

VERTIV™

Avocent® DSView™ 4.5 Management Software Service Pack 11 (SP11) Release Notes

VERSION 4.5.0.558, May 31st, 2019

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1. Software/Hardware Support

IMPORTANT NOTE: Before upgrading to the Avocent® DSView™ 4.5 software for any service pack at SP5 or higher, you must validate that the hardware to be used in DSView™ has full integration software support with this release. The latest status list of hardware compatible with the DSView™ software, as well as links to plug-in downloads, is available here: <https://www.vertiv.com/en-us/support/software-download/software/avocent-dsview-software-downloads/>

For more information, contact your appropriate Technical Support representative.

NOTE: Also prior to upgrading, it is highly recommended that you make a backup of the current Avocent® DSView™ database using the DSView™ Backup/Restore tool as a safeguard against potential upgrade issues.

2. Install/Update Instructions

NOTE: This document is an addendum to the Avocent® DSView™ 4.5 software user documentation and contains information regarding the patches applied to DSView™ 4.5 software since the last full release.

This patch updates Avocent® DSView™ software version 4.5 SP10 (Dec 10, 2018) or prior version to the latest version of DSView™ software (listed at the beginning of these release notes). This patch is provided as a full installation package of the DSView™ management software. In order to install Avocent® DSView™ 4.5 software on the same server as DSView™ 3 software, the DSView™ 3 software must first be backed up and uninstalled before attempting to install the new software.

NOTE: Avocent® DSView™ 4.5 software must be installed on a 64 bit server class machine. During the DSView™ software installation, the user will have the option to install PostgreSQL or point to an existing instance of the database.

First Time Installation

NOTE: For the first time installation scenario, you must be logged in as a local administrator.

To install the DSView™ 4.5 software for the first time:

1. Begin the DSView™ software installation using one of the following methods:
 - a. For installation on a supported Windows system:
Run the setup.exe and then follow the on-screen instructions.
 - b. For installation on a Linux system:
From a command line, type **./install.bin**, **sh install.bin** or **bash install.bin**, then follow the on-screen instructions.
 - i. For SUSE Linux users:
Update “/etc/hosts” file with <Short-Hostname> of the server. Then, run “hostname <Short-Hostname>” from the command line before installing the DSView™ 4.5 software.
2. On the PostgreSQL Installation screen, select *Existing database* to connect to a remote installation of PostgreSQL or a pre-installed PostgreSQL, or the software will install a DSView™ software pre-included version of the PostgreSQL database (version 9.4.4).
3. Modify the following PostgreSQL configuration files before using a remote installation of PostgreSQL or an existing PostgreSQL as a DSView™ 4.5 software database:
 - a. Under the PostgreSQL Install Folder/Data folder, append “custom_variable_classes = 'symmetric'” at the end of the postgresql.conf file. This is only required for PostgreSQL version 9.0, and not required on version 9.4.
 - b. Under the PostgreSQL Install Folder/Data folder, add “host all all <DSViewServerIP>/32 md5” to the pg_hba.conf file.
4. When the installation is complete, the DSView™ 4.5 software can be launched from the web browser by accessing the following URL: <https://<DSViewServerIP>:<DSViewPort>/dsview>

NOTE: If an older version of the Avocent® DSView™ software was uninstalled from this server, some folders from the old installation may be left behind. To prevent these folders from interfering with the current installation, delete the DSView install folder and PostgreSQL folder before proceeding with the installation. These folders are, by default, located in C:\Program Files (Windows®) or /usr/local (Linux) or /export/home on Solaris.

NOTE: Also, ensure the following information is true on a Windows® platform. These suggestions do not apply to every environment, but failed DSView™ software installations have been resolved so far using these recommended steps.

- The Avocent® DSView™ software and PostgreSQL folders are exempt from all antivirus software scanning
- Secondary Login Services are enabled and started
- Postgres users (or user group) have permissions to cmd.exe
- You've right-clicked in the cmd.exe shortcut (Start menu) and changed the log in to %windir%

Upgrading to the New Patch

NOTE: Since this patch is provided as a full installation package, you cannot manually remove this patch. You must be logged in as a local administrator, and the patch needs to be applied to each Avocent® DSView™ 4.5 server (hub and spoke).

