Overview

After a software change on an AOS switch the steps outlined below can be used to verify that the switch is operational on the new code.

Note that this only applies to the 6600/7700/7800/8800 switches.

Steps

Note that the following items are to take place after the upgrade instructions available on the website has already been followed. The switch should already have had the following commands run to have it on the new code and properly synchronized. "reload working no rollback-timeout", "install *.img", "copy working certified flash-synchro".

"**show hardware info**"

```
CPU Type                            : UltraSPARC IIe (SPARC-V9),
Flash Manufacturer                  : AMD,
Flash size                          : 33554432 bytes (32 MB),
RAM Manufacturer                    : Micron,
RAM size                            : 134217728 bytes (128 MB),
NVRAM Battery OK                    : YES,
Interrupt Boot Jumper              : ON,
Force UART Defaults Jumper         : OFF,
Run Extended Memory Diags Jumper   : OFF,
Spare Jumper                        : OFF,
```

BootROM Version   : 5.1.5.340.R01,
Backup Miniboot Version   : 5.1.5.340.R01,
Default Miniboot Version   : 5.1.5.340.R01,
FPGA (1) Version   : 44,
FPGA (2) Version   : 44

Verify that the proper versions of bootrom, miniboot and FPGA are shown for the version of code being run. If incorrect follow upgrade procedure available on the website.

"**show microcode loaded**"

Package	Version	Module	Version
Fos.img	**5.1.5.159.R02**	Networking_kernel.lnk	5.1.5.159.R02

Verify that the expected version of code is shown.

"show cmm"

Module in slot CMM-A-1
```
  Model Name:                 OS7800-CMM ,
  Description:                BBUS BRIDGE,
  Part Number:                901753-10,
  Hardware Revision:          306,
  Serial Number:              2153106A,
  Manufacture Date:           APR 21 2002,
  Firmware Version:           44,
```
  Admin Status: POWER ON,
  Operational Status: UP,

Verify that the Admin Status is "POWER ON" for all available CMM's, and that the Operational Status is "UP"

"show ni"
Module in slot 3
  Model Name: OS7-GNI-U2 ,
  Description: 2PT UNI GIG MOD,
  Part Number: 902140-10,
  Hardware Revision: 505,
  Serial Number: 2203016A,
  Manufacture Date: NOV 12 2002,
  Firmware Version: 6,
  Admin Status: POWER ON,
  Operational Status: UP,

**Verify that the Admin Status is "POWER ON" for all available NI's, and that
the Operational Status is "UP"**

"show configuration snapshot all"

**Compare output with backup configuration file and verify all needed items are still
properly configured.**

**Check for any boot configuration error files which will have a name of
"boot.cfg.x.err" where X is the number on the file.**

"ls –r"
Listing Directory /flash:
-rw   338 Jul 7 19:28 boot.params
drw   2048 Jun 26 11:49 certified/
drw   2048 Jul 7 19:09 working/
-rw   256 Jul 7 19:27 random-seed
-rw   64000 Jun 20 13:23 swlog1.log
-rw   64000 Jul 8 13:27 swlog2.log
drw   2048 May 17 2004 network/
drw   2048 Mar 21 2025 switch/
-rw   82803 Jul 8 2004 slo4sli0ver1.pmd
-rw   245 Mar 21 2025 boot.cfg.1.err

**If there is an error file present view the contents of the file by using
"more boot.cfg.1.err" and correct the errors as necessary.**

"show system"
System:
  Description: 5.1.5.159.R02 Service Release, November 05, 2004.,
  Object ID: 1.3.6.1.4.1.6486.800.1.1.2.1.1.1.1,
  Up Time: 0 days 17 hours 53 minutes and 7 seconds,
  Contact: Alcatel Internetworking, www.ind.alcatel.com,
  Name: OmniSwitch,
  Location: Unknown,
  Services: 72,
  Date & Time: WED JUL 08 2037 13:21:36 (UTC)

Flash Space:
    Primary CMM:
      Available (bytes): 4620288,
      Comments   : Recommend Cleanup to 5225985 bytes free

**Verify that the recommended available flash space is present. In this
example the comments show that more flash space needs to be freed up.**

Note that this Flash Space function only works on 5.1.5r02 and above

**If not enough flash space is free the following items can be checked an
deleted if present (once upgrade has been completed).**

