Extreme Management Center®
Secure Deployment Guide

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Pre-Installation Configuration

Installation Prerequisites

- Ensure the Windows 2008R2 server has a valid Windows key.
- Ensure Remote Desktop Services is properly installed and has a valid license.
- Verify that certificates, if any, have been created and installed on the server.

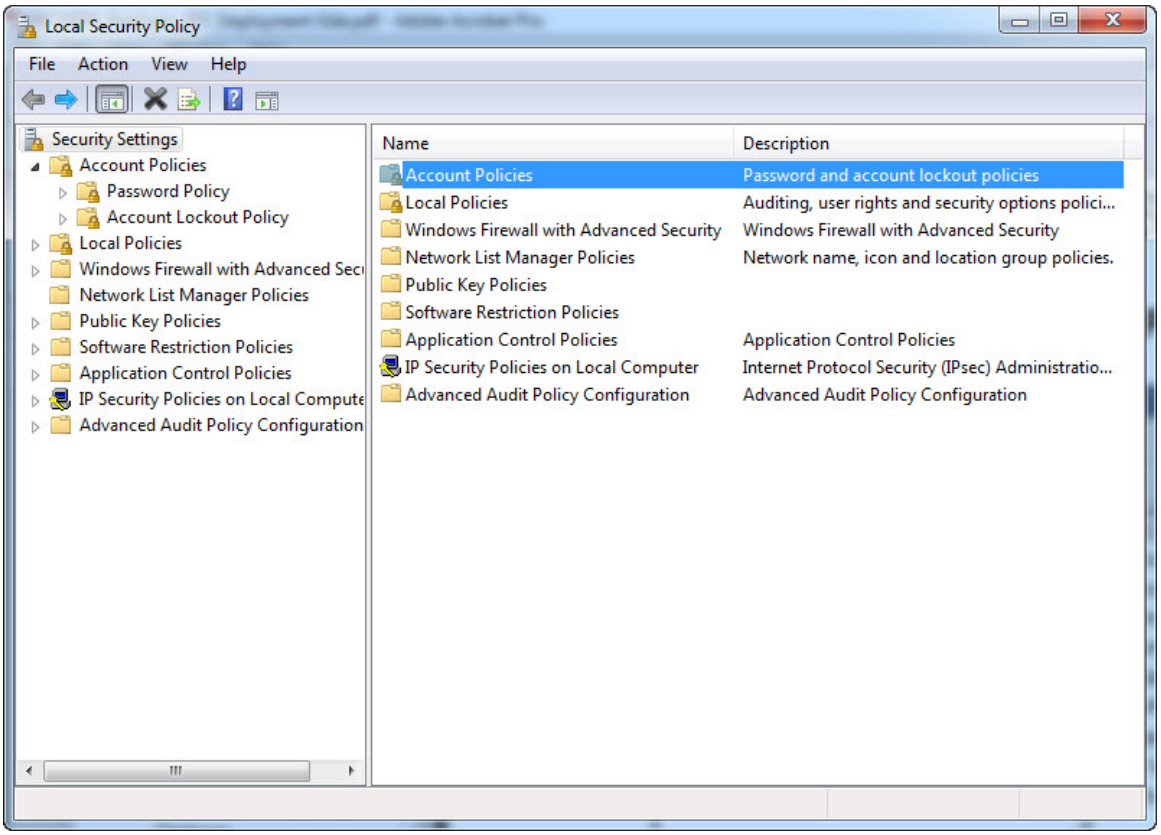
User Accounts

The procedures in this document use the user accounts listed below. They are intended to be examples of various users with certain sets of privileges. User account setup is at the discretion of the Security Administrator.

- netsightsrv — Extreme Management Center server administrator with full Remote Desktop privileges
- netsightadmin — Extreme Management Center administrator with only Extreme Management Center Remote Desktop privileges
- netsightuser — Extreme Management Center user with only Extreme Management Center Remote Desktop privileges
- xadministrator — non-default server administrator
- xguest — non-default guest account

