

Cisco Prime Network 3.8 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 Prime Network 3.8 Device Package release on Cisco Prime Network 3.8 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 3
3	Use the ivne script to install the DP.	Section 4
4	Install the DP files.	Section 5
5	(Optional) Verify the DP installation.	Section 6
6	If you did not restart the gateway server as part of Step 4, restart it to apply your changes.	Section 8

To uninstall a DP (perform a rollback to a previous backup), follow these steps:

Step	Description	Described in:
1	Use the ivne script to rollback the DP.	Section 7
2	Restart the gateway server to apply your changes.	Section 8

2 Installation Prerequisites

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

1. Verify that Cisco Prime Network 3.8 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. Download and install the latest Point patch / service patch on [Prime Network 3.8 on Cisco.com](#) to get the latest bug fixes
4. If your configuration is using the HA/DR (gateway high availability) solution, in the VERITAS Cluster Manager Application, uncheck the critical flag from the Cisco ANA gateway resource.

3 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 Cisco ANA home directory. For example, the following creates a directory named VNEDP under /export/home/:

```
% cd /export/home
% mkdir VNEDP
```

2. Grant the directory *networkuser* permissions. (*networkuser* is the UNIX account for the Cisco ANA application.) In this example, *networkuser* is **network38**.

```
% chown network38:ana VNEDP
```

Note: You may also want to create a backup directory at this time, using the same procedure. For example :

```
% cd /export/home/network38
% mkdir VNEDP-backup
% chown network38:ana VNEDP-backup
```

- Download the device package from Cisco.com to a central repository server. Using ftp, copy the DP file (for example, CiscoPrimeNetwork-3.8-DP1.tar) into the newly-created directory. In this example, the DP file would exist in the following location:

```
/export/home/VNEDP/ CiscoPrimeNetwork-3.8-DP1.tar
```

4 Using the ivne Script

This section provides some general information on the ivne script, which is used to install independent device driver files. We recommend that you use the option that is documented in the installation and rollback steps provided in this document; the other options are described here for your information. For more information on the ivne script, see the [Cisco Active Network Abstraction 3.8 Administrator Guide.](#))

#	Option	Description	Use this when...
1	Install independent VNE drivers from Device Package tar file (recommended)	Installs drivers from the downloaded device package tar on the gateway server	<p>Note: We recommend that you use this option.</p> <ul style="list-style-type: none"> You want to install the entire Device Package or individual jar files.
2	Install independent VNE driver jar file from a web repository.	Installs drivers 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"> You want to install only <i>individual</i> jars files.
3	Install independent VNE drivers from a local folder.	Installs drivers from a local folder on the gateway server.	<ul style="list-style-type: none"> You want to install only <i>individual</i> jars files
4	Rollback to a previous independent VNE driver installation.	Restores all drivers to a previously backed up driver configuration. (You cannot roll back individual driver files.)	<ul style="list-style-type: none"> You want to roll back your configuration to a previously-saved backup.
5	List the existing drivers and their versions.	Lists the drivers that exist in the \$ANAHOME/Main/drivers directory on the gateway server.	You want to see the current version of the files that are in \$ANAHOME/Main/drivers.
Q	Quit	Exits the ivne script.	You want to quit the script.

5 Installing the Complete DP or Individual Jar Files

You can install the entire DP with all the jar files it contains, or you can install individual jar files as needed. All jar files use the following naming convention:

Vendor-JarType-VNEJarVersion.jar

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

```
Cisco-Commons-v2.1.0.0.jar
Cisco-CPT-v2.1.0.0.jar
Cisco-CRS-v2.1.0.0.jar
Cisco-IOX-Commons-v2.1.0.0.jar
Cisco-ISR19xx-v2.1.0.0.jar
Cisco-ISR29xx-v2.1.0.0.jar
Cisco-ISR39xx-v2.0.0.0.jar
Cisco-ME36XX-ME38XX-v2.1.0.0.jar
Cisco-Modules-v2.0.0.0.jar
```

Note : If you are installing the Device package on a Gateway and Unit setup, execute the following steps on the Prime Network Unit

1. Go the \$ANAHOME/Main/drivers directory in the Unit
2. Delete all the jars , by issuing the below command

```
PrimeNetworkServer:/export/home/network38/Main/drivers >> rm *.jar
```

(Refer to CSCtu15254 for further details)

To install a DP or individual jar files:

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 3.
 - The backup directory exists and *networkuser* has read-write-execute permissions for the directory. The script will tell you how much space is required. The default backup directory is \$ANAHOME.

