



Stand Alone Installation Guide

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Computer Requirements

Minimum Specifications

- Processor: Intel[®] i-Series Dual-Core at 2GHz
- Operating System: Windows 7 Professional
- Memory: 4GB
- Graphics Processor: Intel[®] HD2000 Integrated Graphics or comparable solution
- OS Hard Drive (Boot): 20GB Free Space
- Data Hard Drive (2nd Drive): At least 1TB
- Microsoft .NET Framework: Version 4.5

Recommended Specifications

- Processor: Intel[®] i-Series Quad-Core at 2.00GHz or better
- Operating System: Windows 10 Pro 64-bit or greater
- Memory: 8GB
- Graphics Processor: Intel[®] HD4000 Integrated Graphics or better
- OS Hard Drive (Boot): 40GB Free Space
- Data Hard Drive (2nd Drive): At least 1TB
- Microsoft .NET Framework: Version 4.5

Video Data Storage

Digital Ally recommends a RAID storage solution for your digital video evidence. A RAID 1 or RAID 5 array will give you the space and redundancy needed to store years of video securely. NAS devices are not currently supported.

How much space will you need?



There are several factors to consider when calculating storage space. The amount of storage space you will need depends on your individual department's video retention policy, and number of hours of video per car per shift. The laws and policies for retaining video evidence vary from state to state and agency to agency. Use the following formula to determine the amount of storage needed.

 $A = B \times C \times D \times E$

- **A** = Amount of storage needed per day
- **B** = Number of shifts per day
- **C** = Number of cars per shift
- **D** = Hours of recorded video per car per shift
- E = Number of simultaneous video streams per car per shift (1 or 2)

For example, if your department has 8 cars, 3 shifts, and recorded 2.5 hours of video per car per day using a single high resolution video stream, you would need roughly 60 GB of storage a day, or 5.4TB of storage for a 90 day retention policy.

Please contact Digital Ally Technical Support or your local Sales Representative if you need assistance determining storage requirements for your specific deployment. A video storage calculator is available per request if needed.

Prerequisites

The following items must be present on the computer before VuVault can be installed. Ensure that your computer meets this requirement. If not installed, a black screen may be present when trying to play back videos.

Windows Media Player 11.0 or higher

If the following are not installed on the computer, setup will install them for you.

- Windows Installer 4.5
- PowerShell 1.0
- Microsoft .NET Framework 4.5 (Windows XP NOT supported)
- SQL 2008 or SQL Express 2008
- Microsoft Report Viewer

Helpful Tips

Reboot your PC before installing VuVault to make sure that there are no pending file operations. This can cause SQL 2008 to have errors during the installation.

- VuVault is run by multiple Windows services which require an Administrator. This does not have to be a Domain Administrator, but this user needs to have full permissions to the SQL databases and File Shares VuVault will use for Data Storage.
- Create the Administrative Windows user before you continue, you will need it for login Information during Step 16 of the installation. (refer to page 19 for instructions)
- This user must have a password, but exclude the user from having a password policy that forces it to change the password regularly.
- Make sure the firewall on the computer allows Windows File Sharing, and consult the *Firewall Settings* section on page 14 when the installation is complete.

Update your Account

VuVault is available for purchase from Digital Ally Inc. Please call our Sales department at 1-800-440-4947 or 913-814-7774 to purchase, then log on to our Customer Portal at http://www.digitalallyinc.com/login.cfm and register for an account to be an Authorized User. By registering you will be able to download all the latest firmware/software updates and will be notified of future upgrades. If you already have an account, you will need to update your account to gain access to VuVault software and documentation.

Installing VuVault

1. Open the file "VuVaultSetup.exe". Select the language for the install, and click OK.



- 2. Setup will detect if you have any prerequisites that need to be installed. To install these requirements click *Install*. A reboot may be necessary.
- 3. Setup will resume the installation.



