



Cisco Wireless Control System Navigator 1.3.64.0 Installation Guide

This chapter describes how to install Cisco Wireless Control System (WCS) Navigator 1.3.64.0. It contains these sections:

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- [System Requirements, page 2](#)
- [Installing Navigator for Windows, page 3](#)
- [Installing Navigator for Linux, page 6](#)
- [Manually Upgrading Navigator, page 9](#)
- [Starting Navigator, page 8](#)
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Prerequisites

Before installing the WCS Navigator, ensure that you have completed the following:

- Met the necessary hardware and software requirements as listed in the [“System Requirements” section on page 2](#) for WCS Navigator.
- Updated your system with the necessary critical updates and service packs.



Note Refer to the latest release notes for information on the service packs and patches required for correct operation of WCS Navigator.

- Obtained a Navigator license. If there is not a license, WCS Navigator will not run and will provide an error message indicating that a license cannot be found.

System Requirements

Cisco WCS Navigator for Windows or Linux requires the following:

- Up to 20 WCSs depending on the Navigator license.
- Internet Explorer 6 or Internet Explorer 7.
- 3.2-GHz Intel Dual Core processor with 4-GB RAM and 40-GB minimum of free disk space on your hard drive.



Note The screen resolution should be set to 1024 x 768 pixels for Navigator.

Supported Operating Systems

The following operating systems are supported:

- Windows 2003/SP2 and Windows R2/SP2 32-bit installations with all critical and security Windows updates installed.
Windows 2003/SP2 64-bit installations are not supported.
- Red Hat Linux Enterprise Server 5.0 or 5.1 32-bit operating system installations.
Red Hat Linux Enterprise Server 5.0 or 5.1 64-bit operating system installations are not supported.
- Windows 2003 and Redhat Linux version support on VmWare ESX 3.0.1 version and above.

VmWare must be installed on a system with these minimum requirements:
Quad CPU running 3.16 GHz with 8 GBs RAM and a 200-GB hard drive.

Individual operating systems running WCS Navigator in VmWare must follow the specifications for the size of WCS you intend to use.



Note Cisco Navigator can be installed on Red Hat Linux Enterprise Server 3.0, but it will not be supported in future releases.

Installing Navigator for Windows

This section describes how to install WCS Navigator on a Windows operating system. Before installing WCS Navigator, refer to the [“Prerequisites” section on page 2](#) and the [“System Requirements” section on page 2](#). These sections give an overview of the system requirements and measures that you should take prior to the installation. You must have administrator privileges on Windows. If installing Navigator for Linux, see the [“Installing Navigator for Linux” section on page 6](#).



Note You cannot install the Navigator software if the username used to log into the server contains special characters such as exclamation marks (!). To ensure successful installation, log into the server using a username with no special characters before installing the software.

