HYCU
OBM Management Pack
for Citrix

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Contents

Introduction

This guide contains a detailed information on all policies provided with Citrix MP to monitor your Citrix environment as well as performance metrics used for data collection.

The availability of policies on managed nodes depends on the Citrix components you monitor with Citrix MP and on the policies deployed during the Citrix MP installation. Performance metrics are also applicable only to those environments that you monitor with Citrix MP.

Citrix MP policies

Citrix MP provides policies to monitor your Citrix environment. The availability of policies on your system depends on the Citrix components you monitor with Citrix MP and on the policies you deployed during the Citrix MP installation. Citrix MP policies for the following Citrix components are available:

For instructions on how to assign policies, see the "Installing and configuring" chapter of the *HYCU OBM Management Pack for Citrix User Guide*.

For instructions on how to view the Citrix MP related template groups and the respective policies, see the *"Using"* chapter of the *HYCU OBM Management Pack for Citrix User Guide*.

Citrix Virtual Apps and Desktops policies

The following Citrix MP policies for the Citrix Virtual Apps and Desktops environment are provided:

CTX-CVAD-AverageUserLogonAuthenticationTime	
Description	Monitors the average user logon authentication time in a delivery group.
Summary	Monitors the average user logon authentication time (in seconds) for a delivery group. Authentication time is the time taken to complete authentication to the remote session. During this phase the user is authenticated to the domain and his rights are checked for access to the server or desktop OS machine.
Causes	A session can be initiated only after the user's credentials were verified. This usually happens by communicating with an Active Directory domain controller over the network. As authentication is often overlooked during logon, in an environment with an overloaded or inaccessible domain controller, this can have a dramatic impact on logon time. Additionally, applications may also authenticate to Active Directory, causing significant additional time to any application startup if the AD server is unresponsive. Common issues include the following: - Overloaded Active

CTX-CVAD-AverageUserLogonAuthenticationTime

	Directory server leads to additional time to log on. - Unavailable Active Directory server may block authorization process for up to 30 seconds before AD server fails over to a secondary AD server. - Domain controllers in the remote offices may cause slow authentication. - DNS issues.
Resolution	Ensure the following: - AD servers should have enough resources to handle the load also during logon storms. - The server/desktop OS machine to which user is connecting can contact the AD server. - Enough domain controllers should be placed to all main user locations to facilitate the authentication process. - The server/desktop OS machines are using AD DNS servers. Also check if the name registrations for your DCs are correct.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909
	See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705
	You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-AverageUserLogonBrokeringTime

Description	Monitors the average user logon brokering time in a delivery group.
Summary	Monitors the average user logon brokering time (in seconds) for a delivery group. Brokering is a process that allows a user to click a desktop or application resource, and have a 'worker' (server or desktop machine) selected and prepared for an inbound ICA/HDX connection. During brokering process, the Broker Service is responsible for negotiating session launch requests with delivery group machines. The Broker Service communicates with the VDA agent over a CBP (connection brokering protocol) protocol to validate a machine's readiness to fulfill a session launch request, gather the necessary details (IP address or host name), and send the details to the StoreFront site to be packaged and delivered as an '.ICA' launch file that's consumed by the Receiver.
Causes	Reasons for a slower brokering logon phase can be: - Delivery controller is under heavy load. - WCF operations timing out.
Resolution	If the brokering time is slow, escalate the issue to the Virtual Apps and Desktops administrator to check the load balancing on the Delivery Controller.

CTX-CVAD-AverageUserLogonBrokeringTime

External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909
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CTX-CVAD-AverageUserLogonDuration

Description	Monitors the average user logon duration in a delivery group.
Summary	Monitors the average logon duration for a delivery group. The logon duration is the elapsed time from the point when a user launches a desktop or application via Storefront to the point when a user can start using it.
Causes	There are different reasons for a slower user logon including: - A new application was installed. - An operating system update occurred. - Configuration changes were made. Also, check the root causes of all logon phases which are included into the complete logon duration.
Resolution	
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909
	See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705
	You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-AverageUserLogonGPOTime

Description	Monitors the average user logon GPOs time in a delivery group.
Summary	Monitors the average user logon GPOs time (in seconds) for a delivery group. During this phase the desktop/server machine applies user settings defined on the Domain Controller.
	When an application or desktop is launched through Citrix, it kicks off a huge stream of events. Profiles are engaged, printers are mapped, and policies are applied.
Causes	Applying GPOs can have a large impact on the start time. The most common reasones why GPOs increase logon time are:

CTX-CVAD-AverageUserLogonGPOTime	
	- Numerous GPOs instead of a few large ones. - Large number of access control rewrites on folders and files. - Large number of mapped drives. - Large number of network printers. - Unused GPO sections (Computer/User) are not disabled. - Numerous Virtual Apps and Desktops policies.
Resolution	- Issue: GPOs, which heavily rewrite access to files and folders on boot, have a significant impact on logon time. Mitigation: Optimize access control to reduce number of required changes. Use AD groups and build permissions into base image. - Issue: Merging GPOs takes additional time and adds load to the AD server. Mitigation: Merge GPOs if possible, so that only several larger GPOs exist instead of mitiple small ones. - Issue: Many printer and driver mappings increase logon time. Mitigation: Reduce the number of required printer and drive mappings and ensure that client printer mapping is allowed to occur after logon in Virtual Apps and Desktops.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909 See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705 You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-AverageUserLogonHDXConnectionTime	
Description	Monitors the average user logon HDX connection time in a delivery group.
Summary	Monitors the average user logon HDX connection time (in

