Lightspeed Live Server



Windows Server 2019 Update

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Overview

This guide explains how to upgrade your Lightspeed Live Server Windows Server 2012 or 2016 system drives after purchasing the LSL-RAID1-2019OS-DRV drive upgrade kit.

The upgrade kit includes:

- Two new 240GB SATA SSD RAID 1 (mirrored) OS drives
- Operating system upgrade to Windows Server 2019
- Current version of Live Capture.

This procedure is valid for Lightspeed Live server models C2, C2+, C3, C4 and C5.

The upgrade kit is comprised of two high-performance drives with an unlicensed Windows Server 2019 and Live Capture system image on each drive. It is your responsibility to provide your own Windows Server 2019 license key and to back up and restore your Live Capture system.

Backing Up Your Live Capture System and Data

CAUTION: Before you remove your existing OS drives, it is imperative that you back up your Live Capture database, workflows, and user-created files for migration to the new Live Capture system on the new RAID 1 drives to avoid data loss.

Refer to the Domain Management Guide, Vantage Database Management guide, and Live Capture Administration Guide for details as appropriate.

Unpacking the New Drives

Open the kit's shipping box from Telestream, unpack the two drives, placing them near your Lightspeed Live server for easy access. Each is pre-installed in a drive cage, ready for insertion in the bays.

CAUTION: Exercise care when installing drive modules. To avoid damage, wear a static strap and place the drive modules on an anti-static surface.



Installing the New Drives

For this task, you require access to the system chassis.

Note: Before proceeding, make certain that you have backed up your Vantage database, all of your user-created folders and files, and noted other programs you have installed, and Windows settings that you need to configure in the new system.

- **1.** Power down the Lightspeed Live server.
- 2. Remove the front bezel, exposing the front panel drive bays.
- **3.** Remove the existing OS drives from the two right bays. This diagram identifies the bays at the far right in bold type:



4. For each drive, press the button to release the lever, fully retract the lever and pull the drive from the bay.



- **5.** Insert one of the new OS drives in each of the now-empty far-right bays—both drives have the same image, so which bay you insert them in is irrelevant.
- **6.** Re-install the bezel.
- 7. Power the system on and allow it to boot up.



Configuring Your Server

Use this topic to configure Windows settings, add a password for the Administrator user name, add your Windows license, name your computer and join your domain/ workgroup. Consult with your IT department for guidance.

1. When the server reboots for first time use, Windows Server requires some configuration before use. To accomplish this, it displays the Hi There window:

Hi there	
Let's get a few basic things out of the way.	
What's your home country/region?	
United States	~
What's your preferred app language?	
English (United States)	~
What keyboard layout would you like to use?	
US	~
÷.	

2. Make changes as required for your region, language and keyboard and click Next to display the Product Key window:



3. Enter your product key for this instance of Windows Server 2019 and click Next to display the Customize Settings window:

Customize settings							
Type a password for the	built-in administrator accoun	nt that you can use	to sign in to this co	mputer.			
User name	Administrator						
Password							
Reenter password							
4							
\bigcirc				Back	Finish		

- **4.** Enter a new password for the default Administrator user name and click Finish. Windows Server 2019 displays the login window.
- **5.** Enter the new password for the Administrator user name you're logging in as, and press Enter.



Windows displays the desktop, and launches the Server Manager and a Networks panel to the right:

Dashboard	WELCOME TO SERVER MANAGER	🖫 Network
Local Server	Configure this local serve auccessment Configure this local serve Add roles and features Add other servers to manage	Do you want to allow your PC to be discoverable by other PCs and device on this network? We recommend allowing this on you home and work networks, but not public ones.
	WHATS NEW 4 Create a server group 5 Connect this server to cloud LEARN MORE 4	No No
	ROLES AND SERVER GROUPS Roles: 0 Server groups: 1 Servers total: 1	
	ROLES AND SERVER GROUPS Roles: 0 Server groups: 1 Servers total: 1 Local Server 1 Mananeashility: Mananeashility:	
	ROLES AND SERVER GROUPS Roles: 0. Server groups: 1 Servers total: 1 Local Server 1 Manageability Events Services Performance Performance	

- **1.** Click Yes on the Networks panel, and close the Server Manager if its open.
- **2.** Open the Control Panel > System program.

