

How to
Configure
Windows File Event Log

V010



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Preface

This document describes how N-Reporter users can configure Windows file event logging using the open-source tool NXLog.

NXLog converts Windows file event logs into syslog format and forwards them to N-Reporter for normalization, auditing, and analysis.

This document applies to Windows Server 2000, 2003, 2008, 2012, 2016, 2019, and 2022.

References

Audit Policy Recommendations:

https://learn.microsoft.com/windows-server/identity/ad-ds/plan/security-best-

practices/audit-policy-recommendations

Events to Monitor:

https://learn.microsoft.com/windows-server/identity/ad-ds/plan/appendix-l--events-to-monitor

Note: This document is provided solely as a reference for configuring log output. It is recommended that you contact the device or software vendor for assistance with the appropriate log export methods.

1. NXLog

1.1 NXLog Installation

(1) Download NXLog CE (Community Edition)

Please go to: https://nxlog.co/products/nxlog-community-edition/download

Download the latest version of nxlog-ce-x.x.xxxx.msi.

Example Here: nxlog-ce-3.2.2329.msi

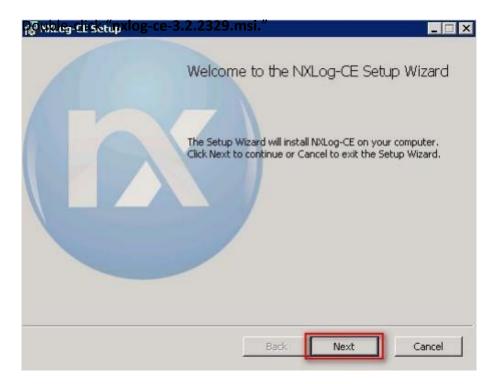


Windows x86-64 nxlog-ce-3.2.2329.msi

Note: If you require the 32-bit version of NXLog, please contact our support team.

(2) Install NXLog

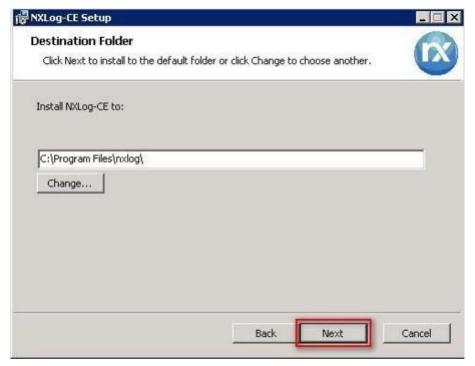
<2.1> For Windows Server 2008 or later:



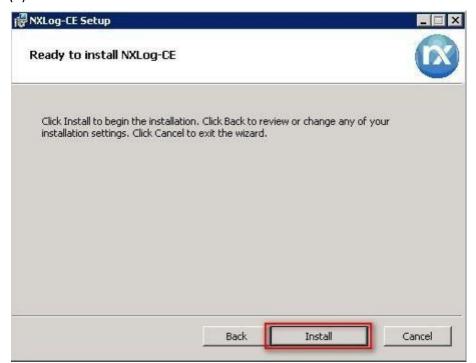
(3) Select "I accept the terms in the License Agreement," then click "Next."



(4) Click "Next." (The default installation path is (C:\Program Files\nxlog\).



(5) Click "Install."

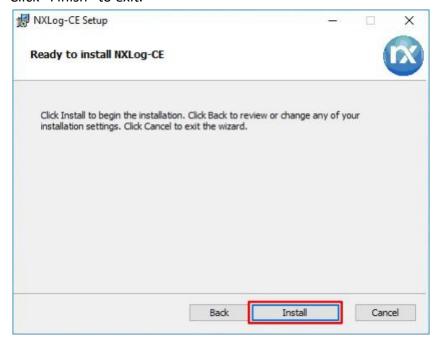


(6) Click "Finish."



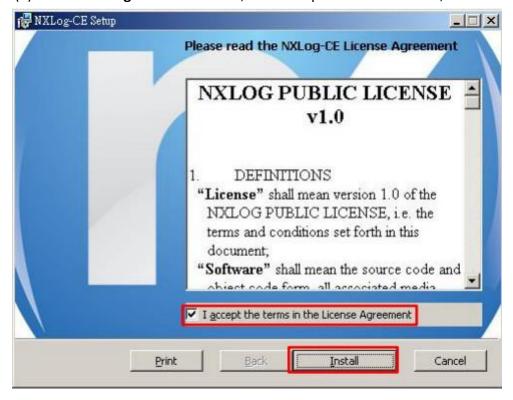
<2.2> For Windows Server 2003:

Download File: nxlog-ce-3.2.2329.msi. → Select "Install" and proceed until the installation completes. → Click "Finish" to exit.



<2.3> For Windows 2000:

- (1) Navigate to the NXLog CE legacy download page: https://sourceforge.net/projects/nxlog-ce/
- (2) Click "See All Activity" and download the Windows 2000–compatible version "/nxlog-ce-2.8.1248.msi."
- (3) Launch "nxlog-ce-2.8.1248.msi," and accept the license terms, click "Install," and then "Finish."



1.2 Download NXLog Configuration File

1.2.1 For Windows Server 2003 or earlier:

(1) Open "Command Prompt."



(2) Download the "NXLog Windows 2003 File" and overwrite the existing NXLog configuration file in the Windows system.

Download link: http://www.npartner.com/download/tech/nxlog Win2003File.conf

C:\> copy "C:\nxlog_Win2003File.conf" "C:\ Program Files \nxlog\conf\nxlog.conf" /y

```
C:\>copy "C:\nxlog_Win2003File.conf" "C:\Program Files\nxlog\conf\nxlog.conf" /y

1 file(s) copied.
C:\>
```

Note: The example above is for a 64-bit operating system. For a 32-bit operating system, replace the highlighted text with: 'C:\ Program Files (x86)\nxlog\conf\nxlog.conf'

1.2.2 For Windows Server 2008 or later

(1) Open "Windows PowerShell."



(2) Download the "NXLog Windows 2008 File" and overwrite the existing NXLog configuration file in the Windows system.

Download link: http://www.npartner.com/download/tech/nxlog Win2008File.conf

PS C:\> Invoke-WebRequest -Uri 'http://www.npartner.com/download/tech/nxlog_Win2008File.conf' - OutFile 'C:\ Program Files\nxlog\conf\nxlog.conf'



Note: This example is for a 64-bit operating system. For a 32-bit system, replace the highlighted text with: 'C:\ Program Files(x86)\nxlog\conf\nxlog.conf'

1.3 NXLog Configuration

1.3.1 For Windows Server 2003 or earlier

```
## Please set the ROOT to the folder your axlog was installed into, otherwise it will not start.

define NCTOT C:\Program files\nxiog
define CEXTID SAOOTX\corf
define CEXTID SAOOTX\corf
define CEXTID SAOOTX\corf
define LOGIR SAOOTX\corf
Roduledr SAOOTX\c
```

```
## Please set the ROOT to the folder your nxlog was installed into, otherwise it will not start.

define NCloud 192.168.8.4

define ROOT C:\Program Files\nxlog

define CERTDIR %ROOT%\cert

define CONFDIR %ROOT%\conf

define LOGDIR %ROOT%\data

define LOGFILE %LOGDIR%\nxlog.log

LogFile %LOGFILE%

Moduledir %ROOT%\modules

CacheDir %ROOT%\data

Pidfile %ROOT%\data\nxlog.pid

SpoolDir %ROOT%\data

## Load the modules needed by the outputs
```

```
<Extension syslog>
      Module xm_syslog
   </Extension>
   ## For windows File 2000 - 2003 Event Log use the following:
   <Input in_eventlog>
      Module
                     im_mseventlog
      ReadFromLast TRUE
     SavePos
                    TRUE
     Exec parse_syslog_bsd(); \
        if ($EventID == 560 or $EventID == 561 or $EventID == 562 or $EventID == 563 or $EventID == 564 or $EventID == 567
or $EventID == 528 or $EventID == 529 or $EventID == 530 or $EventID == 531 or $EventID == 532 or $EventID == 533 or
$EventID == 534 or $EventID == 535 or $EventID == 536 or $EventID == 537 or $EventID == 538 or $EventID == 539 or
$EventID == 540 or $EventID == 551 or $EventID == 552 or $EventID == 682 or $EventID == 683 or $EventID == 672 or
$EventID == 673 or $EventID == 674 or $EventID == 675 or $EventID == 676 or $EventID == 677 or $EventID == 678 or
$EventID == 679 or $EventID == 680 or $EventID == 681) { $SyslogFacilityValue = 17; }
        else if ($SourceName == "Service Control Manager") { $SyslogFacilityValue = 17; } \
        else\
          {\
             drop();\
          }
   <Output out_eventlog>
     Module om_udp
      Host
             %NCloud%
      Port
             514
      Exec $Message = string($EventID) + ": " + $Message;
      Exec if ($EventType == 'ERROR' or $EventType == 'AUDIT_FAILURE') { $SyslogSeverityValue = 3; }
           else if ($EventType == 'WARNING') { $SyslogSeverityValue = 4; } \
           else if ($EventType == 'INFO' or $EventType == 'AUDIT SUCCESS') { $SyslogSeverityValue = 5; }
      Exec to_syslog_bsd();
   </Output>
   <Route eventlog>
      Path in_eventlog => out_eventlog
   </Route>
```

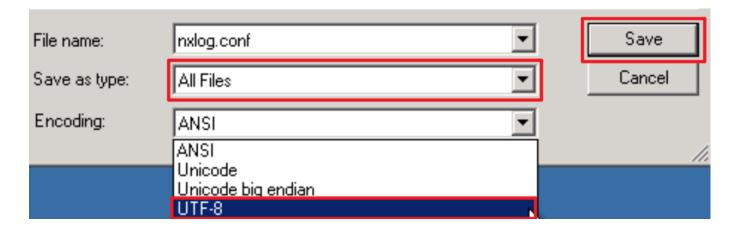
Enter the N-Reporter system IP address in the blue text section.

define NCloud 192.168.3.88

This example is based on a 64-bit operating system.

For a 32-bit operating system, use the following setting instead:

define ROOT C:\Program Files (x86)\nxlog



Note: After modifying the configuration file, save it as a new file to overwrite the original. For Save as type, select "All Files (*.*)". For Encoding, select UTF-8 to avoid encoding errors that could prevent the service from starting.

1.3.2 For Windows Server 2008 or later

```
## Please set the ROOT to the folder your nxlog was installed into, otherwise it will not start.
define NCloud 192.168.8.4
define ROOT C:\Program Files\nxlog
define CERTDIR %ROOT%\cert
define CONFDIR %ROOT%\cert
 define LOGDIR %ROOT%\data
define LOGFILE %LOGDIR%\nxlog.log
LogFile %LOGFILE%
Moduledir %ROOT%\modules
CacheDir %ROOT%\data
Pidfile %ROOT%\data\nxlog.pid
SpoolDir %ROOT%\data
## Load the modules needed by the outputs
 <Extension syslog>
   Module xm_syslog
 </Extension>
## define Security Events
define SecurityEvents 4656, 4657, 4658, 4659, 4660, 4661, 4663, 4664, \
4665, 4666, 4667, 4668, 4670, 4671, 4688, 4690, \
4691, 4698, 4699, 4700, 4701, 4702, 5140, 5142, \
5143, 5144, 5145, 5148, 5149, 5150, 5151, 5152, \
5153, 5154, 5155, 5156, 5157, 5158, 5159, 5168, \
5888, 5889, 5890, 4768, 4769, 4770, 4771, 4772, \
4773, 4774, 4775, 4776, 4777, 4820, 4624, 4625, \
4626, 4627, 4634, 4646, 4647, 4648, 4649, 4672, \
4675, 4778, 4779, 4800, 4801, 4802, 4803, 4964, \
4976, 5378, 5632, 5633
## Windows Server 2008 or higher Event Log use the following:
 <Input in_eventlog>
   Module    im_ms
   Module im_msvistalog
ReadFromLast TRUE
SavePos TRUE
       ery <QueryList> \
<Query Id="0"> \
    Query
       <Select Path="Security">*</Select> \
</Query> \
    </QueryList>
    Exec if ($EventID NOT IN (%SecurityEvents%)) drop();
 <Output out_eventlog>
    Module om_udp
Host %NCloud%
                514
    Port
   Exec to_syslog_bsd();
 </0utput>
 <Route eventlog>
    Path in_eventlog => out_eventlog
```

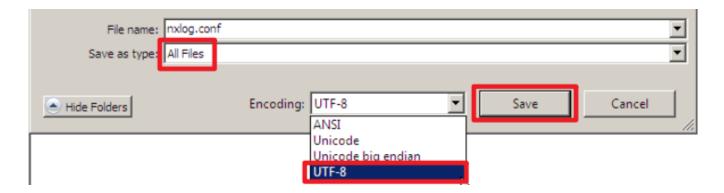
Enter the N-Reporter system IP address in the blue text section.

define NCloud 192.168.3.88

This example is based on a 64-bit operating system.

For a 32-bit operating system, use the following setting instead:

define ROOT C:\Program Files (x86)\nxlog



Note: After modifying the configuration file, save it as a new file to overwrite the original. For Save as type, select "All Files (*.*)". For Encoding, select UTF-8 to avoid encoding errors that could prevent the service from starting.

1.4 Starting the NXLog Service

1.4.1 For Windows Server 2003 or earlier

(1) Open "Command Prompt."



(2) Start the NXLog service and verify that there are no error messages:

```
C:\> net start nxlog
C:\> type "C:\Program Files\nxlog\data\nxlog.log"
```

```
C:\>net start nxlog
The nxlog service is starting.
The nxlog service was started successfully.

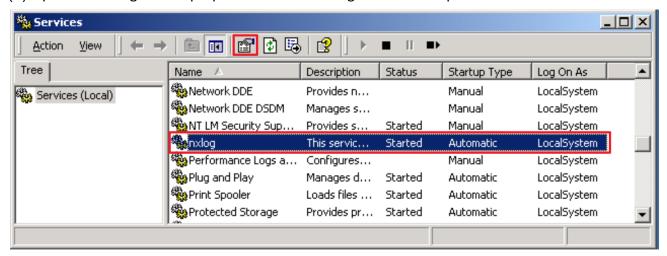
C:\>_
```

(3) Enter the command below to open the **Services** console:

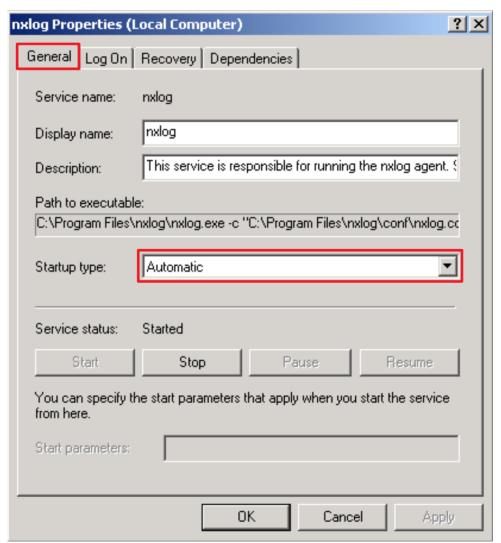
C:\> Services.msc



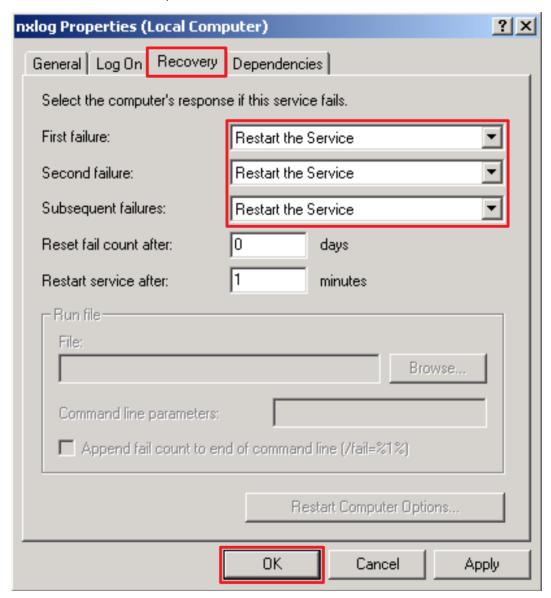
(4) Open the NXLog service properties: select "NXLog" → Click "Properties."



(5) On the General tab, verify that Startup type is set to Automatic (Delayed Start).



(6) On the Recovery tab, verify that First failure, Second failure, and Subsequent failures are all set to "Restart the Service", then click "OK."



1.4.2 For Windows Server 2008 or later

(1) Open "Windows Powershell."



(2) Restart the NXLog service, verify that it is running, and ensure there are no error messages:

```
PS C:\> Restart-Service -Name nxlog
```

PS C:\> Get-Service -Name nxlog | Select-Object -Property Name,Status,StartType

PS C:\> Get-Content 'C:\ Program Files\ nxlog\data\nxlog.log'

```
Administrator: Windows PowerShell

PS C:\> Restart-Service -Name nxlog
PS C:\> Get-Service -Name nxlog | Select-Object -Property Name, Status, StartType

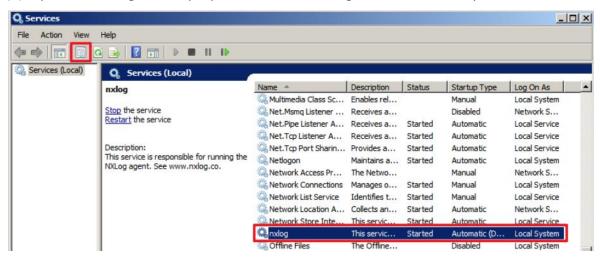
Name Status StartType
----
nxlog Running Automatic

PS C:\> Get-Content 'C:\Program Files\nxlog\data\nxlog.log'
2025-08-11 14:46:55 INFO nxlog-ce-3.2.2329 started
PS C:\> _
```

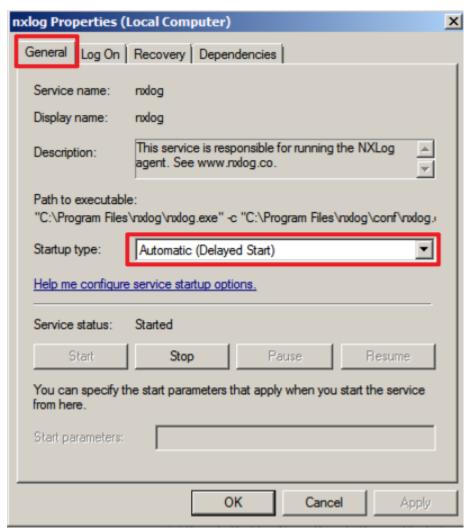
Note: This example is for a 64-bit operating system. For a 32-bit system, replace the highlighted text with: 'C:\Program Files(x86)\nxlog\conf\nxlog.conf'

(3) Enter the command below to open the **Services** console:

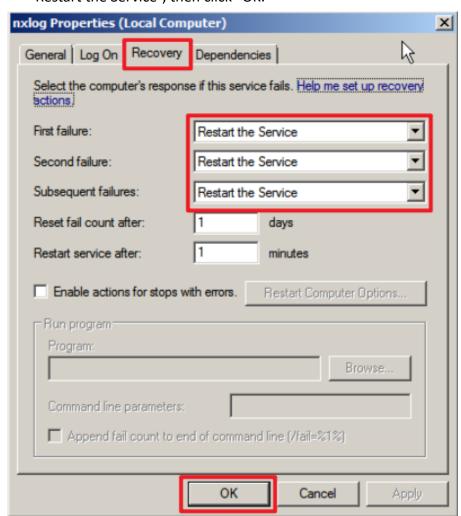
(4) Open the NXLog service properties: select "NXLog" → ☐ Click "Properties."



(5) On the General tab, verify that Startup type is set to Automatic (Delayed Start).



(6) On the Recovery tab, verify that First failure, Second failure, and Subsequent failures are all set to "Restart the Service", then click "OK."



2. Windows Server 2000

2.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

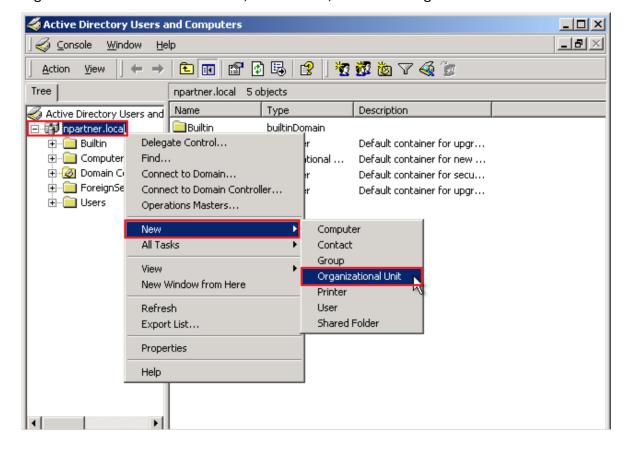
2.1.1 Organizational Unit (OU) Configuration

(1) Click "Active Directory Users and Computers."



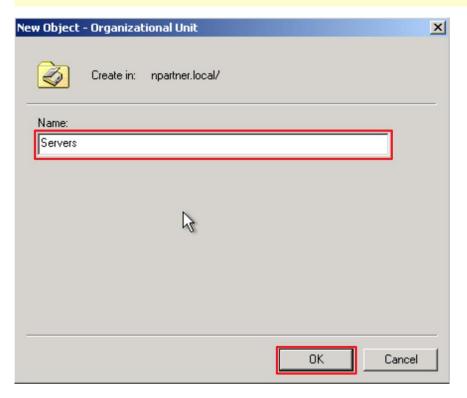
(2) Add an Organizational Unit

Right-click on "Domain Controllers, select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

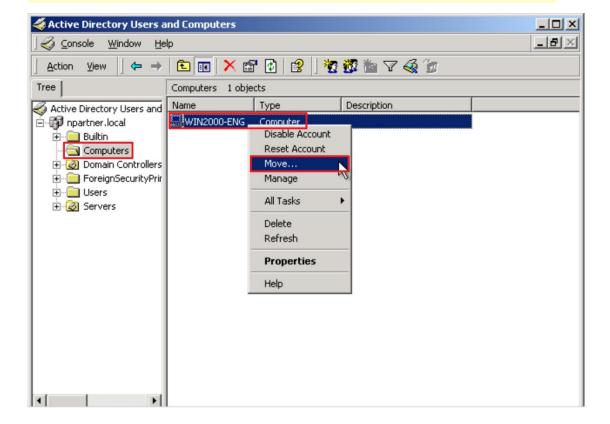
Note: Please create the organizational unit name according to the actual environment. → click "OK."



(4) Move the Server to your New Organizational Unit:

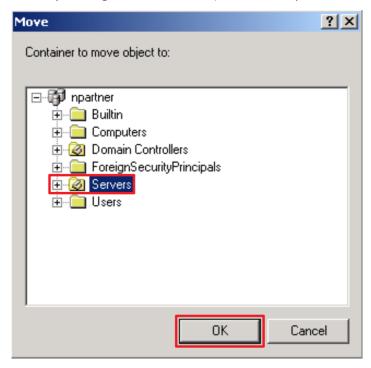
Select the "Computers" organizational unit (OU) → right-click on the "WIN2000-ENG" server.

Note: Please select the Windows File server according to the actual environment. → click "Move."



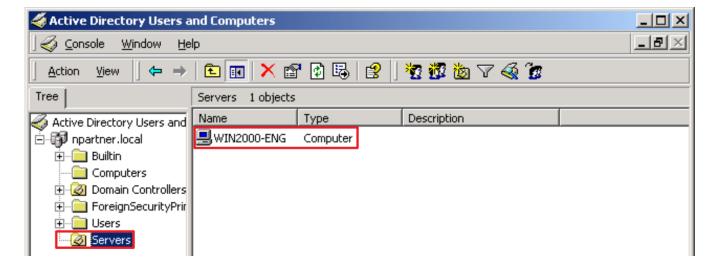
(5) Select your Organizational Unit:

Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2000-ENG" server has been moved.

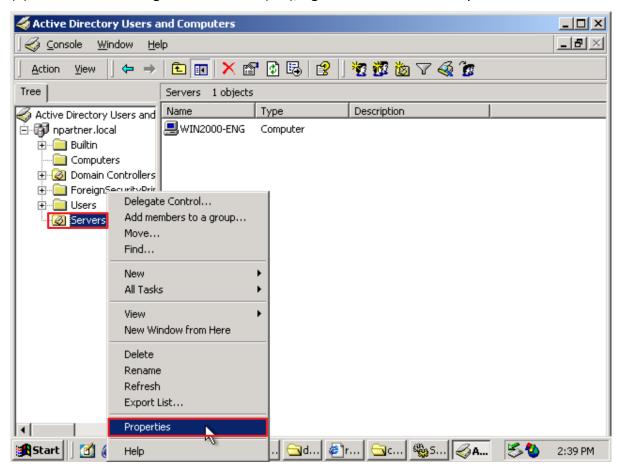


2.1.2 Group Policy Settings

(1) Click "Active Directory Users and Computers."



(2) In the "Servers" organizational unit (OU), right-click and select "Properties."



