Lepide Data Security Platform

Enable Auditing Manually

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1. Introduction

Welcome to the "Enable Auditing Manually" guide created for Lepide Data Security Platform. This solution provides a comprehensive means of auditing Active Directory, Group Policy, Exchange Server, SharePoint, SQL Server, and File Server.

This guide helps you to enable domain auditing manually. If you have any questions at any point in the process, you can contact our Support Team. The contact details are mentioned at the end of this document.

2. Enable Auditing Automatically

While adding a domain, after you provide the appropriate details, Lepide Data Security Platform shows the following dialog box to enable auditing at the domain level automatically.

		Configure Audi	ting		×
Configure Auditing					
For Automatically enablin removed after making the				ain controller. The agent w e changes manually.	vill be
	he selected don or this domain, o ory will :				
Access , Manager	he following system Privilege Use , Deta ment, DS Access, A lit settings of Active	ailed Tracking, Po ccount Logon	olicy Change, Acco	punt	
Auditing Entries for	Well Known Naming Context	Object	Access type	Apply onto	
All AD objects	Domain	Everyone	Successful	This object and all descendant/Child objects	~
Yes, Sof	tware can make required (changes No,	I will make these setting	gs manually later	
1					

Figure 1: Option to enable auditing automatically

While modifying the properties of an already added domain, "Enable Audit" option appears for "Domain Credentials" property.

	Properties	×
Comain Credentials Advanced Domain Configuration IP Settings	Domain Credentials Please enter the domain credentials	
Database Settings Organizational Unit Settings Object Classes and Other Settings Archive Settings	Domain Name or IP: www.vdoc.com User Name : Password : Password : Auditing Method O Without Agent Note : An agent for monitoring Non-owner mailbox access will be deployed. • With Agent	
	OK Canc	;el
	Figure 2: Modifying an already added domain	

igui e z. ijyiiig

You can click Yes,	Software can make required changes button. It displays the following dialog box.
	Group Policy Object Selection
	Group Policy Object Selection Please select Group Policy Object to enable auditing
	Server Name or IP :
	Q
	Group Policy Object Test2 Domain Controller Policy Test Domain Controller Policy Default Domain Policy Default Domain Policy
	OK Cancel

Figure 3: Enable Auditing

Enter either IP Address of the primary domain controller or name of the domain. Select any of the following options.

1. <u>Create New Policy (Recommended)</u>: Select it to create a new Domain Controller Policy. Once selected, you have to provide the name of new Group Policy to be created.

Group Policy Object Selection		
Group Policy Object Selection Please select Group Policy Object to	enable auditing	
Server Name or IP : ⊙ Create New GPO (Recommended)	www.cod.com LepideAuditorEnableAudit	
⊖ Select GPO	Q	
Group Policy O Test2 Domain Controller Policy Test Domain Controller Policy Default Domain Controllers Policy Default Domain Policy Create backup of selected GPO befor		

Figure 4: Creating new Group Policy

Click "OK" to create a new Group Policy at the domain to enable the auditing.

2. Use Selected Domain Controller Policy: This option lets you select a policy to enable the auditing.

Server Name or IP :	www.cod.com
Create New GPO (Recommend	ded) LepideAuditorEnableAudit
Select GPO	
	C
Group	Policy Object
Test2 Domain Controller Policy	
Test2 Domain Controller Policy Test Domain Controller Policy LepideAuditorEnableAudit	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	
Test Domain Controller Policy LepideAuditorEnableAudit	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	
Test Domain Controller Policy LepideAuditorEnableAudit Default Domain Controllers Polic	cy

Select this option to enable its section. Perform the following steps to select an existing Group Policy.

- If a Group Policy is not listed here, you can click oxtimes icon to rescan the domain for listing the updated A. set of Group Policies.
- You cannot select "Default Domain Controller Group Policy" or "Default Domain Group Policy" to enable В. the auditing using Lepide Data Security Platform. If you try, the following error message appears on the screen.