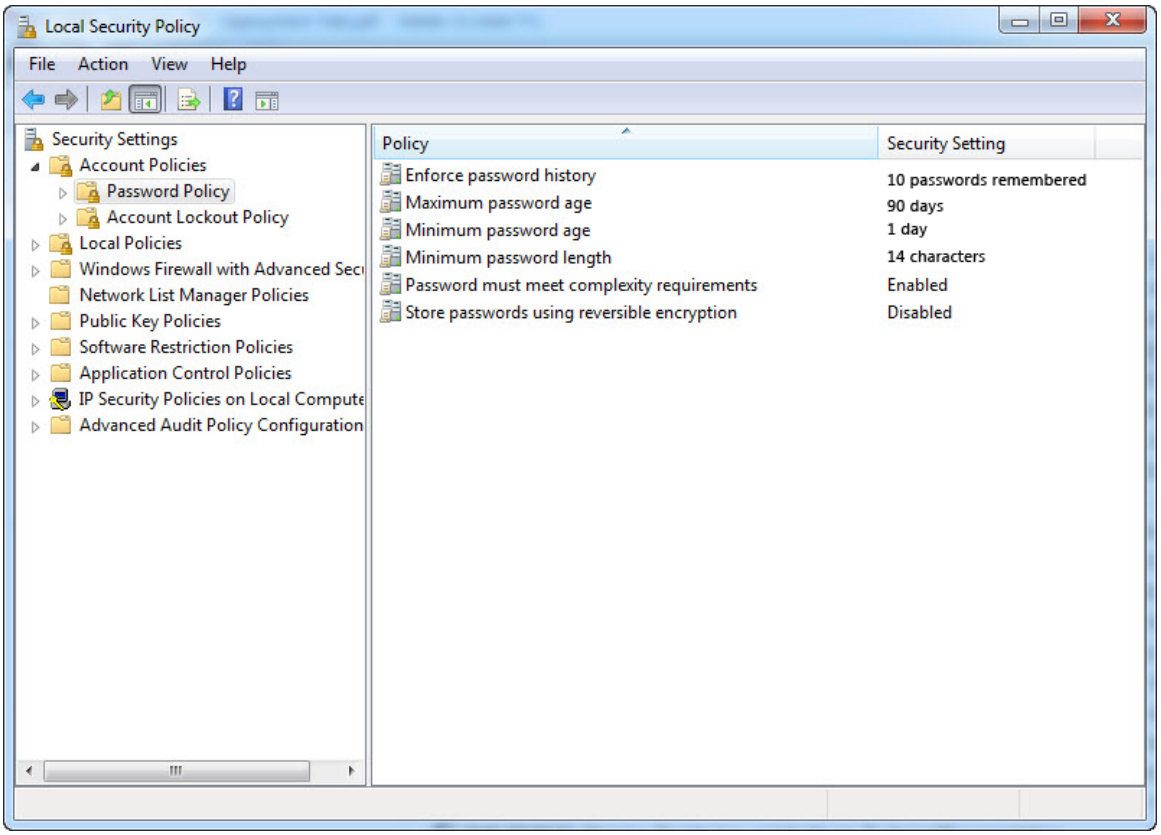
See Configuring Extreme Management Center Users for setting up user accounts.

Configuring Server Account Settings to be STIG-Compliant



Setting the Password Policy

1. From your desktop, select **Start > Administrative Tools > Local Security Policy > Account Policies > Password Policy.**