To upgrade to this patch release:

1. Perform a replication on all spokes in the current system.
2. Back up the DSView™ 4.5 server.
3. Begin the DSView™ 4.5 software installation using one of the following methods:
 - a. For installation on a supported Windows system:
Run the setup.exe and then follow the on-screen instructions.
 - b. For installation on a Linux system:
From a command line, type **./install.bin, sh install.bin or bash install.bin**, then follow the on-screen instructions.
 - i. For SUSE Linux users:
Update “/etc/hosts” file with <Short-Hostname> of the server. Then, run “hostname <Short-Hostname>” from the command line before installing DSView™ 4.5 software.

3. Language Support Information

The languages supported by this version of DSView™ software are English, Simplified Chinese and Japanese.

4. Client Browser Support Information

NOTE: Unless noted otherwise, both 32 bit and 64 bit browsers are supported.

- Microsoft Internet Explorer 11
- Mozilla Firefox version 45.0 ESR
- Google Chrome version 53
- Microsoft Edge

5. Viewer Support and Version Information

The following table lists browser/viewer combinations successfully tested with a representative selection of client operating systems.

Tested Browser and Viewer Combinations

CLIENT SYSTEMS	JAVA/SERIAL VIEWER	ACTIVE X SERIAL VIEWER	HTML5 SERIAL VIEWER	LEGACY JAVA KVM VIEWER	LEGACY ACTIVE X KVM VIEWER	JAVA KVM VIEWER	ACTIVE X KVM VIEWER	HTML5 IDRAC VIEWER**	HTML5 KVM VIEWER
IE11 32-bit	YES	YES	IE11 ONLY	YES	YES	YES	YES	IE11 ONLY	IE11 ONLY
IE11 64-bit *	YES	YES	IE11 ONLY	YES	YES	YES	YES	IE11 ONLY	IE11 ONLY
Chrome 53 32-bit	YES	NO	YES	YES	NO	YES	NO	YES	YES
Chrome 53 64-bit	YES	NO	YES	YES	NO	YES	NO	YES	YES
Firefox 45 ESR 32-bit For Windows Client	YES	NO	YES	YES	NO	YES	NO	YES	YES

CLIENT SYSTEMS	JAVA/SERIAL VIEWER	ACTIVE X SERIAL VIEWER	HTML5 SERIAL VIEWER	LEGACY JAVA KVM VIEWER	LEGACY ACTIVE X KVM VIEWER	JAVA KVM VIEWER	ACTIVE X KVM VIEWER	HTML5 IDRAC VIEWER**	HTML5 KVM VIEWER
Firefox 45 ESR 32-bit For Linux Client	YES	NO	YES	YES	NO	YES	NO	YES	YES
Firefox 45 ESR 64-bit For Linux Client	YES	NO	YES	YES	NO	YES	NO	YES	YES
Firefox 45 ESR 32-bit For Mac OS Client	YES	NO	YES	YES	NO	YES	NO	YES	YES
Microsoft Edge	YES	NO	YES	YES	NO	YES	NO	YES	YES

NOTE: * For the IE11 64 bit version, IE Tabs still run as 32 bit. **Suitable for iDRAC 7 and 8 running firmware version 2.30.30.30 and higher.

Service Pack 11 (SP11) Viewer Versions

VIEWER	JAR/EXE	VERSION	OS PLATFORM
Video Viewer	AvctVideoViewer.exe	3.5.2.3	Win32
Virtual Media	AvctVirtualMedia.exe	3.5.1.7	Win32
VNC Viewer	avctVncViewer.exe	2.1.1.1	Win32
RDP	avctRdpViewer.exe	1.3.0.5	Win32
3rd Party/Serial	AvctSerialViewer.exe	3.7.0	Win32
Putty	AvctPuttyTel.exe	0.64	Win32
Java Video Viewer	avctvideoviewer.jar	4.16.2.7	Linux/Solaris/Mac
Java Serial Viewer	avctsshtelnet.jar	4.6.1.18	Linux/Solaris/Mac
Java Virtual Media	avctVM.jar	1.8.0.91	Linux/Solaris/Mac
Java VNC Viewer	avctVncViewer.jar	4.6.2.12	Linux/Solaris/Mac

VIEWER	JAR/EXE	VERSION	OS PLATFORM
Java 3rd Party/Serial	serialconsoleviewer.jar	4.6.1.16	Linux/Solaris/Mac
New ActiveX KVM Viewer 32-bit	AvctInstall32.cab	5.04.04.394	Win32
New ActiveX KVM Viewer 64-bit	AvctInstall64.cab	5.04.04.394	Win64
New Java KVM Viewer	avctVideo.jar	5.04.04.463	Win/Linux/Mac
HTML5 KVM Viewer	N/A	1.10.1	Win/Linux/Mac
HTML5 Serial/SSH Viewer	N/A	1.0.0	Win/Linux/Mac

