

# Emulex<sup>®</sup> Drivers for Windows

## Release 12.8.351.45-1

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### Purpose and Contact Information

These release notes describe the new features, resolved issues, known issues, and technical tips associated with this release of the Emulex<sup>®</sup> drivers for Windows.

For the latest product documentation and for supported driver versions, go to [www.broadcom.com](http://www.broadcom.com). If you have questions or require additional information, contact an authorized Broadcom<sup>®</sup> Technical Support representative at [ecd-tech.support@broadcom.com](mailto:ecd-tech.support@broadcom.com).

### New Features (Version 12.8.351.45-1)

A change was made to support performance optimization.

### New Features (Version 12.8.351.7-3)

Added support for LPe36000 and LPe36002 64Gb/s HBAs.

**NOTE:** The Emulex OneCommand<sup>™</sup> Manager application has been renamed as the Emulex HBA Manager application.

### Resolved Issues (Version 12.8.351.45-1)

There are no resolved issues in this release.

### Resolved Issues (Version 12.8.351.7-3)

There are no resolved issues in this release.

### Known Issues

1. Revision A of the FOIT AFCT-57F3TMZ-ELX (16GFC longwave optic transceiver) does not support D\_Port (also called ClearLink<sup>®</sup>) for Brocade<sup>®</sup> switches and MDS for Cisco switches.
2. Neither Revision A nor Revision B of the FOIT AFCT-57F3TMZ-ELX (16GFC longwave optic transceiver) or the AFCT-57G5MZ-ELX (32GFC longwave optic transceiver) supports D\_Port for Brocade switches.

3. The Emulex HBA Manager application GUI does not currently support NVMe management, except to modify NVMe-specific driver parameters. Refer to the *Emulex HBA Manager Application User Guide* for information about setting driver parameters.
4. The Emulex HBA Manager application CLI does not provide remote support for NVMe commands. The NVMe-specific commands described in the *Emulex HBA Manager Application Command Line Interface User Guide* can only be issued locally from Windows initiators.
5. Windows driver parameters do not persist after a reboot if they are set with Fabric Assigned Port World Wide Name (FA-PWWN) enabled.

**Workaround**

Perform the following steps:

- a. Disable FA-PWWN.
  - b. Reset the port.
  - c. Change the driver parameters using the Emulex HBA Manager application GUI.
  - d. Enable FA-PWWN.
  - e. Reboot the system.
  - f. Verify that the correct driver parameters are used.
6. I/O might fail if the maximum data transfer size (MDTS) of the target NVMe subsystem is smaller than the maximum transfer size of the Windows driver. By default, the maximum transfer size of the Windows driver is set to 512 KB.

**Workaround**

Change the Windows `LimTransferSize` driver parameter to be smaller than or equal to the MDTS of the target NVMe subsystem. The following values apply to this parameter:

- 0 = Use the size of the Windows `ExtTransferSize` driver parameter
- 1 = 64 KB
- 2 = 128 KB
- 3 = 256 KB

The default setting is 0.

You must reboot the computer after changing the value.

Refer to the *Emulex Drivers for Windows User Guide* for more information about the Windows driver parameters.

7. If the configuration on an NVMe target is changed, the Windows NVMe initiator does not discover the changes.

**Workaround**

Disable and reenabte each target port at the switch. These actions allow the switch to discover the changes.

8. When configuring the NVMe target system, you can determine the NVMe qualified name (NQN) of the initiator ports by using the following formula:

```
nqn.2017-01.com.broadcom:ecd:nvmf:fc:<factory WWPN>[:vport WWPN]
```

**NOTE:** Do not include colons (:) when specifying the WWPNs.

9. ExpressLane™ LUN priority settings do not persist after a reboot when using FA-PWWN.

**Workaround**

None.

10. In a Windows Server 2019 operating system, the Windows Defender antivirus is enabled by default, which results in a substantial reduction in read performance.

#### Workaround

Consider other options for antivirus protection, if necessary.

## Technical Tips

1. Update the firmware and drivers to the latest supported versions for your server and storage platform.
2. Certain inbox drivers do not support LPe31000-series and LPe32000-series adapters, as described in the following table.

**Table 1: Operating System and Support for LPe31000-Series and LPe32000-Series Adapters**

Operating System	Support for LPe31000-Series and LPe32000-Series Adapters
Windows Server 2012	No; use the out-of-box driver
Windows Server 2012 R2	No; use the out-of-box driver
Windows Server 2016	Yes
Windows Server 2019	Yes

#### Workaround

Follow the guidelines in the table.

3. On LPe12000-series adapters, if you configure the link speed in a BIOS utility, the link speed might be overridden by the Emulex driver for Windows according to its link speed setting.

#### Workaround

Configure the link speed in both the Emulex driver for Windows and the x86 Boot BIOS or UEFI utility.

4. The Windows information that was provided in the *Emulex NVMe over Fibre Channel User Guide* has been moved to the *Emulex Drivers for Windows User Guide*. Refer to the *Emulex Drivers for Windows User Guide* for the latest information regarding NVMe and the Emulex drivers for Windows.

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