



Set Device Command Timeout Utility for Linux

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1. Package Contents

The following table describes the contents provided in the Set Device Command Timeout 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-set-cmd-timeout.sh	Script file used set the timeout on the devices connected to the QLogic FC HBA.
README.ql-set-cmd-timeout.txt	Text file version of this readme file.
revision.qlsetcmdtimeout.txt	Text file that identifies the changes made between versions of this package.

2. Requirements

The Set Device Command Timeout utility requires one of the Linux platforms identified in [OS Support](#).

3. OS Support

The Set Device Command Timeout 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 `ql-set-cmd-timeout` utility:

- Allows you to set the timeout on devices by specifying the host and target number on command line.
- Allows you to select a host to set timeout on targets connected to the host using a menu.
- Sets a common value for all hosts at the same time.
- Supports Fibre Channel driver version 8.xx.xx.

5. Using the Set Device Command Timeout Utility

This utility allows you to set the timeout on the devices connected to the QLogic FC HBA. This timeout value applies to the commands sent to the device. This can help when target devices take longer to execute a command, for example under heavy IO. Setting a longer timeout reduces the chance of the Linux SCSI Mid-layer driver aborting the tasks after a timeout.

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, enter the following command:

```
# ./ql-set-cmd-timeout.sh HOST TARGET TIMEOUT
```

where:

HOST is the QLogic HBA number

TARGET is the target connected to HBA

TIMEOUT is the new timeout value to be set on the devices under TARGET

For example:

```
For /sys/bus/pci/drivers/qla2300/0000:05:01.0/host2/target2:0:0/
```

HOST and TARGET will be

HOST=2 (from `..host2..`)

TARGET=0 (from `target2:0:0 <-->`) specify new timeout as

```
# ./ql-set-cmd-timeout.sh 2 0 60
```

5.2 Command Line Options

Options	Description
[DEFAULT]	Displays the timeout on devices connected to the all HOSTs. These devices must be QLogic HBAs.
[HOST]	Specifies the HOST value to see the timeout on devices connected to the HOST. These devices must be QLogic HBAs.
[HOST] [TARGET]	Specifies the HOST and TARGET values to see the timeout on devices connected to the TARGET. These devices must be QLogic HBAs.
[HOST] [TARGET] [TIMEOUT]	Specifies the HOST, TARGET, and TIMEOUT values to set the timeout on devices connected to the TARGET. These devices must be QLogic HBAs.
-i, --interactive	Use this option to start the menu-driven program.
-h, --help, ?	Displays the help message.

Examples

- To display the timeout of all devices connected to QLogic HBAs, enter the following command:
./ql-set-cmd-timeout.sh
- To display the timeout of all devices connected to HOST 2, enter following command:
./ql-set-cmd-timeout.sh 2
- To display the timeout of devices connected on HOST 2, TARGET 0, enter the following command:
./ql-set-cmd-timeout.sh 2 0
- To set timeout of 30 seconds on HOST 2, TARGET 0, enter the following command:
./ql-set-cmd-timeout.sh 2 0 30
- To invoke the menu, enter one of the following commands:
./ql-set-cmd-timeout.sh -i
./ql-set-cmd-timeout.sh --interactive
- To view help, enter one of the following commands:
./ql-set-cmd-timeout.sh -h
./ql-set-cmd-timeout.sh --help

5.3 Menu Options

The utility provides a menu-driven interface that provides finer control of the operation. To invoke the menu from the command line, add the `-i` or `--interactive` option to the `ql-set-cmd-timeout` command:
./ql-set-cmd-timeout.sh -i

The main menu provides options shown in the following example:

```
MAIN MENU
 1. HOST2
 2. HOST3
 3. SELECT ALL HOSTS
 4. SET COMMON TIMEOUT FOR ALL HOSTS
 5. QUIT
```

The following table describes each of these options.