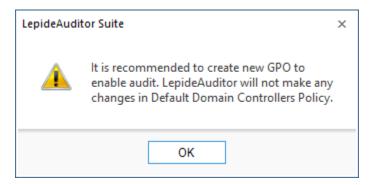


Figure 6: Error message while enabling auditing at Default Domain Controller Policy

- C. Select a custom Group Policy created at the Domain Level or Domain Controller Level upon which the auditing setting has to be applied.
- D. Make sure to check "Create backup of selected GPO before enable auditing" box if you are enabling the auditing on an existing Group Policy. This backup allows you to restore the previous default Domain Controller Policy if any issue persists after enabling the auditing.

It is recommended to create a new Domain Controller Policy to enable the auditing to avoid any such issue.

E. Click "OK." The software tries to enable the auditing and create the backup of the selected group policy on the server in "%systemdrive%\Windows\Lepide\GPOBKP_24-01-2017 18_13_35\" folder. Here, 24-01-2017 will be replaced with the date and 18_13_35 will be replaced with the time when you have clicked "OK" to enable auditing on the selected policy.

If you face any issue in future, you can use this backup to restore the policy to the earlier state. Refer to Section 5 of this document restore the group policy.

F. You have to wait until the auditing is enabled.

3. Issue

If Lepide Data Security Platform faces any problem in enabling the auditing, it displays the following error message while adding/modifying the domain.



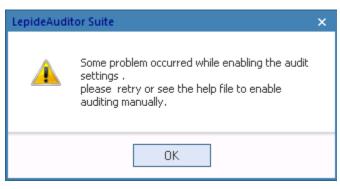


Figure 7: Error message for problem in enabling the auditing

In such cases, you have to enable the auditing settings manually on the Windows Server.

4. Solution

Auditing settings of the Active Directory environment could be setup as follows:

Auditing Entries for	AD Forest Partition for	Object	Access type	Apply onto
All Active Directory objects	Domain naming context	Everyone	Successful	This object and all descendant or child objects.
Active Directory Configuration Objects	Configuration context	Everyone	Successful	This object and all descendant or child objects.
Active Directory Schema Objects	Schema Context	Everyone	Successful	This object and all descendant or child objects.

Table 1: Auditing Settings

If Lepide Data Security Platform displays any error message or does not enable the auditing, then you have to enable the auditing manually in the domain in both Group Policy Management Console and ADSIEdit Console. The steps to be performed in both consoles are listed below.

4.1 Enable Auditing using Group Policy Objects

You have to enable the local and advanced auditing policies in the Group Policy Management Console.

4.1.1 Enable Local Audit Policies

Follow the steps below to configure the Audit Polices for Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2 and Windows Server 2016.

 Go to "Start Menu" → "All Programs" → "Administrative Tools" → "Group Policy Management". It opens "Group Policy Management."

NOTE: You can also type "GPMC.msc" in "Run" box and press "Enter" to access it.

- In the left panel of Group Policy Management Console, navigate to "Forest: domain.com" → "Domains" → "domain_controller.com" → "Domain Controllers".
- 3. Select an already existing customized policy in "Domain Controllers" folder, which is active and enabled on the domain controller organizational unit.

NOTE: We do not recommend to edit "Default Domain Policy" or "Default Domain Controllers Policy" to enable auditing at domain level for Lepide Data Security Platform.

4. If an existing custom policy does not exist, right-click on "Domain Controllers" node.

🗆 🚔 www	w.vdoc.com
F.	Default Domain Policy
	LADSS
- 🖬	Domain Controllers
	Create a GPO in this domain, and Link it here
	Link an Existing GPO
	Block Inheritance
	Group Policy Modeling Wizard
	Group Policy Modeling Wizaru
	New Organizational Unit
	View 🕨
	New Window from Here
	Delete
	Refresh
	Despection
	Properties
	Help

Figure 8: Option to create new Group Policy

- 5. Click "Create a GPO in this domain, and Link it here..." to create a new Custom Group Policy. This command also links the newly created Group Policy to the domain controller's node.
- 6. The following dialog box appears on the screen, in which you have to provide the name of new policy.

lew GPO	×
Name: EnableAudit	
Source Starter GPO:	
(none)	
	OK Cancel

Figure 9: Dialog box to create a new Group Policy

7. Enter the name of new Group Policy. Keep "none" selecting in "Source Starter GPO".

- 8. Click "OK" to create the new Group Policy Object. It takes you back to Group Policy Management Console, which now shows the newly created Group Policy in the left panel under "Domain Controllers" node.
- 9. Right-click newly created Group Policy to access the following context menu.