(3) Enter the Group Policy Object (GPO) name

On the "Group Policy" page → click "New."

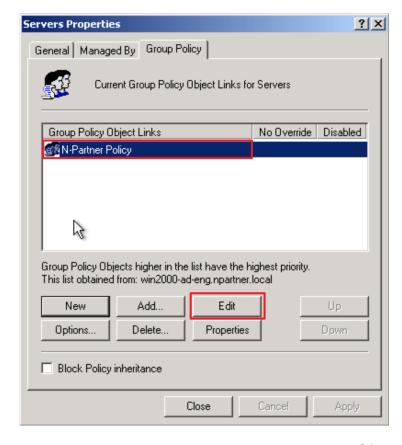


(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy")

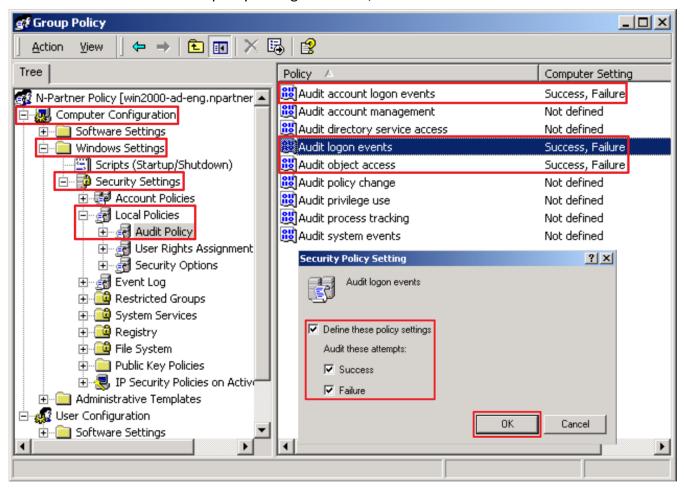
Note: Please create the GPO name according to the actual environment.

→ select "Edit."



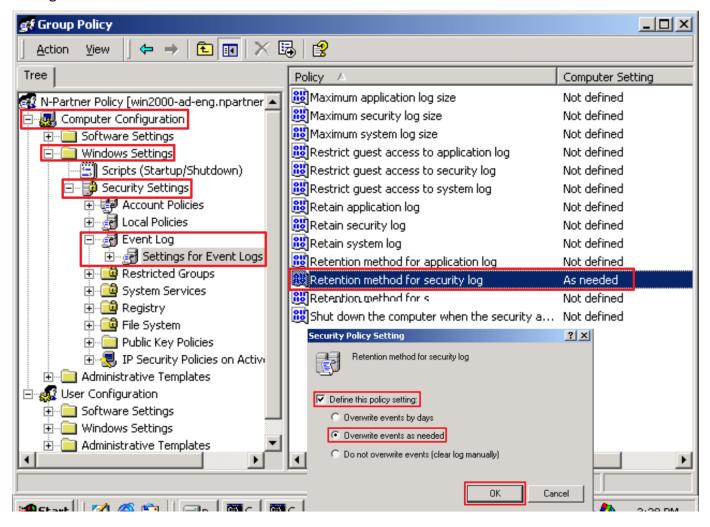
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

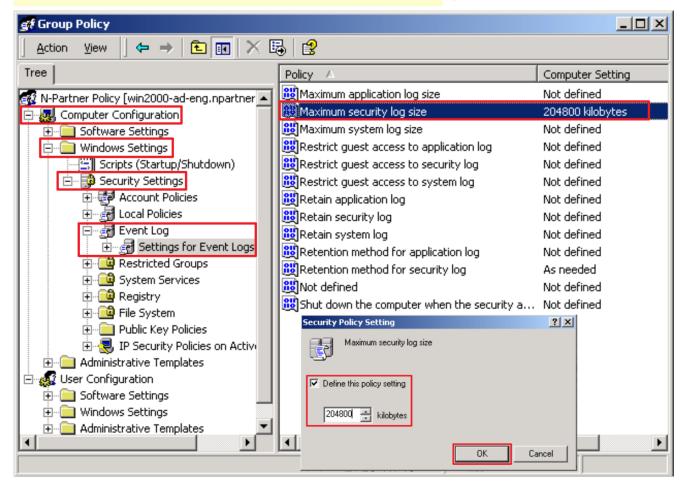
Expand "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow "Settings for Event Logs" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow "Settings for Event Logs" \rightarrow and click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

Note: Please adjust the number based on the actual environment. → click "OK."

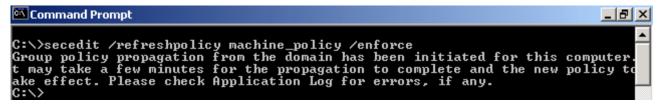


(8) On the Windows File server, open "Command Prompt."



(9) Enter the command below to refresh group policy.

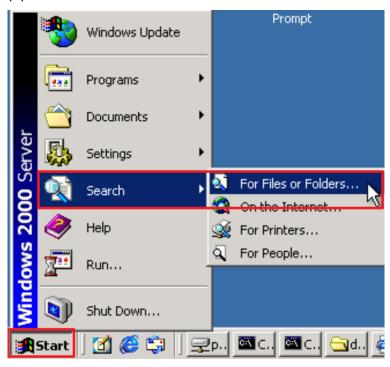
C:\> secedit /refreshpolicy machine policy /enforce



2.2 Workgroup

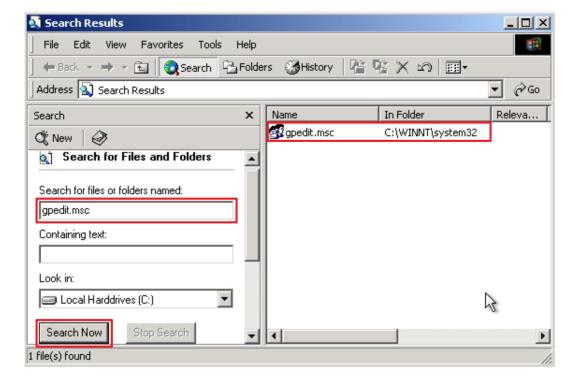
2.2.1 Audit Policy Configuration

(1) Click on "Start" → click "Search" → click on "For Files or Folders"



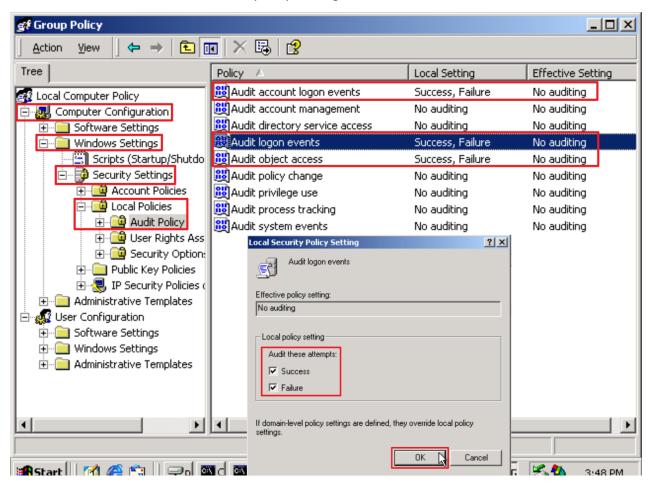
(2) Search for the Group Policy Object Editor

Type gpedit.msc \rightarrow click "Search now" \rightarrow select "gpedit."



(3) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(4) On Windows File server, open "Command Prompt."



(5) Enter the command below to refresh group policy.

C:\> secedit /refreshpolicy machine_policy /enforce

C:\> secedit /refreshpolicy machine_policy /enforce

Group policy propagation from the domain has been initiated for this computer.

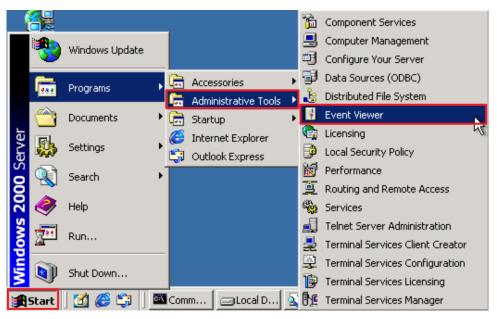
t may take a few minutes for the propagation to complete and the new policy to ake effect. Please check Application Log for errors, if any.

C:\>

2.2.2 Event Log Settings

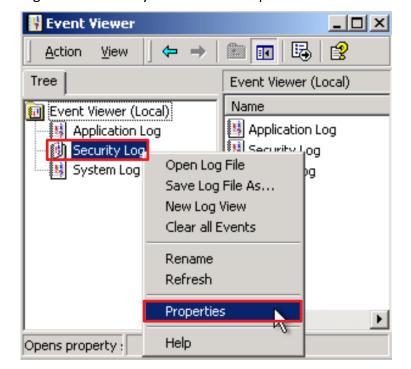
(1) Search for "Event Viewer"

Click "Start" → select "Administrative Tools" → "Event Viewer."



(2) Edit Security Log

Right-click "Security" and select "Properties."

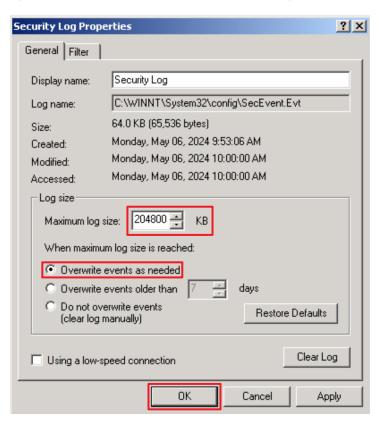


(3) Configure Security Log

Enter maximum log file size: 204800 KB

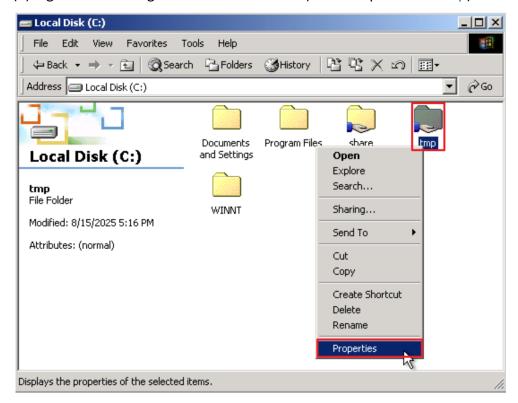
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed" → click "OK."

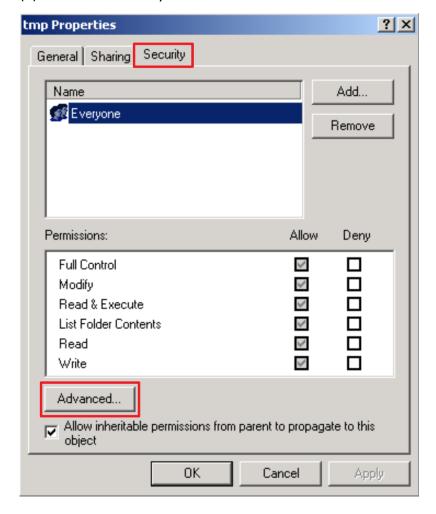


2.3 Folder Audit Configuration

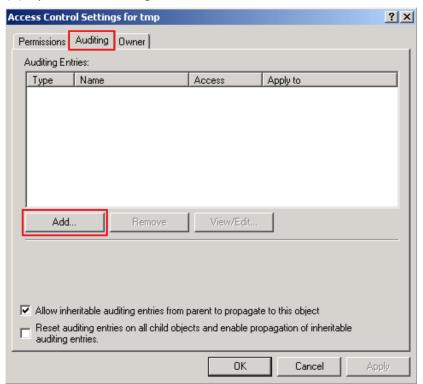
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



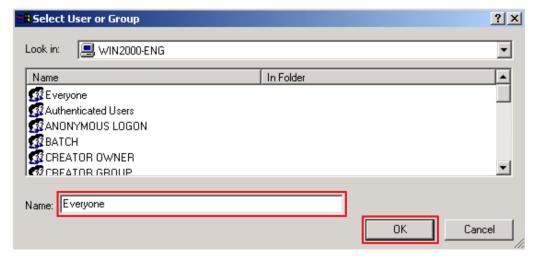
(2) Go to the "Security" tab → click "Advanced."



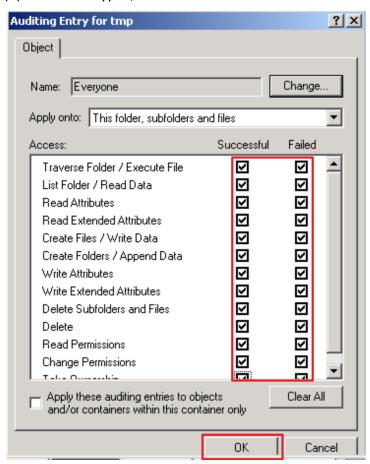
(3) Open the "Auditing" tab → click "Add."



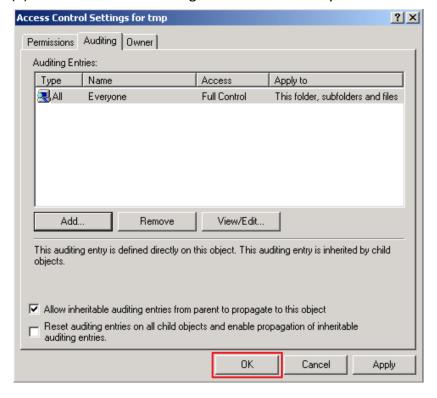
(4) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



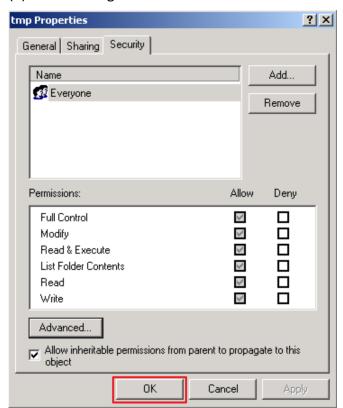
(5) For access types, select "Full Control" for both "Success" and "Failure," and then click "OK."



(6) Confirm that the auditing entries shows "Everyone" → click "OK."



(7) Click "OK" again to confirm and close.



3. Windows Server 2003

3.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

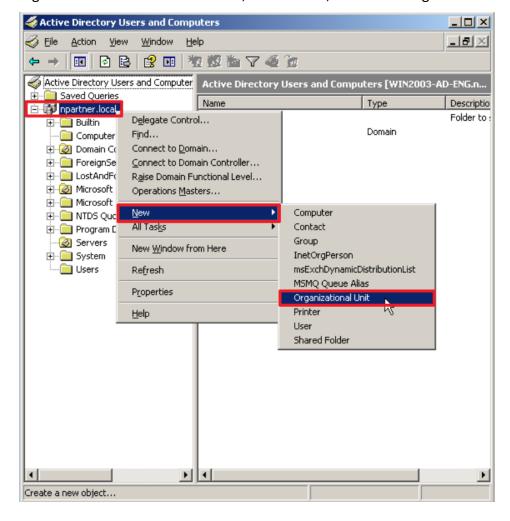
3.1.1 Organizational Unit (OU) Configuration

(1) Click "Active Directory Users and Computers."



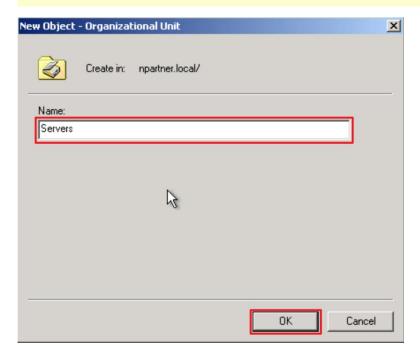
(2) Add an Organizational Unit

Right-click on "Domain Controllers, select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

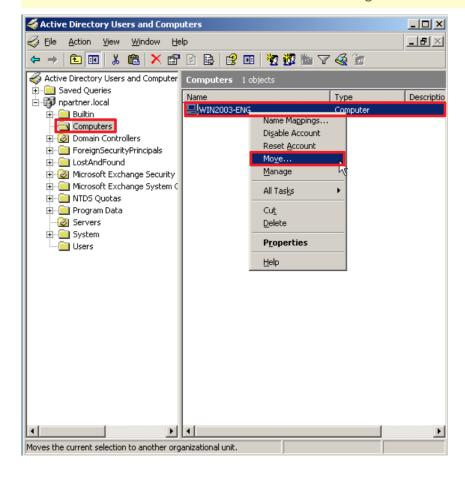
Note: Please create the organizational unit name according to the actual environment. → click "OK."



(4) Move the Server to your New Organizational Unit:

Select the "Computers" organizational unit (OU) → right-click on the "WIN2003-ENG" server.

Note: Please select the Windows File server according to the actual environment. \rightarrow click "Move."



(5) Select your Organizational Unit:

ENG" server has been moved.

⊕ Servers

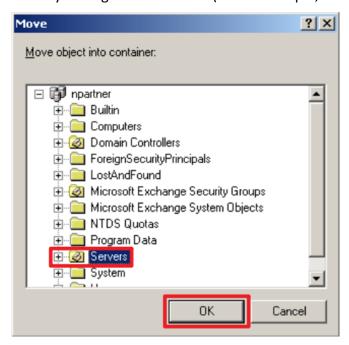
⊕ System

☐ Users

4 |

Active Directory Users and Computers

Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2003-

<u>A</u>ction <u>V</u>iew Window. <u>H</u>elp 🤁 📆 🐞 🔻 🍕 🚡 😰 🔢 **1** Active Directory Users and Computer Servers 2 objects Name Type 🖃 🚮 npartner local WIN2003-AD-ENG Computer ⊕-- i Builtin 🖳 WIN2003-ENG Computer Computers 🕀 🔲 Microsoft Exchange System (庄 🖳 Program Data

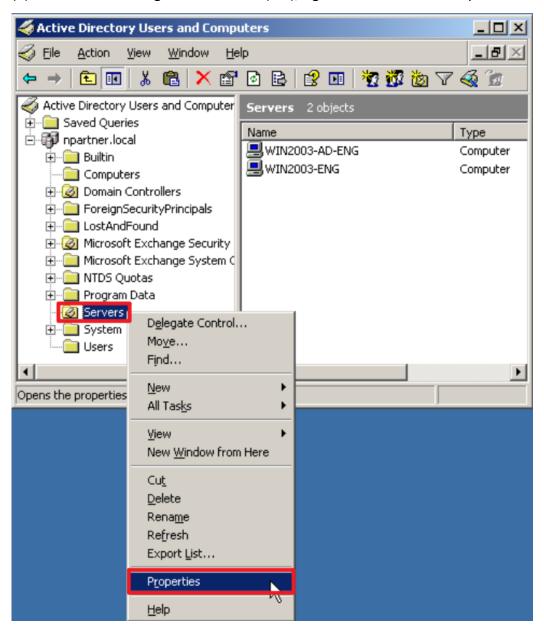
P

3.1.2 Group Policy Settings

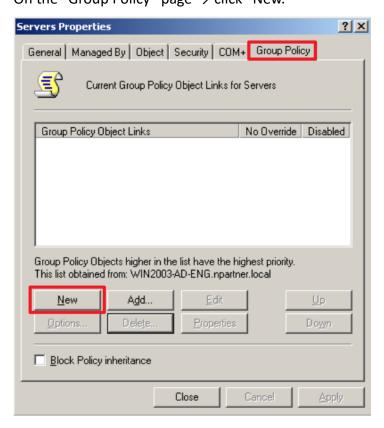
(1) Click "Active Directory Users and Computers."



(2) In the "Servers" organizational unit (OU), right-click and select "Properties."



(3) Enter the Group Policy Object (GPO) name
On the "Group Policy" page → click "New."

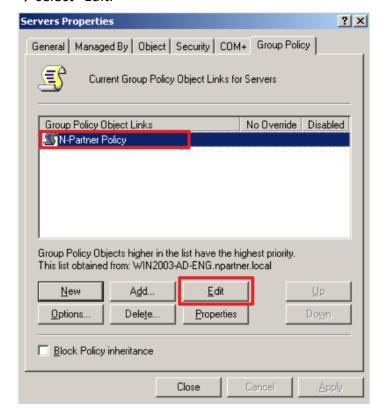


(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy")

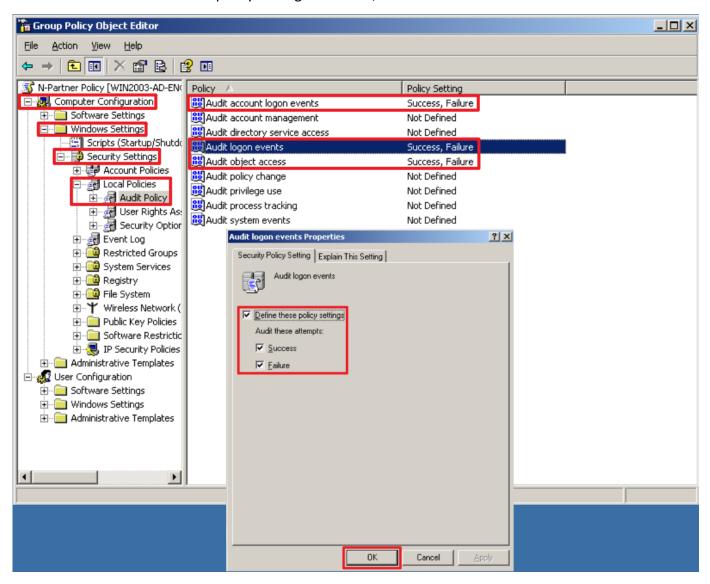
Note: Please create the GPO name according to the actual environment.

→ select "Edit."



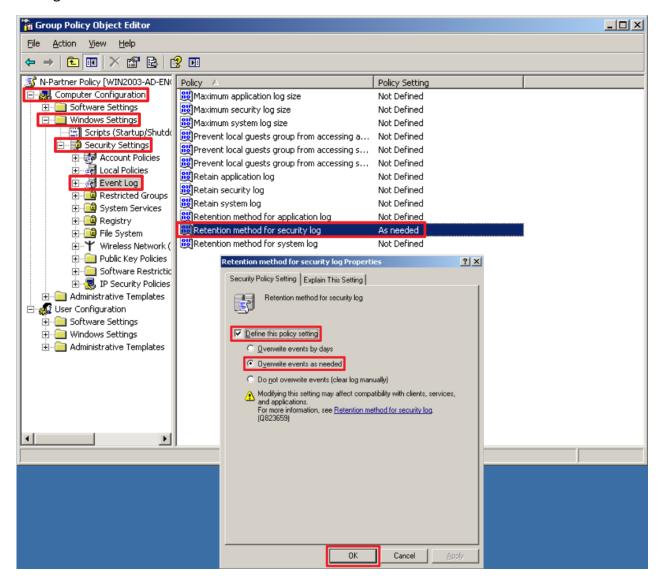
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

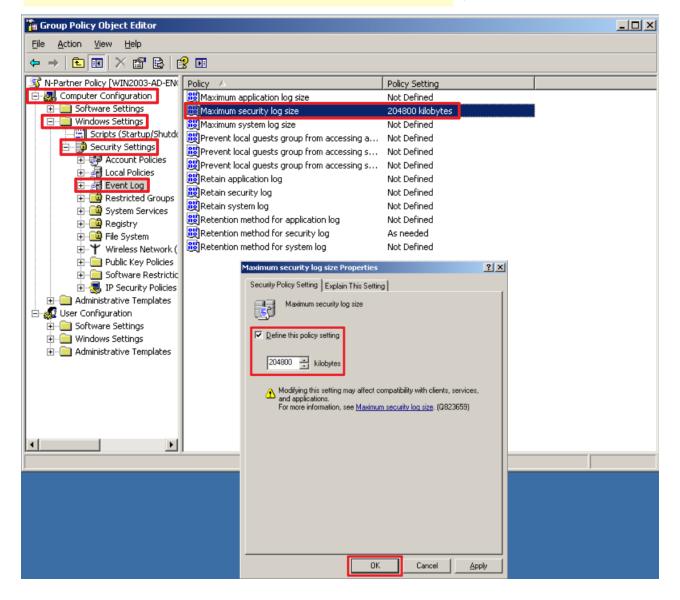
Expand "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow "Settings for Event Logs" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow "Settings for Event Logs" \rightarrow and click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

Note: Please adjust the number based on the actual environment. → click "OK."

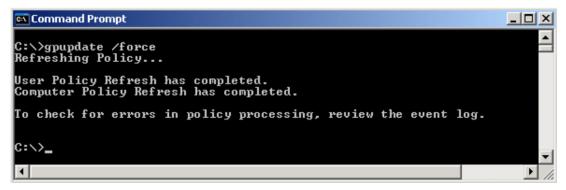


(8) On the Windows File server, open "Command Prompt."



