



---

# Introduction to SL1

SL1 version 8.12.0

---

# Table of Contents

<b>Getting Started</b> .....	<b>4</b>
Prerequisites .....	6
Logging In and Out of SL1 .....	6
Using the Navigation Menus .....	7
Using Basic Search .....	7
Managing New Features on the Content Management Page .....	9
Getting Help and More Information .....	11
Configuring Communication with the ScienceLogic API .....	12
Filtering the Items on a Page .....	13
Tool Tips .....	15
Creating and Using Bookmarks .....	16
The Finder Tool .....	17
Searching for One or More Elements .....	18
Viewing a List of All Elements in SL1 .....	19
Viewing the Results Table .....	20
Getting Help from Guides .....	21
Viewing the List of Guides .....	21
Searching for a Guide by Title .....	21
Viewing a Guide from the Guide Browser .....	22
Viewing a Guide from a Page in the ScienceLogic Platform .....	22
Navigating Within a Guide .....	23
Searching All Guides .....	24
The Toolbox .....	24
<b>Overview of SL1 Features</b> .....	<b>27</b>
Architecture .....	29
SL1 Appliance Functions .....	29
User Interface .....	29
Database .....	29
Data Collection .....	30
Message Collection .....	30
API .....	30
Organizations and Users .....	30
Organizations .....	30
Users .....	30
Credentials .....	31
Discovery .....	32
Device Administration .....	32
Virtual Device .....	32
Component Device .....	33
Events .....	33
Automation .....	33
Business Services .....	34
Application Health .....	34
Dynamic Applications .....	35
PowerPacks .....	35
Maps .....	36
Dashboards .....	37
Reports .....	38
Custom Reports .....	38
Embedded Reports .....	38

Ticketing .....	39
Asset Management .....	39
<b>User Preferences .....</b>	<b>40</b>
Account Preferences .....	41
Schedule Manager .....	45
Viewing the Schedule Manager .....	45
Defining a Scheduled or Recurring Calendar Item .....	47
Enabling or Disabling One or More Scheduled Calendar Items .....	49
Deleting One or More Scheduled Calendar Items .....	49
My Contact Information .....	50
<b>Using Advanced Search .....</b>	<b>53</b>
Performing an Advanced Search .....	54
Components of an Advanced Search .....	55
Fields .....	56
Operators .....	58
Values .....	60
Additional Components of an Advanced Search .....	60
Strings .....	60
Escape characters .....	61
Examples of Advanced Searches .....	62
Advanced Search Examples on the Devices Page .....	62
Advanced Search Examples on the Events Page .....	63
Advanced Search Examples on the Services Page .....	63

## Getting Started



---

### Overview

This manual is intended for new users of SL1, and it covers features in both the new user interface that was released with version 8.12.0 of SL1 as well as the "classic" user interface of SL1 that was available before version 8.12.0.

This manual describes the key features of SL1, including how to access SL1 and get help, how to perform basic and advanced searches, how to set user preferences, and more.

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:

<i>Prerequisites</i> .....	6
<i>Logging In and Out of SL1</i> .....	6
<i>Using the Navigation Menus</i> .....	7
<i>Using Basic Search</i> .....	7
<i>Managing New Features on the Content Management Page</i> .....	9
<i>Getting Help and More Information</i> .....	11
<i>Configuring Communication with the ScienceLogic API</i> .....	12
<i>Filtering the Items on a Page</i> .....	13
<i>Tool Tips</i> .....	15
<i>Creating and Using Bookmarks</i> .....	16

<b>The Finder Tool</b> .....	<b>17</b>
<i>Searching for One or More Elements</i> .....	18
<i>Viewing a List of All Elements in SL1</i> .....	19
<i>Viewing the Results Table</i> .....	20
<b>Getting Help from Guides</b> .....	<b>21</b>
<i>Viewing the List of Guides</i> .....	21
<i>Searching for a Guide by Title</i> .....	21
<i>Viewing a Guide from the Guide Browser</i> .....	22
<i>Viewing a Guide from a Page in the ScienceLogic Platform</i> .....	22
<i>Navigating Within a Guide</i> .....	23
<i>Searching All Guides</i> .....	24
<b>The Toolbox</b> .....	<b>24</b>

## Prerequisites

This manual assumes that the initial installation and configuration (deployment) of SL1 has been completed. For details on the initial configuration of SL1, see the **Installation** manual.

