

Probleemoplossing voor back-up en systeemherstel voor CGOS CGR 1000

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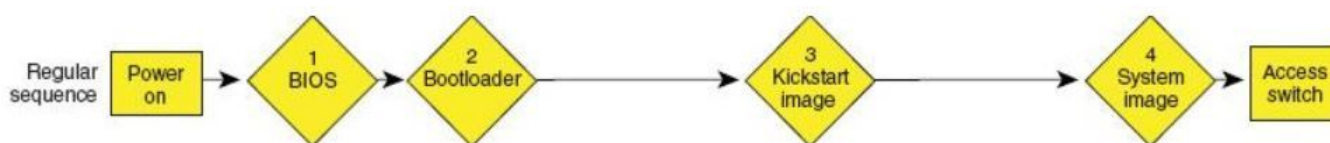
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Inleiding

In dit document worden beschreven welke stappen moeten worden ondernomen om een herstart- en systeembeeld op CGR 1000 te herstellen.

Achtergrondinformatie

CGR1000 gebruikt Cisco Secure Digital Digital (SD) Card-geheugen voor opgeslagen kickstart-beelden, systeembeelden, configuraties, enz. In zeldzame gevallen wordt de SD kaart beschadigd. Als resultaat hiervan wordt de kickstart afbeelding en/of het systeembeeld gecorrumpereerd. Dit voorkomt dat de CGR opstart. De volgorde voor het opstarten wordt in het gegeven cijfer geschetst. De procedure opzet in dit artikel is om het CGR te herstellen van een beschadigde SD kaart geheugenstatus.



Voorwaarden

1. Triviale File Transfer Protocol (TFTP)-server die op de lokale pc is geïnstalleerd
2. Stel de TFTP-server in om de kickstart-afbeelding en het systeembeeld te hebben

Vereisten

Cisco raadt kennis van de volgende onderwerpen aan:

1. Console-kabel
2. CAT5

3. De kickstart-afbeelding en de systeemaafbeeldingen

Gebruikte componenten

Dit document is alleen beperkt tot CGOS-versie die actief is op CGR 1120 en CGR 1240.

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.

Herstelstappen

1. Maak een console-kabel met putty.

2. Sluit de CAT5-kabel van de lokale pc-NIC aan op de CGR ETH 2/2. Dit is de enige interface die werkt op het moment van het herstelproces.

3. Stel de lokale pc-NIC in op dezelfde mate als CGR.

Bijvoorbeeld; PC NIC is 192.0.2.1 Subnet 255.255.255.0.

Voor het CGR wordt 192.0.2.2 Subnet 25.255.255.0.

4. Tijdens de Poetin-zitting zie:

```
"loader>"
```

```
IOFPGA @ 0xd0000000 version=0x30020700, datecode=0xc080d17 CPLD version 0x14  
Reset Reason = 0(0)  
Scratch pad test passed !!!
```

```
BIOS Version: Build # 12 - Wed 06/27/2012  
CGR Loader Version: 1.00.01
```

```
Filesystem type is ext2fs, partition type 0x83  
Filesystem type is ext2fs, partition type 0x83
```

```
GNU GRUB version 0.97
```

```
CGR Loader Version 1.00.01
```

```
loader>
```

5. Stel het IP-adres van ETH2/2 in met de opdracht "IP instellen".

```
set ip 192.0.2.2 255.255.255.0
```

```
Correct - ip addr is 192.0.2.2, mask is 255.255.255.0
Found Intel IOH GBE [2:0.1] at 0xe020, ROM address 0x0000
Probing...[Intel IOH GBE]
MAC address 78:da:6e:8:ad:e1
External PHY link UP @ 1000/full
Address: 192.0.2.2
Netmask: 255.255.255.0
Server: 0.0.0.0
Gateway: 0.0.0.0
```

```
loader>
```