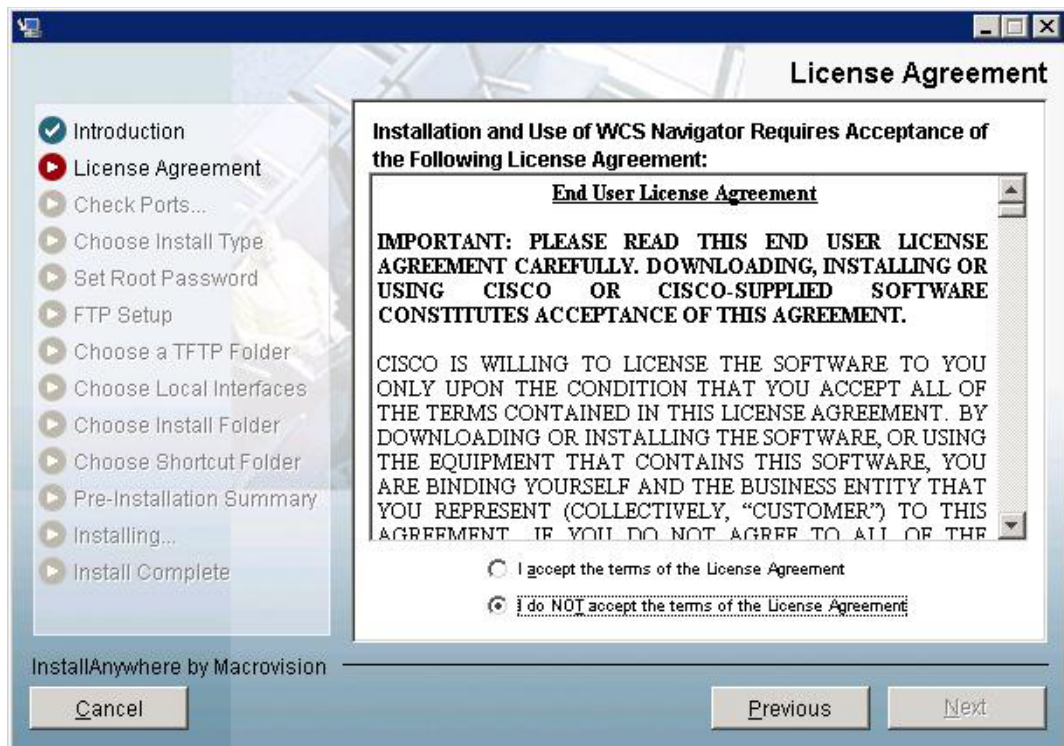


Note WCS Navigator does not support the underscore character (_) in the name of the Windows server running the software. If the server name contains an underscore, you can install the software, but Navigator fails to start.

To install Navigator, follow these steps:

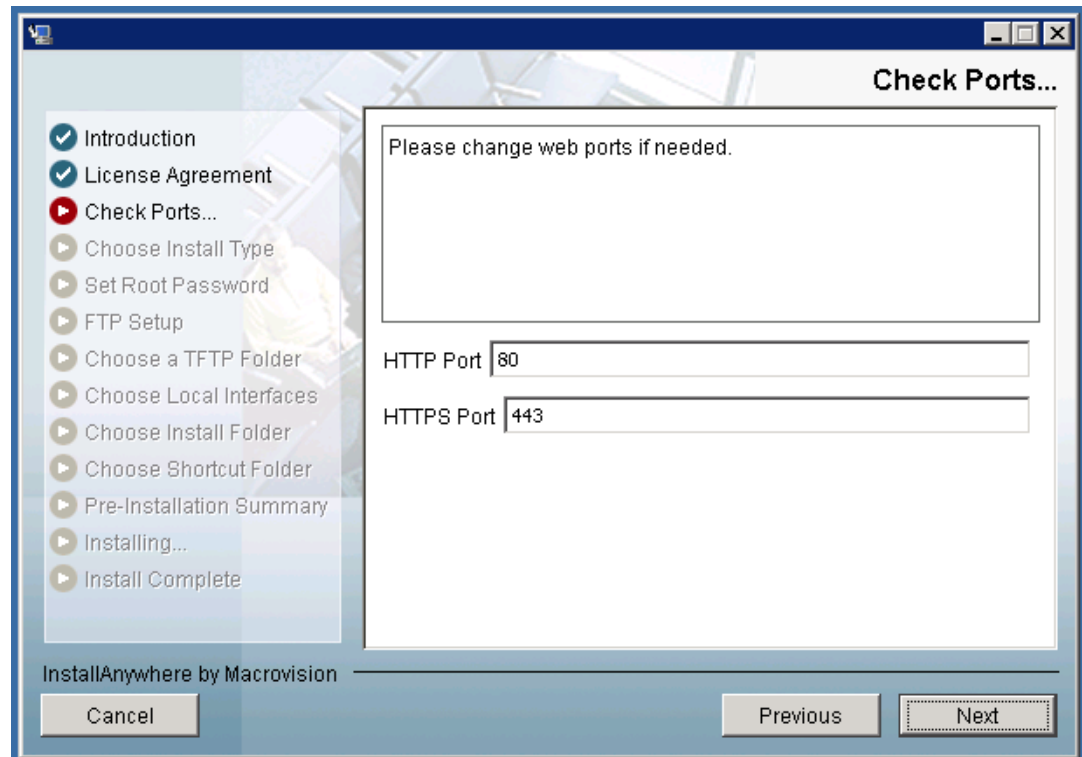
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- Step 1** Double click the NAVIGATOR-K9-1.3.64.0.EXE file that you downloaded from Cisco.com to your local drive.
- Step 2** The Install Anywhere window appears and prepares the system for installation. After a few seconds, the Introduction window appears, followed by the License Agreement window (see [Figure 1](#)). Click **I accept the terms of the License Agreement** to proceed with the installation.