6. Server Operation System Support Information

- Microsoft Windows Server 2008 (x64), 2008 R2 (x64), 2012 (x64), 2012 R2 (x64), 2016 (x64)
- SuSe Linux Enterprise Server 11.4(x64), OpenSuse 12.3 (x64)
- RedHat Enterprise Server 7.3 (x64), 7.5 (x64)
- CentOS 7.4, CentOS 7.5

7. Change Log Information (Fixed Issues and New Features)

ISSUE / FER	DESCRIPTION
487234-874929989	After setting HTML5 as default KVM viewer, IE crashes and closes automatically when launching an ActiveX session.
487234-871437394	Memory leak issues when using SSH Pass-through
CAS-02930-J1C9S7	DSView will not log the login with SSH Key User Event.
CAS-03047-SOXJ6	SSH User can login if the account is disable or expired.
CAS-04022-P4L7L4	Garbled text is under Assign new appliance/Assign new target/Assign new Virtualization/ Assign New Blade Chassis in Japanese.

ISSUE / FER	DESCRIPTION
CAS-04021-Z9X4M7	No response if click "Close" in Merge target device wiz.
CAS-04020-P2R7F4	If the group name is in Japanese, garbled text occur in unit effective rights setting.
CAS-04019-W8B5B5	If the group name is in Japanese, garbled text occur in unit>Group> Effective rights > Assign new user group.
FER	HTML5 Proxy Port usage improvement
FER	New Unit Group Web Service API to manage unit groups and enhanced Unit Web Service API to add/rename/resync/remove appliances and merge/unmerge target connections.
FER	HTML5 KVM Viewer – F10 Full Screen Key change
FER	HTML5 Viewer – Remove sensitive information from URL and console log
FER	HTML5 KVM Viewer -- Single Cursor Support
FER	Allow Admin to Set Default Viewer for users
FER	New GUI API for launch SP sessions
FER	VMWare Viewer (VMRC) support for ESX Server and VC**

NOTE: * Please refer to the SDK document (Place holder for SDK URL) for details.

** It will be necessary to download the VMware VMRC 10.0.4 or above in order to launch the VMware Viewer

8. Known Issues

This release contains the following known issues:

- The Java Viewers (Serial, Video and VNC) may not launch when using Java Runtime Environment (JRE) versions less than 1.8.0.72.
- Legacy viewers support 32 bit browsers only.
- The RDP Viewer and Putty will not work if the client machine does not have the Microsoft Visual C++ 2010 SP1 Redistributable Package (x86) installed.
- For an Avocent® Universal Management Gateway appliance target, the HTML 5 Proxy will not work if *Use dedicated WSS port* is enabled on the appliance side.
- It will be necessary to download the VMware VMRC 10.0.4 or above in order to launch the VMware Viewer.

- The Avocent® DSView™ software dial-out from Linux requires root access.
- There is a known issue when attempting to upgrade from Avocent® DSView™ software version 4.5.0.190 or older versions to DSView™ software version 4.5.0.247 or newer versions on CentOS 7 and RedHat 7. The work-around for this issue is to perform a database backup of the current DSView™ version, do a fresh install of the newer DSView™ software version and restore the database using the backup. For a spoke, delete the spoke from the hub, do a fresh install on the spoke server and re-register to the hub.
- An open Java-based viewer session will not automatically be closed by the Avocent® DSView™ software if the user logs out of the software. This is a side effect of removing Java support from the browsers.
- Do not use hostnames (DNS defined names) for addressing appliances. Use the IP address only.
- The Avocent® DSView™ software does not support NTLM SSO for Windows Server 2012 and Windows Server 2016.
- JCE Extension Library needs to be downloaded to support Kerberos SSO on Windows 2016.
- SUSE11 installs requires at least 8GB memory.
- Digi Rapidport/4 USB Modem is not compatible with Windows Server 2016.
- The Avocent® DSView™ software no longer supports Kerberos SSO in a Windows Server 2008 OS.

