# Schedule Installation

### **Available Install Actions**

#### Pre-Upgrade

- Establishes initial device connection.
- Records running software version.
- Records the running configuration and stores it in a file.
- Checks the state of all nodes on the system.
- Verifies server repository reachability.
- Records inactive, active, committed package list.

#### **Optional Plugins:**

- Records OSPF and ISIS neighbors.
- Sets ISIS set-overload-bit if ISIS is running.
- Records total number of BGP neighbors.
- Records total number of MPLS LDP neighbors.
- Records total number of PIM neighbors.
- Records total number of HSRP neighbors and states.
- Records total number of VRRP neighbors and states.

#### Install Add

Copies software packages to the device.

#### Activate

Activates packages on the device.

#### Post-Upgrade

- Checks node status, standby role status, configuration failure, software package states, etc.
- Verifies error/tracebacks/core files.

#### Commit

Executes Install Commit on the device

### **Available Install Actions - Continue**

#### - ALL

 CSM Server will create Pre-Upgrade, Install Add, Activate, Post-Upgrade, and Commit installation actions with the successor depending on the predecessor. Until the predecessor has executed successfully, the successor will not run.

#### Remove

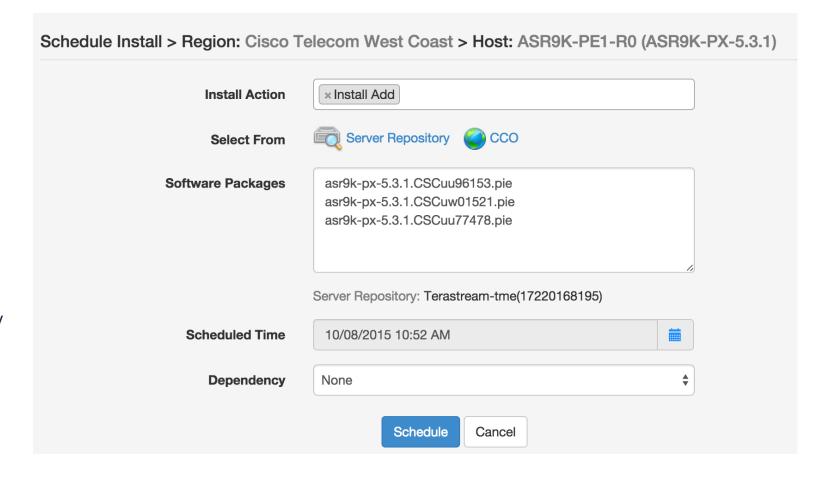
Removes inactive packages on the device.

#### Deactivate

Deactivates active packages on the device.

