



SL1 Acropolis 8.10.3 Release Notes

SL1 version 8.10.3.4

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Overview

This document describes:

- The [Issues Addressed](#) in the 8.10.3.4 release
- The [Issues Addressed](#) in the 8.10.3.3 release
- The [Issues Addressed](#) in the 8.10.3.2 release
- The [New Features](#) in the 8.10.3.1 release
- The [Issues Addressed](#) in the 8.10.3.1 release
- The [New Features](#) in the new user interface
- [Issues Addressed](#) in the new user interface
- The [Beta Features](#) available with the 8.10.3.1 release
- [Disabling the Knowledge Base](#)
- [Special Upgrade Process for FIPS-Compliant Systems](#)
- [Special Considerations for Systems Running 8.4.1 or Earlier](#)
- [Upgrade Process for Systems Running 8.1.0 and Earlier](#)
- [Upgrade Process for Systems Running 8.4.0 and Later](#)
- [Manual Updates for 8.1.x Systems Updated to 8.10.3.4](#)
- [Upgrading MariaDB](#)
- [Rebooting Appliances](#)
- The [features deprecated](#) in the 8.10.3.4 release
- The [known issues for the 8.10.3.4 release](#)

WARNING: The 8.10.3.4 release includes changes that are available in the upcoming 8.14.0 release but are available in the upcoming 8.14.0.1 release. To upgrade from 8.10.3.4 to the upcoming 8.14.0.1 release, import the 8.14.0 release, do not stage and deploy 8.14.0, and then immediately upgrade to 8.14.0.1.

WARNING: The 8.10.3.4 release includes changes that are available in the 8.12.2.2 release but are not available in the earlier 8.12 releases. To upgrade from 8.10.3.4 to the upcoming 8.12.2.2 release, import the 8.12.0 release, do not stage and deploy 8.12.0, and then immediately upgrade to 8.12.2.2.

WARNING: *If you have not already installed an 8.10.x release and rebooted all appliances, you must reboot all appliances after installing 8.10.3.4.* If you would like assistance in planning an upgrade path that meets your security needs while minimizing downtime, please contact your Customer Success Manager. *If you have already installed an 8.10.x release and rebooted all appliances, you do not have to reboot all appliances after installing 8.10.3.4.*

WARNING: *8.10.3.4 does not support Data Collectors and Message Collectors running the CentOS operating system. If your system includes Data Collectors and Message Collectors running the CentOS operating system, contact your Customer Success Manager for details on upgrading Data Collectors and Message Collectors to Oracle Linux before installing 8.10.3.4.*

WARNING: In the installation menu, the **Select Model Type** window displays options for **Storage Node** and **Compute Node**. These options are not available for installation in 8.10.3.4.

WARNING: ScienceLogic strongly suggest you contact Customer Support or your Customer Success Manager to plan your migration from CentOS (versions of SL1 prior to 8.1.1) to 8.10.3.4.

WARNING: 7.x systems must be upgraded to 7.8.5 before the migration to the 8.9 and subsequent upgrade to 8.10.3.4 release. Please contact your Customer Success Manager to begin a discussion on the migration plan that is appropriate for your system.

WARNING: The Knowledge Base includes known vulnerabilities for cross-site scripting and SQL injection. If you are updating from a previous installation, ScienceLogic strongly recommends that you [disable the Knowledge Base](#).

WARNING: If your system is not currently running a recent release, the upgrade process includes importing multiple upgrade files. You must wait until an update file has imported successfully (i.e. the **Import Status** column displays **Complete** in both the EM7 Release pane and the ScienceLogic OS pane) before importing the next update file.

CAUTION: If you are using the new user interface, please see the section on [Issues Addressed in the New User Interface](#) before upgrading to 8.10.3.4. ScienceLogic recommends that Systems running an AP2 version earlier than 5.55.1.3 upgrade their version of AP2 before upgrading to 8.10.3.4.

CAUTION: Before installing a release, ScienceLogic recommends that you verify that recent backups are available for your system.

CAUTION: During the normal system update process, multiple processes are stopped and restarted. This might result in missed polls, gaps in data, and/or unexpected errors. ScienceLogic recommends that you always install ScienceLogic releases during a maintenance window.

CAUTION: The ScienceLogic system update process starts a background process that can perform any required post-upgrade tasks. The post-patch update process is automatically stopped after 24 hours. However, depending on the size of your database as well as the version from which you are upgrading, the post-upgrade tasks can take several days to perform. If the post-patch update process is stopped after 24 hours, the process will automatically re-start and continue processing from the point at which it was stopped. If you see an event that indicates the post-patch update process was stopped, you do not need to contact ScienceLogic support for assistance until you see the same event for three consecutive days.

TIP: Before you install a ScienceLogic release, ScienceLogic recommends reviewing the hardware specifications of all the appliances in your system to ensure they meet the requirements for the current usage of your system. For more information, see <https://support.sciencelogic.com/s/system-requirements>

TIP: ScienceLogic regularly uploads new and updated PowerPacks to the Customer Portal before packaging those PowerPacks in a system update file. For more information, see <https://portal.sciencelogic.com/portal/powerpacks>.

Issues Addressed in 8.10.3.4

Security

- Updated PHP packages to address a security issue. (JIRA ID: EM-33591)

PowerPacks

- Several PowerPacks were updated to address an issue in which library version conflicts could cause the ScienceLogic Libraries, included in those PowerPacks, to become corrupted. To address this issue, if you are using the following PowerPacks, you must install the most recent versions, listed below: (JIRA ID: EM-33524)
 - Amazon Web Services v115
 - Dell EMC: Unity v101
 - Dell EMC: VMAX and PowerMax Unisphere API v201
 - Dynatrace v102

- Google Cloud Platform v102
- LayerX: Application Monitor v101
- Microsoft: Office 365 v102
- Microsoft: Windows Server Cluster v101
- Microsoft: Windows Server Services v101
- NetApp Data ONTAP v105
- Nginx: Open Source and Plus v102
- Pure Storage: Flash Array v102
- ScienceLogic: Integration Service v104
- Tivoli Storage Manager v101
- Windows Restart Automatic Services v101

Issues Addressed in 8.10.3.3

- Addressed multiple security issues.

Issues Addressed in 8.10.3.2

Platform

- Improved multiple queries associated with the process "Enterprise Database: Asset Maintenance", to prevent slow performance and "rows behind" for the process "Enterprise Database: Collection Data Pull, Medium Frequency". (Case: 46000) (Support ID: 179697) (JIRA ID: EM-31993)

Security

- Addressed a security issue. Added restrictions to prevent users from viewing system files from the MIB browser. (JIRA ID: EM-32128)

New Features in 8.10.3.1

8.10.3.1 includes the following new features:

Collector Groups

- Redesigned load balancing for Collector Groups to work more efficiently with Dynamic Component Mapping, collector affinity, and Bulk Snippet Dynamic Applications.

Issues Addressed in 8.10.3.1

The following issues are addressed in the 8.10.3.1 release:

For ease of tracking, the Issues Addressed section includes the support ID or case ID associated with each fixed issue. Although you cannot view other users' support IDs or case IDs, you can verify if one or more of your issues have been fixed.

