

Prime Network 3.10.0 VNE Device Package Installation Guide

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1 Overview: Installing and Uninstalling Device Packages

This VNE Device Package Installation guide is a common guide to install any Cisco Device Package on Cisco Prime Network 3.10 server.

To install a Device Package (DP), follow these steps:

Step	Description	Described in:
1	Make sure your system meets the prerequisites.	Section 2
2	Copy the downloaded DP file to the proper location.	Section 4
3	Use the ivne script to install the DP.	Section 5
4	Install the DP	Section 0
5	List the contents of the DP installed	Section 6
6	Uninstall the DP	Section 7

2 Installation Prerequisites

Before installing the Device Package, make sure of the following:

1. Verify that Cisco Prime Network 3.10.0 is installed on the server.
2. Log into Cisco.com and navigate to [Cisco Prime Network > Prime Network VNE Drivers](#) to download the Prime Network Cisco VNE Device packages
3. If your configuration is using the HA/DR (gateway high availability) solution, perform the below steps before installing the device package.

Before You Begin

1. If you are using the **HA/DR VERITAS** solution:

- a) Uncheck the critical flag from the Cisco Prime Network gateway resource in the VERITAS Cluster Manager application.
- b) Via the VERITAS Cluster Manager, bring Prime Network offline
- c) Disable the Cisco Prime Network gateway resource in the VERITAS Cluster Manager application.
- d) Login to the gateway and start Prime Network by running “networkctl start”.
- e) Wait until Prime Network gateway and units are up and running before continuing

with this patch installation.

2. If you are using the **LINUX RHCS** solution:

Log into the Cisco Prime Network gateway as root user and move the services into freeze mode, by running:

- a) `clusvcadm -Z <Prime Network service>`

b) `clusvcadm -Z <Oracle service>`

For example:

`clusvcadm -Z ana`

`clusvcadm -Z oracle_db`

3 Naming Convention of the Device package tar file

The Cisco VNE Device packages would have the following naming convention going forward

PrimeNetwork-3.10-DPymm.tar For example - PrimeNetwork-3.10-DP1301.tar

PrimeNetwork – indicates the product on which the Device package is supported

3.10 – Indicates the device package is supported on Prime Network release 3.10

DPymm – Indicate year and month in which the package is released. For example , the Device package released in January would carry , DP1301. Likewise , Device package released in March would carry – 1303 etc

- PrimeNetwork-3.10-DP1301.tar – indicates the device package is released in JANUARY 2013 and is supported on Prime Network 3.10.0

4 Copying the DP File to a Central Location

Create a new directory for the DP and copy the DP file to that new directory:

1. Create a new directory outside of the \$PRIME_NETWORK_HOME directory. For example, the following creates a directory named VNEDP under /export/home/:

```
% cd /export/home
```

```
% mkdir VNEDP
```

2. Download the device package from Cisco.com to a central repository server. Using ftp, copy the DP file (for example, PrimeNetwork-3.10-DP1301.tar) into the newly-created directory. In this example, the DP file would exist in the following location:

```
/export/home/VNEDP/PrimeNetwork-3.10-DP1301.tar
```

3. Grant the directory *networkuser* permissions. (*networkuser* is the UNIX account for the Cisco Prime Network application.) In this example, *networkuser* is **pn310**.

```
% chown -R pn310:ana VNEDP
```

% chmod -R 777 VNEDP

5 Using the ivne Script

This section provides some general information on the ivne script, which is used to install VNE Device packages. For more information on the ivne script, see the [Cisco Active Network Abstraction 3.10 Administrator Guide](#).)