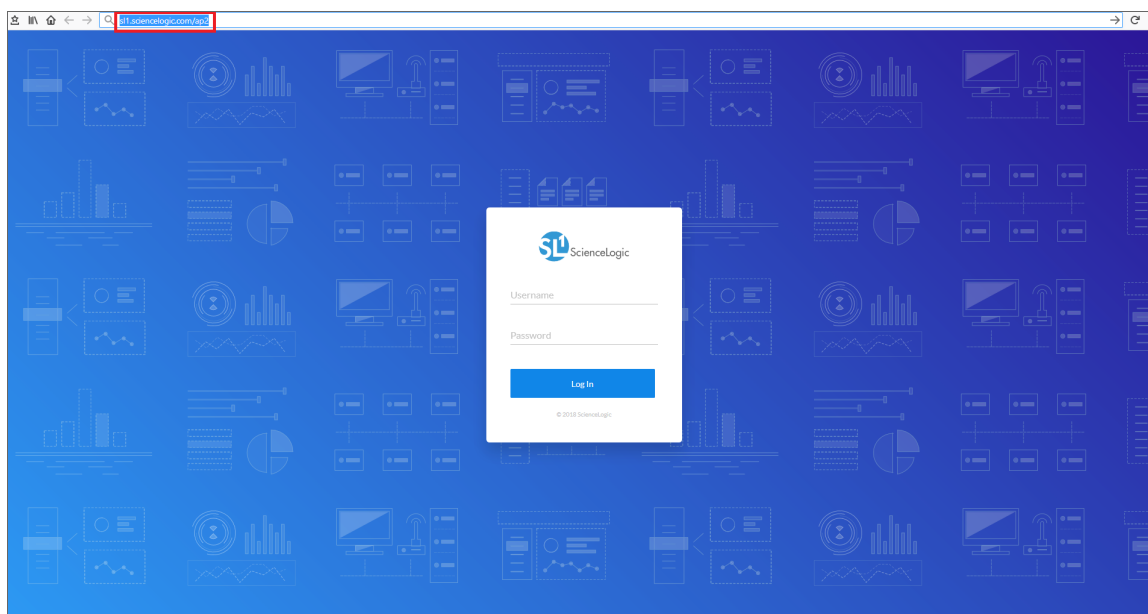
## Logging In and Out of SL1

This topic covers how to access the different user interfaces for SL1.

**NOTE:** You can control access to SL1 by aligning the Admin Portal Access (AP\_Access) access hook with an existing Access Key on the **Access Keys** page (System > Manage > Access Keys).

To log in to SL1:

1. In a browser, type the URL or IP address for SL1.
2. Type **/ap2** at the end of the URL or IP address. For example, you could type **https://sl1.sciencelogic.com/ap2**. The login page for SL1 appears:



**NOTE:** The "classic" user interface for SL1 still exists. You can toggle between the two user interfaces by adding and removing **/ap2** at the end of the URL for SL1.

3. Type the current user name and password you use with SL1 and click **Log In**.
4. If your company uses Single Sign-On (SSO) for authentication, you will be redirected to your company's SSO page, where you can log in to SL1 with your SSO credentials. When you log out, the logout screen redirects you to an SSO page instead of the typical login screen.
5. If you are logging in for the first time, you will be prompted to change your password. Type your username, your old password, and type your new password twice in the *New Password* and *Confirm Password* fields. Click **[Reset Password]**.

To log out of SL1:





1. Click your user name in the navigation bar in the top-right corner of any SL1 page.
2. Click **Log off**. The login page appears.

---

## Using the Navigation Menus


Starting with the 8.12.0 release, the user interface for SL1 was upgraded to include content from both the "new" user interface (also called "ap2") and the "classic" user interface. This "unified" user interface provides a more streamlined method of navigation that uses two menus: a basic menu and an Advanced menu.


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

- To view a pop-out list of menu options, click the menu icon () at the top left of any SL1 page. Use the up and down arrow buttons ( ) to expand and contract the menu options.
- To view a page containing all of the menu options, click the Advanced menu icon () at the bottom left of any SL1 page.

---

## Using Basic Search

On many pages and lists in SL1, you can use the **Search** field to search for specific elements on that page or list. The **Search** field contains a magnifying glass icon () next to the words "Type to search" or "Search". You can access the field above the list of elements on a page or in a list.