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			-	1.1.4				
<i>←</i>	→ * ↑ 💆 > Control P	anel > All Control Panel Items >	System	~ 0	Search Con	trol Panel		۶
	Control Panel Home	View basic information	about your compute	er				
Þ	Device Manager	Windows edition						
•	Remote settings	Windows Server 2019 Stan	Windows Server 2019 Standard					
Advanced system settings	© 2018 Microsoft Corporation. All rights Window reserved.			ndows Ser	ver* 20	19		
		System						
		Processor:	Intel(R) Xeon(R) Gold 6248R CPU @ 3.00GHz 3.00 GHz (2 proce			process	ors	
		Installed memory (RAM): 192 GB (191 GB usable)						
		System type: 64-bit Operating System, x64-based processor						
		Pen and Touch:	No Pen or Touch Input is	availat	ole for this Disp	lay		
		Computer name, domain, and	workgroup settings					
		Computer name:	VIN-DIRIOVCOEST			Char	nge setti	ing
		Full computer name:	WIN-D1RIOVCOEST					
		Computer description:						
		Workgroup:	WORKGROUP					
		Windows activation						
		Windows is not activated.	Read the Microsoft Softwa	are Lice	nse Terms			
	See also	Product ID: Not Available				Activa	ste Wind	dow
	Security and Maintenance							



3. Click Change Settings to update the default computer name. Windows displays the System Properties dialog:

Computer Name Hardw	are Advanced Remote
Windows use on the netwo	es the following information to identify your computer rk.
Computer description:	[
	For example: "IIS Production Server" or "Accounting Server".
Full computer name:	WIN-D1RI0VCQEST
Workgroup:	WORKGROUP
workgroup, click Chang	e. Change ve vorinari vi

4. Click the Change button to display the Computer Name/Domain Changes dialog:

/stem Properties		
Computer Name/Domain Changes	×	
You can change the name and the membership computer. Changes might affect access to network	p of this work resources.	computer
Computer name:		-
C.d. comp. doc. more to		
test		
	More	ange
Member of		
O Domain:		
Workgroup:		
WORKGROUP		
	Canad	
ОК	Canoei	

- **5.** In the Computer Name field, enter the name you want for this server; click Domain or Workgroup and enter the domain or workgroup you want this server to be a member of, and click OK.
- **6.** Close the System Properties window and restart the server with a new server name, as a member of the domain/workgroup.



Configuring the New Drives for RAID 1

To set up the two new drives as RAID 1, follow these steps:

- 1. Log into the server's Administrator account (password: telestream!1).
- 2. Start the Intel(R) Virtual RAID on CPU program, located in C:\Program Files (86)\Intel:

😥 Intel® Virtual RAID on CPU		- 🗆 ×
Home Preferences		(intel)
Current Status Your system is functioning normally.		
Rescan Create Volume.	Volumes	Disk Properties 🖤 Status Normal Type: SATA SD Location Controller 0. Port 0 Location Ope: Internal <u>Activate LED</u> Usage: Available Size: 22,257 GB System disk: Vet Negostated link:rate: 6 Gb/y * Details:
Information		
Your storage system is configured for data protection, increased per Click any device or volume to display its properties.	formance and optimal data storage capacity. You can further optimize your storage system by creating additional w	olumes. To begin the process, click 'Create Volume'.

3. On the Home tab, select the SATA SSD (224 GB) (System) drive and click Create Volume. The program displays the Create Volume Step 1 Select dialog:

👰 Intel® Virtual RAID on CPU				- 0 X
Notest B Virhall RAID on CHU Preference: Preference: Preferen	Create Volume	Select Controller intellity C600+/C220 - series chipset SATA RAID controller intellity C600+/C220 - series chipset SATA RAID controller Select Volume for protection (RAID 1) optimized disk profection (RAID 0) Grant disk hosting and protection (RAID 1) Grant disk hosting and protection (RAID 1) Optimized Josefformance and data protection (RAID 1)	Protection Protection Capacity	Isk Properties tatus: Normal pre SAR SSD station: Controller 0, Port 0 station: Controller 0, Port 0 station: Topic Internal Activate LED spage: Available tre 223.57.05 ptem dist: Wis gebanded link: rate: 6 Gb/s Details
Your storage system is configured for data protection Click any device or volume to display its properties.				. To begin the process, click 'Create Volume'.
		Next Cancel	More help on this page	

4. Under Select Controller, select *Intel(R)* C600+/C220+ series chipset sSATA RAID Controller. Under Select Volume Type, select *Real-time data protection (RAID 1)* and click Next. The program displays Step 2. Configure:

😥 Intel ® Virtual RAID on CPU				- 🗆 ×
Home Preferences	🚱 Create Volume		×	(intel)
Current Status Your system is functioning n	1. Select	Configure Volume	Proposed Configuration	
Secon Create Volume_ Devices Intel(R) C600 + /C220 + series chipset sSATA * Sata SSD (224 GB) (System) * Sata SSD (224 GB) (System) * Intel(R) C600 + /C220 + series chipset SATA R	2. Configure 3. Confirm	Name: Volume, 5000 Select the array disks (minimum selection required): ① SATA SSD on Controller 0, Port 0 (224 68) (System) SATA SSD on Controller 0, Port 1 (224 68) Do you want to keep data from one of the selected disks? No:	New Array	isk Properties 🕐 Jatus Hormal Jocation: Controller O Port O Scation: Controller O Port O Scation Spre: Internal <u>Activate LED</u> Jage: Available et 22.3.57 GB ystem disk: Was egotiated link rate: 6 Gb/s Details
Information Vour storage system is configured for data protection Click any device or volume to display its properties.		Eack Frence Cancel	More help on this page	. To begin the process, click: Create Volume?