9. Devices Supported

Avocent® Devices

- Avocent® ACS 6000 advanced console servers
- Avocent® ACS 5000 advanced console servers
- Avocent® ACS 8000/800 advanced console systems
- Avocent® AutoView 2108/ 2216 and 3108/3216 switches
- Avocent® MergePoint Unity™ 1016, MergePoint Unity™ 1016DAC, MergePoint Unity™ 104E, MergePoint Unity™ 108E, MergePoint Unity™ 108EDAC, MergePoint Unity™ 2016, MergePoint Unity™ 2016DAC, MergePoint Unity™ 2032, MergePoint Unity™ 2032DAC, MergePoint Unity™ 4032, MergePoint Unity™ 4032DAC, MergePoint Unity™ 8032 and MergePoint Unity™ 8032DAC KVM over IP and serial console switches
- Avocent® Power Management Distribution Unit (PM PDU) PM 1000/2000/3000 PDUs
- Avocent® SPC power control devices
- Avocent® Universal Management Gateway 2000, 4000 and 6000 appliances

Vertiv™ Devices

- Vertiv™ Rack PDUs(MPH2™/MPX™ PDUs with RPC-2000 cards)
- Vertiv™ Geist Upgradeable 2 (GU2) and R-Series (RCM, RCU) rPDUs running firmware 5.3.0 or later.

Liebert® Devices

- Liebert® GXT4™ UPS devices
- Liebert® MPH™, MPX™ PDUs (with RPC-1000 cards)

Other Devices

- APC AP78xx, AP79xx, AP8881, AP8661 and AP8941 PDUs
- Blade, Dell DRAC MC, Dell M1000e, FSC BX600, Generic Blade Chassis, HP BladeSystem, HP BladeSystem c-Class, HP BladeSystem p-Class, IBM BladeCenter, IBM BladeCenter H, IBM BladeCenter HT, IBM BladeCenter T
- Citrix XenServer 6.5 Standard
- Dell 2161DS-2, Dell 2321DS, Dell 4161DS and Dell 8321DS appliances
- Dell Remote Console Switch (1082DS/2162DS/4322DS) product family
- FCL Plug-in to support FW Digital KVM Switch product line FW-D1008NP, FW-D2016NP, FW-D2032NP, FW-D4016NP, FW-D8032NP
- Fujitsu KVM s4 Appliance product family KVM s4-0812, KVM s4-1622, KVM s4-3242
- HP Console Switch G2 product family Server Console Switch G2 0x2x16, Server Console Switch G2 0x2x32, IP Console Switch G2 1x1Ex8, IP Console Switch G2 2x1Ex16, IP Console Switch G2 4x1Ex32
- HP G3 KVM Console Switch 0x1x8 G3 KVM Console Switch, 0x2x16 G3 KVM Console Switch
- IBM Console Switch GCM16/32 product family
- KVM Switch product family: 1x1x8 switch, 2x1x16 switch, 8x1x32 switch
- Lenovo GCM 16/32 console switch product family
- Lenovo LCM 8/16 switch product family
- Microsoft Hyper-V2 on Windows 2008 R2
- Microsoft Hyper- V3 on Windows 2012 and 2012 R2
- MPI Intelligent PDU family
- Server Technologies Sentry Switched CDU CW-8H1*, CW-8H2*, CW-16V1*, CW-16V2*, CW-24V2*, CW-24V3*, CW-32VD1*, CW-32VD2*, CW-48V5Z454-A1P, CW-24VY-L30M, CWG-24V4Z423A9/QR, CW-8H1A413, CW-24V4K425A9, STV-4501C, STV-6502M and STV-4501C (supported models may change; contact Avocent Technical Support for current information)

NOTE: Models with an asterisk (*) must be attached to a managed appliance such as the Avocent® MergePoint Unity™ KVM over IP and serial console switch.

- VMware 5.5, VMware 5.5u2, VMware 6.0, VMware 6.5 and VMware 6.7

NOTE: It will be necessary to download the VMware VMRC 10.0.4 or above in order to launch the VMware Viewer

10. Plug-in Information and Versions

NOTE: All plug-ins listed below are shipped with the DSView™ software. Pre-Installed plug-ins are automatically loaded into the DSView™ software and are ready for use. Optional plug-ins must be loaded into the DSView™ software to be used. It is recommended that only plug-ins that will be used be loaded.

NOTE: The minimum recommended plug-in versions to be used with this software version are listed in the table that follows.

- Please see the Avocent® Universal Management Gateway appliance plug-in release notes for features affecting this plug-in in this release of Avocent® DSView™ software. The release notes can be found at www.vertiv.com.
- Please use the recommended Virtualization plug-in version with the Avocent® DSView™ software for support for vMotion and Microsoft VMM. This version of the software supports SCVMM 2008 installed on Windows 2008 R2 and SCVMM 2012 installed on Windows 2012 R2.

