

VICADS v100 (video image control and display system)

safe | secure | certified |

OVERVIEW

The V100 Video Management System (VMS) is the new version of VICADS 4.3 PL1N certified software running on Linux servers and Microsoft Windows “Mini” clients. Linux offers built in redundancy and encryption which allows advanced capabilities to keep the customer ahead of emerging threats. Microsoft Windows is the most widely used platform for the user and works seamlessly with the Linux server so the learning curve is minimized. Combining Linux and Microsoft platforms offers the customer a smaller footprint of hardware, more security, and greater processing capabilities.

The V100 consists of familiar PL1N certified VICADS-4 software hosted on Linux servers providing built-in encryption with advanced capabilities and data fusion keeping the customer ahead of emerging threats. This combined architecture provides high reliability and greater processing power. With Linux servers, serving Windows 10 OS Clients, V100 provides a common graphical user interface with the power of a supercomputer supplying the best of both worlds for our customers!

V100 uses a multi-node cluster model - think high availability Cloud computing- which allows for critical backups, provides a common operating picture for rapid decision making and response, video assessment, and easy installation for protecting critical information and disaster recovery.

V100 has a smaller hardware footprint with a multi-function open platform. Our advanced solution hosts GOTS/COTS developed software applications which condenses physical servers, rack space, complexity, and overall program cost.

Among the add-on integrations is our Cyber Security Solution with:

- DoD Risk Management Framework (RMF) Compliance
- Information Assurance
- Big Data Analytics Integration
- Active Directory Integration
- Inventory Management

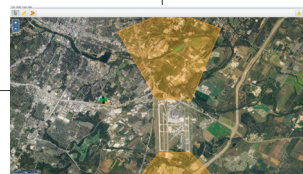
VICADS® System (BDOC)



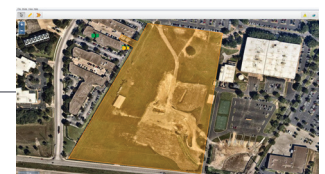
Viewable Cameras:



Building Cameras



Radar Coverage



Intelligent GIS



V100 Cluster

VICADS® Personal Viewer / Softwall / Radar Wall

Flightline Operations

Wing Commander

Building X - Owner User





VICADS Cluster	<p>Sturdy, scalable, serviceable</p> <p>Linux</p> <p>Server/NVR/VBS</p> <p>Scene Authentication</p>	<p>Deployed on 100+ Locations</p> <p>Redundancy and greater processing</p> <p>Smaller hardware footprint</p> <p>Real-time authentication of a video signal from inception (video scene) to the (viewing or storing)</p>
Witness Client	<p>Cyber Security</p> <p>Hybrid Cloud Technology</p> <p>Microsoft Windows</p> <p>Witness Viewer</p> <p>Investigator</p>	<p>New CSA config. Software on server</p> <p>Secure web browser interface for viewing</p> <p>Minimal user training</p> <p>View and control cameras</p> <p>Software tool to view recorded video</p>
Radar Wall/OwlEye	<p>Microsoft Windows</p> <p>Radar Wall</p> <p>OwlEye</p>	<p>Minimal user training</p> <p>Geographic information system (GIS) Ground Based Radar (GBR) integration</p> <p>Alarm video call up</p>
Perimeter Intrusion Detection Systems (PIDS)	<p>Softwall for DOE SEIWG Compliant, JIGSAW integration</p>	<p>Government off the Shelf (GOTS) annunciator PL1N (redundant)</p>

Vault (Dell)

