

Getting Started with Cisco Intercloud Services

Cisco Intercloud Services encourages Cisco users to experience and evaluate our cloud services using a trial account. You get a free, 60-day trial account that you can convert to a production account any time before the trial expires. Trial accounts that are not upgraded to production accounts by the end of the free 60-day period will be deleted.

For technical support, please email: cloud-services-ilab-support@cisco.com

Requesting a CIS Account

To request a free, 60-day trial account, do the following:

1. Go to cloud.cisco.com.
2. Select the **Manage Account** button in the middle of this page.
3. A **Manage Application Account** window opens.
4. Fill in this form and select the Submit button.
5. Your Director needs to pre-approve your trial account.

For production accounts: Directors and Finance Controllers receive an email describing the request. With the Director's approval, the Financial Controller then receives an approval request email. Requests must be pre-approved by the Director and the Financial Controller.

6. CCS is required to approve accounts as well to ensure capacity can meet demand and that the information submitted is verified. Most requests are answered within 48 hours.

Trial Account

- Each trial account project has an initial maximum quota of 20 VMs, 40 vCPUs, 80 GB of RAM, 3 floating IP addresses, and 20 security groups.
- Trial accounts are limited to access within US-Internal-1 Region.
- Use of the trial account is free for a 60-day trial period. Your department is not charged during the trial period.
- You have the option of converting your trial account to a production account before the 60-day trial period ends.

Upgrading to a Production Account

To upgrade from a trial account to a production account at any time within the free 60-day period, do the following:

- Go to cloud.cisco.com and select **Manage Account**> **Production Account**. Fill in this form.
- This requires approval from your Director and your Financial Controller. The Financial Controller's approval is necessary to confirm that financial charges accrued when using the production account are paid.

Increasing Your Quota

To increase your quota, do the following:

- Go to cloud.cisco.com.
- Navigate to your project.
- Click **Manage Quota** (the gear icon).

Application Approval

Once your application is approved, Cisco provisions a project space for you and sends you an email that provides the following information:

<i>username:</i>	Identifies an individual user. Multiple users can share a tenancy/project.
<i>tenant name:</i>	Identifies an individual tenant within the project space. Multiple tenants can share a Cisco Intercloud project space.
<i>private key:</i>	Your SSH private key provided as a text file. This key is used by login scripts to secure the SSH tunnel that supports a live connection to your project space.
<i>setup scripts:</i>	The scripts you can use to easily configure required environment variables, hosts, and other items on your client computer.
<i>jump hosts:</i>	Cisco Intercloud Services Cloud Labs do not yet support full Internet access. To connect, you must tunnel traffic through one of the specified jump hosts listed in this email.

Setting Up Your Computer

Installing the SSH Private Key

Do the following:

- Linux and Mac OS / Windows

Place the text file that contains your private SSH key in the `.ssh` directory.

Adding the Jump Server to Your Hosts File

Add each jump server as the platform-specific instructions below specify:

- Linux and Mac OS

Add each jump server on its own line in the `/etc/hosts` file.

- Windows

Add each jump server on its own line in the `C:\Windows\System32\drivers\etc\hosts` file.

Installing the OpenStack Command-line Clients

For API access, you need to install the OpenStack Command-Line Clients to your local system. You can get these clients from <http://docs.openstack.org/api/quick-start/content/index.html#cli-intro>

You can use the following `openrc` script to set the environment variables that the API requires, or you can set the same ENV variables by any other means that you prefer:

```
$# cat openrc

$# !/bin/sh
export OS_TENANT_NAME=_tenant name provided in Welcome email_
export OS_AUTH_URL=_authN URL provided in Welcome email_
export OS_USERNAME=_local username provided in Welcome email_
export OS_PASSWORD=_Password (from Welcome email) in my_password
file_
```

To run this script, place it in your home directory and execute the `source openrc` command.

Logging in to Cisco Intercloud Services

After setting up your computer, do the following to log in to your Cisco Intercloud Services project space:

1. Open the SSH Tunnel
2. Start the Horizon GUI

Opening the SSH Tunnel

To open an SSH tunnel from your computer to the Cisco Intercloud project space, you can run this `os_tunnel.sh` script:

```
#!/bin/bash

PORTS="80 443 5000 6080 35357 9191 9292 9696 8774 8775 8776"
JUMPHOST=_host name provided in Welcome email_
STACK=_this value provided in Welcome email_
REMOTEUSER=_your username provided in Welcome email_
PRIVKEY=_Path to your local lab_cloud_user Private Key_

for MyPort in $PORTS
do
    FORWARD=$FORWARD" -L $MyPort:$STACK:$MyPort "
done

echo "Trying: sudo ssh -o "ServerAliveInterval=15" -i $PRIVKEY
$FORWARD$REMOTEUSER@$JUMPHOST"
sudo ssh -o "ServerAliveInterval=15" -i $PRIVKEY $FORWARD
$REMOTEUSER@$JUMPHOST
```

You need to leave this connection open to interact with the `us-texas-1.cisco.com` jump server.

Starting the Horizon GUI

After authenticating to the jump host through the SSH tunnel, you can point your browser to the localhost tunnel:

- **URL to jump server:** `xxxxxxxxxxxx`
- **Login:** See your Welcome email.
- **Password:** Available from the "my_password" file in the home directory on the jump host.

Next Steps

Once you've logged in to your project space and started the Horizon GUI, your next steps depend on your development goals:

- **Load pre-existing applications:** To install pre-existing applications in your project space, you can use the Horizon GUI. See [link_to_horizon_docs](https://wiki.openstack.org/wiki/Horizon). (<https://wiki.openstack.org/wiki/Horizon>)
- **Deploy installed applications as billable services:** For more information, see "**Getting Started with Marketplace**." (FAQs and account setup – https://cto-github.cisco.com/DevNetDocs/CCS/blob/master/CCS/Marketplace/FAQ_Marketplace/source/index.md)

- **Develop applications or provide infrastructure for installed applications:** To develop applications or to provide infrastructure for existing applications, do the following:
 1. **Create a project within your project space.** *See [link_to_Chp3_Creating_a_Project](#). (Internal page)*
 2. **Provision networking for your project space:** Cisco Networking is a pluggable, scalable, API-driven system for managing networks and IP addresses and providing tenants with flexibility, control, and access to other Cisco IT services. For more information, see "Getting Started with Networking." (<https://developer.cisco.com/site/cis/documents/networking/>)
 3. **Provision a virtual machine (VM):** To make compute resources and storage available within your project space, you must first provision a virtual machine. For more information, see *[link_to_VM_docs](#)*. (http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-director/vsphere-mgmt-guide/5-3/b_UCS_Director_VMware_vSphere_Management_Guide_53.html)
 4. **Provision compute resources:** When you provision your virtual machine, you choose the scalable, Cisco cloud computing "flavor" (CPU and memory options) that suits your workload needs. Compute works with Cisco Networking technologies to provide a complete cloud-based solution. For more information, see "Getting Started **with Compute**." (<https://developer.cisco.com/site/cis/documents/compute/>)
 5. **Provision Storage-as-a-Service for your project space:** Cisco Storage-as-a-Service offers volume and object storage. Volume storage delivers high-performance for I/O intensive apps, while object storage works well for managing your day-to-day files and media. For more information, see "**Getting Started with Storage-as-a-Service**." (<https://developer.cisco.com/site/cis/documents/storage/>)

For Technical Support

For technical support, please email: cloud-services-ilab-support@cisco.com or the use cloud-services-ilab-support (mailer list).
