

# **Installing the Prime Network Gateway and Units Using the Installation Wizard**

This chapter describes how to install the gateway and units using the GUI installation wizard, which is an alternative (and preferred) installation method to the CLI installation.

The following topics are covered in this section:

- Prerequisites for Using the Installation Wizard, page 5-1
- Launching the Installation Wizard, page 5-2
- Installing the Gateway with Embedded Database Using the Installation Wizard, page 5-3
- Installing the Gateway with External Database Using the Installation Wizard, page 5-7
- Installing a Unit Using the Installation Wizard, page 5-11

The installation wizard does not include installation of Operations Reports and the Prime Network Integration Layer.

#### Prerequisites for Using the Installation Wizard

Before you begin, verify that the following prerequisites are met:

- An X client application, such as Xming, is installed on the local machine on which you plan to launch the wizard.
- A Telnet/SSH client, such as PuTTY, is installed on the local machine on which you plan to launch the wizard, and X11 forwarding is enabled.
- All preinstallation tasks for the gateway and unit are completed. See Preparing for the Installation.
- The database files (linuxamd64\_12c\_database\_1of2.zip and linuxamd64\_12c\_database\_2of2.zip) are available in the Cisco Prime Network 5.0 disk 4. The files required for upgrading to Prime Network 4.0 are available in Prime Network 4.0 DVD.
- Use only Oracle 12.1.0.2. This is because all Prime Network 5.0 fresh installation will support only Oracle 12.1.0.2.

#### Launching the Installation Wizard

To launch the installation wizard:

- **Step 1** Launch the X client application (for example, Xming).
- **Step 2** As the root user, launch a terminal on the server where you want to install the Prime Network gateway.
- **Step 3** Insert **Disk 1: New Install** in the DVD drive. (See Installation DVDs, page 1-2).
- **Step 4** Mount the inserted DVD using the **mount** command, and move to the mount directory.
- **Step 5** In the mount directory, locate the install.bin file and run it:

./install.bin

This launches the installation wizard.

- **Step 6** Read the introduction and click **Next**. In the Installation Type window, you can choose the relevant installation:
  - Prime Network gateway with an embedded database. See Installing the Gateway with Embedded Database Using the Installation Wizard, page 5-3.
  - Prime Network gateway with an external database. See Installing the Gateway with External Database Using the Installation Wizard, page 5-7.
  - Unit. See Installing a Unit Using the Installation Wizard, page 5-11

| Cisco Prime Network    |  |
|------------------------|--|
| cisco                  | Installation Type  |
|                        | The Oracle database can be installed as part of this Prime Network installation (embedded) or Prime Network can connect to an external database. |
|                        | Select the component you want to install:  |
|                        | Express - Install Prime Network with Embedded Oracle Database Custom Install Prime Network with External Oracle Database                         |
|                        | Add Unit – Install Additional Unit for Monitoring Additional Devices   |
|                        |  |
|                        |  |
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|                        |  |
| InstallAnywhere Cancel | Previous Next  |

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## Installing the Gateway with Embedded Database Using the Installation Wizard

The following procedure describes how to install a Prime Network gateway and an embedded database using the GUI installation wizard.

- **Step 1** Launch the installation wizard using the install.bin file on Disk 1: New Install. See Launching the Installation Wizard, page 5-2.
- **Step 2** Read the introduction and click **Next**.
- Step 3 In the Installation Type window, select Express Install Prime Network with Embedded Oracle Database and click Next.
- **Step 4** In the next four windows, provide the required user and installation folder information, as follows:

| Field                                   | Enter:  | Notes   |  |  |
|---|---|---|--|--|
| Operating System User Name Window       |   |   |  |  |
| New Operating System<br>user            | A username for the Prime<br>Network operating system.<br>This username will be used<br>when connecting to the<br>gateway using SSH and for<br>other administrative<br>purposes. | This username is used as the basis for the installation directory and the database schema names. We recommend you use <b>pn50</b> . In the documentation, we use <i>pnuser</i> to represent the operating system user variable. |  |  |
| Password                                | A password for the Prime<br>Network operating system<br>user.   | —   |  |  |
| Prime Network User Window               |   |   |  |  |
| Password                                | A password for the Prime<br>Network root user.  | The root username and password are used to<br>log into the Prime Network GUI applications.<br>Enter a password that complies with the<br>password requirements listed in the text box at<br>the top of the screen.              |  |  |
| Operating System "root" Password Window |   |   |  |  |
| Password                                | A password for the operating system root user.  |   |  |  |
| Installation Folder Window              |   |   |  |  |
| Please choose a folder                  | Select an installation folder<br>or use the default folder.   | The default installation directory is<br>/export/home/OS-User. We recommend you<br>use the default directory. In the<br>documentation, we use \$ <i>NETWORKHOME</i> to<br>represent the installation directory.                 |  |  |

#### Step 5 Click Next.

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**Step 6** Check the Prerequisites Summary window for items that are not marked [OK] and rectify them as needed (for example, add more disk space). Click **Next**.

