBUG”
2. In the \Cisco_Home\logs\eg_log\Services_Server_Name_rules-process.log file, search for
   Executing Workflow: Workflow_Name
   If you don’t find the message, it indicates that the alarm workflow schedule has not been met.

Case 3

Possible cause

Conditions configured in the alarm workflows have not been met.

Recommended action

1. From the Administration Console, check the alarm workflows and see if the conditions configured in the
   alarm node have been met.
Notifications do not reach the recipients

**Symptom**

Notifications configured for alarm workflows do not reach the recipients.

**Case 1**

**Possible cause**

Messaging is not working.

**Recommended action**

**Option 1**

1. In the active database, run the following query on the `egpl_message` table.
   
   ```sql
   SELECT subject, body FROM egpl_message
   ```

   If the query returns any results, it indicates that there is a problem with messaging.

2. You need to check the host name in the `egpl_event.xml` file. Do the following:
   
   a. Obtain the host name (with the exact case) of the primary application server.
   
   b. Open the `Cisco_Home\config\egpl_event.xml` in a text pad.
   
   c. In the file check the primary application server name in the following two lines (first two lines in the file):

   ```xml
   <jmsserver name="default" url="t3://Primary_Application_Server_Name:9001"
   contextFactoryName="weblogic.jndi.WLInitialContextFactory"
   topicConnectionFactoryName="TopicConnectionFactory"
   queueConnectionFactoryName="QueueConnectionFactory"> </jmsserver>
   <jmsserver name="alternate" url="t3://Primary_Application_Server_Name:9001"
   contextFactoryName="weblogic.jndi.WLInitialContextFactory"
   topicConnectionFactoryName="TopicConnectionFactory"
   queueConnectionFactoryName="QueueConnectionFactory"> </jmsserver>
   ```

   The host name (and the case) used in the file should match the host name obtained in Step a. If they don’t match, update the values in the file.

   d. Restart the application.

**Option 2**

- Open the `Cisco_Home\logs\eg_log_Application_Server_Name_Application_Server.log` in a text pad. Search for “exception”. The exception stack traces in the log files provide the file name and line number of the module where the exception occurred. Using this, identify the possible conditions that caused the exception to occur. If you need help with debugging the exception stack traces, contact Cisco TAC.
Case 2

**Possible cause**
Alarm workflow schedule has not been met.

**Recommended action**
1. From the System Console, set the trace level for the alarm workflow logs to “DEBUG”.
2. In the `Cisco_Home\logs\eg_log_services_Server_Name_rules-process.log` file, search for `Executing Workflow:Workflow_Name`
   If you don’t find the message, it indicates that the alarm workflow schedule has not been met.

Case 3

**Possible cause**
Conditions configured in the alarm workflows have not been met.

**Recommended action**
- From the Administration Console, check the alarm workflows and see if the conditions configured in the alarm node have been met.
Chat

- Performance and setup
- Assigning chats
- Chat sessions
- Chat transcripts
This chapter describes recommended actions for the most common issues related to chat and its sub activities (blended collaboration, callback, and delayed callback).

### Performance and setup

**Chats take a long time to appear in agent inboxes**

**Symptom**

A chat takes about 60 seconds to appear in the agent’s inbox.

**Possible cause**

There is some messaging problem on the Customer Console.

**Recommended action**

- Check the Java Console messages for the Customer Console.
- Check the chat session logs in the following log files:
  - `Cisco_Home/logs/eg_log_Application_Server_Name_Application_Server.log`
  - `Cisco_Home/logs/eg_log_Services_Server_Name_agent-assignment-process.log`

### Assigning chats

**Chats are not getting assigned to agents**

**Symptom**

The chat queue is configured to push chats to agents, but the chats are not getting assigned to agents. The activities don’t appear in the agent’s inbox.

**Case 1**

**Possible cause**

The agent is not available for receiving chats.
**Recommended action**

From the Agent Console, check the availability setting of the agent.

**Case 2**

**Possible cause**
The queue is not configured to push chats to agents.

**Recommended action**

- In the queue, check the value in the **Chat push routing method** field. The value should be **Load balanced**.

**Case 3**

**Possible cause**
There is some problem with messaging.

**Recommended action**

- Log out and log in again. Check if the activity appears on re-login. If it appears, check the Java Console for activity push message. Also, check if messaging among users is working.