CTX-CVAD-AverageUserLogonHDXConnectionTime

	seconds) for a delivery group. This is the time taken to complete the steps required for setting up the HDX connection from the client to the VM.
Causes	The HDX connection time is heavily dependent on the network, thus many issues related to the slow HDX connection time are caused by network problems.
Resolution	Identify and eliminate possible network problems.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909

See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705

You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277 |

CTX-CVAD-AverageUserLogonInteractiveSessionTime

Description	Monitors the average user logon interactive session time in a delivery group.
Summary	Monitors the average user logon interactive session time (in seconds) for a delivery group. This logon phase covers Citrix specific activity before it launches the requested application: launching seamless windows engine shell, auto creation of client printers, and ICA client update process.
Causes	
Resolution	One of the issues related to the long interactive session times is the following: http://support.citrix.com/article/CTX135782
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909

See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705

You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277 |

CTX-CVAD-AverageUserLogonProfileLoadTime

Description	Monitors the average user logon profile load time in a delivery group.

CTX-CVAD-AverageUserLogonProfileLoadTime	
Summary	Monitors the average user logon profile load time (in seconds) for a delivery group. The logon phase starts after the user credentials are validated and lasts until the profile is downloaded from the profile storage (network share).
	Once the user is authenticated, the operating system can start his/her session. All of the phases require that the user profile is set up and the user's registry is loaded.
	If a user does not have a profile, a new one is created. This slightly slows down the initial logon compared to the subsequent logons. The main reason is that Active Setup runs the IE/Mail/Theme initialization routines.
	Profile load time is one of the most significant logon times in most organizations. Several types of Microsoft profiles exist: local, roaming, mandatory as well as many third-party solutions.
Causes	The most common causes are:
	• A huge roaming profile needs to be copied over the network.
	• There are connection issues to the profile store (Generally, it is a file share, though some third-party solutions may utilize databases).
	Other reasons for a slower profile load logon phase include:
	• Large profiles
	• Corrupt profiles
	• Unavailable profile store
	• Overloaded profile store
Resolution	• Issue:
	Profiles need to be downloaded on each logon, and unoptimized profiles can grow to hundreds of megabytes or thousands of files. Either size or quantity of files in a roaming profile can increase the download size.
	Mitigation:
	Redirect most user folders to a network share (Desktop, Documents) or ignore folders if it is allowed by the business (Cookies & History)
	• Issue:
	If a user commonly opens up multiple sessions, this increases a possibility of developing corrupt roaming profiles.

CTX-CVAD-AverageUserLogonProfileLoadTime

	Mitigation:
	With Windows Server 2008 R2 Active Directory, enable interim roaming profile writes. Alternatively, use a third-party profile solution that manages multiple sessions better.
	• Issue:
	The profile store is unavailable resulting in a logon delay or an inability to connect.
	Mitigation:
	Ensure the profile store is highly available.
	• Issue:
	The server hosting the profile store has either too many users connected, or may not be optimized as a file server, causing delays in delivering roaming profiles.
	Mitigation:
	Optimize the server for file sharing, ensure that hardware (including disks and network) can handle the necessary load, and distribute it to multiple servers if necessary.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909
	See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705
	You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-AverageUserLogonScriptExecutionTime

Description	Monitors the average user logon scripts execution time in a delivery group.
Summary	Monitors the average user logon scripts execution time (in seconds) for a delivery group.
	This logon phase covers the time taken for the logon scripts to be executed.
Causes	Logon scripts have a great impact on start time. The most common reasons, why logon scripts increase logon times are:
	• Slow or resource-intensive startup scripts (for example, those that move large numbers of files).
	• Inefficient loops in scripts.

CTX-CVAD-AverageUserLogonScriptExecutionTime

	• Nested calls to different scripts.
Resolution	Some scripts execute a lot of actions including calls to other scripts, long loops, mapping network drives, and others. Optimize and merge logon scripts if possible. Windows Server 2008 introduced Group Policy Preferences, which reduces or in some cases eliminates the need for logon scripts. When Group Policy Preferences is not used, assign logon scripts to users via GPOs, rather than the AD User Account property setting.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909 See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705 You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-AverageUserLogonVMStartTime

Description	Monitors the average user logon VM start time in a delivery group.
Summary	Monitors the average user logon VM start time (in seconds) for a delivery group. VM start logon phase includes the time taken to start VMs by the user. VM start time will be 0 in case there was no need to start a new machine, because a machine could be brokered instantly.
Causes	If the desktops are not powered on, when the users try to access them, it takes some time before the desktops boot and are ready for login.
Resolution	Try to fine tune idle pool settings for the desktop OS machines to make them ready for users, when they are expected to use them. Optimize the startup process by disabling or delaying services and applications that are scheduled to run at power on.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909 See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705 You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-ServiceInterface

Description	Monitors status of Citrix Virtual Apps and Desktops services interfaces.
Summary	Monitors the status of the Citrix Virtual Apps and Desktops services interfaces. Possible states are: Responding, NotResponding and BadBindingType.

