Installing the Cisco Modeling Labs Client

Installing the Cisco Modeling Labs Client

The Cisco Modeling Labs client is a powerful cross-platform user interface for creating and editing topologies, and simulating those topologies on the Cisco Modeling Labs server. You can quickly create and edit complex topologies using a graphical point-and-click editor. You can also interact directly with your running simulations from the user interface.

The purpose of this guide is to help you get the Cisco Modeling Labs client up-and-running as quickly as possible. For additional information regarding your specific client installation needs, refer to the following documents:

- Cisco Modeling Labs User Guide, Release 1.0.1—Identifies the user interface and user tasks in greater detail
- Release Notes for Cisco Modeling Labs 1.0 .1—Identifies known issues and workarounds
- Cisco Modeling Labs Online Help

Cisco Modeling Labs Client Requirements

Table 1: Hardware Requirements

Requirement	Description
Operating System	Either of the following: • Microsoft Windows ◦ Windows 7 ◦ Windows 8 • Apple Mac OS X 10.8 or later
Memory (RAM)	500 MB
Disk Space	150 MB

Table 2: Software Requirements

Requirement	Description
Java Runtime Environment (JRE)	
Windows	Either of the following: • Version 6 • Version 7
Mac OS X	Either of the following: • Version 6 • Version 7
Browser	Any of the following: • Google Chrome Version 33.0 or later • Internet Explorer 10.0 or later (See note below.) • Mozilla Firefox 28.0 or later • Safari 7.0 or later **Note** Internet Explorer is not supported when using the AutoNetkit visualization functionality or the User Workspace Management interface. See the Cisco Modeling Labs User Guide, Release 1.0.1 for more information.

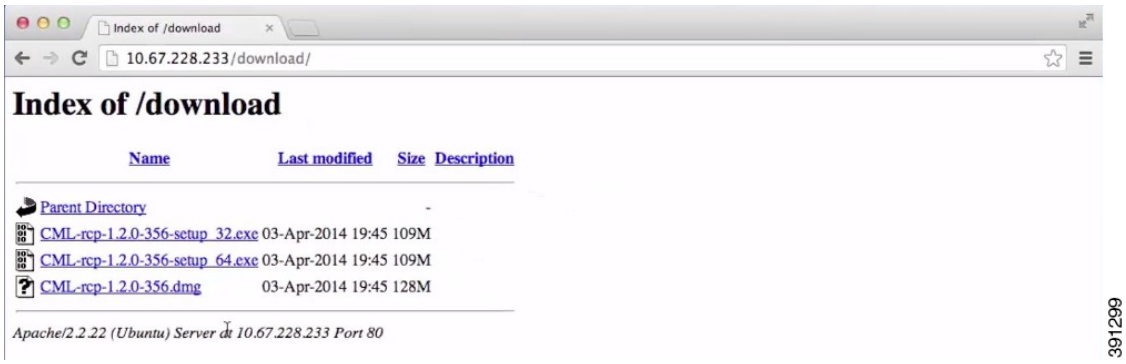
Downloading Cisco Modeling Labs Client

Before You Begin

- Ensure that you know the download location for the Cisco Modeling Labs client.
- Ensure that you know the appropriate IP address or hostname for the Cisco Modeling Labs server.

Step 1 Open a web browser and enter the IP address or hostname for the Cisco Modeling Labs server and include "**/download**," as shown in the following figure.

Figure 1: Cisco Modeling Labs Client Software Files



Three files are available for download:

- <CML-1.x>-64-bit.exe file for Windows
- <CML-1.x>-32-bit.exe file for Windows
- <CML-1.x>.dmg package for Mac OS X

Important You must download the correct version *.exe* file that exactly matches your Java installation. For example, if you are running Java 32-bit, then you must download the 32-bit.exe file for the Cisco Modeling Labs client to work correctly. Similarly, if you are running Java 64-bit, then you must download the 64-bit .exe file.

Step 2 Click the file that is appropriate for your operating system and hardware to start the download.

What to Do Next

See sections Windows Installation Process, on page 4 and Mac OS X Installation Process, on page 4 for more information.