Asset Records

- Addressed an issue that was causing Asset records to become automatically aligned to a default device when edited, even if they were not aligned to a device previously. Users can now create and edit Asset records without aligning to a default device. (Support ID: 177561)

Global Manager

- Addressed an issue in Global Manager. The settings for Event Console Columns in the Account Preferences page (Preferences > Account > Preferences) now persist in the Event Console page after log out.

Windows Services Policies

- Addressed an issue with Windows Service Monitoring Policies. After upgrading to the 8.10 line or later, SL1 no longer triggers multiple spurious events "Windows Service Not Running", when in fact the Windows service had 100% availability. (case 00030592) (Support ID: 177970)

New Features in the New User Interface

User Interface Version

- 8.10.3.1 includes the following version of the user interface:
 - AP2_5.117.2.

General

- If a user forgets his or her password, the user can click the "Forgot Password?" link to reset his or her password.
- Basic Search and Advanced Search were updated to include better search queries and usability.
- SmartViews were deprecated in this release.

Agents

- The new **Agents** page (Devices > Agents) lets you create, upgrade, and delete SL1 Windows and Linux agents.
- The **Agent Investigator** page provides access to all of the data associated with an agent, using the following tabs: **[Config]**, **[Polled Data]**, **[Log Sources]**, and **[Watched Files]**.

Applications

- The new **Applications** page lets you create and manage software applications that you can monitor like devices or business services.

- Applications and application components can generate events in SL1 based on the settings on the **Applications Thresholds** page.

Business Services

- The **Service Investigator** page includes an **Info** menu that displays additional information about the service, including the service description, the managing organizations, the allowed organizations, and the contact user.
- The **Root Cause Analysis** feature allows you to determine what is causing a service to be unhealthy, troubleshoot that service, and refine your policies.

Dashboards

- New dashboard widget options for this release include Agent Polled Data, Agent Processes, Agent Logs, Applications, Application Components, and Maps.
- Dashboards can now display a table of processes running on a device, based upon a given point in time. Also, dashboards can display agent log data in the table widget.
- On a leaderboard table, the dynamic application metrics are properly labeled for the relevant subset of the device.
- You can use an index as a context to which a widget can publish or subscribe.
- Added individual index lines to line charts to let you view time series data from a variety of indexes for a device.
- You can include the organization aligned with a device in a device table or device leaderboard widget.
- You can filter a leaderboard bar chart based on device and organization filters.
- You can filter a device component driver widget to show a list of root parent devices that have a certain device class.
- You can select a service in a table and view a table of events showing only events aligned to that service.
- You can view the name of the Dynamic Application that provides the dashboard with its data.
- When you select a root device on a Device Component widget, all of the devices under that devices are automatically selected.
- You can filter context-driven widgets by device class when selecting a device component.
- You can click the **Full Map** link in a map widget to go directly to the full map.

Devices

- The **Device Investigator** page includes the following updates:
 - New tabs: **[Settings]**, **[Collections]**, **[Journals]**, **[Map]**, **[Monitors]**, **[Notes]**, **[Ports]**, **[Processes]**, **[Redirects]**, **[Relationships]**, **[Schedules]**, **[Services]**, **[Software]**, **[Thresholds]**, and **[Tickets]**.
 - The **[Settings]** tab on a **Device Investigator** page lets you change the collector group and collection type for a device, enable and disable user maintenance, and choose from additional device-specific preferences.
 - The **[Map]** tab on the **Device Investigator** page displays a map of the device and any devices to which it is related.

- In the **More** drop-down list, you can search for specific items on the **Info** drop-down list, such as *Device Class*, *Uptime*, or *Category*. You can also search for a device tool name.
- On a **Device Investigator** page, you can click the forward-slash button (/) to open the **More** drop-down list. You can also highlight search results using the up and down arrow keys, and select a result by pressing **[Enter]**.
- *Collection Time* for a device has been added to the **Info** menu.
- From the **[Events]** tab of the **Device Investigator** page, you can go to the **Event Investigator** page for an event aligned with that device by clicking the link in the **ID** or **Message** field.
- For Device Categories and Device Classes, you can assign icons to multiple categories or classes at the same time, and you can also duplicate and delete categories.

Discovery

- This release includes a new Universal Discovery Framework process that lets you select from a variety of existing discovery types in addition to traditional SNMP discovery.
- The updated Discovery process begins with a page that lets you select specific discovery types based on the type of devices you want to monitor.
- As part of the Discovery process, you can view and modify organization-specific credentials. You can also you can create or edit a credential.

Events

- Every event now has its own **Event Investigator** page, even if that event is not aligned with a device.
- The **Events** page will auto-refresh periodically and display new events. You can also click the refresh icon to manual refresh the **Events** page.
- On the **Events** page and the **Event Investigator** page, you can acknowledge an event that has been previously acknowledged by a different user. You can hover your mouse over an acknowledged field to see when the event was acknowledged and who acknowledged it. Also, if an event was acknowledged by another user and you have the relevant permissions, you can click the **[Reacknowledge]** button to acknowledge that event.
- The **Event Investigator** page includes a new section for **Probable Cause & Resolution** information.
- Clicking the *Ticket ID* for an event on the **Events** page launches a new window with the **Ticket** detail page in the classic user interface. You can also click the **[Actions]** button and select *Create Ticket* to create a new ticket in the classic user interface.
- Clicking the name of an asset on the **Event Investigator** page launches a new window with the **Asset** detail page in the classic user interface.
- Clicking the name of an organization on the **Events** page launches a new window with the **Organization** detail page in the classic user interface.
- The Card view for the **Events** page has been deprecated.

Maps

- The new **Maps** page lets you view relationships between monitored devices in SL1 as maps, and you can also filter maps to show edge and node relationships as needed.

- On the **Maps** page you can also create relationship maps for the various nodes in SL1.
- You can use the Maps features without the "Extended" architecture (Compute Node) by downloading the Maps bundle from the ScienceLogic Customer Portal and running Maps on a CDB. For more information, see the "Installation" chapter in the **Maps** manual.

Issues Addressed in the User Interface

General

- Addressed an issue to ensure that SL1 properly handles user passwords with special characters such as "%" and "@".

Agents

- Addressed an issue where a SQL Server cluster running the Windows SL1 agent stopped unexpectedly. The issue was addressed with version 1.1.5 of the Windows SL1 agent.
- The Windows SL1 agent (version 1.1.5) was updated to prevent reporting an IPv4-mapped TCP socket twice.


