

# 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 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 & 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`.