Subscription Billing

SL1 version 10.1.0

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Chapter 1

Configuring Subscription Billing

Overview

This manual describes how to configure subscription billing and view subscription data.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

This chapter includes the following topics:

Prerequisites 3
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Prerequisites

To configure a ScienceLogic SL1 system to automatically report subscription data to ScienceLogic, you must perform the following general steps:

1. *Create a credential* that the system will use to connect to the ScienceLogic billing server.
2. *Edit the silo.conf configuration* file to use the credential.
3. *Enable the Subscription Usage process*.

To complete these steps, you must have the following information:

- The username and password for the ScienceLogic billing server that your system will communicate with to report usage data.
- The time offset assigned to this system by ScienceLogic.

Creating a Credential for the ScienceLogic Billing Server

To define a SOAP/XML credential that your ScienceLogic SL1 system will use to communicate with the ScienceLogic billing server:

1. Go to the **Credential Management** page (System > Manage > Credentials).
2. In the **Credential Management** page, click the **[Create]** menu. Select *SOAP/XML Host Credential*.
3. The **Credential Editor** modal appears. In this page, you can define the new SOAP/XML credential. To define the new credential, supply values in the following fields:

   Basic Settings

   - ***Profile Name***. Name of the credential. Can be any combination of alphanumeric characters, for example "ScienceLogic Billing".
   - ***Content Encoding***. Select *text/xml*.
   - ***Method***. Select *POST*.
   - ***HTTP Version***. Select *HTTP/1.1*.
   - ***URL***. Enter "https://billing.sciencelogic.com"
   - ***HTTP Auth User***. Enter the username for the account (associated with your SL1 System) on the ScienceLogic billing server.
   - ***HTTP Auth Password***. Enter the password associated with the account on the ScienceLogic billing server.
   - ***Timeout (seconds)***. Enter "5".

   Proxy Settings

   If the SL1 System requires a proxy server to connect to the ScienceLogic billing server via secure HTTP (https), you can specify a proxy server in the Proxy Settings pane. The proxy must use HTTPS (secure HTTPS). To configure a proxy, enter values in the following fields:

   - ***IP***. Enter the IP address of the proxy server.
   - ***Port***. Enter the port on the proxy server to which you will connect.
   - ***User***. Enter the username to use to access the proxy server.
   - ***Password***. Enter the Password to use to access the proxy server.

4. Click the **[Save]** button to save the new SOAP/XML credential.
5. Note the ID number for the new credential.

Editing Silo.conf for Subscription Billing

Every SL1 appliance has a configuration file called **silo.conf**, which contains configuration information about the appliance itself, such as the IP address, licensing information, and directory locations. The default settings in silo.conf are configured automatically when the appliance is installed.

NOTE: All settings in the silo.conf file are case-sensitive.

To edit the silo.conf file:

1. Either go to the console of the SL1 appliance or use SSH to access the server.
2. Log in as user ***em7admin*** with the appropriate password.
3. Type the following at the command line:

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

4. This is the file where users can customize the silo.conf file. In step #7, you will execute a command that sends these changes to the system silo.conf file.
5. Add the following two lines to the end of the file, inserting the ID of the credential you created where indicated:

```
[SUBSCRIBER]
cred_id = <ID of configured credential>
```

6. Save your changes and exit the file (:wq).
7. At the command line, type the following command to rebuild the configuration file:

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

Enabling the Subscription Usage Process

To enable the subscription usage process, which will report billing data to the ScienceLogic billing system, perform the following steps:

1. Go to the **Process Manager** page (System > Settings > Processes).
2. Click the wrench icon ( ) for the **Enterprise Database: Subscription Usage Crunch** process. The **Process Editor** page appears.
3. In the **Process Editor** page, select *Enabled* in the ***Operating State*** field.

4. In the ***Runtime Offset (Mins.)*** field, select the time offset assigned to this system by ScienceLogic.
5. Click the **[Save]** button.

Chapter 2

Configuring Subscription Billing for Secure Networks

Overview

This chapter describes how to configure a ScienceLogic SL1 system for subscription billing when the system is "air gapped", that is, it is a system that does not have internet access.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

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Options for Securing the Billing Process

The following options are available when configuring the communication process for subscription billing on secure networks:

- The subscription billing process can use an authenticated HTTP proxy for the outbound connection to the ScienceLogic billing infrastructure. For more information, see *Creating a Credential for the ScienceLogic Billing Server*.
- Use the option to remove device names from the payload sent to ScienceLogic. For more information, contact ScienceLogic support.

Initial Configuration of a Secure Site

This section describes the initial configuration that must be performed on all ScienceLogic SL1 systems that cannot connect to the ScienceLogic central billing server due to security concerns. You must repeat this process each time a change is made to your billing rules.

Initial ScienceLogic SL1 System Setup

To configure a ScienceLogic SL1 system that cannot connect to the ScienceLogic central billing server, perform the following steps:

1. Go to the **Admin Processes** page (System > Settings > Admin Processes).
2. Locate the ***Enterprise Database: Subscription Usage Crunch*** process, and select its wrench icon ( ). The **Process Editor** page opens.
3. Set the ***Operating State*** field to *Enabled*.
4. Click **[Save]**.
5. Wait for the *Enterprise Database: Subscription Usage Crunch* process to run, which can take up to 24 hours, or run the process manually. To run the process manually, follow these steps:
    - Select System > Monitor > System Usage.
    - Click **[Subscription]**, and select *License Data Delivery Status*. The License Data Delivery Status page appears.
    - Select the checkbox for the oldest file that appears in the page, and then click **[Download]**. The report is downloaded to your browser's download location
6. Provide ScienceLogic with the file.
7. ScienceLogic will configure the central billing server and generate a status file.

Final ScienceLogic SL1 System Setup

After the status file has been generated from the ScienceLogic central billing server, perform the following steps on your ScienceLogic SL1 system:

1. Save the status file to your local computer.
2. Go to the **System Usage** page (System > Monitor > System Usage).
3. Click **[Subscription]** and select *License Data Delivery Status*. The License Data Delivery Status page appears.
4. In the ***Status Update File*** field, browse for the status update file on your local computer.
5. Click **[Upload]**.

Generating a Subscription Usage Report

For secure systems, you must provide your ScienceLogic Customer Success Manager with the Subscription License Usage report once a month. You can schedule the report to run on a regular basis or you can generate the report manually.

Scheduling a Subscription Usage Report

To schedule a subscription usage report to provide to your Customer Success Manager, perform the following steps:

1. Associate the Email addresses you want to send the report to with a user account or external contact in your system.
2. Open the **Reports** page.
3. From the **Reports** page, open the **Report Jobs** page (Reports > Create Report > Report Jobs).
4. Click **[Create]**.
5. Supply values in the following fields.
    - **Job Title**. Enter a name for the report job (for example, "Monthly Subscription License Usage Report").
    - **Run As User**. Select an administrative user in your system.
    - **Report Definition**. In the **EM7 Administration** section, select *Subscription License Usage Report by Type*.
    - **Job Recipients**. Click in the field to open the **Recipient Selector** modal, and add the EM7 Users or External Contacts to whom you want to send the report.
    - **Job Type**. Select *Email & Archive*.
    - **Delivery Method**. In the **Attachment** section, select *Microsoft Excel 2007+ Spreadsheet (.xlsx)*.
    - **Number of Days**. Select *90*.
6. Click **[Save]**.
7. On the **Reports** page, open the **Scheduler** (Reports > Create Report > Scheduler).
8. Click **[Create]**.

9. Supply values in the following fields.
    - **Schedule Name**. Enter a name for the schedule (for example, "Monthly Subscription License Usage Report").
    - **Start Time**. Select the first day of the next month.
    - **Recurrence**. Select *By Interval*.
    - **Interval**. Enter "1" in the first field and select *Months* in the second field.
    - **Report Job**. Select the report job that you created.

      In most cases, you can use the default values in the other fields in this page. See the Reports documentation for a description of the other fields in this page.
10. Click **[Save]**.

Running a Subscription Usage Report Manually

To run a subscription usage report manually:

1. Open the **Reports** page.
2. From the **Reports** page, select ***Run Report > Subscription License Usage Report by Type***.
3. Specify the following values:
    - **Number of days**. Select *90*.
    - **Output format**. Select *Microsoft Excel 2007+ Spreadsheet (.xlsx)*.
4. Click ***[Generate]***. A progress window appears. Do not close this window.
5. When the report is ready, it is downloaded to your browser's download location and is sent to your Email address. Optionally, you can click one of the format icons to download as your format of choice: ODS, PDF, XLSX, or HTML.
6. Provide the spreadsheet (XLSX file) to your Customer Success Manager.