Beta Features

The following beta features are included in the 8.10.3.1 release:

- **Manual Device Discovery**
 - This beta feature allows monitored devices to be added manually instead of via a discovery session.
- **Run Book Actions: Custom Action Type**
 - A Run Book Action of type "Custom Action Type" executes a reusable snippet. Unlike the Action Type "Snippet", a Custom Action Type can accept input parameters (in a JSON format) and create output (in a JSON format). A Custom Action Type allows a single snippet to be used in multiple Action Policies, each time with different inputs and different outputs. A Custom Action Type is associated with an Execution Environment. An Execution Environment contains the supporting modules and code (Content Libraries) required by the Custom Action Type. Content Libraries allow snippet developers to isolate the "heavy weight", re-usable code and write "light weight" snippets that call the Content Libraries.
- **PowerPacks:** Beta versions of the following PowerPacks are available. You can download them from the Customer Portal and import them into SL1:
 - Alibaba Cloud: Aliyun
 - AMQP: RabbitMQ
 - Cisco: ACI Multi-Site Manager
 - Cisco: Cloud Center
 - Cisco: Contact Center Enterprise

- Cisco: Hyperflex
- Cisco: Medianet/Mediatrace
- Cisco: Meraki (API)
- Cisco: Tetration
- Cisco: UC Ancillary PowerPack. Includes Dynamic Applications for monitoring Cisco CUBE devices.
- Cisco: UCS Director
- Cisco: Unity Express (Download from the Customer Portal and Import into SL1)
- Docker (Download from the Customer Portal and Import into SL1)
- ELK: AWS CloudTrail
- ELK: Azure Activity Log
- F5: BIG-IP DNS
- Google Cloud Platform
- Hitachi Data Systems: VSP
- Kubernetes
- Link Layer Neighbor Discovery (Download from the Customer Portal and Import into SL1)
- Microsoft: Office 365
- Microsoft: Windows Server Event Logs
- Palo Alto (Download from the Customer Portal and Import into SL1)

To install a beta PowerPack:

1. Go to the **PowerPack Manager** page (System > Manage > PowerPacks).
2. Select the **[Actions]** menu and select *Install PowerPack*. The **PowerPack Installer** modal page is displayed.
3. Select the lightning-bolt icon () for the PowerPack you want to install. Information about the contents of the PowerPack and the installation process is displayed.
4. Select the **[Install]** button.

TIP: By default, installing an updated version of a PowerPack will overwrite all content in a PowerPack that has already been installed on the target system. You can use the **Enable Selective PowerPack Field Protection** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields.

Disabling the Knowledge Base

The Knowledge Base includes known security vulnerabilities. ScienceLogic no longer supports the Knowledge Base


- ScienceLogic strongly recommends that existing users disable the Knowledge Base. 8.9.2 and later releases provides a new setting in the silo.conf file to disable the Knowledge Base.
- For new installations that installed the 8.10.3.4 release, the Knowledge Base will be disabled by default.

WARNING: The Knowledge Base includes known vulnerabilities for cross-site scripting and SQL injection. ScienceLogic strongly recommends that you disable the Knowledge Base.

To disable the Knowledge Base:

1. Use SSH to connect to the Administration Portal and Database Server or All-In-One (all SL1 appliances that provide a web interface).
2. Use an editor like vi and edit the file `/etc/silo.conf`. In the LOCAL section, add the line:

`kbase_disabled=1`
4. Use an editor like vi and edit the file `/etc/siteconfig/siloconf.siteconfig`. In the LOCAL section, add the line:

`kbase_disabled=1`
5. Open a browser session and login to the SL1
6. From the hamburger menu () in the upper right, select **Clear SL1 System Cache**.
7. Upon your next login, the Knowledge Base tab will not appear. Attempts to access the tab will result in an "Access Denied" error message.

Special Upgrade Process for FIPS-Compliant Systems

FIPS-compliant systems (those that are FIPS 140-2 enabled) should [manually upgrade to the latest version of MariaDB](#).

The platform patch will automatically update MariaDB-client, MariaDB-common, and MariaDB-shared RPMs but will not update the MariaDB Server.

Special Considerations for Systems Running 8.4.1 or Earlier

WARNING: 8.10.3.4 does not support Data Collectors and Message Collectors running the CentOS operating system. If your system includes Data Collectors and Message Collectors running the CentOS operating system, contact your Customer Success Manager for details on upgrading Data Collectors and Message Collectors to Oracle Linux before installing 8.10.3.4.

8.4.2 included a new feature for Ticketing. The Note Editor for tickets includes a drop-down menu where the user can specify that the note be saved as Plain Text or HTML. Ticket notes created in the API can also be saved as Plain Text or HTML. HTML is the default format for ticket notes in both the Note Editor and the API.

This new feature required a change to the database schema that will be performed immediately after a system is upgraded to 8.4.2 or later for the first time. If your system has not been upgraded to 8.4.2 or later, this schema change will be performed after you upgrade.

During the post-patch process, all existing ticket notes will be migrated to the new schema in batches. During the migration, all ticket notes will be unavailable. The user interface and API will not display ticket notes. Ticket notes cannot be viewed or updated during the post-patch process. On a system that included 2,000,000 ticket notes, this process took approximately 6 hours.

If you require access to all ticket notes immediately after installing an 8.4.2 or later release, contact ScienceLogic Customer Support for details on manually updating the database schema before you upgrade to 8.4.2 or later.

The 8.4.2 release also changed the firewall on all appliances from iptables to firewalld. If you are currently running a release earlier than 8.4.2 and have added one or more custom firewall rules, such as a non-standard port for Phone Home Collectors, these rules must be migrated before upgrading to 8.8.1. Please contact ScienceLogic Support for more information.

Upgrade Process for Systems Running 8.1.0 and Earlier

WARNING: 8.10.0 and later releases do not support Data Collectors and Message Collectors running the CentOS operating system. If your system includes Data Collectors and Message Collectors running the CentOS operating system, contact your Customer Success Manager for details on upgrading Data Collectors and Message Collectors to Oracle Linux before installing 8.10.3.4.

WARNING: 7.x systems must be upgraded to 7.8.5 before migration to the 8.9.0 release. After migration to 8.9.0, users can upgrade to releases later than 8.9.0. Please contact your Customer Success Manager to begin a discussion on the migration plan that is appropriate for your system.

The 8.1.1 release included a complete update of the ScienceLogic appliance operating system from CentOS 5.11 to Oracle Linux. Major operating system components, including the database, web server, and High Availability/Disaster Recovery packages have been updated or replaced by new industry-standard packages.

When upgrading from a version prior to 8.1.1, each appliance must be migrated to 8.9.0 and the Oracle Linux 7.5 operating system.

Upgrade to 8.9.0

WARNING: ScienceLogic strongly suggest you contact Customer Support or your Customer Success Manager to plan your migration from CentOS (versions of SL1 prior to 8.1.1) to 8.9.0.

The process of migrating an existing system to 8.9.0 includes multiple additional steps that will vary depending on your architecture. Please contact your Customer Success Manager to begin a discussion on the migration plan that is appropriate for your system.

The following is the general process for migrating to 8.9.0. This is a high-level description only. For details, contact Customer Support or your Customer Success Manager.

- The existing system must be upgraded to at least 7.8.5 before the migration.
- Run the 8.9.0 migration patch.

NOTE: See the separate Migration document for detailed instructions on how to perform the migration steps. Before you migrate to 8.9.0, please contact your Customer Success Manager.

- Use the 8.9.0 ISO to reinstall all Database Servers or All-In-One Appliances. Data is migrated using a logical backup while the database on the existing system is stopped. The downtime of this operation can be mitigated in several ways depending on your current architecture.
- Use the 8.9.0 ISO to reinstall all Administration Portal appliances.
- After reinstalling all Database Servers and Administration Portals, the system is operational.
- If you want to upgrade to a version later than 8.9.0, you must use the 8.9.0 ISO to reinstall all Data Collectors and Message Collectors. 8.10.0 and later versions do not support "mixed-mode", where the Database Servers and Administration Portals are running Oracle Linux and the Data Collectors and Message Collectors are running CentOS.
- To upgrade to 8.10.3.4, see the section on [Upgrade Process for Systems Running 8.4.0 and Later](#).
- Perform the steps listed in the [Other Manual Updates](#) section.

