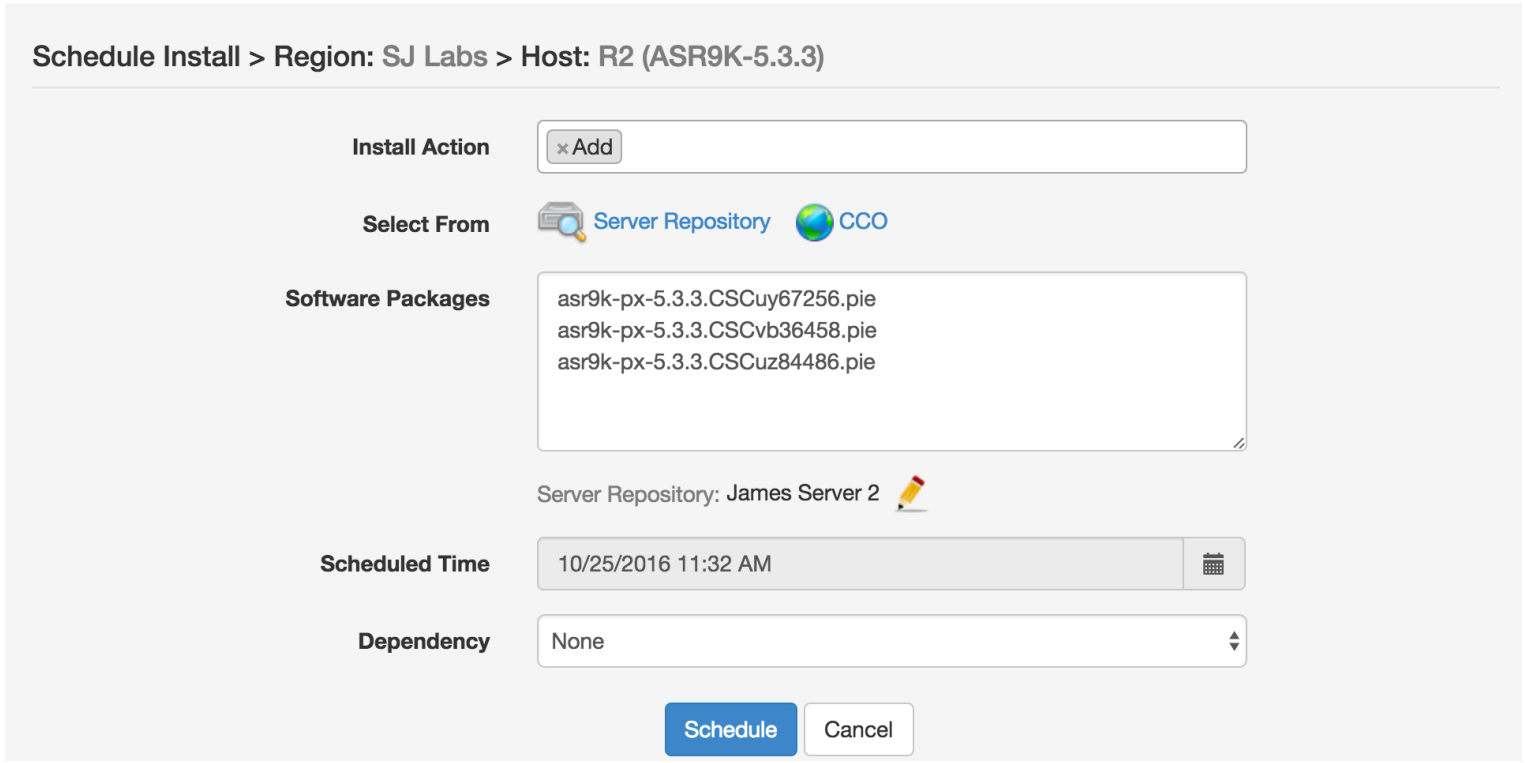
Schedule Installation

Available Install Actions

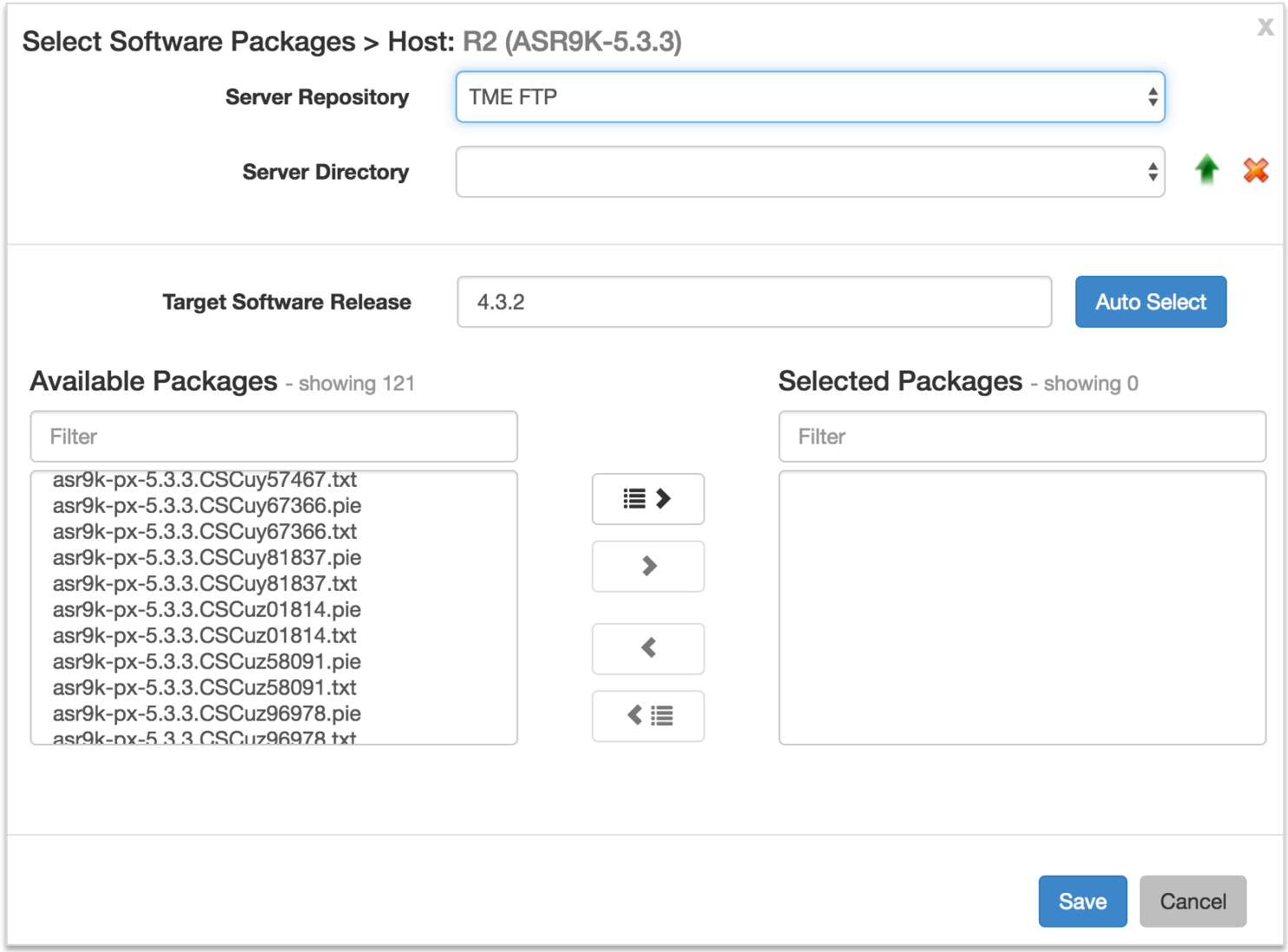
- **Pre-Upgrade**
  - Establishes initial device connection.
  - Records running software version.
  - Backup the running configuration and stores it on CSM Server internal repository.
  - Checks the state of all nodes on the system.
  - Verifies server repository reachability.
  - Records inactive, active, committed package list.
- **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
- **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 selected inactive packages on the device.