Hardware Specifications	Operating System	Ubuntu server 20.04 LTS
	Processor	(2) Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
	RAID Controller	PERC H740P RAID Controller, 8GB NV Cache, Mini card
	Memory	16GB RDIMM, 3200MT/s, Dual Rank
	Storage	Chassis with up to 12x3.5" HDDs on BP, No Mid-Bay and 4x2.5" HDDs Flexbay, 1 or 2CPU Config
	Network	Broadcom 5720 Quad Port 1GbE BASE-T, rNDC
	Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 1100W
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matric Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
	Device Discovery Protocols	UPnP, ONVIF, NMRA, Gsauce, Bonjour
	PTZ Protocols	Pelco D, Pelco P, Pelco ASCII, Bosch OSRD, Most TASS Cameras, VICON, VICON NTCIP, VICON Native, Any cameras on Moog QuickSet, Pedestal, Hurley IR, Allegiant Switcher, SONY VISCA, Phillips LTC2600, CCHU iDome, FLIR NexusXML, ONVIF
Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
Certifications and Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant	
Environmental Specifications	Temperature and Humidity Non Operating	-40°C to 65°C (-40°F to 149°F)
	Temperature and Humidity Operating	10°C to 35°C (50°F to 95°F)
	Heat dissipation (EST)	4100 BTU/hr
Dimensional Specifications	Rack mounted	Height: 86.8mm (3.42") Width*: 482.0mm (18.98") Depth*: 751.34mm (29.58")
	Weight	33.1kg (72.91 lbs)

Vault (HP)

Hardware Specifications	Operating System	Ubuntu server 20.04 LTS
	Processor	Intel Xeon-G 5218 FIO Kit for DL380 G10
	RAID Controller	
	Memory	(6) HPE 16GB RDIMM
	Storage	(6) HPE 4TB SAS 7.2K LFF SC DS HDD
	Network	HPE 10/25GbE 2p FLR-SFP28 BCM57414 Adptr
	Power Supply	HPE 500W FS Plat Ht Plg LH Pwr Sply
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matric Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
	Device Discovery Protocols	UPnP, ONVIF, NMRA, Gsauce, Bonjour
	PTZ Protocols	Pelco D, Pelco P, Pelco ASCII, Bosch OSRD, Most TASS Cameras, VICON, VICON NTCIP, VICON Native, Any cameras on Moog QuickSet, Pedestal, Hurley IR, Allegiant Switcher, SONY VISCA, Phillips LTC2600, CCHU iDome, FLIR NexusXML, ONVIF
Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
Certifications and Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant	
Environmental Specifications	Temperature and Humidity Non Operating	-30° to 60°C (-22° to 140°F)
	Temperature and Humidity Operating	10° to 35°C (50° to 95°F)
	Heat dissipation (EST)	1902 BTU/hr
Dimensional Specifications	Rack mounted	Height: 87.38mm (3.44") Width*: 445.52mm (17.54") Depth*: 730.25mm (28.75")
	Weight	14.79kg (32.6 lbs)

Cyber (Dell)

Hardware Specifications	Operating System	VMware ESXI6.7
	Processor	(2) Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
	RAID Controller	PERC H740P RAID Controller, LP Adapter
	Memory	16GB RDIMM, 3200MT/s, Dual Rank
	Storage	Chassis with up to 8 x 3.5" SAS/SATA Hard Drives for 2CPU Configuration
	Network	Broadcom 5720 Quad Port 1GbE BASE-T, rNDC
	Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 750W
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matrix Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
	Device Discovery Protocols	UPnP, ONVIF, NMRA, Gsauce, Bonjour
	PTZ Protocols	Pelco D, Pelco P, Pelco ASCII, Bosch OSD, Most TASS Cameras, VICON, VICON NTCIP, VICON Native, Any cameras on Moog QuickSet, Pedestal, Hurley IR, Allegiant Switcher, SONY VISCA, Phillips LTC2600, CCHU iDome, FLIR NexusXML, ONVIF
Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
Certifications and Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant	
Environmental Specifications	Temperature and Humidity Non Operating	-40°C to 65°C (-40°F to 149°F)
	Temperature and Humidity Operating	10°C to 35°C (50°F to 95°F)
	Heat dissipation (EST)	2843 BTU/hr
Dimensional Specifications	Rack mounted	Height: 86.8mm (3.42") Width*: 482.0mm (18.98") Depth*: 751.34mm (29.58")
	Weight	28.6kg (63.05 lbs)

Cyber (HP)

