

WORK
HARD
•STAY•
TRUE

Name	CPU Cores	Stress Level	vCPU/pCPU Ratio	CPU Usage %	Consumed Memory	Running VM Count	Datstore R/W IOPS	Datstore Read latency	Datstore Write latency
esx02.contr...	12	Critical	5.58	26%	34%	30	10118 (Datstore-)	0 ms (iSCSI-1)	2 ms
esx01.contr...	12	Medium	6.42	24%	34%	32	23 (Datstore-NFS)	17 ms (Datstore-)	2 ms
XENC02	4	Medium	1	13%	57%	2	1 (NetApp NFS)	N/A	
XEN01	8	None	3.38	36%	42%	10	0 (NFS virtual disk)	N/A	
XEN02	8	None	4.88	10%	68%	13	6 (Dev_Xen NFS)	N/A	
SXPRODXE...	8	None	1.75	11%	73%	6	N/A	N/A	
SXPRODXE...	8	None	2	9%	89%	8	N/A	N/A	

One Master Console for VDI Monitoring & Management

Troubleshooting Performance Issues

Simplify Management Actions

Monitoring End-User Experience

Analyzing Historical Trends

“ Finally, an application that we can actually use to monitor our Citrix environment! Not only does it provide real-time monitoring, but it has a plethora of tools and features that make administration a breeze. Not sure how we got along without it all these years.

BED BATH & BEYOND Lawrence J. Clark
Manager Software as a Service

Compatibility Matrix

VMware vSphere 5.x	Citrix XenDesktop 7.6, 7.5, 7.0, 5.6, 5.5	Windows Server 2012 R2, 2008 R2, 2008, 2003
Citrix XenServer 6.x	VMware Horizon View 6.x, 5.x	Windows Client 8.x, 7, Vista, XP
Citrix XenApp 7.6, 7.5, 6.5, 6.0, 5.0 64-bit, 5.0 32-bit	Microsoft TS/RDS WS 2012 R2, WS 2008 R2, WS 2003 TS/RDS	Prerequisites .NET Framework 3.5 SP1 or 4.5, AD Domain Membership



Performance & Configuration Metrics

* Hypervisor-based metrics

	Configuration Stats	CPU Metrics	Memory Metrics	Disk Metrics	Network Metrics	XenApp	XenDesktop	Horizon View	UX Metrics
Hosts	CPU Cores, CPU Sockets, Hypervisor Type, Hypervisor Version, Installed Memory, Running VM Count, Unmanaged VM Count, VM Count	CPU Usage %, vCPU/pCPU Ratio	Active Memory, Consumed Memory	Datastore R/W IOPS, Datastore Read Latency, Datastore Read Rate, Datastore Write Latency, Datastore Write Rate, Disk Device Latency, Disk Kernel Latency, Disk Queue Depth, Max Datastore Free Space, Min Datastore Free Space, Storage Repository Total Latency	NIC Dropped Received Packets, NIC Dropped Transmitted Packets, NIC Usage	N/A	N/A	N/A	N/A
Computers	Model, Name, OS, OS SP, Physical Addresses, Registered IP Addresses, VM Name*, VM Power State*, VM Tools State*, VM Tools Version*, VM Tools, Hypervisor Platform*, Error Rate Version State*, Guest Name*, Host Name*, DNS A Records, Domain DNS, Domain Role, CPU Count	Host CPU Usage*, Processor Queue Length, CPU, CPU Excessive SMP Use*, CPU Ready*, CPU Swap Wait*, CPU System Time*	Active Memory*, Memory, Memory SwapOut Rate, Memory Utilization, Physical Memory Used, Pages/sec, Paging File, Non-paged Pool Memory	Disk Queue, Disk Reads/sec, Disk Transfers/sec, Disk Writes/sec, Avg. Disk Read Time, Avg. Disk Write Time, Free Space on System Drive, Max Free Space Drive, Min Free Space Drive, Physical Disk Time, Virtual Disk Read IOPS*, IOPS*, Virtual Disk Read Latency*, Virtual Disk Read KBps*, Virtual Disk Write IOPS*, Virtual Disk Write Latency*, Virtual Disk Write KBps	Net Bytes Received/sec, Net Bytes Sent/sec, Net Bytes Total/sec, Dropped Received Packets*, Dropped Transmitted Packets*	Active Sessions, Processes, ASP Request Queued (Citrix Web Interface), ASP Request Rejected (Citrix Web Interface), CSG Connections, PVS vDisk File Name, WorkItem Queue Ready Count, # of Published Applications, Datastore Connection Failure, Edition, Farm, License Check-Out, License Server Connection Failure, Load Evaluator, Number of Busy XML Threads (Citrix XML Broker), Resolution Time (Citrix XML Broker), Resolution Time (Citrix XML Broker), Resolution WorkItem Queue Ready Count, Server Load, Server Logon Mode, Version, Worker Group, Zone, Zone Data Collector, Citrix Licenses - Available and In-use	Processes, PVS vDisk File Name, Catalog Name, Database Avg. Transaction Time, Database Connected, Database Transaction Errors/sec, Desktop Group, Desktop Kind, Desktop State, Farm Name, MCS Image Out of Date, VDA Version, Citrix Licenses - Available and In-use	Active Sessions, Processes, View Agent Version, Virtual Disk Read IOPS, Virtual Disk Write IOPS	Avg. Logon Duration
Sessions	Session Name, State, User, Processes, Connect Time, Disconnect Time, Domain DNS, ID, Logon Time, Branch Name	Session CPU	Memory (Private Bytes), Memory (Working Set), Page Faults/sec	I/O Read Operations/sec, I/O Write Operations/sec	N/A	Citrix Receiver Version, Client IP, Client Name, ICA Latency, Idle Time, Initial Program	Citrix Receiver Version, Client IP, Client Name, ICA Latency, Idle Time, Initial Program	Client IP, Client Name, Idle Time, View Client, Connection Server URL, Domain, Protocol, Tunnel, Type	Logon Duration, Logon Profile, Logon Group Policy, Logon Desktop Load Time, Logon Duration - Other, Avg. ICA Latency
Processes	Created Time, Command Line, Publisher, Exe Name, Exe Size (KB), Exe Version, Exit Code, Exit Time, Modified Time, PID, Priority, Parent Session ID, Start Time	Process CPU	Memory Private Bytes and Working Set, Page Faults/sec	I/O Read Operations/sec, I/O Write Operations/sec	N/A	N/A	N/A	N/A	N/A