Figure 10: Option to edit Group Policy

- 10. Click "Edit" to access "Group Policy Management Editor" for the selected policy.
- Browse to "Computer Configuration" → "Policies" → "Windows Settings" → "Security Settings" → "Local Policies" → "Audit Policy". It displays the policies in the Right Panel.

🍠 Group Policy Management Editor		_ 🗆 ×
<u>File Action View H</u> elp		
🗢 🔿 🚈 🗮 😫 📑 📔		
🧾 EnableAudit [SP13-EX10.WWW.VDOC.COM] Policy 🛛 🔺	Policy A	Policy Setting
🖃 👰 Computer Configuration	Audit account logon events	Not Defined
🖃 🧰 Policies	📗 题 Audit account management	Not Defined
🕀 🚞 Software Settings	Audit directory service access	Not Defined
🖃 🧰 Windows Settings	🔛 📖 Audit logon events	Not Defined
	🔛 📖 Audit object access	Not Defined
Scripts (Startup/Shutdown)	🔛 📖 Audit policy change	Not Defined
Engloyed Printers	Audit privilege use	Not Defined
 Based Security Settings Account Policies 	Audit process tracking	Not Defined
	Audit system events	Not Defined
Local Policies Local Policies Local Policies Local Policies		
E i Event Log		
🗉 📆 System Services		
🕀 🔂 Registry		
표 📆 File System		
🕀 🌆 Wired Network (IEEE 802.3) Policie		
🗉 🧮 Windows Firewall with Advanced S		
📔 Network List Manager Policies]	
🕀 🚂 Wireless Network (IEEE 802.11) Po		
🗉 🧮 Public Key Policies		
표 🧮 Software Restriction Policies		
Image:		
🕀 🦳 Application Control Policies		
🕀 🛃 IP Security Policies on Active Direc		
	•	•

Figure 11: Group Policies

- 12. Here, you have to configure the following policies for both successful and failed events.
 - a. Audit account logon events
 - b. Audit Account Management
 - c. Audit directory service access
 - d. Audit Logon Events
 - e. Audit Policy Change
- 13. Double-click "Audit account logon events" policy to access its properties.

Audit account logon events Properties		? ×
Security Policy Setting Explain		
Audit account logon events		
☑ Define these policy settings		
Audit these attempts:		
Success		
Eailure		
ОК	Cancel	Apply

Figure 12: Properties of "Account Logon Events."

- 14. Check "Define these policy settings" box. It enables the subsequent section.
- 15. Check both "Success" and "Failure" boxes under "Audit these attempts."
- 16. Click "Apply" and "OK." It takes you back to "Group Policy Management Editor", which now shows the configured policy.
- 17. Follow the same steps to configure the following policies.
 - 1. Audit Account Management
 - 2. Audit directory service access
 - 3. Audit Logon Events
 - 4. Audit Policy Change

le <u>A</u> ction <u>V</u> iew <u>H</u> elp			
• 🔿 🚈 🗰 💥 🗊 🗟 🔽 🗊			
Image: Second System Image: System	ds	Policy Image: Audit account logon events Audit account management Audit directory service access Audit logon events Audit object access Audit policy change Audit privilege use Audit system events	Policy Setting Success, Failure Success, Failure Success, Failure Success, Failure Not Defined Success, Failure Not Defined Not Defined Not Defined Not Defined
 [●] Public Key Policies [●] Software Restriction Policies [●] Network Access Protection [●] Application Control Policies [●] Application Control Policies [●] IP Security Policies on Active Di [●] 	er —1		

Figure 13: Configured the required policies

NOTE: Do not close "Group Policy Management Editor" as you have to perform more steps here to enable the Advanced Audit Policies, which are mentioned in the next section.

4.1.2 Enable Advanced Audit Policies

There are two different methods for Windows Servers to enable the advanced auditing policies in Group Policy Management Console. You have to run the commands on Command Prompt for Windows Server 2008, whereas you have to use Group Policy Management Console for Windows 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Sever 2016.

