

# Quick Installation Manual for Windows Drivers

FC/FCoE Version 2.74.014.001

NIC Version 4.6.142.8

iSCSI Version 4.6.130.0

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Emulex, 3333 Susan Street

Costa Mesa, CA 92626

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# 1. Introduction

#### **OneInstall Installer**

A single download package, OneInstall Installer (OneInstall), contains all of the Emulex<sup>®</sup> Windows drivers (Emulex Storport Miniport and Network Driver Interface Specification [NDIS] Miniport drivers) and the OneCommand<sup>®</sup> Manager (OCM) application. OneInstall is available for download from the Emulex website. The limitation of the single package is that you cannot perform pre-installation tasks, unattended installations, or text-only installations. For these tasks, use the AutoPilot Installer.

For instructions on loading the OneInstall Package, see "Loading OneInstall" on page 7.

To learn more about the OCM application, refer to the user manual available on the Emulex website.

#### AutoPilot Installer

For installing individual drivers and specific utilities, AutoPilot Installer<sup>®</sup> provides installation options that include simple installations, unattended installations that use predefined script files, and text-only installations. Emulex drivers and utilities include AutoPilot Installer in the Windows executable files (kit installers) that you can download from the Emulex website.

This driver package contains x86 and x64 drivers and installs the correct files based on the adapters in your system.

- Fibre Channel (FC) driver package (elxdrvr-fc-<version>.exe)
- Fibre Channel over Ethernet (FCoE) driver package (elxdrvr-fcoe-<version>.exe)
- Internet Small Computer System Interface (iSCSI) driver package (elxdrvr-iscsi-<version>.exe)
- Ethernet or Network Interface Card (NIC) driver package (elxdrvr-nic-<version>.exe)
- **Note:** Updating the NIC protocol driver may temporarily disrupt operation of any NIC teams configured on the system.
- **Note:** AutoPilot Installer is not supported for Windows PE. Consult the Windows Automated Installation Kit (WAIK) documentation on including drivers with your Windows PE images.

You can install the driver by any of the following methods:

Note: These installation methods are not mutually exclusive.

- **Hardware-first installation**. At least one Emulex adapter must be installed before you can install the Emulex drivers and utilities.
- **Software-first installation**. You can install drivers and utilities using AutoPilot Installer prior to the installation of any adapters. You do not need to specify the adapter models to be installed later. The appropriate drivers and utilities automatically load when you install the adapters.
- Utility Only installation. If the drivers in the driver kit share the same version with those already installed on the system, you can reinstall or update the previously installed utility without reinstalling the drivers.
- **Text-Only installation**. Text-based installation mode is used automatically when AutoPilot Installer is run on a Server Core system.
- Network installation. You can place the driver kit installers on a shared network drive and install them across your local area network (LAN). Network-based installation is often used in conjunction with unattended installation and scripting. This allows you to configure and install the same driver and utility versions on all the hosts in a storage area network (SAN).
- Unattended installation. You can run the driver kit installers and AutoPilot Installer with no user interaction from a command line or script. Unattended installation works for both hardware-first and software-first installations and all driver kits. An unattended installation operates in silent mode (sometimes referred to as quiet mode) and creates an extensive report file with installation status.
- **Note:** Complete driver and utilities documentation may be downloaded from the Emulex website (www.emulex.com). Click **Downloads** at the top of the web page and navigate by clicking the appropriate links.

## **Operating System Requirements**

One of the following operating systems must be installed on an x 86 or x64 server with a minimum of 512 megabytes (MB) of memory:

- Windows Server 2008: x86 or x64 versions, Enterprise and Server Core installation
- Windows Server 2008 R2, and Windows Server 2012: x64 versions, Enterprise and Server Core installation
- Windows 7 Ultimate, Enterprise, or Professional edition (x64 only; supported on only OneConnect<sup>™</sup> OCe1110x Universal Converged Network Adapters [UCNAs])
- Windows Pre-installation Environment (PE) 2.x, 3.x, or 4.x.
- **Note:** AutoPilot Installer is not supported for Windows PE. See the Windows Automated Installation Kit (WAIK) documentation on including drivers with your Windows PE images.
- **Note:** Check the Emulex website for required updates to the Windows operating system or the Emulex drivers.

## Compatibility

For a complete list of adapters that are compatible with these drivers, see the driver's Downloads page on the Emulex website. For compatible firmware versions, see the Downloads page for the specific adapter.

# **Changing Driver Types**

If you currently use a SCSIport Miniport or FC Port driver, the driver is replaced when you install the Emulex Storport Miniport FC driver. The Emulex Storport Miniport FC driver is installed for all adapters on the server. You also lose your customized driver parameters, persistent bindings, LUN masking and LUN mapping. The default parameters set with AutoPilot Installer are usually the best options. However, you may want to note your current settings before you install the Emulex Storport Miniport driver. After the installation, you can then update your customized driver parameters.