CTX-CVAD-ServiceStatus

Description	Monitors mandatory and optional Citrix Virtual Apps and Desktops services.
Summary	Monitors status for the mandatory and optional Citrix Virtual Apps and Desktops services.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: - The service was stopped by the administrator. - The service encountered an exception that stopped it. - The service was improperly configured, which prevented it from starting. - Another service, which this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-ServiceHealth

Description	Monitors status for Citrix Virtual Apps and Desktops services.
Summary	Monitors status for the Citrix Virtual Apps and Desktops services.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: - The service was stopped by the administrator. - The service encountered an exception that stopped it. - The service was improperly configured, which prevented it from starting.

CTX-CVAD-ServiceHealth

	• Another service, which this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-DeliveryGroupAvailability

Description	Monitors the availability of a delivery group.
Summary	This monitor checks the availability of a delivery group. Delivery group is available if it contains at least one machine that can provide a published resource (application or desktop).
Causes	Machines cannot provide published resources when: • Machine is in maintenance mode. • Machine is not registered. • Machine is fully loaded (For Server OS machine: LoadIndex < 100%; For Desktop OS machine: has no session).
Resolution	If a delivery group is not available and if all machines in a delivery group are operational (not in maintenance and are registered), the additional machines should be added to that delivery group. Otherwise, make sure all machines are operational. Check whether the delivery group maximum capacity was hit or if there are problems with some machines in the delivery group. If all machines are fully loaded, the capacity of the delivery group should be expanded. If there are unregistered machines and the load is high, this indicates that some machines in the DG are not operational.

CTX-CVAD-DeliveryGroupMaintenance

Description	Monitors if the delivery group is in maintenance mode.
Summary	Checks whether a delivery group is in maintenance mode. This policy is not applicable for Static Desktop OS delivery groups.

CTX-CVAD-DeliveryGroupFailedRegistrations

Description	Monitors whether there are any failed registrations for a delivery group.
Summary	Before any desktop/application can be brokered by the controller, a Virtual Delivery Agent installed on the desktop or server machines has to register with one of the controllers in the Virtual Apps and

CTX-CVAD-DeliveryGroupFailedRegistrations

	Desktops site. A machine (VDA) registers with one of controllers every time it is going to be used (started) by Virtual Desktops. Machines, for which registration fails, are not available and they decrease the number of available machines in the delivery group they belong to.
Causes	There can be many reasons, including: • No Virtual Delivery Agent installed on the machine • DNS problems • Firewall specific configuration • Time synchronization issues For a complete list, see causes documented in the Citrix knowledge articles below.
Resolution	To resolve registration problems, check for which machines registration failed by checking alerts for the delivery group in question. Then, try to resolve the problem according to the Citrix knowledge articles: CTX136668 - Virtual Delivery Agent Registration Troubleshooting Flowchart (http://support.citrix.com/article/CTX136668) CTX129700 - Virtual Apps and Desktops Virtual Machines Do Not Successfully Register with the Desktop Delivery Delivery Controller (https://support.citrix.com/article/CTX129700) CTX129225 - VDAs fail to register when using disjoint namespaces in a Virtual Apps and Desktops Environment (http://support.citrix.com/article/CTX129225) CTX126992 - Troubleshooting Virtual Desktop Agent Registration with Controllers in Virtual Desktops (http://support.citrix.com/article/CTX126992)

CTX-CVAD-ApplicationEventInfo

Description	Forwards all Citrix Virtual Apps and Desktops related informational messages from windows application event log.

CTX-CVAD-ApplicationEventWarningError

Description	Forwards all Citrix Virtual Apps and Desktops related warning and error messages from windows application event log.

CTX-CVAD-HypervisorConnectionStatus

Description	Monitors hypervisor connection status which can be in following states: On, Unavailable & InMaintenanceMode.
Summary	Checks the hypervisor connection status. It can be in one of following states: • Unavailable: The broker is unable to contact the hypervisor. • InMaintenanceMode: The hosting server is in maintenance mode. • On: The broker is in contact with the hypervisor.

CTX-CVAD-LogSitePerformanceData

Description	Logs the Virtual Apps and Desktops performance data.

CTX-CVAD-DeliveryGroupActiveSessions

Description	Monitors the number of active Virtual Apps and Desktops sessions in a delivery group.
Summary	Checks the number of active sessions in a delivery group. Active sessions are sessions where a user is active within his/her session (for example, Remote Desktop). Being active means running applications, web browsing, or similar activity that involves using a mouse or keyboard.

CTX-CVAD-DeliveryGroupAllSessions

Description	Monitors the number of active Virtual Apps and Desktops sessions on a site.
Summary	Monitors the number of all sessions in a delivery group. All sessions are sessions that are either in active or disconnect state.

