Upgrading to a 64-bit Extreme Access Control Engine

Beginning in NetSight version 6.3, the 32-bit Extreme Access Control (NAC) engine image is no longer supported. Any Extreme Access Control engine currently running a 32-bit OS image must be upgraded to the newer 64-bit image prior to upgrading to Extreme Management Center (formerly NetSight) 7.0.

The following 32-bit engines must be upgraded to a 64-bit image:

- NAC-A-20
- SNS-TAG-ITA
- SNS-TAG-HPA
- SNS-TAG-LPA
- Extreme Access Control Virtual Engine

This document provides instructions for upgrading an existing 32-bit Extreme Access Control hardware or virtual engine to the new 64-bit Extreme Access Control software.

Instructions on:

- Determining If You Have a 32-bit Extreme Access Control Engine
- Upgrading a Hardware Engine
- Upgrading a Virtual Engine

Determining If You Have a 32-bit Extreme Access Control Engine

You can use the following information to determine if you are running a 32-bit or 64-bit Extreme Access Control engine.

If the Extreme Access Control engine is currently running version 4.4 or earlier, it is a 32-bit engine.

For Extreme Access Control engines running version 5.0 or later, run the following command from the client command line:

```
more/etc/os-version
```

If the contents of the file say "Ubuntu 12.04lts (64bit)", you have a 64-bit engine.
If the contents of the file say "Slackware 12.2 (32bit)", you have a 32-bit engine.

Upgrading a Hardware Engine

This section describes the procedure to install 64-bit software on a 32-bit Extreme Access Control hardware engine.

1. On a Windows platform system, go to the Extreme Management Center (NetSight) (NMS) web page to download the Extreme Access Control Engine Image 64bit (ZIP) file to your system: http://extranet.extremenetworks.com/downloads.

   After entering your email address and password, follow this path to the Software page: Software & Security > NetSight (NMS) > Software > select a version of Extreme Management Center (NetSight) > Extreme Access Control (NAC).
2. Extract the file to a directory on your system.
3. Insert a 4 GB USB flash drive into the USB port on your system and note the drive letter it is assigned.
4. Open a Command Prompt window and cd to the directory where you extracted the file. Be sure to use the "Run as administrator" option when launching the Command Prompt. You can access this option by right-clicking on the Command Prompt icon.
5. Type `make_disk.bat <drive letter>:` and press Enter. Be sure you have specified the correct drive letter.

   The files are copied to the USB flash drive. When the copy is complete you see the message "Successfully installed into <drive letter>: Press any key to continue."
6. Remove the USB flash drive from your system.
7. Insert the USB flash drive into a USB port on the Extreme Access Control engine.
8. Press the power button, and then press F2 to go to the BIOS setup.
9. Configure the engine to boot from the USB flash drive. The process for each engine hardware type is as follows:

- NAC-A-20
    a. Use the arrow keys and navigate to the Boot Settings option and press **Enter**.
    b. Go to the Hard-Disk Drive Sequence option and press **Enter**. Ensure that the USB flash drive is listed at top. If it is not, move it to the top.
    c. Hit **ESC** to exit and select **Save Changes** and **Exit** option.
- SNS-TAG-ITA
    a. Use the arrow keys to navigate to the Hard-Disk Drive Sequence option and press **Enter**.
    b. Ensure that the USB flash drive is listed at top. If it is not, move it to the top.
    c. Hit **ESC** to exit and select **Save Changes** and **Exit** option.
- SNS-TAG-HPA/LPA
    a. Use the arrow keys to navigate to Boot Options and press **Enter**.
    b. Ensure that the USB flash drive is listed in the Boot Option #1. If it is not, change it to the USB flash drive.
    c. Select **Save Changes** and **Exit** option.

10. The engine starts booting from the USB flash drive.
11. When the boot is complete, the Engine Installation screen appears. Press **Enter** and the installation begins.
12. After the installation completes, reboot the engineand then remove the USB flash drive.
13. Configure the new 64-bit software using the instructions in Chapter 2, Configuration, in the *IA-A-20 and IA-A-300 Engine Installation Guide*. When configuring the engine, be sure to use the same IP address and hostname used before. That way you don't have to add and configure a new engine in NAC Manager.

    You can find the installation guide on the Extreme Management Center (NetSight) (NMS) Documentation web page: http://extranet.extremenetworks.com/downloads.

    After entering your email address and password, follow this path to the document: Software & Security > NetSight (NMS) > Documentation >

Manuals & Release Notes > select a version of Extreme Management Center (NetSight) > Mobile IAM and Extreme Access Control (NAC) Engines.

14. Complete the following steps if DNS proxy is enabled on the original Extreme Access Control Engine, otherwise proceed to step 14:
    a. Uncommon the #DNS_PROXY_ENABLE=true line using vi or your preferred editor by deleting the "#" symbol in the `/opt/nac/server/config/config.properties` file .
    b. Enter the following command: `/opt/nac/server/dnsProxy.sh start`
15. Enforce the Extreme Access Control Gateway engine (using NAC Manager) following the software installation operation. Enforcing writes your NAC Manager configuration information to the engine.

Upgrading a Virtual Engine

This section describes the procedure for deploying the 64-bit Extreme Access Control engine image on a VMware server. The Extreme Access Control virtual engine is packaged in the .OVA file format defined by VMware and must be deployed on either a VMware ESX™ 4.0, 4.1, 5.0, or 5.1 server, or a VMware ESXi™ 4.0, 4.1, 5.0, or 5.1 server with a vSphere™ 4.0, 4.1, 5.0, or 5.1 client.

The Extreme Access Control virtual engine comes configured with 12 GB of memory, four CPUs, two network adapters, and 40 GB of thick provisioned hard drive space.

It is recommended that you keep your 32-bit image on the VMware server until after you have successfully installed the new 64-bit image. That way, if any problems are encountered, you can fall back to the 32-bit engine.

1. Go to the Extreme Management Center (NetSight) (NMS) web page to download the Virtual Engine 64bit (OVA) image to your local machine where the vSphere client is installed and running: http://extranet.extremenetworks.com/downloads.

   After entering your email address and password, follow this path to the download page: Software & Security > NetSight (NMS) > Software > select a version of Extreme Management Center (NetSight) > Extreme Access Control (NAC).

2. Open the vSphere client and deploy the virtual engine. For complete instructions, refer to Chapter 1, Engine Deployment, in the *Extreme Management Center, Extreme Access Control, and Analytics Virtual Engine Installation Guide*.

   You can find the installation guide on the Extreme Management Center (NetSight) (NMS) Documentation web page: http://extranet.extremenetworks.com/downloads.

   After entering your email address and password, follow this path to the document: Software & Security > NetSight (NMS) > Documentation > Manuals & Release notes > select a version of Extreme Management Center (NetSight) > NetSight and Extreme Access Control (NAC) Virtual Engines.
3. Once the engine has been deployed, you must configure the engine using the instructions in Chapter 3, Extreme Access Control Engine Configuration, in the *Extreme Management Center, Extreme Access Control, and Analytics Virtual Engine Installation Guide*. When configuring the engine, be sure to use the same IP address and hostname you previously used. That way you do not need to add and configure a new engine in NAC Manager.
4. Enforce the Extreme Access Control Gateway engine (using NAC Manager) following the software installation operation. Enforcing writes your NAC Manager configuration information to the engine.

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