

# 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 SMUs & software upgrades across hundreds of routers in a scheduled manner through a simple point and click Web interface. Supported platforms are:

- IOS XR (ASR9K, CRS)
- IOS XR 64 bit (ASR9K-X64, NCS1K, NCS4K, NCS5K, NCS5500, NCS6K)
- IOS XE (ASR902, ASR903, ASR907, ASR920)
- IOS (ASR901)

CSM Server automates install actions and relieves customers of tedious, manual install steps.

# 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 provides 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 server repositories.
    - 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 inventory information from hosts.
    - Performs housekeeping tasks.

# High Level Overview

- **Login**
  - Use default Admin user authentication to login.
- **Modify User Password**
  - Click Tools – Edit Current User.
- **Create CSM Server Users**
  - Click Tools – Create User.
- **Create Server Repositories**
  - Define TFTP/FTP/SCP/SFTP/LOCAL server repository 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 and hardware inventory information.
- **Host Dashboard**
  - Click the hostname under the Managed Hosts tab.
  - Display the host connection information, software packages, scheduled installations, installation and retrieval history, and hardware inventory.
  - Allows installation to be scheduled.
- **Schedule Install**
  - From Host Dashboard, click Action - Schedule an Installation.
- **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 Console, disable 'Allow Scheduled Installations to Run'.
  - Go to the Install Dashboard to see if there are any in-progress installations.
  - If there are no in-progress installations, follow the instructions below to stop CSM Server.
  - 'Allow Scheduled Installations to Run' will need to be re-enabled when CSM Server starts again.
- **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 stop CSM Server.
  - To leave the virtual environment, type "deactivate". This will return you to the regular shell prompt.
- **To Stop CSM Server**
  - From csmserver directory, type "./csmserver stop".

# Filter Table Data on Date Time Fields



# Filter Table Data on Date Time Fields

- CSM Server saves all date time information in UTC format in the database. From Tools - Admin Console – Time Zone, you can set the display time zone. By default, CSM Server displays the date time using the local time zone (i.e. time zone set on the client machine).
- The data fields that are in date time format include by not limited to Scheduled Time, Start Time, Status Time, Failed Time, Completed Time, and etc. The display format is MM/DD/YYYY HH:MM [AM|PM]. For example, 03/27/2017 12:40 PM. However, to query the database, the search string (can be a partial string) specified in the table search box must be in YYYY-MM-DD format as shown in the picture below.

Search:

- If local time zone is used, it is possible that the date you desire to search on may be one off as the database stores information in UTC format. For example, you scheduled an install job on March 21, 2017 with your local time zone. Depending on the time of the day, the UTC day may be March 22. Take appropriate pre-caution when searching date time fields if you are using local time zone.