# Catalyst 6500 Series Switch ISSU upgradeprocedure met 6800IA (FEX) aangesloten

## Inhoud

Inleiding Voorwaarden Vereisten Gebruikte componenten Upgradeprocedure Eerste instelling Upgradestappen Verifiëren

## Inleiding

Dit document beschrijft een stap-voor-stap software-upgrade (ISSU) procedure op Cisco Catalyst 6500 Series Switches in de VSS-modus (Virtual Switching System) met het gebruik van de Supervisor 2T met dubbel gestartte Cisco Catalyst 6800 Instant Access Switches (FEX) verbonden.

## Voorwaarden

### Vereisten

Er zijn geen specifieke vereisten van toepassing op dit document.

### Gebruikte componenten

De informatie in dit document is gebaseerd op Cisco Catalyst 6500 Series Switches in VSSmodus die Supervisor Engine 2T uitvoeren met een dubbele gestartte 6800IA aangesloten op WS-X6904-40G lijnkaarten.

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u de potentiële impact van elke opdracht begrijpen.

## Upgradeprocedure

## **Eerste instelling**

6K1#show mod sw all

De upgradeprocedure wordt uitgevoerd voor Cisco IOS-softwarerelease 15.1(2)SY naar release 15.1(2)SY1.

Hier zijn de statistieken vóór het ISSU-proces:

- Het Catalyst 6500 chassis met Switch-ID 1 is actief en de Switch met ID 2 is Standby (Hot).
- Beide chassis zijn beschikbaar op Cisco IOS-softwarerelease 15.1(2)SY.
- Eén enkele 6800IA-kaart met Cisco IOS-softwarerelease 15.0(2)EX2 wordt aangesloten op VSS op WS-X6904-40G-lijnkaarten met een dubbele home-verbinding. Het FEX port-channel nummer is 99 en de FEX ID is 110.

Switch Number: 1 Role: Virtual Switch Active \_\_\_\_\_ Mod Ports Card Type Model Serial No. 5 Supervisor Engine 2T 10GE w/ CTS (Acti VS-SUP2T-10G 2 SAL1632K9P2 20 DCEF2T 4 port 40GE / 16 port 10GE 3 WS-X6904-40G SAL1741E4ZA Mod MAC addresses Hw Fw Sw Status \_\_\_\_ \_\_\_\_\_ c471.fe7c.de96 to c471.fe7c.de9d 1.3 12.2(50r)SYS 15.1(2)SY 2 3 e02f.6d6a.698c to e02f.6d6a.699f 1.0 12.2(50r)SYL 15.1(2)SY Ok Mod Sub-Module Model Serial Hw Status \_\_\_\_ \_\_\_\_\_ 2 Policy Feature Card 4 VS-F6K-PFC4 SAL1637MCQQ 1.2 Ok VS-F6K-MSFC5 SAL1637MKX8 1.4 Ok 2 CPU Daughterboard 3 Distributed Forwarding Card WS-F6K-DFC4-E SAL1745FSD6 1.0 Ok Mod Online Diag Status \_\_\_\_\_ \_\_\_\_\_ 2 Pass 3 Pass Switch Number: 2 Role: Virtual Switch Standby \_\_\_\_\_ Model Mod Ports Card Type Serial No. 5 Supervisor Engine 2T 10GE w/ CTS (Hot) VS-SUP2T-10G 2 SAL1650UC8L 3 20 DCEF2T 4 port 40GE / 16 port 10GE WS-X6904-40G SAL171730D3 Hw Fw Sw Mod MAC addresses Status --- ----- ------ ------ ------2 2c54.2dc4.2f3a to 2c54.2dc4.2f41 1.4 12.2(50r)SYS **15.1(2)SY** Ok 3 70ca.9b8f.510c to 70ca.9b8f.511f 1.0 12.2(50r)SYL 15.1(2)SY Ok Mod Sub-Module Model Serial Hw Status \_\_\_\_ \_\_\_\_\_ 2Policy Feature Card 4VS-F6K-PFC4SAL1651UG8P1.22CPU DaughterboardVS-F6K-MSFC5SAL1651UEBY1.5 Ok Ok 3 Distributed Forwarding Card WS-F6K-DFC4-E SAL17173QHY 1.2 Ok