Windows Installation Process

Step 1 After the selected .exe file has finished downloading, double-click it to start the Cisco Modeling Labs client installation.

Step 2 In the Cisco Modeling Labs Setup wizard, click **Next**.

Step 3 Review the License Agreement and click **Agree**.

Step 4 In the **Choose Install Location** window, click **Browse** to navigate to a new location, or click **Next** to choose the default location.

Step 5 In the **Choose Start Menu Folder** window, choose the default and click **Next**.

Step 6 In the **Installation Type** window, accept the defaults and click **Install**. The installation process begins.

Step 7 When the installation completes, click **Finish**. The Cisco Modeling Labs client opens.

What to Do Next

The next step is to configure the Cisco Modeling Labs client to communicate with the Cisco Modeling Labs server, as described in the section Creating a Web Services Profile, on page 4.

Mac OS X Installation Process

Step 1 After the selected .dmg package is downloaded, open it.

Step 2 (Optional) Rename the <*rcp-xxx*> folder as Cisco Modeling Labs.

Step 3 Click the Cisco Modeling Labs folder, and drag-and-drop it into the Applications folder.

Step 4 (Optional) Drag the **CML.app** button from the **Applications** > **Cisco Modeling Labs** folder to your desktop.

Step 5 Double-click the **CML.app** button to open the Cisco Modeling Labs client.

Step 6 Review the License Agreement and then click **Agree**. The Cisco Modeling Labs client opens.

What to Do Next

The next step is to configure the Cisco Modeling Labs client to communicate with the Cisco Modeling Labs server, as described in the section Creating a Web Services Profile, on page 4.

Creating a Web Services Profile

Before You Begin

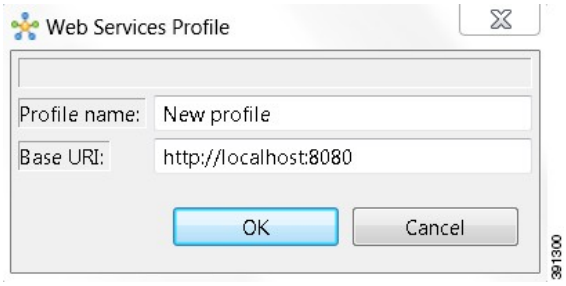
- Ensure that you know the appropriate IP address or hostname of the Cisco Modeling Labs server.
- Ensure that you know the Web Services port number.

- Ensure that you know the username and password for connecting to the Cisco Modeling Labs server. The username and password should be provided by your system administrator.

Step 1 On Windows, choose **File** > **Preferences** > **Web Services**.
On OS X, choose **Cisco Modeling Labs** > **Preferences** > **Web Services**.

Step 2 Click the **Add New Profile** button to open the **Web Services Profile** dialog box, which is shown in the following figure.

Figure 2: Web Services Profile Dialog Box



Step 3 In the **Profile name** field, enter a name for your profile.