- **Remove All Inactive**
  - Removes all inactive packages on the device.
- **Deactivate**
  - Deactivates active packages on the device.

Schedule an Install



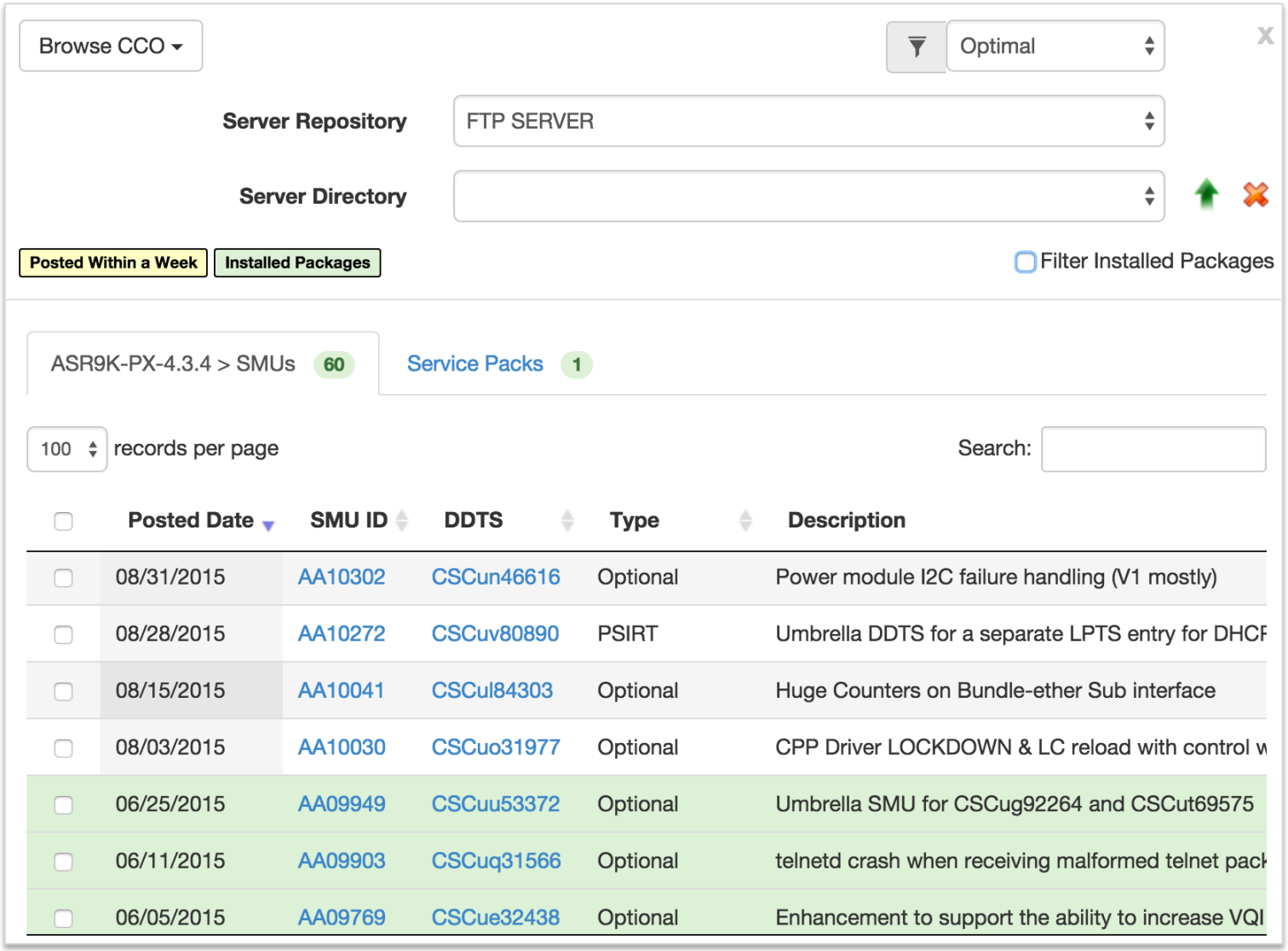
- Invoked from the Host Dashboard's Action menu.
- Select an install action. Multiple install actions may be selected at once.
- Depending on the selected install action, software packages can be selected from Server Repository, CCO, Inactive Packages, or Install History.
- If a dependency is selected, 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 installations 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