Chapter 3

Viewing & Managing Subscription Data

Overview

If you have a subscription license, you can use the **[Subscription]** button in the **System Usage** page (System > Monitor > System Usage) to:

- View a report on license usage.
- Download system usage data for manual upload to the ScienceLogic billing server.
- Upload a receipt from the ScienceLogic billing server.

If your SL1 system is configured to communicate with the ScienceLogic billing server, usage data will be sent automatically from your SL1 system to the ScienceLogic billing server once a day. After the ScienceLogic billing server receives the usage data, SL1 will automatically mark the license usage file as delivered.

If your SL1 system is not configured to communicate with the ScienceLogic billing server or if the connection to the ScienceLogic billing server fails, you can manually upload usage data to the ScienceLogic billing server.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon ( ).

This chapter includes the following topics:

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Subscription License Usage Report by Type 14
Subscription License Summary Dashboard 15
Viewing Subscription Licensing Data 15

Viewing Device Count by License Type 16
Viewing Delivery Status 16
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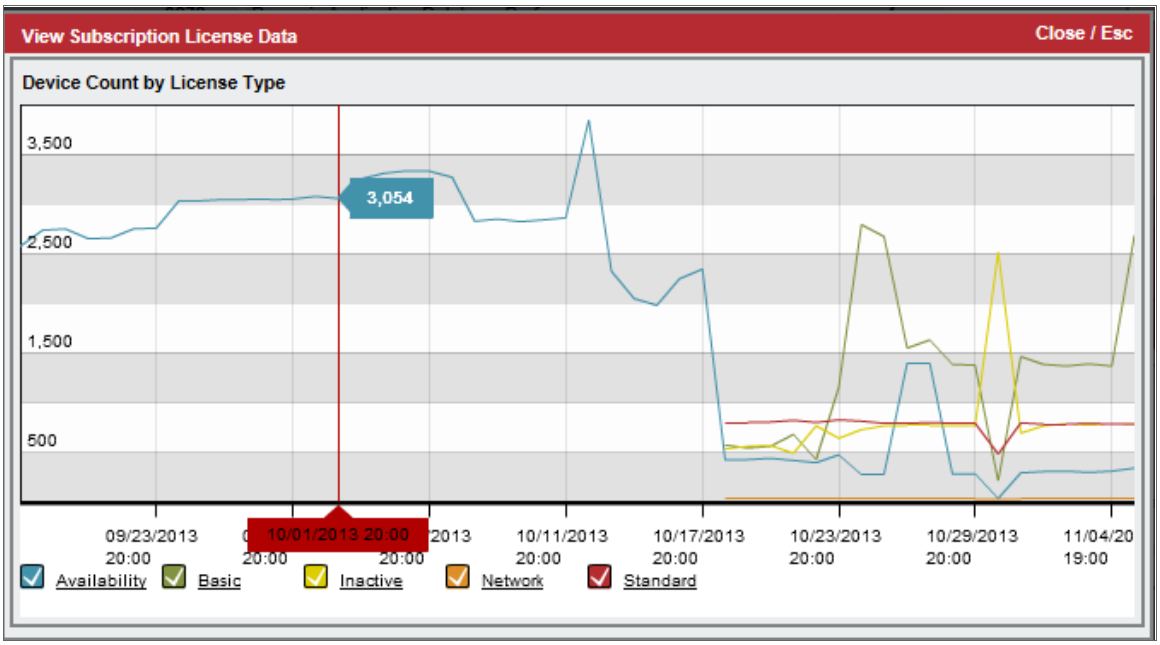
Viewing Reports on License Usage

If you have a subscription license, you can view a report on license usage for your SL1 system. To view a report on license usage for your SL1 system:

1. Go to the **System Usage** page (System > Monitor > System Usage).
2. Click the **[Subscription]** button.
3. Select *View Subscription License Data*.
4. The **View Subscription License Data** modal page appears and displays a report on license usage.



5. The **View Subscription License Data** modal page displays a graph. The graph displays:
   - Number of monitored devices on the y-axis.
   - Date and time on the x-axis.

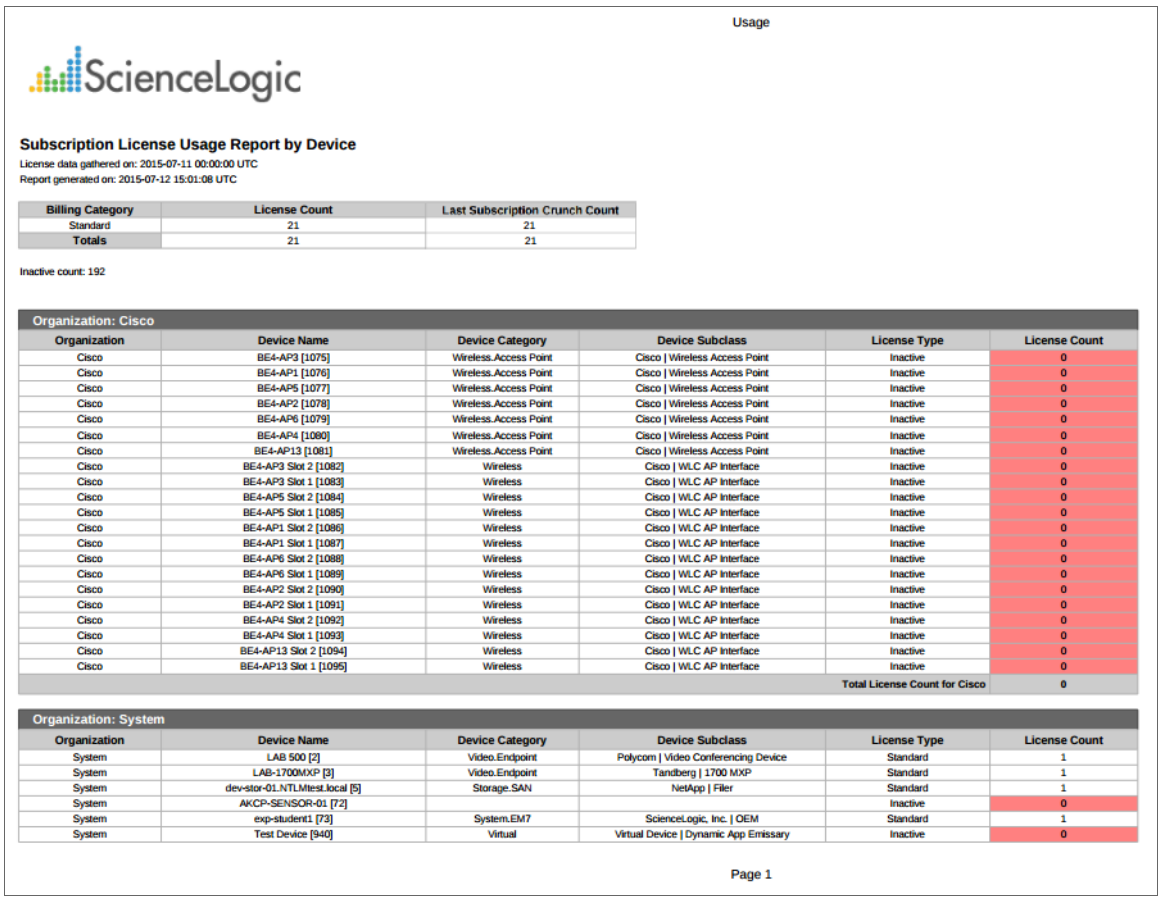
- Each colored line on the graph represents a device category.

Device categories depend upon your specific license agreement with ScienceLogic. The types of device categories that can appear in the **View Subscription License Data** modal page will reflect your license agreement with ScienceLogic.

Subscription License Usage Report by Device

This report displays the number of active and inactive licenses, by device. The report displays the default columns of Billing Category, Organizations, Device Name, Device Category, Device Subclass, License Type, and License Count.

You can customize the output to include a baseline or to separate license totals by type.