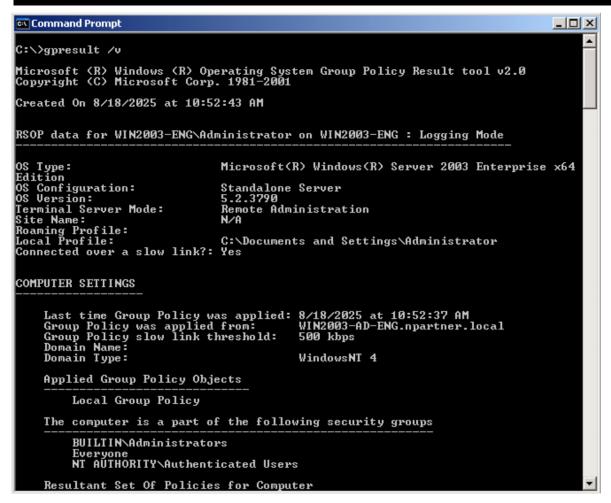
(9) Enter the command below to refresh group policy.

C:\> gpupdate /force



(10) Enter the command below to verify the applied group policy settings.

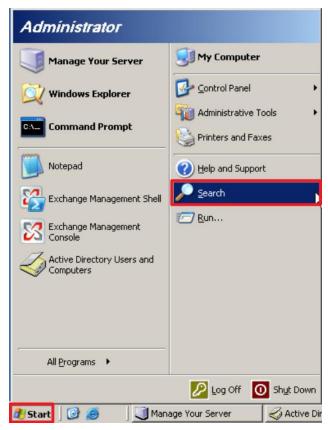
C:\> gpresult /v



3.2 Workgroup

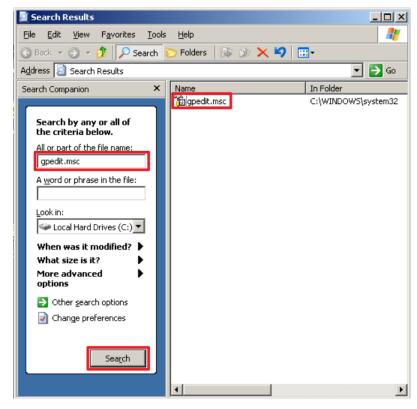
3.2.1 Audit Policy Configuration

(1) Click on "Start" → click "Search."



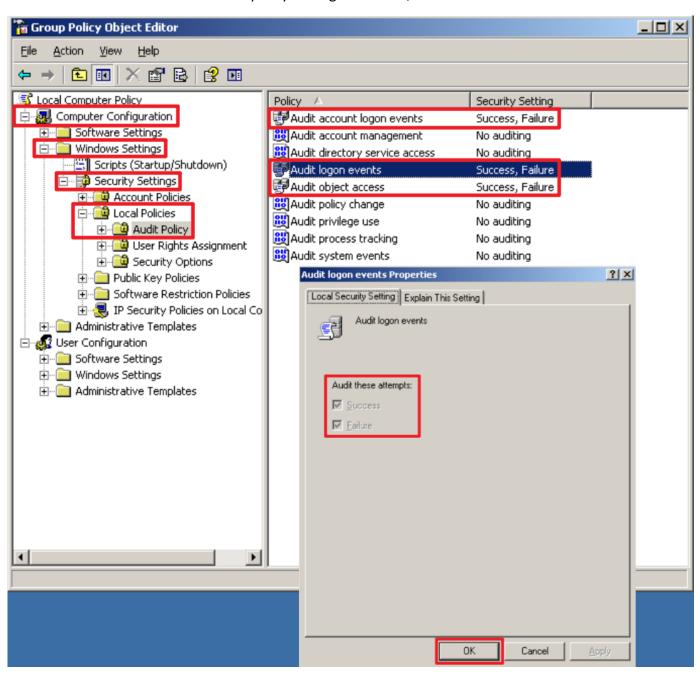
(2) Search for the Group Policy Object Editor

Type gpedit.msc → click "Search now" → select "gpedit."



(3) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(4) On Windows File server, open "Command Prompt."



(5) Enter the command below to refresh group policy.

C:\> gpupdate /force



3.2.2 Event Log Settings

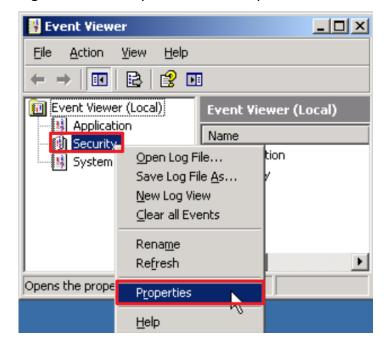
(1) Search for "Event Viewer"

Click "Start" → select "Administrative Tools" → "Event Viewer."



(2) Edit Security Log

Right-click "Security" and select "Properties."

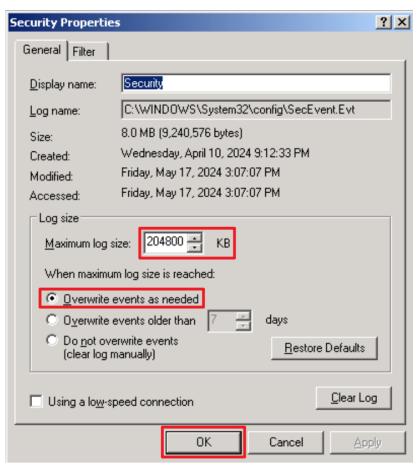


(3) Configure Security Log

Enter maximum log file size: 204800 KB

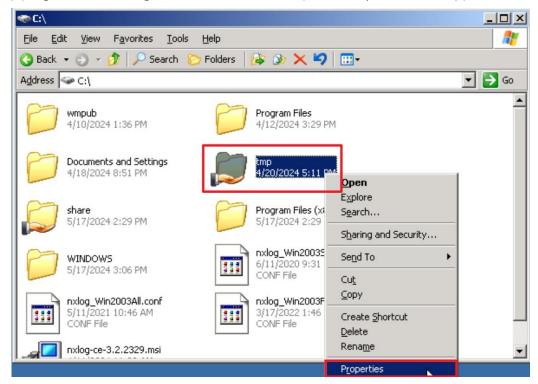
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed" → click "OK."

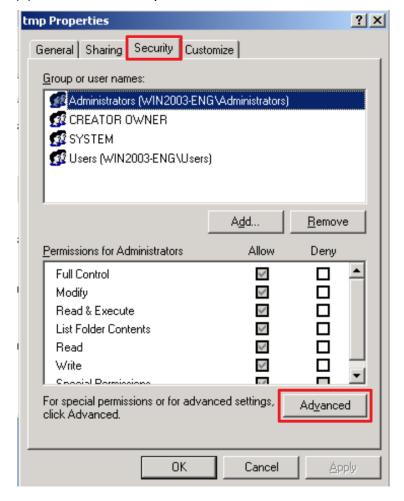


3.3 Folder Audit Configuration

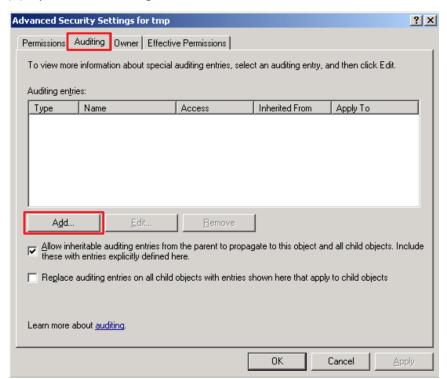
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



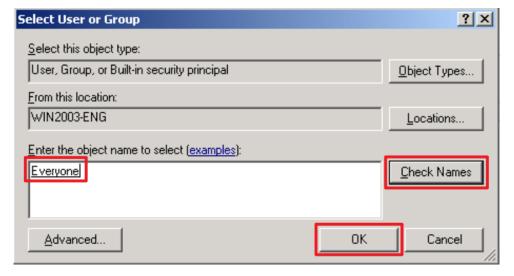
(2) Go to the "Security" tab → click "Advanced."



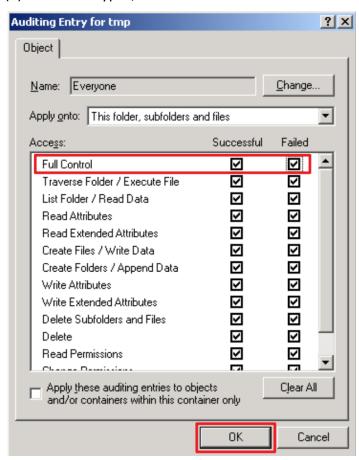
(3) Open the "Auditing" tab → click "Add."



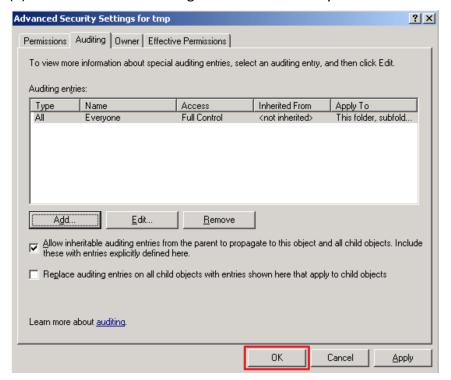
(4) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



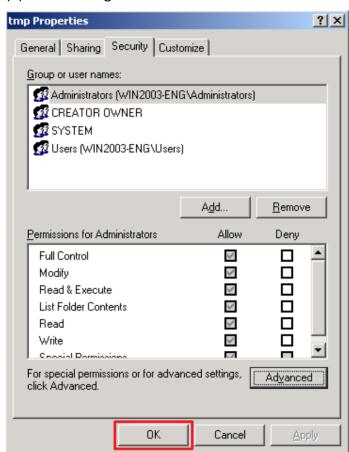
(5) For access types, select "Full Control" for both "Success" and "Failure," and then click "OK."



(6) Confirm that the auditing entries shows "Everyone" → click "OK."



(7) Click "OK" again to confirm and close.



4. Windows Server 2008

4.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

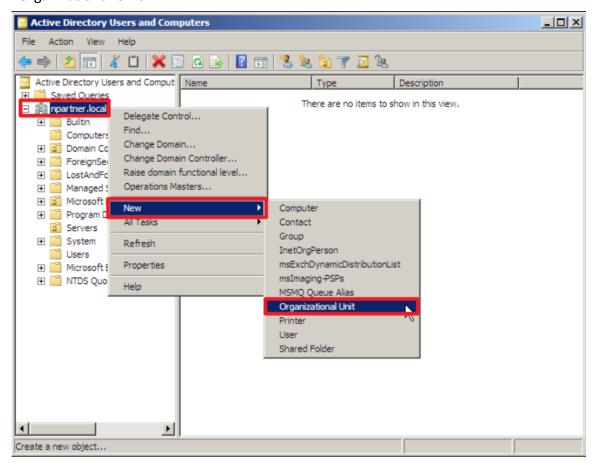
4.1.1 Organizational Unit (OU) Configuration

(1) Click "Active Directory Users and Computers."



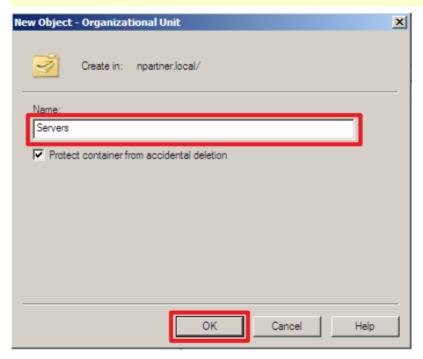
(2) Add an Organizational Unit

Right-click on the domain name (the example here is npartner.local) → select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

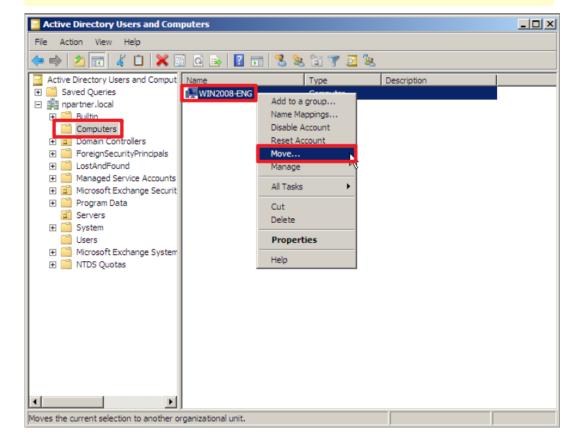
Note: Please create the organizational unit name according to the actual environment. → click "OK."



(4) Move the Server to your New Organizational Unit:

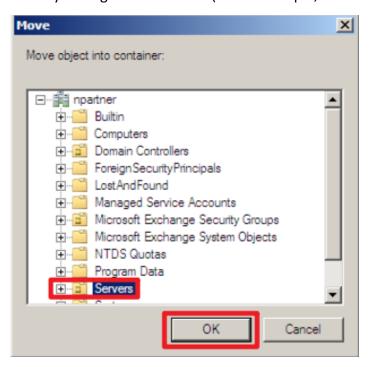
Select the "Computers" organizational unit (OU) → right-click on the "WIN2008-ENG" server.

Note: Please select the Windows File server according to the actual environment. \rightarrow click "Move."



(5) Select your Organizational Unit:

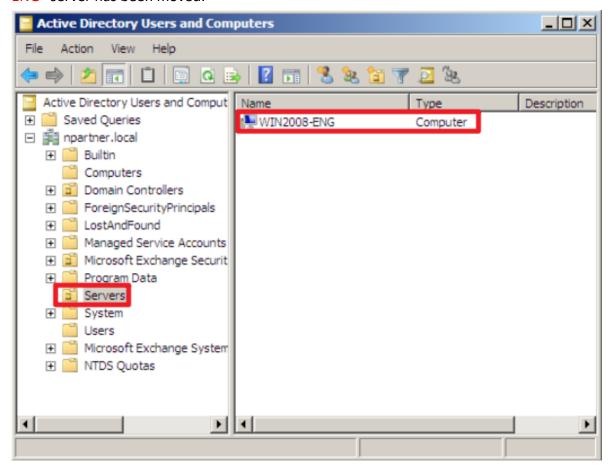
Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

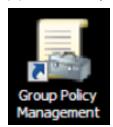
Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2008-

ENG" server has been moved.

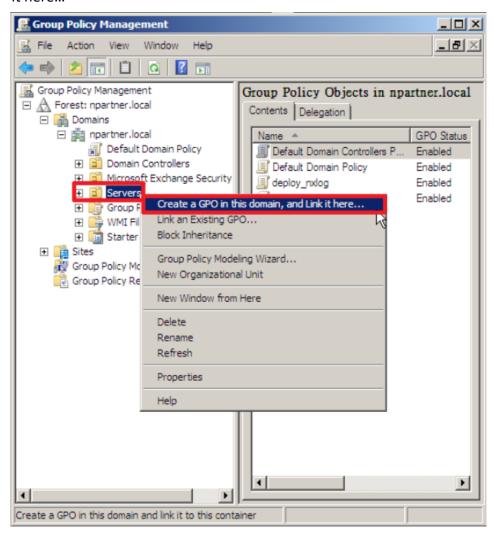


4.1.2 Group Policy Settings

(1) Click "Group Policy Management."



(2) In the "Servers" organizational unit (OU), right-click and select "Create a GPO in this domain, and Link it here..."

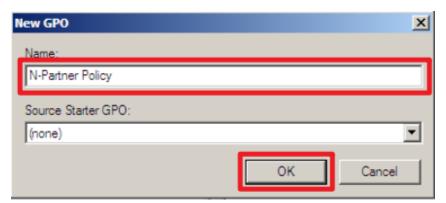


(3) Enter the Group Policy Object (GPO) name

In your group policy object, (in this example, it is "N-Partner Policy")

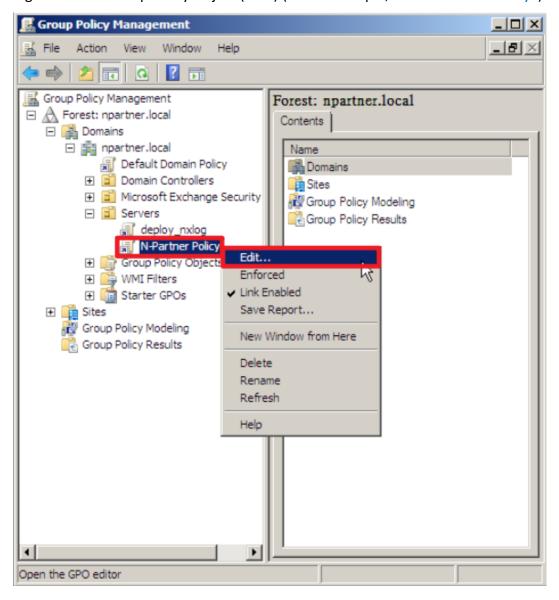
Note: Please create the GPO name according to the actual environment.

→ select "OK."



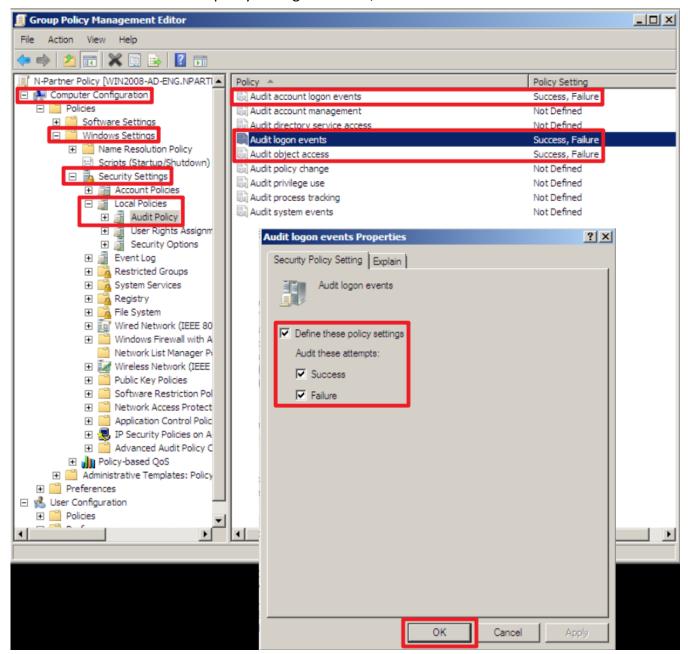
(4) Edit your Group Policy Object

Right-click the Group Policy Object (GPO) (in this example, it is "N-Partner Policy") → select "Edit."



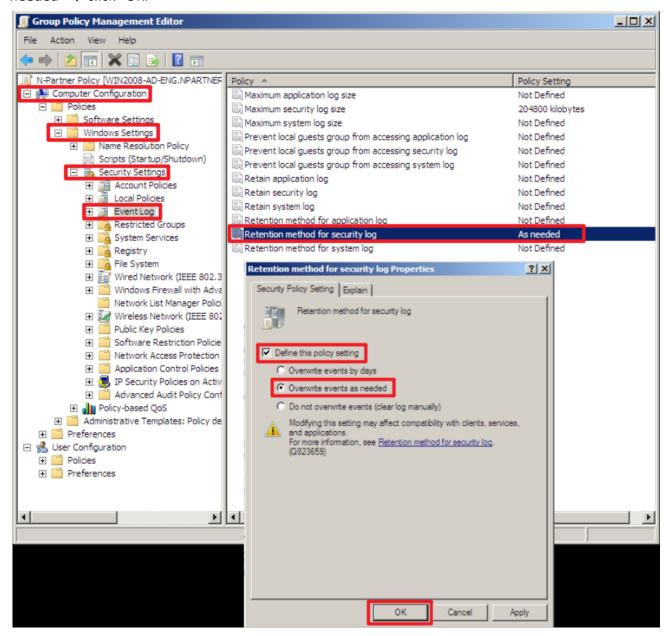
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

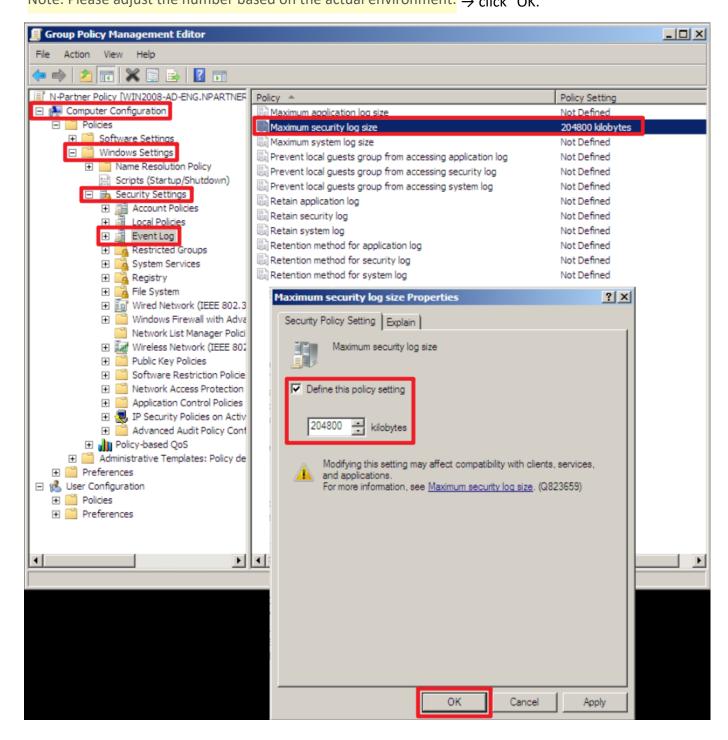
Expand "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow and click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

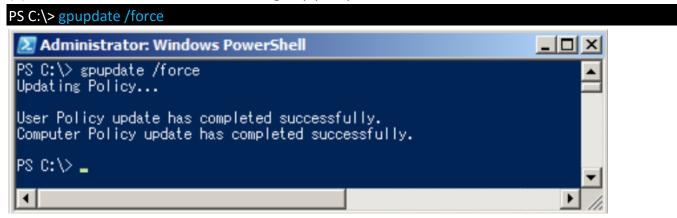
Note: Please adjust the number based on the actual environment. \rightarrow click "OK."



(8) On the Windows File server, open "Windows PowerShell."

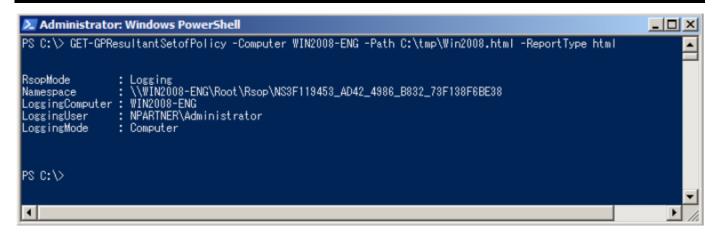


(9) Enter the command below to refresh group policy.



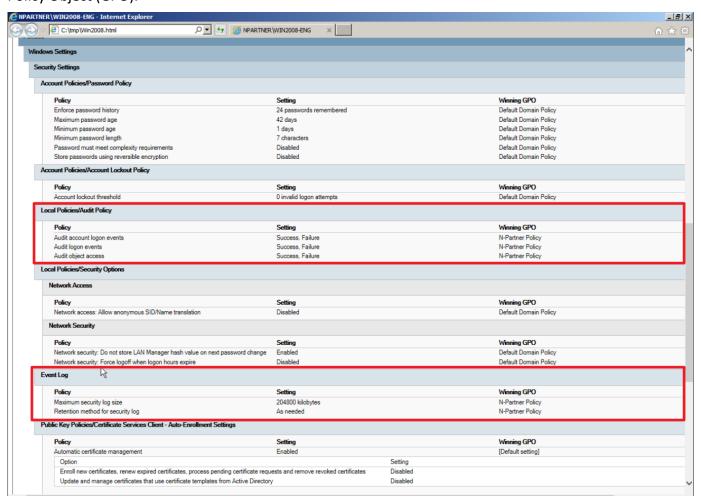
(10) On the AD domain server, open "Windows PowerShell" \rightarrow enter the command below to generate the group policy report for the Windows File server.

PS C:\> Get-GPResultantSetofPolicy -Computer Win2008-ENG -Path C:\tmp\Win2008.html -ReportType html



Replace the text shown in red with the Windows File server name and the folder path/filename.

(11) Open the report and verify that the Windows File server has applied the "N-Partner Policy" Group Policy Object (GPO).

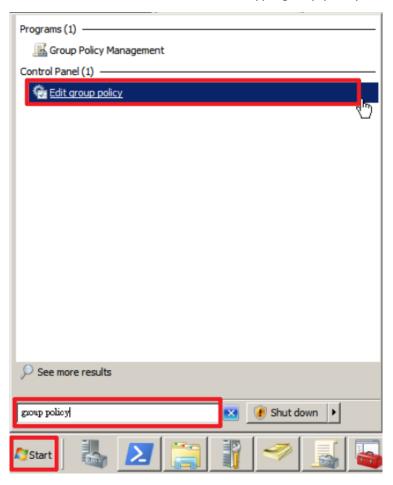


4.2 Workgroup

4.2.1 Audit Policy Configuration

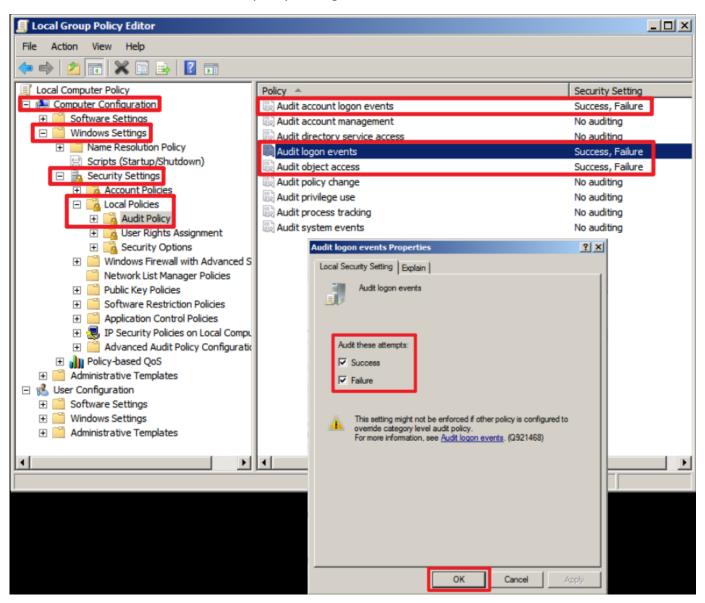
(1) Open "Local Group Policy Editor"

Click "Start" \rightarrow in the "Search" field, type group policy \rightarrow click "Edit group policy."



