

# 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.