Mod Online Diag Status \_\_\_\_ \_\_\_\_ 2 Pass 3 Pass Switch Number: 110 Role: FEX -----Serial No. Mod Ports Card Type Model \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ C6800IA-48TD 48 C6800IA 48GE FOC1736W1A6 1 Hw Fw Mod MAC addresses Sw Status \_\_\_\_ \_\_\_\_\_ 1 c025.5cc2.2d00 to c025.5cc2.2d33 0.0 Unknown **15.0(2)EX2** Ok Mod Online Diag Status \_\_\_\_\_ \_\_\_\_\_\_ 1 Pass 6K1#**show switch virtual** : Virtual Switch Switch mode Virtual switch domain number : 100 Local switch number : 1

Local switch operational role: Virtual Switch Active Peer switch number : 2 Peer switch operational role : Virtual Switch Standby

### Upgradestappen

1. Zorg ervoor dat het nieuwe Cisco IOS-beeld (Cisco IOS-softwarerelease 15.1(2)SY1) aanwezig is in de backplane en de slavebootschijf.

```
6K1#dir bootdisk: | in s2t54
5 -rw- 120035816 Jan 23 2014 22:35:12 +00:00
s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
8 -rw- 119792104 Feb 10 2014 19:42:12 +00:00
s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
6K1#dir slavebootdisk: | in s2t54
5 -rw- 120035816 Jan 23 2014 22:26:14 +00:00
s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
8 -rw- 119792104 Feb 10 2014 19:46:14 +00:00
s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
```

2. (Optioneel) Gebruik deze opdrachten om te controleren of de VSS klaar is voor het uitvoeren van de upgradeprocedure:

bijzonderheden over de kwestie weergevenredundantie tonenswitch tonen6K1#show staatsdetail

Het systeem is ingesteld voor een upgrade in stagnerende modus. Twee supermarktknooppunten blijken online te zijn. Samenvatting: het systeem wordt in de stand-by modus bijgewerkt.

```
Slot = 1/2
RP State = Active
ISSU State = Init
Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
Operating Mode = sso
ISSU Sub-State = No Upgrade Operation in Progress
Starting Image = N/A
Target Image = N/A
Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
```

```
Slot = 2/2
RP State = Standby
ISSU State = Init
Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
Operating Mode = sso
ISSU Sub-State = No Upgrade Operation in Progress
Starting Image = N/A
Target Image = N/A
Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
```

```
This system is Fex-capable
```

Fex-ID ISSU Status

110 FEX\_INIT

6K1#

```
6K1#show redundancy
Redundant System Information :
------
     Available system uptime = 36 minutes
Switchovers system experienced = 0
           Standby failures = 0
      Last switchover reason = none
               Hardware Mode = Duplex
  Configured Redundancy Mode = sso
   Operating Redundancy Mode = sso
            Maintenance Mode = Disabled
              Communications = Up
Current Processor Information :
_____
             Active Location = slot 1/2
      Current Software state = ACTIVE
     Uptime in current state = 36 minutes
               Image Version = Cisco IOS Software, s2t54 Software
               (s2t54-ADVENTERPRISEK9-M),
               Version 15.1(2)SY, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Wed 04-Sep-13 12:37 by prod_rel_team
                       BOOT = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
                 CONFIG_FILE =
                     BOOTLDR =
      Configuration register = 0x2102
```

```
Standby Location = slot 2/2
      Current Software state = STANDBY HOT
      Uptime in current state = 34 minutes
                Image Version = Cisco IOS Software, s2t54 Software
                 (s2t54-ADVENTERPRISEK9-M),
                Version 15.1(2)SY, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Wed 04-Sep-13 12:37 by prod_rel_team
                        BOOT = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
                  CONFIG_FILE =
                     BOOTLDR =
       Configuration register = 0x2102
```

