



Install Crosswork Applications

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Install Crosswork Applications

This section explains how to install Crosswork applications on the Cisco Crosswork UI.

The Crosswork Network Controller applications are bundled as **Essentials**, **Advantage**, and **Add-on** packages (see [Cisco Crosswork Network Controller Packages](#) for more information). Every package contains crosswork applications in a particular format unique to Crosswork known as CAPP (Crosswork APPLICATION). As a first step, the packages containing the application CAPP files (*.tar.gz) must be downloaded from [cisco.com](#) to a machine reachable from the Cisco Crosswork server. The package is then added to the Crosswork UI where the applications within can be installed.

You must first download the relevant Crosswork Network Controller package (Essential or Advantage or Add-on) from [cisco.com](#) and then proceed to install the applications which are part of the package.

Before you begin

Ensure that all requirements of your application are met.

Step 1 Download and validate the CAPP files:

- Navigate to [cisco.com](#) and download the Crosswork Network Controller package that you require and the relevant signature file to a directory in your machine. For the purpose of these instructions, we will use the file names "**cw-na-cncessential-5.0.0-72-release-230502.tar.gz**" and "**cnc-5.0.0-capp-signatures.tar.gz**" respectively.
- Decompress the signature file:

```
tar -xvf <signature file>
```

Example:

```
[test@cw-build sample]% tar -xvf cnc-5.0.0-capp-signatures.tar.gz
README
CW-CCO_RELEASE.cer
cisco_x509_verify_release.py3
cisco_x509_verify_release.py
cw-na-cncessential-5.0.0-72-release-230502.tar.gz.signature
cw-na-cncadvantage-5.0.0-77-release-230425.tar.gz.signature
cw-na-cncaddon-5.0.0-68-release-230502.tar.gz.signature
```

- c) Use python script to validate the signature of each file you plan to use.

Note Use `python --version` to find out the version of Python on your machine.

If you are using Python 2.x, use the following command to validate the file:

```
python cisco_x509_verify_release.py -e <.cer file> -i <.tar.gz file> -s <.tar.gz.signature file>
-v dgst -sha512
```

If you are using Python 3.x, use the following command to validate the file:

```
python cisco_x509_verify_release.py3 -e <.cer file> -i <.tar.gz file> -s <.tar.gz.signature file>
-v dgst -sha512
```

Example:

```
[test@cw-build sample]% python cisco_x509_verify_release.py3 -s
cw-na-cncessential-5.0.0-72-release-230502.tar.gz.signature -i
cw-na-cncessential-5.0.0-72-release-230502.tar.gz -e CW-CCO_RELEASE.cer
Retrieving CA certificate from http://www.cisco.com/security/pki/certs/crcam2.cer ...
Successfully retrieved and verified crcam2.cer.
Retrieving SubCA certificate from http://www.cisco.com/security/pki/certs/innerspace.cer ...
Successfully retrieved and verified innerspace.cer.
Successfully verified root, subca and end-entity certificate chain.
Successfully fetched a public key from CW-CCO_RELEASE.cer.
Successfully verified the signature of cw-na-cncessential-5.0.0-72-release-230502.tar.gz using
CW-CCO_RELEASE.cer
```

Note If you do not have python installed, go to python.org and download the version of python that is appropriate for your work station.

- d) If you are planning to download a standalone Crosswork application (for example, Crosswork Optimization Engine), hover over the relevant file and copy the MD5 or SHA512 checksum to your clip board.

Download the CAPP file to a server that can be reached from the Crosswork server. Run a tool of your choice to calculate the checksum, and the compare the checksum value in your downloaded file with the value you copied in the clip board.

