



---

# Subscription Billing

SL1 version 10.2.0

---

# Table of Contents

<b>Configuring Subscription Billing</b> .....	<b>3</b>
Prerequisites .....	4
Creating a Credential for the ScienceLogic Billing Server .....	4
Editing Silo.conf for Subscription Billing .....	5
Enabling the Subscription Usage Process .....	6
<b>Configuring Subscription Billing for Secure Networks</b> .....	<b>7</b>
Options for Securing the Billing Process .....	8
Initial Configuration of a Secure Site .....	8
Initial ScienceLogic SL1 System Setup .....	8
Final ScienceLogic SL1 System Setup .....	8
Generating a Subscription Usage Report .....	9
Scheduling a Subscription Usage Report .....	9
Running a Subscription Usage Report Manually .....	10
<b>Viewing &amp; Managing Subscription Data</b> .....	<b>11</b>
Ensuring Accurate Data .....	13
Viewing Subscription Usage .....	13
Current License Usage Totals .....	13
Historical License Usage Totals .....	14
Current License Totals .....	15
Viewing Subscription License Reports .....	16
Subscription License Usage Report by Device .....	16
Subscription License Usage Report by Type .....	17
Viewing Subscription Licensing Data .....	18
Viewing Delivery Status .....	19
Manually Uploading License Usage to ScienceLogic .....	20
Downloading the Daily License Usage File .....	21
Manually Uploading the Daily License Usage File to ScienceLogic .....	22
Downloading a Delivery Status Receipt for a Specific Date Range .....	22
Uploading the ScienceLogic Receipt .....	23
Data Retention Settings for Licensing .....	24
<b>Subscription Data Collection</b> .....	<b>26</b>
Subscription Data Collected by SL1 .....	27
Non-billable Devices .....	29
<b>Troubleshooting Subscription Billing</b> .....	<b>30</b>
Installing the Test Script .....	31
Running the Test Script .....	31
Error Message Remediation .....	31



## 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 the menu options, click the Advanced menu icon (.

This chapter includes the following topics:

<i>Prerequisites</i> .....	4
<i>Creating a Credential for the ScienceLogic Billing Server</i> .....	4
<i>Editing Silo.conf for Subscription Billing</i> .....	5
<i>Enabling the Subscription Usage Process</i> .....	6

---

## 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 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 **silو.conf**, which contains configuration information about the appliance itself, such as the IP address, licensing information, and directory locations. The default settings in silو.conf are configured automatically when the appliance is installed.

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

To edit the silو.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 silو.conf file. In step #7, you will execute a command that sends these changes to the system silو.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 > silو.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.



## 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 the menu options, click the Advanced menu icon (.

This chapter includes the following topics:

<a href="#">Options for Securing the Billing Process</a> .....	8
<a href="#">Initial Configuration of a Secure Site</a> .....	8
<a href="#">Generating a Subscription Usage Report</a> .....	9

---

## 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 Manage > Subscription Usage.
  - Click **[License Data Delivery Status]**. The License Data Delivery Status modal 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 **Subscription Usage** page (Manage > Subscription Usage).
3. Click **[License Data Delivery Status.]** The License Data Delivery Status modal 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 > EM7 Administration > 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.

## Viewing & Managing Subscription Data

---

### Overview



If you have a subscription license, you can use the **Subscription Usage** page (Manage > Subscription Usage) to:

- View current or historical subscription license usage graphs
- Download subscription license 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 the menu options, click the Advanced menu icon ()

This chapter includes the following topics:

<a href="#">Ensuring Accurate Data</a>	13
<a href="#">Viewing Subscription Usage</a>	13
<a href="#">Viewing Subscription License Reports</a>	16
<a href="#">Viewing Subscription Licensing Data</a>	18
<a href="#">Viewing Delivery Status</a>	19

<i>Manually Uploading License Usage to ScienceLogic</i> .....	20
<i>Data Retention Settings for Licensing</i> .....	24