- 5. Configure these controls in the Configure Volumes panel (center):
- Select the array disks...: Select both drives
- Do you want to keep data ...: Select Yes: SATA SSD on Controller 0, Port 0
- Advanced Tab: Check Enable volume write-back cache.
- 6. Click Next to continue to display the Step 3 Confirm dialog:

Home Preferences	😢 Create Volume	1	×	<u>(in</u>
Current Status Your system is functioning n Rescan Create Volume Perices Perices Perices Perices Per	1. Select 2. Configure 3. Confirm	Confirm Volume Creation Review the selected configuration. [●] waXNNIN: Completing this sation will permanently delete existing data on the following disks: Back up data before continuing. [●] STA SSD on Controller 0, Port 1 (224 GB) [●] This process could take a while depending on the number and size of the disks. You can continue using other applications during this time. [●] Proceed with deleting data	Proposed Configuration New Array	Isk Properties atus: Normal pes SATA 350 scation: Controller 60: Port 0 scation type: Internal <u>Activate LDD</u> sage: Available ter 22337 08 spetanted link: rate: 6 Gb/s Details To begin the process, click: 'Create Volume'.
		Back Create Volume Cancel	More help on this page	

7. Check the Proceed with Deleting Data control, and click Create Volume to start the process. You can view the data migration progress in the Information panel at the bottom of the window.

CAUTION: Do not use the server or make any changes while the program builds the new mirrored, RAID 1 drive. Wait until the process completes. This process may run for about half an hour.

When the program has created the RAID1 drive set, the Volume Creation Complete dialog displays, as data migration continues:

🔞 Intel® Virtual RAID on CPU		- 🗆 ×
Home Preferences		(intel)
Current Status Your system is function	ning normally.	
S Rescan	v	olume Properties 😨
Devices	Volume Greation Complete The volume was created successfully. Once this process is complete, you will need to restart your computer and utilize the avail space using Windows Disk Management*. You can continue using other applications duri this time. More help	Grating data 1% complete D 1 D 1 Soft and the second se
Vour storage system is configured for data pro volumes. To begin the process, dick 'Create Vo Click any device or volume to display its propo SATA_Array_0000 Volume_0000: Migrating data 1% complet	tection, increased performance and optimal data storage capacity. You can further optimize y lume'. e	our storage system by creating additional



Ra Intel® Virtual RAID on CPU -Home Preferences (intel) Current Status Your system is functioning normally Volume Properties 🥐 5 Create Volume Name: Volume_0000 Rename Iormal Devices ID 1 Change type The volume was created successfully .57 GB Intel(R) C600+/C220+ series chipset Once this process is complete, you will need to restart your computer and utilize the space using Windows Disk Management*. You can continue using other applications this time. olume: Yes • 5414 SSD (224 GB) volume: Ves ns during ick cache: Enabled Disable 🔮 • 🚮 SATA SSD (224 GB) d: Yes 🕐 on details Verify ОК More help Information Your storage system is configured for data protection, increased performance and optimal data storage capacity. You can further optimize your storage system by creating additional volumes. To begin the process, click 'Create Volume...'. Click any device or volume to display its properties

When migration is complete, the message briefly displays 100%:

8. Click OK to dismiss the dialog.

😥 Intel ® Virtual RAID on CPU			- 🗆 ×
Home Preferences			(intel)
Current Status Your system is functioning normally.			
Image: Create Volume_ Devices Image: SATA SSD (224 GB) SATA SSD (224 GB) SATA SSD (224 GB) Image: Market SATA SSD (224 GB)	Volumes sSATA_Array_0000	Volume Properties Name: Volume, 0000 Rename Status: Normal Type: RAD 1 <u>Change type</u> Size 22.3.57 GB System volume: Yes Bootable volume: Yes III III initialized: Yes Userification details <u>Yenfy</u> Bootawith media errors: 0 Physical sector size: 4.096 Bytes Logical sector size: 512 Bytes	Ð
Information Your storage system is configured for data protection, increased perf To begin the process, click 'Create Volume' Click any device or volume to display its properties.	ormance and optimal data storage capacity. You can further opt	imize your storage system by creating add	fitional volumes.