**Case 4**

**Possible cause**
There is some problem with the Agent Assignment service.

**Recommended action**

- Restart the Agent Assignment service.
- Send the following log files to Cisco TAC.
  - *Cisco_Home\logs\eg_log_Application_Server_Name_Application Server.log*
  - *Cisco_Home\logs\eg_log_Services_Server_Name_agent-assignment-process.log*
Case 5

**Possible cause**
The queue configured for routing chat activities in Cisco Interaction Manager is not mapped to the correct MRD.

**Recommended action**
1. Launch the application. Log in as an administrator and go to the Administration Console.
2. Browse to Administration > Department > Department_Name > Workflow > Queues.
3. In the List pane select the queue configured for callback activities and in the Properties pane on the General tab, check the value configured in the Media Routing Domain field. The value should be set to a chat MRD.

Agents cannot pull next chat

**Symptom**
When the agent clicks the Pull Next button, the button stops blinking but the activity is not assigned to the agent.

Case 1

**Possible cause**
There is some problem with messaging.

**Recommended action**
- Log out and log in again. Check if the activity appears on re-login. If it appears, check the Java Console for activity push message. Also, check if messaging among users is working.

Case 2

**Possible cause**
There is some problem with the Agent Assignment service.

**Recommended action**
- Restart the Agent Assignment service.
- Send the following log files to Cisco TAC.
  - Cisco_Home\logs\eg_log_Application_Server_Name_Application_Server.log
  - Cisco_Home\logs\eg_log_Services_Server_Name_agent-assignment-process.log
Pull Next button does not blink or does not stop blinking

**Symptom**
When a new chat comes in a queue, in the Agent Console, the Pull Next button does not blink. Or, the Pull Next button does not stop blinking, after the agent clicks on it.

**Possible cause**
There is some messaging problem. Either the Agent Assignment service did not generate the message or the generated message did not reach the Agent Console.

**Recommended action**
- For the Agent Console, check the Java Console messages for “start blink” or “stop blink”.

---

Chat sessions

Customer sees the service unavailable template

**Symptom**
When a customer tries to initiate a chat, the customer sees the service unavailable template.

**Case 1**

**Possible cause**
The entry point or queue is not active.

**Recommended action**
- From the Administration Console, check that the entry point and queue is active.

**Case 2**

**Possible cause**
- Agents are not available for receiving chats.
**Recommended action**

- If agent availability is required for creating chats, then from the Agent Console check if the agent is available for receiving chats.

---

**Customer sees a blank Customer Console**

**Symptom**

Customer sees a blank Customer Console.

**Possible cause**

Customer’s browser type and version is not supported.

**Recommended action**

Check the customer's browser type and version.

---

**Error while logging in**

**Symptom**

When a customer clicks the **Login** button on the login page, an error message appears.

**Case 1**

**Possible cause**

The entry point is not configured properly.

**Recommended action**

- From the Administration Console, check the primary key fields configured in the login template. Customer name and activity data attributes should not be configured as primary key.
- From the Administration Console, check the regular expression provided for data validation in the login template. Follow “Perl5” syntax for the regular expression.

**Case 2**

**Possible cause**

The last message sent by the customer may contain data that can compromise application security.
Recommended action

- Check the last chat message sent by the customer. The message may contain data that can compromise application security.

Error during chat session

Symptom

An error message appears during the chat session.

Possible cause

The last message sent by the customer may contain data that can compromise application security.

Recommended action

- Check the last chat message sent by the customer. The message may contain data that can compromise application security.

Agent does not receive customer messages

Symptom

Agent does not receive the messages sent by the customer during the chat session

Possible cause

Messaging is not working.

Recommended action

- Check the Java Console for chat messages and for customer’s connection status. Check if messaging among users is working.
- Check the chat session logs in the following log files:
  - Cisco_Home\logs\eg_log_Application_Server_Name_Application_Server.log
  - Cisco_Home\logs\eg_log_Services_Server_Name_agent-assignment-process.log
Symptom
Customer does not receive the pages pushed by an agent.

Case 1
Possible cause
There is some problem with messaging.

Recommended action
- Check the Java Console for page push message.

Case 2
Possible cause
There are some network problems.

Recommended action
- For the Customer Console, check the Java Console for network connection problems.

Case 3
Possible cause
The pages pushed by the agent are not supported.

Recommended action
- Only HTML pages with frames and PDFs (at the top-level only) can be pushed from the agent to the customer.
Chat transcripts

Transcripts are not sent to customers

**Symptom**

At the end of the chat session, chat transcript is not sent to customers.

**Case 1**

**Possible cause**

Entry points are not configured to send transcript to customers.

**Recommended action**

- From the Administration Console, check if the entry point is configured to send transcripts to customers.