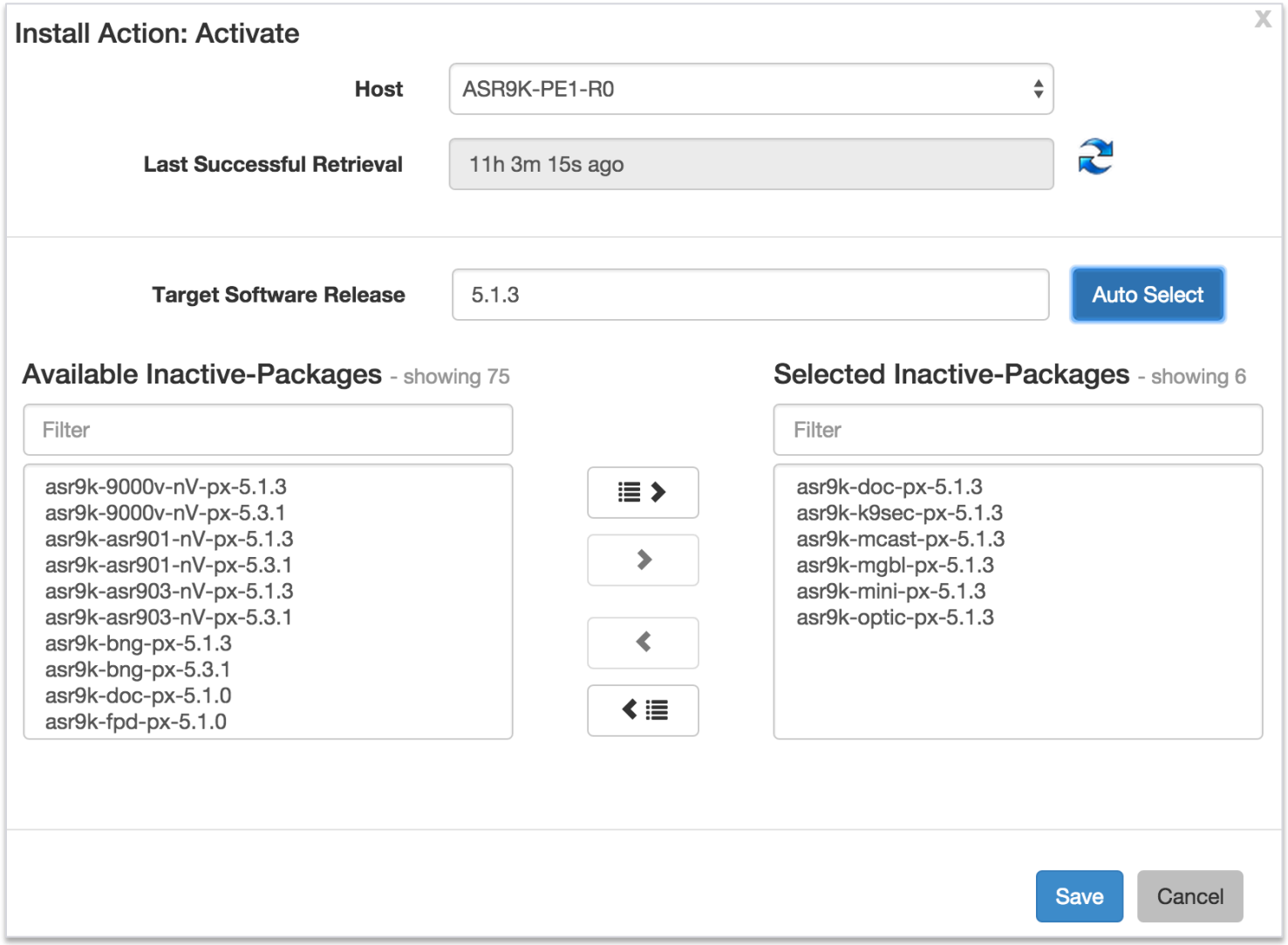
- Invoked by clicking the Server Repository icon on the Schedule Install page.
- Select a server repository.
- Use the Server Directory selector to navigate to the desired directory on the server repository. The software packages in the selected directory will be displayed in the dual list box.
- For Software upgrade, enter the target software release and click Auto Select. This will select all packages from the Available Packages list box that match the device software packages.
- Only server types that support file browsing will be able to use this dialog. Others will have to have packages manually entered in the Schedule Install dialog.