(2) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."

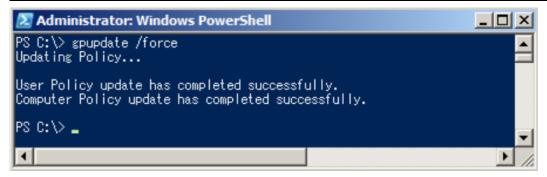


(3) Open "Windows Powershell."



(4) Enter the command below to refresh group policy.

PS C:\> gpupdate /force



(5) Enter the command below to verify the applied group policy settings.

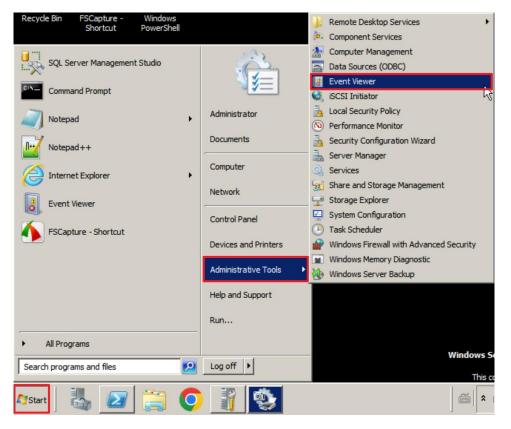
PS C:\> auditpol /get /category:*



4.2.2 Event Log Settings

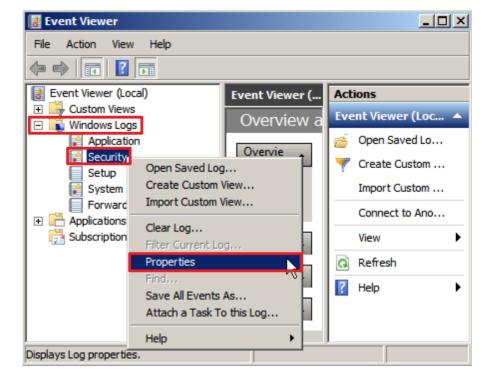
(1) Search for "Event Viewer"

Click "Start" → select "Administrative Tools" → "Event Viewer."



(2) Edit Security Log

Expand "Windows Logs" → right-click "Security" and select "Properties."

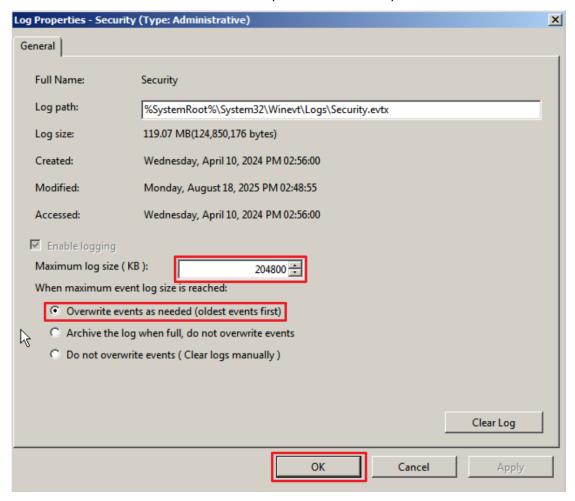


(3) Configure Security Log

Enter maximum log file size: 204800 KB

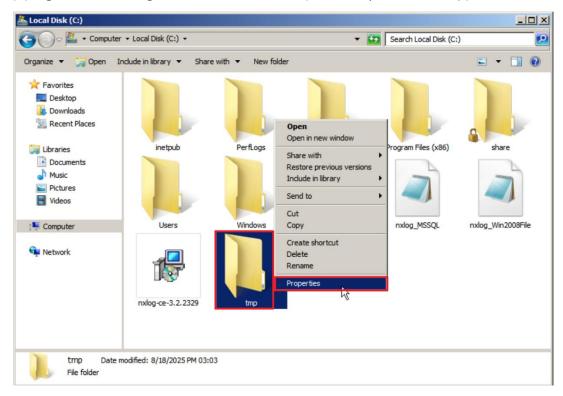
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed(oldest events first)" → click "OK."

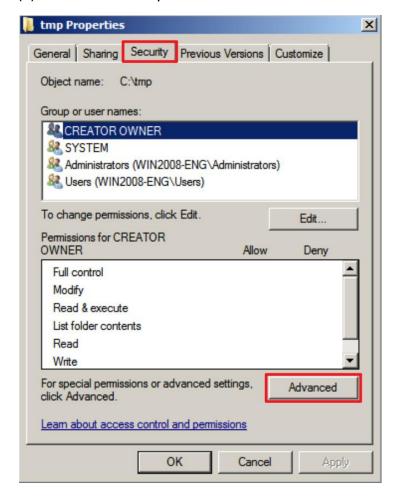


4.3 Folder Audit Configuration

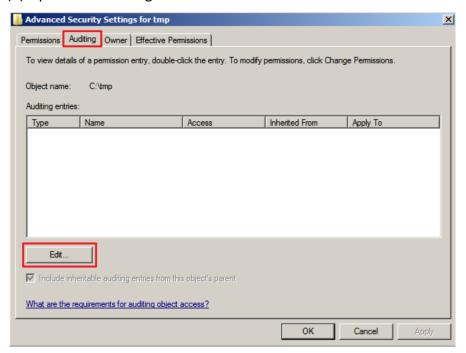
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



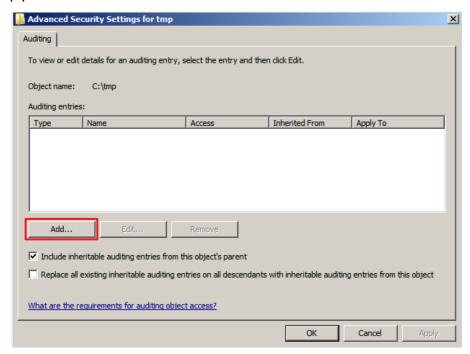
(2) Go to the "Security" tab → click "Advanced."



(3) Open the "Auditing" tab → click "Edit."



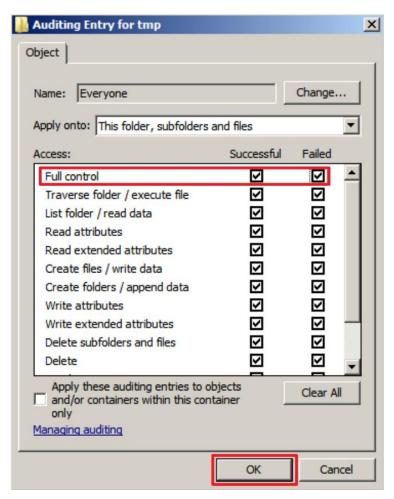
(4) Click "Add."



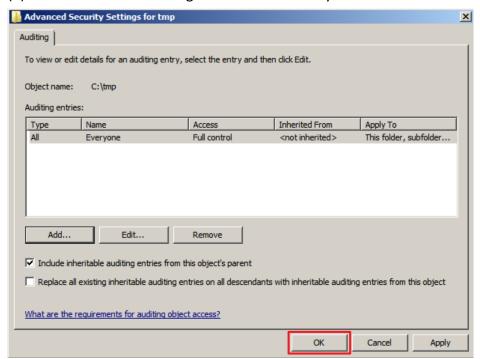
(5) In the object name field, enter Everyone to audit all users → click "Check Names" → click "OK."



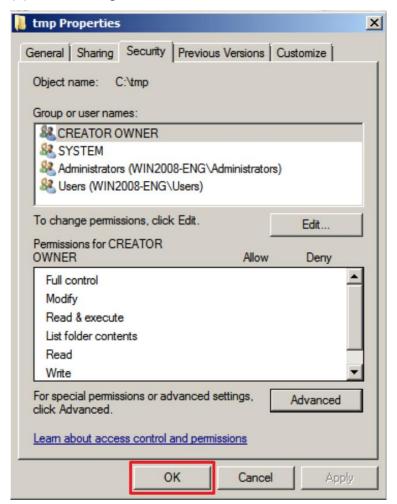
(6) For access types, select "Full Control" for both "Success" and "Failure," and then click "OK."



(7) Confirm that the auditing entries shows "Everyone."



(8) Click "OK" again to confirm and close.



5. Windows Server 2012

5.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

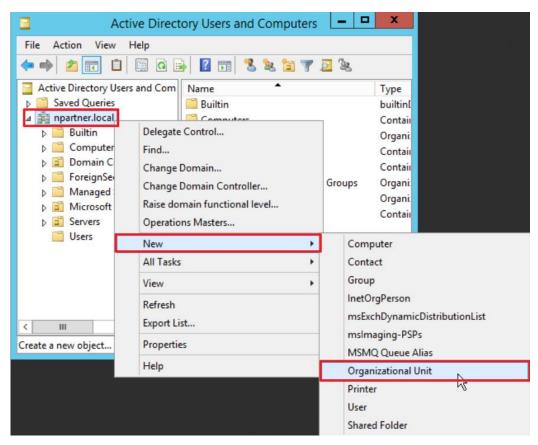
5.1.1 Organizational Unit (OU) Configuration

(1) Open "Active Directory Users and Computers."



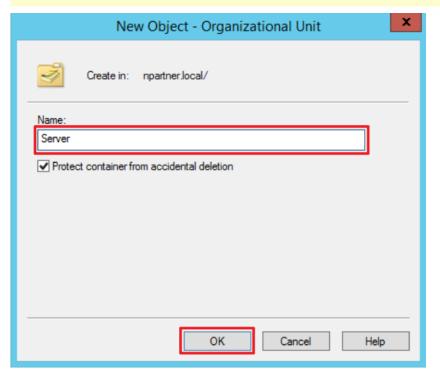
(2) Add an Organizational Unit

Right-click on the domain name (the example here is npartner.local) → select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

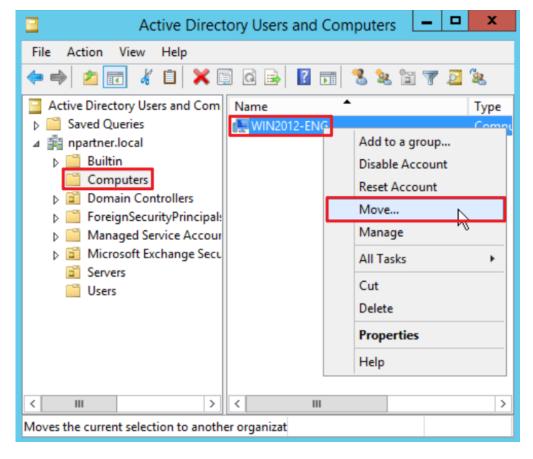
Note: Please create the organizational unit name according to the actual environment. \rightarrow click "OK."



(4) Move the Server to your New Organizational Unit:

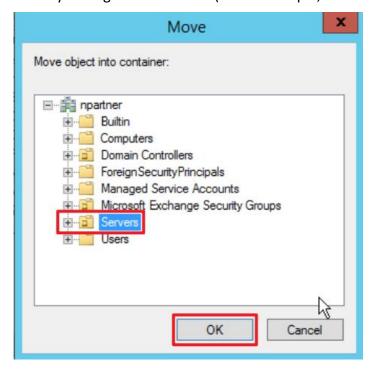
Select the "Computers" organizational unit (OU) → right-click on the "WIN2012" server.

Note: Please select the Windows File server according to the actual environment. \rightarrow click "Move."



(5) Select your Organizational Unit:

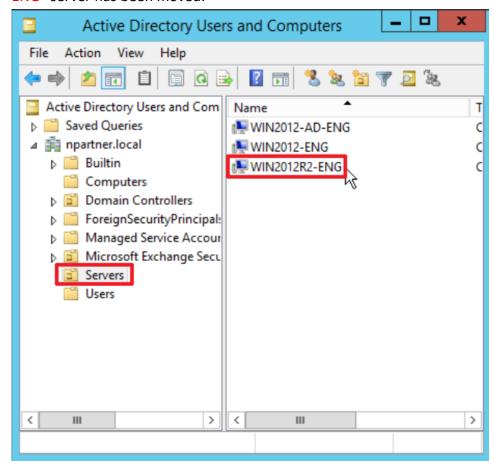
Select your organizational unit (in this example, it is "Servers") → Click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

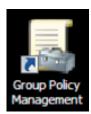
Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2012-

ENG" server has been moved.



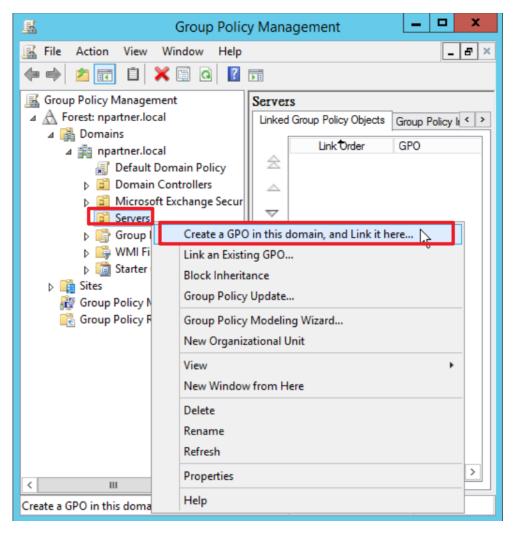
5.1.2 Group Policy Settings

(1) Click "Group Policy Management."



(2) In the Servers organizational unit (OU), create a new Group Policy Object (GPO):

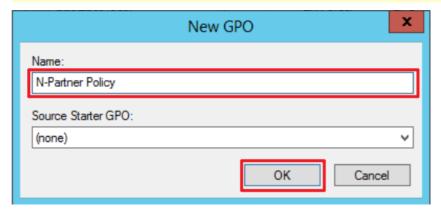
Right-click the [Servers] organizational unit → select "Create a GPO in this domain, and Link it here..."



(3) Edit your Group Policy Object

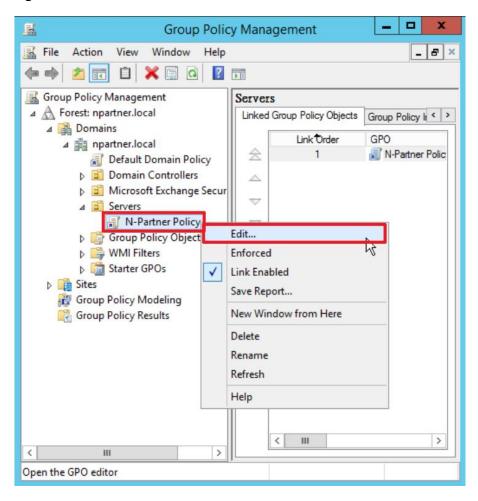
Enter your Group Policy Object name. (in this example, it is "N-Partner Policy")

Note: Create your GPO name according to the actual environment. Then click "Edit."



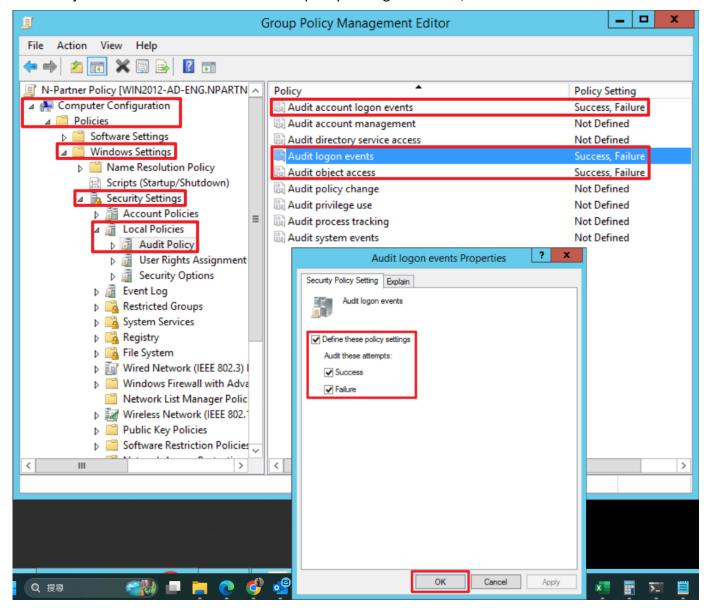
(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy") right-click and select "Edit."



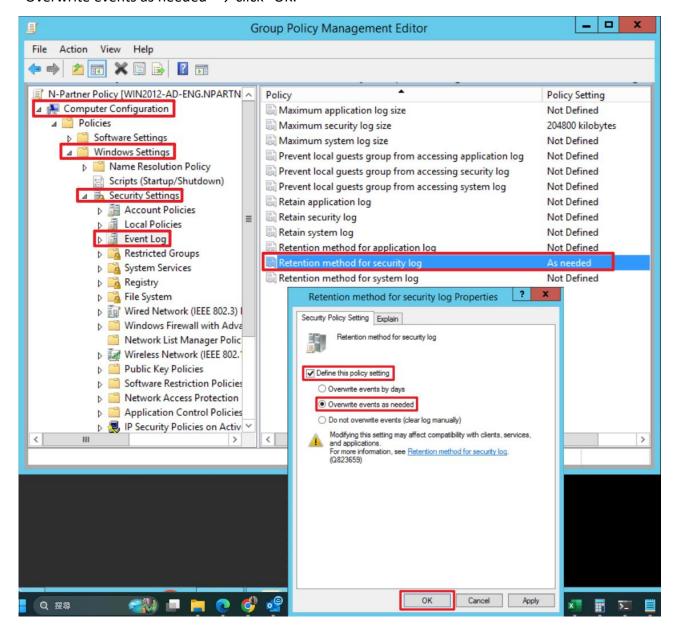
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

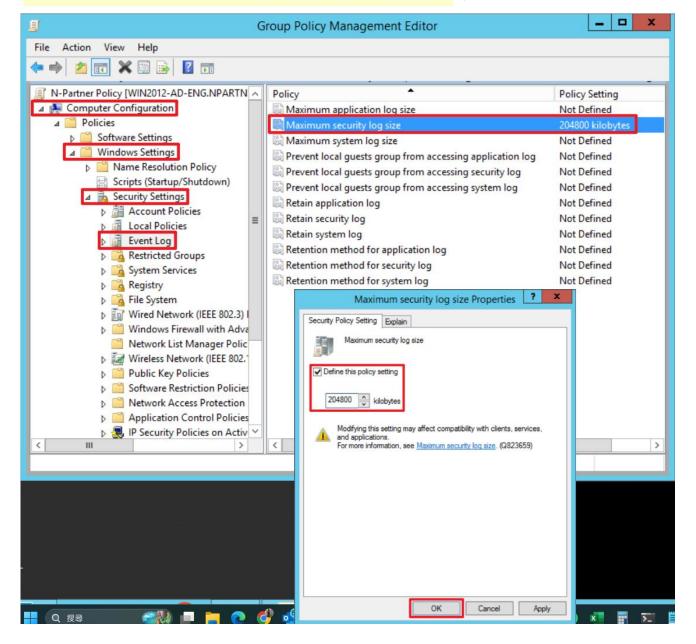
Expand "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow And click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

Note: Please adjust the number based on the actual environment. → click "OK."



(8) On the AD domain server, open "Windows PowerShell."



(9) Enter the command below to refresh group policy.

PS C:\> Invoke-GPUpdate -Computer WIN2012-ENG -RandomDelayInMinutes 0 -Force Administrator: Windows PowerShell PS C:\> Invoke-GPUpdate -Computer WIN2012R2-ENG -RandomDelayInMinutes 0 -Force PS C:\>

Replace the text shown in red with the Windows File server name.

(10) Enter the command below to generate server group policy report.

PS C:\> Get-GPResultantSetofPolicy -Computer WIN2012-ENG -Path C:\tmp\WIN2012.html -ReportType.html

Administrator: Windows PowerShell

PS C:\> Get-GPResultantSetofPolicy -Computer WIN2012R2-ENG -Path C:\tmp\Win2012.html -ReportType html

RsopMode : Logging
Namespace : \\WIN2012R2-ENG\Root\Rsop\NS682763E3_1FA9_440F_ADDC_E6A83DF11F68
LoggingComputer : WIN2012R2-ENG

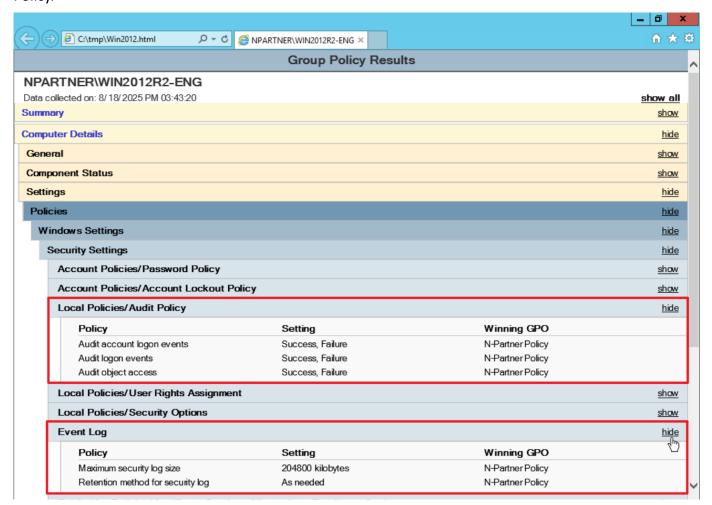
LoggingUser : NPARTNER\administrator

LoggingMode : Computer

PS_C:\> _

For the red text, please enter the Windows File server name and the folder path/file name.

(11) Open the report and verify that your Windows File server is applying the N-Partner Policy Group Policy.

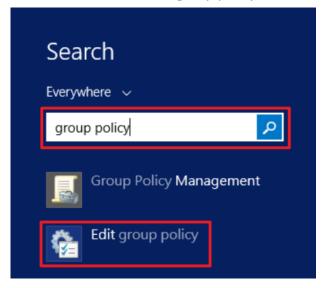


5.2 Workgroup

5.2.1 Audit Policy Configuration

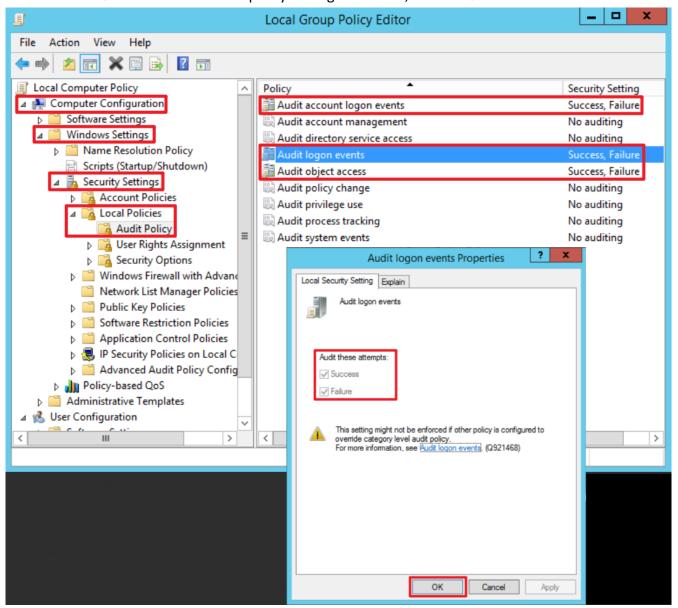
(1) Open Local Group Policy Editor

Click on "Start" → enter "group policy" to search → click on "Edit Group Policy."



(2) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events" and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."

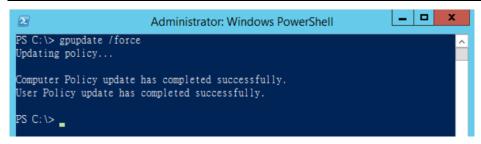


(3) Open "Windows PowerShell."