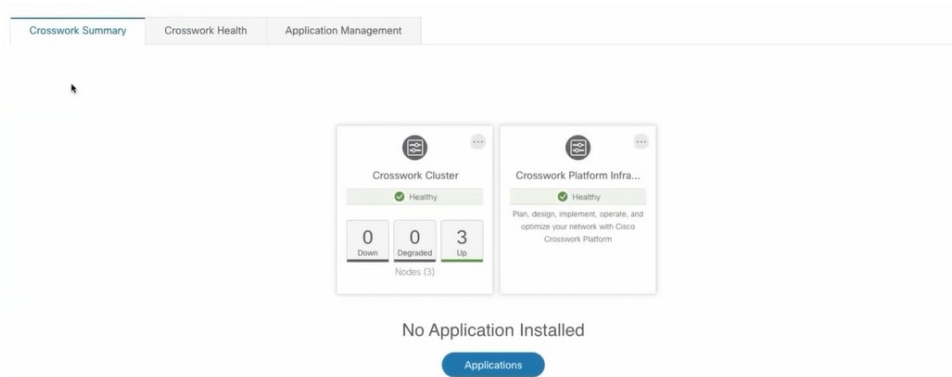
For example, on a MAC you can use the **md5** command to calculate the MD5 sum on a file:

```
md5 <.tar.gz>
```

Verify that the result value matches with the posted value on cisco.com.

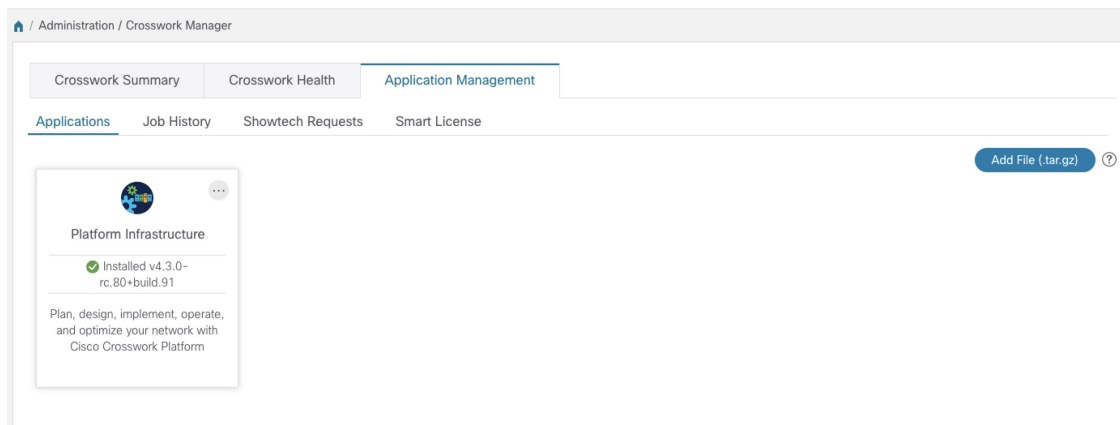
Step 2 Add the downloaded CAPP file to Crosswork:

- a) Log into Cisco Crosswork and in the homepage, click on **Administration > Crosswork Manager**. The **Crosswork Summary** page is displayed with Crosswork Cluster and Crosswork Platform Infrastructure tiles.



You can click on the tiles to get more information.

- b) Click on **Application Management** and select the **Applications** tab.



- c) Click on the **Add File (.tar.gz)** option to add the package that contains the CAPP files.

Note When installing a Crosswork Network Controller package, there is no need to untar the package. You can add the package tarball as-is to the Crosswork UI and the applications within are automatically added. You can then install the individual applications as needed.

- d) In the Add File dialog box, enter the relevant information and click **Add**.

Add File (.tar.gz) via Secure Copy ✕

Server Path/Location
Network/server_name/directory/file name

Host Name/IP Address

Port

Username

Password 👁

Automatically clean all repository files before adding new one

Add
Cancel

The add operation progress is displayed on the **Applications** screen. You can also view the installation progress in the **Job History** tab.

Administration / Crosswork Manager


✔ The product file /root/untar/cw-na-cncadvantage-4.0.0-51-release-220809.tar.gz was successfully added, check job id: AJ3. Go to Job History ✕

Crosswork Summary Crosswork Health **Application Management**

[Applications](#) [Job History](#) [Showtech Requests](#) [Smart License](#)

Job AJ3: Downloading /root/untar/cw-na-cncadvantage-4.0.0-51-release-220809.tar.gz in process Add File (.tar.gz) ?

