



Dolphin DX Firmware Update Guide

Revision 1.0

March 2009

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Installation

Dolphin provides a Linux DX Command Environment tool (DCE) that works in conjunction with the DX driver to enable you to perform a firmware update. Check <http://www.dolphinics.com/support> for the latest list of supported operating systems.

The latest DX firmware files, DCE tool and DX driver are included in the DX Dolphin Express Software for Linux package, which can be downloaded from <http://www.dolphinics.com/support> in the software download section. The latest firmware files are identified by DXfupdate files with the following format DXfupdate.yyww, where yy is the year and ww is the work week. Example (DXfupdate.0844).

Installation of this package is described in the Dolphin DX Express Installation and Reference Guide located at <http://www.dolphinics.com/support> in the Installations and Users Guides section.

The software required for firmware upgrade are included as part of the DX SuperSockets or SISCI installation. To install only the DX driver and DCE required for firmware update, run the installation script with the option

```
--install-ioexpansion
```

DXH510 Adapter Firmware Update

To update the DXH510 firmware, follow this procedure:

- 1) Insert the DXH510 adapter in an available PCIe slot in the computer with the DCE update software.
- 2) Power on the computer.
- 3) Start the DCE application from the folder that you downloaded the DXfupdate file by typing the DCE command.
- 4) Enter the flash command for the local DXH510 and press ENTER.

```
>> flash -firmware -DXfupdate.yyww
```

- 5) DCE will display a set of information about the DXH510, including a 3-digit number identifying the version of the currently installed firmware. It will also display the 3-digit version of the new firmware file.
- 6) If the current firmware version is different from the new firmware version, continue with update by hitting ENTER. If the versions are the same, you can cancel the update by pressing Ctrl-C.
- 7) DCE will complete the installation procedure of the new firmware or exit immediately based on your choice.

Note: Once you have completed the firmware upgrade you must power down and restart the system with the DXH510 for proper operation.

Figure 1 DXH510 Firmware Update Screen Shot

```
=====
Dx Command Environment (DCE) - Ver 1.0
Copyright (C) 2008 Dolphin, Inc.
=====
Build Time : Nov  4 2008, 11:42:06
-----
Adapter 0
-----
board type   : DXH 510 (Host Adapter)
serial number: 95ad011008
>> flash -firmware DXfupdate.0844

** local device info **
board type   : DXH 510 (Host Adapter)
date of test : 9302008
test revision: 2
test result  : 0
operator id  : 1234
serial number: 95ad011008
srom image id: 1a1
firmware rev : 188

Hit ENTER to continue updating current firmware version 188 to version 188 (CTRL-C to quit)

** You must power cycle local host to avoid hardware malfunction **
>>
```

DXS410 Firmware Update

To update firmware for the DXS410 switchbox, follow this procedure:

- 1) Insert the DXH510 adapter in an available PCIe slot in the computer with the DCE update software.
- 2) Connect Port 1 of the DXS410 to be updated to Port 0 of the DXH510 using a CX4 cable. The DXS410 must be connected directly to the DXH510 without any intermediate switches.
- 3) Power on the computer.
- 4) Start the DCE application from the folder that you downloaded the DXfupdate file by typing the DCE command.
- 5) Enter the flash command for the DXS410 and press ENTER.

```
$flash -firmware -DXfupdate.yyww -remote
```

- 8) DCE will display a set of information about the DXS410, including a 3-digit number identifying the version of the currently installed firmware. It will also display the 3-digit version of the new firmware file.
- 6) If the current firmware version is different from the new firmware version, continue with update by hitting ENTER. If the versions are the same, you can cancel the update by pressing Ctrl-C.
- 7) DCE will complete the installation procedure of the new firmware or exit immediately based on your choice.

Note: *Once you have completed the firmware upgrade you must power down and restart the system with the DXS410 for proper operation.*

Figure 2 DXS410 Firmware Update Screen Shot

```
=====
Dx Command Environment (DCE) - Ver 1.0
Copyright (C) 2008 Dolphin, Inc.
=====
Build Time : Mar 23 2009, 09:52:35
-----
Adapter 0
-----
board type   : DXH 510 (Host Adapter)
serial number: 46ad015107
>> flash -firmware DXfupdate.0844 -remote

** remote device info **
board type   : DXS 510 (1U Switch Box)
date of test : 8062008
test revision: 2
test result  : 0
operator id  : 1
serial number: 24ad052808
srom image id: 3a0
firmware rev : 137

Hit ENTER to continue updating current firmware version 137 to version 137 (CTRL-C to quit)

firmware done!

** You must power cycle DXS to avoid hardware malfunction **
\\
```

DXE410 Firmware Update

To update firmware for the DXE410 switchbox, follow this procedure:

- 1) Insert the DXH510 adapter in an available PCIe slot in the computer with the DCE update software.
- 2) Connect Port 0 of the DXE410 Uplink to Port 0 of the DXH510 using a CX4 cable. The DXE410 must be connected directly to the DXH510 without any intermediate switches.
- 3) Power on the computer.
- 4) Start the DCE application from the folder that you downloaded the DXfupdate file by typing the DCE command.
- 5) Enter the flash command for the DXE410 and press ENTER.

```
$Flash -firmware -DXfupdate.yyww -remote
```

- 9) DCE will display a set of information about the DXE410, including a 3-digit number identifying the version of the currently installed firmware. It will also display the 3-digit version of the new firmware file.
- 6) If the current firmware version is different from the new firmware version, continue with update by hitting ENTER. If the versions are the same, you can cancel the update by pressing Ctrl-C.
- 7) DCE will complete the installation procedure of the new firmware or exit immediately based on your choice.

Note: *Once you have completed the firmware upgrade you must power down and restart the system with the DXE410 for proper operation.*

Figure 3 DXE410 Firmware Update Screen Shot

```
=====
Build Time : Nov  4 2008, 11:42:06
-----
Adapter 0
-----
board type   : DXH 510 (Host Adapter)
serial number: 95ad011008
>> flash -firmware DXfupdate.0844 -remote

** remote device info **
board type   : DXE 410 (Expansion Switch Chassis)
date of test : 8052008
test revision: 2
test result  : 15
operator id  : 1234
serial number: 1ad025007
srom image id: 2a0
firmware rev : 16b

Hit ENTER to continue updating current firmware version 16b to version 16b (CTRL-C to quit)

** You must power cycle DXE to avoid hardware malfunction **
>> █
```