4.1.2.1 Steps to Enable Advanced Audit Policies in Windows Server 2008 Only

Start the Command Prompt using Administrator privileges and execute the following commands one by one.

Auditpol /set /category:"Account Logon" /success:enable /failure:enable

2. Auditpol /set /category:"Account Management" /success:enable /failure:enable

3.	Auditpol /failure:e	/category:"DS	Access"	/success:enable
4.	Auditpol /failure:@	/category:"Logon	/Logoff"	/success:enable
5.	Auditpol /failure:@	/category:"Object	Access"	/success:enable
6.	Auditpol /failure:e	/category:"Policy	Change"	/success:enable

4.1.2.2 Steps to Enable Advanced Audit Policies in Windows Server 2008 R2 and above versions

You have to perform the following steps to enable the Advanced Auditing Policies in the same customized Group Policy Object, in which you have enabled the Local Auditing Policies in the previous steps.

 In the left panel of Group Policy Management Editor, navigate to "Computer Configuration" → "Policies" → "Windows Settings" → "Security Settings" → "Advanced Audit Policy Configuration" → "Audit Policies." It displays the different policy categories in the Right Panel.

🗐 Group Policy Management Editor	×□_
<u>File Action View H</u> elp	
🗢 🔿 🚈 🔢 🖬	
Scripts (Startup/Shutdown) Scrupts (Startup/Shutdown) Scrupts Security Settings Local Policies Local Policies Startup/Shutdown System Services Software Registry Software Registry Software Restricted Groups Software Restricted Policies Software Restricted Policies Software Restriction Account Management Software Restriction Account Management Software Restriction Account Restriction Acco	Advanced Audit Policy Configuration Getting Started Advanced Audit Policy Configuration settings can be used to provide detailed control over audit policies, identify attempted or successful attacks on your network and resources, and verify compliance with rules governing the management of critical organizational assets. Image: Configuration attempts and use of the settings of the management of critical organizational assets. Image: Configuration attempts are used, the "Audit: Force audit policy subcategory settings must also be enabled. Image: More about Advanced Audit Configuration Image
Preferences	

Figure 14: Group Policy Objects Management Editor

2. You have to configure all policies of the following categories.

I.Account Logon

- a. Audit Credential Validation
- b. Audit Kerberos Authentication Service
- c. Audit Kerberos Service Ticket Operations
- d. Audit Other Account Logon Events
- II.Account Management
 - a. Audit Application Group Management
 - b. Audit Computer Account Management
 - c. Audit Distribution Group Management
 - d. Audit Other Account Management Events
 - e. Audit Security Group Management
 - f. Audit User Account Management

III.DS Access

a. Audit Detailed Directory Service Replication

- b. Audit Directory Service Access
- c. Audit Directory Service Changes
- d. Audit Directory Service Replication

IV.Logon/Logoff

- a. Audit Account Lockout
- b. Audit IPsec Extended Mode
- c. Audit IPsec Main Mode
- d. Audit IPsec Quick Mode
- e. Audit Logoff
- f. Audit Logon
- g. Audit Network Policy Server
- h. Audit Other Logon/Logoff Events
- i. Audit Special Logon

V.Object Access

- a. Audit Application Generated
- b. Audit Certification Services
- c. Audit Detailed File Share
- d. Audit File Share
- e. Audit File System
- f. Audit Filtering Platform Connection
- g. Audit Filtering Platform Packet Drop
- h. Audit Handle Manipulation
- i. Audit Kernel Object
- j. Audit Other Object Access Events
- k. Audit Registry
- I. Audit SAM

VI.Policy Change

- a. Audit Audit Policy Change
- b. Audit Authentication Policy Change
- c. Audit Authorization Policy Change
- d. Audit Filtering Platform Policy Change
- e. Audit MPSSVC Rule-Level Policy Change
- f. Audit Other Policy Change Events

- 3. Execute the following steps to configure the above policies in the above listed different categories.
 - A. Click "Account Logon" category in the left panel to list all of its policies.