3. Gebruik de opdracht **Loop** om het upgradeproces te starten.

In deze stap herstart het VSS standby chassis, herlaadt het met het nieuwe beeld en initialiseert het als VSS standby chassis in SSO redundantie modus en voert het nieuwe beeld uit. Deze stap is voltooid wanneer de configuratie van het chassis gesynchroniseerd is, zoals aangegeven door het Bulk sync slaagde bericht. Het kan enkele seconden tot enkele minuten duren voor het nieuwe beeld wordt geladen en voor het VSS standby chassis naar de SSO-modus.

```
6K1#issu loadversion 1/2 bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
2/2 slavebootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
System configuration has been modified. Save? [yes/no]: yes
Building configuration...
[ OK ]
%issu loadversion initiated successfully, upgrade sequence will begin shortly
6K1#
*Feb 11 05:24:40.091: %ISSU_PROCESS-SW1-3-LOADVERSION: Loadversion sequence
will begin in 60 seconds. Enter 'issu abortversion' to cancel.
*Feb 11 05:25:10.091: %ISSU_PROCESS-SW1-6-LOADVERSION_INFO: Resetting Standby shortly
<...output truncated...>
*Feb 11 05:29:46.075: %VS_GENERIC-SW1-6-VS_HA_HOT_STANDBY_NOTIFY: Standby switch
is in Hot Standby mode
*Feb 11 05:29:46.079: %HA_CONFIG_SYNC-SW1-6-BULK_CFGSYNC_SUCCEED: Bulk Sync succeeded
*Feb 11 05:29:46.079: %RF-SW1-5-RF_TERMINAL_STATE: Terminal state reached for (SSO)
*Feb 11 05:30:25.091: %ISSU_PROCESS-SW1-3-LOADVERSION: Loadversion has completed.
Please issue the 'issu runversion' command after all modules come online.
! Boot variable for standby should point to new Image in "show issu state detail" output.
6K1#show issu state det
        The system is configured to be upgraded in staggered mode.
        2 supervisor nodes are found to be online.
        Summary: an in-tandem upgrade is in progress.
               Slot = 1/2
          RP State = Active
         ISSU State = Load Version
```

```
Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
     Operating Mode = sso
     ISSU Sub-State = Load Version Completed
     Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
      Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
    Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
               Slot = 2/2
          RP State = Standby
         ISSU State = Load Version
     Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
     Operating Mode = sso
     ISSU Sub-State = Load Version Completed
    Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
      Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
    Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
This system is Fex-capable
Fex-ID ISSU Status
110 FEX_UPGRADE_INIT
6K1#show redundancy states
     my state = 13 -ACTIVE
   peer state = 8 -STANDBY HOT
        Mode = Duplex
         Unit = Secondary
      Unit ID = 18
Redundancy Mode (Operational) = sso
Redundancy Mode (Configured) = sso
Redundancy State
                              = sso
   Maintenance Mode = Disabled
  Manual Swact = enabled
Communications = Up
 client count = 144
 client_notification_TMR = 30000 milliseconds
        keep_alive TMR = 9000 milliseconds
      keep_alive count = 1
  keep_alive threshold = 19
         RF debug mask = 0x0
```

4. Wanneer het VSS standby chassis met succes het nieuwe beeld in de staat van de SSO redundantie draait en alle linecards op het VSS standby chassis online zijn, dient u de opdracht runversion in te voeren om een omschakeling te forceren. Het aangepaste VSS standby chassis neemt het nieuwe actieve chassis over, dat het nieuwe beeld draait. Het voorheen actieve chassis wordt opnieuw geladen en geformatteerd als het nieuwe VSS standby chassis in SSO-modus, waarbij het oude beeld wordt uitgevoerd (voor het geval dat de software-upgrade moet worden afgebroken en het oude beeld wordt hersteld). Deze stap is voltooid wanneer de configuratie van het chassis gesynchroniseerd is, zoals aangegeven door het Bulk sync slaagde bericht.