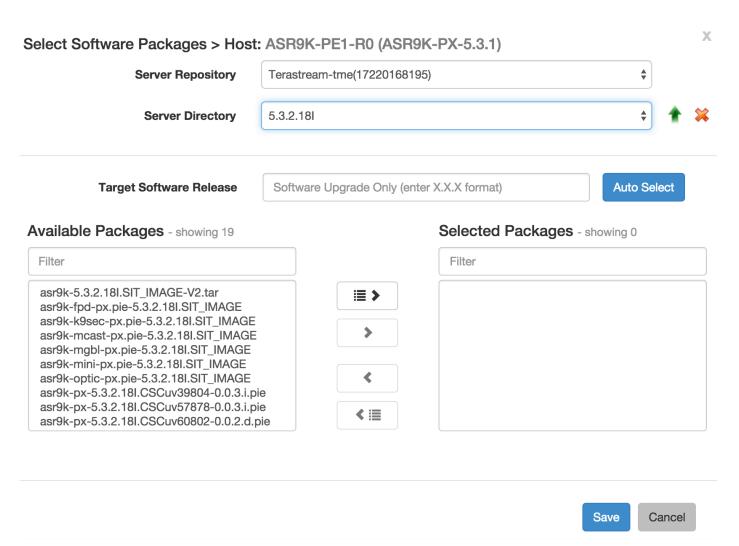
### Schedule an Install

- Invoked from the Host Dashboard's Action menu.
- Select an install action. Multiple install actions may be selected at once.
- Depending on the selected install action, software packages can be selected from Server Repository, CCO, Inactive Packages, or Install History.
- If a dependency is selected, the scheduled installation will not proceed until the dependency is completed successfully. The dependency can only be specified when only one install action is selected (not available for batch installs or when multiple install actions are specified).
- Click the Calendar icon to change the scheduled time. By default, it is the current date and time.



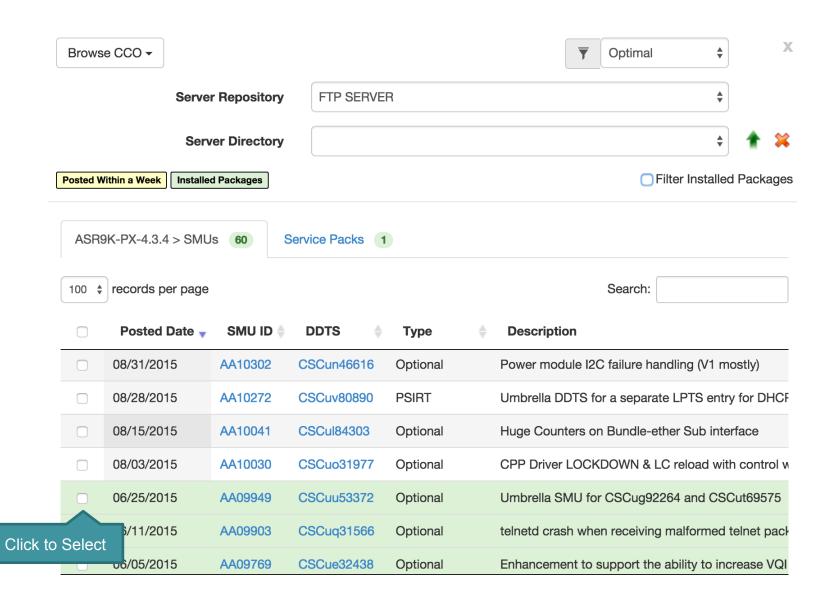
# **Browse Server Repository**

- Invoked by clicking the Server Repository icon on the Schedule Install page.
- Select a server repository.
- Use the Server Directory selector to navigate to the desired directory on the server repository. The software packages in the selected directory will be displayed in the dual list box.
- For Software upgrade, enter the target software release and click Auto Select. This will select packages from the Available Packages list box which match the device software packages.



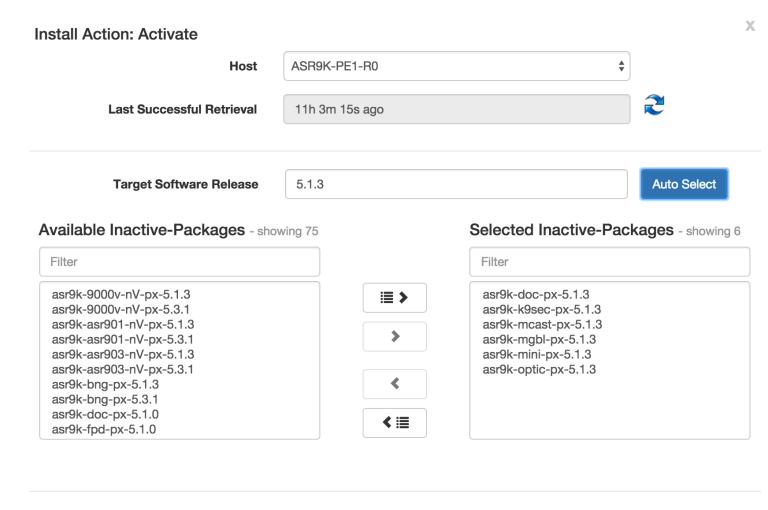
### **Browse CCO**

- Invoked by clicking the CCO icon on the Schedule Install page.
- Use the Browse CCO button to navigate to the desired platform and release.
- Select the server repository where the downloaded files should be stored.
- If you are scheduling installation for a single host, the Filter Installed Packages checkbox will be shown and checked by default. CSM Server filters all installed packages on the host (i.e. Active Packages) from the display list.
- If Filter Installed Packages checkbox is unchecked, the installed packages will be displayed in green highlight.