**TIP:** To use the Advanced Search, click the gear icon () to the right of the **Search** field and select *Advanced*. For more information, see [Advanced Search](#).

The main **Search** field is similar to the Filter-While-You-Type field. As you type text in the **Search** field, SL1 filters the list of elements. However, searches in SL1 use *all* relevant columns for the search, unlike the Filter-While-You-Type field, which only used the columns that were visible on that page.

To use the **Search** field:

1. Click the **Search** field and start typing search text. As you type, SL1 provides potential matching values in a drop-down menu and starts filtering the list with your search text. For example, if you start searching for "government" by typing `gov`, a drop-down list appears with a list of columns that might contain that word, and the list is filtered by items that have "gov" in one of their fields:

A screenshot of a search interface. At the top, there is a search bar with a magnifying glass icon and the text 'gov'. Below the search bar is a dropdown menu with several sections. The first section is 'ANY', with 'ANY: gov' highlighted in blue. The second section is 'EVENT', with suggestions 'message: gov', 'resourceName: gov', 'device.name: gov', and 'device.hostname: gov'. The third section is 'COLLECTOR GROUP', with suggestions 'organization.company: gov', 'device.collectorGroup.id: gov', and 'device.collectorGroup.name: gov'. The fourth section is 'DEVICE GROUP', with suggestions 'vendor: gov', 'model: gov', 'device.deviceClass.type: gov', and 'device.deviceClass.logicalName: gov'. The fifth section is 'DEVICE GROUP', with suggestion 'device.deviceGroup.id: gov'.

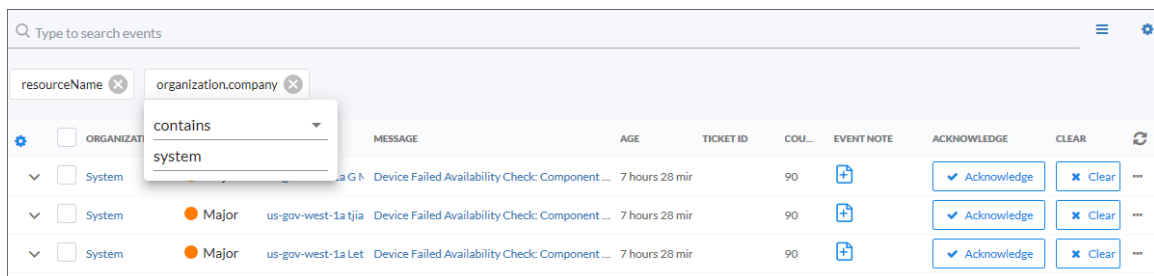
2. If you select one of the suggested fields from the list, such as `resourceName`, a **criteria button** displays under the **Search** field. You can click the criteria button and type more search text under the button:

A screenshot of a search criteria button. At the top, there is a search bar with a magnifying glass icon and the text 'Type to search events'. Below the search bar is a dropdown menu with the text 'resourceName' and a close button (X). Below the dropdown menu is a dropdown menu with the text 'contains' and a downward arrow. Below the dropdown menu is a text input field with the text 'gov'.

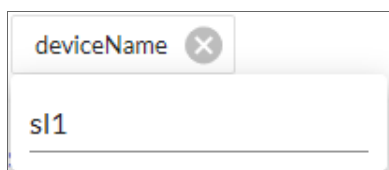


**TIP:** If you select the ANY field from the drop-down menu, the search looks through all relevant columns for matches to your search text.

3. You can add more search criteria to an existing search by typing additional text in the **Search** field, and then selecting additional fields from the drop-down list:



4. Alternately, you can click the menu icon (☰) to the right of the **Search** field to select a search criteria, and then you can type additional search information in the criteria button that appears under the **Search** field:



5. You can remove a search criteria by clicking the Close icon (X) on the criteria button under the **Search** field.
6. To quickly clear a search, click the gear icon (⚙️) to the right of the **Search** field and select *Clear*.