PLUG-IN	VERSION	PRE-INSTALLED/OPTIONAL
Avocent® ACS 8000 console system	2.4.0.1	Pre-installed
Avocent® ACS 6000 console server	3.7.0.5	Pre-installed
Avocent® ACS 5000 console server	3.3.7	Pre-installed
Avocent® MergePoint Unity™ KVM over IP and serial console switch	2.2.0.25243	Pre-installed
Avocent® Power Management Distribution Unit (PM PDU)	2.0.1.8	Pre-installed
Avocent® Universal Management Gateway appliance	4.2.2.21	Pre-installed
Blade Chassis Support	1.2.0.55	Pre-installed
Vertiv™ RPC2 and Rack PDU Support	1.1.2.4	Pre-installed
Infrastructure	2.0.0.20	Pre-installed
Liebert® Rack PDU Support	1.1.0.31	Pre-installed
Virtualization	3.0.0.673	Pre-installed
Geist rPDU	1.0.0.4	<i>Optional</i>
APC MasterSwitch RPDU Support	4.0.0.12	<i>Optional</i>
Avocent® AutoView™ Switch	1.30.1.4445	<i>Optional</i>
Avocent® AutoView™ Switch for Dell	1.30.1.4445	<i>Optional</i>
Dell® Remote Console Switch (1082DS/2162DS/4322DS)	1.32.0.24542	<i>Optional</i>
Fujitsu KVM s4 Appliance	1.32.0.24542	<i>Optional</i>
HP G2 Console Switch	2.2.0.25243	<i>Optional</i>
HP G3 KVM Console Switch	1.30.0.4384	<i>Optional</i>

PLUG-IN	VERSION	PRE-INSTALLED/OPTIONAL
IBM® Console Switch GCM16/32	2.2.0.25243	<i>Optional</i>
Lenovo® GCM 16/32 Console Switch	2.2.0.25243	<i>Optional</i>
Lenovo® Local Console Manager (LCM) Switch	1.30.0.4384	<i>Optional</i>
Liebert® GXT4™ UPS device	1.0.0.444	<i>Optional</i>
MPI PDU	1.0.0.22	<i>Optional</i>
Server Tech Sentry 3 PDU	1.0.0.42	<i>Optional</i>
Server Tech Sentry 4 PDU	1.0.0.9	<i>Optional</i>

11. Using a Virtual Machine

Avocent® DSView™ management software will run on a Virtual Machine (VM). The following specifications are recommended as baseline resources for installing the DSView™ software. Depending on the size of the DSView™ software database, these specifications may need to be increased to improve software performance.

NOTE: VMware administrators should monitor the performance of the VM to ensure that the appropriate resources are provided to support the software system.

Recommended VM Requirements for running the Avocent® DSView™ Software

NOTE: It is recommended that vMotion and Ballooning be disabled for this VM scenario.

The minimum required specifications for setting up a VM to run the DSView™ software are as follows:

- 6 GB RAM (Reserved)
- 1-2 vCPUs (1 core)
- 40+ GB HDD (<7000 target devices)/ 80+ GB HDD (>7000 target devices)
- 1 NIC dedicated 100% (VMXNET3- 1 GB or 10 GB suggested)

The following best practices are recommended for improved performance on VMs in a VMware environment:

- Verify that the Avocent® DSView™ software VMs sharing a vSwitch connected via an NIC are not connected to an oversubscribed network switch.
- Verify that the Avocent® DSView™ software VMs are not connected to an oversubscribed storage LUN.
- Verify that the Avocent® DSView™ software VMs are not placed on oversubscribed server hardware.
- Ensure there are no issues with switches or ports that are oversubscribed due to too many VMs sharing a single port or VLAN.
- Ensure there is available spare capacity in datastores and ensure you are not queuing during peak business hours.
NOTE: Queuing is when there is not enough IO being processed by your storage unit and reads/writes are backing up (or queuing).
- Monitor all resource thresholds to ensure more hardware resources are added before your warning thresholds are breached. Allowing an ESXi host to be oversubscribed puts its VMs at a risk of poor performance.

12. Additional Comments

- Latest versions of the Mozilla Firefox browser on a Windows client no longer support ActiveX, all ActiveX viewers are now eliminated from use on this browser.
- Due to limited resources for HTML5 Viewers with Microsoft Internet Explorer browsers, the All Targets Live option in Scan mode is disabled when using Microsoft Internet Explorer browsers.