Main Menu Option	Description																									
<p>1. HOST2 / 2. HOST3</p>	<p>This option appears if the system has a QLogic HBA installed with a QLogic driver loaded. The host number differs from system to system; as an example, the host numbers 2 and 3 are shown here.</p> <p>Selecting the HOST by specifying the index number opens the next screen, where you can select a particular target.</p> <p>Select option:</p> <ol style="list-style-type: none"> 1. MODIFY TIMEOUT 2. DISPLAY TIMEOUT 3. GO BACK TO PREVIOUS MENU 4. QUIT <p>Please select one of the options above: 1 Please enter new timeout for selected device: 60</p> <p>Modifying the devices.....</p> <table border="1" data-bbox="526 705 1097 842"> <thead> <tr> <th>DEVICE</th> <th>OLD TIMEOUT</th> <th>NEW TIMEOUT</th> </tr> </thead> <tbody> <tr> <td>2:0:0:0</td> <td>4</td> <td>60</td> </tr> <tr> <td>2:0:0:4</td> <td>4</td> <td>60</td> </tr> <tr> <td>2:0:0:5</td> <td>4</td> <td>60</td> </tr> <tr> <td>2:0:0:6</td> <td>4</td> <td>60</td> </tr> </tbody> </table> <p>Hit any key to continue.....</p> <p>Selecting the DISPLAY TIMEOUT option, displays the following:</p> <p>Select option:</p> <ol style="list-style-type: none"> 1. MODIFY TIMEOUT 2. DISPLAY TIMEOUT 3. GO BACK TO PREVIOUS MENU 4. QUIT <p>Please select one of the options above :2</p> <table border="1" data-bbox="526 1224 964 1360"> <thead> <tr> <th>DEVICE</th> <th>TIMEOUT</th> </tr> </thead> <tbody> <tr> <td>2:0:0:0</td> <td>60</td> </tr> <tr> <td>2:0:0:4</td> <td>60</td> </tr> <tr> <td>2:0:0:5</td> <td>60</td> </tr> <tr> <td>2:0:0:6</td> <td>60</td> </tr> </tbody> </table> <p>Hit any key to continue.....</p>	DEVICE	OLD TIMEOUT	NEW TIMEOUT	2:0:0:0	4	60	2:0:0:4	4	60	2:0:0:5	4	60	2:0:0:6	4	60	DEVICE	TIMEOUT	2:0:0:0	60	2:0:0:4	60	2:0:0:5	60	2:0:0:6	60
DEVICE	OLD TIMEOUT	NEW TIMEOUT																								
2:0:0:0	4	60																								
2:0:0:4	4	60																								
2:0:0:5	4	60																								
2:0:0:6	4	60																								
DEVICE	TIMEOUT																									
2:0:0:0	60																									
2:0:0:4	60																									
2:0:0:5	60																									
2:0:0:6	60																									
<p>3. SELECT ALL HOSTS</p>	<p>Selecting this option allows you to select targets on all the HOSTS, then enter a timeout for each one. For example:</p> <pre> MAIN MENU 1. HOST2 2. HOST3 3. SELECT ALL HOSTS 4. SET COMMON TIMEOUT FOR ALL HOSTS 5. QUIT </pre> <p>Please select one of the options above : 3</p> <p>Selecting the SELECT ALL HOSTS by specifying the index number opens the next screen, where you can select a particular action.</p> <p>Select option:</p> <ol style="list-style-type: none"> 1. MODIFY TIMEOUT 2. DISPLAY TIMEOUT 3. GO BACK TO PREVIOUS MENU 																									

	<pre> 4. QUIT Please select one of the options above :1 Enter new timeout for HOST 2 and TARGET 0: 40 Modifying the devices..... DEVICE OLD TIMEOUT NEW TIMEOUT 2:0:0:0 50 40 2:0:0:4 50 40 Enter new timeout for HOST 2 and TARGET 1: 5 Modifying the devices..... DEVICE OLD TIMEOUT NEW TIMEOUT 2:0:1:0 50 5 2:0:1:1 50 5 Selecting the DISPLAY TIMEOUT option displays the following. Select option: 1. MODIFY TIMEOUT 2. DISPLAY TIMEOUT 3. GO BACK TO PREVIOUS MENU 4. QUIT Please select one of the options above :2 DEVICE OLD TIMEOUT NEW TIMEOUT 2:0:0:0 50 40 2:0:0:4 50 40 DEVICE OLD TIMEOUT NEW TIMEOUT 2:0:1:0 50 5 2:0:1:1 50 5 Hit any key to continue..... </pre>
4. SET COMMON TIMEOUT FOR ALL HOSTS	Selecting this option sets the timeout on all the devices connected to all the targets on all the QLogic HBAs.
5. QUIT	Selecting this option exits the ql-set-cmd-timeout utility.

6. Application Notes

None

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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