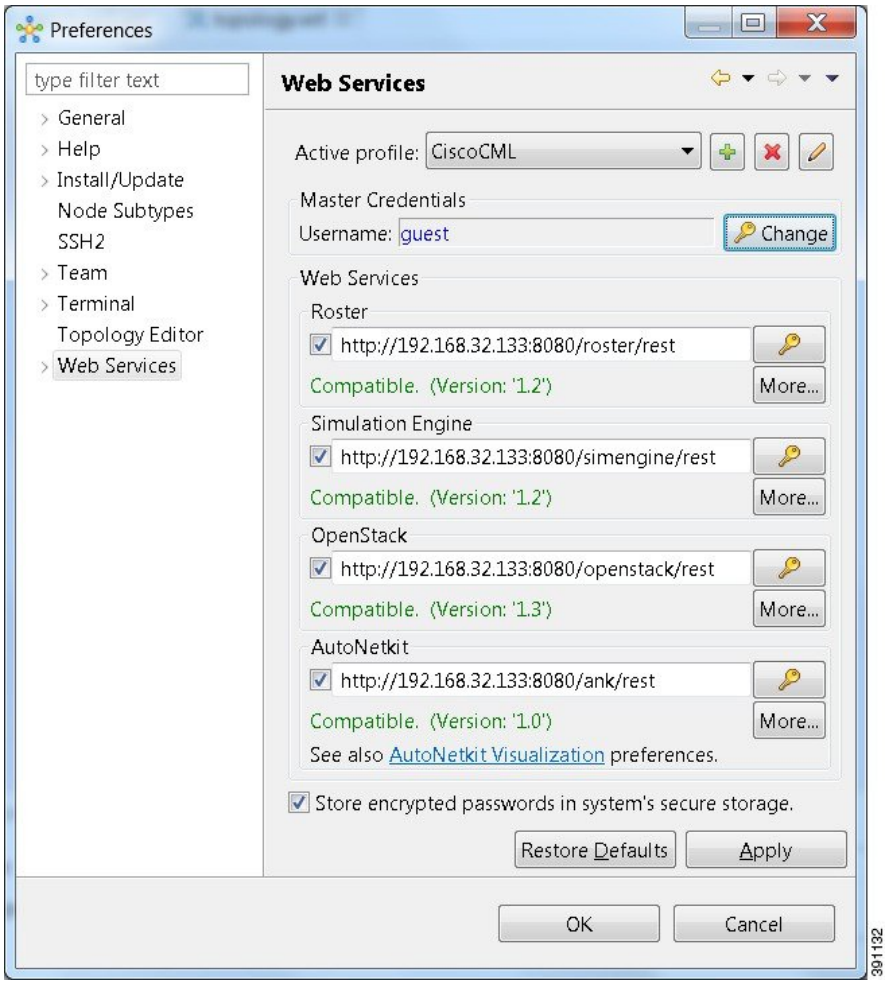
Step 4 Update the **Base URI** field with the IP address of the Cisco Modeling Labs server you are connecting to. Use the format **http://**<*IP address* | *hostname*>**:8080**, (for example, http://10.10.10.10:8080).

Note An active profile allows you to connect to the Cisco Modeling Labs server. The profile name is not used anywhere else in Cisco Modeling Labs. You can create multiple profiles if you have multiple Cisco Modeling Labs servers to connect to.

Step 5 Click **OK**.

Step 6 Log in to the Cisco Modeling Labs client using the credentials provided by your system administrator. Ensure that the word Compatible (shown in green) is displayed for each field, indicating that Web Services are correctly configured, as shown in the following figure.

Figure 3: Newly Created Web Services Profile



Note Errors (shown in red) indicate that Web Services are not configured for the Cisco Modeling Labs client. Possible errors include:

- java.net.ConnectException: Connection timed out: connect—The Cisco Modeling Labs server is not running, or a firewall is blocking the port.
  Verify that the Cisco Modeling Labs server is up-and-running, and change the port setting if needed.
- java.net.ConnectException: Connection refused—The Active profile is not being recognized.
  Verify that the Web Services Profile settings are correct.
- URI is not absolute—An incorrect IP address or hostname was provided.
  Ensure that you are using the correct IP address or hostname to the Cisco Modeling Labs server that was provided by your system administrator.
- Unauthorized User—An unrecognized user or incorrect password was provided.
  Ensure that you are using the correct username and password credentials that were provided by your system administrator.

Step 7 Click **Apply** and then click **OK** to save the changes.

What to Do Next

Verify the communications channel exists between the Cisco Modeling Labs client and the Cisco Modeling Labs server by creating and launching a simulation.

Verifying Your Cisco Modeling Labs Installation

Before You Begin

- Ensure that you have installed the Cisco Modeling Labs client software.
- Ensure that you are using a valid Web Services Profile.

Step 1 **On Windows:** From the Cisco Modeling Labs client menu bar, choose **File** > **New** > **Topology Project**.
On OS X: From the Cisco Modeling Labs client menu bar, choose **File > New > Project**.

Step 2 **On Windows:** Enter **Topology** for the project name, and click **Finish**.
On OS X: Choose **Topology > Topology Project**, and select **Next**. Enter the topology project name, and click **Finish**.

Step 3 **On Windows:** Choose **Projects** > **Topology**, then choose **File** > **New** > **Topology** to create a sample topology to verify your Cisco Modeling Labs client installation.
On OS X: Choose **File > New > Other** to create a sample topology to verify your Cisco Modeling Labs client installation.

