Veritas Enterprise Vault™ Technical Note

Configuring a Windows Server's Firewall for File System Archiving

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Veritas Enterprise Vault: Configuring a Windows Server's Firewall for File System Archiving

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Configuring a Windows server's firewall for File System Archiving

This document includes the following topics:

- About access through a Windows server's firewall for File System Archiving
- Firewall access required for archiving without the FSA Agent
- Firewall access required for installing and using the FSA Agent
- Where to find more about Windows Firewall ports and port configuration

About access through a Windows server's firewall for File System Archiving

This technical note describes the access that Enterprise Vault File System Archiving (FSA) requires through a Windows server's firewall.

FSA requires access through the file server's firewall to do any of the following:

- Install the FSA Agent from a remote Enterprise Vault Administration Console.
- Archive files from the server.
- Create placeholder shortcuts on the server.
- Perform File Blocking on the server, or use the server as a File Blocking agent server for a NetApp filer.
- Perform FSA Reporting on the server, or use the server as an FSA Reporting proxy server for non-Windows file servers.

If a target server's firewall is enabled and you do not configure the firewall to allow the required access, the following problems occur:

- Installation of the FSA Agent from the Administration Console fails.
- The File System Archiving task fails. You may receive error messages such as the following from DTrace, or in the File System Archiving task report:
 - The RPC server is unavailable. (Exception from HRESULT: 0x800706BA)
 - Error making file a placeholder file. Catastrophic failure (Exception from HRESULT: 0x8000FFFF)

Firewall access required for archiving without the FSA Agent

You can configure a Windows file server target without installing the FSA Agent, if you do not require placeholder shortcuts, File Blocking, or FSA Reporting.

 Table 1-1 lists the access that FSA requires through a Windows server's firewall, for archiving without the FSA Agent.

The table lists the inbound port requirements, and the associated programs and services. From Windows Server 2008 onwards, you can use Windows Firewall rules to open selected ports for specified programs and their services, for enhanced security.

Inbound port	Protocol	Program	Service	Required for	Notes
445	ТСР	System	(none)	CIFS share (SMB file sharing)	On Windows Server 2003 this port is included in the supplied Windows Firewall exception File and Printer Sharing.
					On Windows Server 2008 R2 this configuration is provided for example by the supplied inbound rule File and Printer Sharing (SMB-In).

Table 1-1Windows server firewall ports required for archiving without the
FSA Agent

Inbound port	Protocol	Program	Service	Required for	Notes
135	ТСР	svchost.exe	RpcSs	RPC (DCOM) Endpoint Mapper	On Windows Server 2008 R2 this configuration is provided for example by the supplied inbound rule Com+ Network Access (DCOM-In).
RPC Dynamic Ports (Randomly allocated high TCP port)	TCP	svchost.exe	Winmgmt	RPC (DCOM) connection ports for Windows Management Instrumentation (WMI)	On Windows Server 2008 R2 this configuration is provided for example by the supplied inbound rule DFS Management (WMI-In).

Table 1-1Windows server firewall ports required for archiving without the
FSA Agent (continued)

Firewall access required for installing and using the FSA Agent

To enable the installation of the FSA Agent from a remote Administration Console, Enterprise Vault requires the same access as for archiving without the FSA Agent.

See Table 1-1.

For File System Archiving with the FSA Agent, the FSA Agent programs also require access through the server's firewall.

Enterprise Vault installs the FSA Agent programs on the file server in the Enterprise Vault program folder, typically C:\Program Files (x86)\Enterprise Vault.

Table 1-2 lists the FSA Agent programs and the ports and protocols to associate with them. You must configure the server's firewall to allow access for the programs whose functions you require.

Inbound port	Protocol	Program	Service	Required for	Notes
RPC Dynamic Ports	TCP	EvPlaceholderService.exe	(none)	Placeholder shortcuts	Required if you configure placeholder shortcuts for the server.
RPC Dynamic Ports	TCP	FileScreenService.exe	(none)	File Blocking	Required if you configure File Blocking for the server.
					If you configure File Blocking Notifications such as Windows Messenger Service, SMTP, and event logging, additional access is required. Refer to your Microsoft documentation for information on the ports that are required for these services.
RPC Dynamic Ports	TCP	FSAReportingService.exe	(none)	FSA Reporting	Required if you configure FSA Reporting for the server.

Table 1-2Windows server firewall access required for the FSA Agent
programs

Where to find more about Windows Firewall ports and port configuration

For general information on configuring Windows Firewall's ports and DCOM access, see the Microsoft documentation for your target server's operating system.

 For an overview of Windows network ports and RPC, see the following Microsoft article, and the articles in its Reference section under "Remote Procedure Calls and DCOM":

http://support.microsoft.com/kb/832017

- For information for Windows Server 2003 on creating rules to allow the inbound traffic that uses dynamic RPC, see the following Microsoft article: https://msdn.microsoft.com/library/aa389286.aspx
- For information for Windows Server 2008 and later on creating rules to allow the inbound traffic that uses dynamic RPC, see the following Microsoft article:

http://technet.microsoft.com/library/cc732839.aspx

- For guidelines on how to configure dynamic port ranges for TCP/IP on Windows Server 2008 and later, see the following Microsoft knowledge base article: http://support.microsoft.com/kb/929851
- For more information about the ports that Enterprise Vault uses, see the appendix "Ports used by Enterprise Vault" in the *Administrator's Guide*.