Usage

ScienceLogic

Subscription License Usage Report by Device

License data gathered on: 2015-07-11 00:00:00 UTC
Report generated on: 2015-07-12 15:01:08 UTC

Billing Category	License Count	Last Subscription Crunch Count
Standard	21	21
Totals	21	21

Inactive count: 192

Organization: Cisco

Organization	Device Name	Device Category	Device Subclass	License Type	License Count
Cisco	BE4-AP3 [1075]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP1 [1076]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP5 [1077]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP2 [1078]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP6 [1079]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP4 [1080]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP13 [1081]	Wireless.Access Point	Cisco | Wireless Access Point	Inactive	0
Cisco	BE4-AP3 Slot 2 [1082]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP3 Slot 1 [1083]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP5 Slot 2 [1084]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP5 Slot 1 [1085]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP1 Slot 2 [1086]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP1 Slot 1 [1087]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP6 Slot 2 [1088]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP6 Slot 1 [1089]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP2 Slot 2 [1090]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP2 Slot 1 [1091]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP4 Slot 2 [1092]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP4 Slot 1 [1093]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP13 Slot 2 [1094]	Wireless	Cisco | WLC AP Interface	Inactive	0
Cisco	BE4-AP13 Slot 1 [1095]	Wireless	Cisco | WLC AP Interface	Inactive	0
				Total License Count for Cisco	**0**

Organization: System

Organization	Device Name	Device Category	Device Subclass	License Type	License Count
System	LAB 500 [2]	Video.Endpoint	Polycom | Video Conferencing Device	Standard	1
System	LAB-1700MXP [3]	Video.Endpoint	Tandberg | 1700 MXP	Standard	1
System	dev-stor-01.NTLMtest.local [5]	Storage.SAN	NetApp | Filer	Standard	1
System	AKCP-SENSOR-01 [72]			Inactive	0
System	exp-student1 [73]	System.EM7	ScienceLogic, Inc. | OEM	Standard	1
System	Test Device [940]	Virtual	Virtual Device | Dynamic App Emissary	Inactive	0

Page 1

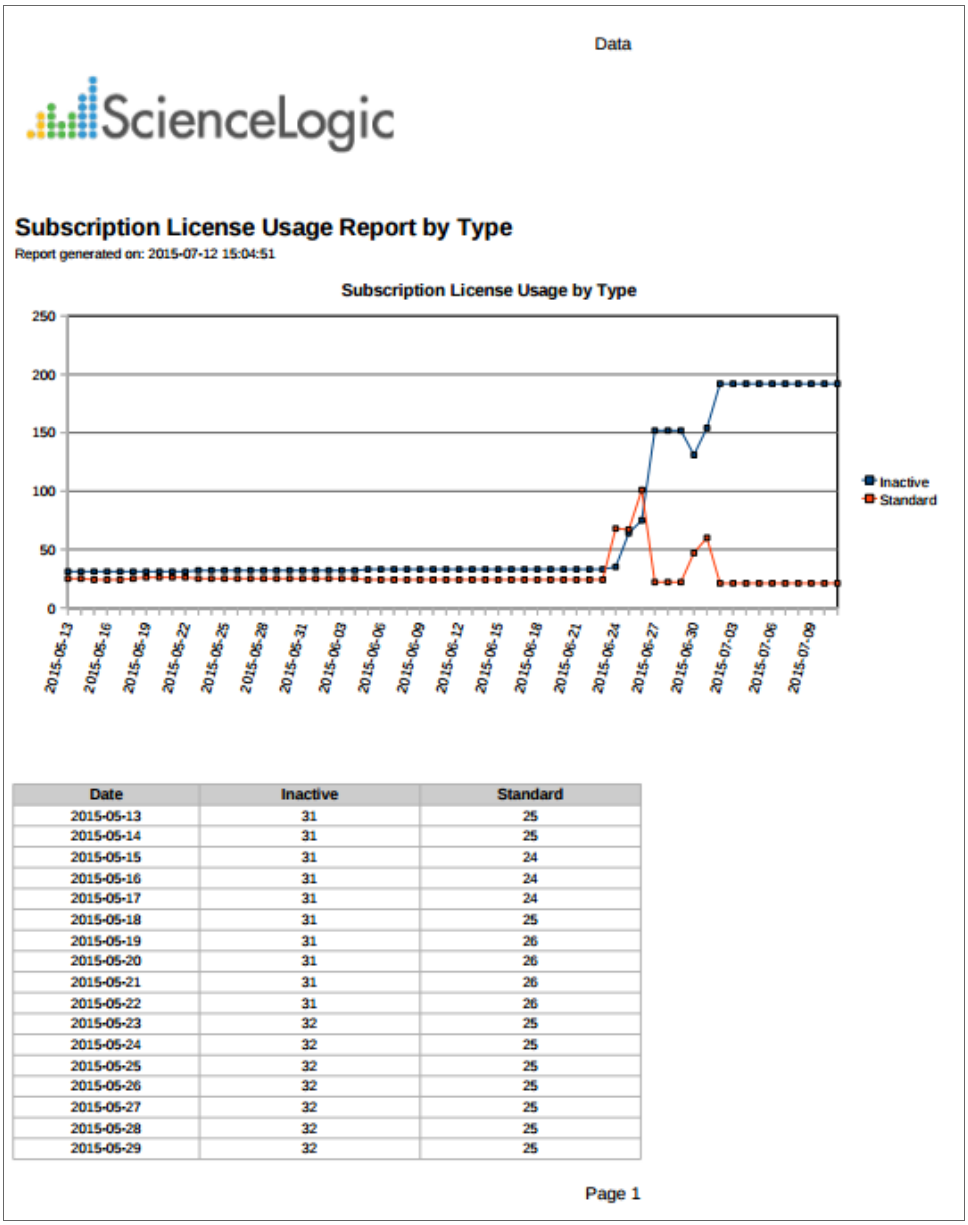
The following input options are available when generating the report:

- ***Organizations***. Specify one or more organizations or all organizations to include in the report.
- ***Options***. Separate the report into tables, with a table for each organization.

This description covers the latest version of this report as shipped by ScienceLogic. This report might have been modified on your SL1 system.

Subscription License Usage Report by Type

This report displays the number of licenses, by type, in a line graph and also includes a table that displays the number of licenses by date and the number of average licenses over time.



Date	Inactive	Standard
2015-05-13	31	25
2015-05-14	31	25
2015-05-15	31	24
2015-05-16	31	24
2015-05-17	31	24
2015-05-18	31	25
2015-05-19	31	26
2015-05-20	31	26
2015-05-21	31	26
2015-05-22	31	26
2015-05-23	32	25
2015-05-24	32	25
2015-05-25	32	25
2015-05-26	32	25
2015-05-27	32	25
2015-05-28	32	25
2015-05-29	32	25

Page 1

The following input options are available when generating the report:

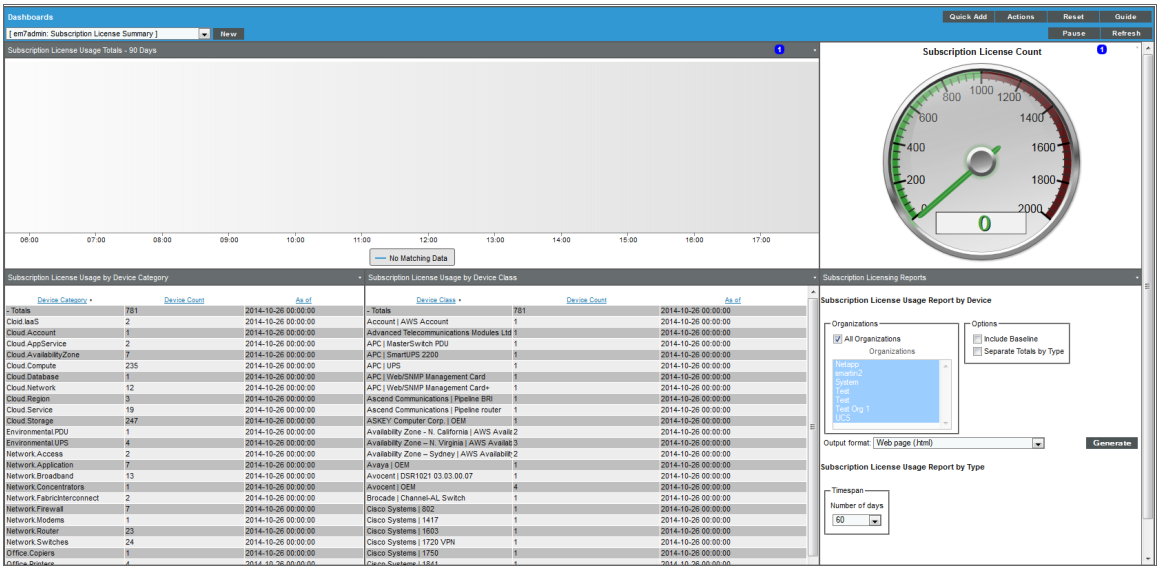
- ***Timespan***. Select the number of days to include in the report. Choices are 30 days, 60 days, 90 days, 120 days, 180 days, and 365 days. The default value is 60 days.