#	Option	Description	Use this when...
1	Install VNE Device Package from a local directory	Installs device packages from the downloaded device package tar on the gateway server	<ul style="list-style-type: none"> You want to install the entire Device Package or individual jar files.
2	Install VNE Device Package from a Web Repository	Installs device packages from a remote host such as a web server that is providing central support to multiple Cisco Prime Network gateway servers.	<ul style="list-style-type: none"> In case , you have multiple gateway server to deploy the DP and use web server as central location
3	List the installed DP drivers and the driver jars files.	Lists the drivers that exist in the \$PRIME_NETWORK_HOME/Main/drivers directory on the gateway server.	<ul style="list-style-type: none"> You want to see the DP installed and the driver jars contained in the DP.
4	Uninstall a Device Package (DP)	Uninstalling the Device packages from g/w and unit servers	<ul style="list-style-type: none"> When you want to permanently remove the DP which are no longer in use
Q	Quit	Exits the ivne script.	You want to quit the script.

You can install the entire DP with all the jar files it contains. All jar files use the following naming convention:

Vendor-JarType-VNEJarVersion.jar

JarType can be Modules, Commons, or device-specific. For example:

Cisco-100xx-v4.0.0.0.jar

Cisco-45xx-v4.0.0.0.jar

Cisco-49xx-v4.0.0.0.jar

Cisco-Modules-v4.0.0.0.jar

Cisco-Commons-v4.0.0.0.jar

6 Installing the Cisco VNE Device Package (Local Directory)

To install a DP:

1. Confirm the following:
 - Your system meets the prerequisites listed in Section 2.
 - You have copied the DP file to a central location; see Section 4.
2. Log in to the Cisco ANA gateway server as *networkuser*
3. Start the installation script:

```
% ivne
```

```

Cisco Prime Network VNE Device Package Installer

1| Install VNE Device Package from a local directory
2| Install VNE Device Package from a Web Repository
3| List installed Device Packages
4| Show latest installed Device Packages
5| Uninstall a Device Package [No Device Packages installed]
q| Quit

```

Make a selection and press Enter.

Choose option **1(Install VNE Device Package from a local directory)** and press Enter at the prompt. The installation script prompts the user to enter the full path of the device package tar file. The installation script installs the DP to the Unit server automatically.

4. Enter the full pathname to the downloaded DP file . The log file location is shown in the messages appearing in the console window

```

Please enter the full path of the device package tar file [Ctrl-C to go back to menu]:
/export/home/VNEDP/ PrimeNetwork-3.10-DP1301.tar

+ Logging to /export/home/pn310/Main/drivers/logs/ivne-install-log-120612-040237.log

+ Going to install PrimeNetwork-3.10-DP1301.tar Device Package.

+ Registry is being updated. Please wait.

+ Preparing client configuration.

+ Collecting images from drivers.

```

Installation completed.

7 Installing the Cisco VNE Device Package (Web Repository)

Choose option **2(Install VNE Device Package from a Web Repository)** and press Enter at the prompt. The installation script prompts the user to enter URL of device package tar file. The installation script downloads the DP and triggers the installation

```

10.105.38.182 (10) | 10.105.38.181 (22)
-----
Cisco Prime Network VNE Device Package Installer

1 Install VNE Device Package from a local directory
2 Install VNE Device Package from a web Repository
3 List installed Device Packages
4 Show latest installed Device Packages
5 Uninstall a Device Package
q Quit
  
```

Make a selection and press Enter.

```

10.105.38.182 (10) | 10.105.38.181 (22)
-----
Please enter the repository address [CTRL+C to go back to menu]: http://10.56.20.131:8080/PN310-DP/
  
```

Install scripts list all the applicable DP for Prime Network 3.10 from the URL. Traverse the list with the arrow keys and press ENTER key.

```

champ (3) | 10.105.38.181 (26) | SFTP-10.105.38.181 (26)
-----
Select Device Package (DP) to install from a web repository

PrimeNetwork-3.10-DP1301
PrimeNetwork-3.10-DP1302
b Back
  
```

Make a selection and press Enter.