e <u>A</u> ction <u>V</u> iew <u>H</u> elp				
🔿 🖄 📷 🗟 🔽 🖬				
👰 Computer Configuration	Subcat	egory	Audit Events	
🖃 🧰 Policies	🔄 👪 Aud	dit Credential Validation	Not Configured	
표 🚞 Software Settings	🔠 📖 📖 Aud	lit Kerberos Authentication Service	Not Configured	
🖃 🚞 Windows Settings	📖 📖 Aud	lit Kerberos Service Ticket Operations	Not Configured	
Image: Margin Resolution Policy	📖 📖 Auc	dit Other Account Logon Events	Not Configured	
📄 Scripts (Startup/Shutdown) 🖃 🚡 Security Settings				
🕀 📑 Account Policies				
🕀 🗃 Local Policies				
🕀 📑 Event Log				
🕀 📴 Restricted Groups				
E 📴 System Services				
🛨 📴 Registry 🛨 🔀 File System				
🛨 🌇 File System 🛨 🚺 Wired Network (IEEE 802.3) Policies				
Windows Firewall with Advanced Securit				
Network List Manager Policies	, II			
Wireless Network (IEEE 802.11) Policies				
Section Access Protection				
Application Control Policies				
IP Security Policies on Active Directory (v			
🖃 🚞 Advanced Audit Policy Configuration				
🖃 🌆 Audit Policies				
Account Logon				
📑 Account Management				
🕀 📑 Detailed Tracking				
🕀 📑 DS Access				
🕀 🗾 Logon/Logoff				
🕀 📑 Object Access				
🕀 👰 Policy Change				
🕀 📑 Privilege Use				
🕀 📑 System				
🕀 📑 Global Object Access Auditing				
Policy-based QoS				

Figure 15: Account Logon Policies

B. In the Right Panel, double-click any policy say "Audit Credential Validation" to access its properties.

Audit Credential Validation Properties	×					
Policy Explain						
Audit Credential Validation						
Configure the following audit events:						
✓ Success						
✓ Eailure						
	ancel Apply					

Figure 16: Properties of "Audit Credential Validation"

- C. Check "Configure the following audit events" box. It enables the subsequent section.
- D. Check both "Success" and "Failure" boxes.
- E. Click "Apply" and "OK." It takes you back to "Group Policy Management Editor", which now shows the configured policy.
- F. Execute the above steps to configure other policies of "Account Logon" category.
- 4. Follow the same steps to configure all policies in the above-listed categories.
- 5. Close "Group Policy Management Editor." It takes you back to to "Group Policy Management Console".
- 6. Select the newly created Group Policy to view its details the right panel.
- 7. In Right Panel, the "Security Filtering" section lets you select the objects like users, groups and computers on which this policy will be applied.
- 8. Click "Add" to display the box to add the objects upon which this policy will be applicable.
- 9. Type "Everyone" in the text box as adding everyone means this Group Policy will be applicable on all Active Directory Objects.



Select User, Computer, or Group	? ×
Select this object type:	
User, Group, or Built-in security principal	<u>O</u> bject Types
Erom this location:	
cod.com	Locations
Enter the object name to select (<u>examples</u>):	
Everyone	Check Names
Advanced	OK Cancel

Figure 17: Selecting Everyone

- 10. Click "Check Names". It verifies the provided entry and formats it as a link.
- 11. Click "OK" to add it. It takes you back to "Group Policy Management Console", which now shows "Everyone" has been added to the selected custom Group Policy.

🛃 Group Policy Management	
🛃 Eile Action <u>V</u> iew <u>W</u> indow <u>H</u> elp	_ B ×
🗇 🔿 🔀 🖬 🖸 🖬	· · · · · · · · · · · · · · · · · · ·
Group Policy Management Forest: www.vdoc.com Domains Www.vdoc.com Default Domain Policy LADSS Domain Controllers Default Domain Controllers Policy Default Domain Controllers Default Domain	EnableAudit Scope Details Settings Delegation Links Display links in this location: www.vdoc.com The following sites, domains, and OUs are linked to this GPO: Location Enforced Link Enabled Path Domain Controllers No Yes www.vdoc.com Image: Security Filtering The settings in this GPO can only apply to the following groups, users, and computers: Image: Security Filtering Mame Image: Security Filtering Image: Security Filtering The settings in this GPO can only apply to the following groups, users, and computers: Image: Security Filtering Mame Image: Security Filtering Image: Security Filtering Multi Filtering This GPO is linked to the following WMI filter: Image: Security Filtering This GPO is linked to the following WMI filter: Image: Security Filtering This GPO is linked to the following WMI filter: Image: Security Filtering

