# Avocent® DSView™ Management Software (R4.5)

# Secure, Remote Infrastructure Management Control

# **Features**

- Unified, secure "hands-on" control of remote infrastructure
- Location independence activity:
  - Triage, diagnostics and root cause analysis
- Disaster recovery
- SLA Management
- Application usage
- Control blade and virtual servers and service processors
- · Native host KVM web interface
- Telnet/Putty serial interfaces
- Session log, report and archive
- Data Center Zone definitions
- Schedule and on-demand firmware management
- Logically bridges virtual media to remote infrastructure
- Shares the Avocent® Rack Power Manager data center model
- Hub-and-spoke architecture
- Out of box authentication with LDAP, active directory, NT domain, TACACS+, RADIUS or RSA SecureID;
- Web secure 2048 SSL certificate
- Two factor authentication (RADIUS and RSA)
- PCI Compliance

# **Benefits**

- Enables IT and data center professionals to flexibly manage operations from any location
- Single point of data center infrastructure management
- Activity logging for full operational accountability
- Zone granularity access control
- Flexibly restore and reimage devices from virtual media
- Instantly add power manager (Avocent Rack Power Manager) exploiting the DSView™ software model
- Architected business continuity
- Secured via site authentication and web certificates
- Consistent appliance firmware management

#### **Business Challenges**

The collaborative mission of IT and data center operations is to support business when and where needed. Flexibly servicing their mission can lead IT and data center operations to unique overhead and productivity challenges, including:

- Geo-dispersed data centers or branch infrastructure, requiring "hands-on" professionals.
- Heterogeneously equipped or merger-acquired data centers inconsistently managed via a
  patch-work of discrete and/or siloed vendor products.
- Lights out data center requiring "hands-on" management within physical isolation.

#### **Solution Overview**

Avocent DSView™ Management Software helps the professionals of your IT and data center operations teams overcome these challenges by providing secure, web-browser enabled sessions to remotely located data center infrastructure controls. Through usage of innovative Avocent® appliances, off-network controls are network enabled for secured web-browser sessions via Avocent DSView™ software:

- Keyboard/Video/Mouse (KVM) controls of a standard server
- Serial port (Telnet, PuTTY, MIB) controls of a server, network, SAN or rack PDU
- Proprietary connection to a service processor
- MIB-based controls to infrastructure like Intelligent Rack PDU

As a stand-alone solution, the Avocent DSView™ software delivers secured web-browser enabled sessions of on-network infrastructure controls like rack PDUs.

As an IT integrated solution, the Avocent DSView  $^{TM}$  software delivers secured web-browser enabled sessions to virtual machines (VMware, MS Hyper V and Citrix).

As an industry-proven secure, remote infrastructure management control solution, the Avocent DSView™ software has evolved a valued collection of production features, such as:

- Secured, remote management control of data center infrastructure (physical servers, blades, virtual instances, physical SANs, virtual media and storage, network gear, rack PDUs) via KVM, serial and service processor for:
  - "Hands-on" management and operational state monitoring (device state, power consumption, temperature) in real time and as a polled device threshold event
  - Control at the physical firmware level for bare metal OS provisioning
  - Control at the physical host OS level for application sessions
  - Control at the logical VM instance level for virtualized OS and application sessions
- Standard based encryption HTTPS/TLS /AES/SSH; out-of-box integration to enterprise authentication and authorization; session and event logging/reporting.
- Threshold based event notification by site defined requires on device parameters.
- Logical data access bridges between virtual media data sources (software installation, off-site data, etc.) and remotely managed data center infrastructure.
- Hub-and-spoke architecture solution architecture for disaster resistance, fail-over management and scalable solution deployment across complex data center topography.
- Supports analog and cellular modem based out-of-band (OOB) access to the data center infrastructure in the event of primary network failure.

#### New with the Avocent DSView™ software R4.5

- Shared data center model with Avocent® Rack Power Manager R1.5
- Updated certification (Java 7, SMNP V3) and server OS (Windows 2012, RHEL 6.5)
- Updated VM Manager integration (VMware 6, MS Hypervisor 2012, XenServer 6.5)
- Updated browser support (Internet Explorer 11, Firefox ESR 38.4, Chrome 47)
- Improved high (many to many) volume rights management
- Hardened product code-line against evolving external threats

Avocent® DSView software is a unified solution that enables IT and data center professionals with secured "hands-on" management control of remote Infrastructure.



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# **Specifications**

#### Avocent DSView<sup>™</sup> software (hub/spoke) minimum requirements

Operating System:

- Microsoft Windows Server 2008 (x64), 2012 (x64)
- SuSe Linux Enterprise Server 11(x64), OpenSuse 12.1 (x64)
- RedHat Enterprise Server 6.4 (x64), 6.5 (x64), 7 (3.10.0-123.el7.x86\_64), CentOS 6.5 (x64), CentOS 7 (x64)
- Sun Solaris SPARC 10

#### **Hardware Requirements:**

#### Large (> 7000 Target Devices)

Windows/Linux Dedicated Physical or Virtual Server (no resource sharing)

- One more 2+ Ghz CPU
- 6+ GB RAM
- 40+ GB HDD

Sun Server

- 1 Ghz UltraSparc III
- 4+ GB RAM
- 80+ GB HDD

1 gbps/10 gbps LAN

Local or remote database

#### Medium (1000-7000 Target Devices)

Windows/Linux Dedicated Physical or Virtual Server (no resource sharing)

