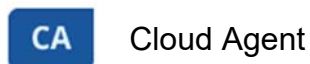




Qualys Cloud Agent Windows 1.5.5

We're excited to tell you about new features, platform coverage changes, improvements, and bug fixes in the Cloud Agent Windows 1.5.5 release. These updates are specific to the agent binary. Platform updates for new features and fixes of management and reporting capabilities of Cloud Agents are documented in the Platform release notes.



New Features

The following new features have been added to this release:

- Duplicate Agent ID detection and automatic re-provisioning
 - Automatically enforces unique Agent IDs for an asset in those cases where the agent is installed in gold images, cloud server instances, VM templates, and other OS cloning technologies.
 - Platform will automatically detect a duplicate Agent ID, trigger the agent to provision with a new Agent ID, and transfer any scan results to that new ID.
 - This is an always-on agent/platform core capability and does not have a configuration setting to enable or disable.
- Config Profile setting to prevent installed agents from auto-updating its version through the Qualys platform
 - Version 1.5.5 is required to support this new Config Profile setting, thus this feature will only take effect on agent versions after 1.5.5.
 - Whether this setting is enabled or not, the agent can still be updated outside of the Qualys platform, for example, manually or through third-party software distribution tools.
 - Installed agents must be updated to current version within three (3) months of release to ensure compatibility with Vulnerability Management QIDs and Policy Compliance CIDs.

Enhancements

The following enhancements are available in this release:

- Introduced a “CPU Limit” capability that restraints the agent to using a defined percentage of one CPU core during data collection. (Base agent load is less than 0.1% when not collecting data.)
 - As an example, a 10% CPU Limit value limits data collection average load to 10% or less of one CPU core, giving an overall effective system average load of 2.5% on a 4-core system and 1.25% on an 8-core system during the brief data collection period.
 - The “CPU Limit” performance setting is not currently exposed in the Configuration Profile (an upcoming release will expose it), until then the agent transparently maps the existing “CPU Throttle” value in the profile to the “CPU Limit” value, based on the following table.

"CPU Throttle" value	"CPU Limit" mapped value	Overall Max CPU Usage (4 core)	Overall Max CPU Usage (8 cores)	Notes
0 ms	100%	25%	12.5%	Highest CPU usage Fastest collection (8 min avg)
1-10 ms	20%	5%	2.5%	
11-20 ms	10%	2.5%	1.25%	
20+ ms	5%	1.25%	0.625%	Least CPU usage Slowest collection (60-90 min avg)

- Optimized performance utilization to reduce CPU spikes during data collection, reduced data collection times, and fixed reported performance defects.
- Data collection times are further reduced for agents that are activated with only one licensed module (Vulnerability Management or Policy Compliance).
- The version of the manifest that is used is logged in the agent log file to aid in troubleshooting when working with Qualys Customer Support.

Behavior Changes

The following behavior changes are implemented in this release:

- Configuration Profile is downloaded and applied first before initial data collection for newly installed agents. Agents are now governed by performance settings and blackout windows for the first execution after installation.
- Consolidates multiple discreet Configuration Profile performance settings to improve agent performance and simplify profile management
 - The existing "Update System with Agent status" setting consolidates the following settings into a single request:
 - Delta Confirmation Interval
 - Manifest Download Interval
 - Configuration Download Interval
 - Revocation Interval
 - Provisioning Interval
 - Upgrade Check Interval
 - The existing "Chunk Sizes for file fragment uploads" and "Delta Upload Interval" settings used in combination replace the "Network Throttle Tx" setting
 - Use these two settings to manage or restrict the upload transmit from agent to the platform by defining the size of upload chunks and the delay between uploads. For example, settings of 1 MB Chunk Size and 60 second Delta Upload Interval will smooth out a 5 MB upload over 5 minutes instead all at once.
 - The existing settings "Network Throttle Rx" and "Chunk sizes for file fragment downloads" are not used in this agent version as the download sizes are so small that there wasn't an impact on throttling.

Platform Coverage Support (Operating Systems)

Support has been added for the following Operating Systems:

- Microsoft Windows Server 2016
- Server Core installation option of supported Windows Server releases (2008/R2, 2012/R2, 2016)

Bug Fixes

The following known reported and notable issues have been fixed in this release:

ID	Description
CRM-18083 CRM-19077	Fixed an issue enumerating Administrator Group Members for QID 105231
CRM-17619 CRM-18547 CRM-20184 CRM-20790	Fixed reported agent performance issues
CRM-19161 CRM-20755	Resolved conflict with PowerGUI application
CRM-20755	Resolved read access to the Qualys agent registry key
CRM-22328	Failed to provision error caused by missing fallback server config
QAG-1300	Agent not honoring event provision interval
QAG-1355	Entry for new event is missing in config
QAG-1483	Agent continues to run when service is “paused”
QAG-1503	Agent not retrying chunk upload upon request time out in certain cases
QAG-1514	Potential error in calculating back off algorithm result
QAG-1682	Fixed an error when persisting manifest files in certain cases
QAG-1687	Fixed an error when agent fails certificate check
QAG-1708	Re-provisioning error after installation in Azure

Known Limitations and Workarounds

The following known limitations are open in this release:

ID	Description
CRM-19819	Cloud Agent UI shows “Pending Assignment” for Windows agents in certain cases
CRM-19889	Agent initialization error with status 592 in certain cases
QAG-1301	Proxy server returns HTTP status 502 error when “Use Basic Auth” set to “False”
QAG-1364	Agent version is displayed as “File info for QualysAgent.exe missing from snapshot” in certain cases before the first Inventory data collection is processed
QAG-1832	Agent cannot be uninstalled in some cases when Resource Monitor is open and agent is selected