CTX-CVAD-DeliveryGroupDisconnectedSessions

Description	Monitors the number of disconnected Virtual Apps and Desktops sessions in a delivery group.
Summary	Monitors the number of disconnected sessions in a delivery group. Monitors the number of ready desktops in a Desktop OS Random delivery group. Ready desktops are machines which are running and are ready for brokering (are ready to be used by users). Only one user sessions is allowed on one Desktop OS machine.

CTX-CVAD-SiteActiveSessions

Description	Monitors the number of active Virtual Apps and Desktops sessions on a site.
Summary	This monitor checks the number of active Virtual Apps and Desktops sessions on a site. Active sessions are sessions where a user is active within his/her session (for example, Remote Desktop). This includes running applications, web browsing, or similar activity that involves using a mouse or keyboard.

CTX-CVAD-SiteAllSessions

Description	Monitors the number of all Virtual Apps and Desktops sessions on a site.
Summary	Shows the number of all sessions on a site. Sessions are in active or disconnect state.

CTX-CVAD-SiteConnectedUsers

Description	Monitors the number of currently connected users on a Virtual Apps and Desktops site.
Summary	Checks the number of currently connected users on a site. Only distinct users running active sessions are counted, while the users with disconnected sessions are not.

CTX-CVAD-SiteDisconnectedSessions

Description	Monitors the number of disconnected Virtual Apps and Desktops sessions on a site.
Summary	Monitors the number of ready virtual machines. Ready virtual machines are the running machines that are ready for brokering (are ready to be used by users). 📄 Note Only one user session is allowed on one Desktop OS machine.

CTX-CVAD-AudioRedirectionService

Description	Monitors the current state of Citrix Audio Redirection Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Audio Redirection Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.

CTX-CVAD-AudioRedirectionService

Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by the administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, which this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-CheckLoadIndex

Description	Monitors load of Server OS machines that are delivering desktops and applications to users.
Summary	Monitors the load of server machines delivering desktops and applications to the end users. Load index can be in the range of 0 to 10000, where 0 means that there is no load and 10000 means that the server is fully loaded. Load index is calculated based on the load management policy settings and is used by the delivery controller when end-users are making new connections. When users try to launch an application or desktop while all active servers are reporting a full load, a new server will be started and made available for new connections. If there are no servers to start or the machines are put in maintenance mode, the connection will fail. The following is a list of default load management policies settings: • CPU usage: Report full load if CPU is 90%, disabled by default • Disk usage: Report 75% load if disk queue length is 8, disabled by default • Memory usage: Report full load if Memory usage is 90%, disabled by default • Memory usage base load: Report zero load if the base operating system's memory usage is below 768 MB, enabled by default • Maximum number of sessions: Limit 100, enabled by default • Concurrent logons tolerance: Target value 2, enabled by default

CTX-CVAD-CheckLoadIndex	
	• CPU usage excluded process priority: Exclude processes that have a priority of Below Normal or Low, enabled by default
Causes	Load index on one machine may be high for different reasons, such as: • Load management policy settings • Too few machines in the delivery group • Failure of one or more machines in the delivery group Abnormally high resource usage of one or more users or applications on the machine As a consequence of these root causes, increased load can be observed on all machines in the delivery group. In some cases, high load can be observed also on only one or a few machines (e.g. end-users running defective application).
Resolution	Identify if the load index is high only on the machine where the issue is reported or also on one or more other machines in the delivery group. Find out if the load is high on only one or more than one machines. Check, if the load is balanced evenly between all the machines in the delivery group. To view and compare load index between machines, check the Server OS machines performance. • If a high load index is recognized on one machine only, try to check if the load management policy settings fit your needs and also check OS performance parameters on the machines, such as, cpu usage, mem usage, disk usage and disk iops, number of concurrent user sessions, etc. • If high load index is recognized on all registered servers, check if load balancing works correctly and if new machines, which can handle new users connections, are powered on and are registering themselves to the delivery controller. • If unused machines exist and are pending in the 'Unregistered' state or are regularly restarted there may be registration issues with you machines that need attention.
External	For more information, see the *Citrix Virtual Apps and Desktops User Guide*, sections related to managing Server OS machine server load and load management policy settings.

CTX-CVAD-DesktopService

Description	Monitors the current state of Citrix Desktop Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Desktop Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised, when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-DiagnosticFacilityCOMServerService

Description	Monitors the current state of Citrix Diagnostic Facility COM Server service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Diagnostic Facility COM Server' is running on Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-EncryptionService

Description	Monitors the current state of Citrix Encryption Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Encryption Service' is running on Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-EndUserExperiencingMonitoringService

Description	Monitors the current state of Citrix End User Experiencing Monitoring service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix End User Experiencing Monitoring' is running on the Server OS machine. Alert is not generated if the machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-GroupPolicyEngineService

Description	Monitors the current state of Citrix Group Policy Engine service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Group Policy Engine' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-HDXMediaStreamforFlashService

Description	Monitors the current state of Citrix HDX MediaStream for Flash Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix HDX MediaStream for Flash Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-LocationAndSensorVirtualChannelService

Description	Monitors the current state of Citrix Location and Sensor Virtual Channel Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Location and Sensor Virtual Channel Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-MobileReceiverVirtualChannelService