- **Step 7** In the Gateway Installation Embedded Oracle Database window, enter the gateway IP address to be used for communication with the units, if it is different from the IP address that was automatically identified by the system.
- Step 8 Select Suite-Integrated (if you are using Prime Network with Prime Central), or Standalone.

**Note** For suite-integrated systems, Prime Network Integration Layer must be installed. See Chapter 9, "Installing the Prime Network Integration Layer".

**Step 9** Provide the following information in the Embedded Database windows.

| Embedded Database<br>Field                           | Enter:  | Notes   |
|--|---|---|
| Embedded Database Wind                               | dow (1)   |   |
| Database username                                    | Username for the Oracle<br>database user, if you do not<br>want to use the default<br>username.                         | Default is <b>oracle</b> .  |
| Database Server<br>IP Address                        | IP address of the database<br>server (IPv4 or IPv6). The<br>database server could be the<br>gateway or a remote server. | Default is the IP address of the gateway.   |
| Choose a database<br>profile                         | Select the database profile that represents your setup.   | See Creating an External Oracle Database,<br>page 4-2 for guidelines (the information also<br>applies to embedded databases).<br>Prime Network calculates memory and<br>storage requirements based on this entry. |
| Would you like to<br>enable database<br>auto-backup? | [yes   no]  | If you enter <b>No</b> , you can enable automatic<br>backups later using the <b>emdbctl</b> command.<br>See the Cisco Prime Network 5.0<br>Administrator Guide.   |
| Embedded Database Wind                               | dow (2)   | ·   |
| Database Zip Files<br>Path                           | Path to the directory in which<br>the database zip files are<br>located.  | Default is <i>l</i> .<br>These files must be copied from Disk 4 of the<br>Prime Network 5.0 installation DVDs.  |
| Database Home  | Path to the database home   | Default is <b>/export/home/oracle</b> .   |
| Directory  | directory.  | Must have a minimum of 6 GB of disk space for oracle binaries   |
|  |   | Should not reside under the installation directory (\$ <i>NETWORKHOME</i> ).  |
| Database Data Files<br>Path                          | Path to the directory<br>containing the datafiles<br>( <i>oracle-datafiles-dir</i> )                                    | Default is<br>/export/home/oracle/oradata/anadb.  |
| Redo Logs File Path                                  | Path to the directory containing the redo files.  | Should not reside on the same disk as <i>oracle-datafiles-dir</i> .   |
|  |   | Use ext3 partition mounted with the default mount options.  |

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| Embedded Database<br>Field | Enter:  | Notes   |
|----------------------------|---|---|
| Archive Logs Files<br>Path | Path to the directory<br>containing the archive log<br>files. | Should not reside on the same disk as <i>oracle-datafiles-dir</i> . |
| Backup Data Files<br>Path  | Path to the directory<br>containing the backup data<br>files. | Should not reside on the same disk as <i>oracle-datafiles-dir</i> . |

- **Step 10** If you selected Suite-Integrated, you will be required to enter information enabling communication with Prime Central, including the Prime Central database server IP address, database port, database SID, database username and password. Click **Next**.
- **Step 11** In the Operations Reports Database (Infobright) windows, enter the information that will enable connection to the server on which the Infobright database is located and the folders for the Infobright data, then click **Next**.

| Field  | Enter:                          | Notes |
|--|---------------------------------|-------|
| Operations Reports Database (Infobright) Window          |                                 |       |
| Infobright Database<br>Server IP Address                 |                                 |       |
| Root user password for SSH connection                    |                                 |       |
| Infobright database<br>server port                       |                                 |       |
| Archive history size                                     |                                 |       |
| Backup history size                                      |                                 |       |
| Would you like to<br>enable backup files<br>creation?    |                                 |       |
| <b>Operations Reports Databa</b>                         | ase (Infobright) Folders Window |       |
| Path to folder for<br>Infobright database<br>data        |                                 |       |
| Path to folder for<br>Infobright database<br>cache data  |                                 |       |
| Path to folder for<br>Infobright database<br>backup data |                                 |       |
| Path to folder for<br>Infobright DLP<br>staging area     |                                 |       |



## Installing the Gateway with External Database Using the Installation Wizard

The following procedure describes how to use the GUI installation wizard to install a Prime Network gateway that is connected to an external database.