2. Log in to the Cisco ANA gateway server as *networkuser*.

3. On the gateway server, go to the \$ANAHOME/Main/drivers directory. (In this procedure, \$ANAHOME is /export/home/network38.)

```
% cd $ANAHOME/Main/drivers
```

4. Start the installation script:

```
% ivne
```

```

Cisco Prime Network Independent VNE Driver Installer

1 Install independent VNE drivers from Device Package tar file (recommended).
2 Install independent VNE driver jar file from a web repository.
3 Install independent VNE driver jar file from a local folder
4 Rollback to a previous independent VNE driver installation.
5 List the existing drivers and their versions.
q Quit.

```

Choose option **1** (*Install independent VNE drivers from Device Package tar file (recommended)*) and press Enter at the prompt. The installation script creates a log and prompts you for a destination folder for a backup of the current VNE driver configuration (so you can rollback to that configuration, if necessary).

```

-----
- Writing log to /export/home/network38/Main/drivers/ivne-install-log-1321794272
Prime Network will be restarted after the procedure is completed...
Would you like to continue? (yes,no) [default yes] yes
Backing up the current VNE driver configuration files.
Please select a destination folder for the backup tar file. The folder should have at
least 5435 KB of free space.
Please enter the backup folder path: [default /export/home/network38]:
/export/home/network38/VNEDP-backup
- Creating .ana-ivne file. [OK]
- Backing up current drivers to
  /export/home/network38/ANA_Drivers_Backup_112011-150439.tar.gz. [OK]

```

5. Enter the full pathname to the downloaded DP file (see Section 3).

```

Please enter the full path of the device package tar file: /export/home/VNEDP/
CiscoPrimeNetwork-3.8-DP1.tar

```

The script will list the jar files that are contained in the DP:

(This list should match the "List of Latest Driver Files" contained in the DP Readme.)

```

The device package contains the following driver jar files:
-----
Cisco-100xx-v2.0.0.0.jar
Cisco-12xxx-v2.1.0.0.jar
Cisco-3400ME-v2.0.1.0.jar
Cisco-3750ME-v2.1.0.0.jar
Cisco-45xx-v2.1.0.0.jar
Cisco-49xx-v2.1.0.0.jar
cisco-70xx-v2.1.0.0.jar
Cisco-76xx_65xxIOS-v2.1.0.0.jar
Cisco-ACE4710-v2.0.0.0.jar
.....
{ The list to indicate a sample list of jars and not the entire list }

```

6. Enter the jars you want to install using one of these methods:
 - To enter specific jars, copy (cut and paste) the names after the prompt.
 - To install all jars, enter **ALL**.

Please enter the independent VNE driver file name(s): [default All] **ALL**
Installation started. Please wait...

7. If any of the selected drivers depend on other jar files, the script will list them, as in the following example. If you do not answer **yes** to the prompt, the listed jar files will not be installed.

```
Installing Cisco-12xxx-v2.1.0.0.jar...
Gathering information from /export/home/network38/Main/drivers/
An upgrade of Cisco-IOX-Commons is required.
Installing Cisco-IOX-Commons version 2.1.0.0 ...
An upgrade of Cisco-Commons is required.
Installing Cisco-Commons version 2.1.0.0 ...
An upgrade of Mib2 is required.
Installing Mib2 version 2.1.0.0 ...
It is not recommended to install Mib2 version 2.1.0.0 since the following drivers are
incompatible with it:
Cisco-Commons
Cisco-ISR19xx
Cisco-ASA5000
Cisco-ACE4710
Cisco-ME36XX-ME38XX
Cisco-Others
Cisco-45xx
Cisco-3750ME
Cisco-49xx
Cisco-MWR29xx
Cisco-3400ME
Cisco-76xx_65xxIOS
Cisco-Modules
Cisco-IOX-Commons
Cisco-CRS
Cisco-12xxx
Cisco-ASR90xx
Cisco-ASR5000
Cisco-UCS
Cisco-Nexus50xx
Cisco-UBR72xx
Cisco-NCCM_Core
Cisco-NCCM_IOX
Cisco-UBR100xx
Cisco-CPT
Cisco-ISR29xx
Cisco-ASR10xx
Cisco-100xx
Cisco-ISR39xx
Cisco-Nexus70xx
Cisco-70xx
Generic-ICMP
Would you like to continue? (yes/no) [Default: no] yes
It is not recommended to install Cisco-Commons version 2.1.0.0 since the following
drivers are incompatible with it:
Cisco-ISR19xx
Cisco-ASA5000
Cisco-ACE4710
Cisco-ME36XX-ME38XX
Cisco-Others
Cisco-45xx
Cisco-3750ME
Cisco-49xx
Cisco-MWR29xx
Cisco-3400ME
Cisco-76xx_65xxIOS
Cisco-Modules
```

