User Workspace Management

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Access the User Workspace Management Interface

After you have started the Cisco Modeling Labs server, you can access the User Workspace Management interface to manage user accounts, projects, licenses, and virtual machine images on the Cisco Modeling Labs server.

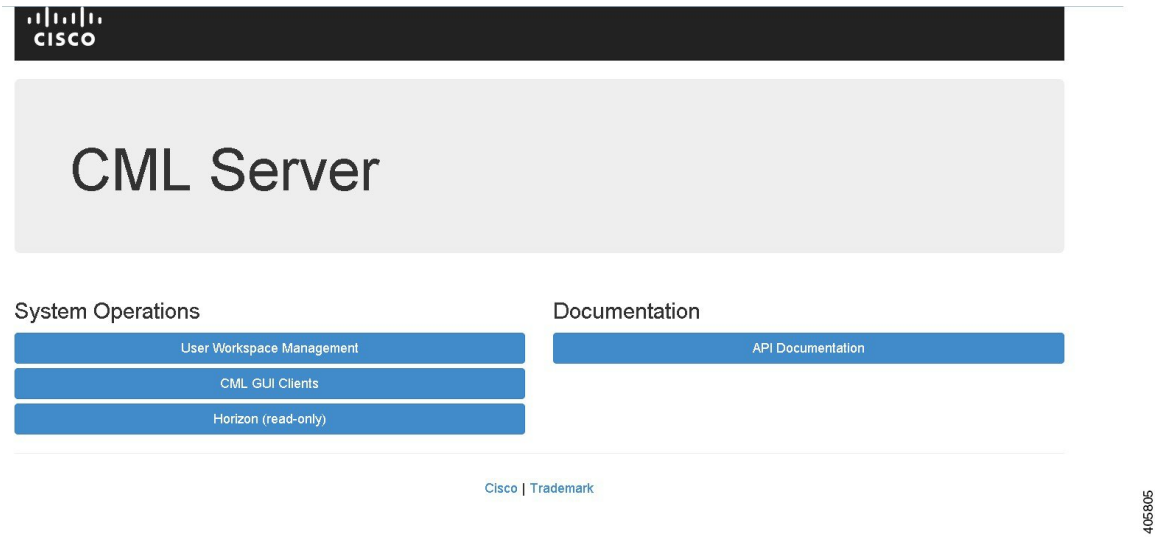
To access the **User Workspace Management** interface, complete the following steps:

Step 1 In the Cisco Modeling Labs server, retrieve the IP address of the VM using the command **ifconfig eth0**.

Step 2 In a web browser, enter the retrieved IP address or hostname in the format, **`http://`**`<IP address | hostname>`.

The **CML Server** main menu page is displayed.

Figure 1: CML Server Main Menu



Step 3 Click **User Workspace Management** to access the **User Workspace Management** interface.

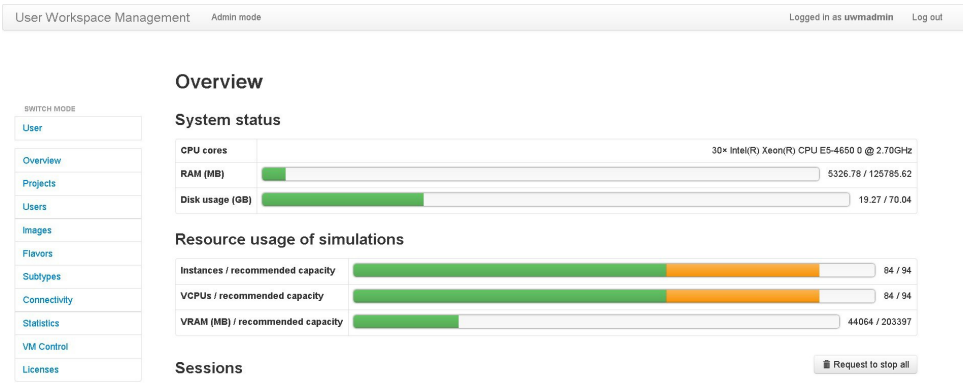
Step 4 Log in to the **User Workspace Management** interface using the username uwmadmin and the password password.

Note When you initially log in to the **User Workspace Management** interface, you are advised to change the password for the uwmadmin account. See the section Change the Password for the uwmadmin Account, on page 3 for details on how to do this.

The application opens in user mode. To create new users, projects, and so on, you must be in admin mode.

Step 5 To change to admin mode, click **Admin** under the Switch Mode section. An overview of the current system-usage statistics for all the active simulations is displayed.

Figure 2: Current Usage Statistics



The task bar on the left enables the following functions:

- Projects—Allows you to import and export projects. You can also add new projects, enable, disable, modify, and delete current projects.

- Users—Allows you add new user accounts, enable, disable, modify, and delete current user accounts.
- Images—Allows you add new virtual machine images, modify, and delete current images. You can also modify and delete image snapshots.
- Flavors—Allows you add and delete virtual machine flavors.
- Subtypes—Allows you to import, export, and duplicate subtypes.
- Connectivity—Allows you to add L2 FLAT IP addresses, L3 SNAT IP addresses, and Project Management IP Addresses.
- Statistics—Provides system statistics for system status, projects and users, simulations, and AutoNetkit usage.
- VM Control—Allows system administrators to stop specific components of an active simulation.
- Licenses—Manages product licenses on the system.

Change the Password for the uwmadmin Account

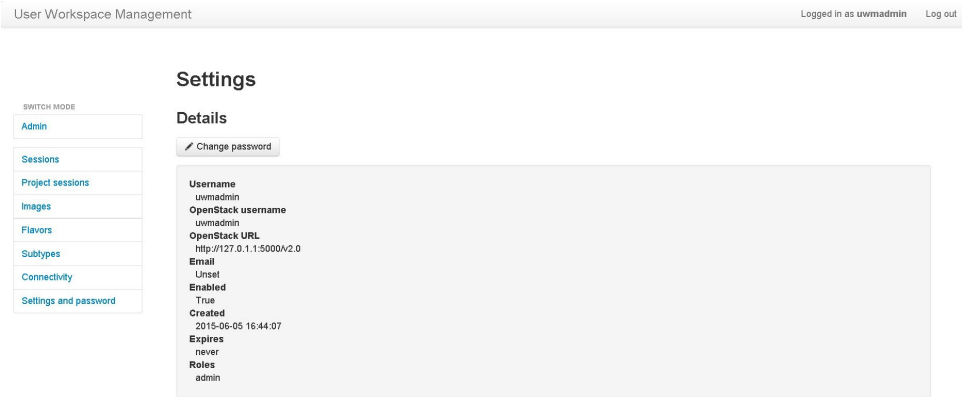
The uwmadmin account is used to manage server resources and user access. Therefore, to reduce the risk of unauthorized access, we recommend that you change the default password for the uwmadmin account to a more secure password on initial login.

Step 1 Login in to the User Workspace Management interface with username uwmadmin and password password.