Features Not Currently Supported by the 8.x Releases

The following functionality that was available in previous releases is not currently available in the 8.10.3.4 release:

- Configuring two All-In-One Appliances for Disaster Recovery
- Applying a patch manually with the `apply_patch` script

Upgrade Process for Systems Running 8.4.0 and Later

WARNING: 8.10.3.4 does not support Data Collectors and Message Collectors running the CentOS operating system. If your system includes Data Collectors and Message Collectors running the CentOS operating system, contact your Customer Success Manager for details on upgrading Data Collectors and Message Collectors to Oracle Linux before installing 8.10.3.4.

WARNING: If your system is not currently running an 8.10 release, the upgrade process includes importing multiple upgrade files (8.5.0 > 8.6.0 > 8.7.0 > 8.8.0 > 8.9.0 > 8.10.0 > 8.10.1.3). You must wait until an update file has imported successfully (when the **Import Status** column displays *Complete*) before importing the next update file.

WARNING: If you have not installed 8.10.1 and rebooted all appliances, you must reboot all appliances after installing 8.10.3.4. If you would like assistance in planning an upgrade path that meets your security needs while minimizing downtime, please contact your Customer Success Manager. If you have already installed 8.10.1 and rebooted all appliances, you do not have to reboot all appliances after installing 8.10.3.4.

CAUTION: If you are using the new user interface, please see the section on [Issues Addressed in the New User Interface](#) before upgrading to 8.10.3.4. If you upgraded your system via **Content Management** and the AP2 version is earlier than 5.55.13, AP2 will not start. ScienceLogic recommends that Systems running an AP2 version earlier than 5.55.1.3 upgrade via GQL before upgrading to 8.10.3.4.

To upgrade to the 8.10.3.4 release from an 8.4.0 or later release:

NOTE: Before upgrading, ensure that:

- Each SL1 Appliance has a valid license
- Each Data Collector is a member of a Collector Group
- Each Data Collector is "available" to the Database Server. To check, see the **Appliances** page (System > Manage > Appliances).

NOTE: Staging and applying SL1 patches is "hitless" and does not require a maintenance window.

CAUTION: [Upgrading MariaDB](#) and the [rebooting all SL1 appliances](#) should be performed during a maintenance window. If you would like assistance in planning an upgrade path that minimizes downtime, please contact your Customer Success Manager.

1. Familiarize yourself with the [Known Issues](#) for this release.
2. Go to the **System Updates** page and disable automatic staging (System > Tools > Updates > Actions > Disable automatic staging).
 - If you have previously used manual staging, perform these additional steps:
 - Go to the **System Updates** page (System > Tools > Updates). Select all updates in the EM7 Releases pane and select all updates in the ScienceLogic OS pane.
 - In the **Select Action** menu, select *Unstage Update (remove staging policy override)*. Click **[Go]**.
 - For software that was previously staged with automatic staging, *Unstage Update (remove staging policy override)* does not affect staging.

NOTE: For details on downloading, importing, staging, and installing system updates, see the manual **System Administration**.

3. *If you are currently running an 8.4 release:*

- From the ScienceLogic portal, download the latest update for 8.5.0, 8.6.0, 8.7.0, 8.8.0, 8.9.0, 8.10.0, and 8.10.3.4 to a local computer. Unzip any zipped files.

- Import the 8.5.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.6.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.7.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.8.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.9.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Go to step #10 and continue.

4. *If you are currently running an 8.5 release:*

- From the ScienceLogic portal, download the latest update for 8.6.0, 8.7.0, 8.8.0, 8.9.0, 8.10.0, and 8.10.3.4 to a local computer. Unzip any zipped files.
- Import the 8.6.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.7.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.8.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.9.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the

ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.

- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Go to step #10 and continue.

5. *If you are currently running an 8.6 release:*

- From the ScienceLogic portal, download the latest update for 8.7.0, 8.8.0, 8.9.0, 8.10.0, and 8.10.3.4 to a local computer. Unzip any zipped files.
- Import the 8.7.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.8.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.9.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Go to step #10 and continue.

6. *If you are currently running an 8.7 release:*

- From the ScienceLogic portal, download the 8.8.0, 8.9.0, 8.10.0, and 8.10.3.4 updates to a local computer. Unzip any zipped files.
- Import the 8.8.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.9.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Continue to step #10.

7. *If you are currently running an 8.8 release:*

- From the ScienceLogic portal, download the 8.9.0, 8.10.0, and 8.10.3.4 updates to a local computer. Unzip any zipped files.
- Import the 8.9.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Go to step #10 and continue.

8. *If you are currently running an 8.9 release:*

- From the ScienceLogic portal, download the 8.10.0 and 8.10.3.4 update to a local computer. Unzip any zipped files.
- Import the 8.10.0 system update file in the System Updates page (System > Tools > Updates > **[Import]** button). The system update file will load an update in both the EM7 Releases and the ScienceLogic OS section. You must wait until the update file has imported successfully (i.e. the **Import Status** column displays *Complete*) before importing the next update file.
- Go to step #10 and continue.

9. *If you are currently running an 8.10.x release:*

- From the ScienceLogic portal, download the 8.10.3.4 update to a local computer. Unzip any zipped files.

- Go to step #10 and continue.

10. Import the 8.10.3.4 system update file in the **System Updates** page (System > Tools > Updates > **[Import]** button).

- The system update file will load an update named **EM7 8.10.3.4** in the EM7 Releases pane.
- The system update file for 8.10.3.4 will load a new update in the ScienceLogic OS pane.


NOTE: In the ScienceLogic OS section, the **Deployment** column might display incorrect information for all rows except for the first row. If any row other than the first displays an incomplete count during the upgrade process, that incomplete count can be safely ignored.

11. After 8.10.3.4 has been imported:

- Select the checkbox for the new update (EM7 8.10.3.4) in the EM7 Releases pane.
- Select the checkbox for the new update in the ScienceLogic OS pane.

NOTE: If you previously installed an 8.10 release, the platform update is already installed in the ScienceLogic OS pane.


- In the **Select Action** menu, select *Stage Update (prepare for installation)*.
- The platform will stage the updates.

12. When staging has completed, install the update in the ScienceLogic OS pane. To do so, select the lightning-bolt icon () for the latest Platform update.

NOTE: If you previously installed an 8.10 release, the platform update is already installed in the ScienceLogic OS pane.

The following warnings might appear; these warnings can be safely ignored:



```
Package installation: warning: %postun(OpenIPMI-libs-2.0.19-11.el7.x86_64)
scriptlet failed, exit status 1
Package installation: warning: file /var/run/OpenIPMI: remove failed: No such
file or directory
```

13. When staging has completed, install the 8.10.3.4 update in the EM7 Releases section. To do so, select the lightning-bolt icon () for the update.

The following warning might be generated; you can safely ignore this warning:

```
502 Bad Gateway
```

If you see this warning, reload the page in your browser.

14. Clear your browser's cache.
15. Clear the SL1 cache.
 - Go to the **Cache Management** page (System > Tools > Cache).
 - From the hamburger menu (), select **Clear EM7 System Cache**.
16. If you have not previously upgraded to 8.2.0, perform the steps listed in the [Other Manual Updates](#) section.
17. Go to the **PowerPack Manager** page (System > Manage > PowerPacks) and install all updated PowerPacks. Updated PowerPacks are loaded on your ScienceLogic system by the patch process. To install an updated PowerPack, find the PowerPack in the **PowerPack Manager** page and select the installation icon () in the **Update** column for the PowerPack or use the *Update PowerPacks* option in the **Select Action** drop-down list.

