



Visual Data Center collects and analyzes real time information from Facility and IT devices in your data centers, MDF, IDF, remote closet or other sites to aggregate and consolidate power, energy, cost, environmental and other key data sets to a common management platform. Interactive reporting and compelling 3D visualization features empower users to proactively manage their space, power and cooling resources by tracking capacity, utilization, trending, alarms and more.

Features	Description
Installation Options	
Physical or Virtual Server Deployments	■ Traditional file install process or use .ova VM images.
Hosted Server Options	■ Hosted SaaS option available using cloud based servers.
Remote Data Gateway	■ MSP architecture to collect data from multiple end users with small numbers of devices.
Disaster Recovery Implementation Options	■ Set up redundancy for disaster recovery with servers in different locations.
Integrated Backup Processes	■ Native backup process eases the recovery proecedures.
Automated Database and Log Pruning	■ Data and log retention is automated and old data is managed with included processes.
Client, Web & Mobile Access Options	■ Multiuple access options for client devices including iOS and Android interfaces.
REST API Integration	■ Integrated REST API allows data to be shared to/from third party applications.

Features		Description
Device Management		
25,000+ Models Available for Device Creation	■	Large and growing model library for Facility, IT and related devices are available for easy creation and management of your assets.
Bulk Import Device Creation, Configuration and Placement	■	CSV/Excel management of devices and data configurations to ease implementation effort.
Auto Discovery Tools	■	Browse network for compatible devices to automatically create and monitor them in the application.
Model & Device Clone Capability	■	Create clones of existing models or devices to simplify administration of custom device configurations.
Integration with ITSM Applications	■	Integrate with ITSM solutions to streamline device creation, attribute changes and trigger ITSM incidents on alarms.
Asset Management		
Capacity Planner Tool	■	Model and What-If analysis for sites based on actual capacity, utilization and trending information.
Mobile Audit Manager	■	Define and perform audit of rack assets using tablets and phones running iOS or Android.
Rack Building	■	Graphically manage rackmount assets with drag and drop asset placement in supported rack types.
Service Schedules	■	Define scheduled service and maintenance activity on all devices.
Warranty Schedules	■	Build a warranty calendar on all devices for parts and labor warranty expirations.
User Defined Attributes List	■	Unlimited creation of custom attributes to be used for devices, reports, etc.
Connections		
Power, Network & Fiber Connectivity	■	Connect power, network and fiber ports on devices to build device hierarchies and dependency views.
200+ Port Types Available for Devices	■	Wide array of supported port types to allow for detailed representation of your device connections.
Root Cause Analysis	■	Browse upstream connection trees to gain insight into possible root cause of device issues.
Impact Analysis for Devices, Owners & Applications	■	Browse downstream connection trees to view device, owner and applications dependent on specific devices and connections.
Monitoring & Control		
SNMP v1, v2c & v3	■	Supports data collection for all three standard versions of the SNMP protocol.
BACnet IP	■	Supports data collection for devices using the BACnet IP protocol.
Modbus TCP	■	Supports data collection for devices using the Modbus TCP protocol.
IPMI	■	Supports IPMI data collection for compliant IT devices.
WMI/Telnet/SSH for CMDB Data	■	Collects CMDB data from end devices using various connection and data collection protocols.
VMWare Integration	■	Allows users to view and manage the host and guest information in the VMWare infrastructure.
User Control of Device Operations	■	User driven controls of devices for on, off, restart, etc. Options are dependent on device types and device support.
Scheduled Control of Device Operations	■	Define regular schedules for device control activity such as changing thermostat setpoints, lighting, etc.

