

## Cisco Modeling Labs Corporate Edition Client Installation Guide, Release 1.0.1

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# Preface

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# **Document Conventions**

This document uses the following conventions:

Convention	Description	
^ or Ctrl	Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. Fo example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are no case sensitive.)	
bold font	Commands and keywords and user-entered text appear in <b>bold</b> font.	
Italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic</i> font.	
Courier font	Terminal sessions and information the system displays appear in courier font.	
Bold Courier font	Bold Courier font indicates text that the user must enter.	
[x]	Elements in square brackets are optional.	
	An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.	
	A vertical line, called a pipe, indicates a choice within a set of keywords or arguments.	
[x   y]	Optional alternative keywords are grouped in brackets and separated by vertical bars.	

Convention	Description
$\{x \mid y\}$	Required alternative keywords are grouped in braces and separated by vertical bars.
$[x \{y   z\}]$	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<>	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!,#	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

### **Reader Alert Conventions**

This document may use the following conventions for reader alerts:

Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.



Means the following information will help you solve a problem.

<u>/!\</u> Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

 $(\bar{\mathbb{T}})$ Timesaver

Means *the described action saves time*. You can save time by performing the action described in the paragraph.



### IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

## **Related Documentation**

Note

Before installing Cisco Modeling Labs, refer to the Cisco Modeling Labs release notes.

These documents provide complete information on Cisco Modeling Labs 1.0.1:

- Cisco Modeling Labs Corporate Edition System Administrator Installation Guide, Release 1.0.1
- Cisco Modeling Labs Corporate Edition Client Installation Guide, Release 1.0.1
- Cisco Modeling Labs User Guide, Release 1.0.1
- Release Notes for Cisco Modeling Labs 1.0.1

# **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/c/en/us/td/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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CHAPTER

# **Installing the Cisco Modeling Labs Client**

- Installing the Cisco Modeling Labs Client, page 1
- Cisco Modeling Labs Client Requirements, page 2
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- Creating a Web Services Profile, page 4
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## **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**

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 1: Hardware Requirements

### 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		
	<b>Note</b> 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 do	ownloading, doul	ole-click it to start the	Cisco Modeling La	abs client installation
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- **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.</rcp-xxx>
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 1On 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

Profile name:	New profile	
Base URI:	http://localhost:8080	
	OK Cancel	

**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

<ul> <li>General</li> <li>Help</li> <li>Install/Update</li> <li>Node Subtypes</li> <li>SSH2</li> <li>Team</li> <li>Web Services</li> <li>Terminal</li> <li>Topology Editor</li> <li>Web Services</li> <li>Compatible. (Version: '1.2')</li> <li>More</li> <li>Simulation Engine</li> <li>Inttp://192.168.32.133:8080/roster/rest</li> <li>Compatible. (Version: '1.2')</li> <li>More</li> <li>OpenStack</li> <li>Inttp://192.168.32.133:8080/openstack/rest</li> <li>Compatible. (Version: '1.2')</li> <li>More</li> <li>OpenStack</li> <li>Inttp://192.168.32.133:8080/openstack/rest</li> <li>Compatible. (Version: '1.2')</li> <li>More</li> <li>OpenStack</li> <li>Inttp://192.168.32.133:8080/ank/rest</li> <li>Compatible. (Version: '1.3')</li> <li>More</li> <li>AutoNetkit</li> <li>Inttp://192.168.32.133:8080/ank/rest</li> <li>Compatible. (Version: '1.0')</li> <li>See also AutoNetkit Visualization preferences.</li> <li>Store encrypted passwords in system's secure storage.</li> <li>Restore Defaults</li> <li>Apply</li> </ul>	type filter text	Web Services 🔶	• \$		
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- **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	<b>On Windows:</b> Choose <b>Projects</b> > <b>Topology</b> , then choose <b>File</b> > <b>New</b> > <b>Topology</b> to create a sample topology to verify your Cisco Modeling Labs client installation. <b>On OS X:</b> Choose <b>File</b> > <b>New</b> > <b>Other</b> 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





**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

4 Simulations 원		🤣 🗖 🗖
ast updated: Fri Jun	06 05:24:33 PDT 2014	-
▲ ⇔cml-user1 ▲ ☆ New Project	t@topologv3-Gvu760	
iosv-1	Open messages console Extract configurations	
🔝 iosv-3	Stop simulation	91633

**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.

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# **Uninstalling the Cisco Modeling Labs Client**

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## **Uninstalling the Cisco Modeling Labs Client**

## **Before You Begin**

- Close the Cisco Modeling Labs client.
- (Optional) Ensure that you have saved any desired .virl files for reimporting purposes.

Step 1 On Windows: Navigate to your Program Files folder and choose Cisco Modeling Labs > Uninstall Cisco Modeling Labs You are prompted with the location of the Cisco Modeling Labs application folder. **On OS X:** Navigate to your **Applications** folder and choose **Cisco Modeling Labs** (CML.app). Step 2 On Windows: Click Uninstall to initiate the uninstallation process. You are prompted whether to delete all user preference settings. On OS X: Click Delete. No further action is required. Step 3 Do one of the following: • Click OK, which uninstalls the Cisco Modeling Labs client from your system. All user preferences and workspaces are also deleted. After you reinstall Cisco Modeling Labs, you can import the saved .virl file into your new workspace. • Click Cancel, which uninstalls the Cisco Modeling Labs client from your system, but retains your user preference and workspace settings. Although you have uninstalled the Cisco Modeling Labs client and it is no longer listed in the **Program Files** folder, your user preference and workspace settings are still retained on your local machine. The default location for these files is c:\Users\<username>\cml\workspace.

### Step 4 Click Finish.

The Cisco Modeling Labs client is removed from your Program Files folder.

### What to Do Next

You are ready to download and install a later release of the Cisco Modeling Labs client.



If you are importing a saved .virl file, see the topic Importing Files in the online help for more information.