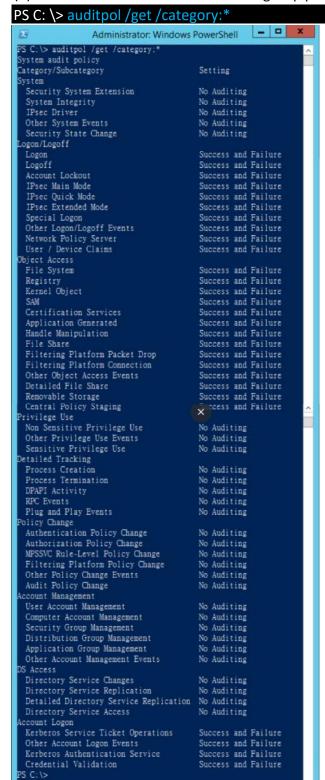


(4) Enter the command below to refresh group policy.

PS C:\> gpupdate /force



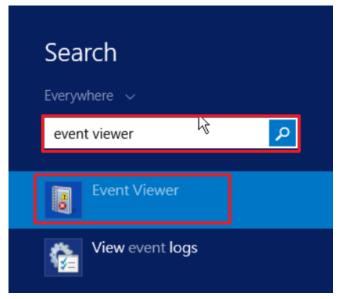
(5) Enter the command below to view group policy applied status.



5.2.2 Event Log Settings

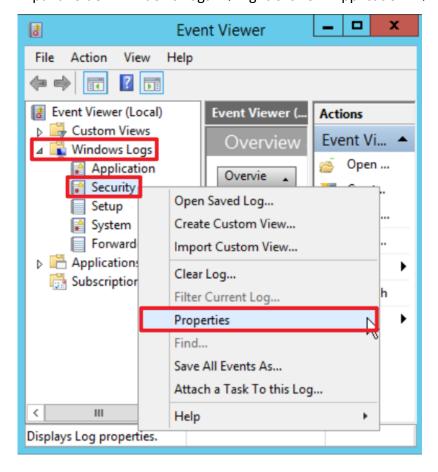
(1) Search for "Event Viewer"

Enter "Event Viewer" to search → click on "Event Viewer" in the search results.



(2) Edit Security Log

Expand folder "Windows Logs" → right-click on "Application" → And click on "Properties."

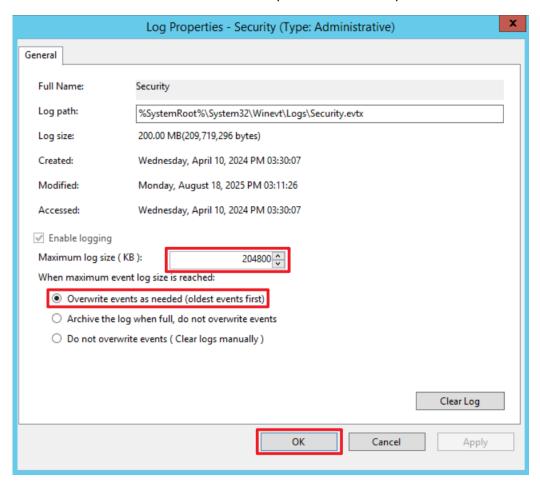


(3) Configure Security Log

Enter maximum log file size: 204800 KB

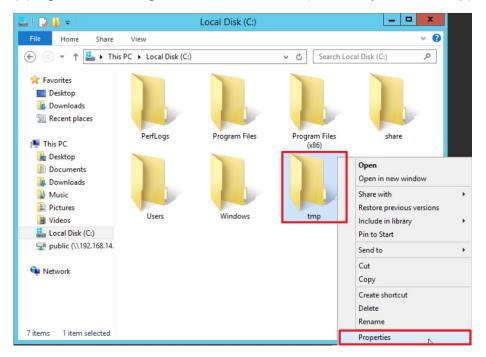
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed (oldest events first)" → click "OK."

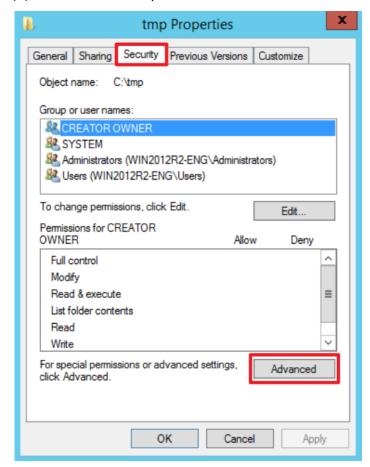


5.3 Folder Audit Configuration

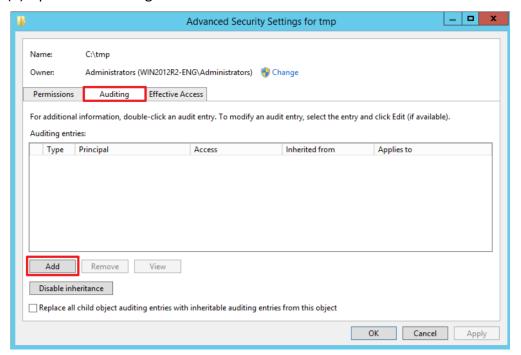
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



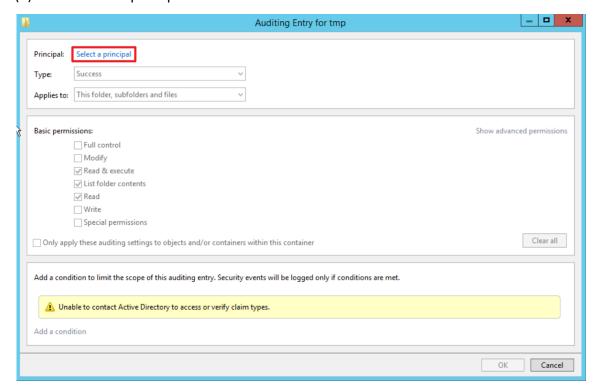
(2) Go to the "Security" tab → click "Advanced."



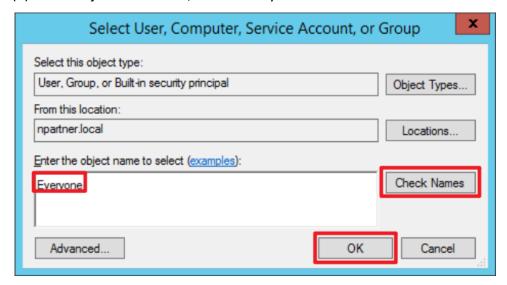
(3) Open the "Auditing" tab → click "Add."



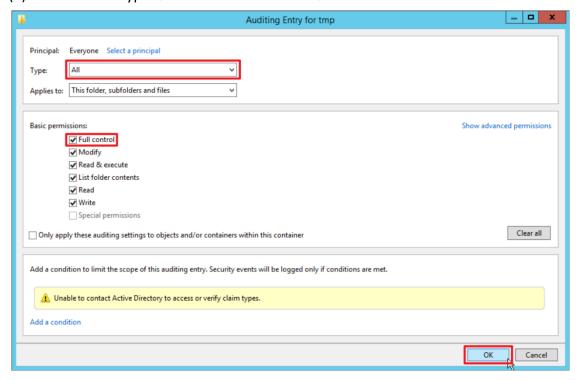
(4) Click "Select a principal."



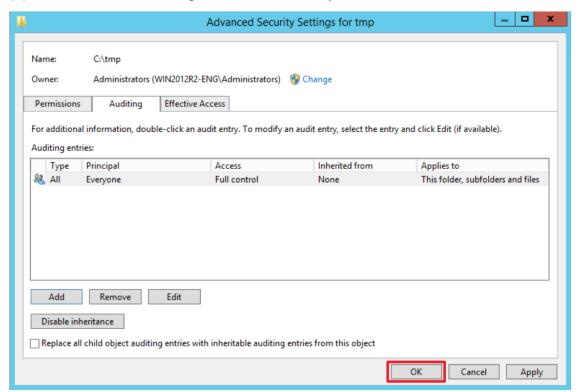
(5) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



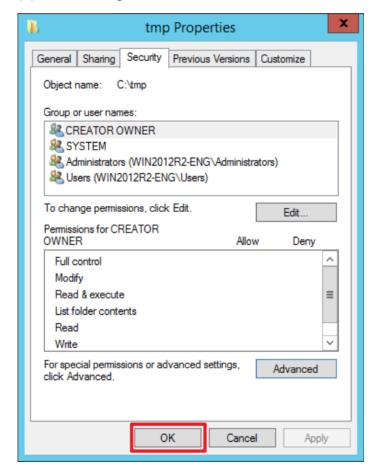
(6) Select "All" in type → enable "Full Control" → click "OK."



(7) Confirm that the auditing entries shows "Everyone" → click "OK."



(8) Click "OK" again to confirm and close.



6. Windows Server 2016

6.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

6.1.1 Organizational Unit (OU) Configuration

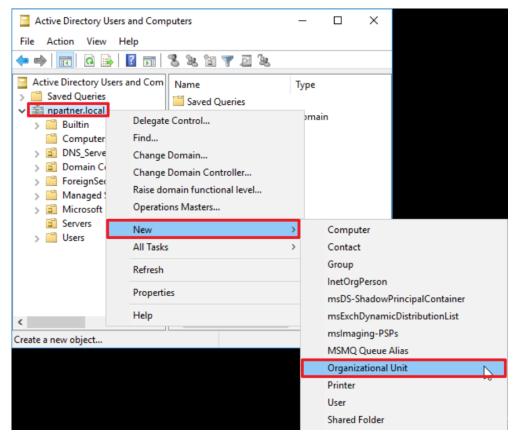
(1) Click "Active Directory Users and Computers."



(2) Add an Organizational Unit

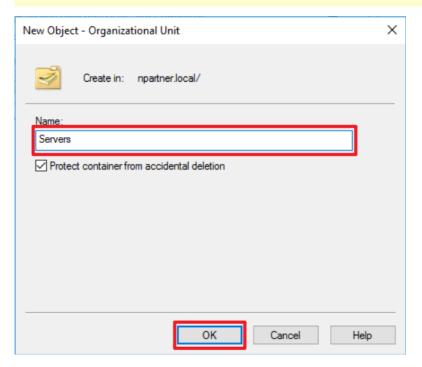
Right-click on the domain name (the example here is npartner.local) \rightarrow select "New," and click

"Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

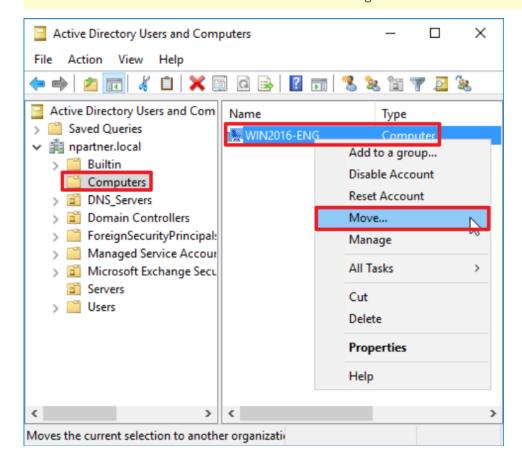
Note: Please create the organizational unit name according to the actual environment. \rightarrow click "OK."



(4) Move the Server to your New Organizational Unit:

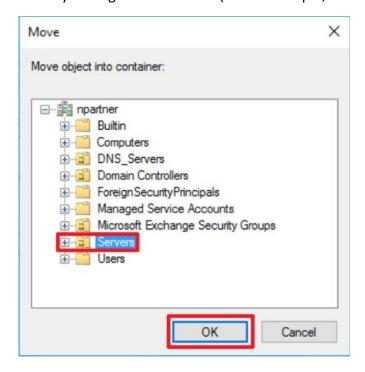
Select "Computers" organizational unit (OU) → right-click on the "WIN2016" server.

Note: Please select the Windows file server according to the actual environment. \rightarrow click "Move."



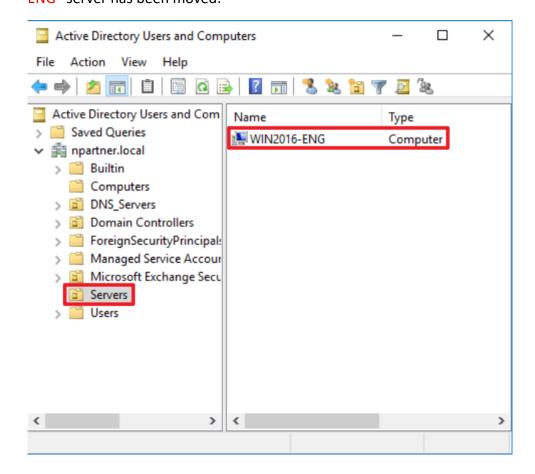
(5) Select your Organizational Unit:

Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2016-ENG" server has been moved.



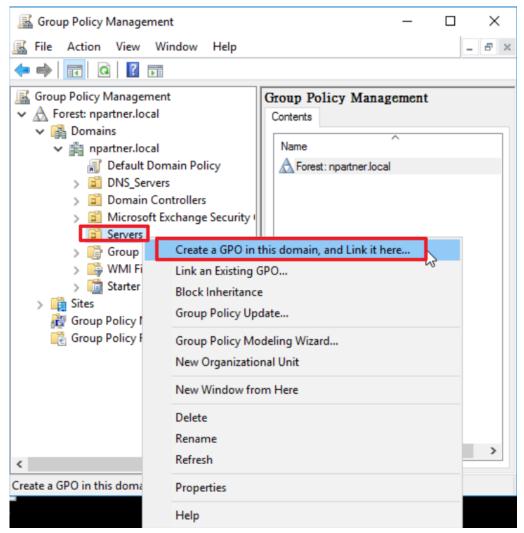
6.1.2 Group Policy Settings

(1) Click "Group Policy Management."



(2) In the Servers organizational unit (OU), create a new Group Policy Object (GPO):

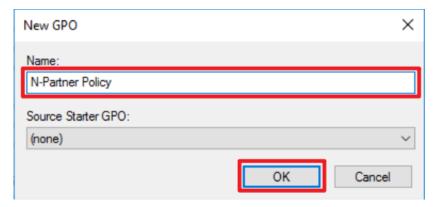
Right-click the [Servers] organizational unit → select "Create a GPO in this domain, and Link it here..."



(3) Edit your Group Policy Object

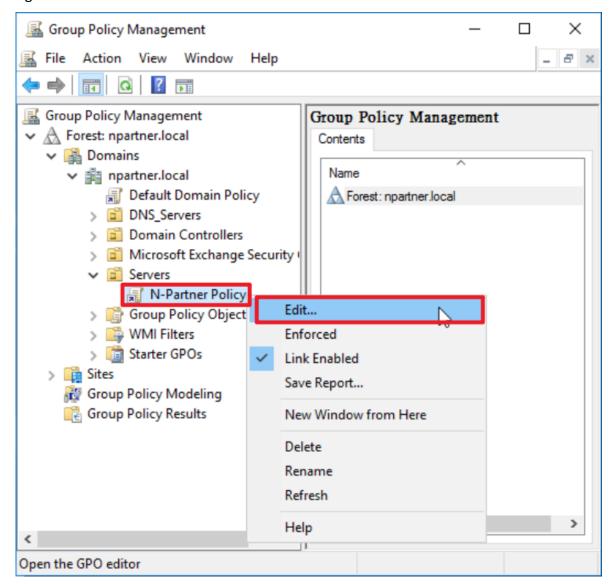
Enter your Group Policy Object name. (in this example, it is "N-Partner Policy")

Note: Create your GPO name according to the actual environment. Then click "Edit."



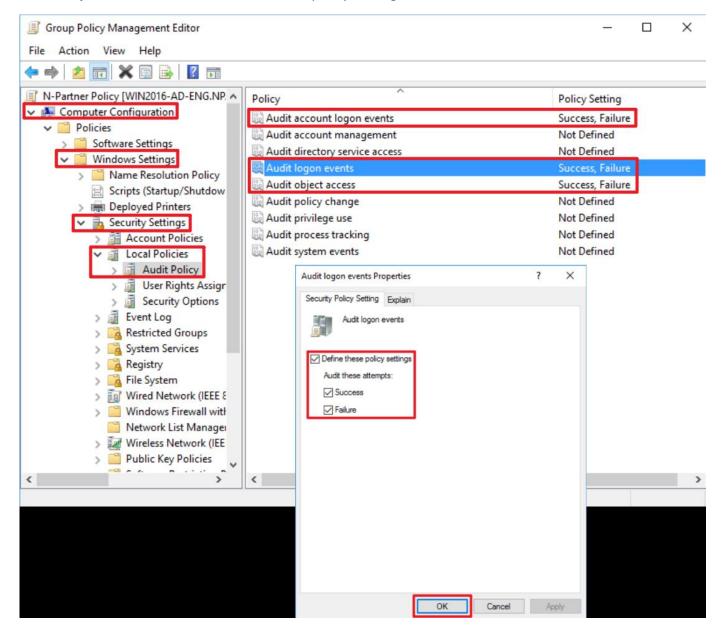
(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy") right-click and select "Edit."



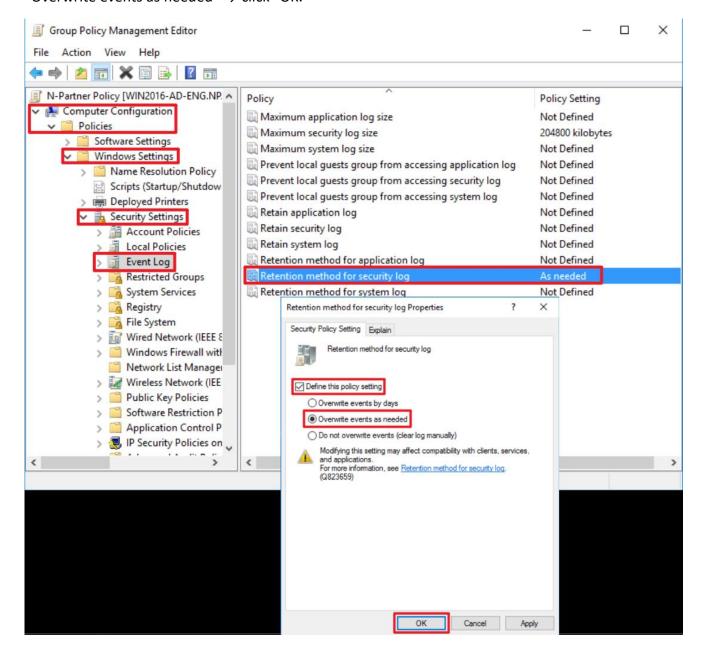
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

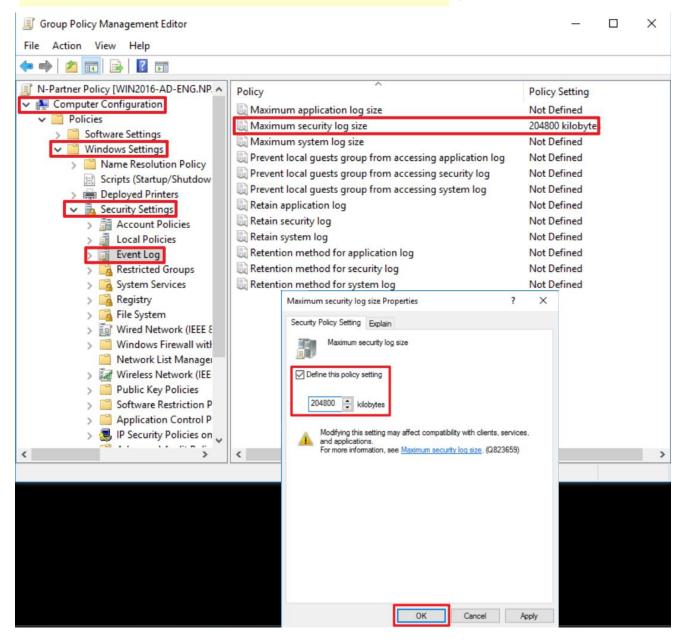
Expand "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow And click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

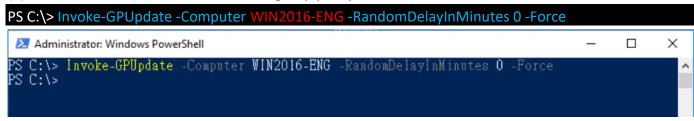
Note: Please adjust the number based on the actual environment. → click "OK."



(8) On the AD domain server, open "Windows PowerShell."

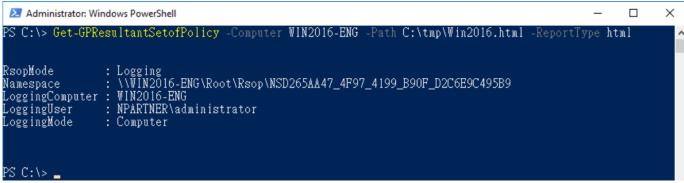


(9) Enter the command below to refresh group policy.



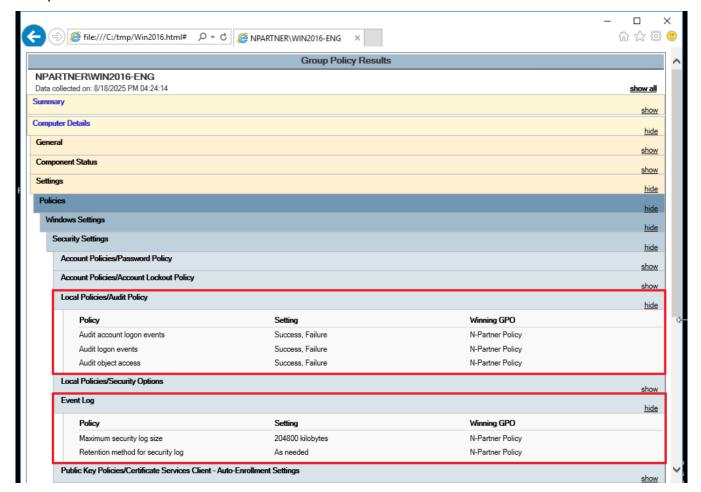
Replace the text shown in red with the Windows file server name.

(10) Enter the command below to generate server group policy report.



For the red text, please enter the Windows file server name and the folder path/file name.

(11) Open the report and verify that your Windows File server is applying the N-Partner Policy Group Policy.

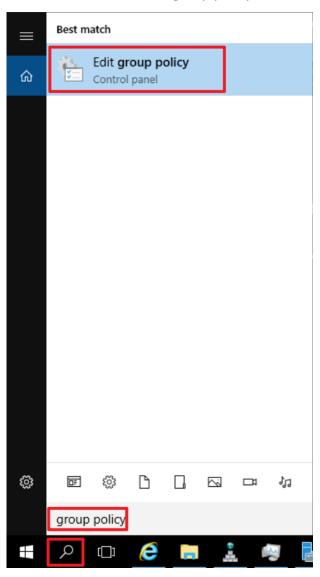


6.2 Workgroup

6.2.1 Audit Policy Configuration

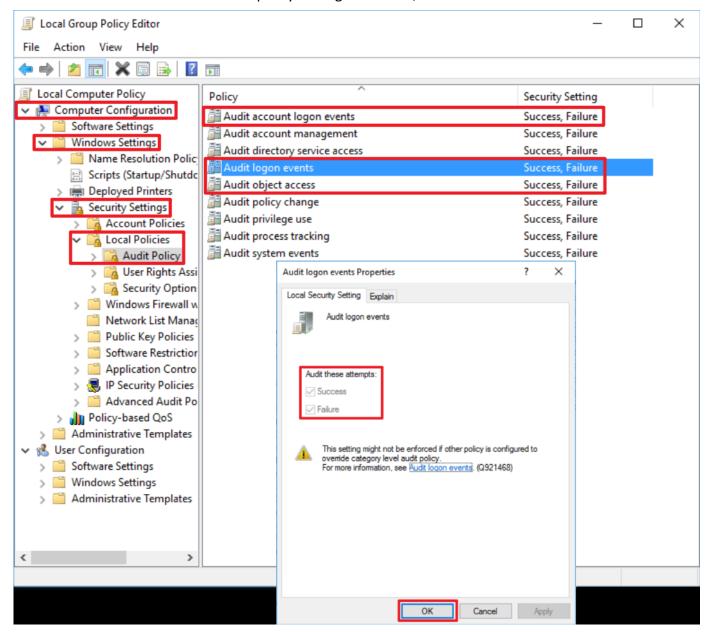
(1) Open Local Group Policy Editor

Click on "Start" → enter "group policy" to search → click on "Edit Group Policy."



(2) Local Group Policies: Audit Policy

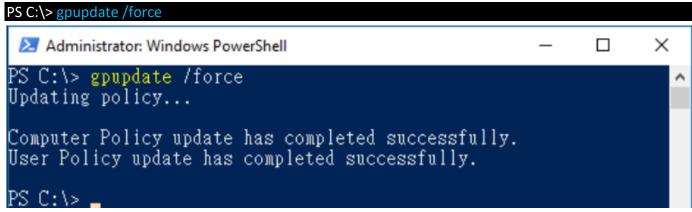
Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events" and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(3) Open "Windows PowerShell."



(4) Enter the command below to refresh group policy.



(5) Enter the command below to view group policy applied status.

