如何升级NAM到版本3.x

目录

简介

本文档提供了如何将网络分析模块(NAM)软件升级到3.x版的分步过程。

先决条件

要求

尝试进行此配置之前，请确保满足以下要求：

- 熟悉文件传输协议(FTP)
- 熟悉命令行中的Catalyst交换机管理

使用的组件

本文档中的信息基于以下软件和硬件版本：

- WS-X6380（原始NAM）
- NAM 3.0版软件
- NAM-1和NAM-2硬件设备
- 运行CatOS 7.3.1的Catalyst 6505

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

规则

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

将NAM软件升级到版本3.x

任务

本节介绍将NAM软件升级到3.x版的信息。

逐步指导

要升级软件，请完成以下步骤：

1. 下载文件：原始NAM — 请参阅适用于Cat 6500的软件下载NAM(生产代码：WS-X6380-NAM)(仅注册客户)，并获取c6nam.3-1-1.bin.gz文件。NAM1/NAM2 — 请参阅适用于Cat 6500的软件下载NAM(生产代码：WS-SVC-NAMx)(仅注册客户)，并获取c6svc-nam.3-1-1.bin.gz文件。

2. 将文件放在要使用的FTP服务器上帐户的根目录中。**注意**：此图示使用WS-X6380-NAM，但同时适用于WS-SVC-NAM-1和WS-SVC-NAM-2。本示例使用以下信息：FTP服务器是：名称：rtp-sycamore.cisco.com地址:172.18.123.68帐户ID为cse。帐户密码为csec。cse的根目录为：~ rtp-sycamore cse %4> pwd /local/home/cse。文件列在此处，因此：/local/home/cse/c6nam.3-1-1.bin.gz。~ rtp-sycamore cse %4>ls -al c6nam.3-1-1.bin.gz-rw-r—r— 1 cse other 75671244 5月28日11:17 c6nam.3-1-1.bin.gz

3. 要验证FTP服务器是否正常工作，请测试以查看此FTP服务器是否可从另一台工作站访问：**注意**：此用rtp-cse-205作为示例。
   ```
   rtp-cse-205_oansari-> ftp rtp-sycamore
   Connected to rtp-sycamore.cisco.com.
   220 rtp-sycamore FTP server (SunOS 5.7) ready.
   Name (rtp-sycamore:oansari): cse
   331 Password required for cse.
   Password: csecse
   230 User cse logged in.
   Remote system type is UNIX.
   Using binary mode to transfer files.
   ```

4. 当您访问FTP服务器时，请确保文件可用：
   ```
   ftp> ls c6nam.3-1-1.bin.gz
   227 Entering Passive Mode (172,18,123,68,222,205)
   150 ASCII data connection for /bin/ls (64.102.51.64,35372) (0 bytes).
   -rw-r--r-- 1 cse other 75671244 May 28 11:17 c6nam.3-1-1.bin.gz
   226 ASCII Transfer complete.
   ```
   当您验证文件存在且可用时，您会更加确信文件传输到NAM将成功。这确认FTP服务正在运行，且所需文件可下载到FTP客户端。

5. 开始升级NAM的步骤。示例如下：检查模块：
   ```
   nms-6506a> (enable) sh mod
   ...

   Mod Slot Ports Module-Type              Model              Sub Status
   --- ---- ----- ------------------------ ------------------ --- --------
   1   1    2     1000BaseX Supervisor     WS-X6K-SUP1A-2GE   yes ok
   15  1    1     Multilayer Switch Feature WS-F6K-MSFC       no  ok
   2   2    0     FlexWAN Module           WS-X6182-2PA       no  power-down

   4   4    2     Network Analysis Module  WS-X6380-NAM       no  ok
   5   5    8     1000BaseX Ethernet       WS-X6408-GBIC      no  ok
   6   6    48    10/100BaseTX Ethernet    WS-X6348-RJ-45     yes ok
   ```

输出显示，所关注的NAM位于插槽4中，状态为ok。检查CatOS交换机的版本：

```
nms-6506a> (enable) sh ver
WS-C6506 Software, Version NmpSW: 7.3(1)
```

注意：版本必须是7.3(1)或更高版本。如果您的交换机未升级到此版本，请勿继续升级NAM。首先升级交换机软件。如果指示的版本为7.3(1)或更高版本，则重置NAM:

```
nms-6506a> (enable) reset 4 hdd:2
This command will reset module 4.
Unsaved configuration on module 4 will be lost
Do you want to continue (y/n) [n]? y
Module 4 shut down in progress, do not remove module until shutdown completed.
nms-6506a> (enable)
```