TIP: By default, installing an updated version of a PowerPack will overwrite all content in that PowerPack that has already been installed on the target system. You can use the **Enable Selective PowerPack Field Protection** setting in the **Behavior Settings** page (System > Settings > Behavior) to prevent new PowerPacks from overwriting local changes for some commonly customized fields.

18. If you are monitoring devices using the ScienceLogic Agent, follow the steps listed in the **Agent Monitoring** manual to upgrade to the latest version of the Agent.

CAUTION: [Upgrading MariaDB](#) and the [rebooting all SL1 appliances](#) should be performed during a maintenance window. If you would like assistance in planning an upgrade path that minimizes downtime, please contact your Customer Success Manager.

19. Upgrade MariaDB to the latest version. To do so, perform the steps in the [Upgrading MariaDB](#) section.
20. 8.10.1 included changes to the operating system. ***If you have not previously installed 8.10.1 or later and rebooted all appliances, you must reboot all appliances after installing 8.10.3.4.*** Perform the steps in the [Rebooting Appliances](#) section that are applicable to your system architecture. If you would like assistance in planning an upgrade path that meets your security needs while minimizing downtime, please contact your Customer Success Manager.

Manual Updates for 8.1.x Systems Updated to 8.10.3.4

If you upgraded from an 8.1.x system to 8.10.3.4, after 8.10.3.4 is installed, you must manually apply the following changes to every Message Collector and All-In-One Appliance in your system:

1. Either go to the console or use SSH to access the server.
2. Log in as user **em7admin** with the appropriate password.
3. Enter the following at the command line:

```
sudo vi /etc/siteconfig/siloconf.siteconfig
```

4. Locate the following line:

```
eventmanager = syslog,trap,internal
```

NOTE: On an All-In-One Appliance, this line will include additional entries in the comma-delimited list.

5. Add ",agent" to the end of the line. The line should now look like this:

```
eventmanager = syslog,trap,internal,agent
```

6. Save the file and exit vi (:wq).

7. At the command line, enter the following command to rebuild the configuration file:

```
sudo /opt/em7/share/scripts/generate-silo-conf.py > /etc/silo.conf
```

Upgrading MariaDB

CAUTION: *Upgrading MariaDB* and the *rebooting all SL1 appliances* should be performed during a maintenance window. If you would like assistance in planning an upgrade path that minimizes downtime, please contact your Customer Success Manager.

Version 8.10.1 included an update to MariaDB that addresses security and performance issues. You can download the latest approved MariaDB updates at <https://portal.sciencelogic.com/portal/miscellaneous>.

NOTE: To address security issues, download the **latest** MariaDB updates. Earlier MariaDB updates remain on the portal to support users who have not yet migrated to the latest release of SL1 and MariaDB.

The following sections describe how to perform this upgrade for different appliance types and architectures.

Two Database Servers Configured for High Availability

To upgrade a High Availability cluster, perform the following steps:

WARNING: The system will be unavailable when performing these steps.

1. Copy the MariaDB RPMs to the file system of both appliances.
2. Log in to the command-line of both Database Server appliances as em7admin.
3. Execute the following command on the secondary Database Server:

```
sudo systemctl stop pacemaker.service
```

4. Execute the following command on the primary Database Server:

```
sudo crm resource stop mysql
```

5. Execute the following command on the primary Database Server to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```

6. On the primary Database Server, navigate to the directory that you copied the RPMs.

7. For each RPM that the output from step 5 showed at an earlier version, execute the following command on the primary Database Server:

```
sudo rpm -Uvh <file name of RPM>
```

8. Execute the following command on the primary Database Server to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

9. Execute the following command on the primary Database Server:

```
sudo systemctl start mysql
```

10. Execute the following command on the primary Database Server, replacing the password for the root database user where indicated:

```
sudo mysql_upgrade -u root -p
```

11. On the secondary Database Server, execute the following command to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```

12. On the secondary Database Server, navigate to the directory where you copied the RPMs.

13. For each RPM that the output from step 11 showed at an earlier version of MariaDB, execute the following command on the secondary Database Server:

```
sudo rpm -Uvh <file name of RPM>
```

14. Execute the following command on the secondary Database Server to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

15. Execute the following command on the secondary Database Server:

```
sudo systemctl start pacemaker.service
```

Two Database Servers Configured for Disaster Recovery

To upgrade two Database Servers configured for disaster recovery, perform the following steps:

WARNING: The system will be unavailable when performing these steps.

1. Copy the latest RPMs to the file system of both appliances.

2. Log in to the command-line of both Database Server appliances as em7admin.
3. Execute the following command on the primary Database Server:

```
sudo systemctl stop mysql
```
4. Execute the following command on the primary Database Server to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```
5. On the primary Database Server, navigate to the directory that you copied the RPMs.
6. For each RPM that the output from step 4 showed at an earlier version, execute the following command on the primary Database Server:

```
sudo rpm -Uvh <file name of RPM>
```
7. Execute the following command on the primary Database Server to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```
8. Execute the following command on the primary Database Server:

```
sudo systemctl start mysql
```
9. Execute the following command on the primary Database Server, replacing the password for the root database user where indicated:

```
sudo mysql_upgrade -u root -p
```
10. On the secondary Database Server, execute the following command to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```
11. On the secondary Database Server, navigate to the directory where you copied the RPMs.
12. For each RPM that the output from step 10 showed at an earlier version, execute the following command on the secondary Database Server:

```
sudo rpm -Uvh <file name of RPM>
```
13. Execute the following command on the secondary Database Server to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

Three Database Servers Configured for HA and DR

To upgrade a High Availability cluster, perform the following steps:

WARNING: The system will be unavailable when performing these steps.

1. Copy the latest RPMs to the file system of all three appliances.
2. Log in to the command-line of all three Database Server appliances as em7admin.

3. Execute the following command on the secondary Database Server in the HA cluster:

```
sudo systemctl stop pacemaker.service
```
4. Execute the following command on the primary Database Server in the HA cluster:

```
sudo systemctl stop mysql
```
5. Execute the following command on the primary Database Server in the HA cluster to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```
6. On the primary Database Server in the HA cluster, navigate to the directory that you copied the RPMs.
7. For each RPM that the output from step 5 showed at an earlier version, execute the following command on the primary Database Server in the HA cluster:

```
sudo rpm -Uvh <file name of RPM>
```
8. Execute the following command on the primary Database Server in the HA cluster to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```
9. Execute the following command on the primary Database Server in the HA cluster:

```
sudo crm resource start mysql
```
10. Execute the following command on the primary Database Server in the HA cluster, replacing the password for the root database user where indicated:

```
sudo mysql_upgrade -u root -p
```
11. On the secondary Database Server, execute the following command to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```
12. On the secondary Database Server, navigate to the directory where you copied the RPMs.
13. For each RPM that the output from step 11 showed at an earlier version, execute the following command on the secondary Database Server:

```
sudo rpm -Uvh <file name of RPM>
```
14. Execute the following command on the secondary Database Server in the HA cluster to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```
15. Execute the following command on the secondary Database Server in the HA cluster:

```
sudo systemctl start pacemaker.service
```
16. On the Database Server for disaster recovery, execute the following command to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```
17. On the Database Server for disaster recovery, navigate to the directory that you copied the RPMs.