## Managing New Features on the Content Management Page

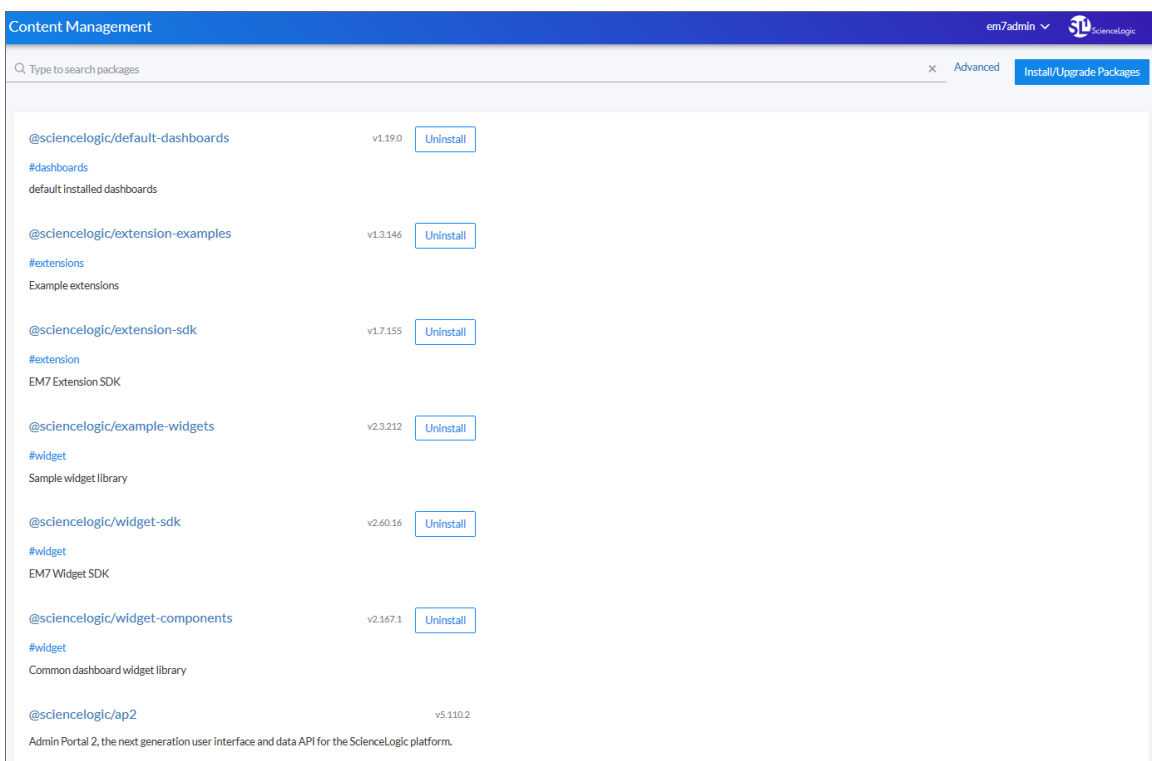
You can use the **Content Management** page to install and upgrade various features of SL1, such as new versions of the user interface (ap2) and new widget components for dashboards. These features are delivered in **content packages**, which you can find on the [**Content Management**] page (Manage > Content Management).

Content package names follow packaging rules for NPM, the package manager for JavaScript. Content packages created by ScienceLogic include **@sciencelogic** in the package name.

**TIP:** You can update more than one content package at a time, and you do not need to wait for one package to install before installing another package. Also, you can navigate away from this page and the package or packages will continue to install.

To install or upgrade a content package:

1. Go to the **[Content Management]** page (Manage > Content Management).
2. Click the **[Install/Upgrade Packages]** button. The **Install Packages** page appears.



3. Click the **[Install]** button for the content package you want to install. The button changes to **[Installed]** when the package finishes installing. Larger content packages might take longer than usual to install.

**NOTE:** If you are updating the **@sciencelogic/ap2** content package, allow the package to run for a few minutes, and ignore any "Install Failed" messages.

4. As a best practice, clear the cache for your browser after the installation, and also clear the cache in the current or "classic" interface by clicking the **[Toolbox]** or "hamburger" button (☰) and selecting *Clear SL1 System Cache*.

**TIP:** To access the classic SL1 interface, type `/em7` at the end of the URL or IP address, such as `http://sl1.sciencelogic.com/em7`.

5. To view more information about a content package, including a short description and a Readme file, where relevant, click the name of the package.
6. Press the **[ESC]** button to return to the **[Content Management]** page. You can leave the **Install Packages** page before a content packages finishes installing.
7. To uninstall a content package, click the **[Uninstall]** button for that package.