**Case 2**

**Possible cause**

The Dispatcher, Workflow Engine, or Workflow Cache service is not running.

**Recommended action**

- From the System Console, check if the Dispatcher, Workflow Engine, and Workflow Cache service is not running.
- Check the `eg_log__Services_Server_Name__dx-process.log` log file. If you need help with analyzing the logs, contact Cisco TAC.

**Case 3**

**Possible cause**

The partition level setting “Default SMTP Server” is not configured correctly.

**Recommended action**

- Check if the partition level setting “Default SMTP Server” is configured correctly.
Reports

- Setup and performance
- Scheduling and running reports
- Report results
Setup and performance

Report service stops or crashes

**Symptom**
While running reports, the user sees a “Report service not running” error.

**Possible cause**
The report service was stopped or it crashed.

**Recommended action**
- In the system partition, from the System Console, start the Report service.

Unable to run reports

**Symptom**
On running a report, the ‘Generating…’ screen is displayed indefinitely.

**Possible cause**
An out of memory error occurs because of which the Report service fails.

**Recommended action**
1. In the following log files, search for “OutOfMemory”. If the problem exists, you need to increase the JVM size for the Report service process.
   - `Cisco_Home\logs\eg_log_Services_server_Name_report-process.log`
   - `Cisco_Home\logs\eg_log_Application_server_Name_Application Server.log`
2. Open the `Cisco_Home\config\egpl_dsm.xml` in a text pad.
3. Search for `<JVMParams>` and after it, add the following:
   ```xml
   <JVMParams>
     <default>-Xmx128m</default>
     <Report_Process_Name>-256m</Report_Process_Name>
   </JVMParams>
   ```
   Where `Report_Process_Name` is the name of the report process for which you want to increase the JVM size.
4. Restart the application.

### Scheduling and running reports

Scheduled reports are not generated

**Symptom**

The scheduled reports do not get generated.

**Case 1**

**Possible cause**

The schedule for the report is not configured properly.

**Recommended action**

- From the Reports Console, check if the schedule of the report is configured properly.

**Case 2**

**Possible cause**

The Scheduler service is not running.

**Recommended action**

- From the System Console, check if the Scheduler service process and instance is running.
On running a report, no results show

**Symptom**
When a user runs a report, the report result shows “No data found” text.

**Case 1**

**Possible cause**
There is no data to display for the timeframe selected for running the report.

**Recommended action**
Check the criteria selected for running the report and see if there is any data that matches the selected criteria.

**Case 2**

**Possible cause**
Summary jobs are not active or the summary jobs fail to execute.

**Recommended action**
1. In the active database, run a query on the `egplr_scheduled_task_status` table, and check the status of each summary job script.
2. From the SQL Enterprise Manager, verify the schedule of the summary jobs.
3. Analyze the reports data from the `egpl_event_history_casemgmt` table and summary tables for each report.

An error occurs while showing report results

**Symptom**
When a user runs a report, the report result window shows a message “An error occurred…”.

**Possible cause**
Some problem occurs while getting the data from the database or while displaying the results in the report result window.
Recommended action

- Contact Cisco TAC.

Report results

Reports data does not match

**Symptom**
When a report is run for the same timeframe at two different times, the reports data does not match.

**Possible cause**
Missing or incorrect data in reports event tables.

**Recommended action**

- Contact Cisco TAC.
Archive

- Running archive jobs
- Processing archive jobs
Running archive jobs

Scheduled archive jobs are not run

Symptom
The archive jobs do not run on schedule.

Case 1

Possible cause
The Archive service is not running.

Recommended action
- From the System Console, check if the Archive service process and instance is running.

Case 2

Possible cause
There is a failed job in some department in the partition.

Recommended action
- Check for failed jobs in all departments in a partition. From the Administration Console, restart all failed jobs.

Case 3

Possible cause
There is a stopped job in the department.

Recommended action
- Check for stopped jobs in the department where the archive jobs are not running. From the Administration Console, restart all stopped jobs.
Processing archive jobs

All archive jobs fail

Symptom
All archive jobs in a partition start failing.

Possible cause
After adding some custom attributes from the Tools Console, the archive jobs need a restart.

When a custom attribute is added to any partition, the active database changes, but the archive database is not update with the latest attribute information. To update the archive database, the Archive service process and instance needs to be restarted. If you don't do that, the archive jobs will keep failing.