18. For each RPM that the output from step 16 showed at an earlier version, execute the following command on the Database Server for disaster recovery:

```
sudo rpm -Uvh <file name of RPM>
```

19. Execute the following command on the secondary Database Server in the HA cluster to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

20. Execute the following command on the Database Server for disaster recovery to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

Single Database Server/All-In-One Appliance/Data Collector/Message Collector

To upgrade MariaDB on a single Database Server, All-In-One Appliance, Data Collector, or Message Collector, perform the following steps:

WARNING: The Database Server, All-In-One Appliance, Data Collector, or Message Collector will be inoperable when performing these steps.

1. Copy the latest RPMs to the file system of the appliance:
2. Log in to the command-line of the appliance as em7admin.
3. Execute the following commands:

```
sudo systemctl stop em7  
sudo systemctl stop mariadb.service
```

4. Execute the following command to determine the current installed version of the RPMs:

```
sudo rpm -qa ^MariaDB-*
```

5. Navigate to the directory that you copied the RPMs.
6. For each RPM that the output from step 4 showed at an earlier version, execute the following command:

```
sudo rpm -Uvh <file name of RPM>
```

7. Execute the following command to validate that the RPMs installed correctly:

```
sudo rpm -qa ^MariaDB-*
```

8. Execute the following commands:

```
sudo systemctl daemon-reload  
sudo systemctl start mariadb.service  
sudo systemctl start em7
```

9. Execute the following command, replacing the password for the root database user where indicated:

```
sudo mysql_upgrade -u root -p
```

Rebooting Appliances

CAUTION: *Upgrading MariaDB* and the *rebooting all SL1 appliances* should be performed during a maintenance window. If you would like assistance in planning an upgrade path that minimizes downtime, please contact your Customer Success Manager.

Use the applicable steps listed in this section to reboot your appliances.

Administration Portal

Perform the following steps to reboot an Administration Portal:

1. Either go to the console of the Database Server or use SSH to access the server.
2. Log in as **em7admin** with the appropriate password.
3. At the shell prompt, execute the following:

```
python -m silo_common.admin_toolbox <appliance_ID> "/usr/bin/sudo /usr/sbin/shutdown  
-r +1"
```

where:

- *appliance_ID* is the appliance ID for the Data Collector, Message Collector, or Administration Portal.

If your SL1 system includes multiple Administration Portals, you can remotely reboot the Administration Portals from an Administration Portal. To do so:

1. Go to the **Appliance Manager** page (System > Settings > Appliances).
2. Select the checkboxes for the appliances you want to reboot.
3. In the **[Select Action]** menu, select **Reboot** and click the Go button.
4. Click the OK button when the "Are you sure you want to reboot the selected appliances?" message is displayed.
5. During the reboot, the user interface for the affected Administration Portals is unavailable.
6. When the reboot has completed, the **Audit Logs** page (System > Monitor > Audit Logs) will include an entry for each appliance that was rebooted.

Data Collectors and Message Collectors

You can reboot Data Collector and Message Collectors either from the user interface or from the command line.

From the SL1 user interface, perform the following steps to reboot a Data Collector or Message Collector:

1. Go to the **Appliance Manager** page (System > Settings > Appliances).
2. Select the checkboxes for the appliances you want to reboot.
3. In the **[Select Action]** menu, select **Reboot** and click the Go button.

4. Click the OK button when the "Are you sure you want to reboot the selected appliances?" message is displayed.
5. During the reboot, go to the **System Logs** page (System > Monitor > System Logs). You should see this message:

```
Major: Could not connect to module (5) database USING SSL=TRUE: Error attempting
to connect to database with SSL enabled True: (2003, 'Can't connect to MySQL
server on '10.2.12.77' (113 "No route to host"))
```

6. When the reboot has completed, the **Audit Logs** page (System > Monitor > Audit Logs) will include an entry for each appliance that was rebooted.

From the console of the Database Server or SSH to the Database Server, perform the following steps to reboot a Data Collector or Message Collector:

1. Either go to the console of a Database Server or SSH to access the server.
2. Log in as **em7admin** with the appropriate password.
3. At the shell prompt, execute the following:

```
python -m silo_common.admin_toolbox <appliance_ID> "/usr/bin/sudo /usr/sbin/shutdown
-r +1"
```

where:

- *appliance_ID* is the appliance ID for the Data Collector, Message Collector, or Administration Portal.

Standalone All-In-One Appliances and Database Servers

Perform the following steps to reboot a standalone All-In-One Appliance or Database Server:

1. Either go to the console or use SSH to access the server.
2. Log in as **em7admin** with the appropriate password.
3. Execute the following commands on the appliance to pause the system and shutdown MariaDB. Enter the password for the em7admin user when prompted:

```
sudo touch /tmp/.proc_mgr_pause
sudo systemctl stop mariadb
```

4. Execute the following command on the appliance to reboot the appliance:

```
sudo reboot
```

5. After the appliance has rebooted, log in to the appliance as the em7admin user using the console or SSH.
6. Execute the following command on the appliance to un-pause the system:

```
sudo rm /tmp/.proc_mgr_pause
```

7. Enter the password for the em7admin user and confirm the command when prompted.

Two Database Servers Configured for Disaster Recovery

Perform the following steps to reboot two Database Servers configured for Disaster Recovery:

1. Either go to the console of the primary Database Server or use SSH to access the server.
2. Log in as **em7admin** with the appropriate password.
3. First, you should check the status of the appliances. To do this, enter the following at the shell prompt:

```
cat /proc/drbd
```

4. Your output will look like this:

```
1: cs:Connected ro:Primary/Secondary ds:UpToDate/UpToDate C r----  
ns:17567744 al:0 bm:1072 lo:0 pe:0 ua:0 ap:0 ep:1 wo:b oos:12521012
```

NOTE: If your output includes "ro:Primary/Secondary", but does not include "UpToDate/UpToDate", data is being synchronized between the two appliances. You must wait until data synchronization has finished before rebooting.

5. Execute the following commands on the **primary** appliance to pause the system and shutdown MariaDB. Enter the password for the em7admin user when prompted:

```
sudo touch /tmp/.proc_mgr_pause  
sudo systemctl stop pacemaker
```

6. Execute the following command on the **primary** appliance to reboot the appliance:

```
sudo reboot
```

7. After the primary appliance has rebooted, log in to the console of the **primary** appliance again.

8. Execute the following commands on the **primary** appliance:

```
sudo rm /tmp/.proc_mgr_pause
```

9. Enter the password for the em7admin user and confirm the command when prompted.

10. Log in to the **secondary** Database Server as the em7admin user using the console or SSH.

11. Execute the following command on the **secondary** appliance to reboot the appliance:

```
sudo reboot
```

12. Enter the password for the em7admin user when prompted.

Two Database Servers in a High Availability Cluster

Perform the following steps to reboot two Database Servers in a high availability cluster:

1. Either go to the console of the secondary Database Server or use SSH to access the server.
2. Log in as **em7admin** with the appropriate password.
3. First, you should check the status of the appliances. To do this, enter the following at the shell prompt:

```
cat /proc/drbd
```

4. Your output will look like this:

```
1: cs:Connected ro:Secondary/Primary ds:UpToDate/UpToDate C r----  
ns:17567744 al:0 bm:1072 lo:0 pe:0 ua:0 ap:0 ep:1 wo:b oos:12521012
```

NOTE: If your output includes "ro:Secondary/Primary", but does not include "UpToDate/UpToDate", data is being synchronized between the two appliances. You must wait until data synchronization has finished before rebooting.