Figure 1 License Agreement



- Step 3** If the install wizard detects a previous version of Navigator, you are prompted to exit the install. When a previous version is detected, you must proceed as an upgrade and follow the steps in the [“Manually Upgrading Navigator”](#) section on page 9 . For a first time install, continue to Step 4.
- Step 4** The Check Ports window appears (see [Figure 2](#)). In the Check Ports window, change the default HTTP and HTTPS ports if necessary and click **Next** to open the Choose Install Type window. The default ports for HTTP and HTTPS are 80 and 442, respectively. Click **Next**.

Figure 2 Check Ports Window



- Step 5** Enter and re-enter the root password. The rules for a strong password are as follows:
- The minimum password length is 8.
 - The password cannot contain the username or the reverse of the username.
 - The password cannot be *Cisco* or *ocsic* (Cisco reversed).
 - The root password cannot be *public*.
 - No character can be repeated more than three times consecutively in the password.
 - The password must contain three of the four following character classes: uppercase, lowercase, numbers, and special characters..
- Step 6** Enter the root FTP password.
- Step 7** From the FTP Server File window, choose a folder in which to store the FTP server files and click **Next** to bring up the TFTP File Server window.



Note Store the FTP server files in a folder outside the main installation folder. This ensures that the FTP server files are not deleted if Cisco Navigator is uninstalled.

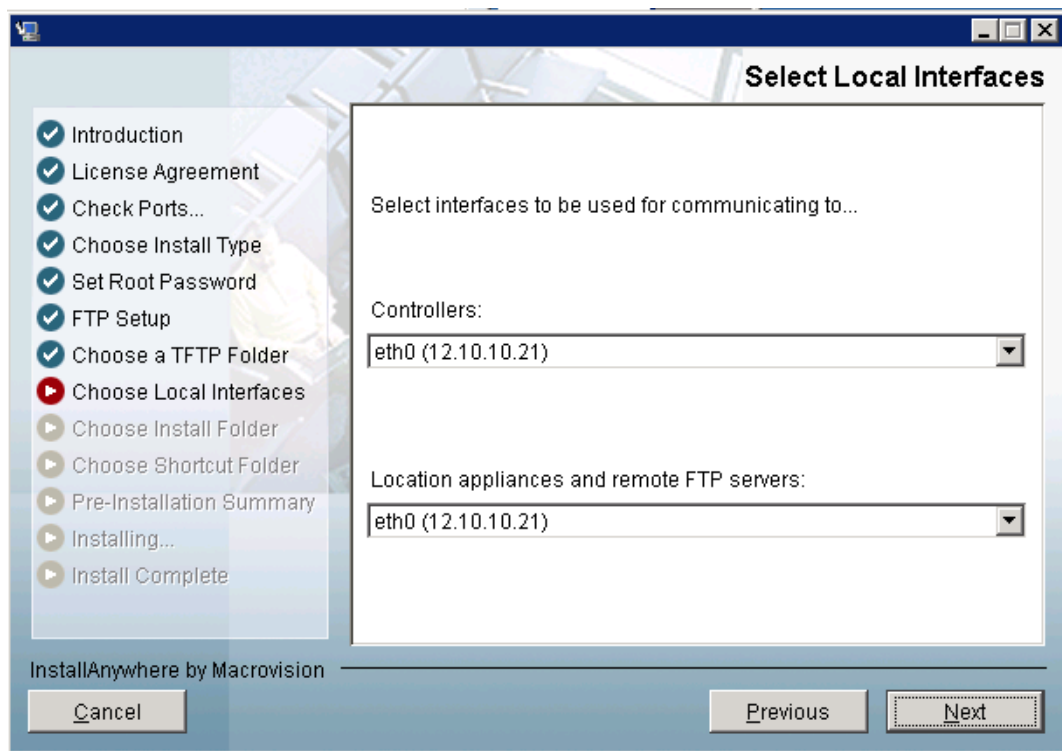
- Step 8** From the TFTP Server File window, choose a folder in which to store the TFTP server files and click **Next**.