This description covers the latest version of this report as shipped by ScienceLogic. This report might have been modified on your SL1 system.

Subscription License Summary Dashboard

The Subscription License Summary Dashboard displays subscription license data and includes the following widgets:

- ***Subscription License Usage Totals***. Displays subscription license usage over time.
- ***Subscription License Usage by Device Category***. Displays license count by device category.
- ***Subscription License Usage by Device Class***. Displays license count by device class.
- ***Subscription Licensing Reports***. Displays the report forms for Subscription License Usage Report by Device and Subscription License Usage Report by Type. From this widget you can generate reports directly from the widget. The report will open in a new browser window.
- ***Subscription License Count***. Displays the number of subscription licenses.



For detailed descriptions of each widget in the Subscription License Billing Dashboard, see the ***Dashboards*** manual.

Viewing Subscription Licensing Data

The **Subscription Data** page allows you to:

- View subscription licensing data that you have submitted to ScienceLogic
- Manually submit subscription licensing data to ScienceLogic

- Download the delivery status information for all data processed by the billing system within a specific date range

This page appears only in ScienceLogic's central licensing system.

Viewing Device Count by License Type

The **View Device Count by License Type** pane displays a graph. The graph displays:

- Number of monitored devices on the y-axis.
- Date and time on the x-axis.
- Each colored line on the graph represents a device category.

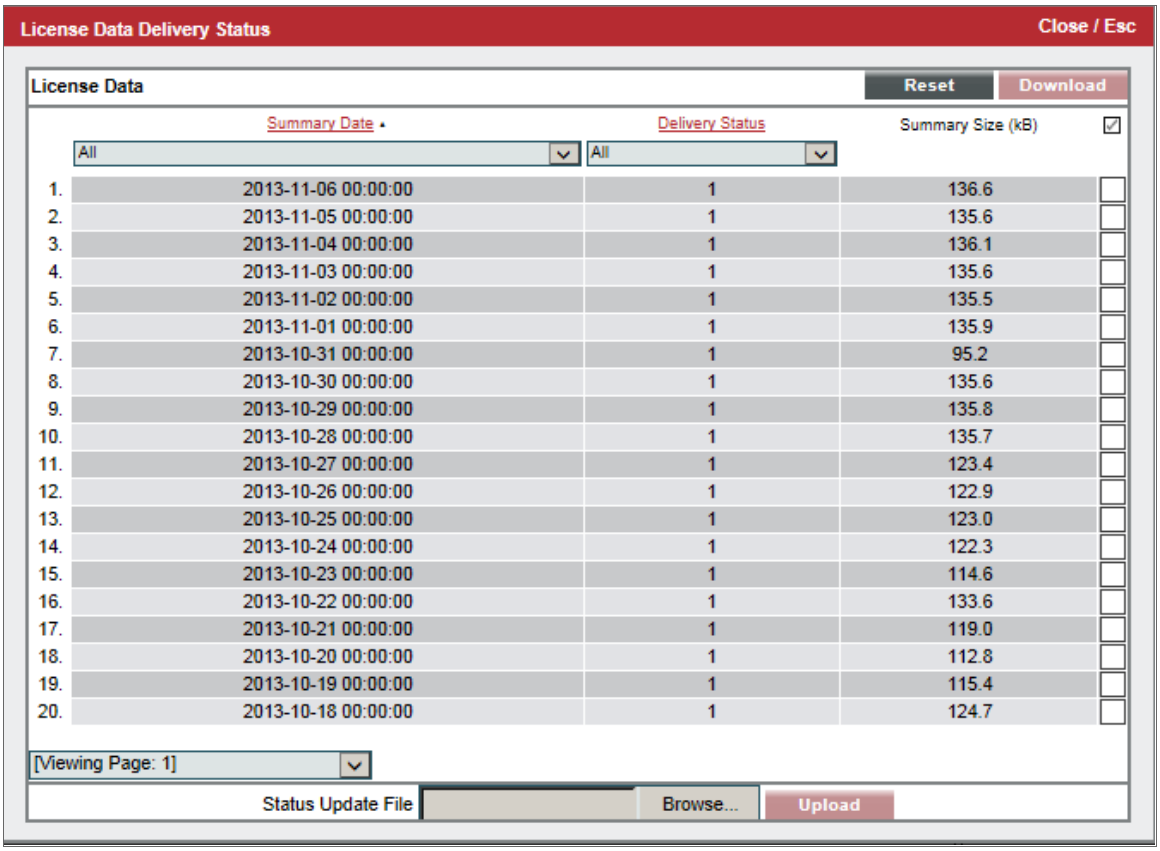
Device categories are dependent upon your specific license agreement with ScienceLogic. The types of device categories that can appear in the **View Subscription License Data** modal page will reflect your license agreement with ScienceLogic.

Viewing Delivery Status

The **License Data Delivery Status** page displays the status of one or more daily license-usage files. To view the **License Data Delivery Status** page:

1. Go to the **System Usage** page (System > Monitor > System Usage).
2. Click the **[Subscription]** button.
3. Select *License Data Delivery Status*.
4. The **License Data Delivery Status** modal page appears and displays a list of daily license-usage files. For each daily license-usage file, the **License Data Delivery Status** page displays the following:
    - ***Summary Date***. Date associated with the daily license-usage file.
    - ***Delivery Status***. Possible values are:
        - *"0" (zero)*. File has not been uploaded to the ScienceLogic billing server.
        - *"1" (one)*. File has been uploaded to the ScienceLogic billing server and may be deleted from the SL1 system by the automated maintenance process.

- ***Summary Size***. Size of the daily license-usage file.



Manually Uploading License Usage to ScienceLogic

If your SL1 system is configured to communicate with ScienceLogic, usage data will automatically be sent to the ScienceLogic billing server once a day. After the ScienceLogic billing server receives the usage data, SL1 will automatically mark the license usage file as delivered.

If your SL1 system is not configured to communicate with ScienceLogic or if the connection to the ScienceLogic billing server fails:

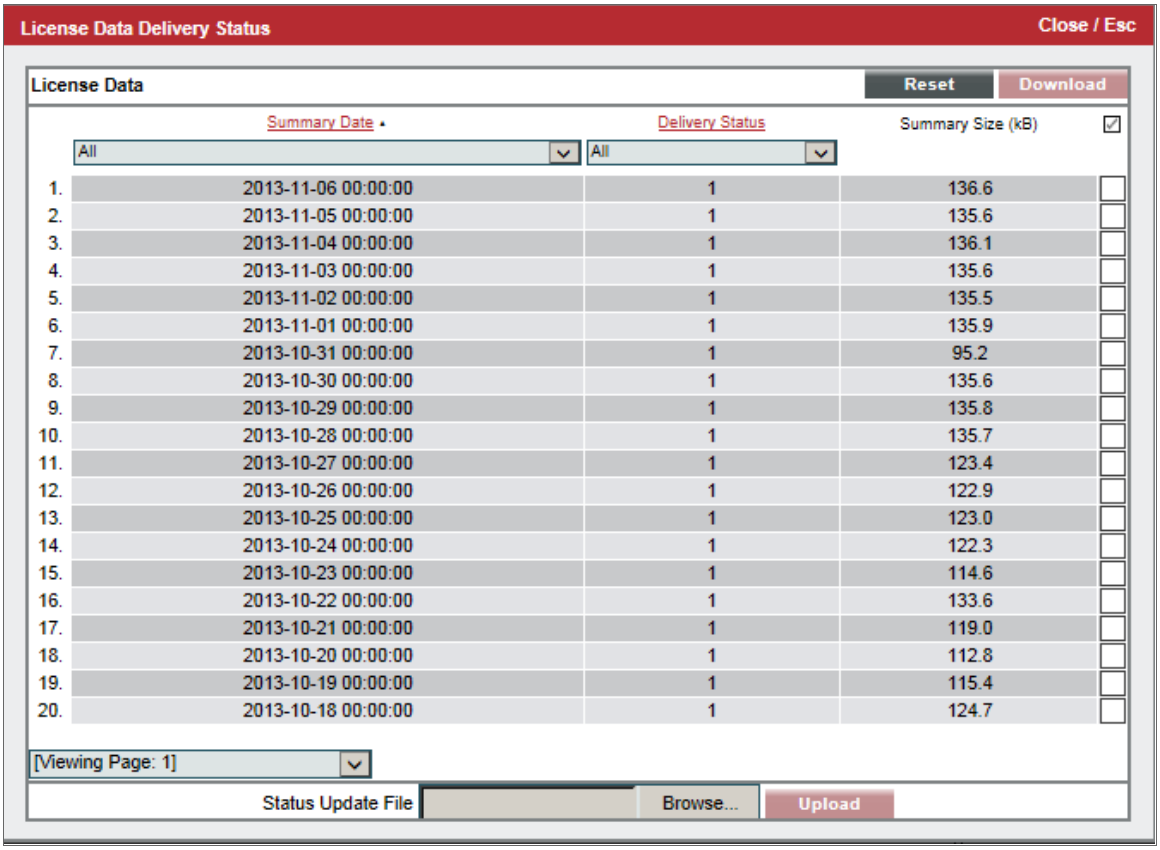
- You can use the **License Data Delivery Status** page to manually download the daily license-usage file.
- You can then log in to the ScienceLogic billing server and manually upload the daily license-usage file.
- You can then use the **License Data Delivery Status** page to upload the ScienceLogic "receipt" to your SL1 system, allowing SL1 to mark the license usage file as delivered.
- License usage files will not be deleted from your system until they are delivered.

Downloading the Daily License-Usage File

If your SL1 system is not configured to communicate with ScienceLogic or if the connection to the ScienceLogic billing server fails, you can use the **License Data Delivery Status** page to manually download the daily license-usage file. You can then log in to the ScienceLogic Licensing and Billing server and manually upload the daily license-usage file.

To download the daily license-usage file using the **License Data Delivery Status** page:

1. Go to the **System Usage** page (System > Monitor > System Usage).
2. Click the **[Subscription]** button and select *License Data Delivery Status*.
3. Select one or more daily license-usage files to download to your local computer, then click the **[Download]** button.



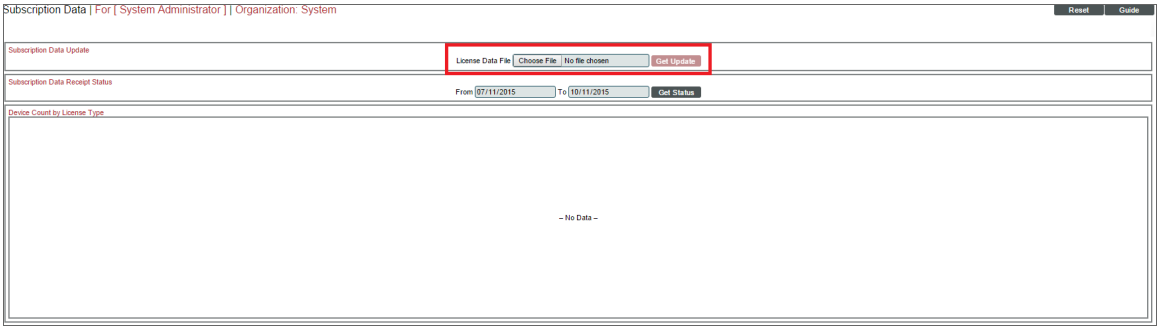
NOTE: If the download size exceeds 50MB, the **[Download]** button becomes disabled.

4. The daily license-usage file will be saved to your local computer. The downloaded file is usually named "license_data.json.gz".

Manually Uploading the Daily License-Usage File to ScienceLogic

After downloading the daily license-usage file to your local computer, you can manually upload the file to the ScienceLogic billing server. To do this:

1. Log in to the ScienceLogic billing system.
2. Go to the **Subscription Data** page (Preferences > Account > Subscription).
3. In the **Subscription Data** page, go to the **Subscription Data Update** pane. Use the **[Browse]** button to find the daily license-usage file that you downloaded to your local computer.
4. Click the **[Get Update]** button to upload the daily license-usage file to the ScienceLogic server.



5. The ScienceLogic server will provide a "receipt" file for you to download. This file is usually called "status_updated.json.gz". You must upload this receipt to your SL1 system.

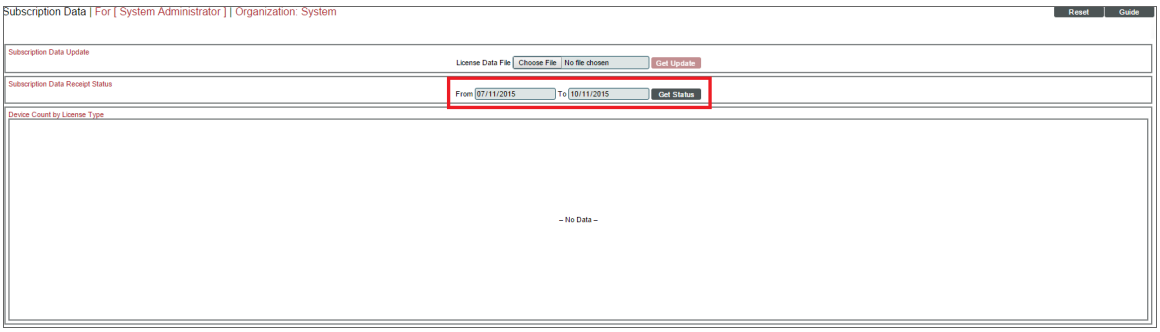
Downloading a Delivery Status Receipt for a Specific Date Range

From the ScienceLogic billing server, you can also download a "receipt" file containing the delivery status for all of the data processed by the billing system within a specific date range. This file can be uploaded to your SL1 System to update your system's data delivery status information.

To download a delivery status receipt for a specific date range:

1. Log in to the ScienceLogic billing server.
2. Go to the **Subscription Data** page (Preferences > Account > Subscription).

3. In the **Subscription Data Receipt Status** pane, use the ***From*** and ***To*** fields to enter the date range for which you want to download data delivery status data, then click the **[Get Status]** button.



4. The ScienceLogic server will provide a "receipt" file for you to download. This file is usually called "status_updated.json.gz". You can upload this receipt to your SL1 system.