**Note:** This update process can leave files associated with old driver kits on your system. After running AutoPilot Installer and restarting your system, you may be required to uninstall old driver or utility program entries. Follow the procedures in the "Uninstalling Programs" section in the Emulex Driver for Windows User Manual. Ensure you delete only previous driver and utility versions.

# 2. OneInstall Installer Overview

OneInstall is an executable file that self-extracts and copies the following software onto your system:

- All compatible protocol drivers to manage communication and data transfer between applications and I/O devices, using Emulex adapters as agents. There are four separate drivers for Emulex adapters: FC, FCoE, iSCSI, and Ethernet.
- ElxPlus driver Supports the OneCommand Manager application, persistent binding and LUN mapping and masking.
- OneCommand Manager application for the Emulex adapters.

# Loading OneInstall

- 1. Navigate to the location of the OneInstall package that you downloaded to your hard drive.
- 2. Double-click on the OneInstall package. The Welcome screen appears.
- 3. Click Next. The Installation options screen appears.
- 4. Select the drivers and application that you want to install. Click Next.

A progress screen appears while the OneInstall installer loads the selected drivers and applications. When the drivers and application software are loaded, an Installation completed screen appears.

5. Click Finish.

# 3. Driver Kit Installer Overview

The driver kit installer is an executable file that self-extracts and copies the following software onto your system:

- The protocol driver There are four separate drivers for Emulex adapters: FC, FCoE, iSCSI, and Ethernet.
- ElxPlus driver Supports the OneCommand Manager application, persistent binding and LUN mapping and masking.

If you are creating Windows PE disk images or performing boot from SAN installation, you must select the **Unpack All Drivers** option instead of running AutoPilot Installer. See step 2 of Installing the Driver Kit in the following procedure.

After the driver kit is installed, you have two options:

- Automatically run AutoPilot Installer immediately. This is the default option. See Option 1 on page 10 for more information.
- Explicitly run AutoPilot Installer later on your system. See Option 2 on page 10 for more information.

#### Installing the Driver Kit

To install the driver kit:

- 1. Do one of the following:
  - Download and install the OneInstall package from the Emulex website to your system. The driver kit installer is downloaded at part of this single package.
  - Download the driver kit installer from the Emulex website to your system.

**Note:** The name of the driver kit installer depends on the current version identifier.

- If you plan to create Windows PE disk images or perform boot from SAN installations, unpack all drivers. On the driver kit installer Welcome page, select the Unpack all drivers check box. Checking this check box unpacks all the drivers into the 'My Documents' directory.
- 3. Choose one of three options:
  - For an automatic interactive installation, see "Option 1: Automatically Run AutoPilot Installer" on page 10.
  - For control of all interactive installation settings, see "Option 2: Run AutoPilot Installer Separately" on page 10.
  - For an unattended installation with AutoPilot Installer, see the Emulex Driver for Windows User Manual.

#### **Text-Only Installation Overview**

Text-based installation mode is used automatically when AutoPilot Installer runs on a server with the Server Core installation option of Windows Server. During text-based installations, AutoPilot Installer interacts through a command prompt window. AutoPilot Installer notifies you when the driver is installed and also gives you a chance to abort the installation.

Whether AutoPilot Installer is launched from the command line or started programmatically, Windows always starts AutoPilot Installer as a separate stand-alone task. This means that AutoPilot Installer has its own command prompt window and cannot access others.

# 4. AutoPilot Installer Overview

AutoPilot Installer includes command line installation, compatibility verification, driver installation, silent installation, driver diagnostics, and adapter management. AutoPilot Installer runs after the driver kit is installed. It can be run by:

- Continuing the installation process after the driver kit installation completes.
- Interactive installation at a later time.
- Unattended installation (see the *Emulex Driver for Windows User Manual* for more information).

## **Running a Software Installation Interactively**

There are two options when performing an installation interactively. These options assume you have already downloaded the driver kit installer from the Emulex website.

#### **Option 1: Automatically Run AutoPilot Installer**

Use this option unless you have specific configuration needs. This option allows you to complete a driver kit installation and AutoPilot installation with a few simple mouse clicks.

- 1. Double-click the driver kit installer. A Welcome page is displayed with driver kit version information and Emulex contact information. (Refer to the *Emulex Driver for Windows User Manual* for information on command line installations.)
- 2. Click **Next** to proceed to the Installation Options page.

For each installation option, the default installation location for that option is displayed. Browse to a different location, if desired.

3. Click **Install** to continue the installation.

The Progress dialog box is displayed. After all tasks complete, a Finish page is displayed. The Start AutoPilot Installer box is automatically selected.