Description	Monitors the current state of Citrix Mobile Receiver Virtual Channel Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Mobile Receiver Virtual Channel Service' is running on the Server OS machine. Alert is not generated if the machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-PrintManagerService

Description	Monitors the current state of Citrix Print Manager Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Print Manager Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: - The service was stopped by an administrator. - The service encountered an exception that stopped it. - The service was improperly configured, which prevented it from starting. - Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-ProfileManagementService

Description	Monitors the current state of Citrix Profile Management service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Services Manager' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: - The service was stopped by an administrator. - The service encountered an exception that stopped it. - The service was improperly configured, which prevented it from starting. - Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-PvsForVMsAgentService

Description	Monitors the current state of Citrix Pvs for VMs Agent Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Pvs for VMs Agent' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default, an alert is raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-ServicesManagerService

Description	Monitors the current state of Citrix Services Manager Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Services Manager' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-SmartCardService	
Description	Monitors the current state of Citrix Smart Card Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Smart Card Service' is running on the Server OS machine. Alert is not generated if machine or its delivery group is in maintenance mode.
Configuration	By default an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-StackControlService	
Description	Monitors the current state of Citrix Stack Control Service.
Summary	Monitors if Virtual Delivery Agent service 'Citrix Stack Control Service' is running on the Server OS machine. Alert is not generated if the machine or its delivery group is in maintenance mode.
Configuration	By default, an alert will be raised only if the service is set to start automatically and the service is not currently running. If the service is set to start manually or is disabled, no alert will be raised when the service is stopped.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-CVAD-TotalUserLogonAuthenticationTime

Description	Monitors the total user logon authentication time in a delivery group.
Summary	Monitors total logon authentication time (in seconds) for a delivery group. Authentication time is the time taken to complete authentication to the remote session.

CTX-CVAD-TotalUserLogonBrokeringTime

Description	Monitors the total user logon brokering time in a delivery group.
Summary	Monitors total user logon brokering time (in seconds) for a delivery group. This is the time taken to complete the process of brokering the session.

CTX-CVAD-TotalUserLogonDuration

Description	Monitors the total user logon duration in a delivery group.
Summary	Monitors total user logon duration (in seconds) for a site. Complete logon duration is time that is needed from a user launching a desktop or application via StoreFront to the time when a user can start using it.

CTX-CVAD-TotalUserLogonGPOTime

Description	Monitors the total user logon GPOs time in a delivery group.
Summary	Monitors total logon GPOs time (in seconds) for a delivery group. During this phase the desktop/server machine applies user settings defined on the Domain Controller.

CTX-CVAD-TotalUserLogonHDXConnectionTime

Description	Monitors the total user logon HDX connection time in a delivery group.
Summary	Monitors total logon HDX connection time (in seconds) for a delivery group. This is the time taken to complete the steps required for setting up the HDX connection from the client to the VM.

CTX-CVAD-TotalUserLogonInteractiveSessionTime

Description	Monitors the total user logon interactive session time in a delivery group.
Summary	Monitors total logon interactive session time (in seconds) for a delivery group. The logon phase covers Citrix specific activity

CTX-CVAD-TotalUserLogonInteractiveSessionTime	
	before it launches the requested application: launching seamless windows engine shell, auto creation of client printers and ICA client update process.

CTX-CVAD-TotalUserLogonProfileLoadTime	
Description	Monitors the total user logon profile load time in a delivery group.
Summary	Monitors total logon profile load time (in seconds) for a delivery group. The logon phase starts just after the user credentials are validated and lasts until the profile is downloaded from the profile storage (network share).

CTX-CVAD-TotalUserLogonScriptExecutionTime	
Description	Monitors the total user logon scripts execution time in a delivery group.
Summary	Monitors total logon scripts execution time (in seconds) for a delivery group. This logon phase covers the time taken for the logon scripts to be executed.
Causes	Logon scripts have a great impact on start time. The most common reasons, why logon scripts increase logon times are: • Slow or resource-intensive startup scripts (for example, those that move large numbers of files). • Inefficient loops in scripts. • Nested calls to different scripts.
Resolution	Some scripts execute a lot of actions including calls to other scripts, long loops, mapping network drives, and others. Optimize and merge logon scripts if possible. Windows Server 2008 introduced Group Policy Preferences, which reduces or in some cases eliminates the need for logon scripts. When Group Policy Preferences is not used, assign logon scripts to users via GPOs, rather than the AD User Account property setting.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909 See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705 You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

CTX-CVAD-TotalUserLogonVMStartTime	
Description	Monitors the total user logon VM start time in a delivery group.
Summary	Monitors total logon VM start time (in seconds) for a delivery group. VM start logon phase includes the time taken to start VMs by the user. VM start time will be 0 in case there is no need to start a new machine, since a machine could be brokered instantly.
Causes	If a desktop is not powered on when the user tries to access it, it takes some time for the desktop to boot and be ready for login.
Resolution	Try to fine tune idle pool settings for the desktop OS machines, to make them ready for the users to start using them. Optimize the startup process by disabling or delaying services and applications that are scheduled to run at power on.
External	Visit the following link to get more info about logon process: http://support.citrix.com/article/CTX128909 See the following Citrix article on troubleshooting slow Virtual Apps logons: http://support.citrix.com/article/CTX101705 You may also want to check out the Citrix logon optimization guide: http://support.citrix.com/article/CTX128277

Citrix MP VDA Machine Monitor policies

The following Citrix MP policies for the Citrix MP VDA Machine Monitor are provided:

CTX-VDAM-ControllerConnections	
Description	Monitors if VDA Machine Monitor can connect to the configured Citrix Delivery Controllers.
Summary	Checks connection from VDA Machine Monitor to the particular Citrix Delivery Controller to obtain a list of VMs it is serving.

