



# Installation and Configuration Guide for IBM WebSphere-CUAE Connector 1.0(1)

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**Part Number: OL-20895-01**

This document describes how you can download, install and configure IBM WebSphere-CUAE Connector 1.0(1).

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# Introduction

IBM WebSphere-CUAE Connector 1.0(1) integrates IBM Communications Enabled Applications (CEA) with Cisco Unified Communications products that are supported by Cisco Unified Application Environment (CUAE) to incorporate call handling actions in their applications. IBM WebSphere-CUAE Connector 1.0(1) exposes third-party call control APIs as web service interface to WebSphere CEA.

## System Requirements

### Hardware Requirements

Refer [IBM WebSphere Application Server Documentation](#).

### Software Requirements

- CEA FEP 1.0.0.1 must run on IBM WebSphere Application Server 7.0.0.7.  
For detailed instructions to install CEA, refer [http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp?topic=/com.ibm.websphere.ceafe.p.multiplatform.doc/info/ae/ae/tins\\_installfp.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v7r0/index.jsp?topic=/com.ibm.websphere.ceafe.p.multiplatform.doc/info/ae/ae/tins_installfp.html)
- Cisco Unified Application Environment 2.5.1 SR2

## Downloading IBM WebSphere-CUAE Connector 1.0(1)

You can download IBM WebSphere-CUAE Connector 1.0(1) from <http://www.cisco.com/>. Make sure you extract the contents of the ZIP file to your hard drive. The ZIP file contains the following files:

- **WASCuaeConnector-1.0.0.ear**
- **CallControll.mca**
- *Installation and Configuration Guide for IBM WebSphere-CUAE Connector 1.0(1)*

## Configuring IBM WebSphere Notification Broker

This section contains the following topics:

- [Creating Buses](#)
- [Associating a Server with a Bus](#)
- [Setting up WS-Notification](#)
- [Verifying WS-Notification Service](#)

## Creating Buses

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- Step 1** From the tree view on the left pane, go to **Service Integration** -> **Buses**.
  - Step 2** On the **Buses** page, click **New**.
  - Step 3** Specify a name for the Bus and clear the **Bus Security** check box
  - Step 4** Click **Next**.
  - Step 5** Review the summary of changes on the **Confirm creation of new bus** page and click **Finish**.  
The new bus is listed on the **Buses** page.
  - Step 6** Click **Save** to save the changes to master configuration.
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## Associating a Server with a Bus

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- Step 1** From the tree view on the left pane, go to **Service Integration** -> **Buses**.
  - Step 2** Click the bus that you created in [Creating Buses, page 3](#)
  - Step 3** On the **Buses** -> <Bus name> -> **Bus Members**, click **Add**.
  - Step 4** Select the Server from the drop down list and click **Next**.
  - Step 5** Select the Type of message store.  
The options are **File store** and **Data store**. The default value is File store.
  - Step 6** Click **Next**.
  - Step 7** Specify the file store properties on the **Configure File store** page using the default values and click **Next**.
  - Step 8** On the **Improve messaging performance** page, select the **Change heap sizes** check box if you want to modify the JVM heap sizes.
  - Step 9** Click **Next**.  
The page displays a summary of the changes that you made in the previous steps.
  - Step 10** Click **Finish**.
  - Step 11** Click **Save** to save the changes.
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## Setting up WS-Notification

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- Step 1** From the tree view on the left pane, click **Service Integration** > **WS-Notification** -> **Services**
  - Step 2** On the **WS-Notification service** page, click **New**.
  - Step 3** On the **New WS-Notification service** page, Specify the name for the **WS-Notification Service** as **CuaeConnectorService**.
  - Step 4** Clear the **Requires registration** and **Enable dynamic registration** check boxes and select the Service Integration bus that is created in [Creating Buses, page 3](#) from the drop down list.
  - Step 5** Click **Next**.