Browse CCO



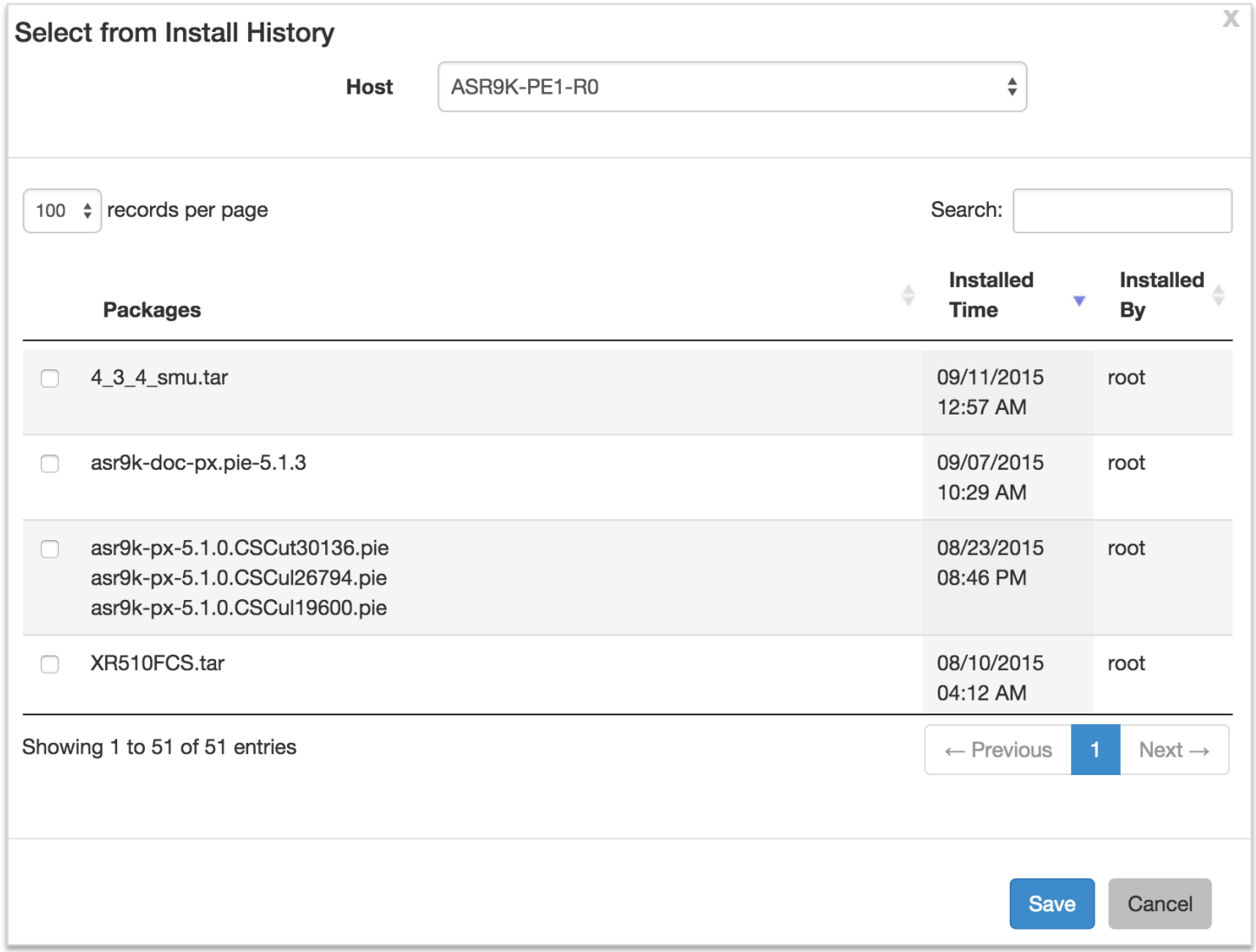
- Invoked by clicking the CCO icon on the Schedule Install page.
- Use the Browse CCO button to navigate to the desired platform and release.
- Select the server repository where the downloaded files should be stored.
- If you are scheduling an installation for a single host, the Filter Installed Packages checkbox will be shown and checked by default. CSM Server filters out all packages already installed 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