Step 2 Click **Admin** under the **Switch Mode** section to switch to admin mode.

Step 3 Click **Settings and password**.
The **Settings** page is displayed.

Figure 3: Settings Page



Step 4 Click **Change Password**.

The **Change Password** page is displayed.

Step 5 Enter new password details and click **Confirm** to save the changes.

Admin Mode Versus User Mode

When you log into the User Management Workspace interface as administrator, there are two modes of operation available to you; these are **Admin** and **User**. The following tables describe the different functions available for each mode.

Table 1: Admin Mode Functions

Function	Description
Projects	Allows you to import and export projects. You can also add new projects, enable, disable, modify, and delete current projects.
Users	Allows you add new users, enable, disable, modify, and delete current users.
Images	Allows you add new images, modify, and delete current images. You can also modify and delete image snapshots.
Flavors	Allows you add and delete flavors.
Subtypes	Allows you to import and export subtypes. You can also create a custom subtypes, using the **specialize** option. You create a new subtype based on one of the available built in subtypes.
Connectivity	Allows you to add and delete L2 Flat IP, L3 Snat IP, and Management IP allocations for projects.
Statistics	Provides system statistics for system status, projects and users, simulations and AutoNetkit usage.
VM Control	Allows you to delete nodes, networks, ports and IP allocations when problems are encountered.

Table 2: User Mode Functions

Function	Description
Images	Allows you add new images, modify, and delete current images. You can also modify and delete image snapshots.
Flavors	Lists details for the available flavors.

Function	Description
Subtypes	Lists details for the available subtypes.
Connectivity	Lists details for the available connections.
Settings and Password	Allows you to change your password.

Manage Projects

Within the **User Workspace Management** interface, a project represents a set of resources that are available to each project. It has the following characteristics:

- By default, a project user account is created for each project.
- To add a user as a standalone user, a project must be assigned to the user. Also, the username will be the project name.
- Additional users can be assigned to a project as required.
- If a user is added to a project, the username of the user is prefixed with the project name.
- Deleting a user account does not delete a project that the user is assigned to.
- Deleting a project deletes only the associated default user; nondefault user accounts are not deleted.

In the **Projects** page, you can perform a number of operations for projects. These operations are:

Operation	Description
Import	Imports a project and its users from a JavaScript Object Notation (JSON) or tab-Separated values (TSV) file.
Export	Exports a project and its users as a JSON or TSV file.
Add	Creates a new project.
Enable	Enables a selected project.
Disable	Disables a selected project.
Modify	Modifies details for a selected project.
Delete	Deletes a selected project and its users.

Import a Project

Files for import must be in the JSON or TSV format and must have previously been exported from the **User Workspace Management** interface.

To import a project and its users, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Projects**.
The **Projects** page, which lists all of the current projects, appears.

Step 2 Click **Import** to import a new project and its associated users.

The **Import Projects and Users** page appears.

Step 3 Click **Browse** to locate the applicable JSON or TSV file for import.

Note If you import projects and users that already exist, they will be updated. After importing users, the STD server needs to be restarted.

Step 4 Click **Import**.
The newly imported project is listed on the **Projects** page.

Export a Project

To export a project and its users, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Projects**.
The **Projects** page, which lists all of the current projects, appears.

Step 2 Check the check box beside the project or projects for export.

Step 3 Click **Export** to export the applicable project and projects and all its users.

Step 4 From the drop-down list, choose the type of file to export to, JSON or TSV.
The **Open** dialog box appears.

Step 5 Click the **Save** radio button and click **OK** to save the file.
The exported file is saved to the specified location.

Create a Project

To create a new project, and a user for the project complete the following steps:

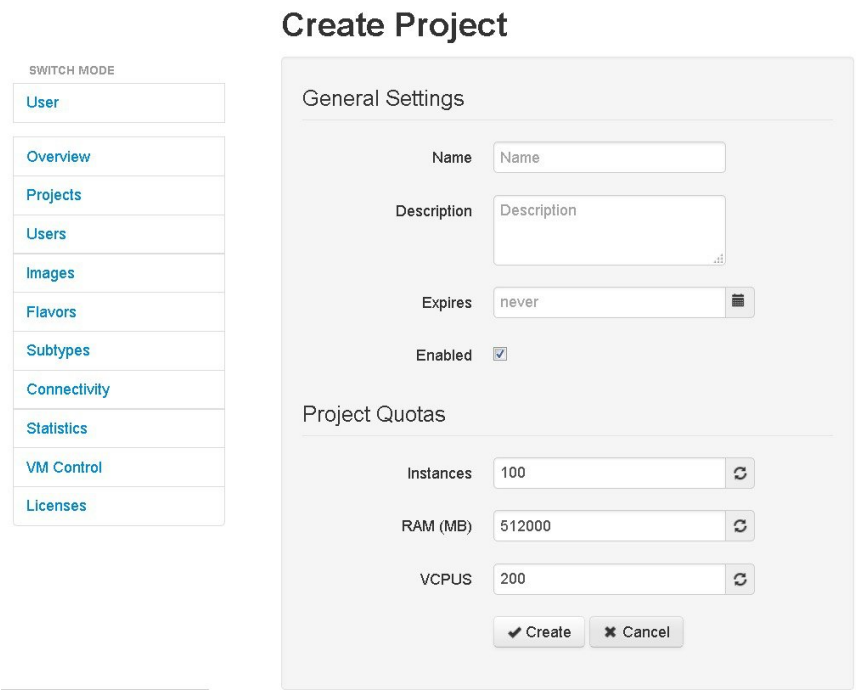
Step 1 In the **User Workspace Management** interface, in admin mode, click **Projects**.

The **Projects** page, which lists all of the current projects, appears.

Step 2 Click **Add** to create a new project.

The **Create Project** page appears.

Figure 4: Create a Project



Step 3 Under **General Settings**, add a name and a description for the project. In the **Expires** field, you can either add an expiry date for the project or accept the default, which is **Never**, meaning the project will never expire. Leave the **Enabled** check box checked to enable the project for use.

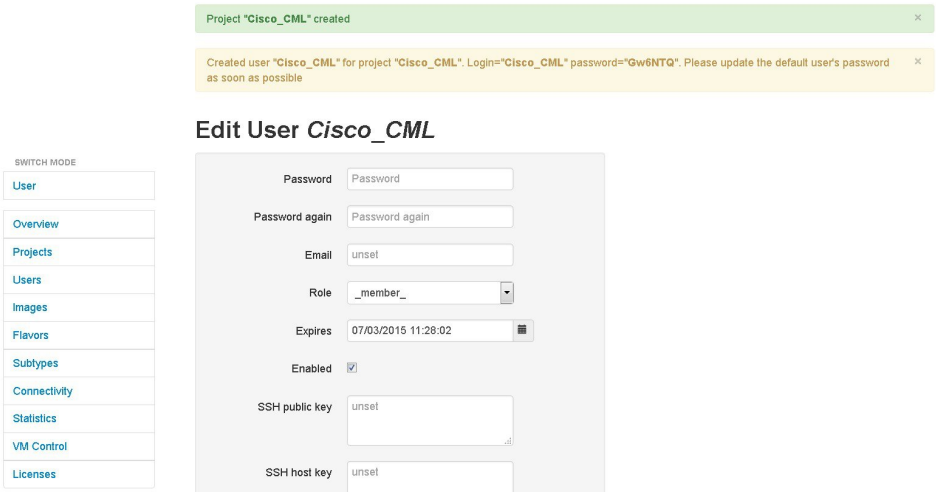
Step 4 Under **Project Quotas**, you can either accept the default values for the system quotas or increase or decrease them based on your project requirements:

- **Instances** quota is the maximum number of virtual machines of any type that can be operational at any given time within the project per user or for all users associated with that project.
- **RAM (MB)** is the maximum RAM that can be consumed by virtual machines running in the project per user or for all users associated with that project.
- **VCPUS** is the maximum number of virtual cores consumed by the virtual machines running in the project.