Recommended action
1. From the System Console, restart the archive service process and instance.
2. From the Administration Console, restart all failed jobs.
Unified CCX integration

- Setup and performance
- Resynchronization
**Setup and performance**

**Incorrect password error during login**

**Symptom**
When a user tries to log in to the application, a message shows “The password is incorrect. Please retype your password. Letters in the password must be typed using the correct case.”

**Case 1**

**Possible cause**
The password is incorrect.

**Recommended action**
- Check the user name and password to see if they are correct.

**Case 2**

**Possible cause**
Due to network timeout issues, the socket connection between Cisco Interaction Manager and Unified CCX breaks.

**Recommended action**
- Check the network connection and if there is a problem, contact your IT administrator.

**Case 3**

**Possible cause**
Primary or secondary Unified CCX server is not running.

**Recommended action**
- Check if the Unified CCX servers are running. If they are not running, then first start the Unified CCX servers (both primary and secondary) and then restart Cisco Interaction Manager.
**Case 4**

**Possible cause**
The primary Unified CCX server is not running, and Cisco Interaction Manager fails to connect to the secondary Unified CCX server.

**Recommended action**
- Check the following log files for java exceptions. If you need help with analyzing the logs, contact Cisco TAC.
  - Cisco_Home\logs\eg_log_{Application_Server_Name}_{Application Server}.log
  - Cisco_Home\logs\wl_console_{Application_Server_Name}.log
- Start the primary or secondary Unified CCX server to ensure that at least one server is available. Restart Cisco Interaction Manager.

**Auto-configuration of agents, teams, and CSQs fails**

**Symptom**
When a partition administrator logs in to the application and goes in to the Administration Console, they see a message “Auto-configuration failed. Please perform manual synchronization to maintain data consistency.” When the administrator goes to the Users, Queues, or User groups node, he does not see any data imported from Unified CCX or he sees java runtime exceptions.

**Case 1**

**Possible cause**
Auto-configuration failed because the Unified CCX server was not running.

**Recommended action**
- Check the following log files for java exceptions. If you need help with analyzing the logs, contact Cisco TAC.
  - Cisco_Home\logs\eg_log_{Application_Server_Name}_{Application Server}.log
  - Cisco_Home\logs\wl_console_{Application_Server_Name}.log
- Start the primary or secondary Unified CCX server to ensure that at least one server is available. Restart Cisco Interaction Manager.
Case 2

**Possible cause**

There were network connection issues during the auto-configuration process. Because of network time out issues, the socket connection between Cisco Interaction Manager and Unified CCX breaks.

**Recommended action**

- From the Administration Console, click the ReSync button to do a manual resynchronization.
- Check the network connection and if there is a problem, contact your IT administrator.

**Runtime errors**

**Symptom**

If there are users already logged in to the application, they see a lot of runtime errors. If any user, other than the partition administrator, tries to log in to the application he sees the “The password is incorrect. Please retype your password. Letters in the password must be typed using the correct case.” message.

Case 1

**Possible cause**

The Unified CCX server is not running.

**Recommended action**

- Check the following log files for java exceptions. If you need help with analyzing the logs, contact Cisco TAC.
  - `Cisco_Home\logs\eg_log_Application_Server_Name_Application Server.log`
  - `Cisco_Home\logs\wl_console_Application_Server_Name.log`
- Start the primary or secondary Unified CCX server to ensure that at least one server is available. Restart Cisco Interaction Manager.

Case 2

**Possible cause**

Because of network time out issues, the socket connection between Cisco Interaction Manager and Unified CCX breaks.

**Recommended action**

- Check the network connection and if there is a problem, contact your IT administrator.
Resynchronization

Manual resynchronization of agents, teams, and CSQs fails

**Symptom**
From the Administration Console, when the partition administrator clicks the ReSync button to do a manual resynchronization, he sees the “The performed operation failed. Please contact your system administrator.” message.

**Case 1**

**Possible cause**
Manual resynchronization failed because the Unified CCX server was not running.

**Recommended action**
- Check the following log files for java exceptions. If you need help with analyzing the logs, contact Cisco TAC.
  - `Cisco_Home/logs/eg_log_Application_Server_Name_Application Server.log`
  - `Cisco_Home/logs/wl_console_Application_Server_Name.log`
- Start the primary or secondary Unified CCX server to ensure that at least one server is available. Restart Cisco Interaction Manager.

**Case 2**

**Possible cause**
There were network connection issues during the resynchronization process. Because of network time out issues, the socket connection between Cisco Interaction Manager and Unified CCX breaks.

**Recommended action**
- Check the network connection and if there is a problem, contact your IT administrator.