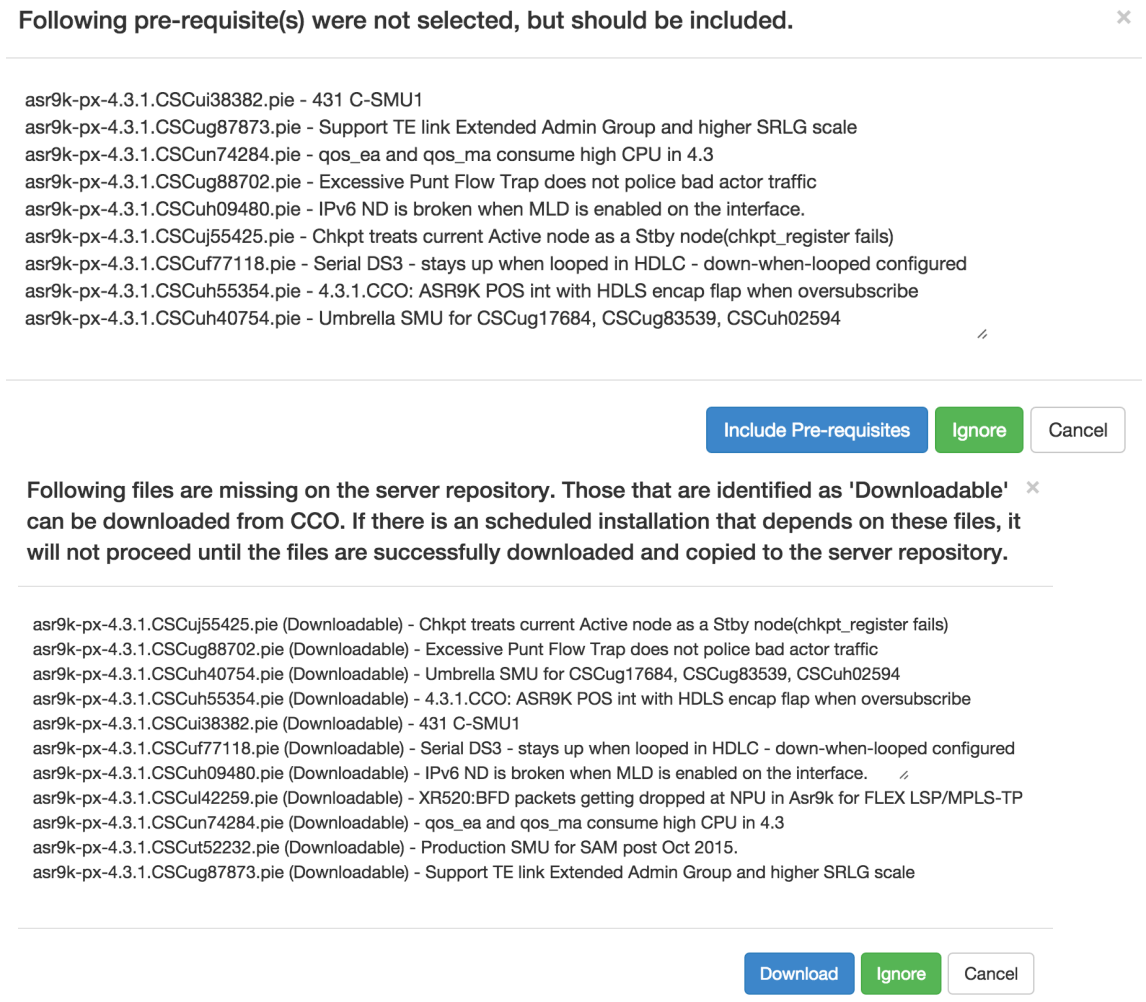
- Invoked by clicking the Inactive Pkgs icon on the Schedule Install page.
- The Last Successful Retrieval text field displays the elapsed time since the software packages were last successfully retrieved.
- Click the Retrieve Latest Software icon to retrieve latest software if necessary.

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.