- **Step 1** Launch the installation wizard using the install.bin file on Disk 1: New Install. See Launching the Installation Wizard, page 5-2.
- **Step 2** Read the introduction and click **Next**.
- Step 3 In the Installation Type window, select Custom: Install Prime Network with External Oracle Database and click Next.
- **Step 4** Provide the required user and installation folder information.

| Field                            | Enter:  | Notes   |  |  |
|----------------------------------|---|---|--|--|
| <b>Operating System Username</b> | Operating System Username Window  |   |  |  |
| New Operating System<br>User     | A username for the Prime<br>Network operating system.<br>This username will be used<br>when connecting to the<br>gateway using SSH and for<br>other administrative<br>purposes. | This username is used as the basis for the installation directory and the database schema names. We recommend you use <b>pn50</b> . In the documentation, we use <i>pnuser</i> to represent the operating system user variable. |  |  |
| Password                         | A password for the Prime<br>Network operating system<br>user.   | —   |  |  |
| Prime Network User Window        | I   |   |  |  |
| Password                         | A password for the Prime<br>Network root user.  | The root username and password are used to<br>log into the Prime Network GUI applications.<br>Enter a password that complies with the   |  |  |
|                                  |   | password requirements listed in the text box at the top of the screen.  |  |  |
| Operating System "root" Pas      | sword Window  |   |  |  |
| Password                         | A password for the operating system root user.  |   |  |  |
| Installation Folder Window       |   |   |  |  |
| Please choose a folder           | pn-installation-dir   | The default installation directory is<br>/export/home/OS-User. We recommend you<br>use the default directory. This default home<br>directory is referred to as<br>\$NETWORKHOME.  |  |  |

Step 5 Click Next.

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**Step 6** Check the Prerequisites Summary window to see if any items do not say [OK] and rectify them as needed (for example, add more disk space). Once verified, click **Next**.

- **Step 7** In the Gateway Installation window, enter the gateway IP address to be used for communication with the units, if it is different from the IP address that was automatically identified by the system.
- Step 8 Select Suite-Integrated (if you are using Prime Network with Prime Central), or Standalone.

- **Note** For suite-integrated systems, Prime Network Integration Layer must be installed. See Chapter 9, "Installing the Prime Network Integration Layer."
- **Step 9** Provide the following information in the External Database window.

| External Database Field                                   | Enter:                             | Notes  |
|---|------------------------------------|--|
| Database Server<br>IP Address                             | IP address of the database server. |  |
| Database Port   | oracle-listener-port               | Default port is 1521.  |
| SID   | oracle-SID                         |  |
| Database Administrator<br>User Name                       | oracle-admin-user                  | Database user who can perform administrative tasks.  |
| Database Administrator<br>Password                        | oracle-admin-password              |  |
| Database Data Files Path                                  | oracle-datafiles-dir               |  |
| Does your database<br>require an encrypted<br>connection? | [yes   no]                         | If you answer <b>yes</b> , you will be prompted for<br>encryption method and algorithm after clicking<br><b>Next</b> . |
| Do you want<br>Prime Network to create<br>the users?      | [yes   no]                         | If you answer <b>yes</b> , Prime Network will create<br>the database users with default usernames.                     |

- **Step 10** If you specified that your database needs encryption, you are prompted for an encryption method and algorithm:
  - Encryption Method—Accepted, Requested, or Required (default is Required).
  - Encryption Algorithm—Choose from the drop-down list.
- **Step 11** If you specified that you did *not* want Prime Network to create the database users, the External Database User Configuration window opens.

| External Database User<br>Configuration Field | Enter                     | Notes                            |
|---|---------------------------|----------------------------------|
| Database schema "main"<br>Username            | <i>name</i> , e.g., PN5.0 |                                  |
| Database schema "dwe"<br>Username             | name_dwe                  | For example, PN5.0_dwe           |
| Database Administrator<br>Username            | name_ <b>admin</b>        | Name for admin database schema   |
| Database Reports main<br>username             | name_rep                  | Name for reports database schema |

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| External Database User<br>Configuration Field | Enter       | Notes  |
|---|-------------|--|
| Database schemes passwords                    | password    | Password used for all schemas except the Event Archive |
| Database EP schema<br>username                | name_ep     | Name for Event Archive database schema                 |
| Database EP Reports<br>username               | name_ep_rep | Name for older reports database schema                 |
| Database EP Schema<br>Password                | ep-password | Password for Event Archive schema                      |