4. Setup will prepare to install, and then prompt you to click *Next*.



5. Read and Accept the EULA, then click Next

Digital Ally VuVault - InstallShield Wizard	
License Agreement Please read the following license agreement carefully.	
End-User License Agreement	
IMPORTANT-READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Digital Ally, Inc. ("LICENSOR") for VuVault, which includes this computer software and its associated printed and online documentation ("SOFTWARE"). Note, however, that any software, documentation, or web services	
I accept the terms of the license agreement <u>Print</u> I do not accept the terms of the license agreement	
< <u>Back</u> Next> Cancel	_

6. Select Standalone and click Next

Digital Ally VuVault - InstallShield Wizard	C X
Digital Ally VuVault	
What type of install would you like to do?	
Standalone (Recommended)	
─ Multi-user	
InstallShield	
	< <u>B</u> ack Next > Cancel

7. Select the location where VuVault application will be installed, then click Next

Digital Ally V	uVault - InstallShield Wizard	C X
Choose D Select fo	lestination Location Ider where setup will install files.	
	Install Digital Ally VuVault to: C:\Program Files (x86)\Digital Ally\VuVault\	hange
InstallShield -		
	< <u>B</u> ack	Next > Cancel

8. Select the features of VuVault you have purchased. Then click Next

Standalone: This box remains checked.

Optical Archive: Reserved for optional Rimage archive. Consult Rimage documentation.

Wireless Transfer Module Server: (For DVM-750, DVM-500, DVM-500Plus, DV-500Ultra, and MicroVu HD only). Check this box only if the wireless upload option was purchased. Consult the VuVault Wireless Server Setup Guide for further instructions when the installation is complete. Additional hardware is required for the wireless upload operation.

Wireless Transfer Module Status Monitor: (For DVM-750, DVM-400, DVM-500, DVM-500Plus, DV-500Ultra, and MicroVu HD only). Check this box only if the wireless upload option was purchased. Consult the VuVault Wireless Server Setup Guide for further instructions when the installation is complete. Additional hardware is required for the wireless upload operation.

Viewer: Check this box to install the Digital Ally Viewer and Configuration Manager software. The Configuration Manager is required for the DVM-250 and DVM-250 plus. Consult your DVM Administrators Guide when the installation is complete.

Wireless Transfer Module Lite: (For DVM-100, DVM-400, DVM-250, DVM-250Plus, and DVM-800, and DVM-800 HD only). Check this box only if the wireless upload option was purchased. Consult the VuVault Wireless Server Setup Guide and your DVM Administrators Guide for further instructions when the installation is complete. Additional hardware may be required for the wireless upload operation.

Digital Ally VuVault - InstallShield Wizard	EX
Select Features Select the features setup will install.	No.
Select the features you want to install, and deselect the features you want to install, and deselect the features of the server	eatures you do not want to install. Description Installs Basic VuVault functions on the local computer
67.64 MB of space required on the C drive 108831.91 MB of space available on the C drive InstallShield	
<u>B</u> ac	k Next > Cancel

9. If SQL 2008 is not installed, select "Install SQL Express2008 on this Computer" and click *Next*.

If SQL 2008 is installed, select "Connect to an existing SQL Server" and click *Next*, then proceed to Step 14.

Core Server			Sec.71
Select new or existing Core Server			
How do you want to connect to the Core S	erver?		
Install SQL Express 2008 on this computer states and the second	uter		
Connect to an existing SQL Server			
tallShield			
	K Back	Next >	Cancel

10. Select a data storage folder. Click Next. This is where videos will be stored.

Digital Ally V	/uVault - InstallShield Wizard
Choose D Select th	e folder where video files should be uploaded
	Store video files in: C:\ProgramData\DigitalAllyData\FileServer Change
InstallShield -	
	<pre></pre>

11. Create the SA (SQL Administrator) password, then click Next.

SA Password Enter the SA Passwo	rd		24
Enter the password fo	r the System Administr	ator ("sa") account.	
Password:			
Retype:			
21			

12. Select the Location where the SQL Server Data will be Stored, then click *Next.* This is **not** where videos will be stored. **Proceed to step 16**.