PS C: \> auditpol /get /category:*

Administrator: Windows PowerShell				×	
PS C:\> <mark>auditpol</mark> /get /category:* System audit policy					1
Category/Subcategory	Setting				
System					
Security System Extension	Success				
System Integrity	Success	and	Failure		
IPsec Driver	Success	and	Failure		
Other System Events Security State Change	Success				
Logon/Logoff	Success	anu	Tallule		
Logon	Success	and	Failure		
Logoff	Success				
Account Lockout	Success	and	Failure		
IPsec Main Mode	Success	and	Failure		
IPsec Quick Mode	Success	and	Failure		
IPsec Extended Mode	Success	and	Failure		
Special Logon Other Logon/Logoff Events	Success Success	and	Failure		
Network Policy Server	Success	and	Failure		
User / Device Claims			Failure		
Group Membership	Success				
Object Access					
File System	Success				
Registry			Failure		
Kernel Öbject	Success				
SAM Santification Sanniage			Failure		
Certification Services Application Generated	Success	and	Failure		
Handle Manipulation			Failure		
File Share	Success	and	Failure		
Filtering Platform Packet Drop	Success	and	Failure		
Filtering Platform Connection	Success	and	Failure		
Other Object Access Events	Success	and	Failure		
Detailed File Share	Success	and	Failure		
Removable Storage	Success				
Central Policy Staging	Success	and	Fallure		
Privilege Use	Cuasaaa	1	Failure		^
Non Sensitive Privilege Use Other Privilege Use Events	Success	and	Failure		
Sensitive Privilege Use	Success				
Detailed Tracking	aasssuud	anu	Talluic		
Process Creation	Success	and	Failure		
Process Termination	Success	and	Failure		
DPAPI Activity			Failure		
RPC Events	Success	and	Failure		
Plug and Play Events	Success				
Token Right Adjusted Events	Success	and	Fallure		
Policy Change	Cuccoaa	and	Failure		
Audit Policy Change Authentication Policy Change	Success	and bre	Failure		
Authorization Policy Change			Failure		
MPSSVC Rule-Level Policy Change			Failure		
Filtering Platform Policy Change	Success	and	Failure		
Other Policy Change Events	Success	and	Failure		
Account Management					
Computer Account Management	Success	and	Failure		
Security Group Management	Success	and	Failure		
Distribution Group Management	Success	and	Failure		
Application Group Management			Failure Failure		
Other Account Management Events User Account Management			Failure		
DS Access	Duccess	anu	Talleic		
Directory Service Access	Success	and	Failure		
Directory Service Changes	Success	and	Failure		
Directory Service Replication	Success	and	Failure		
Detailed Directory Service Replication					
becarios birector, bervice Replication					
Account Logon		0 7 4	Failure		
Account Logon Kerberos Service Ticket Operations	Success	and	railule	لاير	
Account Logon Kerberos Service Ticket Operations Other Account Logon Events	Success	and	Failure		
Account Logon Kerberos Service Ticket Operations	Success Success	and and	Failure Failure Failure Failure		

6.2.2 Event Log Settings

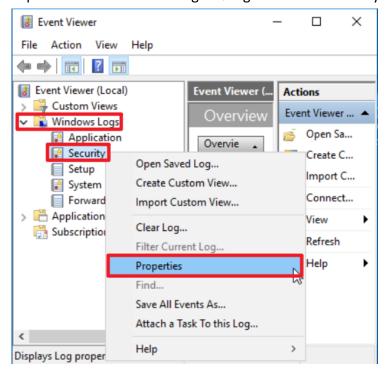
(1) Search for "Event Viewer"

Enter "Event Viewer" to search → click on "Event Viewer" in the search results.



(2) Edit Security Log

Expand folder "Windows Logs" → right-click on "Security" → And click on "Properties."

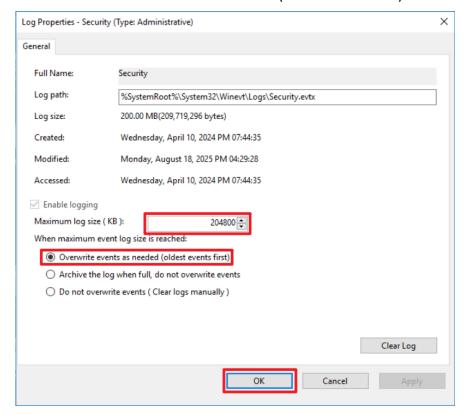


(3) Configure Security Log

Enter maximum log file size: 204800 KB

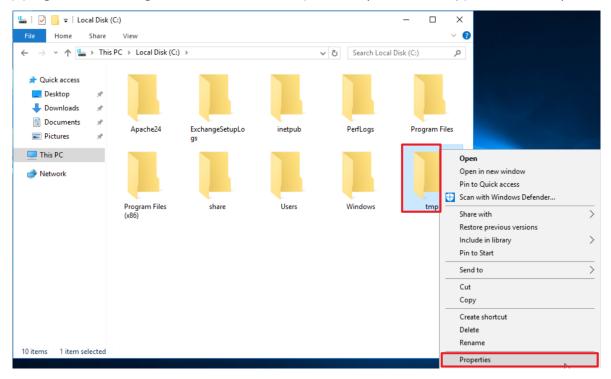
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed (oldest events first)" → click "OK."

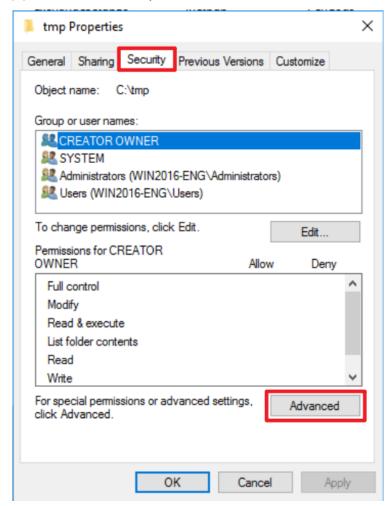


6.3 Folder Audit Configuration

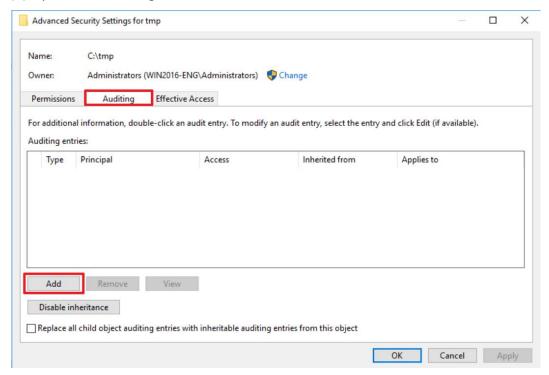
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



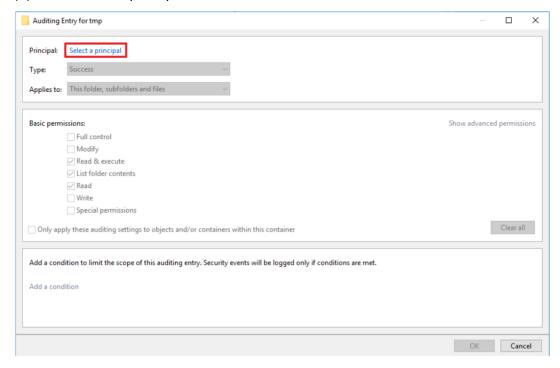
(2) Go to the "Security" tab → click "Advanced."



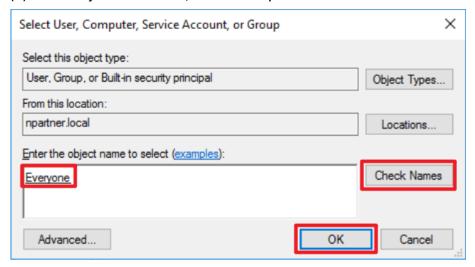
(3) Open the "Auditing" tab \rightarrow click "Add."



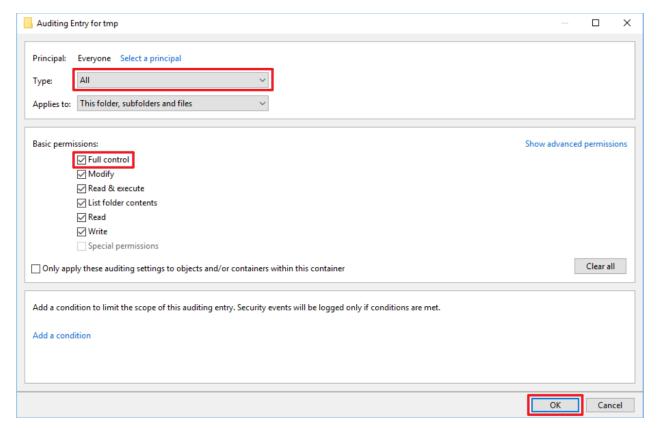
(4) Click "Select a principal."



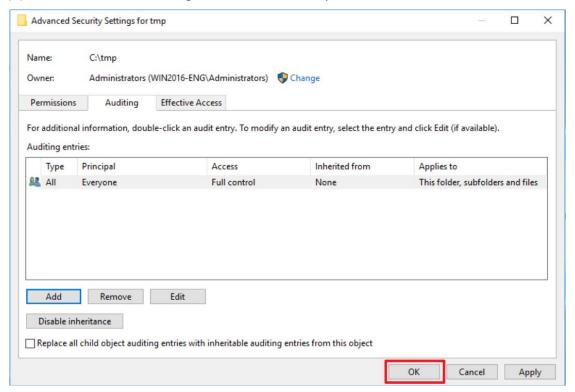
(5) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



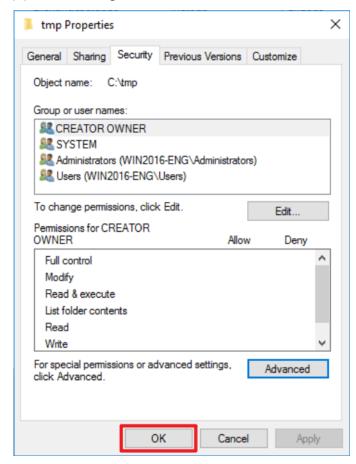
(6) Select "All" in type → enable "Full Control" → click "OK."



(7) Confirm that the auditing entries shows "Everyone" → click "OK."



(8) Click "OK" again to confirm and close.



7. Windows Server 2019

7.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

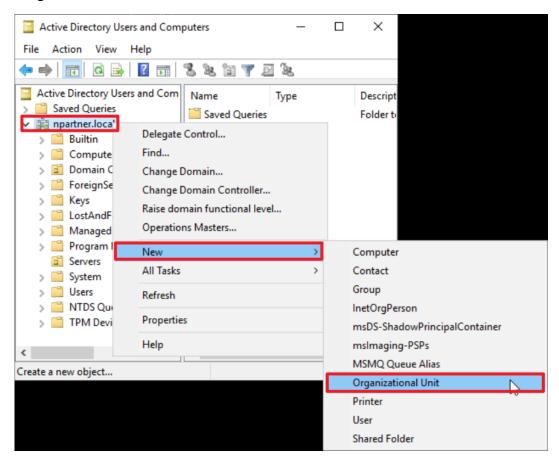
7.1.1 Organizational Unit (OU) Configuration

(1) Click "Active Directory Users and Computers."



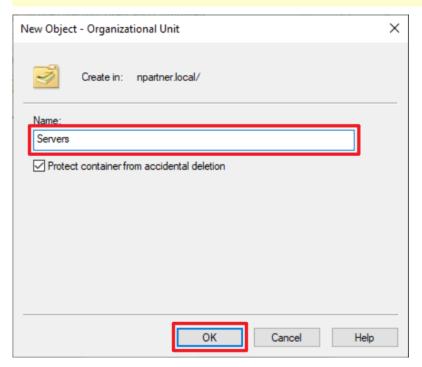
(2) Add an Organizational Unit

Right-click on the domain name (the example here is nparnter.local) → select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

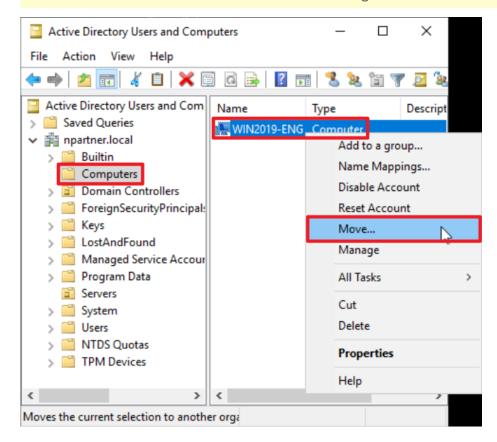
Note: Please create the organizational unit name according to the actual environment. \rightarrow click "OK."



(4) Move the Server to your New Organizational Unit:

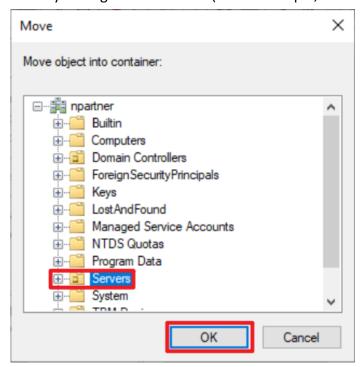
Select the "Computers" organizational unit (OU) → right-click on the "WIN2019-ENG" server.

Note: Please select the Windows file server according to the actual environment. \rightarrow click "Move."



(5) Select your Organizational Unit:

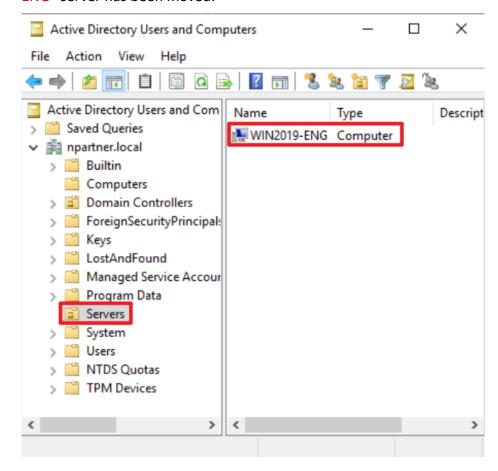
Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2019-

ENG" server has been moved.



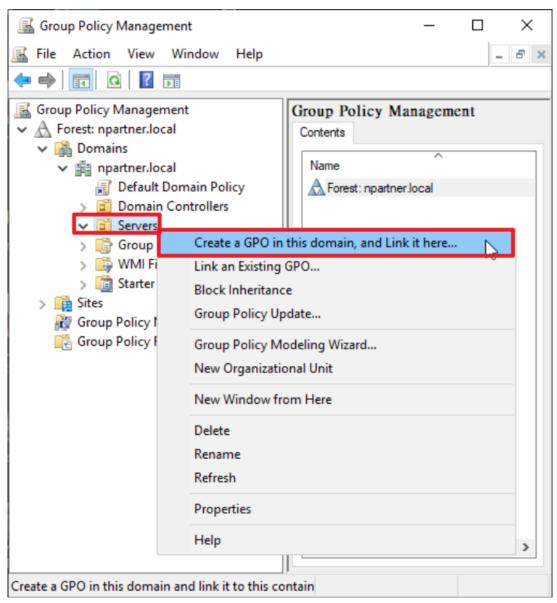
7.1.2 Group Policy Settings

(1) Click "Group Policy Management."



(2) In the Servers organizational unit (OU), create a new Group Policy Object (GPO):

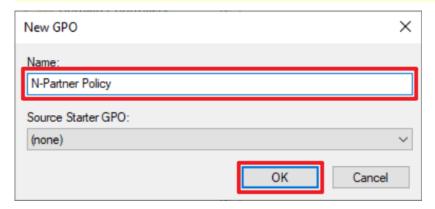
Right-click the [Servers] organizational unit → select "Create a GPO in this domain, and Link it here..."



(3) Enter your Group Policy Object

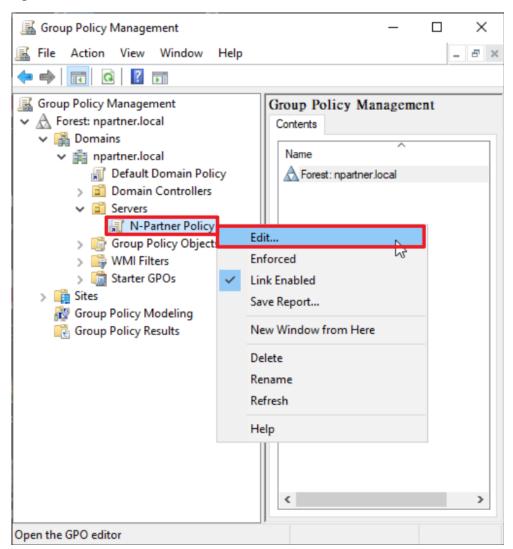
Enter your Group Policy Object name. (in this example, it is "N-Partner Policy")

Note: Create your GPO name according to the actual environment. \rightarrow then click "OK."



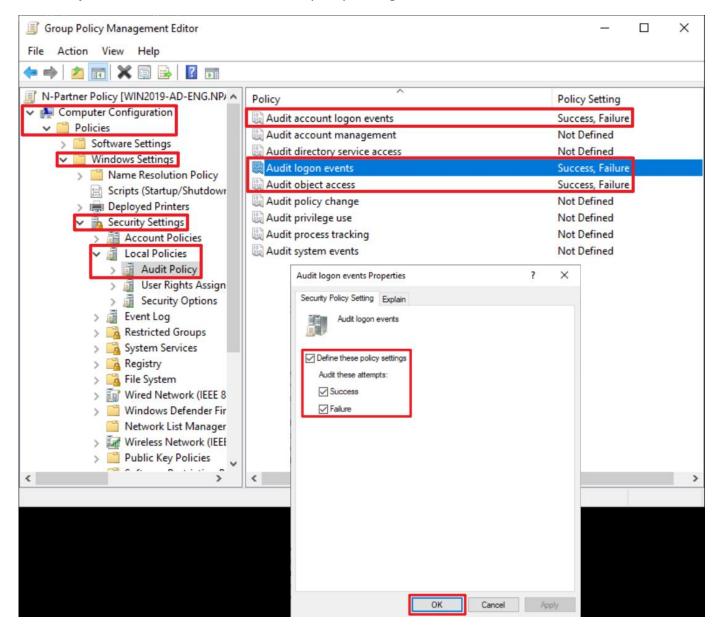
(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy") right-click and select "Edit."



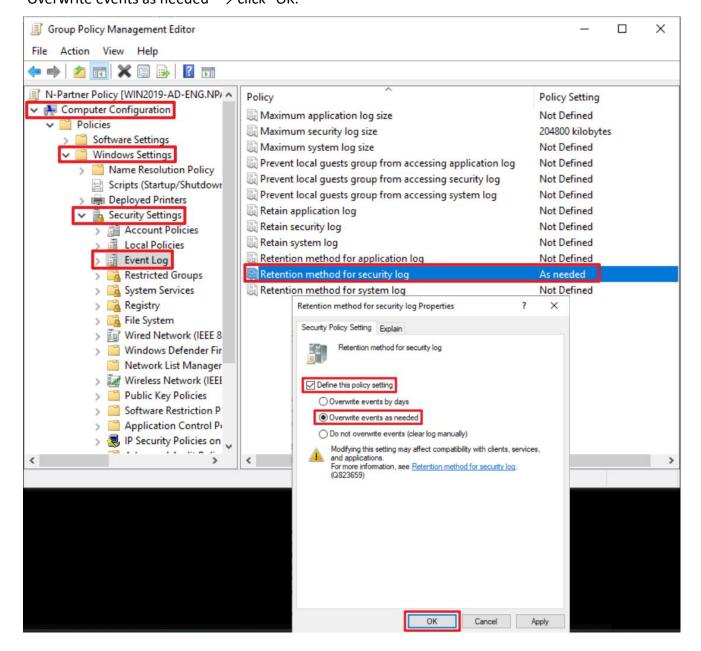
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

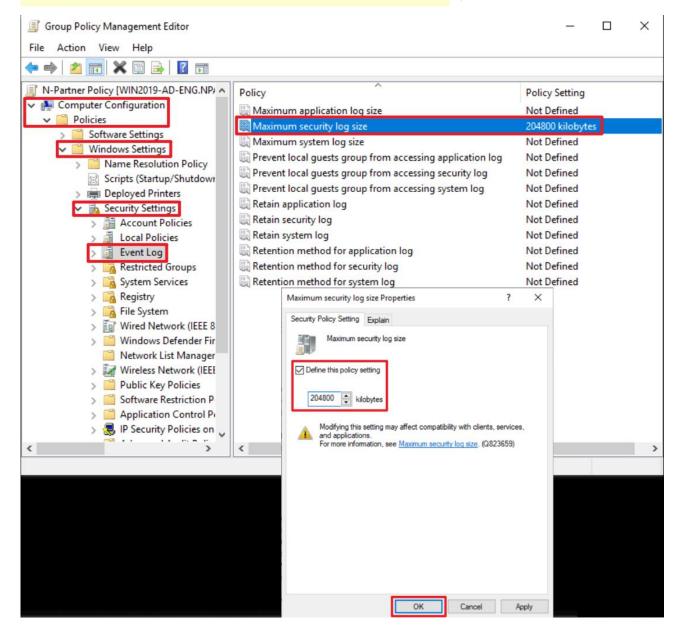
Expand "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow And click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

Note: Please adjust the number based on the actual environment. → click "OK."



(8) On the AD domain server, open "Windows PowerShell."

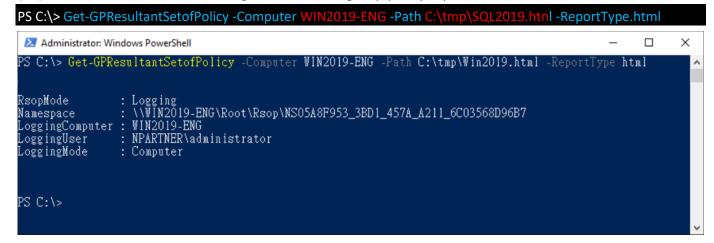


(9) Enter the command below to refresh group policy.



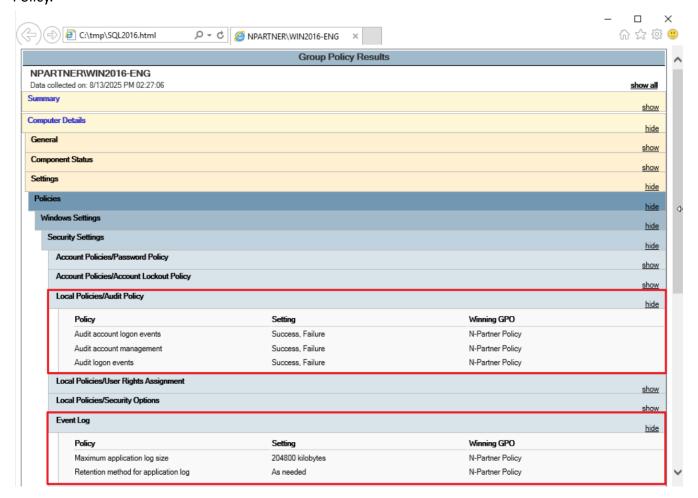
Replace the text shown in red with the Windows File server name.

(10) Enter the command below to generate server group policy report.



For the red text, please enter the Windows File server name and the folder path/file name.

(11) Open the report and verify that your Windows file server is applying the N-Partner Policy Group Policy.

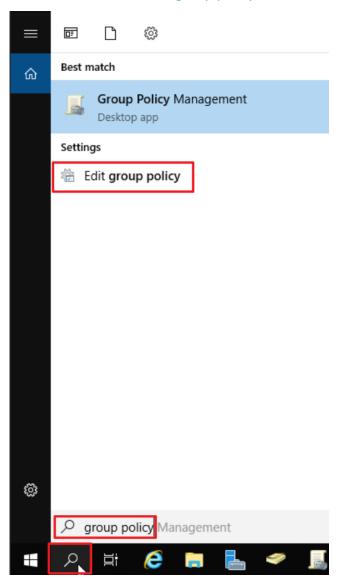


7.2 Workgroup

7.2.1 Audit Policy Configuration

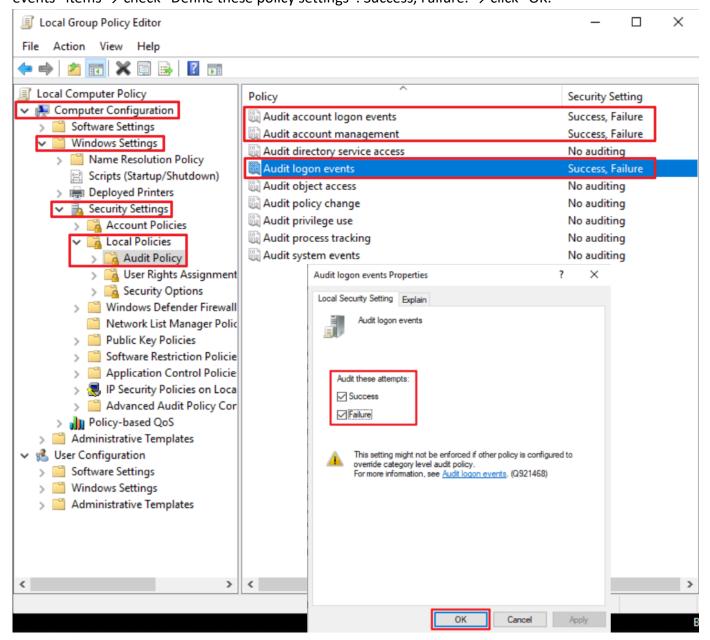
(1) Open Local Group Policy Editor

Click on "Start" → enter "group policy" to search → click on "Edit Group Policy."