Select the appropriate device package by traversing the list with the arrow keys on the keyboard and press Enter key to trigger download and install of the Device package.

```

+ Logging to /export/home/pn310/Main/drivers/logs/ivne-install-log-012113-152859.log
+ Going to install PrimeNetwork-3.10-DP1301 Device Package.
+ Downloading: http://10.56.20.131:8080/PN310-DP/PrimeNetwork-3.10-DP1301.tar. Please wait.
\+ Download completed successfully.
  
```

- + Installing PrimeNetwork-3.10-DP1301 device package. Please wait.
- + Registry is being Updated. Please wait.
- + Preparing client configuration.
- + Collecting images from drivers.
- + Device package installation completed successfully.

8 Verifying the DP Installation

Installed Device Packages can be verified using 2 options

- I. List installed Device Packages
- II. Show latest installed Device Packages

Using - List installed Device Packages :

1. Log in to the Cisco ANA gateway server as *networkuser*.
2. Start the installation script:

```
% ivne
```

3. Choose option 3 (*List installed Device Packages*) and press Enter at the prompt. The installation script creates a log and lists the Device packages installed on the Prime Network 3.10 Gateway Server

```
Cisco Prime Network VNE Device Package Installer

1| Install VNE Device Package from a local directory
2| Install VNE Device Package from a Web Repository
3| List installed Device Packages
4| Show latest installed Device Packages
5| Uninstall a Device Package
q| Quit
```

Make a selection and press Enter.

User can choose the Device package installed (by pressing the arrow button of the keyboard) and press Enter to verify the VNE driver files installed on the server

champ (3) | 10.105.38.181 (26) | SFTP-10.105.38.181 (26)

Latest installed Device Packages.

PrimeNetwork-3.10-DP1301
 b Back

Showing latest installed Device Packages (Third Party and Cisco)

```

champ (3) | 10.105.38.181 (26) | SFTP-10.105.38.181 (26)
Gathering information from /export/home/pn310/Main/drivers/PrimeNetwork-3.10-DP1301
Name                               Driver File Name                    Version    Device Package
Cisco-100xx-PN3.10                 Cisco-100xx-v4.0.0.0.jar           4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-12xxx-PN3.10                 Cisco-12xxx-v4.0.0.0.jar           4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-3400ME-PN3.10                 Cisco-3400ME-v4.0.0.0.jar          4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-3750ME-PN3.10                 Cisco-3750ME-v4.0.0.0.jar          4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-45xx-PN3.10                  Cisco-45xx-v4.0.0.0.jar            4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-49xx-PN3.10                  Cisco-49xx-v4.0.0.0.jar            4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-70xx-PN3.10                  Cisco-70xx-v4.0.0.0.jar            4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-76xx_65xxIOS-PN3.10          Cisco-76xx_65xxIOS-v4.0.0.0.jar    4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ACE4710-PN3.10               Cisco-ACE4710-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ASA5000-PN3.10               Cisco-asa55xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ASR10xx-PN3.10               Cisco-ASR10xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ASR5000-PN3.10               Cisco-ASR5000-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ASR903-PN3.10                Cisco-ASR903-v4.0.0.0.jar          4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ASR90xx-PN3.10               Cisco-ASR90xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-CPT-PN3.10                   Cisco-CPT-v4.0.0.0.jar              4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-CRS-PN3.10                   Cisco-CRS-v4.0.0.0.jar              4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Commons-PN3.10               Cisco-Commons-v4.0.0.0.jar          4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-IOX-Commons-PN3.10           Cisco-IOX-Commons-v4.0.0.0.jar     4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ISR19xx-PN3.10               Cisco-ISR19xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ISR29xx-PN3.10               Cisco-ISR29xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ISR39xx-PN3.10               Cisco-ISR39xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-ME36xx-ME38xx-PN3.10          Cisco-ME36xx-ME38xx-v4.0.0.0.jar   4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-MWR29xx-PN3.10               Cisco-MWR29xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Modules-PN3.10               Cisco-Modules-v4.0.0.0.jar          4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-NCCM_Core-PN3.10             Cisco-NCCM_Core-v4.0.0.0.jar        4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-NCCM_IOX-PN3.10              Cisco-NCCM_IOX-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Nexus10xx-PN3.10             Cisco-Nexus10xx-v4.0.0.0.jar        4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Nexus30xx-PN3.10             Cisco-Nexus30xx-v4.0.0.0.jar        4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Nexus50xx-PN3.10             Cisco-Nexus50xx-v4.0.0.0.jar        4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Nexus70xx-PN3.10             Cisco-Nexus70xx-v4.0.0.0.jar        4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-Others-PN3.10                Cisco-Others-v4.0.0.0.jar           4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-UBR100xx-PN3.10              Cisco-UBR100xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-UBR72xx-PN3.10               Cisco-UBR72xx-v4.0.0.0.jar         4.0.0.0   PrimeNetwork-3.10-DP1301
Cisco-UCS-PN3.10                   Cisco-ucs-v4.0.0.0.jar              4.0.0.0   PrimeNetwork-3.10-DP1301
Generic-ICMP-PN3.10                Generic-ICMP-v4.0.0.0.jar           4.0.0.0   PrimeNetwork-3.10-DP1301
Mib2-PN3.10                         Mib2-v4.0.0.0.jar                   4.0.0.0   PrimeNetwork-3.10-DP1301
pn310@pn310itgs02-lnx [~]%
  