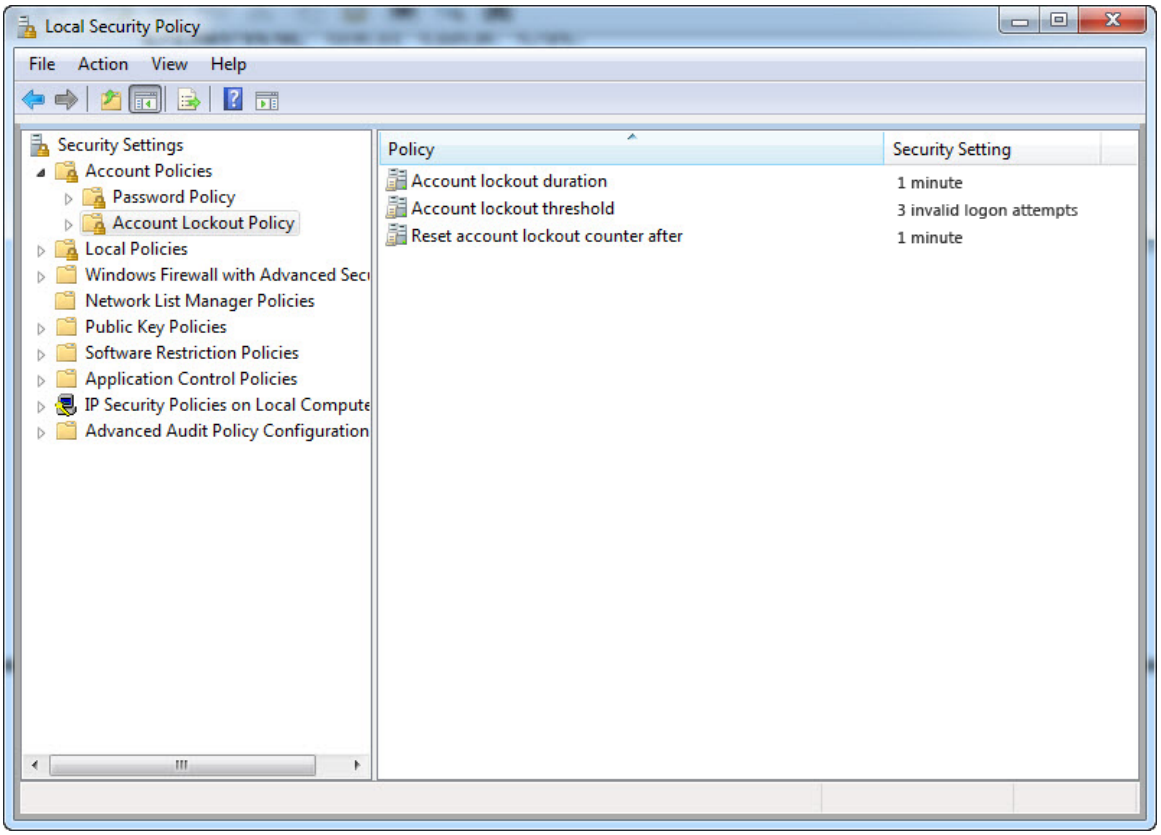


2. For each of the following policies, double-click the policy name, set the new policy, and then click **OK**.

For this policy...	Set to...
Enforce password history	10 passwords remembered
Maximum password age	90 days
Minimum password age	1 day
Minimum password length	14 characters
Password must meet complexity requirements	Enabled
Store passwords using reversible encryption	Disabled

Setting the Account Lockout Policy

1. From your desktop, select **Start > Administrative Tools > Local Security Policy > Account Policies > Account Lockout Policy.**



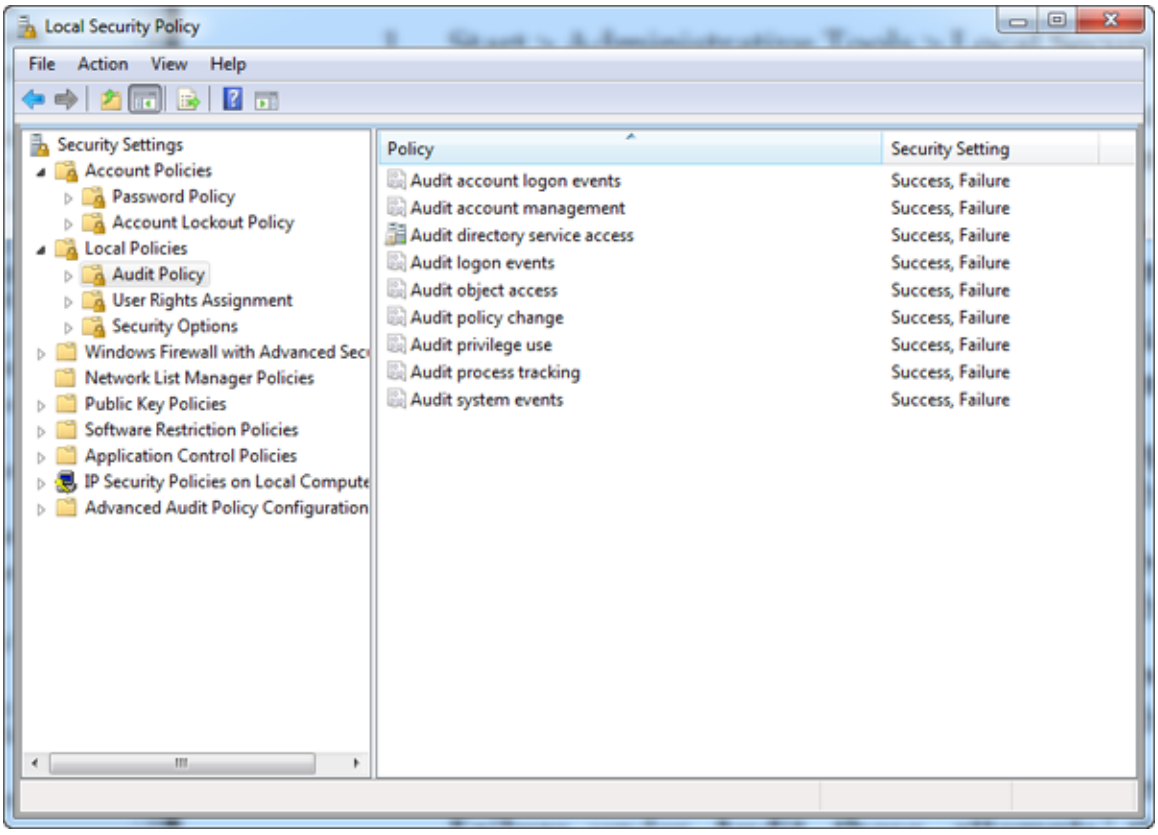
2. For each of the following policies, double-click the policy name, set the new policy, and then click **OK**.