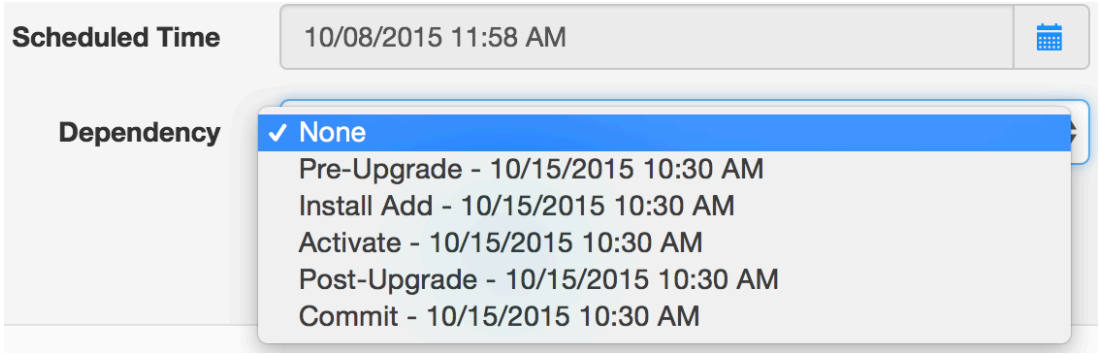
Schedule Install – Prerequisite Checks

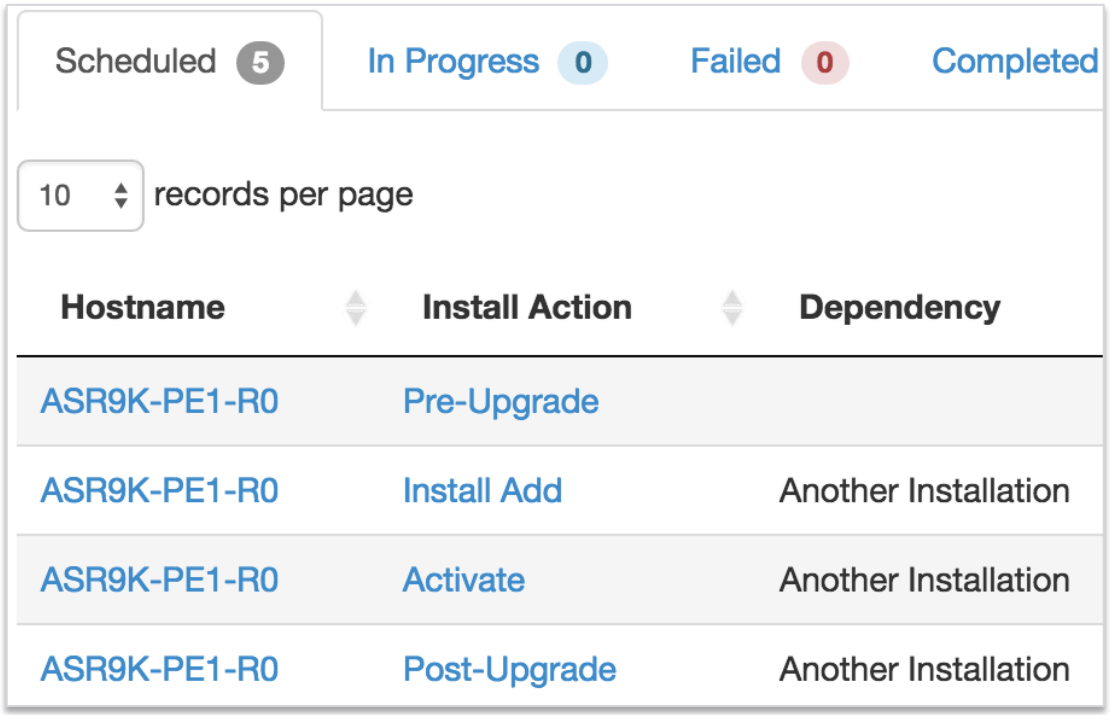


After clicking the Schedule button, CSM Server performs the following functions:

- 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.