### 6K1#issu runversion

Deze opdracht vult de actieve eenheid opnieuw in.

```
Proceed ? [confirm]
%issu runversion initiated successfully
*Feb 11 05:35:19.035: %RF-SW1-5-RF_RELOAD: Self reload. Reason: Admin ISSU
runversion CLI
<...output truncated...>
Feb 11 05:35:21.411: %SYS-SW1-5-SWITCHOVER: Switchover requested by Exec.
Reload Reason: Admin ISSU runversion CLI.
Resetting .....
!
!Standby chassis now becomes active. Below logs are from new active switch.
!
Initializing as Virtual Switch ACTIVE processor
*Feb 11 05:37:36.107: %PFREDUN-SW2-6-ACTIVE: Standby initializing for SSO mode
*Feb 11 05:39:56.563: %HA_CONFIG_SYNC-SW2-6-BULK_CFGSYNC_SUCCEED: Bulk Sync succeeded
*Feb 11 05:39:56.563: %RF-SW2-5-RF_TERMINAL_STATE: Terminal state reached for (SSO)
*Feb 11 05:39:56.555: %PFREDUN-SW1_STBY-6-STANDBY: Ready for SSO mode in Default Domain
! Wait till all the modules and Fex Port-channel 99 links come up
!
*Feb 11 05:41:28.467: %ISSU_PROCESS-SW2-6-RUNVERSION_INFO: Runversion has completed.
Please issue the 'issu acceptversion' command
Feb 11 05:43:13.034: %LINK-3-UPDOWN: Interface TenGigabitEthernet1/0/2, changed
state to up (FEX-110)
Feb 11 05:43:14.033: %LINEPROTO-5-UPDOWN: Line protocol on Interface
TenGigabitEthernet1/0/2, changed state to up (FEX-110)
*Feb 11 05:43:14.491: %SATMGR-SW2-5-FABRIC_PORT_UP: SDP up on interface Te1/3/5,
connected to FEX 110, uplink 52
*Feb 11 05:43:14.491: %SATMGR-SW2-5-DUAL_ACTIVE_DETECT_CAPABLE: channel group 99
is now dual-active detection capable
6K1#show issu state
        The system is configured to be upgraded in staggered mode.
        2 supervisor nodes are found to be online.
        Summary: an in-tandem upgrade is in progress.
               Slot = 2/2
           RP State = Active
         ISSU State = Run Version
     Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
               Slot = 1/2
           RP State = Standby
         ISSU State = Run Version
      Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
This system is Fex-capable
```

Fex-ID ISSU Status

110 FEX\_UPGRADE\_INIT

```
6K1#show fex 110 detail
FEX: 110 Description: FEX0110 state: online
FEX version: 15.0(2)EX2
Extender Model: C6800IA-48TD, Extender Serial: FOC1736W1A6
FCP ready: yes
Image Version Check: enforced
Fabric Portchannel Ports: 2
Fabric port for control traffic: Te2/3/5
Fabric interface state:
    Po99 - Interface Up.
    Te1/3/5 - Interface Up. state: bound
    Te2/3/5 - Interface Up. state: bound
```

 Gebruik de opdracht versie-opname om de terugdraaitimer te stoppen. Dit is nodig omdat als de timer afloopt, het aangepaste chassis opnieuw wordt geladen en naar de vorige softwareversie terugkeert.

```
6K1#issu acceptversion
% Rollback timer stopped. Please issue the 'issu commitversion' command.
```