# **Browse Inactive Packages**

- Invoked by clicking the Inactive Pkgs icon on the Schedule Install page.
- The Last Successful Retrieval text field displays the elapsed time since the software packages was last successfully retrieved.
- Click the Retrieve Latest Software icon to retrieve latest software if necessary.

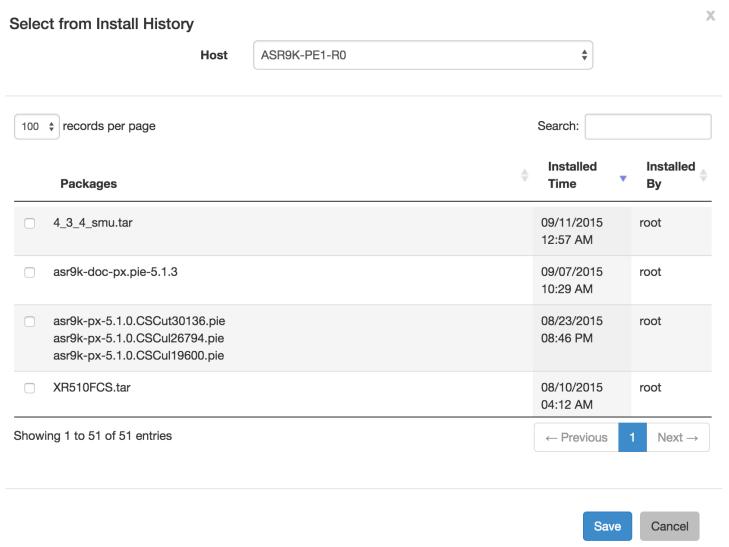


Save

Cancel

## **Browse Install History**

- Invoked by clicking the Browse Install History icon on the Schedule Install page.
- Select the packages from one of the successful Install Add operations.



# Schedule Install – Prerequisite Checks

After clicking the Schedule button, CSM Server performs the following functions:

- It checks for missing pre-requisites on selected software packages.
- It determines whether selected software packages are on the server repository. If they are not, CSM Server prompts the user to download them.
- The scheduled install will not proceed at its scheduled time until the software packages are successfully downloaded and copied to the server repository.

Following pre-requisite(s) were not selected, but should be included.

asr9k-px-4.3.1.CSCui38382.pie - 431 C-SMU1
asr9k-px-4.3.1.CSCug87873.pie - Support TE link Extended Admin Group and higher SRLG scale
asr9k-px-4.3.1.CSCun74284.pie - qos\_ea and qos\_ma consume high CPU in 4.3
asr9k-px-4.3.1.CSCug88702.pie - Excessive Punt Flow Trap does not police bad actor traffic
asr9k-px-4.3.1.CSCuh09480.pie - IPv6 ND is broken when MLD is enabled on the interface.
asr9k-px-4.3.1.CSCuj55425.pie - Chkpt treats current Active node as a Stby node(chkpt\_register fails)
asr9k-px-4.3.1.CSCuf777118.pie - Serial DS3 - stays up when looped in HDLC - down-when-looped configured
asr9k-px-4.3.1.CSCuh55354.pie - 4.3.1.CCO: ASR9K POS int with HDLS encap flap when oversubscribe
asr9k-px-4.3.1.CSCuh40754.pie - Umbrella SMU for CSCug17684, CSCug83539, CSCuh02594