(2) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events" and "Audit logon events" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(3) Open "Windows PowerShell."



(4) Enter the command below to refresh group policy.

PS C:\> gpupdate /force PS C:\> gpupdate /force Updating policy... Computer Policy update has completed successfully. User Policy update has completed successfully. PS C:\>

(5) Enter the command below to view group policy applied status.
PS C: \> auditpol /get /category:*

S Cally and the last destruction)
S C:\> auditpol /get /category:* ystem audit policy			
ategory/Subcategory	Setting		
ysten Security System Extension	No Auditing		
System Integrity	No Auditing		
IPsec Driver	No Auditing		
Other System Events	No Auditing		
Security State Change	No Auditing		
ogon/Logoff	and number of		
Logon	Success and	Failure	
Logoff	Success and		
Account Lockout	Success and		
IPsec Main Mode	Success and		
IPsec Quick Mode	Success and	Failure	
IPsec Extended Mode	Success and	Failure	
Special Logon	Success and		
Other Logon/Logoff Events	Success and		
Network Policy Server	Success and		
User / Device Claims	Success and		
Group Membership	Success and		
bject Access	Success and	rarrure	
File System	Success and	Failure	
Registry	Success and		
Kernel Object	Success and		
SAM	Success and		
Certification Services	Success and		
Application Generated	Success and		
Handle Manipulation	Success and		
File Share	Success and	Failure	
Filtering Platform Packet Drop	Success and		
Filtering Platform Connection	Success and	Failure	
Other Object Access Events	Success and		
Detailed File Share	Success and	Failure	
Removable Storage	Success and		
Central Policy Staging	Success and		
rivilege Use	Duccess and	rarrure	
Non Sensitive Privilege Use	No Auditing		
Other Privilege Use Events	No Auditing		
Sensitive Privilege Use	No Auditing		
etailed Tracking	NO MUNICINE		
Process Creation	No Auditing		
Process Termination	No Auditing		
DPAPI Activity			
RPC Events	No Auditing		
	No Auditing		
Plug and Play Events	No Auditing		
Token Right Adjusted Events	No Auditing		
olicy Change	No indial		
Audit Policy Change	No Auditing		
Authentication Policy Change	No Auditing		
Authorization Policy Change	No Auditing		
MPSSVC Rule-Level Policy Change	No Auditing		
Filtering Platform Policy Change	No Auditing		
Other Policy Change Events	No Auditing		
count Management	No. Audios		
Computer Account Management	No Auditing		
Security Group Management	No Auditing		
Distribution Group Management	No Auditing		
Application Group Management	No Auditing		
Other Account Management Events	No Auditing		
User Account Management	No Auditing		
Access	N 4 1111		
Directory Service Access	No Auditing		
Directory Service Changes	No Auditing		
Directory Service Replication	No Auditing		
Detailed Directory Service Replication	No Auditing		
ccount Logon			
Kerberos Service Ticket Operations	Success and		
Other Account Logon Events	Success and		
Kerberos Authentication Service Credential Validation	Success and Success and		

7.2.2 Event Log Settings

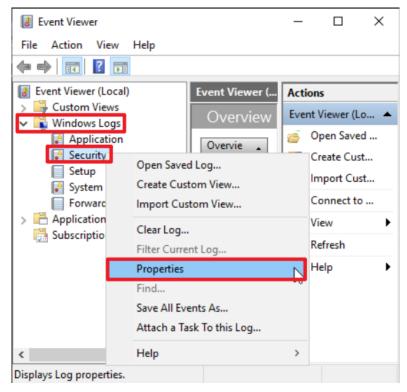
(1) Search for "Event Viewer"

Enter "Event Viewer" to search → click on "Event Viewer" in the search results.



(2) Edit Security Log

Expand folder "Windows Logs" → right-click on "Security" → And click on "Properties."

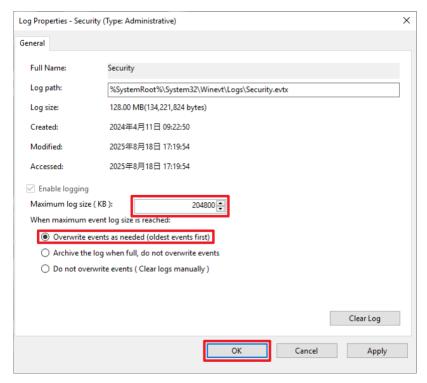


(3) Configure Security Log

Enter maximum log file size: 204800 KB

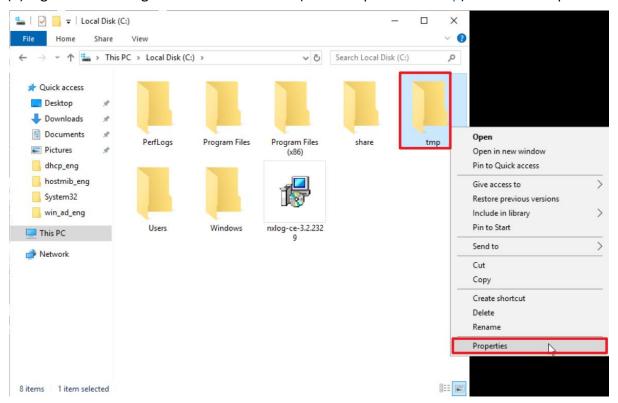
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed (oldest events first)" → click "OK."

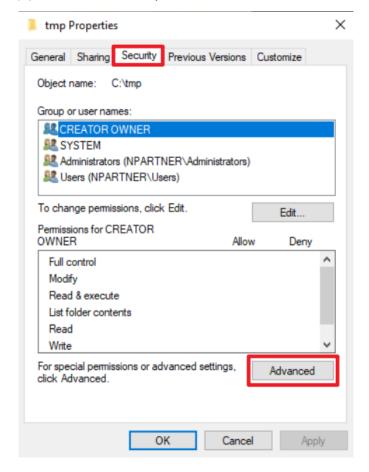


7.3 Folder Audit Configuration

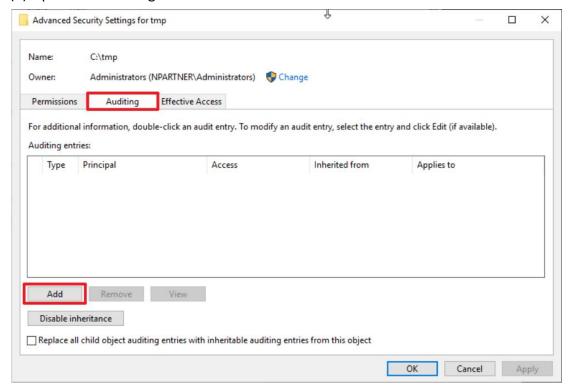
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



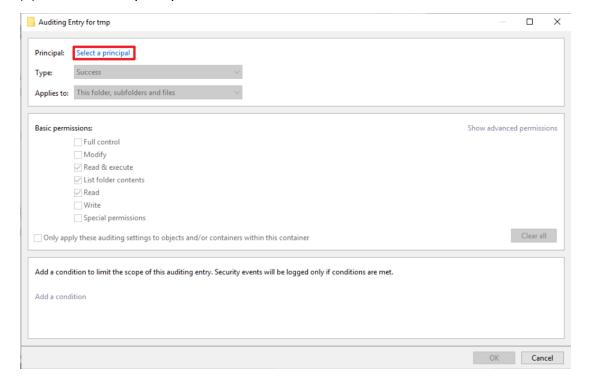
(2) Go to the "Security" tab → click "Advanced."



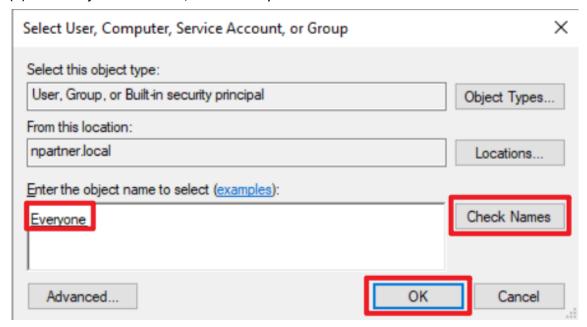
(3) Open the "Auditing" tab \rightarrow click "Add."



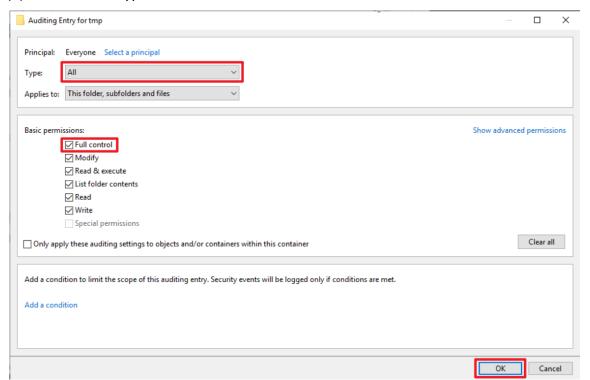
(4) Click "Select a principal."



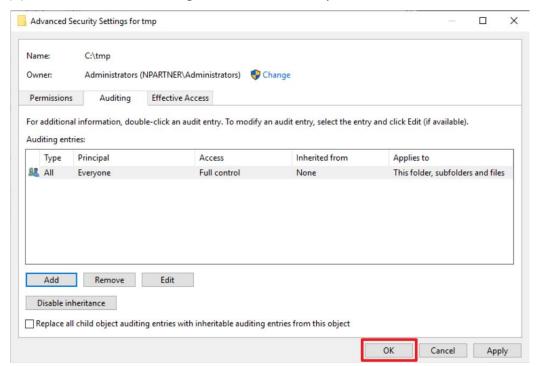
(5) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



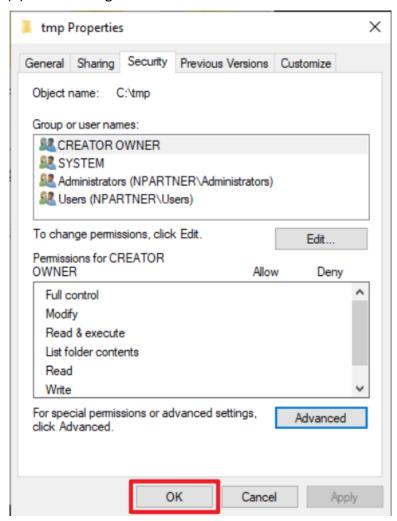
(6) Select "All" in type → enable "Full Control" → click "OK."



(7) Confirm that the auditing entries shows "Everyone" \rightarrow click "OK."



(8) Click "OK" again to confirm and close.



8. Windows Server 2022

8.1 Domain

Windows Audit Policy Configuration:

For detailed information, refer to the Audit Policy Recommendations link in the references.

The following sections describe the configuration methods for Domain and Workgroup environments.

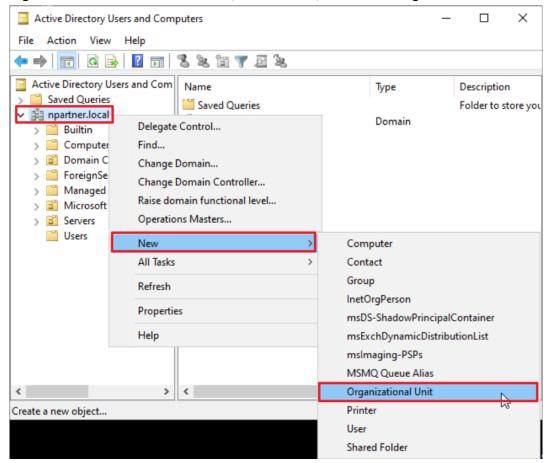
8.1.1 Organizational Unit (OU) Configuration

(1) Click "Active Directory Users and Computers."



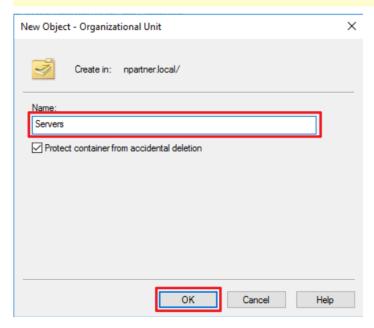
(2) Add an Organizational Unit

Right-click on "Domain Controllers, select "New," and click "Organizational Unit."



(3) Enter your Organizational Unit name: (in this example, it is "Servers")

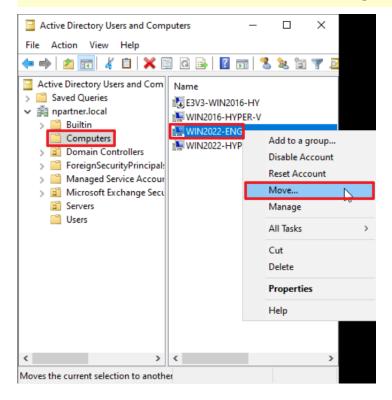
Note: Please create the organizational unit name according to the actual environment. → click "OK."



(4) Move the Server to your New Organizational Unit:

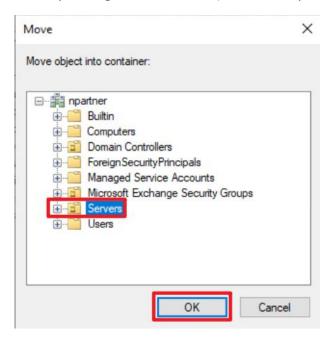
Select your organizational unit in "Domain Controllers" -> Right-click on the "WIN2022-ENG" server.

Note: Please select the Windows File server according to the actual environment. \rightarrow click "Move."



(5) Select your Organizational Unit:

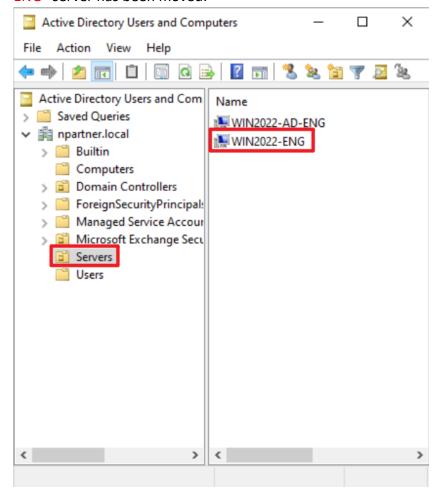
Select your organizational unit (in this example, it is "Servers") → click "OK."



(6) Verify the Server Has Been Moved to your New Organizational Unit:

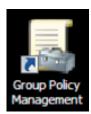
Expand your organizational unit folder (in this example, it is "Servers") and confirm that the "WIN2022-

ENG" server has been moved.



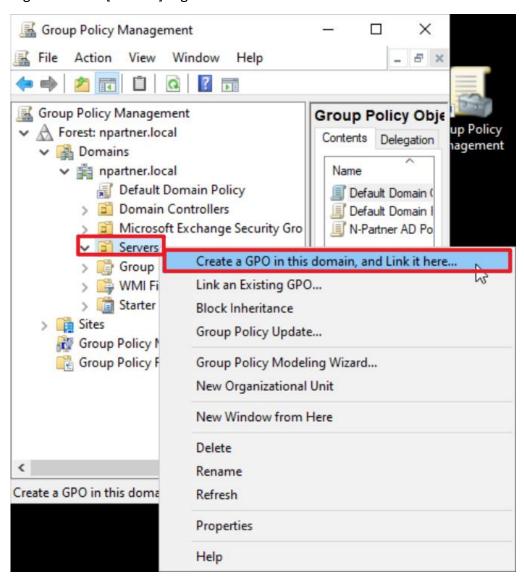
8.1.2 Group Policy Settings

(1) Click "Group Policy Management."



(2) In the Servers organizational unit (OU), create a new Group Policy Object (GPO):

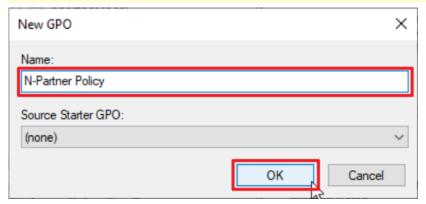
Right-click the [Servers] organizational unit → select "Create a GPO in this domain, and Link it here..."



(3) Edit your Group Policy Object

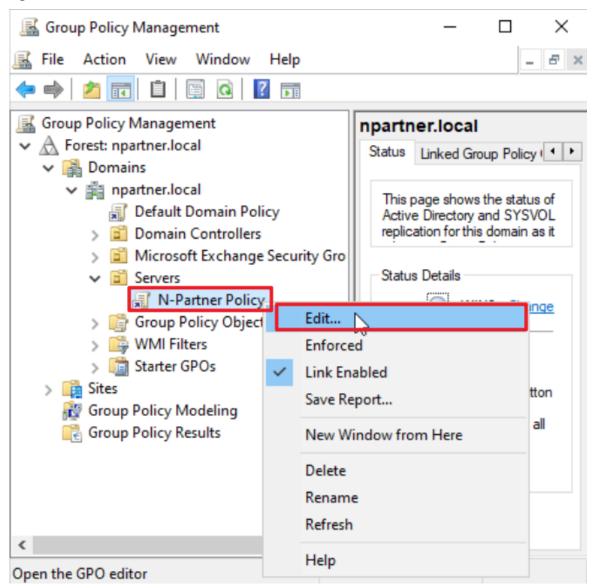
Enter your Group Policy Object name. (in this example, it is "N-Partner Policy")

Note: Create your GPO name according to the actual environment. Then click "Edit."



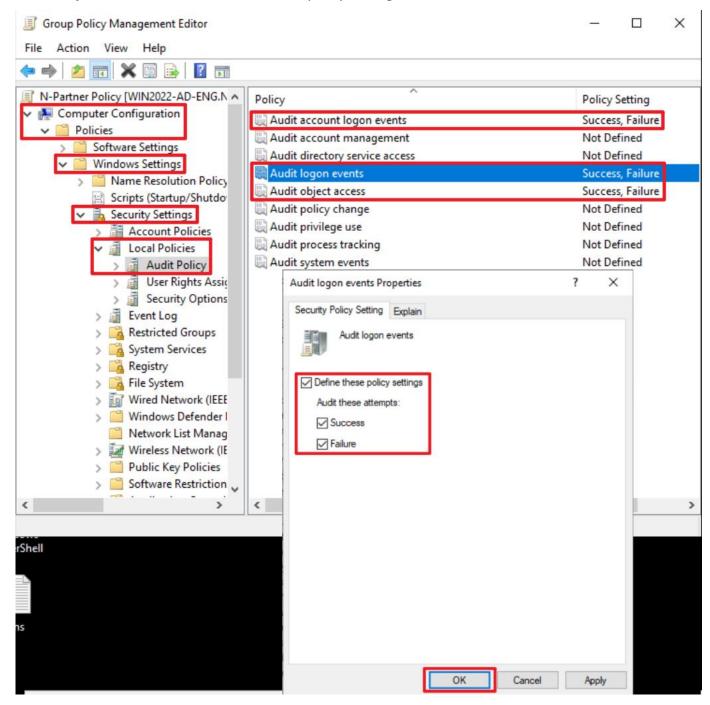
(4) Edit your Group Policy Object

In your group policy object, (in this example, it is "N-Partner Policy") right-click and select "Edit."



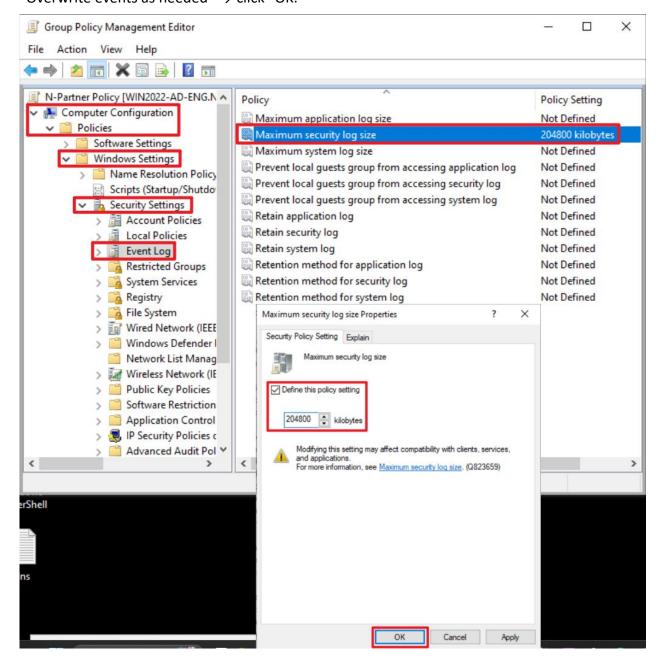
(5) Local Group Policies: Audit Policy

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events," and "Audit object access" \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(6) Event Log: Security Log Retention Method

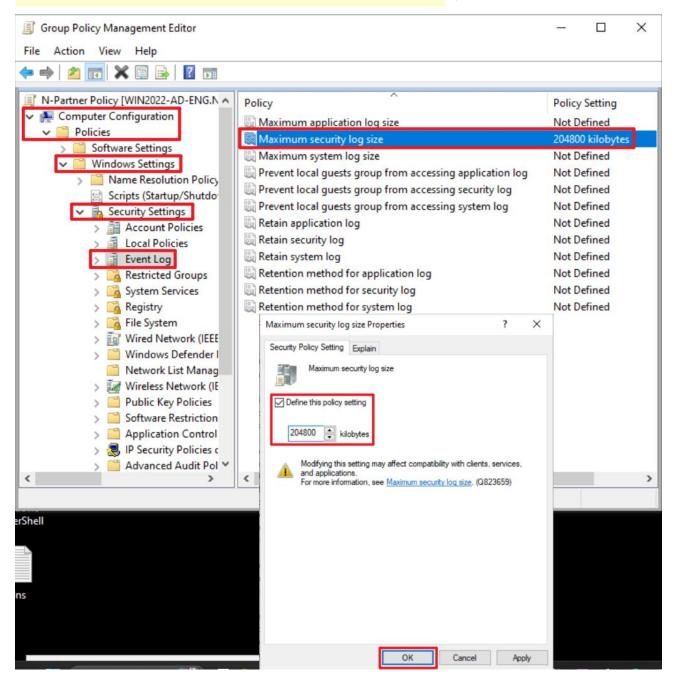
Expand "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow select "Retention method for security log" \rightarrow check "Define this policy setting" \rightarrow select "Overwrite events as needed" \rightarrow click "OK."



(7) Event Logs: Maximum Size of Security Log

Expand folder "Computer Configuration" \rightarrow "Policies" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Event Log" \rightarrow And click on "Maximum security log size" \rightarrow Check "Define this policy setting" \rightarrow enter 204800 KB

Note: Please adjust the number based on the actual environment. → click "OK."



(8) On the Windows File server, open "Windows PowerShell."



(9) Enter the command below to refresh group policy.



Replace the text shown in red with the Windows File server name.

(10) Enter the command below to generate server group policy report.

PS C:\> Get-GPResultantSetofPolicy -Computer WIN2022-ENG -Path C:\tmp\SQL2022.html -ReportType html

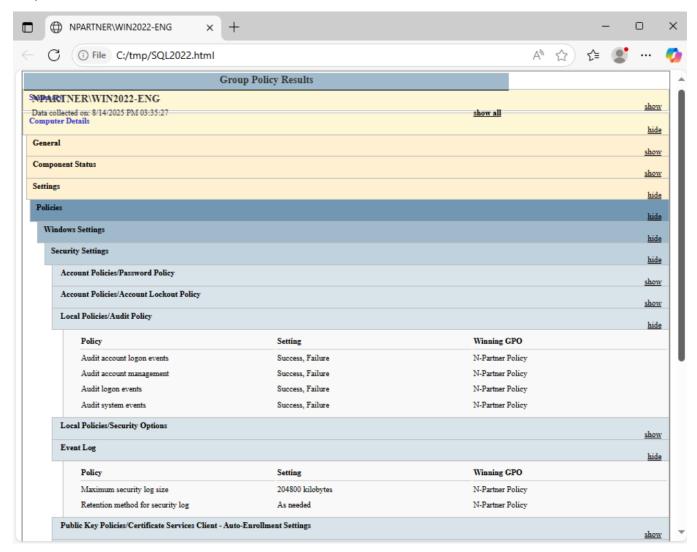
```
Administrator: Windows PowerShell

PS C:\> Get-GPResultantSetofPolicy -Computer WIN2022-ENG -Path C:\tmp\Win2022.html -ReportType html

RsopMode : Logging
Namespace : \\WIN2022-ENG\Root\Rsop\NS1D95751A_30CE_4E92_B7D7_1740B22E0DE1
LoggingComputer : WIN2022-ENG
LoggingUser : NPARTNER\administrator
LoggingMode : Computer
```

For the red text, please enter the Windows File server name and the folder path/file name.

(11) Open the report and verify that your WINDOWS FILE server is applying the N-Partner Policy Group Policy.

