升级Cisco 6015/6130/6160/6260 NI-2 DSLAM的Cisco IOS软件

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Introduction

本文包含升级的您的Cisco NI-2 DSLAM一个逐步程序。必须在 TCP/IP 就绪工作站上安装 TFTP 服务器或远程复制协议 (RCP) 服务器应用。一旦安装应用程序，必须执行配置的一个最小的级别。首先，TFTP应用程序必须配置成TFTP服务器，而不是用作TFTP客户端。其次，必须指定出站文件目录。这是将在其中存储 Cisco IOS 软件映像的目录。大多数 TFTP 应用会提供一个帮助执行这些配置任务的设置例程。

开始使用前

Conventions

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

Prerequisites

本文档没有任何特定的前提条件。

Components Used

This document is not restricted to specific software and hardware versions.

升级 Cisco IOS 软件镜像

使用以下程序升级Cisco IOS软件镜像。

1. 在 TFTP 服务器的出站目录中安装新的 Cisco IOS 软件镜像。TFTP server在此目录里寻找DSLAM的Cisco IOS软件镜像。确保您想复制到您的闪存的镜像位于此目录中。每个镜像的内

存需求也在TFTP server的出局目录里。使用 **show version 命令**，确认您有足够的内存。

```
DSLAM#show version
Cisco Internetwork Operating System Software
IOS (tm) NI2 Software (NI2-DSL-M), Version 12.1(5)DA, EARLY DEPLOYMENT RELEASE SOFTWARE
(fc2)
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Thu 07-Dec-00 19:27 by pnicosia
Image text-base: 0x800082C0, data-base: 0x811EA000
ROM: System Bootstrap, Version 12.0(5)DA, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
BOOTFLASH: NI2 Software (NI2-DBOOT-M), Version 12.1(3)DA, EARLY DEPLOYMENT RELEASE SOFTWARE
(fc1)
6130A uptime is 1 day, 18 hours, 19 minutes
System returned to ROM by power-on
System restarted at 16:11:23 PST Wed Feb 14 2001
System image file is "flash:ni2-dsl-mz.121-5.DA.bin"
cisco 6130 (NI2) processor with 60416K/5120K bytes of memory.
RC64475 CPU at 100Mhz, Implementation 48, Rev 0.0
Bridging software.
1 Ethernet/IEEE 802.3 interface(s)
4 ATM network interface(s)
522232 bytes of non-volatile configuration memory.
4096K bytes of Boot Flash (Sector size 256K).
16384K bytes of Flash internal SIMM (Sector size 256K).
Configuration register is 0x2102
```

2. 设立一个控制台会话对DSLAM。这可以通过直接控制台连接或虚拟Telnet连接执行。直接控制台连接更喜欢，因为Telnet连接将丢失在软件安装的重新启动阶段期间(请参阅第9)步。控制台连接做与反转电缆(浅黑或蓝色电缆)，并且连接DSLAM的控制台端口到PC的COM-port。
3. 启动PC的**超级终端**并且请使用以下设置：9600 bps8数据位0 个奇偶校验位1 个停止位无流控制
4. 验证TFTP server有IP连通性对DSLAM。TFTP server必须有与DSLAM的一个网络连接，并且一定能**连接**TFTP软件升级瞄准的DSLAM的IP地址。要达到此， DSLAM接口和TFTP server必须二者之一有：在同一个范围的一个IP地址或;被配置的默认网关。要验证，请检查TFTP服务器的IP地址。**Note:** 在您验证与您的TFTP server后的网络连通性，请通过发出**write memory命令**写对内存的所有更改在DSLAM。

```
DSLAM#write memory
Building configuration...
[OK]
DSLAM#
```