6. Stel het Gateway-adres in als de lokale PC-NIC met de opdracht "set gw".

```
set gw 192.0.2.1
```

```
Correct gateway addr 192.0.2.1
Address: 192.0.2.2
Netmask: 255.255.255.0
Server: 0.0.0.0
Gateway: 192.0.2.1
```

7. Start de kickstart afbeelding vanaf de lokale ftp server met de opdracht "tftp://".

```
loader> boot tftp://192.0.2.1/cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin
Address: 192.0.2.2
Netmask: 255.255.255.0
Server: 192.0.2.1
Gateway: 192.0.2.1
Filesystem type is tftp, using whole disk
Booting: /cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin console=ttyS0,9600n8nn quiet loader_ver="1.00.01"....
.....
.....Kickstart image verification Successful
Image verification OK
```

```
INIT: Checking all filesystems ..... done.
Warning: switch is starting up with default configuration
Creating boot config file...
/etc/rc.d/rcS.d/S26check-flash: line 528: /mnt/bootloader/boot/grub/menu.lst.local: No such file
or directory
cp: cannot stat `/mnt/cfg/0/boot/grub/menu.lst.local': No such file or directory
WARNING: image sync is going to be disabled after a loader netboot
Loading system software
INIT: Sending processes the TERM signal [H [J
INIT: Sending processes the TERM signal
INIT: Sending processes the
```

```
KILL signal
```

8. Als het beeld eenmaal is opgestart, wordt er een uitvoer weergegeven die lijkt op deze uitvoer.

```
Router(boot)# ?
Exec commands:
clear      Reset functions
config     Enter configuration mode
copy       Copy from one file to another
```

```

delete      Delete a file or directory
dir         Directory listing for files
exit       Exit from the EXEC
find       Find a file below the current directory
format     Format disks
init       Initialize internal disk
load      Load system image
mkdir     Create new directory
move      Move files
no        Disable debugging functions
pwd       View current directory
reload    Reboot this supervisor module
rmdir    Remove existing directory
show     Show running system information
sleep    Sleep for the specified number of seconds
ssh      SSH to another system
tail     Display the last part of a file
telnet   Telnet to another system

```

9. Formateer de gecorrumpeerde SD-kaart met de opdracht "Opmaak":

This command is going to erase the contents of your bootflash:.

Do you want to continue? (y/n) [n] y

```

Formatting bootflash:
Formatting started at:  Fri Feb 20 23:56:00 UTC 2015
mke2fs 1.35 (28-Feb-2004)
Formatting finished at:  Fri Feb 20 23:56:52 UTC 2015
Formatting completed

```

10. Start het systeem in (optiestap: Deze opdracht is indelingen van de SD - kaart en wordt alle documenten vernietigd).

```

Router(boot)# init system
This command is going to erase your startup-config, licenses as well as the contents of your
bootflash:.
```

```

Do you want to continue? (y/n) [n] yInitializing the system
mount: /dev/mmcblk0p4 already mounted or /bootflash busy
mount: according to mtab, /dev/mmcblk0p4 is already mounted on /bootflash
ERROR: cannot mount filesystem
cp: omitting directory `/bootflash/'
Partitioning failed

```

11. Setup de Management Interface (dit is vereist om de kickstart- en systeemaafbeelding naar de flitser te kopiëren).

```

Router(boot)# configure terminal
Router(boot)(config)# interface mgmt0
Router(boot)(config-if)#ip address 192.0.2.2 255.255.255.0
Router(boot)(config-if)#no shut

```

12. Kopieer de kickstart en de systeemaafbeelding in de flitser.

```

Router(boot)# copy tftp://192.0.2.1/cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin bootflash:
Trying to connect to tftp server.....
Connection to server Established. Copying Started.....