Note Store the TFTP server files in a folder outside the main installation folder. This ensures that the TFTP server files are not deleted if WCS Navigator is uninstalled.

- Step 9** If you are installing WCS Navigator on a multi-homed server (a server having multiple interfaces), the installer automatically detects the presence of multiple interfaces. The Select Local Interfaces window appears (see [Figure 3](#)). Choose the interfaces to be used by the server for communicating with WCS. Click **Next**.

Figure 3 *Select Local Interfaces Window*



- Step 10** Choose a folder in which to install the WCS Navigator at the Choose Install Folder window and click **Next** to continue.
- Step 11** Follow the prompts that appear on the screen to complete the installation. After the installation is complete, the Install Complete window appears.
- Step 12** Click **Done** to complete the installation.






Note The system must be rebooted to complete the WCS Navigator installation.

Installing Navigator for Linux

You must have root privileges on Linux. This section describes how to install WCS Navigator on a Linux operating system.

- Step 1** If not already done, log in as root. If you are using a graphical environment, open a terminal window.

- Step 2** Using the command line, switch to the directory that the install file from Cisco.com was downloaded to. For example, if the install file was placed in /root/Desktop, enter **cd /root/Desktop**.
- Step 3** Enter **NAVIGATOR-K9-1.3.64.0.bin** to start the install script.
The install script prepares the install environment displays the license agreement. You are asked to accept the terms of the license agreement.
- Step 4** If the install wizard detects a previous version of Navigator, you are prompted to exit the install. When a previous version is detected, you must proceed as an upgrade and follow the steps in the “[Manually Upgrading Navigator](#)” section on page 9. For a first time install, continue to Step 5.
- Step 5** The Check Ports prompt appears. At the prompt, change the default HTTP and HTTPS ports if necessary. The default ports for HTTP and HTTPS are 80 and 443, respectively.
- Step 6** Enter and re-enter the root password. The rules for a strong password are as follows:
- The minimum password length is 8.
 - The password cannot contain the username or the reverse of the username.
 - The password cannot be *Cisco* or *ocsic* (Cisco reversed).
 - The root password cannot be *public*.
 - No character can be repeated more than three times consecutively in the password.
 - The password must contain three of the four character classes: uppercase, lowercase, numbers, and special characters.
- Step 7** Enter the root FTP password.
- Step 8** Choose a folder in which to store the FTP server files. If the folder does not already exist, you must enter **mkdir** and create it.
-
-  **Note** Store the FTP server files in a folder outside the main installation folder. This ensure that the FTP server files are not deleted if Cisco Navigator is uninstalled.
-
- Step 9** Choose a folder in which to store the TFTP server files. If the folder does not already exist, you must enter **mkdir** and create it.
-
-  **Note** Store the TFTP server files in a folder outside the main installation folder. This ensures that the TFTP server files are not deleted if Cisco Navigator is uninstalled.
-
- Step 10** If you are installing WCS Navigator on a multi-homed server (a server having multiple interfaces), the installer automatically detects the presence of multiple interfaces. Choose the interface to be used by the server for communicating with WCS.
- Step 11** Choose a folder in which to install the WCS Navigator.
- Step 12** Follow the prompts that appear to complete the installation. After the installation is complete, the Install Complete statement appears.
-
-  **Note** You must manually start Navigator after installation.
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Starting Navigator

This section provides instructions for starting Navigator on either a Windows or Linux server.