For this policy...	Set to...
Account lockout duration	1 minute
Account lockout threshold	3 invalid logon attempts
Reset account lockout counter after	1 minute

Setting the Audit Policy

Need some context for this procedure.

1. From your desktop, select **Start > Administrative Tools > Local Security Policy > Local Policies > Audit Policy**.



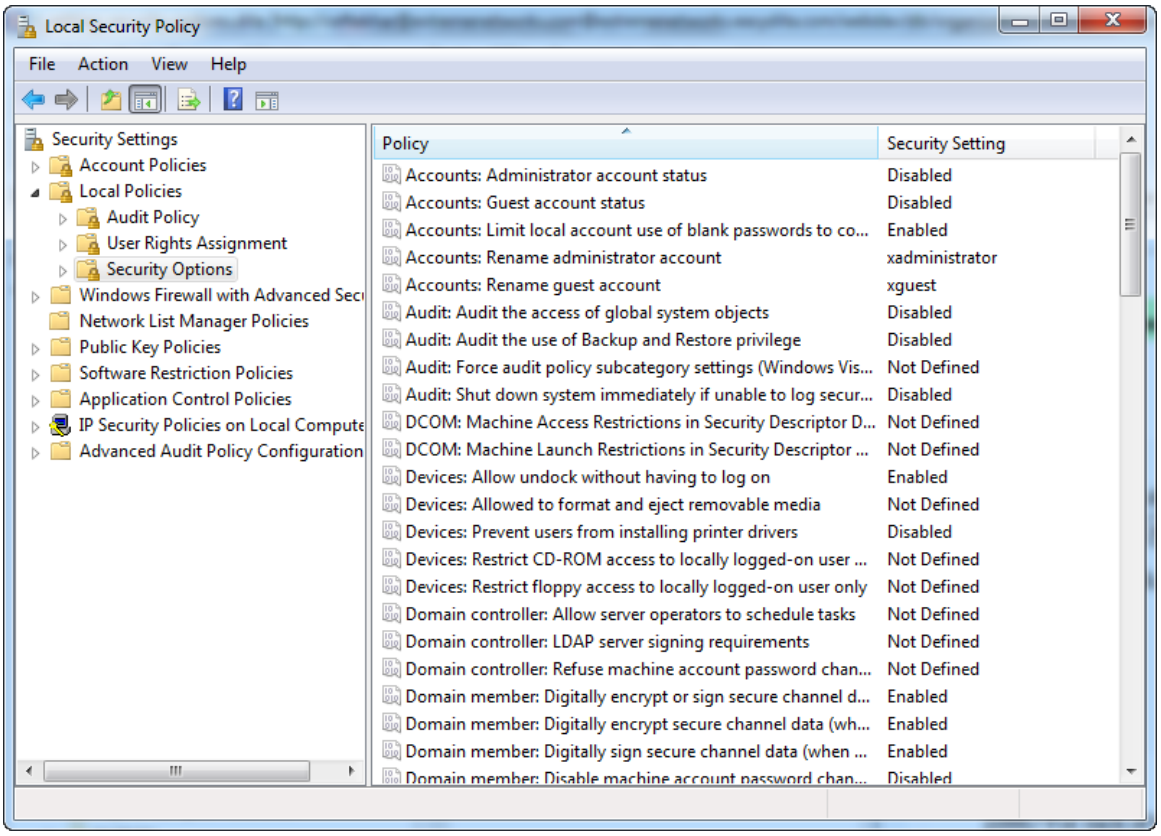
2. For each of the following policies, double-click the policy name, set the new policy, and then click OK.

For this policy...	Enable...
Audit account logon events	Success, Failure
Audit account management	Success, Failure
Audit directory service access	Success, Failure
Audit logon events	Success, Failure
Audit object access	Success, Failure
Audit policy change	Success, Failure
Audit privilege user	Success, Failure
Audit process tracking	Success, Failure
Audit system events	Success, Failure

Setting the Security Options

Need some context for this procedure.