- **Step 12** If you selected Suite-Integrated, you will be required to enter information enabling communication with Prime Central, including the Prime Central database server IP address, database port, database SID, database username and password.
- **Step 13** In the Operations Reports Database (Infobright) windows, enter the information that will enable connection to the server on which the Infobright database is located and the folders for the Infobright data, then click **Next**.

| Field  | Enter:  | Notes  |
|--|---|--|
| Operations Reports Database (Infobright) Window          |   |  |
| Infobright Database<br>Server IP Address                 |   |  |
| Root user password for SSH connection                    |   |  |
| Infobright database<br>server port                       |   |  |
| Archive history size                                     |   |  |
| Backup history size                                      |   |  |
| Would you like to<br>enable backup files<br>creation?    |   |  |
| Estimate your<br>database profile                        | Select the database profile that represents your setup. | See Creating an External Oracle Database, page 4-2 for guidelines. |
| <b>Operations Reports Databa</b>                         | ase (Infobright) Folders Window                         |  |
| Path to folder for<br>Infobright database<br>data        |   |  |
| Path to folder for<br>Infobright database<br>cache data  |   |  |
| Path to folder for<br>Infobright database<br>backup data |   |  |
| Path to folder for<br>Infobright DLP<br>staging area     |   |  |



Operations Reports are only available to customers with Operations Reports license prior to May 2018. For re-installation of Operations Reports contact a Cisco customer support representative.

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Step 14 In the Installation Setup Summary window, review and verify the information.

**Step 15** Click **Install**. The installation procedure will take between 20-50 minutes to complete. When the installation is complete, you will receive a message indicating this. If the installation fails, you will receive a message with details about the failure. The following logs are available:

- Installation logs—/var/adm/cisco/prime-network/logs/.
- Configuration logs—\$NETWORKHOME/Main/logs.

### Installing a Unit Using the Installation Wizard

The following procedure describes how to install an additional unit using the GUI installation wizard.



Ensure that the OS version of unit and gateway is same while adding the unit to the gateway.



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Before starting the unit installation, ensure that the gateway to which the unit will be connected is up and running.

- **Step 1** Launch the installation wizard using the install.bin file on Disk 1: New Install. See Launching the Installation Wizard, page 5-2.
- **Step 2** Read the introduction and click **Next**.
- Step 3 In the Installation Type window, select Add Unit and click Next.
- **Step 4** Provide the required user and installation folder information.

| Field                         | Enter:   | Notes  |  |
|-------------------------------|--|--|--|
| Set OS User Window            |  |  |  |
| Operating System User<br>Name | The same operating system<br>username as is configured<br>for the gateway. | —  |  |
| Password                      | OS-User-password   | —  |  |
| PN Administrator User Wind    | PN Administrator User Window   |  |  |
| PN Administrator User<br>Name | admin-username   | User name of the administrator user for access to the various Prime Network applications.                              |  |
| Password                      | admin-password   | This is the password for the Prime Network<br>admin user, which is used to log into the Prime<br>Network applications. |  |
| Installation Folder Window    |  |  |  |
| Please choose a folder        | The path to the installation directory.                                    | This should be the same installation folder as was specified for the gateway.  |  |

- **Step 5** Check the Prerequisites Summary window to see if any items do not say [OK] and rectify them as needed (for example, add more disk space). Once verified, click **Next**.
- **Step 6** In the Unit Installation window, enter the following:

| Unit Installation Field                      | Enter:  | Notes  |
|--|---|--|
| Gateway IP Address                           | The gateway IP address to<br>be used for communication<br>with the units. | Make sure the gateway is up and running before proceeding. |
| Prime Network User OS<br>Password on Gateway | OS-User-password  |  |
| Unit IP Address                              | unit-ip-address   |  |

| Unit Installation Field                       | Enter:                       | Notes  |
|---|------------------------------|--|
| Mode  | [Active Unit   Standby Unit] | Active units are started after they are<br>added; standby units start when a<br>failover occurs.     |
| Unit Protection                               | [Enable   Disable]           | Enable or disable unit high availability protection.   |
| Unit Name                                     | unit-name                    |  |
| Unit Protection Group                         | unit-protection-group        | The protection group to which the unit belongs.  |
| Main Schema Database<br>IP Address (optional) | FaultDatabase-ip-address     | Providing this information protects<br>against incompatible gateway and<br>database interface types. |

**Step 7** In the Pre-installation Summary window, verify the information.

- **Step 8** Click **Install** to start the Unit installation.
- **Step 9** When the installation is complete, click **Done**.

The following logs are available:

- Installation logs—/var/adm/cisco/prime-network/logs/.
- Configuration logs—\$NETWORKHOME/Main/logs.