Features		Description
Alarms & Notifications		
Warning, Critical, Normal & Unreachable Alarm Status	■	Define alarm thresholds and track alarm status for all monitored data points for all devices.
SMTP & SMS Notification Delivery	■	Configure notification rules to send SMTP and/or SMS notifications to users.
Notification Escalation Rules	■	Define multiple levels of notification escalation rules if alarm conditions persist without resolution.
Time Based Notification Routing	■	Route notifications to different recipients based on time of day for alarm activity.
Visual & Audible Alerting	■	Leverage graphical and audio alarm notifications to enable quick response to alarm conditions.
Dashboards & Trend Charts		
Real Time Thermal Images	■	Thermal cloud images for floorplans based on real time temperature and humidity data.
User Defined Dashboard Views	■	Dashboard studio empowers users to create their own views of data using a variety of gauges.
User Defined Multi-Line Trend Views	■	Easily assemble multi-device or multi-data trend chart views with the trend chart studio.
Predictive Trend Views for Future State Analysis	■	Extrapolate actual collected data into the future for predictive analysis.
Microsoft Power BI Integration	■	Use Visual Data Analytics to graphically navigate data and assemble reports leveraging Microsoft Power BI tools.
Reporting		
50+ Out of Box Reports	■	Standard list of common reports for assets, efficiency, capacity, etc which can be filtered based on desired output.
User Defined Reports	■	Report creator tool which allows for custom report creation of any supported application data.
Scheduled Report Delivery	■	Define scheduled execution and delivery of PDF or Excel reports to recipient SMTP addresses.
Report Access Control	■	Manage rights to standard or custom reports for all users.
Security		
Active Directory Integration	■	Easily integrate the user management with multi-domain Active Directory implementations.
Multi-tenant Rights Management	■	Limit rights to features, devices, locations, etc to specific user groups.
Streaming IP Camera Video	■	View IP Camera images using the integrated IP camera FTP feature.
Physical Door Access Integrations	■	View and control physical access devices.
Customer Implementation Profiles		
Corporate Data Center	■	Single site or distributed enterprise data center site management.
Colocation Provider	■	Single instance with rights access to allow users to manage only their devices, data and alarms.
Managed Service Provider	■	Single instance designed to support hundreds of remote, end users with private networks.
Campus Implementation	■	Healthcare or University management of data centers, MDF/IDF and remote closets.

Features		Description
Workflow Management		
Project Approval Cycles	■	Create asset management projects with formal approval and rejection cycles.
Install, Move, Decommission Tasks	■	Supports the key install, move and decommission tasks including rack selection wizards.
Port Connect & Disconnect Tasks	■	Manage port connect and disconnect activity with formalized project tasks.
Work Orders Assigned to Technicians	■	Deliver work orders to technicians who can mark as completed within application.
Resource Reservations	■	Graphical visualization of Reserved Floorspace, Rack U Space, Network Power Ports and Power for pending projects.
Support		
24X7 Online Customer Portal	■	Account access to support portal for managing active tickets and tracking ticket history.
24X7 Phone Support	■	Phone support to speak directly with engineers to help resolve issues.
Knowledgebase	■	Access tips, tricks and answers to common questions using the Knowledgebase.
Technical Library of Product Documents	■	Installation guides, user guides, solution videos, whitepapers and more to help support customer use of the product.
Training Sessions	■	Basic User, Power User, Administrator and Reseller Sales topics are available training options.

Architecture Requirements

Usage Profile: 500 floormount device licenses with 5,000 monitored devices. On average, 20 monitor points per device with a 5 minute polling interval. Default retention policies for data, backups and logs.

	Visual Data Center Server	Visual Data Center Client	Mobile
OS	RHEL/CentOS 6.x/7.x 64-Bit	Windows 7/8/10 64-Bit	iOS 9.3+/Android 4.4+
CPU	Quad Core Intel Xeon E3-1220 v3 (passmark 6992) and above	Dual Core Intel i3-4170 (passmark 5182) and above	Dual Core 1GHz ARM Cortex-A9 and above
Memory	16GB	Minimum: 8GB Recommended: 16GB	1GB and above
Storage	300GB Free Space	10GB Free Space	80MB
Disk Throughput	300MB/second and above	80MB/second and above	
Backup Space	500MB		
Graphics Adapter		Dedicated Graphics Adapter recommended	

For larger implementations, Visual Data Center is horizontally scalable for database and data collection services. In addition, the application can be deployed in a High Availability (HA) or Disaster Recovery (DR) configuration. To scope the server resources needed for a larger or distributed solution please consult a certified Visual Data Center architect.