- 4. Click **Finish**. AutoPilot Installer is run automatically. AutoPilot Installer completes one of the installations:
  - Hardware-First Installation or Driver and Utility Update (see page 11).
  - Software-First Installation (see page 12).

#### **Option 2: Run AutoPilot Installer Separately**

This option is recommended to:

- Change installation settings for a limited number of systems.
- Familiarize yourself with AutoPilot Installer configuration options.

Run AutoPilot Installer after the driver kit installation is complete. This allows you to change the configuration options supplied to AutoPilot Installer (see below).

- 1. Perform steps 1 through 3 for Option 1.
- 2. Clear the **Run AutoPilot Installer** check box on the Finish page.

3. Click **Finish**. The driver kit installer exits.

After the driver kit installation is complete, change the configuration by changing the configuration file or entering parameters on the command line (see the *Emulex Driver for Windows User Manual* for more information).

Once you have finished this step, you can run AutoPilot Installer at a later time, using either of the following methods: (If you are supplying options via the command line, run AutoPilot Installer from the command line.)

- Select **Programs>Emulex>AutoPilot Installer** in the Start menu.
- Run AutoPilot Installer from a command line by running:

C:\Program Files\Emulex\AutoPilot Installer\APInstall.exe

**Note:** The location of APInstaller.exe may differ on your system, depending on your system's Program Files location. You may also specify a different location when you install the driver package.

## Hardware-First Installation or Driver Update

The driver kit installer must be downloaded from the Emulex website and installed.

- **Note:** Updating the NIC protocol driver may temporarily disrupt operation of any NIC teams configured on the system.
- Note: To update the Emulex protocol drivers, begin this procedure at step 2.

To perform a hardware-first installation:

- 1. Install a new Emulex adapter and power-on the system. If the Windows Found New Hardware wizard is displayed, click **Cancel** to exit. AutoPilot Installer performs this function.
  - **Note:** If there are multiple adapters in the system, the Windows Found New Hardware wizard appears multiple times. Click **Cancel** to exit the wizard each time it appears.
- 2. Run AutoPilot Installer using any of the options listed in "Running a Software Installation Interactively" on page 10.
- 3. When the AutoPilot Installer Welcome page appears, select an adapter in the list and click **Next**. Installation continues. Specific considerations:
  - If you are replacing a SCSIport Miniport or FC Port driver, an Available Drivers list is displayed. Click **OK** on this window.
  - If you are updating the driver and the utility, the existing management modes and port settings are used, unless otherwise specified in the configuration file. These settings are pre-selected but can be changed. Set or change settings, then click **Next**.
  - If you are initially installing a vendor-specific version of the Emulex driver installation program, a Driver Configuration page may be displayed. This page includes one or more windows with questions that you must answer before

continuing the installation process. In this case, answer each question and click **Next** on each window to continue.

- 4. Click **Next**. Installation automatically completes. A dialog box is displayed if Windows requires a reboot. Once the installation is successful, a Finish page appears.
- 5. View or print a report, if desired.
  - View Installation Report The installation report is a text file with current Emulex adapter inventory, configuration information and task results.
  - Print Installation Report The Windows print dialog is displayed to select options for printing the installation report.
- 6. Click **Finish** to exit AutoPilot Installer. If the system needs to be rebooted, you are prompted to do so as indicated in step 4; you must reboot before using the drivers or utilities.

#### Software-First Installation

The driver kit installer must be downloaded from the Emulex website and installed on your system. Either the full or core driver package may be installed; only one can be installed on a system.

To perform a software-first installation:

1. Run AutoPilot Installer using any of the options listed in "Running a Software Installation Interactively" on page 10. The following message appears:

AutoPilot	Installer Warning
1	AutoPilot Installer cannot find any Emulex adapters in this system. AutoPilot Installer can perform a driver pre-installation, allowing you to install your adapters later. Click OK to pre-install drivers, or click Cancel to stop the installation.

Figure 4-1 AutoPilot Installer Warning (Software-First Installation)

- 2. Click OK. A Welcome page appears.
- 3. Click **Next**. Installation automatically completes. Once the installation is successful, a Finish Page appears.
- 4. View or print a report, if desired.
  - View Installation Report The installation report is a text file with current Emulex adapter inventory, configuration information and task results.
  - Print Installation Report The Windows print dialog is displayed to select options for printing the installation report.
- 5. Click **Finish** to exit AutoPilot Installer.

# 5. AutoPilot Installation Failure

If the installation fails, the Diagnostics window shows that the adapter failed. If the adapter fails:

- 1. Select the adapter to view the reason why the adapter failed. The reason and suggested corrective action are displayed.
- 2. Perform the suggested corrective action and run AutoPilot Installer again.
  - **Note:** AutoPilot Installer can be run again from the Start menu (Programs>Emulex>AutoPilot Installer) or APInstall.exe can be run from a command prompt.