

Emulex® HBA Manager Application for Linux

Release 14.4.393.28-1

Purpose and Contact Information

These release notes describe the supported operating systems, new features, resolved issues, known issues, and technical tips associated with this release of the Emulex® HBA Manager application for Linux.

For the latest product source files and documentation, and supported driver versions, go to www.broadcom.com. If you have questions or require additional information, contact an authorized Broadcom® Technical Support representative at ecd-tech.support@broadcom.com.

Supported Operating Systems

The following table provides the supported Linux operating systems, their supported architectures, and their levels of support in the Emulex HBA Manager application.

Operating Systems	Architecture			Emulex HBA Manager Support	
	x86_64	Arm	ppc64le	Full CLI	Limited CLI ^a
RHEL 8.8 to 8.10 and RHEL 9.3 to 9.5	✓		✓	✓	
RHEL 8.8 to 8.10 and RHEL 9.3 to 9.5		✓			✓
Oracle Linux 8.8 to 8.10 with a UEK 6, 7, 7U1, or 7U2 kernel and Oracle Linux 9.3 to 9.5 with a UEK 7, 7U1, or 7U2 kernel	✓			✓	
SLES 12 SP4 to SP5 and SLES 15 SP4 to SP5	✓		✓	✓	
SLES 15 SP6	✓	✓	✓	✓ (x86_64 and ppc64le)	✓ (Arm)
Ubuntu Server 22.04, 24.04	✓			✓	
Ubuntu Server 22.04, 24.04		✓	✓		✓
FusionOS 22.0.1, 23.0.1	✓				✓
FusionOS 22.0.4.9, 23.0.1		✓			✓
openEuler 22.03 SP3, 22.03 SP4, 24.03	✓	✓			✓
Kylin V10 SP3, SP3-2403	✓	✓			✓
UnionTechOS V20 1060E, 1070E	✓	✓			✓

a. Limited CLI means only a subset of CLI commands. For information about these commands, refer to the *Emulex HBA Manager Application Command Line Interface User Guide*.

NOTE: Broadcom Emulex supports open source Linux distributions that are compatible with RHEL kernels. Some features like NVMe/FC may not be supported if the open source kernel does not support it.

The following Emulex HBA Manager CLI commands are supported for operating systems offering limited application support:

- `Download` – This command downloads a firmware image to the specified adapter.
- `Dump` – This command creates a diagnostic dump file in the `HbaCmd` dump file directory.
- `HbaAttributes` – This command displays a list of all adapter attributes for the adapter.
- `ListHBAs` – This command displays a list of the manageable Emulex adapters found by local discovery.
- `LoopBackTest` – This command runs any of several loopback tests on the specified adapter port.

For information about these commands, refer to the *Emulex HBA Manager Application Command Line Interface User Guide*.

New Features

- This release adds support for the following operating systems:
 - RHEL 9.5
 - Oracle Linux 9.5 with a UEK 7 or 7U2 kernel
 - openEuler 22.03 SP4
 - openEuler 24.03
- This release discontinues support for the following operating systems:
 - RHEL 9.2
 - Oracle Linux 9.2
 - openEuler 20.03 SP3
 - openEuler 20.03 SP4
 - openEuler 22.03 SP2
- This release adds support for the LPe38100-series and LPe37100-series adapters.
- This release adds support for the EDIF (Encryption Data in Flight) Management command group to manage the EDIF feature on Emulex LPe37100-series and LPe38100-series HBAs. The EDIF Management command group includes the following commands:
 - `GetConnectionInfo` - This command displays all the encrypted connections associated with an initiator port (physical or virtual port).
 - `GetEdifLog` - This command retrieves the firmware log for EDIF security association errors.
 - `GetEdifParams` - This command displays the EDIF feature configurable parameters for a given HBA port.
 - `SetEdifParams` - This command sets new values to EDIF parameters at the port level.

For more information on a specific command, use the Emulex HBA Manager CLI `Help` command.

- This release adds support for NVMe over FC auto-connect on Kylin V10 SP3.

NOTE:

- The HBA-initiated `DPortTest` is no longer supported; the feature will be disabled in a future release. The HBA continues to support switch-initiated tests.
- The Emulex HBA Manager application only supports the Emulex HBA Manager CLI. The Emulex HBA Manager GUI is no longer supported.
- Support to enable the Fabric Assigned Port World Wide Name (FA-PWWN) feature on an HBA port is discontinued. The feature will be disabled in a future release.
- Support to enable Fabric Assigned Boot LUN (FABL) on an HBA port is discontinued. The feature will be disabled in a future release.

Resolved Issues

No issues were resolved in this release.

Known Issues

1. If you attempt to set the `max-vmid` value using an Emulex HBA Manager CLI application version that is earlier than 14.2.673.12 on a Linux system using a driver version that is 14.2.673.12 or later, the `setdriveparam` command will fail with `error 163`.

Workaround

Use the same versions for both the Emulex HBA Manager CLI application and the driver for Linux.

2. In the *Emulex HBA Manager Application Command Line Interface User Guide*, *Table 5: Supported Linux Operating Systems* has incorrect entries. Use the table detailed in the [Supported Operating Systems](#) section of this document for correct information.

Technical Tips

1. On SLES 12 SP4, initiating a firmware dump might result in an error message similar to the following:

```
error: Invalid argument [arc/elx_lpe_35000_pci_device.app:TriggerFWDumps:510]
Consider adding "iomem-relaxed" to grub cfg kernel commandline.
[0x1000000090fa9483a2], [host8] [0000:01:00.0] Failed to trigger firmware dump.
```

If this message appears, perform the following steps:

- a. Add the following kernel command line to the host grub configuration file:

```
iomem=relaxed
```

- b. Reboot the host.
- c. Repeat the process to initiate a firmware dump.

2. Interference can occur with the Emulex HBA Manager application's ability to permanently change WWNs.

Some adapters on some systems use techniques in the BIOS code at boot time to configure the adapter, such as the adapter WWN. In such cases, this might interfere with the Emulex HBA Manager application's ability to make permanent (nonvolatile) changes to the adapter's WWN.

3. Disable FA-PWWN and FABL features on HBA ports. These features will not be supported in a future release.

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