Hardware Specifications	Operating System	VMware ESXI6.7
	Processor	Intel Xeon-G 5218 FIO Kit for DL380 G10
	RAID Controller	
	Memory	(6) HPE 16GB RDIMM
	Storage	(6) HPE 4TB SAS 7.2K LFF SC DS HDD
	Network	HPE 10/25GbE 2p FLR-SFP28 BCM57414 Adptr
	Power Supply	HPE 500W FS Plat Ht Plg LH Pwr Sply
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matrix Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
	Device Discovery Protocols	UPnP, ONVIF, NMRA, Gsauce, Bonjour
	PTZ Protocols	Pelco D, Pelco P, Pelco ASCII, Bosch OSD, Most TASS Cameras, VICON, VICON NTCIP, VICON Native, Any cameras on Moog QuickSet, Pedestal, Hurley IR, Allegiant Switcher, SONY VISCA, Phillips LTC2600, CCHU iDome, FLIR NexusXML, ONVIF
Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
Certifications and Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant	
Environmental Specifications	Temperature and Humidity Non Operating	-30° to 60°C (-22° to 140°F)
	Temperature and Humidity Operating	10° to 35°C (50° to 95°F)
	Heat dissipation (EST)	1902 BTU/hr
Dimensional Specifications	Rack mounted	Height: 87.38mm (3.44") Width*: 445.52mm (17.54") Depth*: 730.25mm (28.75")
	Weight	14.79kg (32.6 lbs)

Analytic (Dell)

Hardware Specifications	Operating System	Ubuntu server 20.04 LTS
	Processor	(2) Intel Xeon Gold 6136 3.0G, 12C/24T, 10.4GT/s , 24.75M Cache, Turbo, HT (150W) DDR4-2666
	RAID Controller	PERC H730P RAID Controller, 2GB NV Cache, Mini card
	Memory	(6) - 16GB RDIMM, 3200MT/s, Dual Rank
	Storage	2.5 Chassis with up to 8 Hard Drives and 3PCIe slots
	Network	Broadcom 5720 Quad Port 1GbE BASE-T, rNDC
	Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 750W
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matric Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
	Device Discovery Protocols	UPnP, ONVIF, NMRA, Gsauce, Bonjour
	PTZ Protocols	Pelco D, Pelco P, Pelco ASCII, Bosch OSRD, Most TASS Cameras, VICON, VICON NTCIP, VICON Native, Any cameras on Moog QuickSet, Pedestal, Hurley IR, Allegiant Switcher, SONY VISCA, Phillips LTC2600, CCHU iDome, FLIR NexusXML, ONVIF
Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
Certifications and Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant	
Environmental Specifications	Temperature and Humidity Non Operating	-40°C to 65°C (-40°F to 149°F)
	Temperature and Humidity Operating	10°C to 35°C (50°F to 95°F)
	Heat dissipation (EST)	2843 BTU/hr
Dimensional Specifications	Rack mounted	Height: 42.8mm (1.69") Width*: 482.0mm (18.98") Depth*: 808.5mm (31.8")
	Weight	21.9kg (48.28 lbs)

Analytic (HP)

Hardware Specifications	Operating System	Ubuntu server 20.04 LTS
	Processor	Intel Xeon-G 6240 FIO Kit for DL380 G10
	RAID Controller	
	Memory	(6) HPE 16GB RDIMM
	Storage	(2) HPE 480GB SATA MU LFF SCC 5300M SSD
	Network	HPE Ethernet 1Gb 4-port
	Power Supply	HPE 500W Flex Slot Universal Hot Plug Low Halogen Power Supply
	Power Consumption	
	Peripherals	DVD-RW, Mouse, Keyboard
	Form Factor	Rack Mounted (2U)
	Warranty	3/3/3 (material/labor/onsite) Mini Warranty US
	Hardware Part Numbers	
	Software Part Numbers	
Performance Specifications	# of Servers	
	# of Recording Servers	Unlimited
	# of cameras	Unlimited
	# of users	Unlimited
	# of Clients	Unlimited
	Digital Matric Switcher	Interfaces with CCDE and provides digital matrix switcher for IVA with live and recorded video automatically delivered to client workstations
	Active Directory Integration	Yes, with Kerberos security for user authentication
	Configuration Interface & Database	Web based (SSL) and PostgreSQL
	Supporting Encoding Protocols	MJPEG, MPEG2 TS/ES, MPEG4 part 10 (H.264)
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Video Analytics Options	Video Motion Detection, Objet Video 5x-6 (edge or server based)	
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Dimensional Specifications	Rack mounted	Height: 87.38mm (3.44") Width*: 445.52mm (17.54") Depth*: 730.25mm (28.75")
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