Step 5 Click **Create**.

The **Edit User** page appears.

Figure 5: Edit the Project User



Using this window, you can add details for the new user created when the project is created.

Step 6 In the **Password** and **Password Again** fields, enter a new password for the user.

Note The default password can be used or a more meaningful password can be entered. This password can also be changed at a later time.

Step 7 In the **Email** field, add a valid email address for the user.
By default, the user is assigned a member role.

Step 8 In the **Expires** field, you can add an expiry date for the user or accept the default **Never**. Leave the **Enabled** check box checked to enable the project for immediate use. Alternatively, you can set up a project and users, but you cannot enable them to be configured and available at a later time.

Step 9 Click **Save** to save the changes for the user.

Step 10 (Optional) To confirm that the project has been added, click **Projects** to view the newly added project, and click **Users** to view the newly added user. Otherwise, logout.

Manage Users

Within the **User Workspace Management** interface, you can manage user accounts from the **Users** page. User accounts permit access to the Cisco Modeling Cisco Modeling Labs server from the Cisco Modeling Labs client.

In the **Users** page, you can perform a number of operations for users. These operations are:

In the **Users** page, you can perform a number of operations for users. These operations are:

Operation	Description
Add	Creates a new user account.

Operation	Description
Enable	Enables a selected user account.
Disable	Disables a selected user account.
Modify	Modifies details for a selected user account.
Delete	Deletes a selected user account.

Create a User

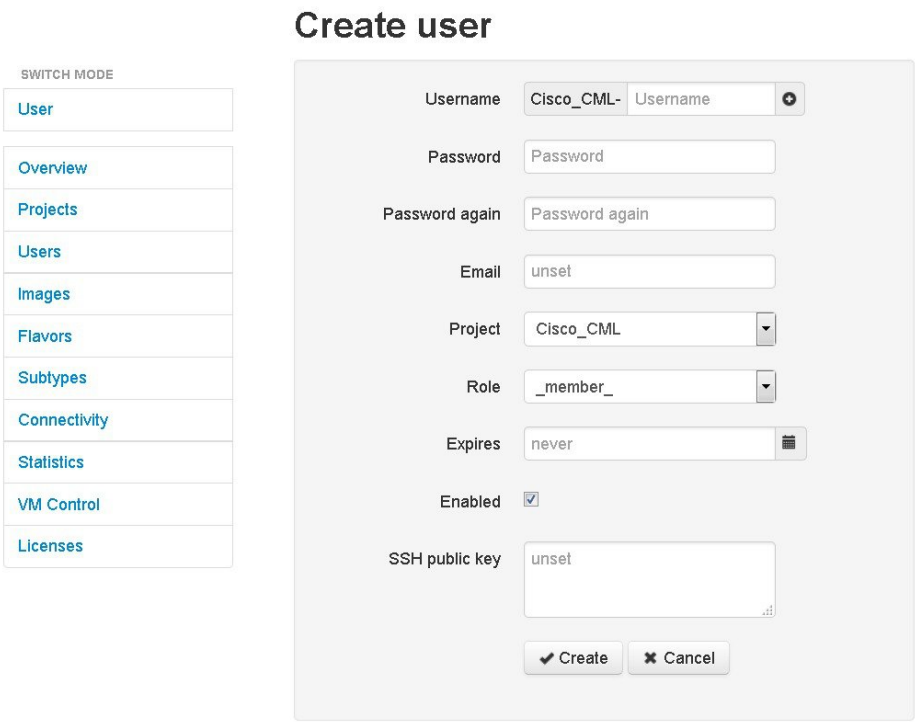
To create a new user, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Users**.
The Users page, which lists all the default users, appears.

Step 2 Click **Add** to create a new user.

The **Create User** page appears.

Figure 6: Create a User



Step 3 In the **Username** field, enter a username for the new user.

Note To create multiple users, click the **Add** (+) icon to the right of the **Username** field.

Step 4 In the **Password** and **Password Again** fields, enter a password for the new user.

Step 5 In the **Email** field, enter a valid email address for the user.

Step 6 From the **Project** drop-down list, choose the applicable project for the user.

Step 7 From the **Role** drop-down list, choose the applicable role for the user.

Note A user with administrative rights has administrative rights across the entire system.

Step 8 In the **Expires** field, you can either add an expiry date for the user or accept the default, which is **Never**.

Step 9 Leave the **Enabled** check box checked.

Step 10 Click **Create**.

The **User** *<Project Name>-<Username>* page appears.

This page presents details and project quotas for the user.

Step 11 (Optional) Click **Modify User** to amend the details for a user, or click **Delete User** to delete a user.

Step 12 Click **Users** to view the newly created user.

Expire a User Account

While the option to disable a user account is available in the **User Workspace Management** interface, it is advisable that you expire a user account rather than disable it. When a user account with running simulations is disabled, the project is effectively frozen and simulations can only be stopped by the administrator via **VM Control**. However, if a user account with running simulations is expired, the administrator can stop the running simulations for the expired user account.

To expire a user account, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Users**.
The **Users** page, which lists all of the default users, appears.

Step 2 Click the user account to be expired.
The **User Details** page appears.

Step 3 In the **Expires** field, enter an expiry date and time for the user account, or use the calender icon.

Step 4 Click **Save**.
The **User Details** page appears and shows the expiry date for the user account.

Manage VM Images

Within the **User Workspace Management** interface, you can add new images, update details for existing images, or delete images from the system. Additionally, you can take a snapshot of the disk content of a virtual machine image. This newly created user-specific disk image can be used in other simulated sessions.

Cisco Modeling Labs 1.1 includes the following images built into the Cisco Modeling Labs client:

- Cisco Virtual IOS (IOSv) Software Release 15.5(3)M
- Cisco IOSv Layer 2 Switch Software Release 15.2.(4.0.63)E
- Linux server (Ubuntu 14.04.2 LTS Cloud-init)

For the most up-to-date list of virtual images, see Release Notes for Cisco Modeling Labs 1.1.