Starting Navigator on Windows

Follow these steps to start Navigator on Windows.


Note

With Navigator installed as a Windows service, it runs automatically upon system bootup.

Step 1 Log into the system as administrator.

Step 2 Perform one of the following:

- From the Windows Start menu, click **Start > All Programs > WCS Navigator > StartNavigator**.
- From the command prompt, navigate to the Navigator installation directory `C:\Program Files\Navigator1.3\bin>startServer.bat`.

The Navigator Admin window appears and displays messages indicating that it is starting.


Note

With Navigator installed as a service, messages also appear to indicate that the Nms_Server service is starting.

Step 3 Close the Navigator Admin window when the Close button becomes active.

Step 4 Navigator is now ready to host user interfaces (clients).

Starting Navigator on Linux

Follow these steps to start Navigator when it is installed on Linux.


Note

To see the version of Navigator you currently have installed, enter `./opt/Navigator1.3/bin/nmsadmin.shversion`.


Note

With Navigator installed as a Linux service, it runs automatically upon system bootup.

Step 1 Log into the system as root.

Step 2 Using the Linux command line interface (CLI), perform one of the following:

- Navigate to the `/opt/Navigator1.3/bin` directory (or the directory chosen during installation) and enter `./StartNavigator`.
- Navigate to the `/opt/Navigator1.3/bin` directory and enter `./StartNavigator`.

The CLI displays messages indicate that Navigator is starting.

Step 3 Navigator is ready to host user interfaces (clients).

Logging into the Navigator User Interface

Follow these steps to log into the Navigator user interface through a web browser.

Step 1 Launch Internet Explorer 6.0 or later on a different computer than the one on which you installed and started Navigator.



Note Some Navigator features may not function properly if you use a web browser other than Internet Explorer 6.0 on a Windows workstation.

Step 2 In the browser's address line, enter **https://10.1.1.1**, where 10.1.1.1 is the IP address of the computer on which you installed and started Navigator.

Step 3 When the Navigator user interface displays the Login window, enter the root password which was created during installation.

Step 4 Click **Submit** to log into Navigator.

Step 5 After logging in, you need to install the license for Navigator.

You can now add WCS to the Navigator and start using the application.



Note To exit the Navigator user interface, close the browser window or click **Logout** in the upper right corner of the page.

Manually Upgrading Navigator

Follow these steps to manually upgrade Navigator on a Windows server.

Step 1 If possible, stop all Navigator user interfaces to stabilize the database.

Step 2 Back up the Navigator database. Refer to the [“Backing Up the Navigator Database \(for Windows\)” section on page 10](#) or the [“Backing Up the Navigator Database \(for Linux\)” section on page 10](#).

Step 3 Uninstall the Navigator application. Refer to the [“Uninstalling Navigator on Windows” section on page 11](#) or the [“Uninstalling Navigator on Linux” section on page 11](#).

Step 4 Install the new version of Navigator by following the instructions in the [“Installing Navigator for Windows” section on page 3](#) or the [“Installing Navigator for Linux” section on page 6](#).

Step 5 Restore the Navigator database by following the instructions in the [“Restoring the Navigator Database \(for Windows\)” section on page 11](#) or the [“Restoring the Navigator Database \(for Linux\)” section on page 12](#).

Backing Up the Navigator Database (for Windows)

Follow these steps to back up the Navigator database on a Windows server.

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- Step 1** Log into the system as administrator.
- Step 2** Create a backup directory for the Navigator database with no spaces in the name.
- Step 3** Perform one of the following:
- Follow these steps from the Windows Start menu:
 - a. Click **Programs > Navigator > Backup**. The Enter Information window appears.
 - b. Browse to the backup directory that you created and choose the filename or enter the full path of the backup directory that you created and a name for the backup file and click **OK**.
 - Follow these steps from the command prompt:
 - a. Navigate to the Navigator installation directory (\bin).
 - b. Enter **DBAdmin backup *backup-filename***, where *backup-filename* is the full path of the backup directory that you created plus a name for the backup file.
- The DBAdmin window appears and displays messages indicating the status of the backup.
- Step 4** Close the DBAdmin window when the Close button becomes active.
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Backing Up the Navigator Database (for Linux)

Follow these steps to back up the Navigator database on a Linux server.