Digital Ally V	uVault - InstallShield Wizard		×
Data Stor Select th	rage Folder e folder for the database		No.
	Install Digital Ally VuVault Data to: C:\ProgramData\DigitalallyData		Change
InstallShield -		< Back Next	> Cancel

13. Select the existing SQL Instance and enter the SA password. Then click Next.

Database Server		and the second second
Select database se	rver and authentication method.	
Database server th	at you are installing to:	
STREAMING-BOX	\DIGITALALLY	 Browse
Connect using:		
Windows auth	entication	
SQL Server a	uthentication using the Login ID and password below	
Login ID:	sa	
Password:	•••••	
stallShield ———		

14. Select a data Storage Folder. Click *Next.* This is where videos will be stored.

Digital Ally V	uVault - InstallShield Wizard	C X
Choose D Select th	Pestination Location e folder where video files should be uploaded	
	Store video files in: C:\ProgramData\DigitalAllyData\FileServer	Change
InstallShield –	< <u>B</u> ack Next >	Cancel

15. Enter the Username and Password of the Windows Administrator User that will run the VuVault services. If this is a local account, use the format *Computername\Username*. If you are on a domain use the format *Domain\Username*.

Service Log	jon Information
Specify a us	sername and password for the services
Specify the The user ac This user w	user name and password of the user account that will logon to use this application. count must be in the form DOMAIN\Username (or COMPUTERNAME\UserName). ill be used to run the servers and should not be a normal user.
Username:	STREAMING-BOX\VuVault User
Password:	••••••
Retype:	•••••••
stallShield —	
	Kack Next> Cancel

16. Select the language configuration, then click Next

Digital Ally VuVault - InstallShield Wizard	
Language Configuration	
Select language configuration for VuVault	
Language: English	•
InstallShield	< <u>B</u> ack Next > Cancel

17. Review the selections and make any changes necessary. Click *Next* if no changes are needed.

Summary		24
Please review the following configu	aration selections:	
Setup Type = Standalone		
Installation Directory = C:\Program Account for NT Services = STREA	Files (x86)\Digital Ally\VuVault AMING-BOX\VuVault User	
SQL Server Express 2008 will be in Directory for SQL Database file	nstalled is = C:\ProgramData\DigitalallyData	
Selected Features : Core Server Installing a new instance on t File Server	he local machine	
•		Þ
tallShield ———		
	<back next=""></back>	Cancel

18. To begin the installation, click Install

Digital Ally VuVault - InstallShield Wizard	BX
Ready to Install the Program The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back the wizard.	:. Click Cancel to exit
InstallShield	Cancel

- **19.** Setup will install PowerShell and SQL 2008 Express if not found on the computer.
- **20.** Setup will now install VuVault.

Digital Ally VuVault - InstallShield Wizard	C X
Setup Status	
Digital Ally VuVault is configuring your new software installation.	
Writing system registry values	
InstallShield	Cancel

21. Click *Finish*, and then launch VuVault from your computer's desktop. Refer to the *VuVault User's Guide* provided by Digital Ally.

Digital Ally VuVault - InstallShie	eld Wizard	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed Digital Ally VuVault. Click Finish to exit the wizard.	
	< <u>B</u> ack Finish Cancel	

Firewall Settings

In order for VuVault to function correctly, it will be necessary to create firewall exceptions for all Digital Ally services. These are named:

- DigitalAlly.Aurora.Core.ServerService.exe
- > DigitalAlly.Aurora.FileServer.ServerService.exe
- > DigitalAlly.Wtm.ServerService.exe (DVM-750 and 500 series, *wireless installation only*)
- > DigitalAlly.Wtm.MonitorService.exe (DVM-750 and 500 series, *wireless installation only*)
- Digital Ally.Wtm.Lite.exe (DVM-250 series, wireless installation only)
- 1. To get started, open the *Windows Firewall with Advanced Security* console from the *Administrative Tools* menu. In the left pane of the console, you'll see two nodes, the *Inbound Rules* and the *Outbound Rules* nodes. The *Inbound Rules* node lists the rules that control unsolicited, inbound connections to the server. The *Outbound Rules* node lists the rules that control outbound connections made by the server.