Figure 18: Added "Everyone" to apply new Group Policy on all Active Directory Objects

- 12. Close "Group Policy Management Console".
- 13. In "Run" box or at "Command Prompt", execute the following command to update the Group Policy on all domain controllers.

gpupdate /force

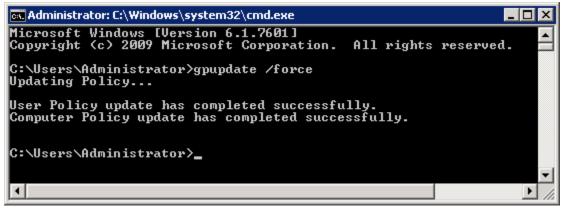


Figure 19: Updating Group Policy

4.2 Enable Auditing using ADSIEdit.msc

Perform the following audit settings using the ADSIEdit.msc on any Windows Server. Visit <u>http://technet.microsoft.com/en-us/library/cc773354(v=ws.10).aspx</u> to know more about installing and using ADSIEdit.msc.

You have to perform the following steps for all Windows Server.

- Open ADSIEdit.msc using the "Run" dialog box. You can also open it from "Start Menu" → "Administrative Tools" → "ADSIEdit".
- 2. Connect to the Active Directory. Select any node and perform below steps. Repeat these steps for each root node.
- 3. Right-click on the root "ADSI Edit" and select "Connect to".
- 4. It is required to connect to the following three naming contexts and to turn on their auditing.
 - a. Default Naming Context
 - b. Configuration
 - c. Schema

NOTE: We will connect to all these naming contexts one by one and then turn on their auditing.



📂 ADSI Edit	
File Action View Help	
2 ADSI Edit	Actions
Connection Settings	AD5I Edit 🔺
Name: Default naming context	More Actions
Path: LDAP://SP13-EX10.www.cod.com/Default naming context	
Connection Point	
C Select or type a Distinguished Name or Naming Context:	
Select a well known Naming Context:	
Default naming context	
Computer	
C Select or type a domain or server: (Server Domain [:port])	
 Default (Domain or server that you logged in to) 	
Use SSL-based Encryption	
Advanced OK Cancel	

Figure 20: Select the naming context to which you want to connect

- 5. Select "Default Naming Context".
- 6. Click "OK" to establish the connection. Default Naming Context will be connected and its root node will be displayed in "Left Panel".
- 7. Expand the root node to access the domain controller's node "DC=www,DC=domain,DC=com".
- 8. Again, right click on "ADSIEdit" parent node and select "Connect To".
- 9. In "Connection Settings" box, select "Configuration" for naming context and click "OK".

📝 ADSI Edit				
File Action View Help				
🗢 🔿 🗡 📅 🙆 🖻 🔽 🖬				
Z ADSI Edit	Name	Class	Dis	Actions
Default naming context [SP13-EX10.www DC=www.DC=cod.DC=com	Connection Settings	• •	×	Default naming context [SP13-EX1 🔺
DC=www,DC=cod,DC=com	Connection Settings Name: Configuration Path: LDAP://SP13-EX10.www.cod.com Connection Point Connection Point Connection Point Select or type a Distinguished Name Image: Select a well known Naming Context Configuration Computer Select or type a domain or server: (Image: Default (Domain or server that you Use SSL-based Encryption Advanced Image: Default (Context and Context and Cont	I/Configuration I or Naming Context: I I I I I I I I I I I I I I I I I I I		More Actions
	I		Þ	

Figure 21: Connecting to Root Configuration

- 10. It connects ADSI Edit to the Domain Configuration and displays its root node in the Left Panel.
- 11. Expand the node to access "CN=Configuration,DC=www,DC=domain,DC=com".
- 12. Right click on "ADSI Edit" parent node and select "Connect To".
- 13. Select "Schema" as the naming context and click "OK" to connect to it.