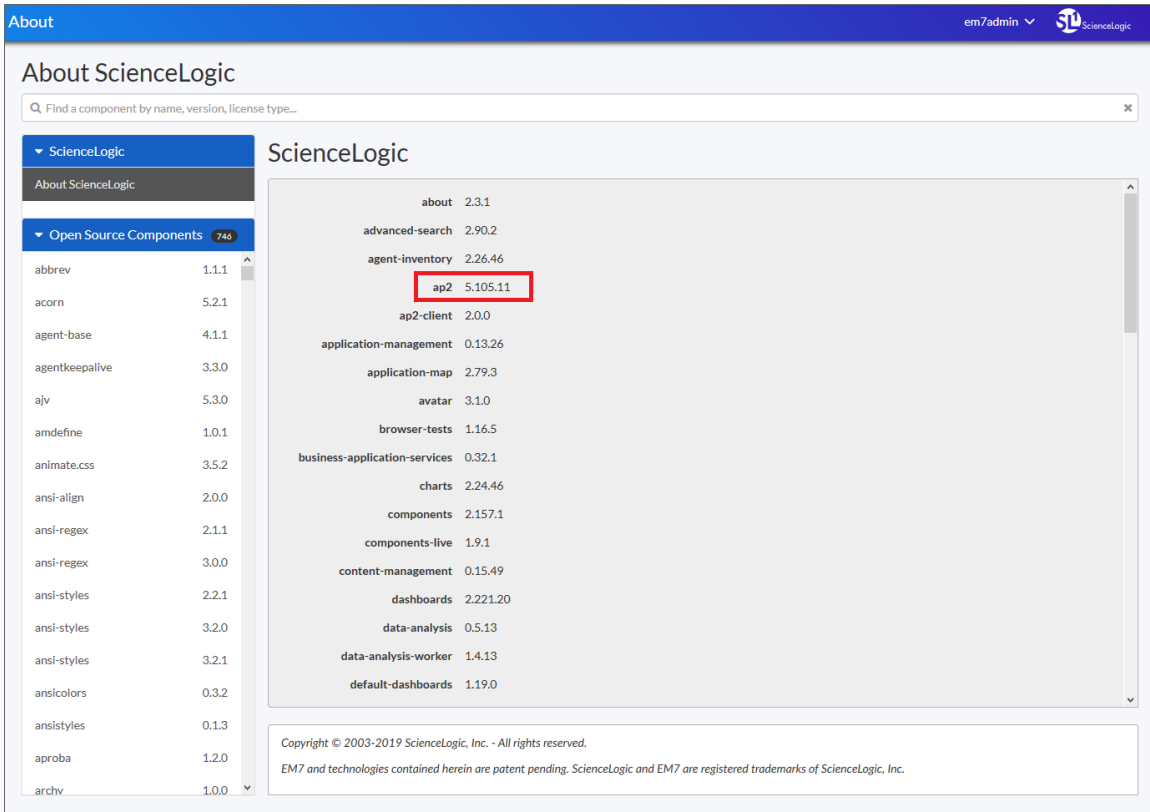
## Getting Help and More Information

For documentation about any page in SL1, click your user name in the blue navigation bar in the top right of any SL1 page and select *Help* from the menu. A Help topic specific to the current page appears in a new browser window:

The screenshot displays the ScienceLogic SL1 interface. At the top right, a search field is highlighted with a red box. The main content area shows a help topic titled "Performing an Advanced Search". The page includes a navigation sidebar on the left with sections like "Section I. General Information", "Section II. Installation and Configuration", etc. The help topic text explains how to perform an advanced search, listing steps and components. A search field is shown with the text "me" entered, and a dropdown menu displays "message" and "alignedResourceName" as field options. A tip box indicates that pressing **[Ctrl+Space]** shows all possible search commands. Another search field shows "message contains" with a dropdown menu displaying "contains" and "doesNotContain" as operator options. A final tip box notes that a red exclamation mark icon indicates an incorrectly formatted or incomplete command, while a green checkmark icon indicates a complete and formatted command.

The online Help includes a **Search** field at the top right of the page that you can use to find additional topics related to SL1 and the "classic" user interface.

For more information about the components used by SL1, click your user name in the blue navigation bar in the top right of any SL1 page and select *About*. The **About ScienceLogic** page appears:



**TIP:** To identify the version of SL1 you have installed, click **About ScienceLogic** in the left-hand pane and locate the **ap2** value in the list of ScienceLogic components in the right-hand pane.