CTX-VDAM-DiscoveryDuration	
Description	Monitors the VDA Machine Monitor discovery duration.
Summary	Monitors if the VDA Machine Monitor discovery duration takes too long - more than discovery interval on the agent.

CTX-VDAM-DesktopSessionCPUUtilization	
Description	Monitors CPU utilization in Desktop OS session over time interval.

CTX-VDAM-DesktopSessionCPUUtilization

Summary	Helps to identify Desktop OS sessions that host applications/processes with high CPU utilization.
Resolution	Identify the processes/services consuming processor time using Citrix Director or Task Manager/Resource Monitor locally on the machine. • If all processes/services are within normal parameters and the level of CPU consumption is as expected, consider adding CPU resources to this system in future. • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of unsaved data.

CTX-VDAM-DesktopSessionDiskLatancy

Description	Monitors disk transfer (reads and writes) latency in Desktop OS session over time interval.
Summary	High disk read and write latency (Avg. Disk sec/Transfer) indicates a disk performance bottleneck. The physical disk, and possibly even overall system performance, may significantly diminish, which results in poor operating system and application performance.
Resolution	Identify the processes/services consuming disk time: • If all processes/services are within normal parameters and the level of disk consumption is as expected, consider upgrading to a more capable disk subsystem in future. • If a process/service outside normal parameters can be identified, the process should be killed. Note that killing a process can cause a loss of unsaved data.

CTX-VDAM-DesktopSessionMemoryPageFaults

Description	Monitors memory hard page faults (per second) in Desktop OS session over time interval.
Summary	Monitors memory hard page faults (per second) in Desktop OS session over time interval. Memory page faults per second is the rate at which pages are read from or written to the disk to resolve hard page faults. High value typically indicates a memory bottleneck. In case there is still plenty of RAM available, an application is probably sequentially reading a file from memory. Please refer to KB139609 for further information.

CTX-VDAM-DesktopSessionMemoryPhysicalUtilization

Description	Monitors physical memory usage in Desktop OS session over time interval.
Summary	Helps to identify desktop OS sessions that host applications/processes with high memory consumption.
Resolution	Identify the processes/services consuming memory using Citrix Director, Task Manager, or Resource Monitor locally on the machine. • If all processes/services are within normal parameters and the level of memory consumption is as expected, consider adding additional memory to this system in future. • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of the unsaved data.

CTX-VDAM-DesktopSessionNetworkTraffic

Description	Monitors bandwidth usage in Desktop OS session over time interval.
Summary	Helps to identify Desktop OS sessions with high bandwidth usage (traffic from Citrix Receiver to VDA and in the opposite direction).
Causes	High bandwidth usage could be caused by: • Printing to a local printer • Copying to or from the client storage • Displaying animations These and other factors can have a great impact on all other users working from the same remote office, if bandwidth is limited and the policy is not set accordingly.
Resolution	Set thresholds according to your environment expectations.

CTX-VDAM-FailedConnectionsPercentage

Description	Monitors the percentage of virtual machines where VDA Machine Monitor could not get data from (could not connect to).
Summary	Monitors the percentage of failed connections of the VDA Machine Monitor to virtual machines (virtual machines from which VDA Machine Monitor could not get data or to which it could not connect).
Causes	Disabled or improperly configured WinRM management.

CTX-VDAM-LogMachinePerformanceData

Description	Logs the VDA Machine Monitor performance data.

CTX-VDAM-ServerMachineCPUUtilization

Description	Monitors CPU utilization on Server OS machine over time interval.
Summary	Monitors CPU utilization on Server OS machine over time interval.
Causes	The reason of the high CPU utilization can be too many sessions on a machine or high CPU consumption by some sessions.
Resolution	Identify the processes/services consuming processor time using Task Manager or Resource Monitor. • If all processes/services are within normal parameters and the level of CPU consumption is as expected, consider adding additional CPU resources to this system in the future. • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of the unsaved data.

CTX-VDAM-ServerMachineDiskIO

Description	Monitors number of disk IO operations on Server OS machine over time interval.
Summary	Checks the number of disk IO operations on the Server OS machine over time interval.

CTX-VDAM-ServerMachineDiskLatancy

Description	Monitors disk transfer (reads and writes) latency on Server OS machine over time interval.
Summary	High disk read and write latency (Avg. Disk sec/Transfer) indicates a disk performance bottleneck. The physical disk and possibly even overall system performance may significantly diminish, which will result in poor operating system and application performance.
Resolution	Identify the processes/services consuming disk time using Task Manager or Resource Monitor. • If all processes/services are within normal parameters and the level of disk consumption is as expected, consider upgrading to a more capable disk subsystem in the future. • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of unsaved data.

