

Scalability: Streamlining HBA and CNA Installation for the Enterprise

AT A GLANCE

Emulex LightPulse[®] Fibre Channel host bus adapters (HBAs), Fibre Channel over Ethernet (FCoE) converged network adapters (CNAs) and AutoPilot Installer[®] provide unique capabilities that dramatically reduce the time required to deploy HBAs and CNAs in an enterprise-class storage area network (SAN). Using powerful and flexible scripting, IT administrators can automate the installation of drivers and utilities to minimize the Total Cost of Ownership (TCO).

TECHNOLOGY

- Emulex LightPulse HBAs
- Emulex LightPulse FCoE CNAs
- AutoPilot Installer

APPLICATIONS

- Enterprise storage area networks

For enterprise IT administrators, reducing the time and effort required to install and configure Fibre Channel HBAs and FCoE CNAs is one of the critical factors in maximizing enterprise-class scalability and minimizing TCO. Emulex LightPulse adapters and Emulex AutoPilot Installer provide administrators with unique capabilities that simplify adapter installation and configuration for enterprise environments.

AutoPilot Installer begins with a simple wizard for interactive installations. Installation of drivers and utilities for a single LightPulse adapter can be completed in one process, in less than one minute and with only seven mouse clicks. Competitive solutions, such as QLogic adapters, can require more than seven minutes and 55 mouse clicks.

However, installation for a single adapter is only the beginning of the story. Scaling out to a large enterprise involves streamlining the installation process for dozens of adapters across multiple servers, and is often best done by pre-provisioning servers with adapter drivers and software and using replicated installation strategies. For these scenarios, the customizable scripting capability of AutoPilot Installer provides capabilities unmatched by competing products.

Key AutoPilot Installer features include:

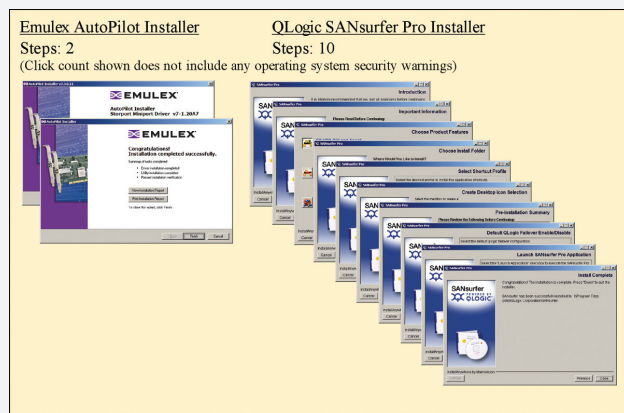
- ▶ **Automated silent installation**—AutoPilot Installer uniquely supports command-line installation that can be included in an automated installation procedure. Default parameters can be changed through a customizable configuration file or in a single step, directly from the command line.
- ▶ **Replicated installation from a reference server**—Only AutoPilot Installer utilizes a configuration file that can reference an installation server that has all the necessary files maintained in a single location for installations throughout the enterprise.



Table 1—Emulex HBAs and CNAs are more suited for large enterprise environments because of the unique ease of installation features in AutoPilot Installer

Scalability Features	Emulex	QLogic
Customizable automated silent installation	✓	
Replicated installation from a reference server	✓	
Single wizard-based installation for drivers & utilities	✓	
Single-instance driver installation for multiple adapters	✓	✓
Software-first installation (preconfigured servers)	✓	

Figure 1—This figure illustrates how much easier it is to install both the drivers and management software using AutoPilot Installer compared to QLogic SANSurfer



- ▶ **One installation for driver and utilities**—Unlike competing HBAs and CNAs that require multiple steps to install device drivers and management utilities, AutoPilot Installer provides one process to install a qualified package of driver and management utilities. A single installation kit provides a complete bundle with all of the components for a successful installation, saving time and ensuring compatibility.
- ▶ **Single-instance driver installation**—The driver is automatically installed or updated for all HBAs or CNAs on a server. This becomes an important time-saver as servers are scaled up for mission-critical applications.
- ▶ **Software-first installation**—Larger enterprises will often prepare servers with a standardized installation of the operating system and device drivers, and then deploy the server when needed. Emulex HBAs and CNAs uniquely support software-first installations that enable the administrator to pre-configure the Emulex LightPulse adapter driver and utilities. When the physical HBAs or CNAs are later installed and Windows is started, the adapters will be detected and the driver and utilities used automatically with no further action needed.

Conclusion

AutoPilot Installer dramatically reduces the time required to deploy adapters in a large-scale SAN. Installations can be automated using customizable script files and reference servers. A single process for installing drivers and utilities and the ability to pre-install software prior to hardware deployment significantly simplify the management of large-scale enterprise SANs. AutoPilot Installer is just one of the reasons why 95 of the Fortune 100 choose Emulex for their mission-critical solutions.

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