6. Gebruik de opdracht runversion alle opdrachten gebruiken om de beeldomzetting te starten en de upgradeprocedure te starten op de FEX (6800IA). De FEX zet het downloaden van een afbeelding van de nieuwe softwarebundel van Supervisor2T in gang (hier Cisco IOSsoftwarerelease 15.2(2)SY1). Als je FEX stapels gebruikt, is de meester verantwoordelijk om de afbeelding naar zijn leden te halen. Een TFTP-server draait op 192.1.1.1.

```
6K1#issu runversion fex all
% Successfully initiated 'runversion fex' for Fex IDs: 110.
Use 'show issu state' for more information.
6K1#show issu state det
       The system is configured to be upgraded in staggered mode.
        2 supervisor nodes are found to be online.
        Summary: an in-tandem upgrade is in progress.
              Slot = 2/2
          RP State = Active
         ISSU State = Run Version
     Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;bootdisk:
s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
    Operating Mode = sso
     ISSU Sub-State = Run Version Completed
    Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
      Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
    Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
```

```
Slot = 1/2
RP State = Standby
ISSU State = Run Version
Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12;
Operating Mode = sso
ISSU Sub-State = Run Version Completed
Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
```

This system is Fex-capable

#### Fex-ID ISSU Status

#### 110 FEX\_UPGRADE\_IN\_PROGRESS

```
Following are the logs on from FEX 6800IA console:
!
!192.1.1.1 is the tftp running on FEX controller i.e. VSS active and vlan 1012 is the
control vlan associated with fex.
1
FEX-110#
Loading c6800ia-universalk9-mz.150-2.EX4.bin from 192.1.1.1
[OK - 15493122 bytes]
examining image...
extracting info (112 bytes)
extracting c6800ia-universalk9-mz.150-2.EX4/info (792 bytes)
extracting info (112 bytes)
Stacking Version Number: 1.55
System Type:
                      0x00000000
 Ios Image File Size: 0x00EB5200
Total Image File Size: 0x00EC6A00
Minimum Dram required: 0x08000000
                 universalk9-150-2.EX4
 Image Suffix:
 Image Directory:
                    c6800ia-universalk9-mz.150-2.EX4
                     c6800ia-universalk9-mz.150-2.EX4.bin
 Image Name:
 Image Feature:
                     IP|LAYER_2|SSH|3DES|MIN_DRAM_MEG=128
 FRU Module Version: No FRU Version Specified
Old image for switch 1: flash:/c6800ia-universalk9-mz.150-2.EX2
Old image will be left alone
Extracting images from archive into flash...
! The console will be waiting for about 5-10 minutes after the above line.
<output truncated>
New software image installed in flash:/c6800ia-universalk9-mz.150-2.EX4
Following are the logs from the 6500 Active supervisor:
```

\*Feb 11 06:00:30.387: %SATMGR-SW2-5-ONLINE: FEX 110 online \*Feb 11 06:00:30.391: %SATMGR-SW2-5-FEX\_MODULE\_ONLINE: FEX 110, module 1 online \*Feb 11 06:00:30.395: %OIR-SW2-6-INSREM: Switch 110 Physical Slot 1 - Module Type LINE\_CARD inserted \*Feb 11 06:00:30.951: %SATMGR-SW2-5-FABRIC\_PORT\_UP: SDP up on interface Te2/3/5, connected to FEX 110, uplink 51 \*Feb 11 06:00:30.951: %SATMGR-SW2-5-DUAL ACTIVE DETECT CAPABLE: channel group 99 is now dual-active detection capable \*Feb 11 06:01:00.983: %OIR-SW2-6-SP\_INSCARD: Card inserted in Switch\_number = 110, physical slot 1, interfaces are now online FEX-110#show ver | in image System image file is "flash:/c6800ia-universalk9-mz.150-2.EX4/ c6800ia-universalk9-mz.150-2.EX4.bin" 6K1#**show issu state det** The system is configured to be upgraded in staggered mode. 2 supervisor nodes are found to be online. Summary: an in-tandem upgrade is in progress. Slot = 2/2RP State = Active ISSU State = Run Version Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12; bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12 Operating Mode = sso ISSU Sub-State = Run Version Completed Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin Slot = 1/2RP State = Standby ISSU State = Run Version Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12; Operating Mode = sso ISSU Sub-State = Run Version Completed Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin

This system is Fex-capable

### Fex-ID ISSU Status

110 FE	X_UPGRADE	COMPLETE
--------	-----------	----------

7. Typ de opdracht voor de vastlegging van de opdracht om het VSS stand-by chassis te verbeteren en bevestig de ISSU-sequentie. Het VSS standby chassis herstart, herlaadt met het nieuwe beeld en formatteert als VSS standby chassis in de SSO redundantie status, met het nieuwe beeld. Deze stap is voltooid wanneer de chassisconfiguratie gesynchroniseerd is, zoals aangegeven door de Bulk sync slaagde bericht, en alle linecards in de nieuwe VSS-Standby is online en geïnstalleerd.

```
%issu commitversion initiated successfully, upgrade sequence will continue shortly
6K1#
*Feb 11 06:05:30.839: %ISSU PROCESS-SW2-3-COMMITVERSION: issu commitversion;
Commitversion sequence will begin in 60 seconds. Enter 'issu abortversion'
to cancel.
*Feb 11 06:06:00.839: %ISSU_PROCESS-SW2-6-COMMITVERSION_INFO:
Resetting Standby shortly
*Feb 11 06:08:48.571: %PFREDUN-SW2-6-ACTIVE: Standby initializing for SSO mode
*Feb 11 06:09:01.163: %ISSU PROCESS-SW2-6-COMMITVERSION INFO: Standby has
come online, wait for terminal state
*Feb 11 06:10:41.267: %VS_GENERIC-SW2-6-VS_HA_HOT_STANDBY_NOTIFY: Standby switch
is in Hot Standby mode
*Feb 11 06:10:41.271: %HA_CONFIG_SYNC-SW2-6-BULK_CFGSYNC_SUCCEED:
Bulk Sync succeeded
*Feb 11 06:10:41.271: %RF-SW2-5-RF_TERMINAL_STATE: Terminal state reached for (SSO)
*Feb 11 06:10:46.403: %ISSU_PROCESS-SW2-6-COMMITVERSION_INFO: Upgrade has completed,
updating boot configuration
!
!Boot variable now displays both new and old image in ?show issu state detail? output.
!
6K1#show issu state detail
        The system is configured to be upgraded in staggered mode.
        2 supervisor nodes are found to be online.
        Summary: an in-tandem upgrade is in progress.
               Slot = 2/2
          RP State = Active
         ISSU State = Commit Version
     Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
     Operating Mode = sso
     ISSU Sub-State = Commit Version completed, waiting for system to settle
     Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
       Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
    Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
               Slot = 1/2
          RP State = Standby
         ISSU State = Commit Version
      Boot Variable = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
     Operating Mode = sso
     ISSU Sub-State = Commit Version completed, waiting for system to settle
    Starting Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin
      Target Image = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
    Current Version = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin
```

```
This system is Fex-capable
```

6K1**#issu commitversion** 

#### Fex-ID ISSU Status

110 FEX\_UPGRADE\_COMPLETE

```
6K1#show redundancy
Redundant System Information :
    _____
     Available system uptime = 1 hour, 28 minutes
Switchovers system experienced = 1
           Standby failures = 1
      Last switchover reason = user forced
               Hardware Mode = Duplex
  Configured Redundancy Mode = sso
    Operating Redundancy Mode = sso
            Maintenance Mode = Disabled
              Communications = Up
Current Processor Information :
_____
             Active Location = slot 2/2
      Current Software state = ACTIVE
     Uptime in current state = 36 minutes
               Image Version = Cisco IOS Software, s2t54 Software
(s2t54-ADVENTERPRISEK9-M), Version 15.1(2)SY1, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Thu 28-Nov-13 12:58 by prod_rel_team
                       BOOT = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
                CONFIG_FILE =
                    BOOTLDR =
      Configuration register = 0x2102
Peer Processor Information :
_____
            Standby Location = slot 1/2
      Current Software state = STANDBY HOT
     Uptime in current state = 1 minute
               Image Version = Cisco IOS Software, s2t54 Software (s2t54-ADVENTERPRISEK9-
M),
Version 15.1(2)SY1, RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Thu 28-Nov-13 12:58 by prod_rel_team
                       BOOT = bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY1.bin,12;
bootdisk:s2t54-adventerprisek9-mz.SPA.151-2.SY.bin,12
                 CONFIG_FILE =
                     BOOTLDR =
      Configuration register = 0x2102
```