CTX-VDAM-ServerMachineDiskQueue

Description	Monitors disk queue length on Server OS machine over time interval.
Summary	Checks the number of the queued disk IO operations on the Server OS machine over time interval.

CTX-VDAM-ServerMachineDiskReads

Description	Monitors disk read operations on Server OS machine over time interval.
Summary	Checks the number of disk read operations on the Server OS machine over time interval.

CTX-VDAM-ServerMachineDiskUtilization

Description	Monitors disk utilization on Server OS machine over time interval.
Summary	Monitors the percentage of disk utilization on the Server OS machine over time interval.

CTX-VDAM-ServerMachineDiskWrites

Description	Monitors disk write operations on Server OS machine over time interval.
Summary	Checks the number of disk write operations on the Server OS machine over time interval.

CTX-VDAM-ServerMachineMemoryPageFaults

Description	Monitors memory page hard faults (per second) on Server OS machine over time interval.
Summary	Memory page faults per second is the rate at which pages are read from or written to the disk to resolve hard page faults. High value typically indicates a memory bottleneck. In case there is still plenty of RAM available, an application is probably sequentially reading a file from memory. Please refer to KB139609 for further information.

CTX-VDAM-ServerMachineMemoryPhysicalUtilization

Description	Monitors physical memory utilization on Server OS machine over time interval.
Summary	High physical memory usage may be caused by machine having

CTX-VDAM-ServerMachineMemoryPhysicalUtilization

	too many sessions or some sessions may consume too much memory.
Resolution	Identify the processes/services consuming memory using Task Manager or Resource Monitor. • If all processes/services are within normal parameters and the level of memory consumption is as expected, consider adding additional memory to this system in the future. • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of unsaved data.

CTX-VDAM-ServerMachineNetworkTraffic

Description	Monitors network traffic (send and receive) on Server OS machine over time interval.
Summary	Monitors network traffic (send and receive) across all network interfaces on Server OS machines.
Resolution	Identify the processes/services consuming network using Task Manager or Resource Monitor. • If all processes/services are within normal parameters and the level of bandwidth consumption is as expected, considere moving the respective process/service to a dedicated NIC (or team of NICs). • If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of unsaved data.

CTX-VDAM-ServerSessionCPUUtilization

Description	Monitors CPU utilization in Server OS session over time interval.
Summary	Monitors CPU utilization in Server OS session over time interval. Helps to identify Server OS sessions that host applications/processes with high level of CPU utilization.

CTX-VDAM-ServerSessionNetworkTraffic

Description	Monitors bandwidth usage in Server OS session over time interval.
Summary	Monitors network traffic (send and receive) across all network interfaces on Server OS machines.
Resolution	Identify the processes/services consuming network using Task

CTX-VDAM-ServerSessionNetworkTraffic	
	Manager or Resource Monitor.
	• If all processes/services are within normal parameters and the level of bandwidth consumption is as expected, considere moving the respective process/service to a dedicated NIC (or team of NICs).
	• If a process/service outside normal parameters can be identified, the process should be killed. Please note that killing a process can cause loss of unsaved data.

Citrix StoreFront policies

The following Citrix MP policies for the Citrix StoreFront environment are provided:

CTX-SF-BrokerAvailability	
Description	Monitors whether the Citrix Broker Server is available.
Summary	Checks availability of all Broker servers configured on a StoreFront server. It sends a simple request to the Citrix XML Broker Service running on a Broker server using Citrix NFuse protocol. If the Broker service is available it returns a list of its capabilities.

CTX-SF-ReceiverWebSiteAvailability	
Description	Monitors whether the StoreFront Web Receiver website is available.
Summary	This monitor checks availability of each Receiver for Web website on a StoreFront server. Website availability checking is performed for websites hosted on a local web server.

CTX-SF-ServiceStatus	
Description	Monitors mandatory and optional Citrix StoreFront services.
Summary	The mandatory or optional Citrix StoreFront Management Pack services are not running.
Causes	A service can stop for many reasons, including: • The service was stopped by an administrator. • The service encountered an exception that stopped it. • The service was improperly configured, which prevented it from starting. • Another service, that this service depends on, was stopped.
Resolution	Start the service.

CTX-SF-StoreServiceProbeStatus	
Description	Monitors whether the StoreFront Store service probe is successful.
Summary	Checks availability of each store service on a StoreFront server. Store probing is performed for store services hosted on a local web server.
	Probing of a store service is performed using Citrix Store Service API. The Store Services are a part of the StoreFront Services and allow clients to access resources available from various back-end providers. A store probe consists of three phases:
	• Initial response: Store service must be available on a local web server.
	• Login: StoreFront MP Agent service must be able to log in to a store service using provided credentials.
	• Resource enumeration: After a successful login, store service must return a list of available resources.
Causes	A StoreFront store service probe can fail for the following reasons:
	• User credentials that should be used in a probe are not configured. To resolve this, ensure that user credentials are provided and configured appropriately. The, deploy the configured credentials to the monitored StoreFront servers.
	• ExplicitForms authentication protocol is not enabled. To resolve this, run Citrix StoreFront Management Console, select Authentication section and enable the 'User name and password' authentication method.