- Step 6** On the **Select WS-Notification service type** page, select Version 7.0 and click **Next**.
  - Step 7** On the **Configure handler and web service policy settings** page, select **(none)** from the JAX-WS handler list.
  - Step 8** Select **Query WSDL** check box and click **Next**.
  - Step 9** On the **Create WS-Notification service points** page, select **Yes** to create a new WS-Notification Service Point and click **Next**.
  - Step 10** On the **New WS-Notification service point** page, specify the name of the **WS-notification Service Point** as **CuaeConnectorServicePoint**.
  - Step 11** From the drop down list, select the bus member that is created in [Associating a Server with a Bus, page 3](#) and click **Next**.
  - Step 12** On the **Define Transport settings** page, select the SOAP version 1.1.
  - Step 13** Select **(none)** for JAX-WS handler list settings and click **Next**
  - Step 14** On the **Create WS-Notification Service Points** page, select **No** when prompted to create another instance of WS-Notification Service Point.
  - Step 15** Click **Next**.
  - Step 16** On the **Create permanent topic namespace** page, select **No** when prompted to create a new namespace.
  - Step 17** On the **Summary** page, click **Finish** to complete the setup for Notification Broker Web Service.
  - Step 18** Click **Save**.
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## Verifying WS-Notification Service

- Step 1** From the tree view on the left pane, go to **Application Types > WebSphere enterprise applications**.  
On the **Enterprise Applications** page, you can see **WSN\_CuaeConnectorService\_CuaeConnectorServicePoint** among the list of applications. The status of the application will be Stopped.
  - Step 2** Select the check box against **WSN\_CuaeConnectorService\_CuaeConnectorServicePoint** and click **Start**.
  - Step 3** Go to **Services-> Service providers**.  
You can see the services with the status Running.
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# Configuring IBM WebSphere-CUAE Connector 1.0(1)

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- Step 1** Go to `http://<IP address>:9080/wascuaconnector/connectorAdminLogin.jsp`
- Step 2** Click **Login**.
- Step 3** Click **Configure CUAE**, and then click **Add** to add a new CUAE server.
- Step 4** Enter the following details:
- **CUAE Server IP**—IP address of the CUAE server.
  - **CUAEServer Port**—Port at which the Etch bridge is listening.
  - **User Name**—User name that is configured on the CUAE server. CUAE Connector registers itself using this credential.
  - **Password**—Password that is configured on the CUAE server.
  - **Partition**—Partition that is configured for the CallControl.mca application.
  - **Device Pool Name**—CTI monitored device pool that is configured on the CUAE server. This Pool is used for dynamic registration of device corresponding to the DN provided in **OpenSession**.
  - **Device Type**—CTI monitor. The default value is CTI\_MONITORED.
  - **ReConnect Delay**—Time in milliseconds after which the client tries to reconnect to the listener/bridge after it goes down.
- Step 5** Click **Save**.
- Step 6** Click **Configure Notification Broker** and specify the following information:
- **Notification Broker IP**—IP address where the WebSphere notification broker is running. The default IP address is 127.0.0.1
  - **Notification Broker Port**—Port where the WebSphere notification broker is running. The default port number is 9080.
- Step 7** Click **Add**.
- You can see the newly added server on the **List CUAE Server** page.



**Note** You can configure multiple servers for load-balancing.

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## Configuring CUAE

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- Step 1** Login to CUAE Server and create a CTI monitored pool. See *Administration Guide for the Cisco Unified Application Environment* for step-by-step procedures to create a CTI monitored pool)
- Step 2** Upload the **CallControll.mca** file to CUAE server to install the application.
- Step 3** Select the appropriate partition.
- The partition should be the one that is specified in [Configuring IBM WebSphere-CUAE Connector 1.0\(1\), page 5](#)
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## Installing IBM WebSphere-CUAE Connector 1.0(1)

This section describes the installation procedure for IBM WebSphere-CUAE Connector 1.0(1).