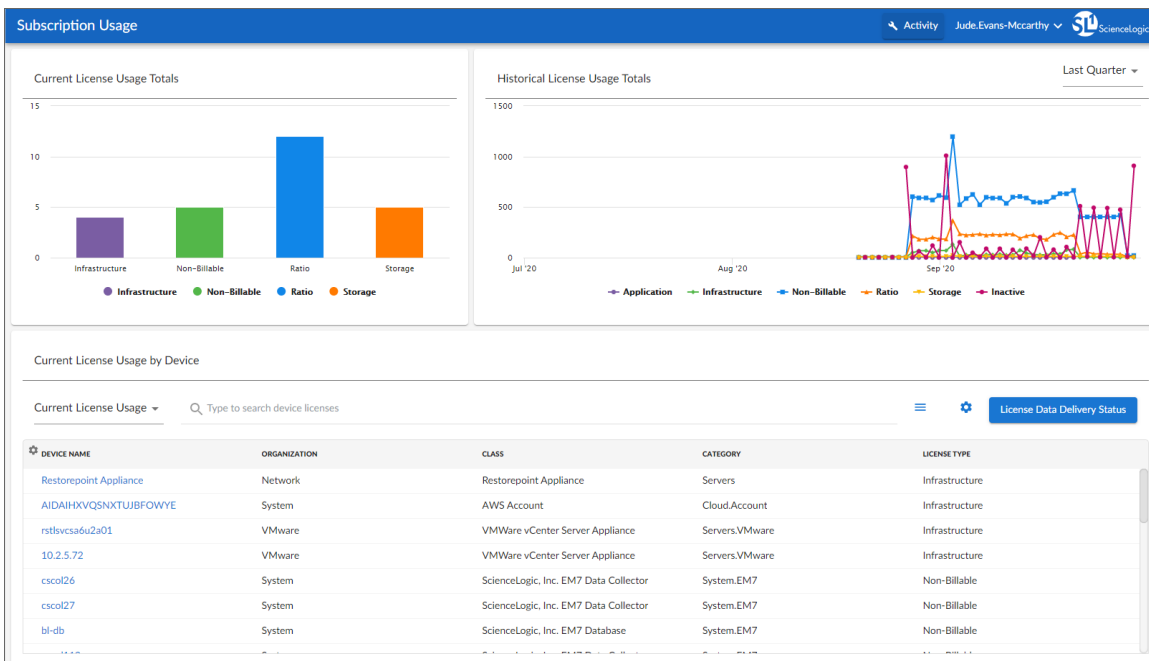
# Ensuring Accurate Data

If the reports described in this chapter do not appear to be correct, validate your configuration by opening the Subscription Usage page (Manage > Subscription Usage). If the process is configured correctly

- For secure/air-gapped systems, the latest "Summary Date" value will be within the last 48 hours
- For systems that connect to ScienceLogic, the latest "Summary Date" value will be within the last 48 hours, and the "Delivery Status" is "1".

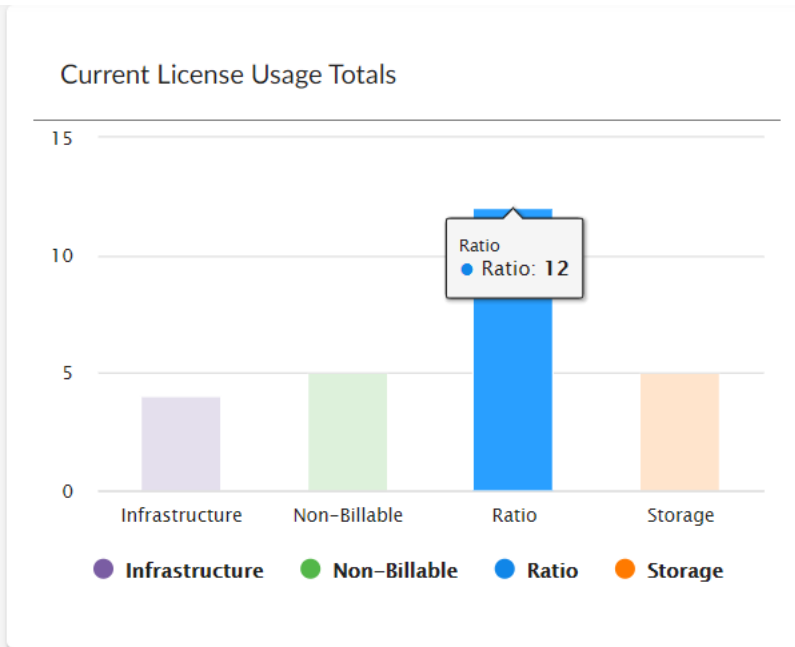
# Viewing Subscription Usage

The **Subscription Usage** page (Manage > Subscription Usage) provides a visual overview of your subscription license usage including historical and current information. The information available in each panel of the page is described in this section.