1. From your desktop, select **Start > Administrative Tools > Local Security Policy > Local Policies > Security Options**.



2. For each of the following policies, double-click the policy name, set the new policy, and then click **OK**.

For this policy...	Set to...
Accounts: Rename administrator account	xadministrator
Accounts: Rename guest account	xguest

For this policy...	Set to...
Interactive logon: Message text for users attempting to log on	Enter the following text: You are accessing a U.S. Government (USG) Information System (IS) that is provided for USG authorized use only. By using this IS (which includes any device attached to this IS), you consent to the following conditions: The USG routinely intercepts and monitors communications on this IS for purposes including, but not limited to, penetration testing, COMSEC monitoring, network operations and defense, personnel misconduct (PM), law enforcement (LE), and counterintelligence (CI) investigations. At any time, the USG may inspect and seize data stored on this IS. Communications using, or data stored on, this IS are not private, are subject to routine monitoring, interception, and search, and may be disclosed or used for any USG-authorized purpose. This IS includes security measures (e.g., authentication and access controls) to protect USG interests--not for your personal benefit or privacy. Notwithstanding the above, using this IS does not constitute consent to PM, LE or CI investigative searching or monitoring of the content of privileged communications, or work product, related to personal representation or services by attorneys, psychotherapists, or clergy, and their assistants. Such communications and work product are private and confidential. See User Agreement for details.

For this policy...	Set to...
Interactive logon: Message title for users attempting to log on	Enter the following text: U.S. Government (USG) Information System (IS) that is provided for USG authorized use only.
System cryptography: Use FIPS compliant algorithms for encryption, hashing and signing	Enable

Configuring Windows Users and Groups

Creating a User Group

Need some context for this procedure.

1. From your desktop, select Start > Administrative Tools > Sever Manager > Local Users and Groups > Groups.
2. Select Action > New Group.
3. In the resulting dialog, enter the following information:
    - Group name: netsightusers
    - Description: Users that are capable of using
4. Click Create and Close.

Configuring Users

Need some context for this procedure.
Needs new screen shots -- the ones I took are for Computer Management and not Server Management

1. From your desktop, select Start > Administrative Tools > Sever Manager > Local Users and Groups > Users.
2. Select Action > New User.
3. In the resulting dialog, enter the following information:
    - User name: netsightadmin

- Password: Enter a password
- Confirm password: Confirm the password

4. Click Create and Close.
5. Double-click the netsightadmin user.
6. In the resulting dialog, select the Member of tab.
7. Click Add.
8. In the resulting dialog, enter netsightusers and Remote Desktop Users separated by a semicolon.
   Note: If this user is not already part of the "User" group, add it now.
9. Click Check Names to validate the groups.
10. Click OK.
11. Remove any other groups by selecting the group and clicking Remove.
12. From the Environment tab, enable Start the following program at logon.
13. In the Profile file name field, enter logoff.exe.
14. Click OK.
15. Select Action > New User
16. In the resulting dialog, enter the following information:
    - User name: netsightuser
    - Password: Enter a password
    - Confirm password: Confirm the password
17. Click Create and Close.
18. Double-click the netsightuser user.
19. In the resulting dialog, select the Member of tab.
20. Click Add.
21. In the resulting dialog, enter netsightusers and Remote Desktop Users separated by a semicolon.
22. Click Check Names to validate the groups.
23. Click OK.

24. Remove any other groups by selecting the group and clicking Remove.
25. From the Environment tab, enable Start the following program at logon.
26. In the Profile file name field, enter logoff.exe.
27. Click OK.
28. Select Action > New User
29. In the resulting dialog, enter the following information:
    - User name: netsightsrv
    - Password: Enter a password
    - Confirm password: Confirm the password
30. Click Create and Close.
31. Double-click the netsightsrv user.
32. In the resulting dialog, select the Member of tab.
33. Click Add.
34. In the resulting dialog, enter netsightusers and Administrators separated by a semicolon.
35. Click Check Names to validate the groups.
36. Click OK.
37. Remove any other groups by selecting the group and clicking Remove.
38. From the Environment tab, enable Start the following program at logon.
39. In the Profile file name field, enter logoff.exe.
40. Click OK.
41. Click Apply and OK.

Installing

To install , you must be logged in as "netsightsrv".

1. Initiate the install by double-clicking the install package (via the .exe file) or install DVD.
2. From the Install GUI Welcome Screen, click Next.
3. Accept the terms of the license agreement, and click Next.
4. Enter your Product License, and then click Next.
5. From the next screen, clear TFTP and BOOTP, and then click Next.
6. Change the Install Folder to: C:\Enterasys Networks\NetSight, and then click Next.
7. If the folder does not exist, click OK to create folder when prompted.
8. Wait until the following status is shown: Server is ready for connections, and then click Finish.