1%



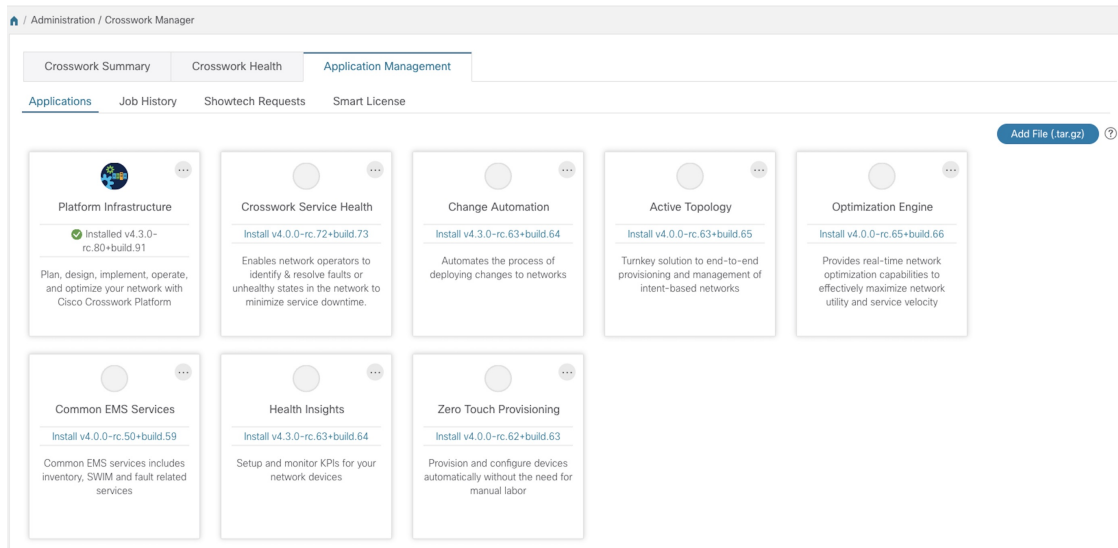
Platform Infrastructure

✔ Installed v4.3.0-rc.80+build.91


Plan, design, implement, operate, and optimize your network with Cisco Crosswork Platform

Note When loading a Crosswork Network Controller package, the loading process may stop at 50% for a while depending on the resources your host platform has available.

The newly added application files are displayed as tiles on the **Applications** screen.



Step 3 Install the Application CAPP file:

- a) Click on the **Install** prompt on the application tile. You can also click  on the tile, and select the **Install** option from the drop down list.

Important After you install Crosswork Cluster and Crosswork Data Gateway, the applications in the Crosswork Network Controller package (Essential or Advantage) need to be installed in the following sequence:

1. Crosswork Optimization Engine
2. Crosswork Active Topology
3. Crosswork Service Health (only available in Advantage package)
4. Element Management Functions (EMF)

Crosswork Change Automation, Crosswork Health Insights, and Crosswork Zero Touch Provisioning can be installed independently in any order and do not require any other application to be installed prior.


The application is now installed. You can observe the change in the application tile icon. Once an application is installed, all the related-resources, UI screens and menu options are dynamically loaded in the Crosswork UI.

Note Once an application is installed, the 90-day evaluation period will automatically start. You can register the application with your Cisco Smart Account in the the **Smart License** tab.

- b) After an application is installed, it must be activated to become functional. The first-time installation also activates a CAPP file. However, if the activation fails after a successful installation, you can manually activate the application.

To manually activate an application, click the  on the application tile, and select **Activate**.

Step 4 Repeat step 3 for installing any remaining applications.

Step 5 (Optional) Click  on the application tile, and select the **View Details** option to view details of the installed application.

Step 6 Once an application (or all applications) have been installed, check the health of the environment to make sure all the applications are healthy. It can take up to an hour for all the processes that make launch and for the applications to report

as healthy. If after an hour a newly installed application is not healthy after an hour, contact the Cisco Customer Experience team.

What to do next

Return to the installation workflow:

- VMware: [Install Cisco Crosswork Network Controller on VMware vCenter](#)
- AWS EC2: [Install Cisco Crosswork Network Controller on AWS EC2](#)