

Solução de problemas de flash de inicialização e recuperação de imagem do sistema para CGOS CGR 1000

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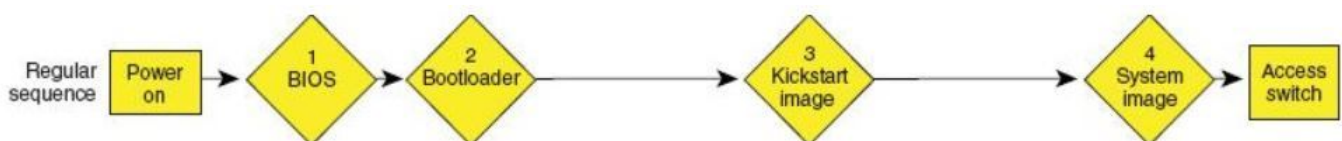
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Introduction

Este documento descreve as etapas de solução de problemas para recuperar o flash de inicialização e a imagem do sistema no CGR 1000.

Informações de Apoio

O CGR1000 usa a memória do cartão Cisco Secure Digital (SD) para armazenar imagens de início de sessão, imagens do sistema, configurações, etc. Em raras ocasiões, o cartão SD é corrompido. Como resultado, a imagem de início e/ou a imagem do sistema fica corrompida. Isso impede que o CGR seja inicializado. A sequência para a inicialização é descrita na figura fornecida. O procedimento descrito neste artigo é restaurar o CGR de um estado de memória de cartão SD corrompido.



Prerequisites

1. Servidor Trivial File Transfer Protocol (TFTP) instalado no PC local
2. Configure o servidor TFTP para ter a imagem de início rápido e a imagem do sistema

Requirements

A Cisco recomenda que você tenha conhecimento destes tópicos:

1. Cabo do console

2. CAT5

3. A imagem de início e as imagens do sistema

Componentes Utilizados

Este documento está restrito apenas à versão CGOS em execução no CGR 1120 e no CGR1240.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Etapas de recuperação

1. Configure o cabo do console usando putty.

2. Conecte o cabo CAT5 da placa de rede do pc local ao CGR ETH 2/2 . Essa é a única interface que funciona no momento do processo de recuperação.

3. Configure a placa de rede do pc local para estar na mesma sub-rede que o CGR.

Por exemplo; a placa de rede do PC é a sub-rede 192.0.2.1 255.255.255.0.

Para o CGR, a sub-rede 255.255.255.255.0 será 192.0.2.2.

4. Na sessão de Putty, você verá:

```
"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. Configure o endereço IP de ETH2/2 com o comando "set ip".

```
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. Configure o endereço do gateway para ser a placa de rede do PC local com o comando "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. Inicialize a imagem do kickstart a partir do servidor tftp local com o comando "boot 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[HJ
INIT: Sending processes the TERM signal
INIT: Sending processes the
```

```
KILL signal
```

8. Quando a imagem for inicializada, você verá uma saída semelhante a essa saída.

```
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. Formate o cartão SD corrompido com o comando "format bootflash:".

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. Execute o init system (etapa de opção: esse comando formata o cartão SD e apaga tudo).

```

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. Configure a interface de gerenciamento (isso é necessário para copiar o kickstart e a imagem do sistema no flash de inicialização).

```

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. Copie a imagem do sistema e do início no flash de inicialização.

```

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. Verifique se a imagem do sistema e do início está no CGR com "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. Inicialize a imagem do sistema com o comando "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 ...  
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. Quando o CGR for inicializado na imagem do sistema, você precisará instalar o kickstart e a imagem do sistema com "install all bootflash:<kickstart-image> system bootflash:<system image>".

```
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