Additionally, the following demonstration images are included in the build:

- Cisco IOS XRv Software Release 5.3.1 CCO
- Cisco CSR1000v Software Release 3.16 XE-based

The following production images are available to purchase separately:

- Cisco IOS XRv Software Release 5.3.1
- Cisco CSR1000v Software Release 3.1.6
- Cisco ASAv Software Release 9.4.1

In the **Images** page, you can perform a number of operations for images. These operations are:

In the **Images** page, you can perform a number of operations for images. These operations are:

Operation	Description
Add	Creates a new virtual machine image.
Modify	Modifies details for a selected virtual machine image.
Delete	Deletes a selected virtual machine image.

Create a Virtual Machine Image

To create a new virtual machine image, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Images**.

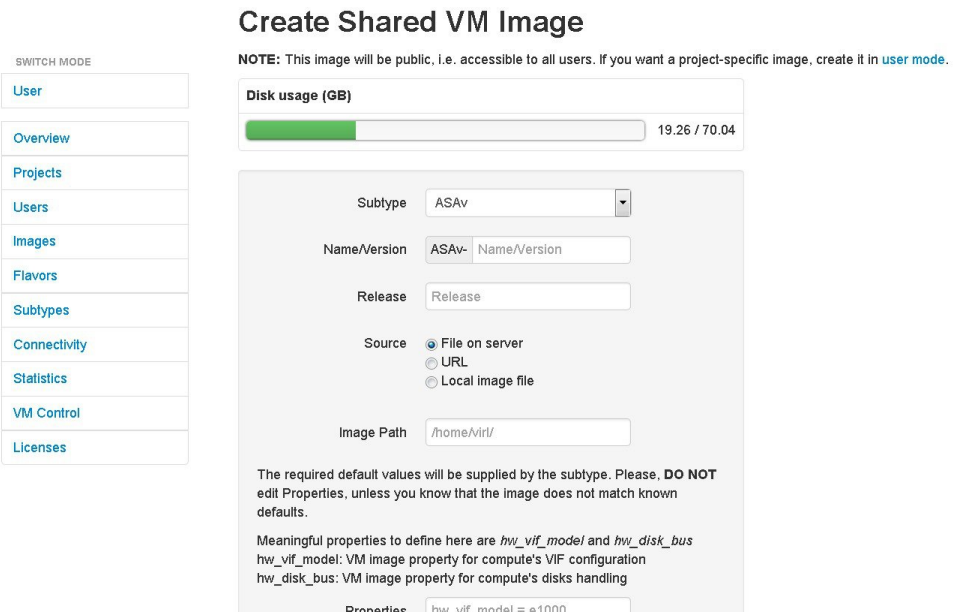
The **Images** page, which lists all of the available registered images, appears.

Note Images listed in admin mode are available to all users.

Step 2 Click **Add** to create a new image.

The **Create Shared VM Image** page appears.

Figure 7: Create Shared VM Image



Step 3 From the **Subtype** drop-down list, choose the appropriate subtype for the new image.

Step 4 In the **Name/Version** field, enter a name or version number for the image.

Step 5 In the **Image Path** field, enter a path on the server/virtual machine (an HTTP, FTP or TFTP URL) or choose a file to upload.

Step 6 To upload an image from your own device, click **Browse** to navigate to the image file.

Step 7 Leave the **Properties** field blank because by default, appropriate properties are automatically set based on the chosen subtype.

Step 8 Click **Create** to create your virtual machine image.

Note The creation process can take a while depending on where the image file is located relative to the Cisco Modeling Labs server. Both virtual machine disk (VMDK) and QEMU copy-on-write 2 (QCOW2) image formats are supported. As part of the creation process for images, a flavor is also created, which contains information on the CPU and memory allocation for the virtual machine image.

The **Image <*Image Name*>** page, which contains the details and properties of the virtual machine image, appears.

Step 9 Click **Images** to view the newly added image.

Step 10 Under the **Options** column, use the **Modify** or **Delete** options to amend the details for the virtual machine or to delete a virtual machine image. After the image is installed, it is available for users to select for their topology simulation.

Step 11 In the Cisco Modeling Labs client, click **File** > **Preferences** > **Node Subtypes**

Step 12 In the **Node Subtypes** dialog box, click **Fetch from Server**.
The **Confirm** dialog box is displayed.

Step 13 Click **OK** to update the list of node subtypes based on the currently configured Cisco Modeling Labs server.

Create an Image Snapshot

When a Linux server is present in a running simulation, you can take a snapshot of the disk content of the server. This newly created user-specific disk image can be used in other simulated sessions.

To take a snapshot of the server's disk content, complete the following steps.

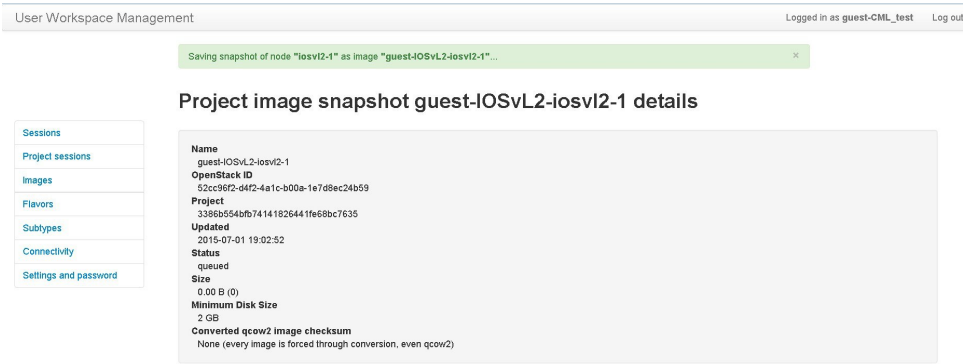
Step 1 Log in to the **User Workspace Management** interface.

Note You must log in as a user other than the uwmadmin user, for example, guest.

Step 2 On the **Overview** page, under **Sessions**, choose the applicable running session.
A list of active virtual machines is displayed.

Step 3 Choose the applicable virtual machine image, and from the **Options** drop-down list, click **Create Snapshot**.
Project details for the newly created snapshot are displayed.

Figure 8: Newly Created Image Snapshot



The image snapshot can be reused in the Cisco Modeling Labs client under **Properties** > **Node** > **VM Image.**

See Cisco Modeling Labs Corporate Edition User Guide, Release 1.1 for more information.

Manage Virtual Machine Flavors

Within the **User Workspace Management** interface, as part of the creation process for virtual machine images, a virtual machine flavor is created. Flavors are used in each virtual machine to define the CPU, memory (RAM) allocation, disk space, the number of cores, and so on.

In the **Flavors** page, you can perform a number of operations for flavors. These operations are:

Operation	Description
Add	Creates a new flavor.
Delete	Deletes a selected flavor.