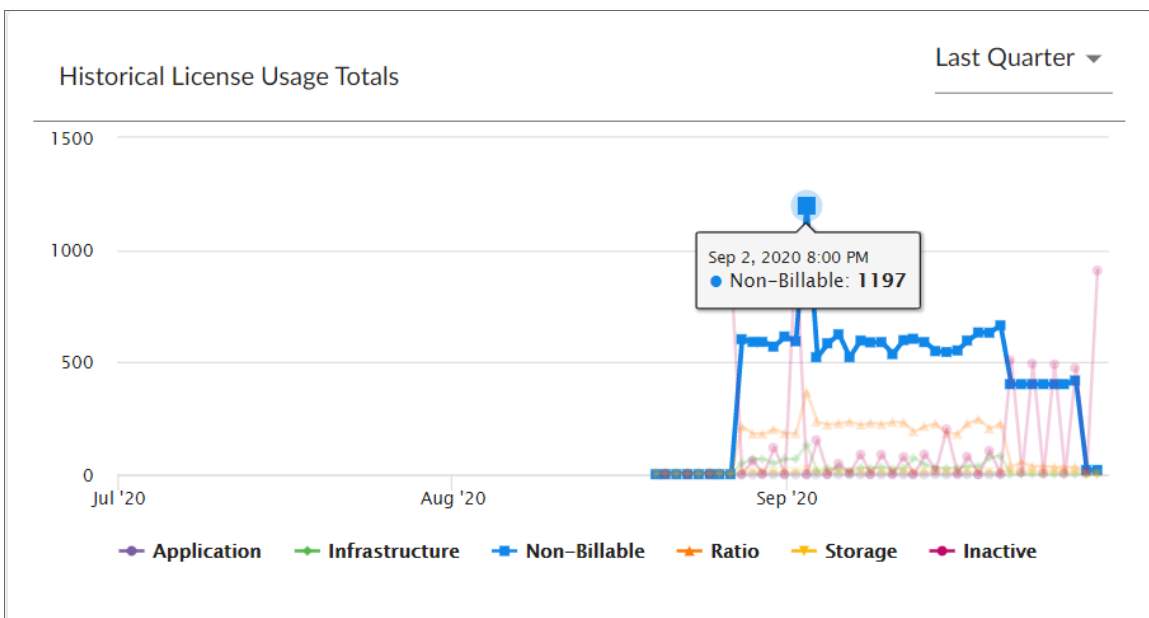
## Current License Usage Totals

The bar chart in the upper-left corner of the Subscription Usage page shows the ratio total consumption of subscription licenses by license type. Each bar represents a license type. You can hover over a bar to see the number of licenses currently being consumed for that type. In the example below, we have four license types. We see that we are currently using 12 Ratio licenses.



## Historical License Usage Totals

The line graph in the upper-right corner of the Subscription Usage page shows subscription license usage over time by license type. You can hover over a data point to see how many licenses of a given type were in use at that point in time.



A Date Range selector lets you narrow your view by using one of the following:

- All
- Current Quarter
- Last Quarter
- Current & Last Quarter
- Last Year

Whereas the "Current License Usages Totals" bar chart showed us that the most used license type currently is the Ratio license, the historical graph shows us that the Non-Billable license type is the most used over the given time range.

## Current License Totals

The Current License usage table in the lower half of the Subscription Usage page lets you view information about your current subscription license usage in one of two ways:

- **Current License Usage by Device.** Choose "Current License Usage" from the drop-down list. Provides a list of all devices and the licenses they are using. You can search the table or filter on Device Name, Class, Organization, Category, or License Type.

Current License Usage by Device

Current License Usage ▾ 🔍 Type to search device licenses ☰ ⚙️ License Data Delivery Status

	ORGANIZATION	CLASS	CATEGORY	LICENSE TYPE
Current License Usage				
Current License Counts	Network	Restorepoint Appliance	Servers	Infrastructure
<a href="#">AIDAIHXVQSNXTUJBFOWYF</a>	System	AWS Account	Cloud.Account	Infrastructure
<a href="#">rstlsvcsa6u2a01</a>	VMware	VMWare vCenter Server Appliance	Servers.VMware	Infrastructure
<a href="#">10.2.5.72</a>	VMware	VMWare vCenter Server Appliance	Servers.VMware	Infrastructure
<a href="#">cscol26</a>	System	ScienceLogic, Inc. EM7 Data Colle...	System.EM7	Non-Billable
<a href="#">cscol27</a>	System	ScienceLogic, Inc. EM7 Data Colle...	System.EM7	Non-Billable
<a href="#">bl-db</a>	System	ScienceLogic, Inc. EM7 Database	System.EM7	Non-Billable

**NOTE:** You can click on a device to open the Device Investigator page for the device. For more information, see *Using the Device Investigator* in the online help.

**TIP:** If you are looking for a specific device license or licenses, click the gear icon (⚙️) to the right of the **Search** field and select *Advanced*. For more information, see the "Performing an Advanced Search" topic in the *Introduction to SL1* manual.

- Current License Counts by Device Class.** Choose "Current License Counts" from the drop-down list. Provides a list of all device classes that are associated with devices in the system, the device category, the total licenses currently consumed by devices of that device class, and a breakdown count for each license type for the device class. You can filter this table by device Class or Category.