- 9. Note that the drive now displays in the Volumes panel (center). Select the VOLUME_0000 volume icon and verify that in the Volume Properties panel (right), Type displays *RAID* 1 and Initialized displays *Yes*:
- **10.** Close the program and reboot the server to continue.

Changing the NVIDIA GPU to Run in TCC Mode

The NVIDIA GPU on Lightspeed Live servers must run in TCC mode, as opposed to default WDDM mode: The NVIDIA GPU executing in TCC mode disables Windows graphics and is used in headless configurations, whereas WDDM mode is required for Windows graphics.

Run this script to set the GPU to TCC mode—follow these steps:

- 1. Navigate to C:\vX.X.X\Installers and open the Windows 2019 folder.
- **2.** Double-click *SetNvidiaDriverModelToTCC.bat* to run the script to set the GPU to run in TCC mode.
- **3.** Restart the server.



Configuring Your Desktop for Live Capture

Perform these tasks to set up your desktop for optimal Live Capture operation:

- Adding Vantage and Source Manager Shortcuts
- Setting Chrome as your Default Browser
- Setting your Desktop Wallpaper
- Changing your Desktop Theme
- Turning Off Drive Indexing
- Setting Windows Visual Effects
- Operating System Specific Content

Consult with your IT department for guidance.

Adding Vantage and Source Manager Shortcuts

Follow these steps to add desktop shortcuts to Source Manager and Vantage, and apply the correct icons to them.

Adding a Source Manager Shortcut

1. Open a browser window and type http://localhost:8090/ in the address bar.



- 2. Click and drag the shortcut icon (to the left of the address bar) to the desktop.
- **3.** Right-click the shortcut and select Change Icon to display the Change Icon dialog.
- **4.** Click OK to select the icon and dismiss the dialog, and then click OK to apply the icon to the shortcut and dismiss the Properties dialog.

Adding a Vantage Shortcut

1. Open a browser and type http://localhost/Vantage in the address bar.

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 Vantage
 ×
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 →
 C
 ①
 localhost/Vantage/Login.aspx?ReturnUrl=%2/vantage

- 2. Click and drag the i icon (to the left of the address bar) to the desktop.
- **3.** Right-click on the shortcut and select Change Icon to display the Change Icon dialog.
- **4.** Click Browse and navigate to the installer folder. Select the installer file at C:\VX.X\Installers\VantageX.X_Setup_X.X.XXX.X and click Open.
- **5.** Click OK to select the icon and dismiss the dialog, and then click OK to apply the icon to the shortcut and dismiss the Properties dialog.



Setting Chrome as your Default Browser

Vantage and Live Capture web apps are all designed for execution in Chrome. Follow these steps to make Chrome your default browser.

- 1. Open the Chrome browser.
- 2. Click the More menu (at the top right corner of the window) and select Settings.
- 3. In the Settings panel on the left, click Default Browser.

Setting your Desktop Wallpaper

- 1. Right-click on the desktop and select Personalize.
- 2. In the Personalization window's task panel on the left, select Background.
- **3.** Under the Preview panel Background menu, select Picture and then click Browse to select your wallpaper—the Telestream wallpaper file is a JPEG file, located in *C:\Wallpaper*.
- 4. Click Choose Picture to update the desktop with your new wallpaper.
- **5.** If the icon's font isn't visible against the background, select Solid Color from the menu: If a white font is required, select Gold. If a black font is required, select Red. Next, select the picture. The font should now display properly.

Changing your Desktop Theme

- 1. Right-click on the desktop and select Personalize.
- 2. In the Personalization window's task panel on the left, select Themes.
- 3. Select Desktop Icon Settings to display its dialog.
- 4. Check all desktop icons or choose those that you want to display on the desktop.
- 5. Select OK to update your preferences and dismiss the dialog.

Turning Off Drive Indexing

- 1. Right-click on the D:\Media drive and select Properties.
- **2.** In the General tab, uncheck Allow files on this drive to have contents indexed in addition to file properties.
- **3.** In the Confirm Attribute Changes Dialog, ensure that Apply changes to drive D:\, subfolders and files is enabled, and click OK.

Setting Windows Visual Effects

- 1. Click the desktop search icon (magnifying glass on bottom—left edge of taskbar)
- **2.** In the search field, type performance and select Adjust the appearance and performance of Windows to display the Performance Options dialog.
- **3.** In the Visual Effects tab, select Adjust for best performance and click OK.

Updating your New Live Capture System

If you are using Microsoft SQL Server Standard, you should update the SQL Express database on the new RAID 1 drive prior to migration.

Update your new Live Capture system from your database and workflows backups, plus user-created folders and files.

Refer to the Domain Management Guide and the Vantage Database Management guide for information.



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