

SLX-9540 Smart SSD Controller Firmware Update

Version 1.5

This document describes the procedure to update Smart SSD controller firmware on switches running SLX-OS. The procedure applies to SLX9540 (Avalanche) and SLX9640 (Snowball).

NOTE: For assistance, contact Extreme GTAC support.

<https://www.extremenetworks.com/support/contact/>

Check Smart SSD controller firmware version

1. Boot SLX switch and login as admin
2. Run 'start-shell' gain access to the Linux shell

```
SLX# start-shell
Entering Linux shell for the user: admin
[admin@SLX]#
```

3. From SLX Linux shell, log into **HOST mode** as root.

```
[admin@SLX]# ssh root@127.2.0.1
The authenticity of host '127.2.0.1 (127.2.0.1)' can't be established.
ECDSA key fingerprint is
SHA256:XL8Kyj+fBR50KmVD8X7LKd98BayjKqBfrowvbPPVc8s.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts
(/fabos/users/admin/.ssh/known_hosts).
root@127.2.0.1's password: <!-- fibranne

[.snip.]

root@HOST:~# <!-- notice HOST prompt
```

4. Run smartctl command to read firmware version on both SSD drives.

Continue to 'Upgrade Smart SSD controller firmware version' section only if version is FW1055 or FW1167. If any other firmware version is reported no update is required, and you can exit now.

```
root@HOST:~# /usr/sbin/smartctl --all /dev/sda | grep Firmware
Firmware Version: FW1055
```

```
root@HOST:~# /usr/sbin/smartctl --all /dev/sdb | grep Firmware
Firmware Version: FW1055
```

Upgrade Smart SSD controller firmware version

1. Copy the firmware file FW1198_TT-Disabled_DLMC_BGA.bin from the ZIP where these instructions were found to a file server your SLX has access to.

2. Boot SLX switch and login as admin

- a. Run 'start-shell' gain access to the Linux shell

```
SLX# start-shell
Entering Linux shell for the user: admin
```

- b. Run 'cd /tmp'

```
[admin@SLX]# cd /tmp
```

- c. Transfer SSD firmware file from file server to SLX-VM via FTP or SCP

FTP example:

```
[admin@SLX]# ftp 10.26.176.97
Connected to 10.26.176.97.
220 (vsFTPD 3.0.3)
Name (10.26.176.97:admin): gtac
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.

ftp> cd /tftp/tmp
250 Directory successfully changed.

ftp> ls FW1198_TT-Disabled_DLMC_BGA.bin
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw----- 1 1001 1001 461824 Mar 13 00:14
FW1198_TT-Disabled_DLMC_BGA.bin
226 Directory send OK.

ftp> bin
200 Switching to Binary mode.

ftp> get FW1198_TT-Disabled_DLMC_BGA.bin
local: FW1198_TT-Disabled_DLMC_BGA.bin remote: FW1198_TT-
Disabled_DLMC_BGA.bin
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for FW1198_TT-
Disabled_DLMC_BGA.bin (461824 bytes).
226 Transfer complete.
461824 bytes received in 0.00571 secs (7.9e+04 Kbytes/sec)
ftp> bye
221 Goodbye.
```

```
[admin@SLX]#
```

SCP example:

```
[admin@SLX]# scp gtac@10.26.176.97:/tftp/tmp/FW1198_TT-Disabled_DLMC_BGA.bin /tmp
The authenticity of host '10.26.176.97 (10.26.176.97)' can't be
established.
ECDSA key fingerprint is
SHA256:mkNPn+jUL73MTzOSI1Mxpq/q3IGChdoloQPDaVJxcV4.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts
(/fabos/users/admin/.ssh/known_hosts).
gtac@10.26.176.97's password:

FW1198_TT-Disabled_DLMC_BGA.bin
100% 451KB 26.8MB/s 00:00
```

- d. Verify the file cksum is **1611392826** before upgrading the firmware file to the switch.

```
[admin@SLX]# cksum /tmp/FW1198_TT-Disabled_DLMC_BGA.bin
1611392826 461824 /tmp/FW1198_TT-Disabled_DLMC_BGA.bin
```

- e. Transfer SSD firmware file from SLX-VM to SLX HOST-OS

```
[admin@SLX]# scp /tmp/FW1198_TT-Disabled_DLMC_BGA.bin
root@127.2.0.1:/tmp
The authenticity of host '127.2.0.1 (127.2.0.1)' can't be
established.
ECDSA key fingerprint is
SHA256:XL8Kyj+fBR50KmVD8X7LKd98BayjKqBfrowvbPPVc8s.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts
(/fabos/users/admin/.ssh/known_hosts).
root@127.2.0.1's password: <!-- fibranne

FW1198_TT-Disabled_DLMC_BGA.bin
100% 451KB 30.7MB/s 00:00
```

3. login to switch in **HOST mode** as root.

```
[admin@SLX]# ssh root@127.2.0.1
The authenticity of host '127.2.0.1 (127.2.0.1)' can't be established.
ECDSA key fingerprint is
SHA256:XL8Kyj+fBR50KmVD8X7LKd98BayjKqBfrowvbPPVc8s.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts
(/fabos/users/admin/.ssh/known_hosts).
root@127.2.0.1's password: <!-- fibranne
```

```
[.snip.]
```

```
root@HOST:~# <!-- notice HOST prompt
```

4. At HOST prompt, run 'cd /tmp', then 'ls -lh' to confirm the firmware file

```
root@HOST:~# cd /tmp
root@HOST:/tmp# ls -lh
total 464K
-rwxr-xr-x 1 root root 2.2K Jul 25 08:51 benv_outfile
-rw-r--r-- 1 root root 41 Jul 25 08:47 cond
-rw----- 1 root root 451K Jul 29 02:02 FW1198_TT-Disabled_DLMC_BGA.bin
prw-r--r-- 1 root root 0 Jul 25 08:47 skapfifo
drwx----- 2 root root 4.0K Jul 25 08:47 tmux-0
srwxrwxrwx 1 root root 0 Jul 25 08:46 warmdev
```

5. Type commands below to update controller's firmware for the two SSD (sda and sdb) drives.

Note: The command should be typed in one line.

```
root@HOST:~# /sbin/hdparm --fwdownload-mode3-max ./FW1198_TT-Disabled_DLMC_BGA.bin
--yes-i-know-what-i-am-doing --please-destroy-my-drive /dev/sda
```

```
root@HOST:~# /sbin/hdparm --fwdownload-mode3-max ./FW1198_TT-Disabled_DLMC_BGA.bin
--yes-i-know-what-i-am-doing --please-destroy-my-drive /dev/sdb
```

6. Run smartctl command to verify firmware version is FW1198 on both drives.

```
root@HOST:~# /usr/sbin/smartctl --all /dev/sda | grep Firmware
Firmware Version: FW1198
root@HOST:~# /usr/sbin/smartctl --all /dev/sdb | grep Firmware
Firmware Version: FW1198
root@HOST:~#
```

7. Power cycle the unit to complete the installation.