Contextual Management Actions

Computers Actions	Flush DNS, RDP to Computer, Send Super Message, Reboot Machine, Send Wake-On-LAN Signal, Shutdown Machine, Refresh Machine Group Policy, Import Registry, Disable Process Execution, Enable Process Execution, Run AS, Launch Event Viewer, Admin\$, NSLookup, Ping, Test WMI, Trace, Force Power Off VM, Force Reset VM, Power On VM, Restart Guest, Shutdown Guest	Registry Controller	Manage Registry on multiple targets: comparison and batch management of Windows Registry on selected computers/sessions
Sessions Actions	Chat, Remote Assistance, Disconnect Session, Log Off Session, Shadow Session, Send Super-Message, Get Session Screenshot, Refresh User Group Policy, Kill Policy, Reapply Group Policy, Registry Import, Start Process in Session	Services Controller	Manage Services on multiple targets: comparison and batch management of Windows Services on selected computers
Processes Actions	End Process, Kill Process, PSKill Process, Set Process Priority, Start CPU Throttling	File System Controller	Manage File System on multiple targets: comparison and batch management of file system on selected computers
Permission Delegation	Delegate management actions based on AD group membership	Programs & Updates Controller	Compare programs and updates on multiple computers: comparison of installed programs and OS updates on selected computers

Historical Reporting

Resource Consumption	Host, VM, User Session and Application Resource Consumption
User Sessions	User Sessions Count, User Sessions Activity, User Session Details
Application Usage	Application Usage Summary, Application Usage Details
VDI Management	Logon Duration, Client Versions, Protocol Latency, License Usage
Enterprise Features	Web and Mobile UI, Scheduled Reports, Permission Delegation

Script Based Actions

Script Engines	PowerShell, VB, Batch
Advanced Features	Multiple Execution Contexts, Map Columns to Arguments
Sample Scripts	Get PVS Write Cache Size, Analyze GPO Extension Load Time, IE URL's

Incident Triggers and Alerts

Trigger Types	Performance Metrics, Windows Events, Process Events, User Session Events, Citrix License Events
Alert Types	E-mail (Cloud based), Mobile Push Notification, Event Log, E-mail (SMTP)

Solve Your VDI Challenges with ControlUp

Troubleshooting Performance Issues

High IOPS usage on multiple XenDesktop VM's or high Datastore latency can affect the performance of the entire VDI infrastructure and cause poor user experience. You can quickly spot storage performance issues across multiple layers, from the physical hosts and Datastores all the way to specific user sessions and processes with ControlUp's dashboard. The detection of root cause issues is accelerated by easily correlating performance metrics in real-time.

Simplify Management Actions

Your time and your end-user time is valuable, therefore maintenance tasks need to be accomplished as quickly as possible. Sometimes, however, native management tools do not provide the functionality that you need to solve management issues. ControlUp's Script Based Actions (SBAs) can help overcome these limitations to target the exact machines that need to enter maintenance mode and executing quickly in one management action instead of several.

Monitoring End-User Experience

Ensuring an excellent end-user experience is a key objective for any admin. Issues such as slow logon times and application launches can have a dramatic effect on the end-user experience and need to be resolved quickly to avoid frustration. ControlUp provides early detection of issues that might affect the end-user experience. Once issues are detected, ControlUp real-time views can help troubleshoot by displaying a breakdown of the logon process into major phases such as User Profile, Group Policy, and Desktop Load times.

Analyzing Historical Trends

Historical reports are imperative to measure the health of your VDI environment. Reports for capacity planning, performance management, application usage analysis and end-user experience - including license consumption, login tracking for security purposes, and application usage analysis, are imperative. With ControlUp, save unlimited performance and usage data - including hosts, servers, user sessions and even processes data, to understand past and predict future performance.

ControlUp is trusted by these & many more great customers!