Current License Counts by Device Class

Current License Counts ▾ 🔍 Type to search device class licenses

CLASS	CATEGORY	TOTAL	INFRASTRUCTURE	NON-BILLABLE	RATIO	STORAGE
AWS Account	Cloud.Account	1	1	0	0	0
AWS Service	Cloud.Service	1	0	1	0	0
Cisco Systems CRS-1 1...	Network.Router	1	0	0	1	0
Citrix NetScaler	Network.Services	1	0	0	1	0
Dell EMC Unisphere fo...	Storage.Management	1	0	0	0	1
Dell EMC Unity LUN	Storage.LUN	2	0	0	0	2
Dell EMC Unity Stora...	Storage.Pool	1	0	0	0	1

## Viewing Subscription License Reports

SL1 comes with two subscription license reports that you can use to view your license usage by device or by license type. To access these reports, go to Report > Run Report > EM7 Administration.

### 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.





### 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
<b>Totals</b>	<b>21</b>	<b>21</b>

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
<b>Total License Count for Cisco</b>					<b>0</b>

Organization: System					
Organization	Device Name	Device Category	Device Subclass	License Type	License Count
System	LAB 500 [3]	Video.Endpoint	Polycom   Video Conferencing Device	Standard	1
System	LAB-1700MXP [3]	Video.Endpoint	Tandberg   1700 MXP	Standard	1
System	dev-stor-01.NTLMinet.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

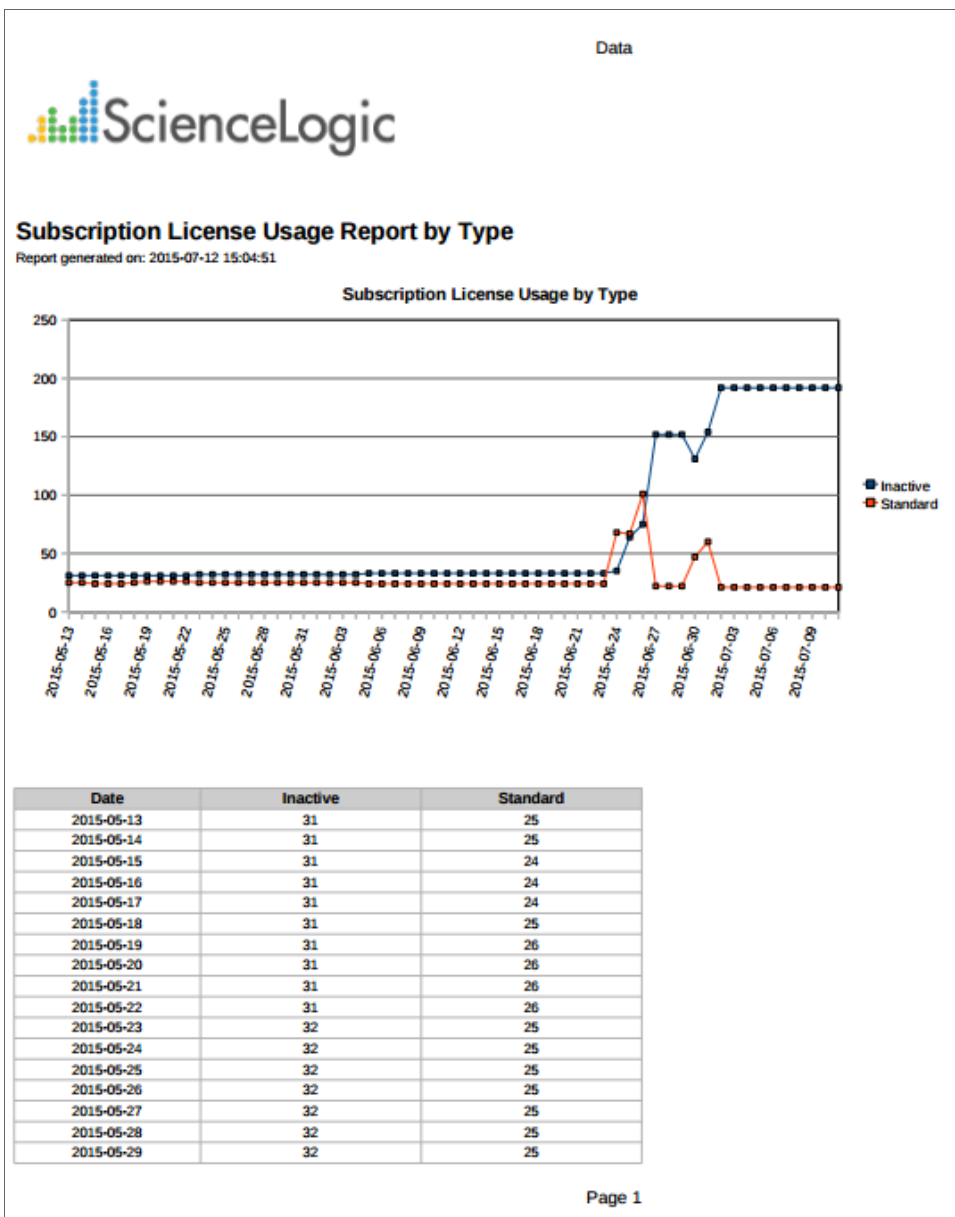
The following input options are available when generating the report:

- **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.