Creating Users and Groups

Need context for this procedure.

1. Select Start > All Progras > Extreme Networks > Extreme Control Cnter > Clients > Console.
2. When prompted to login, use the following credentials and click OK:
   - Server: localhost
   - User name: netsightsrv
   - Password: [password defined in Configuring Users]
3. Navigate to Tools > Authorization/Device Access.
4. Click Add Group and complete the following fields:
   - Authorization Group name: netsightuser
   - Membership Criteria: basic netsight capabilities
5. From the Capabilities tab, select or clear the user's capabilities depending on the user's privileges.
6. Click Apply.

7. Click Add Group and complete the following fields:
    - Authorization Group name: netsightadmin
    - Membership Criteria: admin netsight capabilities
8. From the Capabilities tab, select or clear the user's capabilities depending on the user's privileges.
9. Click Apply and Close.
10. Click Add User and complete the following fields:
    - User name: netsightuser
    - Domain/Host name: localhost
    - Authorization group: netsightuser
11. Click Apply.
12. Click Add User and complete the following fields:
    - User name: netsightadmin
    - Domain/Host name: localhost
    - Authorization group: netsightadmin
13. Click Apply.
14. Click Close.
15. Exit the Console Program.

Configuring

Configuring Services

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
2. Double-click BootP Service.
3. From the General tab, select Disabled from the Startup type drop-down menu.
4. From the Log On tab, enable This account.
5. Click Browse and enter the object name as netsightsrv.
6. Click Check Names to validate the object name.
7. Click OK.
8. Enter and confirm the password assigned in Configuring Users.
9. Click OK.
10. Repeat the above steps for the following services:

For this service...	Change Startup Type to...
Database Service	Automatic
Server Service	Automatic
SNMP Trap Service	Automatic
Syslog Service	Automatic
TFTP Service	Disabled

11. Click OK.
12. Restart the computer and log in again as user netsightsrv.

Configuring Access Control of Directory

Need context for this procedure. Don't have Extreme (Enterasys) Networks directory - does user need admin access? Is this created when installing NetSight?

1. Navigate to the C:\ drive (Start > Computer > OS (C:).
2. Right-click the directory named Extreme Networks and select Properties.

3. From the Security tab, click Advanced.
4. Click Change Permissions.
5. Clear the Include inheritable permissions from this object's parent checkbox.
6. Click Add.
7. Select Replace all child object permissions with inheritable permissions from this object.
8. Click Add.
9. In the Enter the ojbect name to select field, type netsightusers.
10. Click Check Names.
11. Click OK.
12. Select Allow for the following permissions:
    Traverse folder / execute file
    List folder / read data
    Read attributes
    Read extended attributes
    Create files / write data
    Create folders / append data
    Write attributes
    Write extended attributes
    Read permissions
13. Select Apply these permissions to objects and/or containers within this container only.
14. Click OK.
15. Select Users (NETSIGHT-1\Users) and then click Remove.
16. Click OK, Yes, and OK twice to exit.

Encrypting the File System Service

Need context for this procedure.

1. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
2. Double-click Encrypting File System (EFS).
3. From the General tab, select Automatic from the Statrup type drop-down menu.

4. Click Start.
5. Once the service starts, click OK.
   Need image here

Encrypting the File System of the mysql Directory

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
2. Double-click Database Service.
3. From the General tab, click Stop.
4. Once the Service has stopped, click OK.
5. From your desktop, navigate to the C:\ directory (Start > Computer > OS (C:)).
6. Navigate to C:\Extreme Networks\NetSight.
7. Right-click on the mysql directory and select Properties.
8. Click Advanced.
   Need image here
9. Select Encrypt contents to secure data.
   Need image here
10. Click Apply.
11. When prompted, select Apply changes to this folder, subfolders and files.
12. Click OK twice to exit.
13. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
14. Double-click Database Service.
15. From the General tab, click Start.
16. Once the Service has started, click OK.

Configuring the Application Identity Service

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
2. Double-click Application Identity.
3. From the General tab, select Automatic from the Startup type drop-down menu.
4. Click Start.
5. Once the service has started, click OK.

Configuring Application Control Policies

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Sever Manager > Configuration > Services.
2. Right-click AppLocker and select Properties.
3. Select Configured from the following sections:
   Executable rules
   Windows Installer rules
   Script rules
4. Click OK.