5. 验证引导闪存镜像是**ni2-dboot-mz.121-5.da1**或**ni2-dboot-mz.121-4.da**。如果它是，请去步骤14。如果它不是，请进入步骤6腾出Bootflash的空位。

```
DSLAM#dir bootflash:
Directory of bootflash:/

1  -rw-     3361208   Jan 01 2000 00:05:11  ni2-dboot-mz.121-2.DA

3801088 bytes total (439752 bytes free)
```

6. 通过删除当前启动镜像的名字腾出Bootflash的空位。

```
DSLAM#delete bootflash:ni2-dboot-mz.121-2.DA.bin
Delete filename [ni2-dboot-mz.121-2.DA.bin]?
Delete bootflash:ni2-dboot-mz.121-2.DA.bin? [confirm]
```

7. 使用**squeeze bootflash命令，**恢复在Bootflash的可用空间。

```
DSLAM#squeeze bootflash
All deleted files will be removed. Continue? [confirm]
Squeeze operation may take a while. Continue? [confirm]
Squeeze of bootflash complete
```

8. 复制启动镜像到Bootflash。

```
DSLAM#copy tftp://171.69.89.140/ni2-dboot-mz.121-5.DA1.bin bootflash:
Destination filename [ni2-dboot-mz.121-5.DA1.bin]?
```

```
Accessing tftp://171.69.89.140/ni2-dboot-mz.121-5.DA1.bin...
Loading ni2-dboot-mz.121-5.DA1.bin from 171.69.89.140 (via Ethernet0/0): !!!!!!!
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[OK - 3405392/6810624 bytes]

3405392 bytes copied in 57.676 secs (59743 bytes/sec)
```

9. 输入全局配置模式并且设置配置寄存器为**0x0000**，以便NI-2在ROM监控器(ROMMON)模式下将重新启动。

```
DSLAM#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
DSLAM(config)#config-register 0X0
DSLAM(config)#exit
```

10. 保存运行的配置并且重置系统。

```
DSLAM#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]

DSLAM#reload
Proceed with reload? [confirm]

*Jan 10 02:11:43.397: %SYS-5-RELOAD: Reload requested
System Bootstrap, Version 12.0(5)DA1, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
Copyright (c) 1999 by cisco Systems, Inc.
NI2 platform with 65536 Kbytes of main memory
```

11. 如果看到BOOTLDR在您输入**set命令后**，在Bootflash的镜像已经使用作为启动载入器;进入步骤13。否则，请去步骤12并且输入命令强制系统使用ni2-dboot-mz.121-5.bin作为启动载入器。

```
rommon 1 > set
```

12. 请使用**被移置的BOOTLDR**删除变量和**同步**保存ROMmon状态，然后重新启动。当NI-2引导时，使用ni2-dboot-mz.121-5da.bin作为您的启动载入器。

```
rommon 2 > unset BOOTLDR

rommon 3 > sync
```

13. 送回配置寄存器到**0x2102**并且重置系统。

```
rommon 4 > confreg 0x2102
rommon 5 > reset
```

14. 显示开始ni2-闪存文件的名字并且请使用它作为文件名在第15步。

```
DSLAM#dir flash:
Directory of flash:/

    1  -rw-     9447084   Jan 01 2000 00:13:03  ni2-dsl-mz.121-5.DA1.bin

15990784 bytes total (6543572 bytes free)
```

15. 删除在步骤14找到的闪存文件名。请重复步骤14和步骤15，直到在闪存的所有文件被删除了。

```
DSLAM#delete flash:ni2-dsl-mz.121-5.DA1.bin
Delete filename [ni2-dsl-mz.121-5.DA1.bin]?
Delete flash:ni2-dsl-mz.121-5.DA1.bin? [confirm]
```

16. 恢复在闪存的可用空间。

```
DSLAM#squeeze flash:
All deleted files will be removed. Continue? [confirm]
Squeeze operation may take a while. Continue? [confirm]

Squeeze of flash complete
```