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.*

## 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 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 **Subscription Usage** page (Manage > Subscription Usage).
2. Click the [**License Data Delivery Status**] button.
4. The **License Data Delivery Status** modal 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.

The screenshot shows a window titled "License Data Delivery Status" with a close button (X) in the top right corner. Below the title bar is a header area with "License Data" on the left, and "Reset" and "Download" buttons on the right. Below the header are two dropdown menus: "Summary Date" (set to "All") and "Delivery Status" (set to "All"). To the right of these is a column header "Summary Size (kB)" with a checked checkbox. The main area contains a table with 11 rows, each representing a date from 2020-09-24 to 2020-10-04. Each row has a checkbox in the rightmost column. At the bottom of the window, there is a "Status Update File" section with a "Choose File" button, the text "No file chosen", and an "Upload" button.

	Summary Date	Delivery Status	Summary Size (kB)	
1.	2020-10-04 00:00:00	0	10948.4	<input type="checkbox"/>
2.	2020-10-03 00:00:00	0	10948.4	<input type="checkbox"/>
3.	2020-10-02 00:00:00	0	10948.4	<input type="checkbox"/>
4.	2020-10-01 00:00:00	0	10948.4	<input type="checkbox"/>
5.	2020-09-30 00:00:00	0	10948.4	<input type="checkbox"/>
6.	2020-09-29 00:00:00	0	10948.4	<input type="checkbox"/>
7.	2020-09-28 00:00:00	0	10948.4	<input type="checkbox"/>
8.	2020-09-27 00:00:00	0	10948.4	<input type="checkbox"/>
9.	2020-09-26 00:00:00	0	10948.4	<input type="checkbox"/>
10.	2020-09-25 00:00:00	0	10948.4	<input type="checkbox"/>
11.	2020-09-24 00:00:00	0	10948.4	<input type="checkbox"/>

## 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:

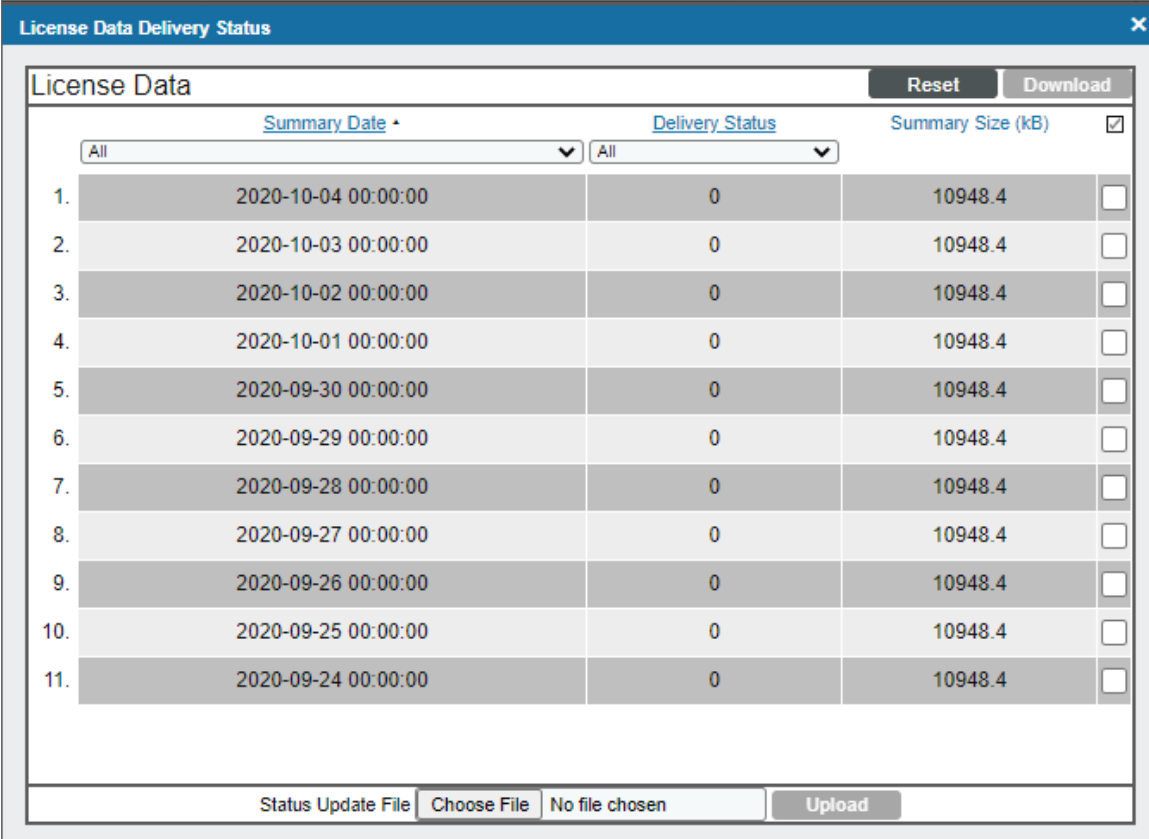
- You can use the **License Data Delivery Status** page to manually download the daily license-usage file.
- You can then log in to the ScienceLogic billing server and manually upload the daily license-usage file.
- You can then use the **License Data Delivery Status** page to upload the ScienceLogic "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 **Subscription Usage** page (Manage > Subscription Usage).
2. Click [**License Data Delivery Status**].
3. Select one or more daily license usage files to download to your local computer, and then click the [**Download**] button.