```

- Verify that the correct drivers are listed by checking the “List of Latest Driver files” section in the DP Readme.

Using – Show latest installed Device Packages :

- Log in to the Cisco ANA gateway server as *networkuser*.
- Start the installation script:

```
% ivne
```



```

Cisco Prime Network VNE Device Package Installer

1| Install VNE Device Package from a local directory
2| Install VNE Device Package from a Web Repository
3| List installed Device Packages
4| Show latest installed Device Packages
5| Uninstall a Device Package
q| Quit

```

Make a selection and press Enter.

- Choose option 4 (*Show latest installed Device Packages*) and press Enter at the prompt. The installation script creates a log and lists the latest Device packages installed on the Prime Network 3.10.0 Gateway Server

```

| champ (3) | 10.105.38.181 (26) | SFTP-10.105.38.181 (26)

Latest installed Device Packages.

PrimeNetwork-3.10-DP1302
b| Back

```

showing latest installed Device Packages (Third Party and Cisco)

9 Uninstalling the Prime Network 3.10.0 Device Package

In Prime Network 3.10.0, many device packages can be installed at any point of time. The user has the option to choose which device package instance be used for modeling a VNE. If “latest” was chosen while adding the VNE, the latest Device package installed on the server will be used. The user has a option to uninstall a device package not used by any of the VNE on the system.

If user tries to uninstall a device package which is currently used by a VNE for modelling , the uninstall scripts throws an error indicating the avm using the device package , and that the Device package could not be uninstalled. The user has then to configure the VNE to use an alternate device package before installing the current device package.

- Log in to the Cisco ANA gateway server as *networkuser*.
- Start the ivne script:

/ % ivne

Cisco Prime Network VNE Device Package Installer

- 1 Install VNE Device Package from a local directory
- 2 Install VNE Device Package from a Web Repository
- 3 List installed Device Packages
- 4 Show latest installed Device Packages
- 5 Uninstall a Device Package
- q Quit

Make a selection and press Enter.

Choose the Device package which you want to be uninstalled

champ (3) | 10.105.38.181 (26) | SFTP-10.105.38.181 (26)

Select Device Package (DP) to uninstall.

- PrimeNetwork-3.10-DP1301
- PrimeNetwork-3.10-DP1302
- b Back

Make a selection and press Enter.

```
+ Logging to /export/home/pn310/Main/drivers/logs/ivne-install-log-061312-122707
+ Uninstalling PrimeNetwork-3.10-DP1302.tar Device Package.
+ Removing Registry entries (Gateway & Units if available). Please wait...Done.
+ Removing from remote units:
  1.Removing from 10.56.121.115

Uninstallation Completed.
```