5. Execute the following command on the **secondary** appliance to stop the cluster service:
6. Enter the password for the em7admin user when prompted.
7. Log in to the **primary** Database Server as the em7admin user using the console or SSH.
8. Execute the following commands on the **primary** appliance to pause the system and stop the cluster service. Enter the password for the em7admin user when prompted:

```
sudo touch /tmp/.proc_mgr_pause  
sudo systemctl stop pacemaker
```

9. Execute the following command on the **primary** appliance to reboot the appliance:
10. After the primary appliance has rebooted, log in to the console of the **primary** appliance again.

11. Execute the following command on the **primary** appliance:

```
sudo rm /tmp/.proc_mgr_pause
```

12. Enter the password for the em7admin user and confirm the command when prompted.
13. Ensure that the user interface is now available on the primary appliance.
14. Log in to the **secondary** Database Server as the em7admin user using the console or SSH.
15. Execute the following command on the **secondary** appliance to reboot the appliance:
16. Enter the password for the em7admin user when prompted.

Three Database Servers Configured for High Availability and Disaster Recovery

Perform the following steps to reboot three Database Servers configured for high availability and disaster recovery:

1. Either go to the console of the **secondary Database Server in the HA cluster** or use SSH to access the server.

2. Log in as **em7admin** with the appropriate password.

3. First, you should check the status of the appliances. To do this, enter the following at the shell prompt:

```
cat /proc/drbd
```

4. Your output will look like this:

```
10: cs:Connected ro:Secondary/Primary ds:UpToDate/UpToDate C r----  
ns:17567744 al:0 bm:1072 lo:0 pe:0 ua:0 ap:0 ep:1 wo:b oos:12521012
```

NOTE: If your output includes "ro:Secondary/Primary", but does not include "UpToDate/UpToDate", data is being synchronized between the two appliances. You must wait until data synchronization has finished before rebooting.

5. Execute the following command on the **secondary Database Server in the HA cluster** to stop the cluster service:

```
sudo systemctl stop pacemaker
```

6. Enter the password for the em7admin user when prompted.

7. Log in to **primary** Database Server as the em7admin user using the console or SSH.

8. Execute the following commands on the **primary** appliance to pause the system and stop the cluster service. Enter the password for the em7admin user when prompted:

```
sudo touch /tmp/.proc_mgr_pause  
sudo systemctl stop pacemaker
```

9. Execute the following command on the **primary** appliance to reboot the appliance:

```
sudo reboot
```

10. After the primary appliance has rebooted, log in to the console of the **primary** appliance again.

11. Execute the following command on the **primary** appliance:

```
sudo rm /tmp/.proc_mgr_pause
```

12. Enter the password for the em7admin user and confirm the command when prompted.

13. Log in to the **secondary Database Server in the HA cluster** as the em7admin user using the console or SSH.

14. Execute the following command on the **secondary Database Server in the HA cluster** to reboot the appliance:

```
sudo reboot
```

15. Enter the password for the em7admin user when prompted.
16. Log in to the **Database Server for Disaster Recovery** as the em7admin user using the console or SSH.
17. Execute the following command on the **Database Server for Disaster Recovery** to reboot the appliance:

```
sudo reboot
```
18. Enter the password for the em7admin user when prompted.

Deprecated Features

As of the 8.2.0 release, the following PowerPacks are no longer included in the default ISO. These PowerPacks will not be automatically removed from an existing system during an upgrade and will remain available for download on the [ScienceLogic Portal](#):

- ADIC Base Pack
- Ascend Communications Base Pack
- Cabletron System Base Pack
- CloudKick Management
- GoGrid Base Pack
- Informant Cluster
- Informant Exchange
- Informant MS SQL
- Informant Windows OS
- NTI Base Pack
- Rackspace Base Pack
- Redback Base Pack
- RIM Blackberry Base Pack
- Sensatronics Base Pack
- SystemEdge Base Pack
- System Uptime
- Tipping Point Base Pack
- Xirrus Base Pack

The new user interface architecture requires API access for all users; API access is automatically granted to users. The following API-specific access hooks have been deprecated and removed from the product:

- API: Resource Indexes
- API: Server Access
- API: Virtual Device

The following functionality that was available in previous releases is no longer available in the 8.10.3.4 release:

- The process for generating rollup/normalized data has been updated to improve performance and scalability. This update deprecates the generation of frequent rollup data. The following user interface pages are affected:
 - The widgets Leaderboard/Top-N, Leaderboard/Top-N (secondary), and Multi-Series Performance no longer support Frequent normalization. If these widgets are used by older dashboards and are already configured to use Frequent normalization, the platform will automatically update these widgets to use hourly normalization.
 - In the Collection Labels page (System > Manage > Collection Labels), the Frequent Data column is deprecated.
- The Cisco Nexus PowerPack has been removed from the default build and is no longer supported. However, the PowerPack is not deleted during the upgrade process. The device classes for Cisco Nexus devices are now included in the Cisco: Base Pack PowerPack.
- The ScienceLogic Agent no longer supports 32-bit versions of Linux or Windows.
- The third-party Azure python library has been removed from the ISO build.
- The FTP, SFTP, NFS, and SMB backup options that stage locally are no longer supported.
- The EMC Base Pack PowerPack has been removed from the default build and is no longer supported. However, the PowerPack is not deleted during the upgrade process. If you are still using the EMC Base Pack PowerPack, ScienceLogic recommends using the EMC: VNX PowerPack instead.
- The SAN wizard is no longer supported. ScienceLogic will no longer provide direct support for configuring a SAN for data storage.
- Integration Server appliances are no longer supported.
- Root access is not enabled on any appliance.
- The VMware: vCloud PowerPack has been removed from the ISO build and is no longer supported.
- The "ifconfig" command is no longer supported by the new appliance operating system. The "ip addr" command must be used instead.
- NOC Screens (System > Manage > Screens) are no longer included in the platform. To re-enable this feature, contact ScienceLogic Customer Support.
- The Knowledge Base is no longer supported by ScienceLogic and will be disabled by default for new users.
- High-Availability and Disaster Recovery no longer support the command "drbd-overview". To check the status of drbd, use "cat /proc/drbd".

Known Issues

Agent Monitoring

- Agent monitoring does not work if the Agent installation is performed for an already discovered device using an organization setting that is different from the current organization for the device.
- Log File Monitoring Policies do not work if the policy is applied before the log file is created.
- A Windows 7 server discovered by an Agent is incorrectly categorized as a Windows 2012 Server.

- The AWS t2.nano instances have severe memory constraints. For this reason, the Agent for Linux will run only on t2.micro or larger devices.

API

- API calls for Interface Packet performance data runs an unnecessary SQL query for CBQoS tables, creating unnecessary overhead.
- API calls to IFP normalized performance data cannot filter on the metric value and return a null value.
- API calls to CBQoS normalized performance data cannot filter on the metric value and return a null value.