The screenshot shows the 'License Data Delivery Status' interface. At the top, there are 'Reset' and 'Download' buttons. Below them is a table with the following columns: 'Summary Date', 'Delivery Status', 'Summary Size (kB)', and a checkbox. The table contains 11 rows of data, each representing a daily license usage file. The 'Summary Date' column shows dates from 2020-09-24 to 2020-10-04. The 'Delivery Status' column shows '0' for all entries. The 'Summary Size (kB)' column shows '10948.4' for all entries. At the bottom of the interface, there is a 'Status Update File' section with a 'Choose File' button, a 'No file chosen' indicator, and an 'Upload' button.

	Summary Date	Delivery Status	Summary Size (kB)	
1.	2020-10-04 00:00:00	0	10948.4	<input type="checkbox"/>
2.	2020-10-03 00:00:00	0	10948.4	<input type="checkbox"/>
3.	2020-10-02 00:00:00	0	10948.4	<input type="checkbox"/>
4.	2020-10-01 00:00:00	0	10948.4	<input type="checkbox"/>
5.	2020-09-30 00:00:00	0	10948.4	<input type="checkbox"/>
6.	2020-09-29 00:00:00	0	10948.4	<input type="checkbox"/>
7.	2020-09-28 00:00:00	0	10948.4	<input type="checkbox"/>
8.	2020-09-27 00:00:00	0	10948.4	<input type="checkbox"/>
9.	2020-09-26 00:00:00	0	10948.4	<input type="checkbox"/>
10.	2020-09-25 00:00:00	0	10948.4	<input type="checkbox"/>
11.	2020-09-24 00:00:00	0	10948.4	<input type="checkbox"/>

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

4. The daily license usage file is 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 Billing).
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.



The screenshot shows the 'Subscription Data Update' section of the ScienceLogic billing system. It features a 'License Data File' field with a 'Choose File' button and a 'No file chosen' message. A red box highlights the 'Choose File' button and the 'Get Update' button. Below this, there is a 'Subscription Data Receipt Status' section with 'From' and 'To' date pickers set to 07/11/2015 and 10/11/2015, and a 'Get Status' button. The main content area is titled 'Device Count by License Type' and currently displays '- No Data -'.

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 Billing).

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.

Subscription Data | For [ System Administrator ] | Organization: System

Subscription Data Update License Data File Choose File No file chosen Get Update

Subscription Data Receipt Status From 07/11/2015 To 10/11/2015 Get Status

Device Count by License Type

- No Data -

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 **Subscription Usage** page (Manage > Subscription Usage).
2. Click **[License Data Delivery Status]**.
3. In the **Status Update File** field, click **[Choose File]** and browse to locate the "receipt" file.

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

License Data				Reset	Download
	Summary Date	Delivery Status	Summary Size (kB)	<input checked="" type="checkbox"/>	
1.	2020-10-04 00:00:00	0	10948.4	<input type="checkbox"/>	
2.	2020-10-03 00:00:00	0	10948.4	<input type="checkbox"/>	
3.	2020-10-02 00:00:00	0	10948.4	<input type="checkbox"/>	
4.	2020-10-01 00:00:00	0	10948.4	<input type="checkbox"/>	
5.	2020-09-30 00:00:00	0	10948.4	<input type="checkbox"/>	
6.	2020-09-29 00:00:00	0	10948.4	<input type="checkbox"/>	
7.	2020-09-28 00:00:00	0	10948.4	<input type="checkbox"/>	
8.	2020-09-27 00:00:00	0	10948.4	<input type="checkbox"/>	
9.	2020-09-26 00:00:00	0	10948.4	<input type="checkbox"/>	
10.	2020-09-25 00:00:00	0	10948.4	<input type="checkbox"/>	
11.	2020-09-24 00:00:00	0	10948.4	<input type="checkbox"/>	

Status Update File Choose File No file chosen Upload

## 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.

---

# 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 the menu options, click the Advanced menu icon (.

This chapter includes the following topics:

<i>Subscription Data Collected by SL1</i> .....	27
<i>Non-billable Devices</i> .....	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	<ul style="list-style-type: none"> <li>• ScienceLogic System Identifier</li> <li>• ScienceLogic Version</li> <li>• ScienceLogic Revision</li> <li>• DRBD Version</li> <li>• MySQL Version</li> <li>• Number of Organizations</li> <li>• Number of Users</li> <li>• Number of Applications</li> <li>• Number of Application Components</li> <li>• List of Dynamic Applications installed on each monitored device, with the following information included:               <ul style="list-style-type: none"> <li>◦ ID</li> <li>◦ GUID</li> <li>◦ Name</li> <li>◦ Version</li> </ul> </li> </ul>

Collection	Data Collected
	<ul style="list-style-type: none"> <li>◦ PowerPack GUID</li> <li>◦ PowerPack Name</li> <li>◦ PowerPack Version</li> <li>◦ Number of Subscribers</li> <li>• Number of Configured Dashboards</li> <li>• Number of Scheduled Reports</li> <li>• Number of Asset Records</li> <li>• Number of each type of the following appliances: <ul style="list-style-type: none"> <li>◦ Admin Portals</li> <li>◦ Database Servers</li> <li>◦ Data Collectors</li> <li>◦ Message Collectors</li> <li>◦ Compute Nodes</li> <li>◦ Storage Nodes</li> </ul> </li> <li>• Number of Device Groups</li> <li>• Number of IT Services</li> <li>• Number of Business Services</li> <li>• Number of Device Services</li> <li>• Number of Automations triggered for the past 24 hours</li> <li>• Number of Automation Actions executed for the past 24 hours</li> <li>• Number of New Tickets Created</li> <li>• Number of New Event Instances</li> <li>• Number of Knowledge Base Articles</li> <li>• Latest output of System Status script for each appliance</li> <li>• Earliest license expiry date</li> <li>• List of all installed PowerPacks with the following information per PowerPack: <ul style="list-style-type: none"> <li>◦ GUID</li> <li>◦ Name</li> <li>◦ Version</li> <li>◦ Revision</li> <li>◦ Publisher</li> </ul> </li> </ul>
Per Device	<ul style="list-style-type: none"> <li>• Device ID</li> <li>• Organization ID</li> <li>• Device Name</li> </ul>

Collection	Data Collected
	<ul style="list-style-type: none"> <li>• Device Class with the following information per device class: <ul style="list-style-type: none"> <li>◦ GUID</li> <li>◦ Name</li> <li>◦ Description</li> <li>◦ Device Category GUID</li> <li>◦ Device Category Name</li> </ul> </li> <li>• Device Subscription Tier</li> <li>• Device Category</li> <li>• Interface Count</li> <li>• Merge/Component ID</li> <li>• Aligned Dynamic Applications</li> <li>• Number of Associated Applications</li> <li>• Number of Associated Business Services</li> <li>• Number of Associated IT Services</li> <li>• Number of Associated Device Services</li> <li>• Relationships with other devices <ul style="list-style-type: none"> <li>◦ Relationship Type</li> <li>◦ Device Class for the device on the other end of the relationship</li> </ul> </li> </ul> <p><b>NOTE:</b> Certain component devices do not count against your license usage in SL1. For more information, see the <a href="#">Non-billable Component Devices</a> section.</p>

## Non-billable Devices

Typically, any device that SL1 is monitoring will consume a ScienceLogic device license, 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 with 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 devices do not count against your license usage in SL1:

- 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 assigned specific device classes. This includes SL1 appliances and logical component devices such as AWS Regions, VMware Folders, and so on. The latest list of non-billable devices is available on the ScienceLogic support portal.



## 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 the menu options, click the Advanced menu icon (.

This chapter includes the following topics:

<i>Installing the Test Script</i> .....	31
<i>Running the Test Script</i> .....	31
<i>Error Message Remediation</i> .....	31

---

## 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	<p>An HTTP request to the login page of <code>https://billing.sciencelogic.com</code> without user credentials failed.</p> <p><b>Cause:</b> 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.</p> <p><b>Next Steps:</b></p> <ul style="list-style-type: none"><li>• Test connections to other internet pages</li><li>• Troubleshoot the network settings for the Database Server</li><li>• Whitelist <code>https://billing.sciencelogic.com</code> in the your firewall configuration</li></ul> <p><b>NOTE:</b> Using an HTTP proxy is an option for the connection, if required.</p>
ERROR: cred_id section missing from [SUBSCRIBER] in /etc/silo.conf	The <code>cred_id</code> option is not included in <code>/etc/silo.conf</code> .