Uploading the ScienceLogic Receipt

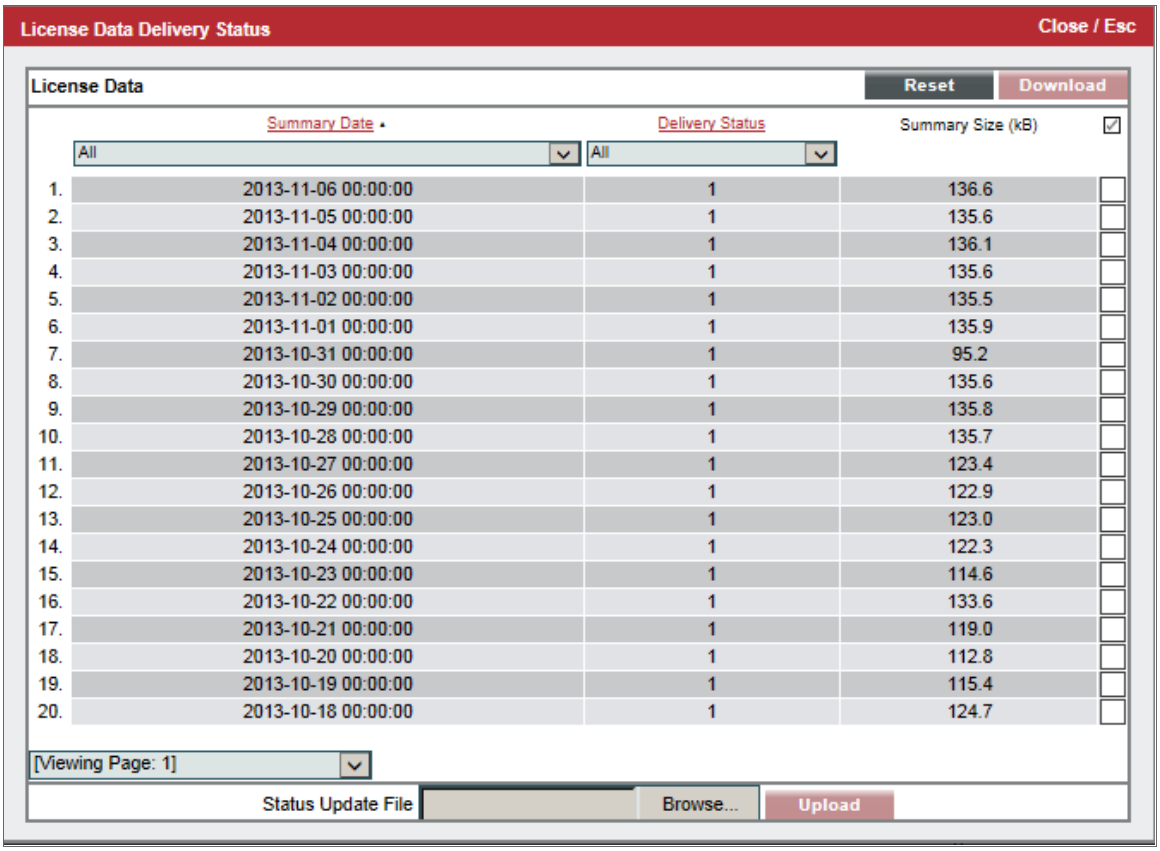
After uploading the daily license-usage file to the ScienceLogic Billing server, the ScienceLogic server will provide a "receipt" file for you to download. This file is usually called "status_updated.json.gz".

You must upload this "receipt" file to your SL1 system to inform your SL1 system that the upload was successful and that the SL1 system may delete the daily license-usage file.

To upload the "receipt" file:

1. Go to the **System Usage** page (System > Monitor > System Usage).
2. Click the **[Subscription]** button and select *License Data Delivery Status*.
3. In the ***Status Update File*** field, use the **[Browse]** button to locate the "receipt" file.

4. Click the **[Upload]** button to upload the "receipt" file to your SL1 system:



Data Retention Settings for Licensing

The **Data Retention Settings** page contains settings for subscribers.

To adjust these settings:

1. Go to the **Data Retention Settings** page (System > Settings > Data Retention).
2. The following sliders appear under the **Subscription Data Retention** heading:

   - ***Subscriber Device Configuration Data***. For users with a subscriber license. Number of months to retain the files and database tables that contain configuration information for a device. Default value is twelve months.
   - ***Subscriber Device Usage Data***. For users with a subscriber license. Number of months to retain information on total number of events and total number of tickets. Default value is six months.
   - ***Subscriber System Configuration Data***. For users with a subscriber license. Number of months to retain the files and database tables that contain configuration information for the SL1 system. Default value is twelve months.

- ***Subscriber System Usage Data***. For users with a subscriber license. Number of months to retain information on total number of events and total number of tickets. Default value is six months.
- ***Subscriber Device Type Data***. For users with a subscriber license. Number of months to retain the files and database tables that map each device to a device category, as per your subscriber license. Default value is six months.
- ***Subscriber Daily Delivery Data***. For users with a subscriber license. Number of months to retain the "crunched" license usage data that is calculated each day using the Subscriber Device Configuration Data, Subscriber System Configuration Data, Subscriber System Usage Data, and Subscriber Device Type Data. SL1 will not prune data that has not yet been delivered to the ScienceLogic Licensing and Billing server.

Chapter 4

Viewing License Data

Overview

This chapter describes license data for SL1.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon (•••).

This chapter includes the following topics:

Viewing License Information *23*

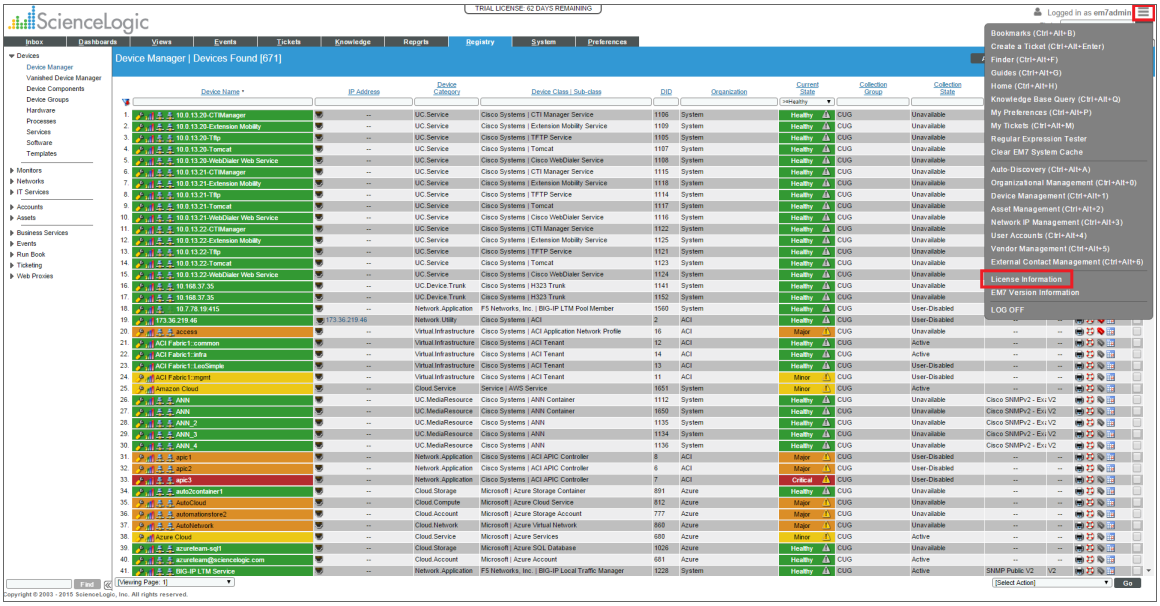
Viewing License Information

The **License Information** modal enables you to:

- View a list of all third-party licenses that are aligned with SL1
- Search for specific licenses
- View the full text of each license

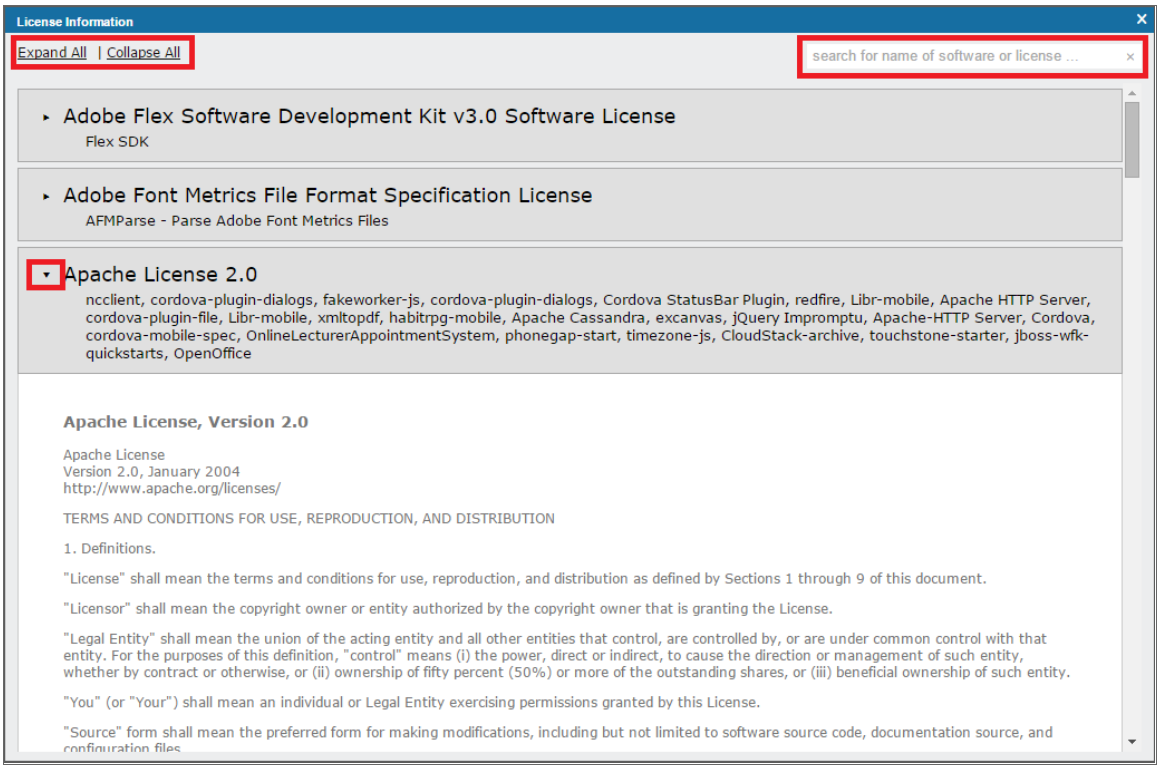
To view license information:

1. Click the Toolbox button in the upper-right of the ScienceLogic browser session and then select *License Information*.