```

```
TFTP get operation was successful
Copy complete, now saving to disk (please wait)...
```

```
Router(boot)# copy tftp://192.0.2.1/cgr1000-uk9.5.2.1.CG4.3.SPA.bin bootflash:
Trying to connect to tftp server.....
Connection to server Established. Copying Started.....
```

```
TFTP get operation was successful
Copy complete, now saving to disk (please wait)...
```

13. Controleer dat de kickstart en de systeemaafbeelding op de CGR staan met "dir".

```
Router(boot)#dir
 29167616    Feb 21 00:39:59 2015  cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin
143332283    Feb 21 00:42:06 2015  cgr1000-uk9.5.2.1.CG4.3.SPA.bin
      372    Feb 23 17:55:52 2015  fpga.log
     1905    Feb 23 18:39:54 2015  mts.log
```

```
Usage for bootflash://
691462144 bytes used
8859394048 bytes free
9550856192 bytes total
```

14. Start de systeemaafbeelding met de opdracht "load bootflash".

```
Router(boot)# load bootflash:cgr1000-uk9.5.2.1.CG4.3.SPA.bin
```

```
Loading system software
Uncompressing bootflash:/cgr1000-uk9.5.2.1.CG4.3.SPA.bin.....done. (in 37 seconds)
Loading plugin 0: core_plugin...
```

```
INIT: Switching to runlevel: 3
INIT: Sending processes the TERM signal
Router(boot)#
```

```
INIT:
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
System is coming up ... Please wait ...
2015 Feb 21 00:47:56  %$ VDC-1  %$ %COPP-2-COPP_NO_POLICY: Control-plane is unprotected.System is
coming up ... Please wait ...
2015 Feb 21 00:47:58  %$ VDC-1  %$ %VDC_MGR-2-VDC_ONLINE: vdc 1 has come online 2015 Feb 21
00:47:58 Router %$ VDC-1  %$ %PLATFORM-2-
```

```
INPUT_POWER_SOURCE_TRANSITION: Three Phase and DC Input Status Alert: L1 Phase ON, L2 Phase
OFF, L3 Phase OFF, DC Input Absent
```

15. Zodra de CGR in de systeemaafbeelding is opgestart, moet u de kickstart en systeemaafbeelding installeren met 'alle flitser installeren:<kickstart-afbeelding> systeemflitser:<systeemaafbeelding>'.</h3>

```
cgr1120# install all kickstart bootflash:cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin system
bootflash:cgr1000-uk9.5.2.1.CG4.3.SPA.bin
```

```
Verifying image bootflash:/cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin for boot variable
"kickstart".
-- SUCCESS
```

```
Verifying image bootflash:/cgr1000-uk9.5.2.1.CG4.3.SPA.bin for boot variable "system".
-- SUCCESS
```

```
Verifying image type.
-- SUCCESS
```

```
Extracting "system" version from image bootflash:/cgr1000-uk9.5.2.1.CG4.3.SPA.bin.
-- SUCCESS
```

```
Extracting "kickstart" version from image bootflash:/cgr1000-uk9-kickstart.5.2.1.CG4.3.SPA.bin.
-- SUCCESS
```

```
Extracting "bios" version from image bootflash:/cgr1000-uk9.5.2.1.CG4.3.SPA.bin.
-- SUCCESS
```

```
Checking for Battery Power Mode.
-- SUCCESS
```

```
Checking for Module Power Status.
-- SUCCESS
```

```
Checking for WPAN upgrade compatibility.
-- SUCCESS
```

```
Performing module support checks.
-- SUCCESS
```

```
Notifying services about system upgrade.
-- SUCCESS
```

Compatibility check is done:

Module	bootable	Impact	Install-type	Reason
1	yes	disruptive	reset	Hitless upgrade is not supported

Images will be upgraded according to following table:

Module	Image	Running-Version(pri:alt)	New-Version	Upg-Required
1	system	5.2(1)CG4(3)	5.2(1)CG4(3)	no
1	kickstart	5.2(1)CG4(3)	5.2(1)CG4(3)	no
1	bios	v16.1.0(10/15/2013):V12.1.0(06/27/2012)	v16.1.0(10/15/2013)	no
1	fpga	2.07.00	2.07.00	no

Switch will be reloaded for disruptive upgrade.

Do you want to continue with the installation (y/n)? [n] y