🗾 ADSI Edit		_ _ ×
File Action View Help		
🗇 🔿 🗾 🖬 🙆 📑		
	Name	Actions
Default naming context [SP13-EX10.www.uder.com]	ttings X	Configuration [SP13-EX10.www.vdoc 🔺
Configuration [SP13-EX10.www.vdoc.cor CN=Configuration,DC=www,DC=vdd	na	More Actions
Path: LDAP:	//SP13-EX10.www.vdoc.com/Schema	
Connection P		
C Select or	^r type a <u>D</u> istinguished Name or Naming Context:	
G Select a	well known Naming Context:	
Schem		
Computer		
C Select or	r type a domain or <u>s</u> erver: (Server Domain [:port])	
Default ((Domain or server that you logged in to)	
	-based Encryption	
Advanced	OK Cancel	

Figure 22: Connecting to Schema

- 14. It connects ADSI Edit to the Schema and displays its root node in the Left Panel.
- 15. Expand its node to access "CN=Schema,CN="Configuration,DC=www,DC=domain,DC=com".
- 16. Now, it is required to enable the auditing settings for the following four root nodes of different naming contexts.
 - a. DC=www,DC=domain,DC=com
 - b. CN=Configuration,DC=www,DC=domain,DC=com
 - c. CN=Schema,CN=Configuration,DC=www,DC=domain,DC=com
- 17. The user has to perform the following steps one by one for each of the above nodes.
 - a. Right click on "DC=www,DC=domain,DC=com" under "Default Naming Context".



📝 ADSI Edit		
🕞 📋 Default naming context [SP13-EX:	10.www.vdoc.com]
📔 DC=www,DC=vdoc,DC=com		ı
🖂 🚦 Configuration [SP13-EX10.www. [,]	New 🕨	
 CN=Configuration,DC=www. Schema [SP13-EX10.www.vdoc.c CN=Schema,CN=Configurati 	Rename Refresh	doc,DC=com
	Properties	
	Help	



- b. Select "Properties" option to access its properties.
- c. Switch to "Security" tab.

C=www,DC=cod,DC=com Properties		? ×
Attribute Editor Security		
<u>G</u> roup or user names:		
SELF		
Authenticated Users		
RETWORK SERVICE		
🧟 Organization Management (VDOC\Organ	ization Manac	gement) 🔳
	A <u>d</u> d	<u>R</u> emove
Permissions for Everyone	Allow	Deny
Full control		
Read		
Write		
Create all child objects		
Delete all child objects		
For special permissions or advanced settings, Advanced.		Advanced
Learn about access control and permissions		
OK Cancel	Apply	Help

Figure 24: Security Tab of Node Properties

- d. Click "Advanced" button to access the Advanced Security settings.
- e. Switch to "Auditing" tab in "Advanced Security Settings".



📕 Advanced See	curity Settings for Policies	;			×			
Permissions Au	Permissions Auditing Owner Effective Permissions							
To view or edit	To view or edit details for an auditing entry, select the entry and then click Edit.							
Auditing entries:	Auditing entries:							
Туре	Name	Access	Inherited From	Apply To				
A <u>d</u> d	<u>E</u> dit	<u>R</u> emove		Restore de <u>f</u> aults]			
🔽 Include inhe	eritable auditing entries from thi	s object's parent						
) (bat are the re) (hat are the requirements for auditing chiest access?							
	What are the requirements for auditing object access?							
			ОК	Cancel <u>Apply</u>				

Figure 25: Auditing tab

f. Click "Add" to add "Everyone" for auditing using the following box:

Select User, Computer, or Group		? ×
Select this object type:		
User, Group, or Built-in security principal		<u>O</u> bject Types
Erom this location:		
cod.com		Locations
Enter the object name to select (<u>examples</u>):		
Everyone		<u>C</u> heck Names
		-
Advanced	OK	Cancel

Figure 26: Add User

- g. Type "Everyone" to audit the changes made by all objects.
- h. Click "Check Names" to verify the username.
- i. Click "OK" to add the user. It shows "Auditing Entry" dialog box.