Installation Dependency

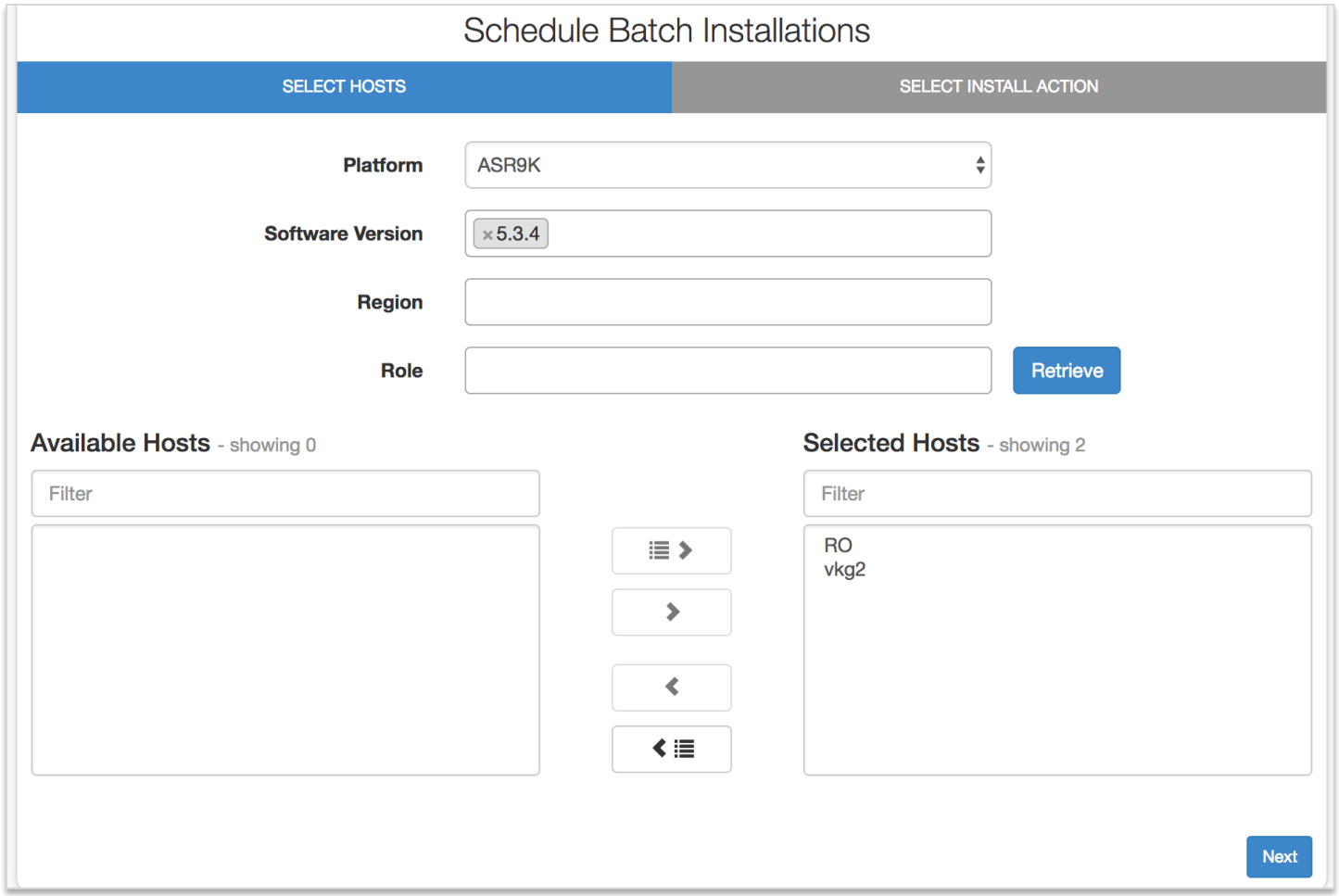




- A dependency can be specified when creating a scheduled install. For example, Install Activate should not be performed unless Install Add is successful.
- If an installation fails, any scheduled install that is dependent on the failed installation will not execute.
- When multiple install actions or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

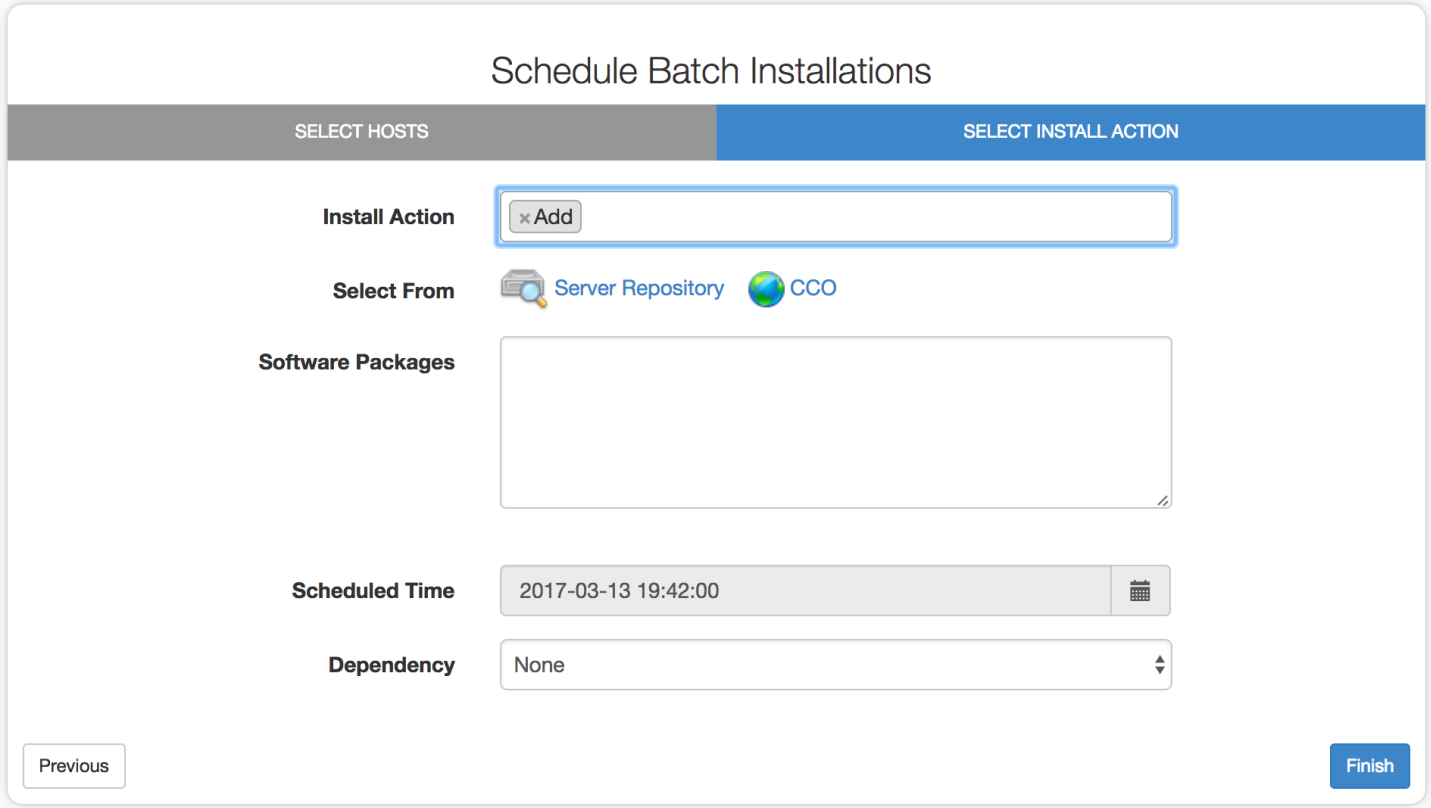
Schedule Batch Installations

Schedule Batch Installations



- Invoked by clicking the Schedule Batch Installations link on the home page or the Action button on the Install Dashboard page.
- Select a platform, software version, region, or role to filter managed hosts.
- Click the Retrieve button to retrieve hosts that satisfied the selected criteria.
- Use the dual list box to select multiple hosts for the same scheduled installation.