Create a Virtual Machine Flavor

To create a new virtual machine flavor, complete the following steps:

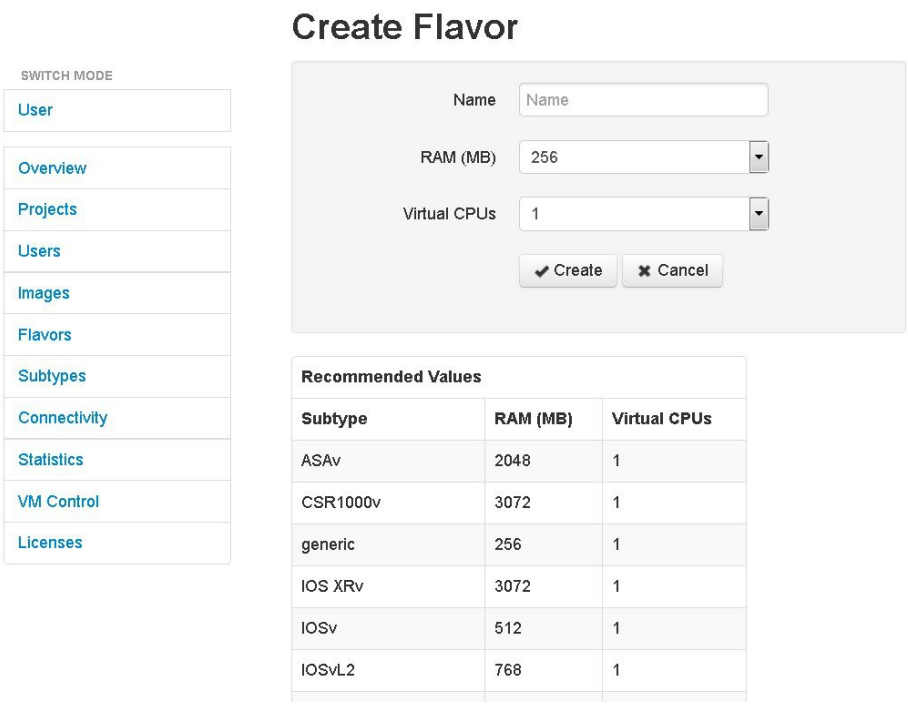
Step 1 In the **User Workspace Management** interface, in admin mode, click **Flavors**.

The **Flavors** page, which lists all of the available flavors, appears.

Step 2 Click **Add** to create a new flavor.

The **Create Flavor** page appears.

Figure 9: Create a Flavor



Step 3 In the **Name** field, enter a name for the flavor.

Step 4 From the **RAM** drop-down list, choose the amount of memory allocation for the flavor.

Step 5 From the **Virtual CPUs** drop-down list, choose the number of virtual CPUs for the flavor.

Step 6 Click **Create** to create your virtual machine flavor.

The **Flavors** page appears with the newly created flavor listed.

Step 7 Under the **Options** column, use the **Delete** option to delete a virtual machine flavor.

Manage Subtypes

In the **User Workspace Management** interface, the **Subtypes** page provides a list of integrated subtypes, which users can use as templates to create their own custom subtypes. Using the **Specialize** option for a subtype, a user can duplicate the subtype template make the necessary updates to create a new custom subtype. Subtypes can be imported and exported, which allows users to apply their custom subtypes to other Cisco Modeling Labs server installations.

In the **Subtypes** page, you can perform a number of operations for subtypes. These operations are:

Operation	Description
Import	Imports a subtype from a JSON file.
Export	Exports a subtype to a JSON or TSV file.
Specialize	Duplicates an available subtype to create a custom subtype.

Import a Subtype

Subtypes for import must be available in a JSON file.

To import a subtype, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Subtypes**.
The **Subtypes** page, which lists the integrated subtypes, appears.

Step 2 Click **Import** to import a new subtype.

The **Import Subtypes** page appears.

Step 3 In the text area, paste the subtype details from the JSON file.

Step 4 Click **Import**.
The newly imported subtype is listed on the **Subtypes** page.

Step 5 (Optional) Click **Specialize** to create a custom subtype based on the newly imported subtype, click **Modify** to amend the details for the subtype, or click **Delete** to delete the subtype.

Create a Custom Subtype

To create a custom subtype, complete the following steps:

Step 1 In the **User Workspace Management** interface, in admin mode, click **Subtypes**.

The **Subtypes** page, which lists the integrated subtypes available, appears.

Step 2 For the applicable subtype, click the **Options** drop-down list next to it and click **Specialize**.
The **Specialize Subtype** page appears.

Step 3 Update the subtype fields as required.

Note You can use the default values on the **Subtypes** page; however, you must provide a new name for the new subtype.

Table 3: New Subtype Fields

Field	Description
Name of new subtype	Enter a name for the new subtype.
Description of plugin	Provide a description of the plug-in to be created.
Name of management interface	Enter a name for the management interface.
Pattern for data interface names	Provide the interface name format, for example, GigabitEthernet0/{0}.
First data interface number	Enter a valid integer for the first interface.
Max count of data interfaces	Enter the maximum allowed number of interfaces.
Number of interfaces per LC	Enter the permitted number of interfaces per line card (LC) allowed.
Number of serial interfaces	Choose the number of interfaces allowed. Options are **0**, **1**, **2**, **3**, and **4**.
Protocol for network CLI	Choose the type of console connection. Options are **Telnet** or **SSH**.
Make VNC access	Allow VNC access. Enabled when the check box is checked.
Name of icon for GUI	Enter a name for the subtype icon that is displayed in the Cisco Modeling Labs client.
Show subtype on GUI palette	Allow the subtype icon to be displayed in the Cisco Modeling Labs client. Enabled when the check box is checked.
Configuration disk type	Choose the type of configuration disk. Options are **cdrom**, **disk**, **cloud-init**, **iso9660**, and **vfat**.
ISO 9660 Level in cdrom Disk	Choose the ISO 9660 level in cdrom disk. Options are **2**, **3**, and **4**.
Name of file for config drive	Enter a name for the configuration drive file.
Virtual interface model	Choose a virtual interface model. Options are **e1000**, **vitrio**, and **rtl8139**.
Main disk bus model	Choose a main disk bus model. Options are **ide**, **vitrio**, and **scsi**.
RAM (MB) allocated per node	Specify the amount of RAM (MB) to use for each node.

Field	Description
Number of CPUs allocated per node	Choose the number of CPUs to allocate per node. Options are **1**, **2**, **3**, **4**, **5**, **6**, and **7**.
Extra comma-separated image properties	Enter any additional image properties.
(Optional) Name of default image	Enter a name for the default image.
(Optional) Name of default flavor	Enter a name for the default flavor.

Note You can choose to go with the default values on the Subtypes page; though you must provide a name for the new subtype.

Step 4 When completed, click **Create** to create the new custom subtype.
The new subtype is created and its details are displayed in the **Subtypes** page for the new subtype.

Note For a newly created subtype, the value in the **Dynamic** column is **Yes**, which indicates that the new subtype is based on a built-in subtype.

Step 5 (Optional) On this page, you can click **Specialize** to create a custom subtype based on the newly created subtype, click **Modify** to amend the details for the subtype, or click **Delete** to delete the subtype.

