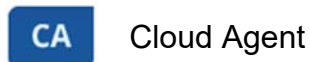




## Qualys Cloud Agent Linux / Mac 1.6

We're excited to tell you about new features, platform coverage changes, improvements, and bug fixes in the Cloud Agent Linux 1.6.0 and Mac 1.6.0 (GA) releases. 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 1.6 is required to support this new Config Profile setting, thus this feature will only take effect on agent versions after 1.6.
  - 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:

- 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:

- macOS Sierra (10.12)

## Bug Fixes

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

ID	Description
CRM-18492 CRM-18472	Mac agent does not populate NetBIOS name in UI
CRM-18842	Agent on SUSE Enterprise not showing “open ports” and “installed software”
CRM-19270	Proxy issue with customer-supplied certificate
CRM-19819	Agents show “Pending Assignment” in UI for long periods of time in certain cases
CRM-20240	Linux agent not honoring CPU Throttle settings in certain cases
CRM-21119	After upgrade operating system to macOS Sierra, Cloud Agent fails to start
CRM-21760	Fedora 24 agent fails to start

## Known Limitations and Workarounds

The following known limitations are open in this release:

ID	Description
CRM-18184	Specific Policy Compliance CIDs (2542, 1425) not supported on Red Hat Linux 5.x
CRM-19676	Linux agent fails to auto update in certain cases
CRM-20463	Linux/Mac agent does not display correct DNS name in certain cases
CRM-20715 CRM-20964	QID 45097 not support on Linux agent needed for “exclude non-running kernel feature” related vulnerabilities
CRM-21140	Red Hat 7 agent shows “Error” status for certain PC CIDs
LXAG-236	Service list not populating on openSUSE Leap 42.1 and Ubuntu 16.04
LXAG-238	IPv6 routing table not populating on Oracle Linux 5.11 and openSUSE 42.1
LXAG-247	Network configs failing on Oracle Linux 7.2 on certain assets
LXAG-263	Uninstall from Portal UI doesn’t succeed on CentOS 7.x [workaround: manual uninstallation succeeds]
LXAG-337	No services under System Information tab for some platforms
LXAG-350	Portal shows upgraded agent version though self patch has failed
LXAG-353	Agent hangs when downloading new binary through Fiddler proxy (very rare)
LXAG-355	System Information tab has no users listed though RHEL 5.11 has users
LXAG-357	Portal shows proxy IP as an unknown interface for the agent
LXAG-395	CIS Policy Compliance hangs on Amazon Linux in certain situations
LXAG-458	HTTPS proxy does not support “https://” in the proxy URL [workaround: remove “https://” from the proxy URL, e.g. qualys https proxy=user:pass@1.2.3.4:3128]
LXAG-469	Agent daemon fails to start on Fedora 24 if install directory is different from default
LXAG-477	Rare case where duplicate Agent ID is created if agent is restarted during the first provisioning call [workaround: remove and reinstall agent]
LXAG-478	Rare case where agent may fail to restart itself on some Red Hat/CentOS 5.11 hosts