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- Step 1** Go to `https://<ip address>/ibm/console/` and login to the WebSphere Admin Console.
  - Step 2** On the left pane, go to **Applications -> Application Types -> Web Sphere Enterprise Applications** and click **Install**.
  - Step 3** Click **Browse** and locate the **WASCuaeConnector-1.0.0.ear** file.
  - Step 4** Click **Next** to start the installation.
  - Step 5** On the **Preparing for the application installation** page, select **Fast Path** and click **Next**.
  - Step 6** On the **Install New Application** page click **Next** retaining the default values.
  - Step 7** On the **Map modules to server** page, map controller service module in WASconnector to one of the clusters and service and click **Apply**.
  - Step 8** Click **Next**.
  - Step 9** On the **Summary** page, click **Finish**.
  - Step 10** Click **Save** to save the changes to the master configuration.  
The installed application is listed on the **Enterprise Applications** page.
  - Step 11** Select the check box against the application and click **Start** to start the application.
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## Verifying Installation

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- Step 1** Login to Admin Console.
  - Step 2** Go to **Services -> Service providers**.  
On the **Service providers** page you can see **ControllerService** listed.
  - Step 3** Click **ControllerService** to view details of the application.
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## Uninstalling IBM WebSphere-CUAE Connector 1.0(1)

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- Step 1** Go to `https://<ip address>/ibm/console/` and login to the CUAE Admin Console.
  - Step 2** On the left pane, go to **Applications -> Application Types -> Web Sphere Enterprise Applications**.
  - Step 3** Select the Application that you want to uninstall and click **Uninstall**.
  - Step 4** Click **Save** to save the changes.
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# Troubleshooting

- Q.** java.net.ConnectException: Connection timed out Exception
- A.** Check the following:
- Go to CUAE administration page and verify whether the **CallControl** application is deployed and enabled.
  - Verify whether the CUAE Server IP address is valid.
- Q.** Value of CallState in CallStatus is “CALL\_STATUS\_FAILED” and “Failure Reason” is “No More Sessions Possible”
- A.** Check the following:
- Verify the connector configuration and the user credentials.
  - Check the number of OpenSessions/active sessions. The connector may have reached the maximum limit of 2500 sessions per CUAE Server.
  - If above steps do not help, restart the connector application from the WebSphere administration console.
- Q.** Value of CallState in CallStatus is “CALL\_STATUS\_FAILED” and “Failure Reason” is “errorCode=1000; errorString=InvalidArgument; detail=Failed to find etch app info, reg key:xxxxxx; data=null”
- A.** Restart the connector application from WebSphere Administration Console.
- Q.** How do I enable Detailed trace?
- A.** To enable Detailed trace for the Connector, the Etch interface, the CUAE JTAPI API Interface wrapper, and the CUAE JTAPI Event handler, set application server trace string to
- ```
com.cisco.wascuaconnector.webservice.*=finest
com.cisco.wascuaconnector.etch.*=finest
```
- To Enable detailed trace for Connector configuration Interface, set the application server trace to
- ```
com.cisco.wascuaconnector.config.*=finest
```
- To enable detailed trace for Connector Notification Broker client, set the application server trace to
- ```
com.cisco.wascuaconnector.wsn.*=finest
```

## To Configure Application server trace

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- Step 1** Select **TroubleShooting > Logs and trace** from the tree on the left panel.
- Step 2** Click on **Server instance** (the one applicable for Connector) on the right Panel.
- Step 3** Click on **Diagnostic trace**.
- Step 4** Click on **Runtime** tab.
- Step 5** Click on **Change Log Detail Levels**.
- Step 6** Specify the above mentioned Server trace settings here.
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- Q.** Where can I see the Connector logs?
- A.** You can view the SystemOut.log and trace.log at the following location:
- ```
<Websphere install dir>\AppServer\profiles\<ServerProfile>\logs\server1\
```
- ServerProfile is the Websphere Server profile that the Connector uses.
- For example, C:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\logs\server1>
- Q.** Where can I see the CUAE logs?
- A.** Navigate to `http://<server-ip-address>/cuadmin`, and choose **Server Logs > Select All > Archive Selected Logs**.
- Q.** I get the error message “Device does not exist. Device is not registered with the CUAE Database”.
- A.** Invoke DeviceListX Provider or restart the Application Server.
- If the error appears again, check whether the device is controlled by the application user or the device is registered with CUCM.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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