Cisco-IOX-Commons
 Cisco-CRS
 Cisco-12xxx
 Cisco-ASR90xx
 Cisco-ASR5000
 Cisco-UCS
 Cisco-Nexus50xx
 Cisco-UBR72xx
 Cisco-NCCM_Core
 Cisco-NCCM_IOX
 Cisco-UBR100xx
 Cisco-CPT
 Cisco-ISR29xx
 Cisco-ASR10xx
 Cisco-100xx
 Cisco-ISR39xx
 Cisco-Nexus70xx
 Cisco-70xx

Would you like to continue anyway? (yes/no) [Default: no] **yes**

It is not recommended to install Cisco-IOX-Commons version 2.1.0.0 since the following drivers are incompatible with it:

Cisco-CRS
 Cisco-12xxx
 Cisco-ASR90xx
 Cisco-ASR5000

Would you like to continue anyway? (yes/no) [Default: no] **yes**

Installing Cisco-12xxx -

Please note that the following I-VNEs are mandatory and will be installed:

Name Package	Driver File Name	Version	Device
Mib2 ANA3.8.x-DP0	Mib2-v2.1.0.0.jar	2.1.0.0	Cisco-
Cisco-Commons ANA3.8.x-DP0	Cisco-Commons-v2.1.0.0.jar	2.1.0.0	Cisco-
Cisco-IOX-Commons ANA3.8.x-DP0	Cisco-IOX-Commons-v2.1.0.0.jar	2.1.0.0	Cisco-
Cisco-12xxx ANA3.8.x-DP0	Cisco-12xxx-v2.1.0.0.jar	2.1.0.0	Cisco-

Would you like to continue? (yes/no) [Default: yes] **yes**

Installing Cisco-3400ME-v2.0.1.0.jar...

Gathering information from /export/home/network38/Main/drivers/

An upgrade of Cisco-Others is required.

Installing Cisco-Others version 2.1.0.0 ...

It is not recommended to install Cisco-Others version 2.1.0.0 since the following drivers are incompatible with it:

Cisco-ASA5000
 Cisco-45xx
 Cisco-3750ME
 Cisco-49xx
 Cisco-MWR29xx
 Cisco-3400ME

Installing Cisco-NCCM_Core-v2.1.0.0.jar...

Gathering information from /export/home/network38/Main/drivers/

It is not recommended to install Cisco-NCCM_Core version 2.1.0.0 since the following drivers are incompatible with it:

Cisco-NCCM_IOX

Would you like to continue anyway? (yes/no) [Default: no] **Yes**

It is not recommended to install Cisco-Nexus70xx version 2.1.0.0 since the following drivers are incompatible with it:

Cisco-NCCM_Core
Cisco-NCCM_IOX

Would you like to continue anyway? (yes/no) [Default: no] **yes**

Installing Cisco-NCCM_Core -

Please note that the following I-VNEs are mandatory and will be installed:

```
-----
Name                               Driver File Name                    Version    Device
Package
Cisco-NCCM_Core                     Cisco-NCCM_Core-v2.1.0.0.jar        2.1.0.0    Cisco-
ANA3.8.x-DP0
Cisco-Nexus70xx                     Cisco-Nexus70xx-v2.1.0.0.jar        2.1.0.0    Cisco-
ANA3.8.x-DP0
```

Would you like to continue? (yes/no) [Default: yes] **yes**

Note that if you try to reinstall a VNE driver jar file that has been already updated on the server, you will see a message that says “Installation was partially successful,” because the file already exists. For example:

```
Installing Cisco-NCCM_IOX-ANA3.7.X-v1.0.jar...
Gathering information from /export/home/network38/Main/drivers/
The same or a newer version of Cisco-NCCM_IOX already exists [current version is:
1.1.0.0].
```

Installation was partially successful. Would you like to continue? (y or n) [default n] **y**

If this occurs, enter **y** to continue with the installation.