Configuring AppLocker Executable Rules

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Local Security Policy > Application Control Policies > AppLocker > Executable Rules.
2. Right-click in blank area and select Create New Rule….

   The Create Executable Rules wizard opens.

3. In the wizard click Next and then select Allow if not selected by default.
4. Click the Select… button.

5. In the resulting dialog, type netsightusers.

6. Click Check Names.
7. Click OK.
8. Click Next.
9. Select the Path option, and then click Next.

10. Click Browse Folders... and select the C:\Extreme Networks path.

11. Click OK and then Next twice.
12. In the Name field, type NetSight, and then click Create.

    The wizard closes and returns to the Local Security Policy.

13. Repeat the steps above to create the following rules:

Rule Identification Name	File Path
netsightsrv	C:\Users\netsightsrv
netsightadmin	C:\Users\netsightadmin
netsightuser	C:\Users\netsightuser

Configuring AppLocker Script rule

Need context for this procedure
All steps except Step 1 are reused from t_configuring-applocker-rules.

1. From your desktop, select Start > Administrative Tools > Local Security Policy > Application Control Policies > AppLocker > Script Rules.
2. Right-click in blank area and select Create New Rule....

The Create Executable Rules wizard opens.

3. In the wizard click Next and then select Allow if not selected by default.
4. Click the Select... button.
5. In the resulting dialog, type netsightusers.
6. Click Check Names.
7. Click OK.
8. Click Next.
9. Select the Path option, and then click Next.
10. Click Browse Folders... and select the C:\Extreme Networks path.
11. Click OK and then Next twice.
12. In the Name field, type NetSight, and then click Create.

The wizard closes and returns to the Local Security Policy.

13. Repeat the steps above to create the following rules:

Rule Identification Name	File Path
netsightsrv	C:\Users\netsightsrv
netsightadmin	C:\Users\netsightadmin
netsightuser	C:\Users\netsightuser

Configuring RemoteApp Manager

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Server Manager > Roles > RemoteApp Manager.
2. Right-click RemoteApp Manager and select Add RemoteApp Programs.
3. Click Next.
4. Select the following Apps:
   Automated Security Manager
   Console
   Inventory Manager
   NAC Manager
   Policy Manager
5. Click Next and then Finish.
6. In the right column under RemoteApp Programs, perform the following steps for each program:
   1. Right-click the program and select Create Windows Installer Package.
   2. Click Next three times.
   3. Click Finish.
7. From your desktop, navigate to C:\Program Files\Packaged Programs.
8. Copy the MSI packages just created onto a USB drive or other storage medium.
9. Transfer and install MSI packages onto the client computer.

Windows Firewall Configuration

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Local Security Policy > Windows Firewall with Advanced Security > (expand folder) > Inbound Rules.
2. In the blank area, right-click and select New Rule.
   The New Inbound Rule Wizard opens.
3. Select the Port option and then click Next.
4. If not already selected, choose the TCP option.
5. Type 135 in the Specific local ports field.
6. Click Next.

7. Select the second option, Allow the Connection if it is secure.

8. Click the Customize... button.
9. In the resulting dialog, select the first option, Allow the connection if it is authenticated and integrity-protected.

10. Click OK and then Next three times.
11. On the Profile page, leave Domain, Private, and PUblic selected, and then click Next.
12. In the Name field, type RDP 135 Access, and then click Finish.

The wizard closes and returns to the Local Security Policy window.

13. Repeat the steps above to create the following rules:

Port Type	Specific local port	Connection Type	Rule Name
TCP	3389	Allow the Connection if it is secure / Allow the connection if it is authenticated and integrity-protected	RDP 3389 Access
UDP	137	Allow the Connection	RDP UDP 137 Access

Port Type	Specific local port	Connection Type	Rule Name
Custom	161	1. On the Protocols and Ports page, select the following options: • Protocol type: UDP • Local port: Specific Ports / 161 2. On the Scope page, select the following options: • Local IP addresses: These IP addresses > Add > enter ECC server address [/64 or /24] > OK • Remote IP addresses: These IP addresses > Add > enter management IP and 64 bit mask of Management Subnet addresses [/64 or /24] > OK	SNMP Access

Port Type	Specific local port	Connection Type	Rule Name
		3. Select Allow the Connection.	

Port Type	Specific local port	Connection Type	Rule Name
Custom	162	1. On the Protocols and Ports page, select the following options: • Protocol type: UDP • Local port: Specific Ports / 162 2. On the Scope page, select the following options: • Local IP addresses: These IP addresses > Add > enter ECC server address [/64 or /24] > OK • Remote IP addresses: These IP addresses > Add > enter management IP and 64 bit mask of Management Subnet for router/switch [/64 or /24] > OK	SNMP Trap

Port Type	Specific local port	Connection Type	Rule Name
		3. Select Allow the Connection.	