2. Click on the *Inbound Rules* node. The rules that you see here will vary depending on what servers and services are installed and enabled on the server. Then under *Actions*, click *New Rule*.



3. Select Program and click Next.

Prew Inbound Rule Wizard	
Rule Type Select the type of firewall rule to o	create.
Steps: Program Action Profile Name	What type of rule would you like to create? Program Rule that controls connections for a program. Prodefined: BranchCache - Content Retrieval (Uses HTTP) Rule that controls connections for a Windows experience. Dustom Lean more about rule types

4. Click *Browse* to enter the path of the service. By default, the Digital Ally services are located in the *C:\Program Files (x86)\Digital Ally\VuVault* directory. For this example, the WTM Lite Service has been chosen. Click *Next*.



5. Select "Allow the connection". Click Next.

Mew Inbound Rule Wiza	rd 🕞 💌
Action Specify the action to be taken	when a connection matches the conditions specified in the rule.
Specify the action to be taken Steps: Program Action Profile Name	 when a connection matches the conditions specified in the rule. What action should be taken when a connection matches the specified conditions? Allow the connection This includes connections that are protected with IPsec as well as those are not. Allow the gonnection if it is secure This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node. Customize Block the connection
	Leam more about actions < Back

6. Choose your network environment and click Next.

Prev Inbound Rule Wiza	ard E Z						
Profile	his de contine						
Specily the profiles for which t	nis rue applies.						
Steps:							
Rule Type	When does this rule apply?						
Program							
Action	Domain						
Profile	Applies when a computer is connected to its corporate domain.						
ame	Private						
	Applies when a computer is connected to a private network location.						
	V Public						
	Applies when a computer is connected to a public network location.						
	Loop many they to refile						
	Lean more about promes						
	< <u>B</u> ack Cancel						

7. Give your new firewall exception a name and click *Finish*.

Mew Inbound Rule Wizard	
Name Specify the name and description	n of this rule.
Steps:	
Rule Type	
Program	
 Action 	
Profile	Name:
Name	Digital his Service
	Description (optional):
	< Back Finish Cancel

8. The new exception will now be listed under the inbound rules column. Repeat this procedure for all Digital Ally services.