- To apply your changes, the installation script prompts you to restart the Cisco ANA gateway. Enter **yes** at the prompt. (If you enter **no**, you must restart Cisco ANA at a later time or your changes will not be applied. See Section 8.)

```
Removing old drivers from units... Done.
Installation completed successfully.
- Collecting images from drivers.Restarting Prime Network...
Stopping Prime Network Web Server...
Stopping AVMs...Done.
Starting Prime Network Gateway.....Done.

Independent VNE installation is now complete.
```

6 Verifying the DP Installation

- Log in to the Cisco ANA gateway server as *networkuser*.
- On the gateway server, go to the \$ANAHOME/Main/drivers directory. (In this procedure, \$ANAHOME is /export/home/network38.)

```
% cd $ANAHOME/Main/drivers
```

3. Start the installation script:

```
% ivne
```

```

Cisco Prime Network Independent VNE Driver Installer

1 Install independent VNE drivers from Device Package tar file (recommended).
2 Install independent VNE driver jar file from a web repository.
3 Install independent VNE driver jar file from a local folder
4 Rollback to a previous independent VNE driver installation.
5 List the existing drivers and their versions.
q Quit.

```

4. Choose option 5 (*List the existing drivers and their versions*) and press Enter at the prompt. The installation script creates a log and lists the drivers that exist in \$ANAHOME/Main/drivers. (In this procedure, \$ANAHOME is /export/home/network38.)

Note: Cisco and third party VNE driver files will be listed here. Cisco VNE driver files have a **Cisco-** prefix in the filename.

```
- Writing log to /export/home/network38/Main/drivers/ivne-install-log-022311-012757
Gathering information from /export/home/network38/Main/drivers/
```

Device Package name in the last column indicates the Device package version in which the jar version was revised.

Name	Driver File Name	Version	Device Package
Cisco-12xxx	Cisco-12xxx-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-70xx	cisco-70xx-v2.1.2.0.jar	2.1.2.0	Cisco-ANA3.8.x-DP4
Cisco-76xx_65xxIOS	Cisco-76xx_65xxIOS-v2.4.0.0.jar	2.4.0.0	Cisco-ANA3.8.x-DP4
Cisco-ASR10xx	Cisco-ASR10xx-v2.3.0.0.jar	2.3.0.0	Cisco-ANA3.8.x-DP4
Cisco-ASR5000	Cisco-ASR5000-v2.3.1.0.jar	2.3.1.0	Cisco-ANA3.8.x-DP4
Cisco-ASR903	Cisco-ASR903-v2.2.0.0.jar	2.2.0.0	Cisco-ANA3.8.x-DP4
Cisco-ASR90xx	Cisco-ASR90xx-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-CPT	Cisco-CPT-v2.4.0.0.jar	2.4.0.0	Cisco-ANA3.8.x-DP4
Cisco-CRS	Cisco-CRS-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-Commons	Cisco-Commons-v2.4.0.0.jar	2.4.0.0	Cisco-ANA3.8.x-DP4

Cisco-IOX-Commons	Cisco-IOX-Commons-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-ME36XX- ME38XX	Cisco-ME36XX-ME38XX- v2.1.1.0.jar	2.1.1.0	Cisco-ANA3.8.x-DP4
Cisco-MWR29xx	Cisco-MWR29xx-v2.2.1.0.jar	2.2.1.0	Cisco-ANA3.8.x-DP4
Cisco-NCCM_Core	Cisco-NCCM_Core-v2.2.1.0.jar	2.2.1.0	Cisco-ANA3.8.x-DP4
Cisco-Nexus50xx	Cisco-Nexus50xx-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-Nexus70xx	Cisco-Nexus70xx-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-Others	Cisco-Others-v2.3.1.0.jar	2.3.1.0	Cisco-ANA3.8.x-DP4
Cisco-UBR100xx	Cisco-UBR100xx-v2.1.1.0.jar	2.1.1.0	Cisco-ANA3.8.x-DP4
Mib2	Mib2-v2.1.1.0.jar	2.1.1.0	Cisco-ANA3.8.x-DP4
Cisco-Modules	Cisco-Modules-v2.2.1.0.jar	2.2.1.0	Cisco-ANA3.8.x-DP3
Cisco-Nexus10xx	Cisco-Nexus10xx-v2.2.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP2
Cisco-100xx	Cisco-100xx-v2.0.1.0.jar	2.0.1.0	Cisco-ANA3.8.x-DP1
Cisco-3400ME	Cisco-3400ME-v2.0.1.0.jar	2.0.1.0	Cisco-ANA3.8.x-DP1
Cisco-3750ME	Cisco-3750ME-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-45xx	Cisco-45xx-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-49xx	Cisco-49xx-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-ISR19xx	Cisco-ISR19xx-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-ISR29xx	Cisco-ISR29xx-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-NCCM_IOX	Cisco-NCCM_IOX-v2.1.0.0.jar	2.1.0.0	Cisco-ANA3.8.x-DP1
Cisco-ACE4710	Cisco-ACE4710-v2.0.0.0.jar	2.0.0.0	Cisco-ANA3.8.x-DP0
Cisco-ASA5000	Cisco-asa55xx-v2.0.0.0.jar	2.0.0.0	Cisco-ANA3.8.x-DP0
Cisco-ISR39xx	Cisco-ISR39xx-v2.0.0.0.jar	2.0.0.0	Cisco-ANA3.8.x-DP0
Cisco-12xxx	Cisco-12xxx-v2.2.2.0.jar	2.2.2.0	Cisco-ANA3.8.x-DP4
Cisco-70xx	cisco-70xx-v2.1.2.0.jar	2.1.2.0	Cisco-ANA3.8.x-DP4