The **License Information** modal appears. All of the licenses that are aligned with SL1 are listed.

2. On the **License Information** modal, you can do the following:



- To view any license in its entirety, click its right-arrow icon. When you do, the icon becomes a down-arrow, and the full license information appears.
- To view all of the licenses in their entirety, click the **Expand All** link.
- To view only the condensed information for each license, click the **Collapse All** link.
- To search for a specific license, type part or all of its name in the search box in the upper-right of the page and then press the **Enter** key.

Appendix

A

Subscription Data Collection

Overview

This chapter describes the subscription data collected by SL1.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon (•••).

This chapter includes the following topics:

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Non-billable Component Devices *29*

Subscription Data Collected by SL1

With a subscription license, SL1 collects and sends billing data to ScienceLogic via secure Hypertext Transfer Protocol (HTTPS). During this collection, SL1 collects device configuration data and statistical metadata only; no specific performance collection data is included.

SL1 collects the following billing data from customer systems:

- Device configuration data that is recorded per-device

NOTE: ScienceLogic uses the data collected for each device to assign a license to the device. The rules that govern how licenses are assigned are based on your contract with ScienceLogic. Certain component devices do not count against your license usage in SL1. For more information, see the *Non-billable Component Devices* section.

- System configuration data
- Device statistics data that is recorded per-device and per-collection type and aggregated daily

NOTE: Each device is categorized based on whether it is managed as infrastructure, is part of a managed application, or is part of a managed service.

The following table lists the specific data that is collected:

Collection	Data Collected

Per SL1 System	• ScienceLogic System Identifier
	• ScienceLogic Version
	• ScienceLogic Revision
	• DRBD Version
	• MySQL Version
	• Number of Organizations
	• Number of Users
	• Number of Applications
	• Number of Application Components
	• List of Dynamic Applications installed on each monitored device, with the following information included:
	  ◦ ID
	  ◦ GUID
	  ◦ Name
	  ◦ Version
	  ◦ PowerPack GUID
	  ◦ PowerPack Name
	  ◦ PowerPack Version
	  ◦ Number of Subscribers
	• Number of Configured Dashboards
	• Number of Scheduled Reports
	• Number of Asset Records
	• Number of each type of the following appliances:

Collection	Data Collected
	◦ Admin Portals ◦ Database Servers ◦ Data Collectors ◦ Message Collectors ◦ Compute Nodes ◦ Storage Nodes • Number of Device Groups • Number of IT Services • Number of Business Services • Number of Device Services • Number of Automations triggered for the past 24 hours • Number of Automation Actions executed for the past 24 hours • Number of New Tickets Created • Number of New Event Instances • Number of Knowledge Base Articles • List of all installed PowerPacks with the following information per PowerPack: ◦ GUID ◦ Name ◦ Version ◦ Revision ◦ Publisher
Per Device	• Device ID • Organization ID • Device Name • Device Class with the following information per device class: ◦ GUID ◦ Name ◦ Description ◦ Device Category GUID ◦ Device Category Name • Device Subscription Tier • Device Category • Interface Count • Merge/Component ID • Aligned Dynamic Applications

Collection	Data Collected

	• Number of Associated Applications
	• Number of Associated Business Services
	• Number of Associated IT Services
	• Number of Associated Device Services
	• Relationships with other devices
	  ◦ Relationship Type
	  ◦ Device Class for the device on the other end of the relationship
	
	NOTE: Certain component devices do not count against your license usage in SL1. For more information, see the ***Non-billable Component Devices*** section.

Non-billable Component Devices

Typically, any device that collects performance data in a 24-hour period will consume a ScienceLogic device license for that period, regardless of whether it is a "Physical" device monitored via direct network polling, a "Virtual" device with no network address of its own, or a "Component" device that was created in SL1 via a Dynamic Application or relationships between Dynamic Applications.

There are, however, some devices that do not consume device licenses. If you have a subscription license, the following component devices do not count against your license usage in SL1:

- Devices for which no performance data has been collected for the previous 24-hours, (that is, devices with a Collection State of User-Disabled). Collection on these devices has been manually disabled by a user. SL1 will not collect data from these device until a user manually re-enables collection.
- Devices in a virtual collector group. Virtual collector groups do not perform collection on any devices aligned with them; they serve only as a means of storing historical data from those devices.
- Devices in the **Device Category** *Virtual.Infrastructure*. These devices include legacy VMware ESX servers and any virtual machines associated with them.

In addition, the following devices do not count against your license usage:

Device Class	Device Description
AWS	Auto Scale Launch Config
AWS	Auto Scale Service
AWS	Availability Zone
AWS	Availability Zone – Beijing
AWS	Availability Zone – N. California

Device Class	Device Description
AWS	Availability Zone – GovCloud (US)
AWS	Availability Zone – Ireland
AWS	Availability Zone – N. Virginia
AWS	Availability Zone – Oregon
AWS	Availability Zone – São Paulo
AWS	Availability Zone – Singapore
AWS	Availability Zone – Sydney
AWS	Availability Zone – Tokyo
AWS	CloudFront Behavior
AWS	CloudFront Error Page
AWS	CloudFront Invalidation
AWS	CloudFront Origin
AWS	CloudFront Restriction
AWS	CloudFront RTMP Distribution
AWS	CloudFront Web Distribution
AWS	CloudTrail
AWS	CloudTrail Service
AWS	EC2 Service
AWS	Glacier Service
AWS	Glacier Vault
AWS	OpsWorks Service
AWS	RDS Option Group
AWS	RDS Parameter Group
AWS	RDS Service
AWS	RDS Snapshot
AWS	RDS Subnet Group
AWS	Redshift Cluster Parameter Group
AWS	Redshift Service
AWS	Region

Device Class	Device Description
AWS	Region Asia Pacific (Singapore)
AWS	Region Asia Pacific (Sydney)
AWS	Region Asia Pacific (Tokyo)
AWS	Region China (Beijing)
AWS	Region EU (Ireland)
AWS	Region GovCloud (US)
AWS	Region South America (São Paulo)
AWS	Region US East (N. Virginia)
AWS	Region US West (N. California)
AWS	Region US West (Oregon)
AWS	Route 53 Hosted Zone
AWS	Route 53 Service
AWS	Storage Gateway Volumes
AWS	VPC Instance
AWS	VPC Subnet
Cisco Systems	ANN Container
Cisco Systems	BRI Gateway Container
Cisco Systems	Device Container
Cisco Systems	FXO Gateway Container
Cisco Systems	FXS Gateway Container
Cisco Systems	Gatekeeper Container
Cisco Systems	H323 Trunk Container
Cisco Systems	HW Conf Container
Cisco Systems	MGCP Gateway Container
Cisco Systems	MOH Container
Cisco Systems	MTP Container
Cisco Systems	PRI Gateway Container
Cisco Systems	SIP Trunk Container
Cisco Systems	SW Conf Container