Windows Firewall with Advanced Securi	ty					
<u>File Action View H</u> elp						
🗢 🄶 📶						
P Windows Firewall with Advanced Secur	Outbound Rules					Actions
Inbound Rules	Name	Group	Profile	Enabled	*	Outbound Rules
Connection Security Rules	Ore Networking - Destination Unreacha		Domain	Yes		Kew Rule
Monitoring	🕑 Core Networking - Packet Too Big (ICMP		Domain	Yes		Filter by Profile
, <u>, , , , , , , , , , , , , , , , , , </u>	🔇 Core Networking - Parameter Problem (I		Domain	Yes	Ε	
	Ore Networking - Time Exceeded (ICMP		Domain	Yes		Y Filter by State
	🔇 Networking - Destination Unreachable (I		Domain	Yes		🛛 Filter by Group
	🛛 🕜 Networking - Parameter Problem (ICMPv		Domain	Yes	ш	View
	Networking - Redirect (ICMPv4-Out)		Domain	Yes		O Refresh
	Networking - Redirect (ICMPv6-Out)		Domain	Yes		
	Networking - Source Quench (ICMPv4-O		Domain	Yes		Export List
	Networking - Time Exceeded (ICMPv4-O		Domain	Yes		📝 Help
	BranchCache Content Retrieval (HTTP-O	BranchCache - Content Retr	All	No		Corre Nichard Jan Dealast Teo Die (I
	BranchCache Hosted Cache Client (HTT	BranchCache - Hosted Cach	All	No		Core Networking - Packet 100 big (I
	BranchCache Hosted Cache Server(HTTP	BranchCache - Hosted Cach	All	No		E Copy
	BranchCache Peer Discovery (WSD-Out)	BranchCache - Peer Discove	All	No		Properties
	Connect to a Network Projector (TCP-Out)	Connect to a Network Proje	Domain	No		- Help
	Connect to a Network Projector (TCP-Out)	Connect to a Network Proje	Private	No		- Help
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Domain	No		
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Private	No		
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Domain	No		
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Private	No		
	Connect to a Network Projector (WSD-O	Connect to a Network Proje	All	No		
	🕑 Core Networking - DNS (UDP-Out)	Core Networking	All	Yes		
	Ore Networking - Dynamic Host Config	Core Networking	All	Yes		
	Ore Networking - Dynamic Host Config	Core Networking	All	Yes		
	Ore Networking - Group Policy (LSASS	Core Networking	Domain	Yes		
	Core Networking - Group Policy (NP-Out)	Core Networking	Domain	Yes		
	Ore Networking - Group Policy (TCP-O	Core Networking	Domain	Yes		
	🕜 Core Networking - Internet Group Mana	Core Networking	All	Yes		
	🛛 🕑 Core Networking - IPHTTPS (TCP-Out)	Core Networking	All	Yes		
	🖉 Core Networking - IPv6 (IPv6-Out)	Core Networking	All	Yes		
	🛛 🕑 Core Networking - Multicast Listener Do	Core Networking	All	Yes		
	Oore Networking - Multicast Listener Qu	Core Networking	All	Yes	Ŧ	
۰	•			Þ		

9. Next, select *Outbound Rules* and repeat the above procedure for all Digital Ally services.

Port List

If you need to open specific ports on your computer, these ports should be opened.

- **1.** Make sure your firewall allows windows file sharing.
- **2.** Open the TCP ports 21, 135, 1433, 2120, 2382, 2383, 4022, 12531, 12537, 12545, 12546, 12601, 14147
- 3. Open UDP port 1434

Creating a Windows User for VuVault Services

1. Right click on *My Computer* and click *Manage*. Then select *Local Users and Groups* from the tree view on the left. Expand *Local Users and Groups* and click on *Users*.



2. Next, right click *Users* and click *New User*. Then create a Username and Password for the new user. Uncheck the box "*User must change password at next login*" and check the box "*Password never expires*" and click *Create* then *Close*.

Write the User Password Here

keep in a safe place.



3. Select the new user, right click the mouse and then select *Properties*



4. Now click the *Member Of* tab on the Properties window and click *Add*. Then type "Administrators" in the name box and click *OK*, then click *OK* on the User Property window.

Computer Management	_			_	
File Action View Help					
🗢 🄿 🖄 📰 🔀 🛛	? 🗊				
Computer Management (Local	Name Administrator Digital Ally Guest	Full Name	Description Built-in account f	ior administering	
 Task Scheduler Event Viewer 		VuVault User Properti	es	Image: Im	23
 Bared Folders Bared Folders Bared Folders Local Users and Groups Users 	HomeGroup. VuVault User	Select Groups Select this object typ	e:		8 ×
Groups Performance		Groups From this location:			Object Types
 Bevice Manager Storage Disk Management 		STREAMING-BOX	es to select (examples):		Locations
Services and Applications		Administrators	is to select (<u>champles</u>).		Check Names
		Advanced		ОК	Cancel
			Channala		
		Add	Remove Changes to a are not effect user logs on.	ive until the next time th	NP 1e
	[01	Cancel	Apply Hel	₽

5. Close Computer Management, you have now setup the VuVault Services User. You will designate this user in Step 16 of the VuVault installation (page 12).

Contact Us

9705 Loiret Blvd

Lenexa, KS 66219

Website: www.digitalallyinc.com

Phone: 800-440-4947 (8AM to 5PM CST)

Support E-Mail: support@digitalallyinc.com

Sales E-Mail: sales@digitalallyinc.com