Error Message	Description
	<p><b>Cause:</b> The subscription billing process is not configured correctly.</p> <p><b>Next Steps:</b> For information about the required silo.conf configuration, see "Editing Silo.conf for Subscription Billing" in the "Configuring Subscription Billing" section.</p>
ERROR: [SUBSCRIBER] section from /etc/silo.conf missing	<p>The SUBSCRIBER section is not included in /etc/silo.conf.</p> <p><b>Cause:</b> The subscription billing process is not configured correctly.</p> <p><b>Next Steps:</b> For information about the required silo.conf configuration, see "Editing Silo.conf for Subscription Billing" in the "Configuring Subscription Billing" section.</p>
ERROR: Cannot login to https://-billing.sciencelogic.com with the cred id <ID> username and password	<p>An HTTP request to the login page of https://billing.sciencelogic.com with user credentials failed.</p> <p><b>Cause:</b> The username and password in the credential specified in the silo.conf file did not successfully authenticate on https://billing.sciencelogic.com.</p> <p><b>Next Steps:</b></p> <ul style="list-style-type: none"> <li>• Verify the username and password listed for your services account on https://iportal.sciencelogic.com.</li> <li>• If the credential is correct, attempt to log in to https://billing.sciencelogic.com manually with the credential.</li> <li>• If the manual login fails, open a Billing case for IT to check the issue.</li> <li>• 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.</li> </ul>
ERROR: Cred type wrong for credential <ID>	<p>The credential specified in the silo.conf configuration is not a SOAP/XML credential.</p> <p><b>Cause:</b> The subscription billing process is not configured correctly.</p> <p><b>Next Steps:</b> 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.</p>
ERROR: Port not 443 for cred <ID>	<p>The credential specified in the silo.conf configuration does not use port 443.</p> <p><b>Cause:</b> The port specified for the credential ID shown is incorrect.</p> <p><b>Next Steps:</b> 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.</p>
ERROR: https://-billing.sciencelogic.com not found in cred <ID>	<p>The credential specified in the silo.conf configuration file does not have the URL for the billing server.</p>



Error Message	Description
	<p><b>Cause:</b> The URL for the billing server ("https://billing.sciencelogic.com") is missing or incorrect.</p> <p><b>Next Steps:</b> 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.</p>
ERROR: Credential \$cred not found	<p>The credential specified in the silo.conf configuration does not exist.</p> <p><b>Cause:</b> The subscription billing process is not configured correctly.</p> <p><b>Next Steps:</b> For the required credential configuration, see the "Creating a Credential for the ScienceLogic Billing Server" in the "Configuring Subscription Billing" section.</p>
<Number> UHEs detected, please investigate	<p>The system log contains unhandled exceptions for the subscription usage process.</p> <p><b>Next Steps:</b> Execute the following query for more details, and then follow the standard troubleshooting process for unhandled exceptions, escalating to Support as necessary:</p> <pre>select * from master_logs.system_messages where date_ edit &gt; date_sub(now(), interval 7 day) and message like '^153: Unhandled exception on appliance%';</pre>

© 2003 - 2021, ScienceLogic, Inc.

All rights reserved.

#### LIMITATION OF LIABILITY AND GENERAL DISCLAIMER

ALL INFORMATION AVAILABLE IN THIS GUIDE IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. SCIENCELOGIC™ AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

Although ScienceLogic™ has attempted to provide accurate information on this Site, information on this Site may contain inadvertent technical inaccuracies or typographical errors, and ScienceLogic™ assumes no responsibility for the accuracy of the information. Information may be changed or updated without notice. ScienceLogic™ may also make improvements and / or changes in the products or services described in this Site at any time without notice.

#### Copyrights and Trademarks

ScienceLogic, the ScienceLogic logo, and EM7 are trademarks of ScienceLogic, Inc. in the United States, other countries, or both.

Below is a list of trademarks and service marks that should be credited to ScienceLogic, Inc. The ® and ™ symbols reflect the trademark registration status in the U.S. Patent and Trademark Office and may not be appropriate for materials to be distributed outside the United States.

- ScienceLogic™
- EM7™ and em7™
- Simplify IT™
- Dynamic Application™
- Relational Infrastructure Management™

The absence of a product or service name, slogan or logo from this list does not constitute a waiver of ScienceLogic's trademark or other intellectual property rights concerning that name, slogan, or logo.

Please note that laws concerning use of trademarks or product names vary by country. Always consult a local attorney for additional guidance.

#### Other

If any provision of this agreement shall be unlawful, void, or for any reason unenforceable, then that provision shall be deemed severable from this agreement and shall not affect the validity and enforceability of any remaining provisions. This is the entire agreement between the parties relating to the matters contained herein.

In the U.S. and other jurisdictions, trademark owners have a duty to police the use of their marks. Therefore, if you become aware of any improper use of ScienceLogic Trademarks, including infringement or counterfeiting by third parties, report them to Science Logic's legal department immediately. Report as much detail as possible about the misuse, including the name of the party, contact information, and copies or photographs of the potential misuse to: [legal@sciencelogic.com](mailto:legal@sciencelogic.com)



800-SCI-LOGIC (1-800-724-5644)

International: +1-703-354-1010