Cisco-76xx_65xxIOS Cisco-76xx_65xxIOS-v2.4.0.0.jar 2.4.0.0 Cisco-ANA3.8.x-DP4

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

7 Uninstalling the Cisco Prime Network 3.8 Device Package (Rollback)

The rollback procedure restores the driver configuration files to a previously backed-up version. You will need to provide the full pathname of the backup folder. The rollback script will list the available backups from which you can choose. The rollback procedure consists of two main steps: performing the rollback and verifying that the drivers were removed.

Note: The rollback procedure deletes the VNE driver files under \$ANAHOME/Main/drivers and replaces the files with a backup version. Since the directory contains both Cisco and third-party VNE Drivers , the procedure could affect the third party devices. Therefore you should manually verify the version of any third-party VNE driver files after completing the rollback.

1. Log in to the Cisco ANA gateway server as *networkuser*.
2. On the gateway server, go to the \$ANAHOME/Main/drivers directory. (In this procedure, \$ANAHOME is /export/home/network38.)

Note: “**ivne**” command should be issued from the directory where the backups are stored. If for example , backups are stored under /export/home/network38 /VNEDP-backup directory , change the directory as below.

This step is not necessary if you are running Cisco Prime Network 3.8.0.0.3 and above
(Refer to CSCtu12607 for further details)

```
% cd /export/home/network38/VNEDP-backup
```

3. Start the installation script:

```
export/home/network38/VNEDP-backup % ivne
```

```

192.168.117.133 - PuTTY
Cisco ANA Independent VNE Driver Installer

1 Install independent VNE drivers from a web repository.
2 Install independent VNE drivers from a local folder.
3 Install independent VNE drivers from a Device Package tar.
4 Rollback to a previous independent VNE driver installation.
5 List the existing drivers and their versions.
q Quit.

ana373@anadev-ucs133 [~] * Enter.

```

- Choose option **4** (*Rollback to a previous independent VNE driver installation*) and press Enter at the prompt. The installation script creates a log and prompts you for the full pathname of the folder that contains the backup file with the desired rollback configuration.

```

Writing log to /export/home/network38/Main/drivers/ivne-install-log-011111-181726
- Writing log to /export/home/network38/Main/logs/drivers_rollback-1294750050.log.
Please enter the backup folder: /export/home/network38/VNEDP-backup

```

- To list all backup files that exist in that folder, enter **y** at the prompt:

```

Would you like to view a list of the available files? (y/n) [default n] y

ANA_Drivers_Backup_010711-201901.tar.gz
ANA_Drivers_Backup_020711-180201.tar.gz

```

- Enter (cut and paste) the filename you want to use for the restore operation:

```

Please enter the backup file name: ANA_Drivers_Backup_010711-201901.tar.gz
- Removing contents of /export/home/network38/Main/drivers. [OK]
- Extracting backup archive under /export/home/network38/Main/drivers. [OK]
Removing old drivers from units... Done.
Rollback completed successfully.
- Collecting images from drivers.Restarting Prime Network...
Stopping Prime Network Web Server...
Stopping AVMs...Done.
Starting Prime Network Gateway.....Done.

Independent VNE rollback is now complete

```

8 Verify the installation.

Refer to Section 6 for the procedure.