📕 Auditing Entry for www			X
Object Properties			
Name: Everyone		<u>⊂</u> hange	
Apply onto: This object and all desce	endant objects	-	1
Access:	Successful	 Failed	1
			ı İ
Full control			
List contents			1
Read all properties			
Write all properties			
Delete	\checkmark		
Delete subtree			
Read permissions			
Modify permissions			
Modify owner			
All validated writes		- E	
All extended rights		ū.	
Apply these auditing entries to ot and/or containers within this cont only <u>Managing auditing</u>		Clear All	
	ОК	Cancel	

Figure 27: Auditing Entries for www

- j. Select "This object and all descendant objects" in "Apply onto" drop-down menu.
- k. Click "Full Control" in "Successful" column first.
- I. Now, you have to uncheck the following entries in "Successful" column.
 - Full Control
 - List contents
 - Read all properties
 - Read permissions

Keep other entries checked in "Successful" column.

- m. Make sure all checkboxes in "Failed" column are blank or not checked.
- n. Keep "Apply these auditing entries to objects and/or containers within this container only" unchecked.
- o. Click "OK" to apply the auditing entries. It takes you back to "Auditing" tab of Advanced Security Settings.
- p. Click "Apply" and "OK" to apply the auditing settings.
- q. Close "Properties".
- 18. Repeat the steps (a) to (q) of Step 17 to enable the auditing of remaining root nodes.
 - a. CN=Configuration,DC=www,DC=domain,DC=com
 - b. CN=Schema,CN=Configuration,DC=www,DC=domain,DC=com

19. Close the window of ADSIEdit.msc.

5. Restore Backed up Group Policy

While enabling the auditing, Lepide Data Security Platform lets you select an existing Group Policy or create a new one. If you are selecting an existing Group Policy, the solution allows you to take its backup. The backup is created on the server in "%systemdrive%\Windows\Lepide\GPOBKP_24-01-2017 18_13_35\" folder. Here, 24-01-2017 will be replaced with the date and 18_13_35 will be replaced with the time when you have clicked "OK" to enable auditing on the selected policy.

You can perform the following steps to restore the Group Policy using this backup to restore to its earlier state before enabling the auditing.

- 1. Go to "Start" \rightarrow "Administrative Tools" \rightarrow "Group Policy Management Console" to access its console.
- 2. In the left panel of "Group Policy Management Console", browse to "Forest" \rightarrow "www.domain.com".
- 3. Right click on "Group Policy Objects" node and click "Manage Backups" option.

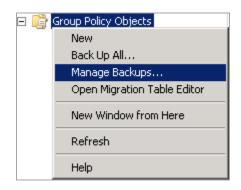


Figure 28: Option to manage the Group Policy Backups

4. "Manage Backups" dialog box appears on the screen.

🛃 Manage Backups							
Backup location:							
C:\Windows\Lepide\G	iPOBKP_24-01-2017 19_3	35_13	•	<u>B</u> rowse			
Backed up GPOs:							
Domain 🔺	Name	Time Stamp	Description	GPO ID			
www.vdoc.com	Test2 Domain Contro	1/24/2017 7:35:14 PM		{239B39C8-D95			
Show only the lates	t version of each GPO						
<u>R</u> estore	<u>D</u> elete	<u>V</u> iew Settings.		Close			

Figure 29: Manage the backups of Group Policies

- 5. Click "Browse" and open "%systemdrive%\Windows\Lepide" folder.
- 6. Now select "GPOBKP_*" folder of that date and time when you have selected to create the backup while enabling the auditing.
- 7. Click "OK". It takes you back to "Manage Backups" dialog box that shows the Group Policy from the selected backup.
- 8. You can click "Restore" to restore this backup.

6. Support

If you are facing any issues whilst installing, configuring or using the solution, you can connect with our team using the below contact information.

Product experts

USA/Canada: +1-800-814-0578 UK/Europe: +44 (0) -845-594-3766

Technical gurus

USA/Canada: +1-800-814-0578 UK/Europe: +44(0)-800-088-5478



Rest of the World: +91 (0) -991-004-9028

Rest of the World: +91(0)-991-085-4291

Alternatively, visit <u>http://www.lepide.com/contactus.html</u> to chat live with our team. You can also email your queries to the following addresses:

<u>sales@Lepide.com</u>

support@Lepide.com

To read more about the Lepide Data Security Platform, visit http://www.lepide.com/.

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