## Verifiëren

Gebruik deze opdrachten om te controleren of de upgrade geslaagd is:

- bijzonderheden over de kwestie weergeven
- redundantie tonen
- switch tonen

Hier is de huidige status na het ISSU-proces:

- 6500 chassis met Switch-ID 2 is actief en de Switch met ID 1 is Standby (Hot). Ze zijn nu beschikbaar op Cisco IOS-softwarerelease 15.1(2)SY1.
- De Instant Access Client (6800IA) voert nu Cisco IOS-softwarerelease 15.0(2)EX4 uit.

6K1#**show mod swi all** Switch Number: 1 Role: Virtual Switch Standby \_\_\_\_\_ Model Mod Ports Card Type Serial No. \_\_\_\_ \_\_\_\_ 2 5 Supervisor Engine 2T 10GE w/ CTS (Hot) VS-SUP2T-10G SAL1632K9P2 3 20 DCEF2T 4 port 40GE / 16 port 10GE WS-X6904-40G SAL1741E4ZA Mod MAC addresses Hw Fw Sw Status \_\_\_\_ \_\_\_\_\_ 2 c471.fe7c.de96 to c471.fe7c.de9d 1.3 12.2(50r)SYS 15.1(2)SY1 Ok e02f.6d6a.698c to e02f.6d6a.699f 1.0 12.2(50r)SYL 15.1(2)SY1 Ok Status Mod Sub-Module Hw Model Serial \_\_\_\_\_ \_\_\_\_\_\_ 2Policy Feature Card 4VS-F6K-PFC4SAL1637MCQQ1.2Ok2CPU DaughterboardVS-F6K-MSFC5SAL1637MKX81.4Ok 3 Distributed Forwarding Card WS-F6K-DFC4-E SAL1745FSD6 1.0 Ok Mod Online Diag Status \_\_\_\_\_ 2 Pass 3 Pass Switch Number: 2 Role: Virtual Switch Active \_\_\_\_\_ Mod Ports Card Type Model Serial No. \_\_\_\_ \_\_\_\_ 2 5 Supervisor Engine 2T 10GE w/ CTS (Acti VS-SUP2T-10G SAL1650UC8L 20 DCEF2T 4 port 40GE / 16 port 10GE 3 WS-X6904-40G SAL17173QD3 Mod MAC addresses Hw Fw Sw Status \_\_\_\_ \_\_\_\_\_ 2c54.2dc4.2f3a to 2c54.2dc4.2f41 1.4 12.2(50r)SYS 15.1(2)SY1 2 Ok 3 70ca.9b8f.510c to 70ca.9b8f.511f 1.0 12.2(50r)SYL 15.1(2)SY1 Ok Mod Sub-Module Model Serial Hw Status 2 Policy Feature Card 4 VS-F6K-PFC4 VS-F6K-MSFC5 \_\_\_\_ \_\_\_\_\_ VS-F6K-PFC4 SAL1651UG8P 1.2 Ok SAL1651UEBY 1.5 Ok 3 Distributed Forwarding Card WS-F6K-DFC4-E SAL17173QHY 1.2 Ok Mod Online Diag Status \_\_\_\_\_ \_\_\_\_\_\_ 2 Pass 3 Pass Switch Number: 110 Role: FEX \_\_\_\_\_ Serial No. Mod Ports Card Type Model \_\_\_\_ \_\_\_\_\_ 1 48 C6800IA 48GE C6800IA-48TD FOC1736W1A6 Hw Fw Sw Mod MAC addresses Status \_\_\_\_ \_\_\_\_\_

Mod Online Diag Status

- ----
- 1 Pass

6K1#

### 6K1#**show switch virtual**

Switch mode: Virtual SwitchVirtual switch domain number: 100Local switch number: 2Local switch operational role:Virtual Switch ActivePeer switch number: 1Peer switch operational role: Virtual Switch Standby