

# Catalyst 9000 Switches Booting to Switch: Prompt Due to Stack 1+1 Variable

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## Introduction

This document describes a rare problem and solution about Catalyst 9000 Series Switches that fail to boot normally and fall into the bootloader (switch:) prompt.

## Problem

Chassis 2 reloading, reason - Active/Standby selection failed in 1+1 Mode.

```
switch: boot
attempting to boot from [flash:packages.conf]

Located file packages.conf
#
#####
#####
Validate packages: SHA-1 hash:
calculated 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA
expected 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA

Both links down, not waiting for other switches
Switch number is 2

Chassis 2 reloading, reason - Active/standby selection failed in 1+1 Mode <<<<<<
Feb 19 20:06:55.572 FP0/0: %PMAN-5-EXITACTION: Process manager is exiting: reload fp action
requested
Feb 19 20:06:57

Initializing Hardware...

System Bootstrap, Version 16.6.1r [FC1], RELEASE SOFTWARE (P)
Compiled Sat 07/15/2017 8:31:57.39 by rel

Current image running:
Primary Rommon Image

Last reset cause: SoftwareReload
C9300-48U platform with 8388608 Kbytes of main memory
```

```
attempting to boot from [flash:packages.conf]
```

```
Located file packages.conf
```

```
#
```

```
#####  
#####
```

```
Validate packages: SHA-1 hash:
```

```
calculated 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA
```

```
expected 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA
```

Another way to identify this problem is to look at the STACK 1+1 bootloader variable with the use of the **set** command in bootloader mode. To get the switch in bootloader mode, click the **mode** button while the switch starts to boot up.

```
switch: set  
ABNORMAL_RESET_COUNT=0  
AUTOREBOOT_RESTORE=1  
BOARDID=20569  
BOOT=flash:packages.conf  
BSI=0  
MAC_ADDR=00:ab:cd:ef:01  
MANUAL_BOOT=yes  
MODEL_NUM=C9300-48UXM  
MODEL_REVISION_NUM=D0  
MOTHERBOARD_ASSEMBLY_NUM=73-17959-06  
MOTHERBOARD_REVISION_NUM=A0  
MOTHERBOARD_SERIAL_NUM=XXXXXXXXXXXX  
RANDOM_NUM=1901228755  
RET_2_RCALTS=  
ROMMON_AUTOBOOT_ATTEMPT=3  
STACK_1_1=2_0 <<<<<<<  
SWITCH_IGNORE_STARTUP_CFG=1  
SWITCH_NUMBER=2  
SYSTEM_SERIAL_NUM=XXXXXXXXXXXX  
TEMPLATE=access  
VERSION_ID=V01
```

```
switch:
```

## Solution

Unset the Stack 1+1 variable. After this switch is able to boot normally.

```
switch:unset STACK_1_1
```

```
switch: set  
ABNORMAL_RESET_COUNT=0  
AUTOREBOOT_RESTORE=1  
BOARDID=20569  
BOOT=flash:packages.conf  
BSI=0  
MAC_ADDR=00:ab:cd:ef:01  
MANUAL_BOOT=yes  
MODEL_NUM=C9300-48UXM
```

```
MODEL_REVISION_NUM=D0
MOTHERBOARD_ASSEMBLY_NUM=73-17959-06
MOTHERBOARD_REVISION_NUM=A0
MOTHERBOARD_SERIAL_NUM=XXXXXXXXXXXX
RANDOM_NUM=1901228755
RET_2_RCALTS=
ROMMON_AUTOBOOT_ATTEMPT=3
SWITCH_IGNORE_STARTUP_CFG=1
SWITCH_NUMBER=2
SYSTEM_SERIAL_NUM=XXXXXXXXXXXX
TEMPLATE=access
VERSION_ID=V01
```

switch:

Once the Stack 1+1 bootloader variable is unset, then issue the `boot` command so that switch can boot from the boot variable set on the switch.

```
switch: boot
attempting to boot from [flash:packages.conf]
```

```
Located file packages.conf
#
#####
#####
Validate packages: SHA-1 hash:
calculated 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA
expected 550C9730:667B2788:DD6F6B06:D0FFA819:01A315DA
```

```
Both links down, not waiting for other switches
Switch number is 2
```

## Related Information

For information about the Stack 1+1 mode, refer to [1:1 Redundancy](#).