Step 6 Click the **Subtypes** tab to see the custom subtype listed on the page.

System Statistics

You can view various statistics concerning the usage and operation of your Cisco Modeling Labs system. System statistics are available from the **Statistics** option on the left-hand side of the interface.

The following areas are covered:

Table 4: System Statistics

Area	Description
System Status	Provides a summary of the Cisco Modeling Labs server system state. Includes information on CPU cores, memory, and disk space (total and free). In addition, it provides a snapshot of the memory usage history for the last week, the last month, and the previous 24 hours; the snapshot includes the average and maximum percentages used.  System status CPU cores: 30× Intel(R) Xeon(R) CPU E5-4650 0 @ 2.70GHz RAM (MB): 12379.39 / 251785.09 Disk usage (GB): 15.80 / 30.99 Memory usage history — Average — Max Last month — 4.61% — 12.26% Last week — 4.99% — 5.63% Last day — 4.92% — 5.17%
Projects and Users	Lists the number of currents projects and users.  Projects and users Number of projects 6 Number of users 9

Area	Description
Simulations	Lists details for the number of active simulations and nodes for the last week, the last month, the previous 24 hours, and with those currently running. Simulations Active / Simulations / Nodes In last month: 74 / 209 In last week: 17 / 39 In last day: 8 / 19 Now: 8 / 19 There are two further categories: • **Subtype Usage in Simulations—**Lists the subtypes and their average and maximum usage stats. Subtype usage in simulations Subtype / Average / Max CSR1000v: 0.15 / 3 IOS XRv: 0.41 / 4 IOSv: 1.92 / 12 jumphost: 0.06 / 1 mgmt-lxc: 0.18 / 1 NX-OSv: 0.09 / 3 server: 0.14 / 5 *all* (nodes ran in a simulation): 2.94 / 15 • **Simulation/node Operation Failures—**Lists the number of simulation/node failures for the last week, the last month, and the previous 24 hours. Simulation/node operation failures Simulation launch / Simulation termination / Node start / Node stop In last month: 11 / 1 / 0 / 0 In last week: 4 / 0 / 0 / 0 In last day: 0 / 0 / 0 / 0

Area	Description
AutoNetkit	Lists details for the number of configurations generated in the last week, the last month, and the previous 24 hours, including the number of invalid topologies encountered. The category **Subtype Usage in Configured Topologies** lists the subtypes used in configuration requests along with their average and maximum usage stats. **AutoNetkit** **Configs in last month** 84 (21 invalid topologies) **Configs in last week** 17 (12 invalid topologies) **Configs in last day** 0 (0 invalid topologies) **Subtype usage in configured topologies** **Subtype** **Average** **Max** ASAv 0.01 1 CSR1000v 0.25 3 IOS XRv 0.44 4 IOSv 2.57 12 IOSvL2 0.04 1 NX-OSv 0.17 3 server 0.16 5 *all* (topology size) 3.63 15

Connectivity

Within the **User Workspace Management** interface, the **Connectivity** page provides details on all OpenStack ports available on the external (FLAT and SNAT) and project management networks

- L2 FLAT IP address allocations—Create an externally reachable fixed IP address for a project.
- L3 SNAT IP address allocations—Create a floating IP address for a project. Floating IPs are externally reachable and are mapped to an internal fixed IP address.
- Project Management IP address allocations—Create a fixed IP address on the management network of the selected project. This IP address can be statically assigned to the nodes.

Operation	Description
Add	Creates a new OpenStack port connection for L2 Flat, L3 SNAT, or Project Management.
Delete	Deletes an OpenStack port connection. **Note** Only detached addresses in the DOWN state can be deleted.

Create an OpenStack Port Connection

To create a new port connection, complete the following steps:

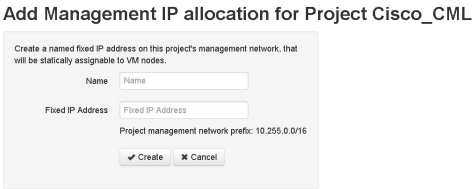
Step 1 In the **User Workspace Management** interface, in admin mode, click **Connectivity**.
The **Outside Connections** page, which lists all current port connections appears.

Step 2 Connections are grouped into three areas: **L2 FLAT**, **L3 SNAT**, and **Project Management**. Click **Add** in the applicable group to create the required port connection for that type.

The corresponding **Add IP Allocation** page appears.

Step 3 Complete the fields as required for the applicable port connection.

Connection Type	Field	Description
Layer 2 FLAT IP Address Allocations  	**Owning Project**	Choose a project from the drop-down list.
	FLAT Network	Choose a FLAT network from the drop-down list.
	Name	Enter a name for the new port connection.
	Fixed IP address	Enter a custom IP address from the range defined by the prefix displayed, or to have an address automatically assigned, leave this field blank.

Connection Type	Field	Description
Layer 3 SNAT IP Address Allocations  	**Owning Project**	Choose a project from the drop-down list.
	Name	Enter a name for the new port connection.
	Fixed IP Address	Enter a custom IP address from the range defined by the prefix displayed, or to have an address automatically assigned, leave this field blank.
	Floating IP Address	Enter a custom IP address from the range defined by the prefix displayed, or to have an address automatically assigned, leave this field blank.
Project Management  	**Name**	Enter a name for the new port connection.
	Fixed IP Address	Enter a custom IP address from the range defined by the prefix displayed, or to have an address automatically assigned, leave this field blank.

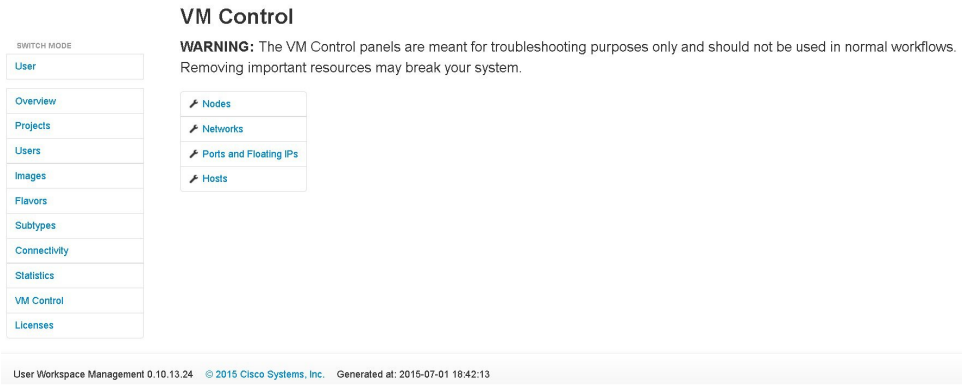
Step 4 Click **Create**.

The new connection is created and its details are displayed in the **Connectivity** page.

Using the VM Control Tool

The **VM Control** tool is available to aid system administrators with troubleshooting issues encountered in the **User Workspace Management** interface. The tool enables system administrators to stop specific components of an active session. In circumstances where components of a session fail to be deleted through the normal shutdown methods, this tool enables system administrators to remove blocked components.

