# Overview

# What is CSM Server?

CSM Server is a web-based, server-side automation and orchestration framework. It gives service providers the ability to simultaneously schedule and deploy IOS XR (ASR9K, CRS) and IOS XR 64 bit (ASR9K-64, NCS5K, NCS5500, NCS6K) SMUs & software upgrades across hundreds of routers in a scheduled manner through a simple point and click Web interface.

CSM Server automates and relieves our customers of having to perform tedious and manual install steps themselves.

## **CSM Server**



#### Requirements

- Runs on Linux machine
- Python interpreter 2.7.6 & supported libraries
- MySQL 5.6 or above
- Gunicorn web server
- Safari/Google Chrome/Firefox Browser

#### Installation

- Refer to the Installation Guide.
- The Installation Guide will provide instructions on installing CSM Server and various components on different Linux distributions, as well as how to launch it.

#### CSM Server Modules

#### CSM Server

- Provides a Web GUI to provision hosts, jump servers, regions, and servers.
- Schedules different types of installation jobs.
- Browses database information and views system and session logs.
- Performs administrative tasks.

#### CSM Dispatcher

- Runs scheduled download and install jobs.
- Collects software inventory information from hosts.
- Performs housekeeping tasks.

# **High Level Overview**

#### Login

Use default Admin user authentication to login.

#### Modify User Password

Click Tools – Edit My Profile.

#### Create CSM Server Users

Click Admin – Create User.

#### Create Server Repositories

Define TFTP/FTP/SFTP server information.

#### Create Regions

 Create regions and link them with server repositories.

#### Create Jump Servers

 Define jump servers if managed hosts are behind them.

#### Create Managed Hosts

- Define connection information and assign a region to a managed host.
- Once a host is defined, CSM Server will connect to the host to retrieve software inventory information.

#### Host Dashboard

- Click the hostname under the Managed Hosts tab.
- Display the host connection information, software packages, scheduled installations, and the install and software inventory history.
- Allows installation to be scheduled.

#### Schedule Install

 From Host Dashboard, click Action - Schedule an Install.

#### Install Dashboard

View scheduled/in-progress/failed/completed installations.

# Start & Stop CSM Server

## **Start CSM Server**

For detailed information, refer to the installation guide.

#### Follow only if CSM Server is running inside virtualenv:

- To enter the virtual environment, from csmserver directory, type "source env/bin/activate".
- The shell prompt will display "(env)" which indicates you are inside the virtual environment.
- Follow the instructions below to start CSM Server.
- To leave the virtual environment, type "deactivate". This will return you to the regular shell prompt.

#### To Start CSM Server

From csmserver directory, type "./csmserver start".

#### To Start CSM Server Securely

- Must have ssl.key and ssl.cert files.
- From csmserver directory, type "./csmserver start secure".

# **Stop CSM Server**

- For detailed information, refer to the installation guide.
- Before stopping CSM Server, the following precautions will help eliminate unexpected results:
  - On the Admin Dashboard, disable 'Allow Scheduled Installs to Run'.
  - Go to the Install Dashboard to see if there is any in-progress installation.
  - If there is no in-progress installation, follow the instructions below to stop CSM Server.
  - 'Allow Scheduled Installs to Run' will need to be re-enabled when CSM Server starts again.
- If CSM Server is running inside virtualenv
  - Follow the instructions on the previous slide to enter the virtual environment.
- To Stop CSM Server
  - From csmserver directory, type "./csmserver stop".