Step 4 **On Windows:** Enter **topology.virl** for the topology name, and click **Finish**.

On OS X: Choose **Topology > Topology** and click **Next**. Select the Parent folder and enter the filename **topology.virl**. Click **Finish**.

Step 5 Choose **Palette** > **Nodes** and click **IOSv** to add a Cisco IOSv device to the topology.

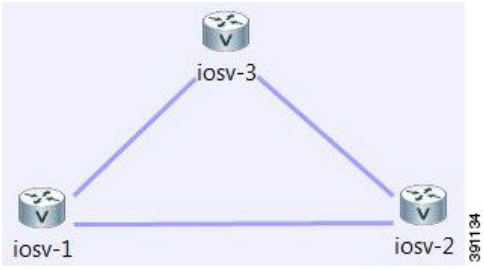
Step 6 Click anywhere on the canvas to position the device, and click the canvas two more times to add two more devices.

Step 7 Choose **Palette** > **Tools** and click **Connect** to create links between the three devices:

a) Click a source device on the canvas, and then click a target device on the canvas to create a link between the two devices.

b) Create links for the remaining devices on the canvas.
When done, the links should appear as those shown in the following figure.

Figure 4: Three-node Network

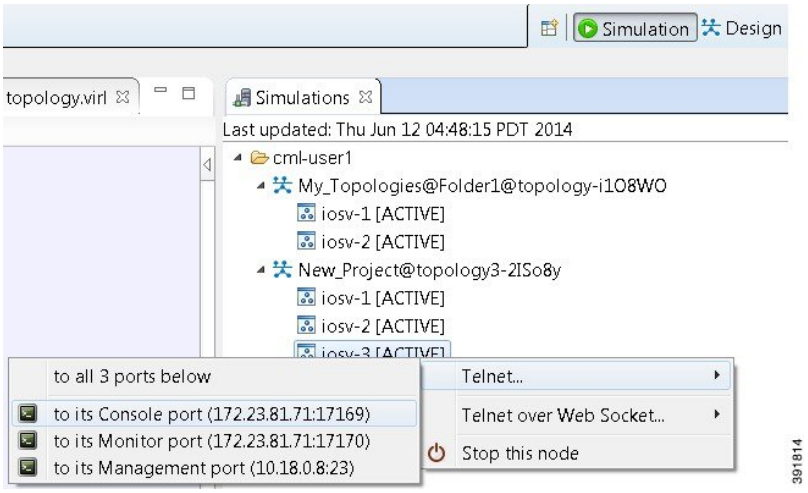


Step 8 From the toolbar, click the **Save** button to save the topology.

Step 9 From the toolbar, click the **Launch Simulation** button to run the simulation.
In the **Simulations** view, you will see that the node states are [ACTIVE], meaning the nodes are running and ready for use.

Step 10 Right-click the corresponding node and choose **Telnet** > **to its Console port**, as shown in the following figure.

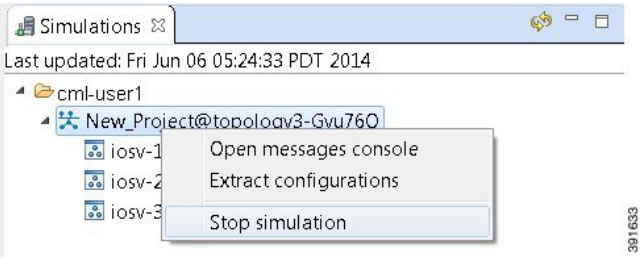
Figure 5: Accessing a Running Node



Note The Cisco Modeling Labs client installation is complete.

Step 11 (Optional) To stop the simulation, in the **Simulations** view, right-click the simulation name and select **Stop simulation**, as shown in the following figure.

Figure 6: Stopping a Simulation



Step 12 (Optional) To delete a sample topology, select the topology in the **Projects** view, and click the **Delete** icon in the toolbar. See the Cisco Modeling Labs online help and the *Cisco Modeling Labs User Guide, Release 1.0.1* for more information.