Figure 10: VM Control Tool



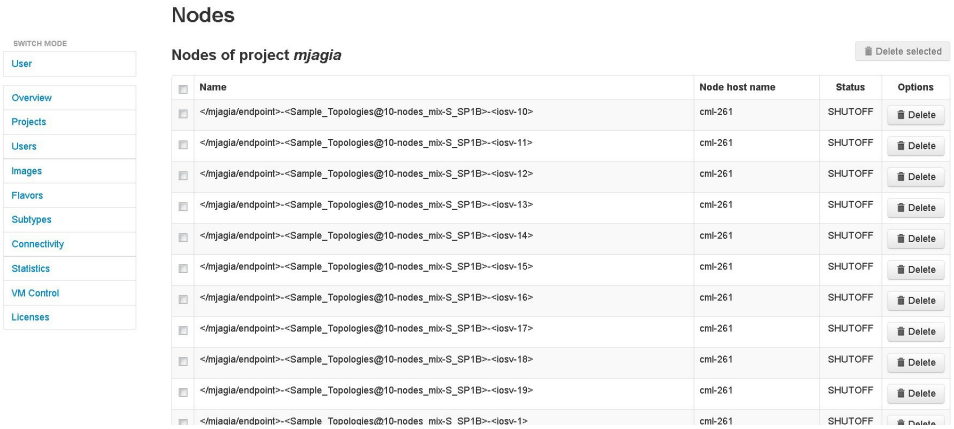
The applicable components are:

- VM Control Nodes
- VM Control Networks
- VM Control Ports and Floating IPs
- VM Control Hosts

VM Control Nodes

The **VM Control Nodes** page lists all the nodes for all the currently running projects for all users. You can delete a specific node or all the nodes for a specific project or projects.

Figure 11: VM Control Nodes Page



Step 1 To delete a specific node:

a) In the node list for the applicable project, check the corresponding check box.

b) Click **Delete** in the **Options** column.
The node is deleted.

Step 2 To delete all the nodes for a specific project:

a) In the node list for the applicable project, check the corresponding **Name** check box.

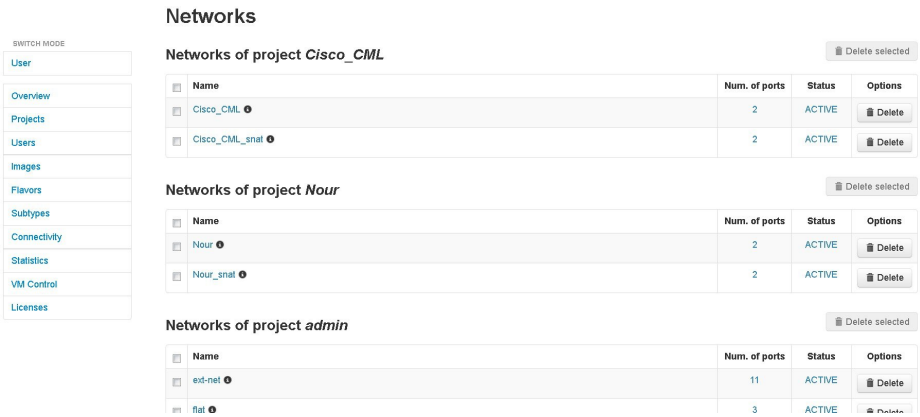
Note When you check the **Name** check box for a particular project, the check boxes for all the nodes in the project are automatically checked. You cannot uncheck individual nodes within a project; either all the nodes or no nodes are checked.

b) Click **Delete Selected**.
All nodes for the particular project are deleted.

VM Control Networks

The **VM Control Networks** page lists all the networks for all the currently running projects for all the users. You can delete a specific network or all the networks for a specific project or projects.

Figure 12: VM Control Networks Page



Step 1 To delete a specific network:

a) In the network list for the applicable project, check the corresponding **Name** check box.

b) Click **Delete** in the **Options** column.
The network is deleted.

Step 2 To delete all the networks for a specific project:

a) In the network list for the applicable project, check the corresponding **Name** check box.

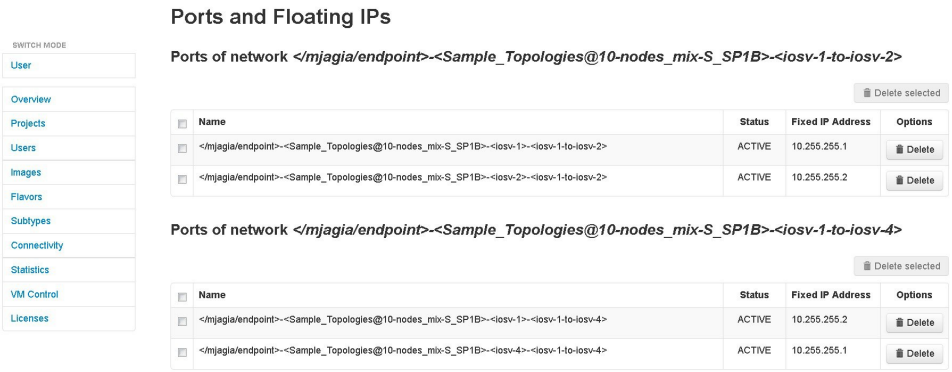
Caution When you check the **Name** check box, the check boxes for all the networks in the project are automatically checked. In the **VM Control Networks** page, for each user project, two networks are listed in blue with an information icon. These two networks are specifically created for use by OpenStack. We recommend that you do not delete these networks. Uncheck the check boxes for these two networks before clicking **Delete Selected**.

b) Click **Delete Selected**.
All the networks for the particular project are deleted.

VM Control Ports and Floating IPs

The **VM Control Ports and Floating IPs** page lists all the ports and floating IPs for all the currently running projects for all the users. You can delete a specific port or floating IP or all the ports and floating IPs for a specific project or projects.

Figure 13: VM Control Ports and Floating IPs Page



Step 1 To delete a specific port or floating IP:

a) In the port or floating IP list for the applicable project, check the corresponding check box.

b) Click **Delete** in the **Options** column.
The port or floating IP is deleted.

Step 2 To delete all the ports or floating IPs for a specific project:

a) In the port or floating IP list for the applicable project, check the **Name** check box.