Device Class	Device Description
Cisco Systems	T1CAS Gateway Container
Cisco Systems	Telepresence Conf Bridge Container
Cisco Systems	Transcoder Container
Cisco Systems	Video Conf Bridge Container
Cisco Systems	UCS Service Profle
Cisco Systems	Nexus DaughterCard
Cisco Systems	Nexus DaughterCards Container
Cisco Systems	Nexus Fan
Cisco Systems	Nexus Fan Container
Cisco Systems	Nexus FEX Container
Cisco Systems	Nexus FEX Fan
Cisco Systems	Nexus FEX Fan Container
Cisco Systems	Nexus FEX PowerSupplyContainer
Cisco Systems	Nexus IO Module
Cisco Systems	Nexus IO Modules Container
Cisco Systems	Nexus Power Supply
Cisco Systems	Nexus Power Supply Container
Cisco Systems	Nexus Supervisor
Cisco Systems	Nexus Supervisors Container
Cisco Systems	Nexus VEM
Cisco Systems	Nexus VEM Container
Cisco Systems	Nexus VSM
Cisco Systems	Nexus VSM Container
Citrix Systems, Inc.	CloudPlatform System VM
EMC Corporation	VNX SPE Enclosure
EMC Corporation	VMAX Container
EMC Corporation	VMAX Director
EMC Corporation	VMAX Disk Array Enclosure
EMC Corporation	VMAX Disk Groups

Device Class	Device Description
EMC Corporation	VMAX Dreadnought Subsystem
EMC Corporation	VMAX Management Enclosure
EMC Corporation	VMAX Matrix Interface Board Enclosure
EMC Corporation	VMAX Mirror Pools
EMC Corporation	VMAX Physical System
EMC Corporation	VMAX Primordial Pool
EMC Corporation	VMAX Replication Pool
EMC Corporation	VMAX Replication Pool
EMC Corporation	VMAX Spare Pool
EMC Corporation	VMAX Spare Pools
EMC Corporation	VMAX Storage Pools
EMC Corporation	VMAX Thin Pools
EMC Corporation	VNX Container
EMC Corporation	VNX Disk Enclosure
EMC Corporation	VNX Enclosures
EMC Corporation	VNX Mirror Pools
EMC Corporation	VNX Primordial Pool
EMC Corporation	VNX RAID Group
EMC Corporation	VNX RAID Groups
EMC Corporation	VNX Replication Pool
EMC Corporation	VNX Replication Pool
EMC Corporation	VNX Spare Pool
EMC Corporation	VNX Spare Pools
EMC Corporation	VNX Storage Pools
EMC Corporation	VNX Unified Pools
EMC Corporation	VNX LUN RAID Group
F5 Networks, Inc.	BIG-IP Local Traffic Manager
F5 Networks, Inc.	BIG-IP LTM Node
HP 3PAR	Common Provisioning Groups

Device Class	Device Description
HP 3PAR	Concrete Pools
HP 3PAR	Controller Nodes
HP 3PAR	Disk
HP 3PAR	Disk Cage
HP 3PAR	Disk Enclosures
HP 3PAR	Pools
HP 3PAR	Primordial Pool
HP 3PAR	Volumes
KEMP Technologies	Sub-Virtual Service
Linux KVM	Domain Container
Linux KVM	Pool Container
NetApp	vServer Admin
New Relic, Inc.	Account Premium
Nimble Storage	Volume Container
OpenStack	Instance
Puppet Labs, Inc.	Enterprise Container
Puppet Labs, Inc.	Puppet Nodes Container
SolidFire	Account
SolidFire	Accounts Container
SolidFire	Drive
SolidFire	Nodes Container
VMware	Datacenter
VMware	Distributed Virtual Portgroup
VMware	Distributed Virtual Switch
VMware	Folder
VMware	Network
VMware	vCloud Catalog
VMware	vCloud Organization
VMware	vCloud vApp

Device Class	Device Description
VMware	vCloud vAppTemplate
VMware	vCloud Vdc
VMware	vCloud VM

Appendix

B

Troubleshooting Subscription Billing

Overview

This chapter describes how to check the configuration of subscription billing data collected by SL1.

Use the following menu options to navigate the SL1 user interface:

- To view a pop-out list of menu options, click the menu icon ( ).
- To view a page containing all of the menu options, click the Advanced menu icon (•••).

This chapter includes the following topics:

Installing the Test Script 36

Running the Test Script 37

Error Message Remediation 37

Installing the Test Script

You can use the `test_subscription.sh` script to check the configuration of subscription billing on your system and test the connection to the Billing Server. This script is included in SL1 version 8.14.0 and later releases and requires no additional installation.

NOTE: For 8.12 and earlier versions, you can obtain the test_subscription.sh file from Support. You must transfer the file manually to the current primary Database Server or All-In-One Appliance using an SCP tool, and move the file to the `/opt/em7/bin` directory.

Running the Test Script

To run the test_subscription.sh script:

1. Connect to the console of the current primary Database Server or All-In-One Appliance as the admin user.
2. Execute the following command. Enter the admin user password when prompted:
   `sudo sh`
3. Execute the following command:
   `/opt/em7/bin/test_subscription.sh`

Error Message Remediation

The following table lists all possible error messages generated by the `test_subscription.sh` script, along with a description of possible causes and next steps:

Error Message	Description
ERROR: Cannot connect to https://billing.sciencelogic.com	An HTTP request to the login page of https://billing.sciencelogic.com without user credentials failed. **Cause:** The most likely cause is that the Database Server does not have internet access. If you have internet access from the Database Server, go to Next Steps. **Next Steps:** • Test connections to other internet pages • Troubleshoot the network settings for the Database Server • Whitelist https://billing.sciencelogic.com in the your firewall configuration **NOTE:** Using an HTTP proxy is an option for the connection, if required.
ERROR: cred_id section missing from [SUBSCRIBER] in /etc/silo.conf	The cred_id option is not included in /etc/silo.conf. **Cause:** The subscription billing process is not configured correctly. **Next Steps:** For information about the required silo.conf configuration, see "Editing Silo.conf for Subscription Billing" in the "Configuring Subscription Billing" section.
ERROR: [SUBSCRIBER] section from /etc/silo.conf missing	The SUBSCRIBER section is not included in /etc/silo.conf. **Cause:** The subscription billing process is not configured correctly. **Next Steps:** For information about the required silo.conf configuration, see "Editing Silo.conf for Subscription Billing" in the "Configuring Subscription Billing" section.
ERROR: Cannot login to	An HTTP request to the login page of https://billing.sciencelogic.com with

Error Message	Description
https://billing.sciencelogic.com with the cred id <ID> username and password	user credentials failed. **Cause:** The username and password in the credential specified in the silo.conf file did not successfully authenticate on https://billing.sciencelogic.com. **Next Steps:** • Verify the username and password listed for your services account on https:// iportal.sciencelogic.com. • If the credential is correct, attempt to log in to https://billing.sciencelogic.com manually with the credential. • If the manual login fails, open a Billing case for IT to check the issue. • If the manual login is successful, a networking issue might be the cause. Try the steps listed for the "ERROR: Cannot connect to https://billing.sciencelogic.com" entry.
ERROR: Cred type wrong for credential <ID>	The credential specified in the silo.conf configuration is not a SOAP/XML credential. **Cause:** The subscription billing process is not configured correctly. **Next Steps:** Create a SOAP/XML credential. For the required credential configuration, see the "Creating a Credential for the ScienceLogic Billing Server" in the "Configuring Subscription Billing" section.
ERROR: Port not 443 for cred <ID>	The credential specified in the silo.conf configuration does not use port 443. **Cause:** The port specified for the credential ID shown is incorrect. **Next Steps:** Edit the credential to use port 443. For the required credential configuration, see the "Creating a Credential for the ScienceLogic Billing Server" in the "Configuring Subscription Billing" section.
ERROR: https://billing.sciencelogic.com not found in cred <ID>	The credential specified in the silo.conf configuration file does not have the URL for the billing server. **Cause:** The URL for the billing server ("https://billing.sciencelogic.com") is missing or incorrect. **Next Steps:** For the credential ID shown, edit the credential and change the URL to "https://billing.sciencelogic.com". See "Editing Silo.conf for Subscription Billing" in the "Configuring Subscription Billing" section.
ERROR: Credential $cred not found	The credential specified in the silo.conf configuration does not exist. **Cause:** The subscription billing process is not configured correctly. **Next Steps:** For the required credential configuration, see the "Creating a Credential for the ScienceLogic Billing Server" in the "Configuring Subscription Billing" section.

Error Message	Description
<Number> UHEs detected, please investigate	The system log contains unhandled exceptions for the subscription usage process. **Next Steps:** Execute the following query for more details, and then follow the standard troubleshooting process for unhandled exceptions, escalating to Support as necessary: `select * from master_logs.system_messages where date_edit > date_sub(now(), interval 7 day) and message like '^153: Unhandled exception on appliance%';`

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