



Dynamic TGT-LUN Discovery Utility for Linux

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1. Package Contents

The following table describes the contents provided in the Dynamic TGT-LUN Discovery Utility package.

Filename	Description
COPYING	GNU General Public License that describes user rights to copy, distribute, and use the open source content in this Linux tool.
ql-dynamic-tgt-lun-disc.sh	Script file used to scan the QLogic HBAs for all the LUNs.
README.ql-dynamic-tgt-lun-disc.txt	Text file version of this readme file.
revision.qldynamic.txt	Text file that identifies the changes made between versions of this package.

2. Requirements

The Dynamic Target and LUN Discovery Utility requires one of the Linux platforms identified in [OS Support](#).

3. OS Support

The Dynamic TGT-LUN Discovery Utility for Linux runs on the OS platforms shown in the following table.

Operating Systems		
OS Name	OS Type	Hardware Platform
Red Hat RHEL AS 3.0	32-bit/64-bit	Intel x86, Intel EM64T, AMD64, Intel IA64, and PPC64 platforms
Red Hat RHEL AS 4.0	32-bit/64-bit	Intel x86, Intel EM64T, AMD64, Intel IA64, and PPC64 platforms
Novell SLES 8	32-bit/64-bit	Intel x86, Intel AMD64, Intel IA64, and PPC64 platforms
Novell SLES 9	32-bit/64-bit	32-bit/64-bit on Intel x86, Intel EM64T, AMD64, Intel IA64, and PPC64 platforms
Novell SLES 10	32-bit/64-bit	64-bit on Intel x86, Intel EM64T, AMD64, Intel IA64, and PPC64 platforms

NOTE: For specific OS service packs (SP) and updates, refer to the descriptions where this software version is posted on the QLogic website (http://support.qlogic.com/support/drivers_software.asp).

4. Supported Features

The Dynamic TGT-LUN Discovery utility provides following features:

- Re-scans all the QLogic HBAs for new LUNs.
- Re-scans and removes lost LUNs from the system.
- By default, scans up to 256 LUNs and allows you to set the maximum number of LUNs to scan.
- By default, scans all QLogic HBAs and allows you to select a specific HBA to scan.
- Displays information for each HBA.
- Provides an option for proc-based scanning, as an alternative to the default sysfs-based scanning.
- Supports QLogic FC Driver Versions 7.xx.xx and 8.xx.xx.

5. Using the Dynamic TGT-LUN Discovery Utility

This utility scans for newly added LUNs. After adding new LUNs, you do not need to unload, then load the QLogic FC driver or reboot the system. To see the newly added LUNs, run the `ql-scan-lun.sh` utility. The following subsections describe how to use this utility:

- [5.1 Starting the Utility](#)
- [5.2 Command Line Options](#)
- [5.3 Menu Options](#)

5.1 Starting the Utility

To start this utility, run the following command:

```
# ./ql-dynamic-tgt-lun-disc.sh
```

By default, the utility re-scans the QLogic HBAs for new LUNs.

5.2 Command Line Options

Options	Description
<code>-s, --scan [-r --refresh]</code>	Rre-scans all the devices connected to the QLogic HBA, which refreshes the LUN display by removing all LUNs that no longer exist. CAUTION: Take care when using the refresh option since it removes the existing LUNs before performing a re-scan.
<code>-i, --interactive</code>	Use this option to start the menu-driven program.
<code>-p, --proc</code>	Uses the proc file system to perform LUN scanning on 2.6 kernel; on a 2.4 kernel, the LUN scanning is based on proc file system only.
<code>-h, --help, ?</code>	Prints the help message.