AWS AMI

- In 8.5.x and 8.6.0 an intermittent issue prevents users from accessing the user interface for Database Servers built from the AWS AMI.
 - **Workaround:** Go to the console of the Database Server or log in using SSH. Execute the following commands at the shell prompt:

```
cd /etc/nginx/  
openssl req -x509 -sha256 -nodes -days 365 -newkey rsa:2048 -keyout  
silossl.key -out silossl.pem  
systemctl start nginx  
systemctl status nginx
```

Backups

- The size of the default partition for local configuration backups is not suitable for most systems. If you require local configuration backups, contact ScienceLogic Customer Support for assistance with utilizing a larger partition.

Bandwidth Billing

- Upgrading to 8.10.1.2 caused an outage in Bandwidth Billing. All virtual interfaces report "0" bandwidth used, even though the network interfaces included in the virtual interfaces correctly reported bandwidth used.

- **Workaround:**

- Go to the **Database Tool** page (System > Tools > DB Tool).
- In the **SQL Query** field, enter the following:

```
master.system_custom_config set field_value = 0 where field = 'high_precision_if_collect';
```

- Click **[Go]**.

CBQoS

- In the Device Performance page, the Navigation Bar displays CBQoS entries with the name "Overview (%)", but the user is unable to generate these reports using raw data. The user can generate these reports using normalized data. The user can generate all other CBQoS device performance reports, including reports for "Overview (<unit>)".
- If you discover a CBQoS device but don't enable any CBQoS collection for any interface on that device, the platform will attempt collection of CBQoS statistics and will generate entries in the silo_query.log
- Under high-load conditions, an unhandled exception might occur when CBQoS collection starts collecting data from a device.

Configuration Dynamic Applications

- Addressed an issue with the PowerPacks "Windows Restart Automatic Services" and "Microsoft: Windows Server Services". The Dynamic Applications "Windows Find Automatic Services Not Running" and "Microsoft: Windows Server Service Configuration" were generating unhandled exceptions. Although 8.10.1 and later release includes a fix for this problem, some users might not see collected configuration data immediately after upgrading.

To workaround this problem, for each device associated with these Dynamic applications, go to the console or SSH to the Data Collector associated with the Dynamic Applications and run the following SQL command:

At the shell prompt, enter `silo_mysql` to get an sql prompt. Then run the following command:

```
DELETE FROM collector_state.config_last_poll where did = <device_id> and app_id IN (<dynamic_application_id_1><dynamic_application_id_2>)
```

where:

- `<device_id>` is the device for which you want to view configuration data collected by the two Dynamic Applications.
- `<dynamic_application_id_1>`, `<dynamic_application_id_2>` are the IDs associated with the two Dynamic Applications.

Data Collectors

- When a Data Collector is built with the 8.5.0 release, added to a distributed system that is built with 8.5.1.2, and device discovery begins, the system log includes an unhandled exception related to the Data Collector. When the Data Collector is updated to 8.5.1.2, the issue is resolved.

Dashboards

- Exporting dashboard widgets to PDF does not work.
- The Custom Table widget does not read context correctly if one or more rows are selected.

Device Performance

- When generating reports in CSV format in the Device Performance page (select report > **[Report]** button > CSV), the exported report displays some values in the incorrect columns.

Device Vanish/Device Purge

- If users set the **Component Vanish Timeout** field to "0" (zero) in the **System Thresholds Default** page (System > Settings > Thresholds > System), component devices should never be set to "vanish" mode. If users also set the **Component Purge Timeout** to any value other than zero in the **System Thresholds Default** page (System > Settings > Thresholds > System), component devices will be purged without ever being set to "vanish" mode. To prevent this behavior, set both **Component Vanish Timeout** and **Component Purge** Timeout to "0" (zero).

EMC

- The "EMC: VNX Enclosure Configuration" Dynamic Application is failing to collect data for Chassis Name, Chassis Type, Health State, Operational Description, Operational Status, Average Air Temperature, Current Air Temperature, Average Input Power, and Current Input Power.

Events

- If users select an event that was triggered by data collected with the ScienceLogic Agent, the link to the incident that triggered the event (`usr/local/silo/gui/ap/www/responder-ui/incident/4/index.em7`) is broken.

IT Services

- The Select IT Service Owner modal page does not display any users.

Microsoft: SQL Enhanced

- On 8.6.0, when the Data Collector is over-burdened or the monitored Windows system is slow, one or more Dynamic applications in the Microsoft: SQL Enhanced PowerPack can sigterm.

phpMyAdmin

- phpMyAdmin fails to connect to the database on Data Collection servers or Message Collection servers and displays error message "#1045 - Access denied for user 'root'".
 - **Workaround.** Go to the console of the Database Server or log in using SSH. Edit the following file:
 - `/etc/siteconfig/siloconf.siteconfig1`
 - Remove the lines for `ap_user` and `ap_pass`.

Platform

- When changing the IP address of a Data Collector or a Message Collector, the platform will generate an unhandled exception until the IP address is changed in the System > Settings > Appliances page.

Scheduler

- Schedules for device maintenance, device groups, user schedule, and discovery schedule are firing an hour early due to Daylight Savings Time.
 - **Workaround.** Log in to the console of the database server or open an SSH session to the Database Server
 - At the shell prompt, execute the following:
 - `python /opt/em7/backend/schedule_shift.py`
 - When prompted, select the schedule type and the time change.
 - For Daylight Savings Time, note this option:
 - **Limit to DST-supporting timezones? (y|n)**


Yes. Only those schedules that match the selected schedule type AND are affected by DST will be updated.

No. All schedules of the selected schedule type will be updated.



SoftLayer

- After installing the PowerPack "SoftLayer: Cloud" and discovering a Bare Metal Server, the Device Performance report for "Public Network Performance Dynamic Application > Public Network Throughput" displays incorrect values.

Standard Deviation

- There is a relationship between the value in the **min weeks data** field (for standard deviation objects) in the **Collections Objects** page (System > Manage > Applications > wrench icon  > Collections) and the value in **Raw Data Retention** in the **Device Thresholds** page (Registry > Devices > Device Manager > wrench icon > Thresholds) for a Data Collector or the global value in the **Raw Performance Data** field in the **Data Retention Settings** page (System > Settings > Data Retention). Note that the threshold defined for the device overrides the global threshold defined in the **Data Retention Settings** page. If the value in the **min weeks data** field.

Updates/Installation

- In the System Updates page (System > Tools > Updates), older ScienceLogic OS appears, with lightning-bolt icon () after the latest version of the ScienceLogic OS is successfully deployed.
- In the System Updates page (System > Tools > Updates), in some situations, the **Deployment** column in the **ScienceLogic OS** pane mistakenly displays a partial update. If you select the log icon (), the log shows that all appliances were updated.
- The appliance selection screen that appears during the installation erroneously lists the deprecated Integration Server appliance.
- An unhandled exception is generated when staging cannot complete.

- For users who use self-signed SSL certificates, when updating to 8.10.1 . and later, you will see the spurious error message "Waiting for web server to respond". To clear the error message, refresh the page. This message does not affect the update. The refresh causes the browser to upload the newly generated, self-signed certificate to the server.

User Interface

- The System Logs page will fail to load when the number of available pages is approximately 400,000. As a workaround, you can select a higher page result count preference to decrease the number of pages.
- The lightning-bolt icon does not appear in the Monitors tab of the Device Administration panel.

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