**"ls –r" (will display contents of all folders if issued from root
directory"**

**In the flash directory remove any old files not relevant to the new code
such as old files ending in .err, .dmp, .pmd, or any FPGA, miniboot or
bootrom images. This is done by using the "rm" command following by the
path and filename (if in a different directory than the present working
directory).**
**Note that any new .err, .dmp, or .pmd files that have a timestamp
indicating they occurred after the upgrade should be reported to customer
support and provided with all requested information.**

"ls –r"
Listing Directory /flash:
-rw   338 Jul 7 19:28 boot.params
drw   2048 Jun 26 11:49 certified/
drw   2048 Jul 7 19:09 working/
-rw   256 Jul 7 19:27 random-seed
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drw   2048 Mar 21 2025 switch/
-rw   82803 Jul 8 2004 slo4sli0ver1.pmd
-rw   245 Mar 21 2025 boot.cfg.1.err

**In the /flash/switch/avlan directory delete all files ending with .bk
(backup) with the following command "rm /flash/switch/avlan/*.bk"**

Note that for the redundant CMM's on 5.1.5r02 and above the following
remote commands can be issued from the primary CMM for the secondary CMM.

rls /flash
     (remote list- the directory desired has to be specified
     e.g. rls /flash/working)

rrm /flash (remote remove - path and filename must be specified)

rcp /flash (remote copy from secondary to primary – path, filename as well
as source and destination must be specitifed)

"show configuration status"
File configuration: none scheduled
Error file limit: 1

Running configuration and saved configuration are **identical**

Verify that the running and saved configuration are identical.
If the running and saved configuration are different issue a "write memory", and
then a "copy working certified" for a mono cmm, or "copy working certified flash-
synchro" for a dual cmm chassis. Check status again.

"show running directory"

CONFIGURATION STATUS
   Running CMM   : PRIMARY,
   CMM Mode   : DUAL CMM,
   Current CMM Slot   : A,
   Running configuration   : WORKING,
   Certify/Restore Status : CERTIFIED
SYNCHRONIZATION STATUS
   Running Configuration   : SYNCHRONIZED,
   NIs Reload On Takeover   : NONE

Verify that the running configuration is working
Verify that the certify/restore status is certified
Verify that the synchronization status is synchronized
Verify that the NIs reload on takeover is none
If the status of any of the above is different than what should be, issue a "write
memory", and then a "copy working certified" for a mono cmm, or "copy working
certified flash-synchro" for a dual cmm chassis. Check status again.

"show log swlog timestamp mo/day/year 00:00" (where the month and day are
for the day the upgrade was performed).

Verify that there are no errors after the bootup sequence has completed and
the NI's are up. It is normal to have messages during boot sequence.
Report any unexpected errors to customer support.

If the log appears clean it may be cleared out if desired for a clean start
on the new code by issuing "swlog clear"

ALCATEL

On 6600 run "show stack topology" to check that all elements are shown.

"show vlan"
Verify that all desired vlans show the admin and oper state as "on".
Note that in order to have a vlan become active at least one interface has to be active in the vlan first.

"show ip interface"
Verify all needed interfaces show a status of "up" and forward is "yes"

```
"show ip interface"
Total 8 interfaces
 Name       IP Address      Subnet Mask      Type     Status    Forward
---------+---------------+---------------+--------+--------+----------
 loopback  127.0.0.1       255.0.0.0        ETH_II      UP        NO
 vlan 2    151.151.1.2     255.255.0.0      ETH_II      UP        YES
```

"show ip route"
If using dynamic routing (rip, ospf, bgp) check the routing table for the proper dynamically learned routes with "show ip route"
If the expected routes are not seen take the appropriate troubleshooting steps for each protocol (check neighbor state, interface state, etc.)

"show spantree" (check if enabled)
"show spantree ports" (check for proper forwarding ports)
"show vlan port" (check for proper forwarding ports)
If running spanning tree use the above commands to check the state of ports to ensure the proper links are forwarding.

Run a ping test to neighboring and remote devices to verify connectivity is up. Initiate a ping test from end point to end point to verify connectivity exists.

ALCATEL

If you have any questions, the following contact information should be used:

Web Links
Customers: http://eservice.ind.alcatel.com/
EMEAI Business Partners: http://www.businesspartner.alcatel.com/

Email
support@ind.alcatel.com
EMEAI Business Partners: mailto:support.center@alcatel.fr)

Phone
North America 1 800-995-2696
Latin America 1 877-919-9526
Europe (EMEAI) +33-388-55-69-04
Asia Pacific +65-394-7933
Other International +1-818-878-4507

Alcatel customers under maintenance contracts have access to troubleshooting tools on the Intranet found at the web addresses listed above.