17. 从TFTP server复制Cisco IOS软件镜像闪动。

```
DSLAM#copy tftp: flash:
Address or name of remote host [171.69.89.140]?
Source filename [ni2-dsl-mz.122-1b.DA.bin]?
Destination filename [ni2-dsl-mz.122-1b.DA.bin]?
Accessing tftp://171.69.89.140/ni2-dsl-mz.122-1b.DA.bin...
Loading ni2-dsl-mz.122-1b.DA.bin from 171.69.89.140 (via Ethernet0/0): !!!!!!!!!
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[OK - 9447084/18893824 bytes]

9447084 bytes copied in 128.940 secs (73805 bytes/sec)
```

18. 输入**全局配置模式**并且禁用从系统的引导程序。保存您的对启动配置的更改并且重新载入系统升级镜像。

```
DSLAM(config)#no boot system
 DSLAM(config)#end
 DSLAM(config)#write memory
 DSLAM(config)#reload
```

19. 确认运行的镜像是ni2-dsl-mz.122-1b.da。如果它不是，请进入步骤17。

```
DSLAM#show version
Cisco Internetwork Operating System Software
IOS (tm) NI2 Software (NI2-DSL-M), Version 12.2(1b)DA, EARLY DEPLOYMENT RELEASE
SOFTWARE (fc1)
TAC Support: http://www.cisco.com/tac
Copyright (c) 1986-2001 by cisco Systems, Inc.
Compiled Mon 20-Aug-01 14:13 by torowe
Image text-base: 0x80008308, data-base: 0x814CC000

ROM: System Bootstrap, Version 12.0(5)DA, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
BOOTLDR: NI2 Software (NI2-DBOOT-M), Version 12.2(1b)DA, EARLY DEPLOYMENT RELEASE SOFTWARE
(fc1)

DSLAM uptime is 28 minutes
System returned to ROM by reload at 00:06:58 UTC Sat Jan 1 2000
```

```
System image file is "flash:ni2-dsl-mz.122-1b.DA.bin"

cisco 6100 (NI2) processor with 60416K/5120K bytes of memory.
RC64475 CPU at 100Mhz, Implementation 48, Rev 0.0
Bridging software.
1 Ethernet/IEEE 802.3 interface(s)
8 DMT DSL Port interface(s)
4 ATM network interface(s)
522232 bytes of non-volatile configuration memory.

4096K bytes of Boot Flash (Sector size 128K).
16384K bytes of Flash internal SIMM (Sector size 256K).
Configuration register is 0x2102
```

20. 清除在引导闪存的所有信息。回答**y**确认所有问题。当DSLAM返回您到EXEC提示时，引导闪存顺利地被格式化和即可用。保证Bootflash是**3.8 MB**总数。如果它不是，请去步骤14。

```
DSLAM#format bootflash:
Format operation may take a while. Continue? [confirm]
Format operation will destroy all data in "bootflash:".  Continue? [confirm]
Formatting sector 1
Format of bootflash: complete
```

21. 从TFTP server复制启动镜像到Bootflash。

```
DSLAM#copy tftp://171.69.89.140/ni2-dboot-mz.122-1b.DA.bin bootflash:
Destination filename [ni2-dboot-mz.122-1b.DA.bin]?
Accessing tftp://171.69.89.140/ni2-dboot-mz.122-1b.DA.bin...
Loading ni2-dboot-mz.122-1b.DA.bin from 171.69.89.140 (via Ethernet0/0): !!!!!!!
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[OK - 3712100/7424000 bytes]

3712100 bytes copied in 69.476 secs (53798 bytes/sec)
```

22. 重新载入DSLAM由新的Cisco IOS软件镜像做它引导。

```
DSLAM#reload
```

23. 确认从新的Cisco IOS软件镜像引导的DSLAM被发出**show version命令**。

```
DSLAM#show version
```

show version 命令的输出应显示升级后的 Cisco IOS 软件镜像的名称。

Related Information

- 交换机产品支持
- Technical Support & Documentation - Cisco Systems