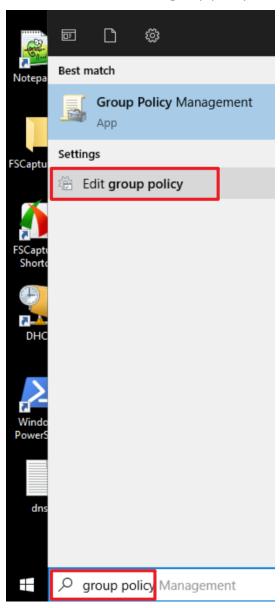


8.2 Workgroup

8.2.1 Audit Policy Configuration

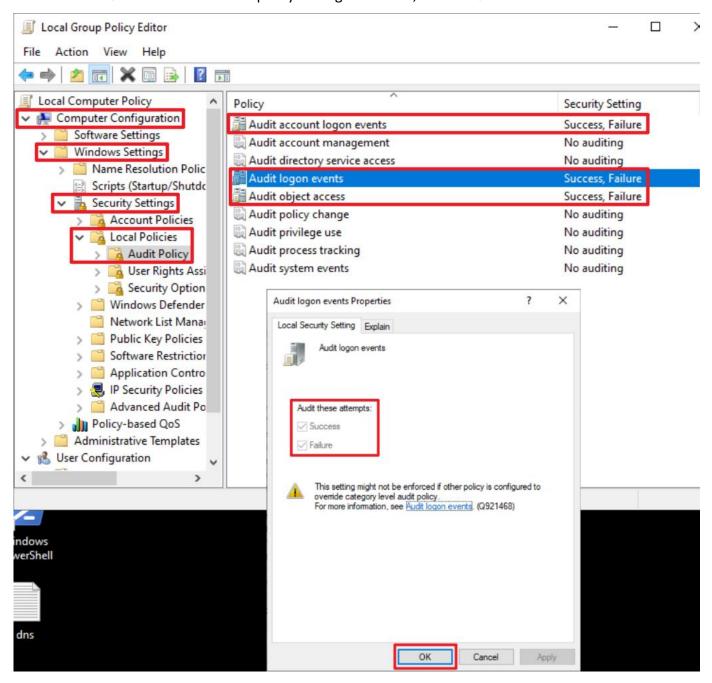
(1) Open Local Group Policy Editor

Click on "Start" → enter "group policy" to search → click on "Edit Group Policy."



(2) Local Group Policies: Audit Policy

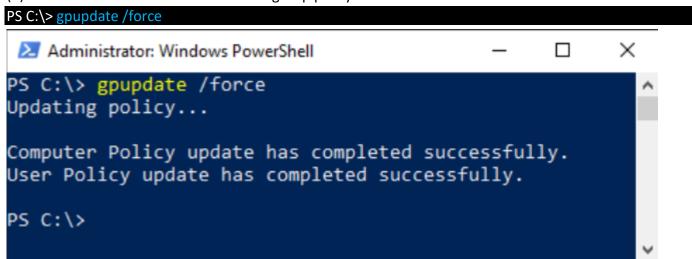
Expand folder "Computer Configuration" \rightarrow "Windows Settings" \rightarrow "Security Settings" \rightarrow "Local Policies" \rightarrow "Audit Policy." And click on "Audit account logon events," "Audit logon events" and "Audit object access" items \rightarrow check "Define these policy settings": Success, Failure. \rightarrow click "OK."



(3) Open "Windows PowerShell."



(4) Enter the command below to refresh group policy.



(5) Enter the command below to view group policy applied status.

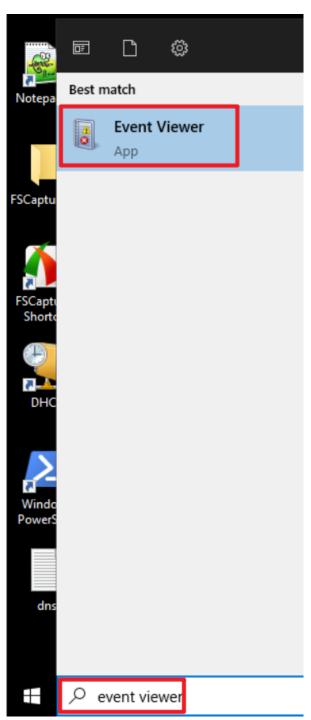
PS C: \> auditpol /get /category:* Mac Administrator: Windows PowerShell X PS C:\> auditpol /get /category:* System audit policy Category/Subcategory Setting System Security System Extension System Integrity No Auditing No Auditing No Auditing IPsec Driver Other System Events No Auditing Security State Change No Auditing Logon/Logoff Success and Failure Logon Logoff Success and Failure Success and Failure Success and Failure Account Lockout IPsec Main Mode IPsec Main Mode IPsec Quick Mode IPsec Extended Mode Success and Failure Special Logon Other Logon/Logoff Events Network Policy Server User / Device Claims Success and Failure Success and Failure Success and Failure Group Membership Success and Failure Object Access File System Success and Failure Registry Kernel Object Success and Failure Success and Failure Kernel Object SAM Success and Failure SCENTIFICATION Services Application Generated Handle Manipulation File Share Filtering Platform Packet Drop Filtering Platform Connection Other Object Access Events Detailed File Share Success and Failure Removable Storage Success and Failure Success and Failure Central Policy Staging Privilege Use Non Sensitive Privilege Use Other Privilege Use Events No Auditing No Auditing Sensitive Privilege Use No Auditing Detailed Tracking No Auditing Process Creation Process Termination No Auditing DPAPI Activity No Auditing RPC Events No Auditing Plug and Play Events No Auditing Token Right Adjusted Events No Auditing Policy Change Audit Policy Change Authentication Policy Change No Auditing No Auditing Authorization Policy Change MPSSVC Rule-Level Policy Change Filtering Platform Policy Change No Auditing No Auditing No Auditing Other Policy Change Events No Auditing Account Management Computer Account Management No Auditing Security Group Management Distribution Group Management No Auditing No Auditing Application Group Management No Auditing Other Account Management Events No Auditing User Account Management No Auditing DS Access Directory Service Access No Auditing Directory Service Changes No Auditing Directory Service Replication No Auditing Detailed Directory Service Replication No Auditing Account Logon Kerberos Service Ticket Operations Success and Failure Other Account Logon Events Success and Failure Kerberos Authentication Service Success and Failure Success and Failure Credential Validation

PS C:\>

8.2.2 Event Log Settings

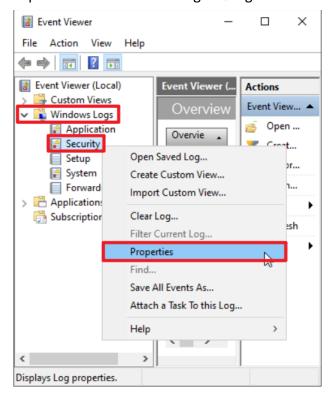
(1) Search for "Event Viewer"

Enter "Event Viewer" to search \rightarrow click on "Event Viewer" in the search results.



(2) Edit Security Log

Expand folder "Windows Logs" → right-click on "Security" → And click on "Properties."

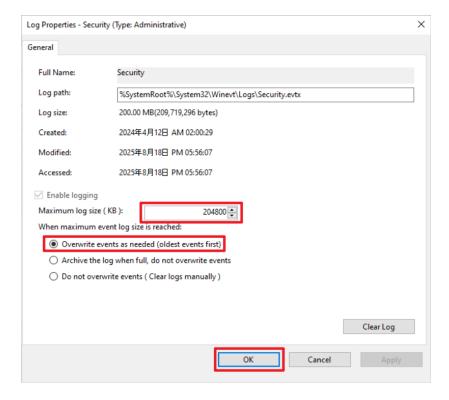


(3) Configure Security Log

Enter maximum log file size: 204800 KB

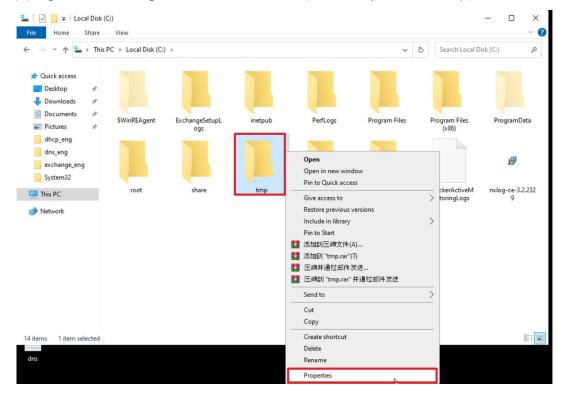
Note: Please adjust the number according to the actual environment.

→ click on "Overwrite events as needed (oldest events first) → click "OK."

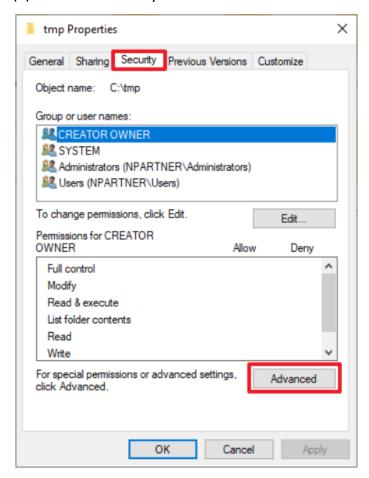


8.3 Folder Audit Configuration

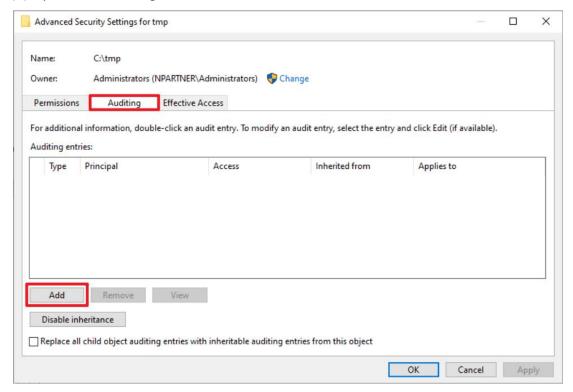
(1) Right-click the target folder to be audited (the example here is tmp) → select "Properties."



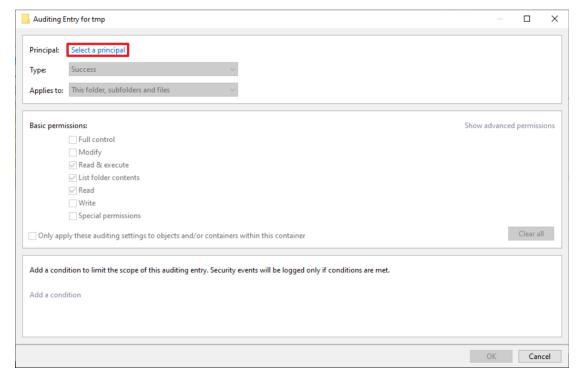
(2) Go to the "Security" tab → click "Advanced."



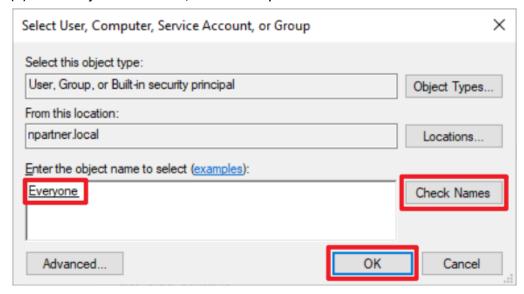
(3) Open the "Auditing" tab → click "Add."



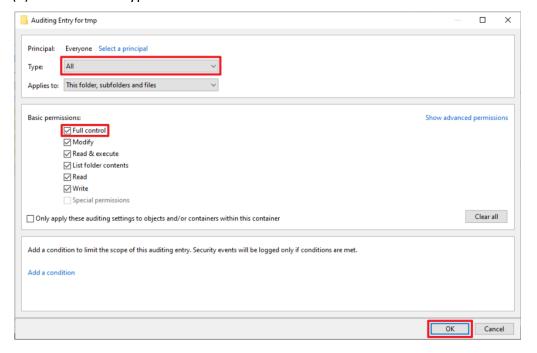
(4) Click "Select a principal."



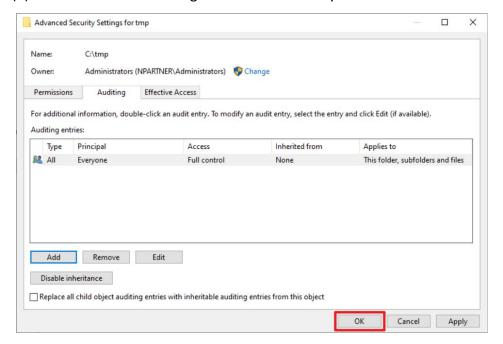
(5) In the object name field, enter "Everyone" to audit all users → click "Check Names" → click "OK."



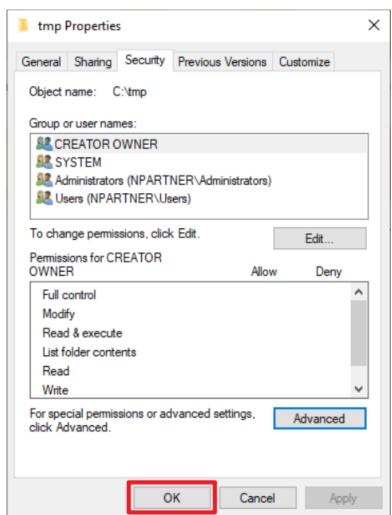
(6) Select "All" in type → enable "Full Control" → click "OK."



(7) Confirm that the auditing entries shows "Everyone" → click "OK."



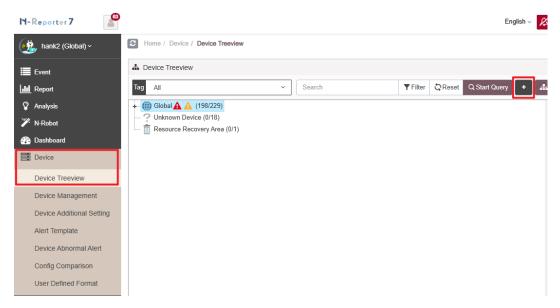
(8) Click "OK" again to confirm and close.



9. N-Reporter

(1) Add a Windows WINDOWS FILE device:

Go to "Device Management" \rightarrow "Device Treeview" \rightarrow click "Add."



(2) Select the device type:

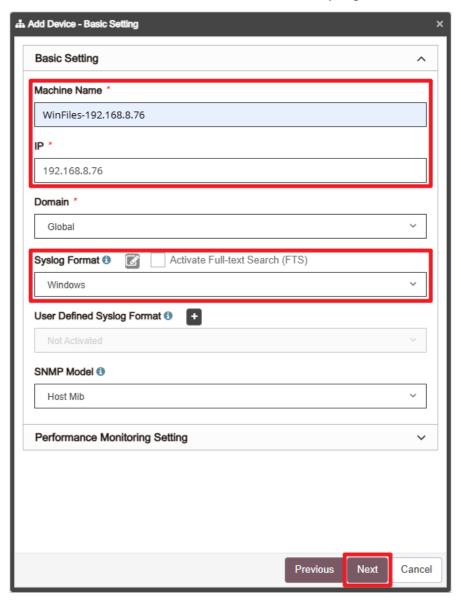
Choose "Application/DB/OS/Server" → click "Guided Mode."



9.1 For Windows Server 2003 or earlier

(1) Basic Device Settings:

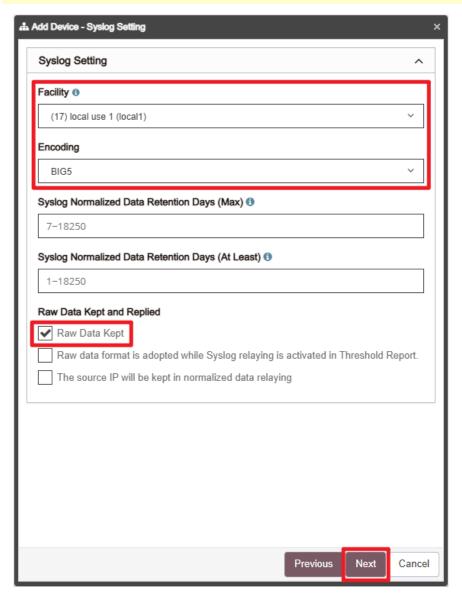
Enter the device name and IP address → For Syslog Data Format, select "Windows" → click "Next."



(2) Syslog Settings

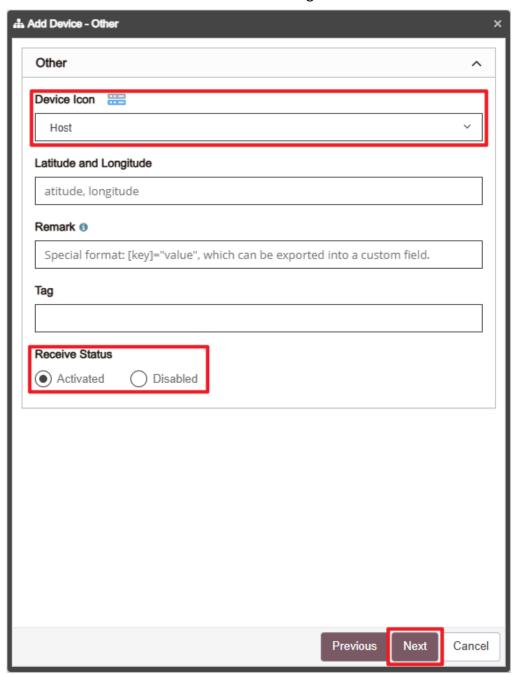
Set "Facility" to "(18) local use 2 (local2)" and "Encoding" to "BIG5" \rightarrow click "Next."

If "Raw Data Kept" function is enabled, the "Event Query" page will display raw data information.

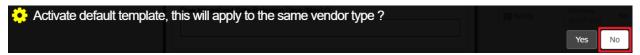


(3) Others

Set "Device Icon" to "Host" \rightarrow Set "Receiving Status" to "Activated" \rightarrow click "Next" \rightarrow Confirm.



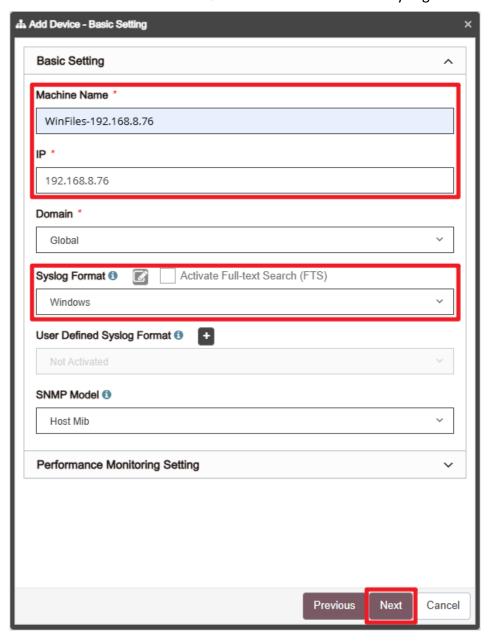
Activate default templates for devices of the same vendor type, click "No."



9.2 For Windows 2008 or later

(1) Device Basic Settings

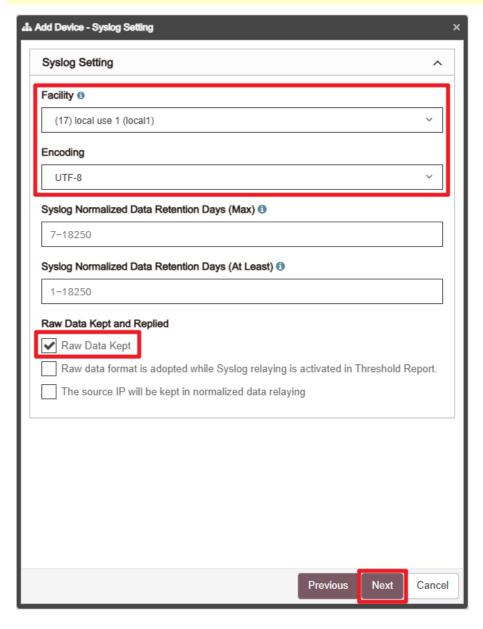
Enter the device name and IP \rightarrow Select "Windows" for the Syslog data format \rightarrow Click "Next."



(2) Syslog Settings

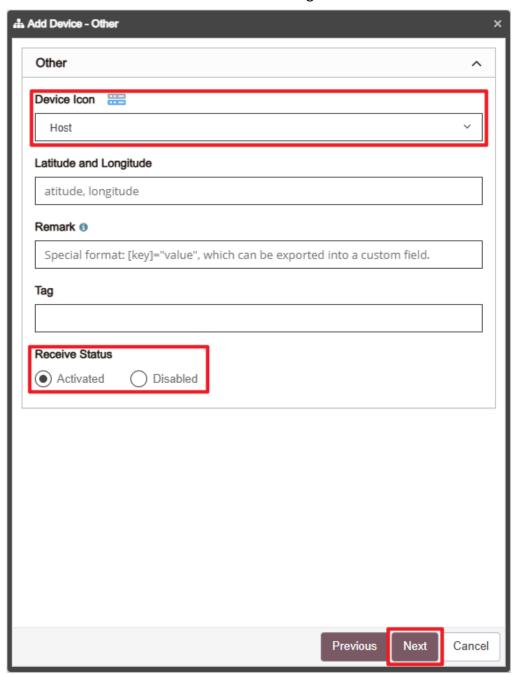
Set "Facility" to "(17) local use 1 (local1)" and "Encoding" to "UTF-8" → click "Next."

If "Raw Data Kept" is checked, the "Event Query" page will display raw data information.

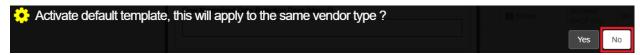


(3) Others

Set "Device Icon" to "Host" \rightarrow Set "Receiving Status" to "Activated" \rightarrow click "Next" \rightarrow Confirm.



Activate default templates for devices of the same vendor type, click "No."



10. Troubleshooting

10.1 Invoke-GPUpdate Error

(1) On the server, run Invoke-GPUpdate to update the Windows Server Group Policy. An error message may appear.

```
Administrator: Windows PowerShell

PS C:\> Invoke-GPUpdate -Computer SQL2022 -RandomDelayInMinutes 0 -Force
Invoke-GPUpdate : Computer "SQL2022" is not responding. The target computer is either turned off or Remote Scheduled
Tasks Management Firewall rules are disabled.
Parameter name: computer
At line:1 char:1
+ Invoke-GPUpdate -Computer SQL2022 -RandomDelayInMinutes 0 -Force
+ CategoryInfo : OperationTimeout: (:) [Invoke-GPUpdate], ArgumentException
+ FullyQualifiedErrorId : COMException, Microsoft.GroupPolicy.Commands.InvokeGPUpdateCommand

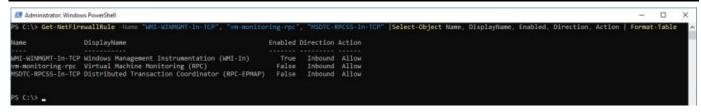
PS C:\> _
```

(2) On the Windows Server, open "Windows PowerShell."



(3) Enter the following command to check the Windows Firewall rules for **WMI-WINMGMT-In-TCP**, **vm-monitoring-rpc**, **MSDTC-RPCSS-In-TCP**:

PS C:\> Get-NetFirewallRule -Name "WMI-WINMGMT-In-TCP", "vm-monitoring-rpc", "MSDTC-RPCSS-In-TCP" |
Select-Object Name, DisplayName, Enabled, Direction, Action | Format-Table



(4) Enter the following command to enable the Windows Firewall rules **WMI-WINMGMT-In-TCP**, **vm-monitoring-rpc**, and **MSDTC-RPCSS-In-TCP**:

PS C:\> Set-NetFirewallRule -Name "WMI-WINMGMT-In-TCP", "vm-monitoring-rpc", "MSDTC-RPCSS-In-TCP"
Enabled True

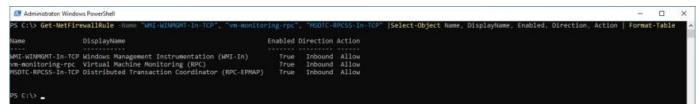
Administrator: Windows PowerShell

PS C:\> Set-NetFirewallRule -Name "WMI-WINMGMT-In-TCP", "vm-monitoring-rpc", "MSDTC-RPCSS-In-TCP" -Enabled True

PS C:\> __

(5) Enter the following command to verify the Windows Firewall rules **WMI-WINMGMT-In-TCP**, **vm-monitoring-rpc**, **MSDTC-RPCSS-In-TCP** again:

PS C:\> Get-NetFirewallRule -Name "WMI-WINMGMT-In-TCP", "vm-monitoring-rpc", "MSDTC-RPCSS-In-TCP" |
Select-Object Name, DisplayName, Enabled, Direction, Action | Format-Table



(6) On the server, enter the following command to update the Windows Server Group Policy:

PS C:\> Invoke-GPUpdate -Computer Win2019 -RandomDelayInMinutes 0 -Force

```
Administrator: Windows PowerShell

PS C:\> Invoke-GPUpdate -Computer $_.name -RandomDelayInMinutes 0 -Force

PS C:\> _
```

Note: Replace the text shown in red with the Windows Server name.

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