Following files are missing on the server repository. Those that are identified as 'Downloadable' × can be downloaded from CCO. If there is an scheduled installation that depends on these files, it

asr9k-px-4.3.1.CSCuj55425.pie (Downloadable) - Chkpt treats current Active node as a Stby node(chkpt\_register fails) asr9k-px-4.3.1.CSCug88702.pie (Downloadable) - Excessive Punt Flow Trap does not police bad actor traffic asr9k-px-4.3.1.CSCuh40754.pie (Downloadable) - Umbrella SMU for CSCug17684, CSCug83539, CSCuh02594 asr9k-px-4.3.1.CSCuh55354.pie (Downloadable) - 4.3.1.CCO: ASR9K POS int with HDLS encap flap when oversubscribe asr9k-px-4.3.1.CSCui38382.pie (Downloadable) - 431 C-SMU1 asr9k-px-4.3.1.CSCuf77118.pie (Downloadable) - Serial DS3 - stays up when looped in HDLC - down-when-looped configured asr9k-px-4.3.1.CSCuh09480.pie (Downloadable) - IPv6 ND is broken when MLD is enabled on the interface. sar9k-px-4.3.1.CSCuh42259.pie (Downloadable) - XR520:BFD packets getting dropped at NPU in Asr9k for FLEX LSP/MPLS-TP asr9k-px-4.3.1.CSCuh74284.pie (Downloadable) - qos\_ea and qos\_ma consume high CPU in 4.3 asr9k-px-4.3.1.CSCut52232.pie (Downloadable) - Production SMU for SAM post Oct 2015. asr9k-px-4.3.1.CSCug87873.pie (Downloadable) - Support TE link Extended Admin Group and higher SRLG scale

will not proceed until the files are successfully downloaded and copied to the server repository.

Download Ignore Cancel

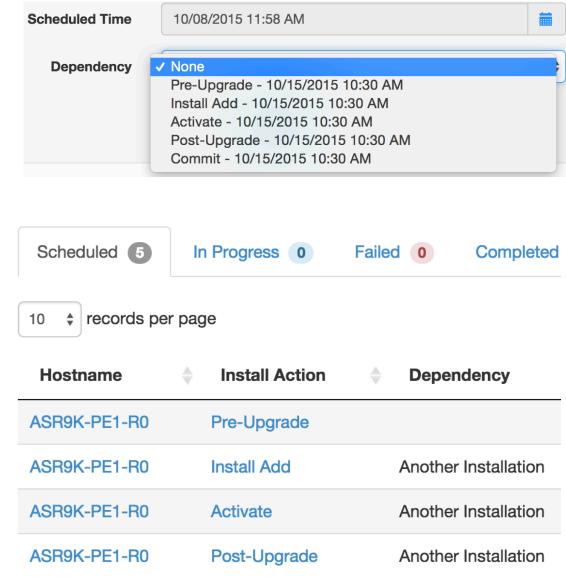
Include Pre-requisites

Ignore

Cancel

## **Installation Dependency**

- A dependency can be specified when creating a scheduled install. For example, Install Activate should not be performed unless Install Add is successful.
- If an installation failed, any scheduled install that has the failed installation as its dependency will not execute.
- When multiple install actions or 'ALL' is selected, CSM Server will create the dependency automatically.
- Deleting a scheduled install will also delete all of its dependencies.



# Schedule Batch Installation

### **Schedule Batch Installs**

- Invoked by clicking the Schedule Batch Installs icon on the home page or the Action button on the Install Dashboard page.
- Select a region of interest.
- Select a role and/or software version to further filter hosts. Multiple roles or software versions may be selected.
- All managed hosts belonging to the selected region, role, and software version role will be displayed.
- Use the dual list box to select multiple hosts for the same scheduled installation.
- Click the Calendar icon to change the scheduled time. By default, it is the current date and time.