- 2+ Ghz Multi-Core CPU
- 6+ GB RAM
- 40+ GB HDD

Sun Server

- 1 Ghz UltraSparc III
- 4+ GB RAM
- 40+ GB HDD

10 mbps/100 mbps/1gbps (recommended) LAN

Local or remote database

#### Small (<1000 Target Devices)

Windows/Linux Dedicated Physical or Virtual Server or (ESX/Hyper-V)

Virtual Machine (no resource sharing)

- Dedicated processing priority 2+ Ghz
- Dedicated 4 GB RAM
- 40 GB non-expanding HDD

Sun Server

- 1 Ghz UltraSparc III
- 4+ GB RAM
- 40+ GB HDD

10 mbps/100 mbps LAN

Local database

#### **Browser support**

- Microsoft Internet Explorer 9, 10 or 11
- Mozilla Firefox® 38.4 ESR (32 bit)
- Google Chrome 47

#### **Virtual Machine Support**

- VMware ESX server version up to version 6.0
- Microsoft Hyper-V3
- Xen Express, Standard, Enterprise or Platinum versions up to 6.5 (Enterprise and Platinum versions support resource pool, required for XenMotion)

#### **Blades supported**

- IBM blade chassis: BladeCenter, BladeCenter T/ H / HT
- IBM blade chassis: PowerEdge 1855, PowerEdge 1955
- Dell DRAC MC. Dell M1000e
- HP blade chassis: BladeSystem c-Class, BladeSystem p-Class
- FTS BX600
- Generic blade chassis

## **KVM** over IP appliances

- Avocent MergePoint Unity™ KVM over IP and serial console switch
- Avocent® Universal Management Gateway 2000/4000/6000 appliance
- Avocent® DS1800 digital switches
- Avocent DSR™ KVM over IP switch: 800, 1010, 1020, \* 1021, \* 1022, \* 1024, \* 1030,\* 1031,\* 1161, 2010, 2020,\* 2030,\* 2035,\* 2161, 4010, 4020,\* 4030,\* 4160, 8020,\* 8030,\* 8035\*
- Cyclades™ KVM/net KVM over IP switch
- Cyclades KVM/netPlus KVM over IP switch
- \* These models contain a modem port for use with the Avocent DSR switch remote operations software

#### Third-party KVM over IP appliances

- Dell 1082DS, 2161DS2, 2162DS, 4161DS 4322DS, 8321DS, DAV2108, DAV2116
- HP G2 Switches: AF620A, AF621A and AF622A
- IBM GCM2, GCM4, GCM16, GCM32, LCM16, LCM8
- Blackbox: KV2116A and KV4116A
- Fujitsu: s2-0411, s3-1641, s4-0812, 1622, and 3242
- Fujitsu Components Limited: FW-D1008NP, FW-D2016NP, FW-D4016NP, FW-D2032NP, FW-S1008SR, FW-S1016SR, FW-S1032SR, FW-S1048SR

#### Console management appliances

- Avocent® ACS advanced console servers ACS 5000 and ACS 6000 appliances
- Avocent® Universal Management Gateway 2000/4000/6000 appliances
- All Avocent CCM console management appliances
- CPS810 and 1610 serial over IP network appliances

#### Power devices

- Power devices are supported on Avocent ACS, Avocent CPS, Avocent CCM appliances and on all Avocent DSR switch and Avocent MergePoint Unity switch that contain one or more SPC ports
- Avocent SPC power control devices
- Avocent PM PDUs: PM 8, PM 10, PM 20, PM 1000, PM 2000 and PM 3000
- Emerson Rack PDUs MPH, MPH2, MPX
- Emerson MPI Intelligent PDU family
- \*Avocent CPS and Avocent CCM appliances do not support \*\* Rack PDUs only supported through Ethernet

# Third-party power devices

- APC AP71xx, 78xx and 79xx series and AP8661, AP8941 PDUs\*
- Server Technologies Sentry 3 & 4 models CW-48V5Z454-A1P, CW-24VY-L30M, CWG-24V4Z423A9/QR, CW-8H1A413, CW-24V4K425A9, STV-6502M and STV-
- Sentry Switched CDU CW-8H1, CW-8H2, CW-16V1,
  - CW-16V2, CW-24V2, CW-24V3, CW-32VD1 and CW-32VD2 (supported models may change; contact Avocent Technical Support for current information)
- \* PDUs only supported through Ethernet
- $^{**}$ Server Technology Sentry Switched devices supported via serial connections on Avocent ACS, DSR switch and MergePoint Unity switch

#### Service processor managers

- Avocent® Universal Management Gateway 2000/4000/6000 appliances
- Generic Appliances

Data center devices such as UPS, HVAC and environmental monitoring devices may be managed with the Avocent DSView $^{\text{TM}}$  management software by launching a standard Web browser to the device URL or opening a Telnet session.

### Supported modems

The following modems and serial PCI cards are supported by the Avocent DSView™ software, provided the modems are supported on the Avocent DSView™ software server operating system.

- MultiTech MT9234SMI
- Digi Rapidport USB Modem
- US robotics 5686

Note: The modems listed are not supported on Sun Solaris SPARC operating systems.

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