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- Step 1** Log into the system as root.
- Step 2** Using the Linux CLI, navigate to the /opt/Nav1.3 directory (or any other directory).
- Step 3** Create a backup directory for the Navigator database with no spaces in the name.
- Step 4** Perform one of the following:
- Navigate to the directory chosen during installation and enter **./Backup**. Enter a name for the backup file when prompted.
 - Navigate to the directory chosen during installation and enter **DBAdmin backup *backup-filename***, where *backup-filename* is the full path of the backup directory that you created plus a name for the backup file.
 - Using KDE or X-Windows, enter **DBAdmin -gui backup**, browse to the backup directory, and choose the file.

The CLI displays messages indicating the status of the backup.

Uninstalling Navigator on Windows

Follow these steps to uninstall Navigator on a Windows server.

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- Step 1** Log into the system as administrator.
 - Step 2** From the Windows Start menu, click **Programs > Navigator > Uninstall Navigator**.
 - Step 3** When the Uninstall Navigator window appears, click **Uninstall**.
 - Step 4** Follow the instructions on the window to continue the uninstall process.
 - Step 5** When the Navigator Uninstaller window indicates that the program is uninstalled, click **Finish** to close the window.
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Uninstalling Navigator on Linux

Follow these steps to uninstall Navigator on a Linux server.

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- Step 1** Stop Navigator.
 - Step 2** Log into the system as root through an X terminal session.
 - Step 3** Using the Linux CLI, navigate to the directory chosen during installation.
 - Step 4** Enter `./UninstallNav`.
 - Step 5** Click **Yes** to continue the uninstall process.
 - Step 6** Click **Finish** when the uninstall process is complete.
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Restoring the Navigator Database (for Windows)

Follow these steps to restore the Navigator database from a backup file on a Windows server.

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- Step 1** Log into the system as administrator.
 - Step 2** Perform one of the following:
 - Follow these steps from the Windows Start menu:
 - a. Click **Start > Programs > Navigator > Restore**. The DBAdmin and Enter Information window appears.
 - b. Browse to the backup directory that you created and choose the filename or enter the full path and filename of the backup file and click **OK**.
 - Follow these steps from the command prompt:
 - a. Navigate to the Navigator installation directory.
 - b. Enter `DBAdmin restore backup-filename`, where *backup-filename* is the full path and filename of the backup file.
 - Step 3** Click **Yes** if a message appears indicating that Navigator is running and needs to be shut down.

- Step 4** The DBAdmin window appears and displays messages indicating that Navigator is shutting down (if applicable) and the Navigator database is being restored. Close the DBAdmin window when the Close button becomes active.



Note If the restore process shuts down Navigator, a restart is attempted after a successful restore.

Restoring the Navigator Database (for Linux)

Follow these steps to restore the Navigator database from a backup file on a Linux server.

- Step 1** If possible, stop all Navigator user interfaces to stabilize the database.
- Step 2** Log into the system as root.
- Step 3** Using the Linux CLI, perform one of the following:
- Navigate to the directory chosen during installation and enter **./Restore** to start the restoration process. Enter the backup filename when prompted.
 - Navigate to the directory chosen during installation and enter **DBAdmin restore backup-filename**, where *backup-filename* is the full path and filename of the backup file.
- Step 4** Click **Yes** if a message appears indicating that Navigator is running and needs to be shut down.
- Step 5** The DBAdmin window appears and displays messages indicating that Navigator is shutting down (if applicable) and the Navigator database is being restored. Close the DBAdmin window when the Close button becomes active.



Note If the restore process shuts down Navigator, a restart is attempted after a successful restore.

The CLI displays messages indicating that the Navigator database is being restored.