CTX-SF-LogStorePerformanceData	
Description	Logs the StoreFront Store performance data.

Citrix Licensing policies

The following Citrix MP policies for the Citrix Licensing environment are provided:

CTX-CLS-LicenseUsage	
Description	Monitors Citrix Licensing Server license use.

CTX-CLS-ServiceStatus	
Description	Monitors Citrix Licensing Server services.

CTX-CLS-ApplicationEventInfo

Description	Forwards all Citrix Licensing Server Application info event log entries.

CTX-CLS-ApplicationEventWarningError

Description	Forwards all Citrix Licensing Server Application warning / error event log entries.

CTX-CLS-LogLicenseUseData

Description	Logs Citrix Licensing Server license use information.

CTX-CLS-TcpPortProbe

Description	Monitors TCP ports used by Citrix Licensing Server.
Summary	Monitors availability of TCP ports used by Citrix Licensing Server (default 27000, 8082, and 443).

Citrix Provisioning policies

The following Citrix MP policies for the Citrix Provisioning environment are provided:

CTX-CPVS-DesktopRamCache

Description	Monitors RAM cache utilization for the device.

CTX-CPVS-DiskCacheSize

Description	Monitors the size of the device disk cache on a server.

CTX-CPVS-NetworkLoad

Description	Checks network load on a system.

CTX-CPVS-NetworkTraffic

Description	Checks the number of mega bytes per second which are sent and received over network adapters on a system.

CTX-CPVS-ServiceStatus

Description	Monitors all mandatory and optional Citrix Provisioning Server services.

CTX-CPVS-ApplicationEventInfo

Description	Forwards all Citrix Provisioning Server Application informational event log entries.

CTX-CPVS-ApplicationEventWarningError

Description	Forwards all Citrix Provisioning Server Application warning and error event log entries.

CTX-CPVS-LogCachePerformanceData

Description	Logs virtual disk cache usage on Citrix Provisioning Server.

CTX-CPVS-LogNetworkLoadPerformanceData

Description	Logs network load on Provisioning Server.

CTX-CPVS-LogServicePerformanceData

Description	Logs the selected performance data for Provisioning Server services.

Citrix MP performance metrics

Citrix MP collects data from the Citrix environment based on the performance metrics. For each component of the Citrix environment monitored with Citrix MP, specific performance metrics are provided:

Citrix Virtual Apps and Desktops

Category	Metrics
CVAD Site utilization information	- The number of all sessions in the Site - The number of active sessions in the Site - The number of disconnected sessions in the Site - The number of non-brokered sessions in the Site - The number of desktops that are in use on a site. Desktops in use (or active desktops) are machines to which users are connected (either brokered or non-brokered). - The number of currently connected users on a site. Only distinct users having active sessions are counted while users having disconnected or non-brokered sessions are not. - Logon count - Average logon duration - Max logon duration - Total logon duration
CVAD Group utilization information	- Indicator whether desktop group is shared (2) or private (1) - The number of all desktops in the desktop group - The number of unregistered desktops in the desktop group

Category	Metrics
	• The number of desktops that are in use for a desktop group. Desktops in use (or active desktops) are machines to which users are connected (either brokered or non-brokered).
	• Number of ready desktops for a desktop group. Ready desktop are machines which are running and are ready for brokering (are ready to be used by users)."
	• The number of disconnected desktops for a desktop group. Disconnected desktops are machines that have sessions running but are disconnected.
	• The logon count
	• Average logon duration
	• Maximal logon duration
	• Total logon duration
	• The number of all sessions in the desktop group
	• The number of active sessions in the desktop group
	• The number of disconnected sessions in the desktop group
	• The number of non-brokered sessions in the desktop group
	• Machine load index - average
	• Machine load index - current
	• Machine load index - max available
	• Machine load index - max current
CVAD Machine utilization information	• CPU usage
	• Physical memory utilization
	• Memory page faults
	• Network reads
	• Network writes
	• Disk latency
	• Disk IO
	• Disk read
	• Disk write
	• Disk queue
	• Disk utilization

Citrix StoreFront

Category	Metrics
Citrix StoreFront Farm Broker Performance Data	- Broker Availability - Broker Response Time
Citrix StoreFront Web Site Performance Data	- Receiver website availability - Website load time
Citrix StoreFront Stores Probe Performance Data	- Store initial response time - Store login time - Store resource enumeration time

Citrix Licensing

Category	Metrics
Citrix Licensing license usage	- The number of available feature licenses - The number of user feature licenses - The % of used feature licenses

Citrix Provisioning

Category	Metrics
Citrix Provisioning resource consumption	- The % of the processor time consumption of a Provisioning service (in %) - Physical memory consumption of a Provisioning service (in bytes) - Virtual memory consumption of a Provisioning service (in bytes)
Network traffic information on a Citrix Provisioning Server	- Bytes Total/sec - Current Bandwidth
Virtual ram cache usage	The current RAM disk cache utilization
Virtual disk cache usage	The current size of the cache file in the store cache folder

Provide feedback

For any suggestions and comments regarding this product or its documentation, send us an e-mail to:

support@hycu.com

We will be glad to hear from you!