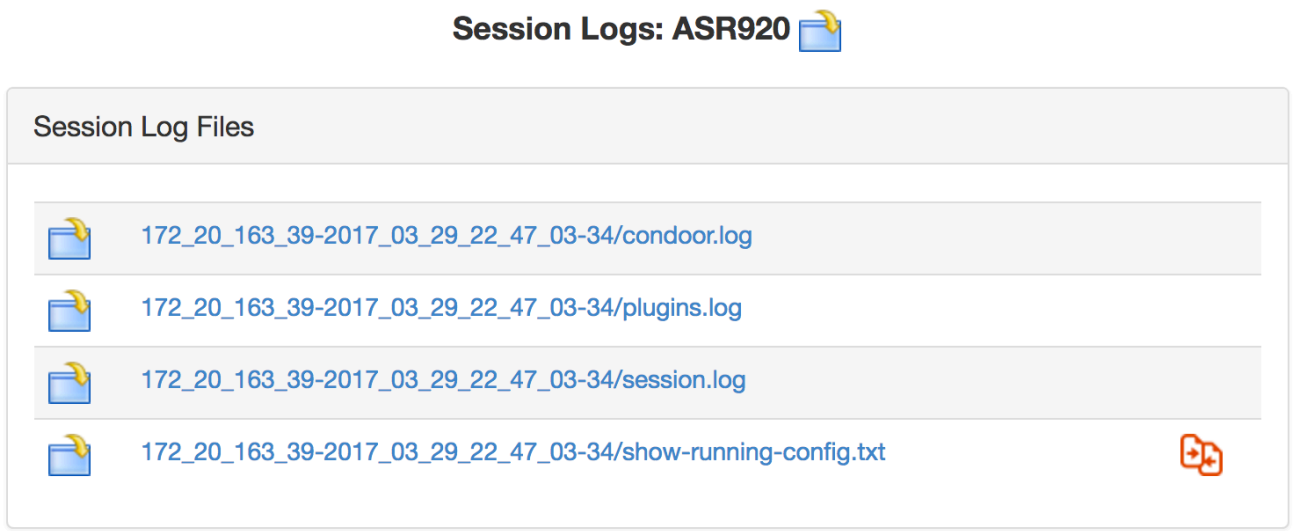
Schedule Batch Installations - Continue



- Select an install action. Multiple install actions can be selected.
- Click the Calendar icon to change the scheduled time. By default, it is the current date and time.
- The dependency displays all available install action strings for selection. When selected, CSM Server will lookup the latest scheduled install job that matches the selected install action for the same host and create a dependency relationship. If no appropriate job is found, no dependency will be created.

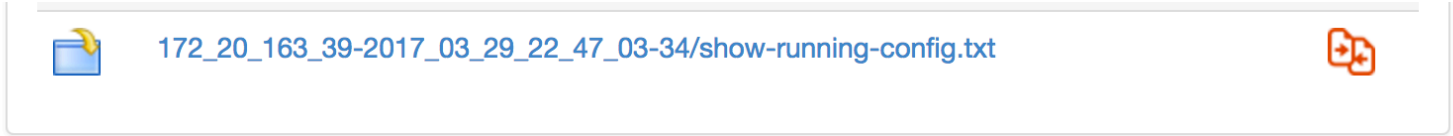
Session Logs

Session Logs



- Various log files are created during the installation operation. The three main logs are condoor.log, plugins.log, and session.log.
- The condoor.log file contains information on the connection between CSM Server and the device.
- The plugins.log contains information on each plugin as it executes specific logics on the device.
- The session.log file provides valuable insights on the commands sent by CSM to the router.
- These three log files may contain information on why installations fail and can be useful for troubleshooting.
- Click the download icons to the left of the files to download the log files individually, or the download icon at the top to download all log files at once.

Session Logs – Continue



File Compare

```
File 1: show-running-config.txt (created on 03/29/2017 03:24 PM)
File 2: show-running-config.txt (created on 03/29/2017 03:47 PM)

Insertions: 9     Deletions: 8


Load for five secs: 2%/01%; one minute: 23%; five minutes: 2%
No time source, *15:04:14.38127:26.607 UTC Wed Mar 29 2017

Building configuration...

Current configuration : 4887918 bytes
!
version 15.65
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no platform punt-keepalive disable-kernel-core
platform bfd-debug-trace 1
platform tcam-parity-error enable
platform tcam-threshold alarm-frequency 1
!
hostname CSG-5502-ASR920
```

- During the Post-Upgrade operation, CSM Server scans all the output files generated by the Pre-Upgrade operation. If there are output differences, a new red icon will appear next to the output file.
- Clicking the red icon will open a File Compare dialog which displays the file output differences between the Pre-Upgrade and Post-Upgrade. The numbers of insertions and deletions are indicated on the dialog.
- The file compare feature also applies to output files generated by the custom command profile selected for the Pre/Post-Upgrade operations.