注意：对于NAM1/NAM2，必须使用以下命令：**reset <module> cf:1**。您在终端上看到以下输出：

```
2003 May 28 11:28:36 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)"
2003 May 28 11:28:36 %SNMP-5-MODULETRAP:Module 4 [Down] Trap
2003 May 28 11:28:36 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "failed(7)"

003 May 28 11:28:50 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 11:28:50 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483090709 ticks
2003 May 28 11:28:50 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)"
2003 May 28 11:29:07 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483092362 ticks
2003 May 28 11:29:07 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted

2003 May 28 11:30:26 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "ok(2)"
2003 May 28 11:30:26 %SNMP-5-MODULETRAP:Module 4 [Up] Trap
2003 May 28 11:30:27 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 11:30:27 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483100353 ticks
2003 May 28 11:30:27 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted
2003 May 28 11:30:27 %SYS-3-MOD_PORTINTFINSYNC:Port Interface in sync
for Module 4
```

确保NAM重新启动成功：

```
nms-6506a> (enable) sh mod 4
Mod Slot Ports Module-Type Model Sub Status
--- ---- ----- ------------------------ ------------------ --- --------
4 4 2 Network Analysis Module WS-X6380-NAM no ok
```
!--- Yes, it is up again.

会话到NAM并发出upgrade 命令：

```
nms-6506a> (enable) sess 4
Trying NAM-4...
Connected to NAM-4.
Escape character is '^]'.

Cisco Network Analysis Module (WS-X6380-NAM)

Maintenance Partition
```
!--- Notice how this states Maint Partition now. login: **root**
```
Password:
```
!--- Enter the password (the default password here is 'cisco'). Network Analysis Module
```
(WS-X6380-NAM) Console, 1.2(1a)m Copyright (c) 1999, 2000, 2001 by cisco Systems, Inc.
root@nms-6506a-nam.123.cisco.com#upgrade ftp://cse:csecse@172.18.123.68/
local/home/cse/c6nam.3-1-1.bin.gz
```

*!--- Notice that the complete path was specified after the IP address, !--- the same path
that was retrieved from the "pwd" command on the server. !--- For this reason, it is*

encouraged to use your UNIX server as your !--- FTP server. If necessary, get your sysadmin to enable FTP on it !--- temporarily to upgrade this NAM. !--- This step takes the longest time to upgrade. root@nms-6506a-nam.123.cisco.com#**upgrade ftp://cse:csecse@172.18.123.68/local/home/cse/c6nam.3-1-1.bin.gz**500 'SIZE c6nam.3-1-1.bin.gz':
command not understood.
ftp://cse:csecse@172.18.123.68/local/home/cse/c6nam.3-1-1.bin.gz
(unknown size) - [|] 41362K
!--- This goes on for a long time. !--- You have to be patient through this. !--- Then, after a lot of time, (can run for hours): 75671250 bytes transferred in 3010.21 sec
(24.55k/sec) downloaded image version 3.1(1) Upgrade file
ftp://cse:csecse@172.18.123.68/local/home/cse/c6nam.3-1-1.bin.gz is downloaded. Upgrading
will wipe out the contents of the application partition on the hard disk. Do you want to
proceed installing it [y|N]: **y**

Proceeding with installation. Please do not interrupt.
If installation is interrupted or fails, boot this
partition again and restart upgrade.

!--- After a few minutes, you should see this: Upgrade complete. You can boot the new
application partition. root@nms-6506a-nam.123.cisco.com#

返回并重置交换机：

root@nms-6506a-nam.123.cisco.com#**exit**

nms-6506a> (enable) **reset 4**
This command will reset module 4.
Unsaved configuration on module 4 will be lost
Do you want to continue (y/n) [n]? **y**
Module 4 shut down in progress, do not remove module until shutdown completed.

you might see these log messages as well:
2003 May 28 12:47:45 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)"
2003 May 28 12:47:45 %SNMP-5-MODULETRAP:Module 4 [Down] Trap
2003 May 28 12:47:45 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "failed(7)"

2003 May 28 12:48:00 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 12:48:00 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483565551 ticks
2003 May 28 12:48:00 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)"
2003 May 28 12:48:16 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483567205 ticks
2003 May 28 12:48:16 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted

2003 May 28 12:48:00 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 12:48:00 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483565551 ticks
2003 May 28 12:48:00 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)"
2003 May 28 12:48:16 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483567205 ticks
2003 May 28 12:48:16 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted
2003 May 28 12:50:22 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "ok(2)"
2003 May 28 12:50:22 %SNMP-5-MODULETRAP:Module 4 [Up] Trap
2003 May 28 12:50:22 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 12:50:22 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483579792 ticks
2003 May 28 12:50:22 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted
2003 May 28 12:50:23 %SYS-3-MOD_PORTINTFINSYNC:Port Interface in sync
for Module 4

最后，再次登录NAM:

```
nms-6506a> (enable) sess 4
Trying NAM-4...
Connected to NAM-4.
Escape character is '^]'.

Cisco Network Analysis Module (WS-X6380-NAM)
```
!--- NOTE #1: The 3.1 application image upgrade requires a special !--- one-time extra reboot for optimal NAM 3.1 operation. !--- Reboot the NAM immediately after logging in. !--- NOTE #2: Although it is NOT recommended, if for some reason you either !--- want to downgrade the application image later on this NAM or reinstall !--- the maintenance image, it is necessary to first install the NAM !--- downgrade patch. login: **root**
```
Password:
Terminal type: vt100

Cisco Network Analysis Module (WS-X6380-NAM) Console, 3.1(1)
Copyright (c) 1999-2003 by cisco Systems, Inc.

root@nms-6506a-nam.123.cisco.com#
root@nms-6506a-nam.123.cisco.com# reboot
```
!--- Reboot the NAM one last time. Reboot the NAM? (Y/N) [N]: **y**

6. 等待NAM重新启动

!--- Note: NAM 3.1 takes a little longer to reboot (7-10 minutes). Look for these logs:
```
2003 May 28 12:55:08 %SNMP-5-ENTITYMODTRAP:Module 4 status changed to "unknown(1)" 2003 May
28 12:55:08 %SNMP-5-MODULETRAP:Module 4 [Down] Trap 2003 May 28 12:55:08 %SNMP-5-
ENTITYMODTRAP:Module 4 status changed to "failed(7)" 2003 May 28 12:55:23 %SNMP-5-
FRUREMOVEDTRAP:module 4 removed 2003 May 28 12:55:23 %SNMP-5-ENTITYTRAP:Entity Mib last
change time 483609821 ticks 2003 May 28 12:55:23 %SNMP-5-ENTITYMODTRAP:Module 4 status
changed to "unknown(1)" 2003 May 28 12:55:39 %SNMP-5-ENTITYTRAP:Entity Mib last change time
483611474 ticks 2003 May 28 12:55:39 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted
```
最后：
```
2003 May 28 12:57:17 %SNMP-5-ENTITYMODTRAP:Module 4 status changed to "ok(2)"
2003 May 28 12:57:17 %SNMP-5-MODULETRAP:Module 4 [Up] Trap
2003 May 28 12:57:18 %SNMP-5-FRUREMOVEDTRAP:module 4 removed
2003 May 28 12:57:18 %SNMP-5-ENTITYTRAP:Entity Mib last change time 483621409 ticks
2003 May 28 12:57:18 %SNMP-5-FRUINSERTEDTRAP:module 4 inserted
2003 May 28 12:57:18 %SYS-3-MOD_PORTINTFINSYNC:Port Interface in sync for Module 4
```

验证

使用本部分可确认配置能否正常运行。

命令输出解释程序（仅限注册用户）(OIT) 支持某些 show 命令。使用 OIT 可查看对 show 命令输出的分析。

- **show mod**
```
nms-6506a> (enable) sh mod 4
Mod Slot Ports Module-Type Model Sub Status
--- ---- ----- ------------------------- ------------------ --- --------
4 4 2 Network Analysis Module WS-X6380-NAM no ok


(i) login again to see the version:

nms-6506a> (enable)sess 4
Trying NAM-4...
Connected to NAM-4.
Escape character is '^]'.
```

```
Cisco Network Analysis Module (WS-X6380-NAM)

login: root
Password:
Terminal type: vt100

Cisco Network Analysis Module (WS-X6380-NAM) Console, 3.1(1)
Copyright (c) 1999-2003 by cisco Systems, Inc.

root@nms-6506a-nam.123.cisco.com#
```

故障排除

目前没有针对此配置的故障排除信息。

相关信息

- 思科网络分析模块流量分析器用户指南，3.6
- 技术支持和文档 - Cisco Systems