Port Type	Specific local port	Connection Type	Rule Name
Custom	22	1. On the Protocols and Ports page, select the following options: • Protocol type: TCP • Local port: Specific Ports / 22 2. On the Scope page, select the following options: • Local IP addresses: These IP addresses > Add > enter ECC server address [/64 or /24] > OK • Remote IP addresses: These IP addresses > Add > enter management IP address and 64 bit mask of management subnet for router/switch [/64 or /24] > OK	SSH Access

Port Type	Specific local port	Connection Type	Rule Name
		3. Select Allow the Connection.	
UDP	514	Allow the Connection	Syslog UDP 514 Access

Configuring IPsec

Need context for this procedure

1. From your desktop, select Start > Administrative Tools > Local Security Policy > Windows Firewall with Advanced Security.
2. Right-click Windows Firewall with Advanced Security - Local Group Policy Object and select Properties.
3. From the Domain Profile tab, select On from the Firewall state drop-down menu.
4. Select Block from the Inbound connections drop-down menu.
5. Select Allow from the Outbound connections drop-down menu.
6. From the IPsec Settings tab, click Customize... in the IPSec Defaults area.
7. In the resulting dialog, select the Advanced radio button in the Key exchange (Main Mode) area.
8. Click Customize....
9. In the resulting dialog, click Add.
10. Ensure the following security methods are selected: SHA-1 is selected in the drop-down menu.

Drop-down Menu	Selection
Integrity algorithm	SHA-1
Encryption algorithm	AES-CBC 128
Key exchange algorithm	Diffie-Hellman Group 14

11. Click OK when finished.
12. Back on the Customize Advanced Key Exchange Settings, do the following:
    1. Enter 480 in the Minutes field (Key lifetimes area).
    2. Enter 0 in the Sessions field.
    3. Select the Use Diffie-Hellman for enhanced security checkbox.
    4. Click OK.
13. Select the Advanced radio button in the Data protection (Quick Mode) area.
14. Click Customize... and then Add.
15. In the resulting dialog, select the Require encryption for all connection security rules that use these settings checkbox.
16. In the Data integrity and encryption area, click Add.
17. In the resulting dialog, select the following options:
    Select ESP (recommended).
    Choose AES-CBC 128 from the Encryption algorithm drop-down menu.
    Choose SHA-1 from the Integrity algorithm drop-down menu.
    In the Key lifetimes area, type 60 for Minutes and 100,000 for KB.
18. Click OK twice to exit.
19. Select Advanced for Authentication method, and then click Customize.
20. In the resulting dialog, click Add.
21. Ensure that the First authentication is optional is *not* selected, and then click OK.
22. Click OK again to exit the Customize IPsec Settings dialog.
23. Select None from the IPsec tunnel authorization area, and click OK to exit.
24. Back in the Local Security Policy window, click Connection Security Rules.
25. In the blank area, right-click and select New rule....

The New Connection Security Rule Wizard opens.

26. Select Custom and then click Next.
27. For Which computers are in Endpoint 1?, choose These IP address and then click Add....
28. In the This IP address or subnet, type the IP address of NetSight server in xxxx.xxxx.xxxx.xxxx format.
29. Click OK.
30. For Which computers are in Endpoint 2?, choose These IP addresses and click Add.
31. In the This IP address or subnet, type the IP address and 64-bit mask of client(s) in xxxx.xxxx.xxxx.xxxx.xxxx.xxxx.xxxx.xxxx/64 or xxx.xxx.xxx.xxx/24 format.
32. Click OK and then Next.
33. Select Require authentication for inbound and outbound connections (third option), and then click Next.
34. Select Advanced (fourth option), and then click Customize....
35. In the First authentication area, click Add....
36. In the resulting dialog, select Preshared key, and enter the key.
37. Click OK to exit.
38. Ensure that the First authentication is optional is *not* selected, and then click OK.
39. Click Next.
40. On the Protocols and Ports page, select the following options:
    Protocol type: Any
    Endpoint 1 port: All Ports
    Endpoint 2: All Ports
41. Click Next.
42. On the Profile page, leave Domain, Private, and Public selected, and then click Next.
43. On the Name page, enter the rule name and click Finish.
    You are returned to the Local Security Policy dialog. If the new rule is not enabled, right-click the rule and select Enable rule.
44. Repeat the above configure IPsec for the NetSight client, but reverse the Endpoint 1 and Endpoint 2 IP addresses.