Examples

- To re-scan all the HBAs, enter one of the following commands:
./ql-dynamic-tgt-lun-disc.sh
./ql-dynamic-tgt-lun-disc.sh -s
./ql-dynamic-tgt-lun-disc.sh --scan
- To re-scan and remove any lost LUNs, enter one of the following commands:
./ql-dynamic-tgt-lun-disc.sh -s -r
./ql-dynamic-tgt-lun-disc.sh --scan --refresh
- To invoke the menu, enter one of the following commands:
./ql-dynamic-tgt-lun-disc.sh -i
./ql-dynamic-tgt-lun-disc.sh --interactive
- To view help, enter one of the following commands:
./ql-dynamic-tgt-lun-disc.sh -h
./ql-dynamic-tgt-lun-disc.sh --help

5.3 Menu Options

The utility provides a menu-driven interface that provides finer control of the operation.

To invoke the menu, use the `-i` or `--interactive` option with the `ql-dynamic-tgt-lun-disc` utility. For example:

```
# ./ql-dynamic-tgt-lun-disc.sh -i
```

The following subsections describe the displayed menus:

- [5.3.1 Main Menu](#)
- [5.3.2 Select Host to Scan Options](#)

5.3.1 Main Menu

The main menu provides options shown in the following example:

```
MAIN MENU
 1: ALL HOSTS SCAN
 2: ALL HOST SCAN & REFRESH
 3: SELECT HOST TO SCAN
 4: SET MAX LUN's TO SCAN (Current: 256)
 5: QUIT
```

The following table describes each of the Main Menu options:

Main Menu Option	Description
1: ALL HOSTS SCAN	Scans all the QLogic HBAs connected in the system. When finding a new LUN, the utility displays a message, indicating the new LUN found.
2: ALL HOST SCAN & REFRESH	Scans all the QLogic HBAs connected in the system. In addition to performing a re-scan, it removes LUNs that do not exist anymore from the system. For example, if LUN 1 is seen on Host: 2, Bus: 0, and Device: 0, a corresponding entry appears in <code>/proc/scsi/scsi</code> , as shown in the following example: Host: scsi2 Channel: 00 Id: 00 Lun: 01 If the LUN is removed, the system still shows the LUN in <code>/proc/scsi/scsi</code> . To remove the lost LUNs, use this option to re-scan the HBA.
3: SELECT HOST TO SCAN	Invokes the menu to select a specific QLogic HBA to be scanned. (See section 5.3.2.)
4: SET MAX LUN's TO SCAN (Current: 256)	By default, the system scans up to 256 LUNs. Use this option to change the maximum number of LUNs to be scanned.
5. QUIT	Exits the <code>ql-dynamic-tgt-lun-disc</code> utility.

5.3.2 Select Host to Scan Options

The Select Host to Scan menu provides options shown in the following example:

```
SELECT HOST TO SCAN
 1. HOST: scsi2
 2. HOST: scsi3
 3. SET SCAN TYPE (Current : SCAN ONLY)
 4. GO BACK TO PREVIOUS SCREEN
 5. QUIT
```

The following table describes each of the Main Menu options:

Select Host to Scan Option	Description
1. HOST: scsi2 / 2. HOST: scsi3	Indicates the HBA to be scanned. Selecting this option starts re-scanning the HBA that corresponds to this host number.
3. SET SCAN TYPE	Scan type specifies whether re-scanning removes LUNs that no longer exist as a default. By default, the utility re-scans without removing LUNs from the system. This option lets you change this to HOST SCAN & REFRESH.
4. GO BACK TO PREVIOUS SCREEN	Returns to the Main Menu.
5. QUIT	Exits the ql-dynamic-tgt-lun-disc utility.

6. Application Notes

CAUTION: Take care when using the refresh option since it removes the existing LUNs before it performs a re-scan.

7. Known Issues and Workarounds

None

8. Contacting Support

Please feel free to contact your QLogic approved reseller or QLogic Technical Support at any phase of integration for assistance. QLogic Technical Support can be reached by the following methods:

Web: <http://support.qlogic.com>

North America Contact Information

Email: support@qlogic.com

Phone: (952) 932-4040

Support contact information for other regions of the world is available at the QLogic website:

<http://support.qlogic.com>

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