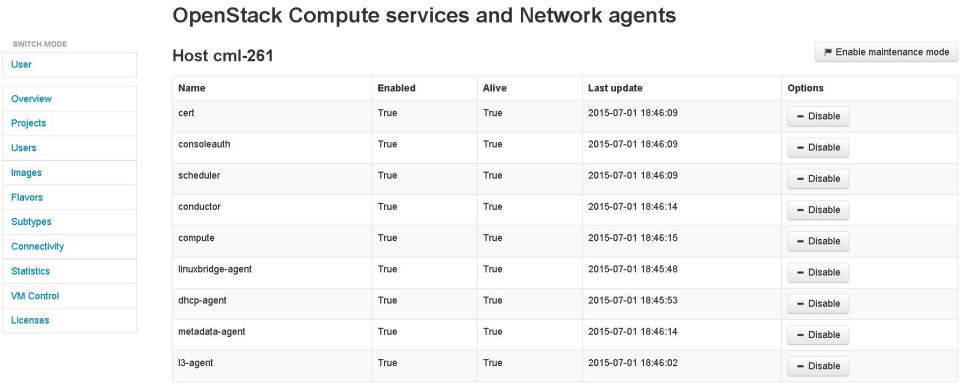
Note When you check the **Name** check box for a particular project, the check boxes for all the ports or floating IPs in the project are automatically checked. You can uncheck individual ports or floating IPs within the project as required.

b) Click **Delete Selected**.
All ports or all floating IPs for the particular project are deleted.

VM Control Hosts

The **VM Control Hosts** page lists all the compute services and network agents. Maintenance mode on a host disables the compute service on that node. It prevents new virtual machine from being deployed on that host.

Figure 14: VM Control Hosts Page

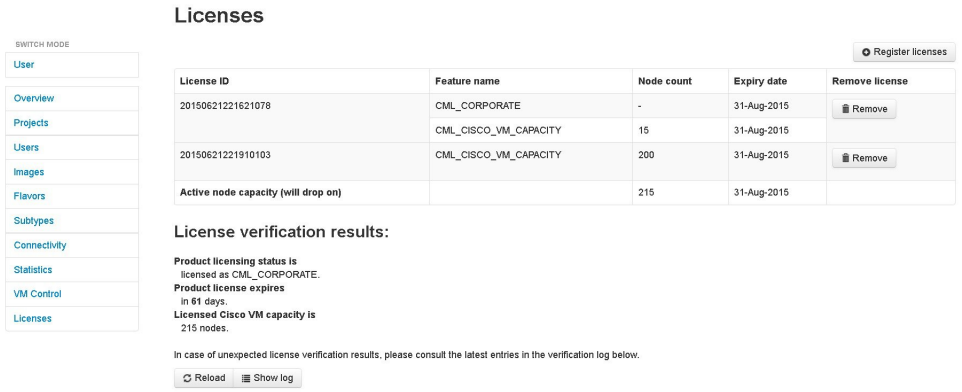


Manage Cisco Modeling Labs Licenses

Within the **User Workspace Management** interface, you can manage Cisco Modeling Labs licenses. A license specifies the options that are enabled for Cisco Modeling Labs.

The **Licenses** page provides details on all the licenses that are currently in use. These include the license ID, type of license, number of nodes per license, and the expiry date.

Figure 15: Licenses Page



Register a Cisco Modeling Labs License

To register a license, complete the following steps:

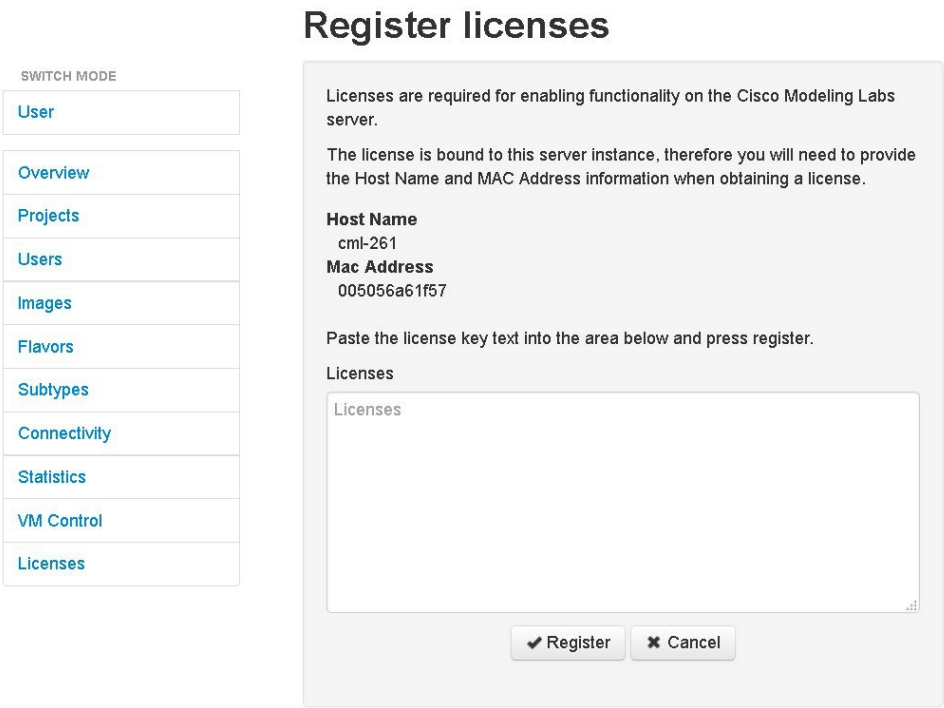
Step 1 Open the email containing your Cisco Modeling Labs license key.

Step 2 Using a text editor, open the attached .lic file.

Step 3 In the **User Workspace Management** interface, in admin mode, click **Licenses**.
The **Licenses** page, which lists all valid licenses, appears.

Step 4 Click **Register License** to register a valid license.
The **Register licenses** page appears.

Figure 16: Register Licenses



Step 5 Copy and paste the license key from the .lic file into the **Licenses** text area.

Step 6 Click **Register**.
The license is applied.

Step 7 Return to the **Licenses** page to view the newly registered license.

Stop Active Sessions in the User Workspace Management Interface

If you are a system administrator, you can terminate active sessions from within the **User Workspace Management** interface. You can select one or more sessions to terminate, including sessions started by other users.

If you are a client user, you can only terminate a session from within the **User Workspace Management** interface that you started.

Details on stopping a single session or stopping all sessions for a particular project are discussed in the following section.

Stop an Active Session

The **Overview** page lists all the active sessions for all the currently running projects for all the users. You can stop a specific session, or all the sessions for a specific project or projects.

Step 1 To stop a specific session:

a) In the session list for the applicable project, check the corresponding check box.
b) Click **Request to Stop Selected**. The **Stop Sessions** page appears.
c) Enter your login password and click **Request Stop**.
The session is terminated.

Note The status of the terminated session changes from **ACTIVE** to **STOP** in the **Overview** page. Additionally, the session is no longer visible in the Cisco Modeling Labs client.

Step 2 To stop all the sessions for a specific project:

a) In the session list for the applicable project, check the **Session** check box.
Note When you select the **Session** check box for a particular project, the check boxes for all the nodes in the project are automatically checked. You can uncheck individual sessions within the project as required.
b) Click **Request to Stop Selected**. The **Stop All Sessions for All Users** page appears.
c) Enter your login password and click **Request Stop**.

The sessions are terminated.

Note The statuses of the terminated sessions change from **ACTIVE** to **STOP** in the **Overview** page. Additionally, the sessions are no longer visible in the Cisco Modeling Labs client.