In the left-hand navigation pane, click any of the components in the **Open Source Components** pane to view licensing information about those components, along with links to relevant websites where relevant. To search for a specific open-source component, type the name of that component in the **Search** field at the top of the page. The list of components is filtered by your search terms.

## Configuring Communication with the ScienceLogic API

To avoid communication errors between SL1 and the ScienceLogic API, configure the `em7_limits.conf` file to limit the number of connections per IP on all SL1 appliances that communicate with the ScienceLogic API. Use this configuration if you are using a version of SL1 that is lower than 8.9.0, or if you used the patch to upgrade to 8.9.0 instead of using the ISO version of 8.9.0.

To configure communication on a SL1 appliance:

1. Either go to the console of the SL1 server or use SSH to access the SL1 appliance.
2. Log in as user **em7admin**.
3. Open the file `/etc/nginx/conf.d/em7_limits.conf` with vi or another text editor:
 

```
sudo vi /etc/nginx/conf.d/em7_limits.conf
```
4. To limit the number of connections per IP, add the following line to the file:
 

```
limit_conn perip 200
```
5. Save your changes and exit the file (`:wq`).
6. Restart the SL1 appliance by executing the following command:
 

```
sudo systemctl restart nginx
```
7. Run steps 1-6 on all SL1 appliances that communicate with the ScienceLogic API.

---

## Filtering the Items on a Page

Many pages in SL1 that display data in tabular format include a "filter-while-you-type" filter above each table column. For example, the following filters appear on the **Device Manager** page (Devices > Device Manager):



You can filter the list of items on a page by entering values in one or more filters. The list of items is dynamically updated as you enter values. By default, the cursor is placed in the first Filter-While-You-Type field. You can use the `<Tab>` key or your mouse to move your cursor through the fields. There are two general types of filter:

- Text filters, where you enter text to match against. SL1 will search for the items that contain the text you entered, including partial matches. For example, if you enter "server" in the **Device Name** filter in the **Device Manager** page, the list of devices will be filtered to include only the devices that include "server" in the device name. Most text filters support the following special characters:
  - `,` (comma). Specifies an "or" operation. For example:
    - "dell, micro" would match all values that contain the string "dell" OR the string "micro".
  - `&` (ampersand). Specifies an "and" operation. For example:
    - "dell & micro" would match all values that contain the string "dell" AND the string "micro".
  - `!` (exclamation mark). Specifies a "not" operation. For example:
    - "!dell" would match all values that do not contain the string "dell".

- `^` (caret mark). Specifies "starts with." For example:
  - "`^ micro`" would match all strings that start with "micro," like "microsoft".
  - "`^`" will include all rows that have a value in the column.
  - "!`^`" will include all rows that have no value in the column.
- `$` (dollar sign). Specifies "ends with." For example:
  - "`$ware`" would match all strings that end with "ware", like "VMware".
  - "`$`" will include all rows that have a value in the column.
  - "!`$`" will include all rows that have no value in the column.
- `min-max`. Matches numeric values only. Specifies any value between the minimum value and the maximum value, including the minimum and the maximum. For example:
  - "`1-5`" would match 1, 2, 3, 4, and 5.
- `-` (dash). Matches numeric values only. A "half open" range. Specifies values including the minimum and greater or including the maximum and lesser. For example:
  - "`1-`" matches 1 and greater, so it would match 1, 2, 6, 345, etc.
  - "`-5`" matches 5 and less, so it would match 5, 3, 1, 0, etc.
- `>` (greater than). Matches numeric values only. Specifies any value "greater than." For example:
  - "`>7`" would match all values greater than 7.
- `<` (less than). Matches numeric values only. Specifies any value "less than." For example:
  - "`<12`" would match all values less than 12.
- `>=` (greater than or equal to). Matches numeric values only. Specifies any value "greater than or equal to". For example:
  - "`=>7`" would match all values 7 and greater.
- `<=` (less than or equal to). Matches numeric values only. Specifies any value "less than or equal to". For example:
  - "`=<12`" would match all values 12 and less.
- `=` (equal). Matches numeric values only. For numeric values, allows you to match a negative value. For example:
  - "`=-5`" would match "-5" instead of being evaluated as the "half open range" as described above.

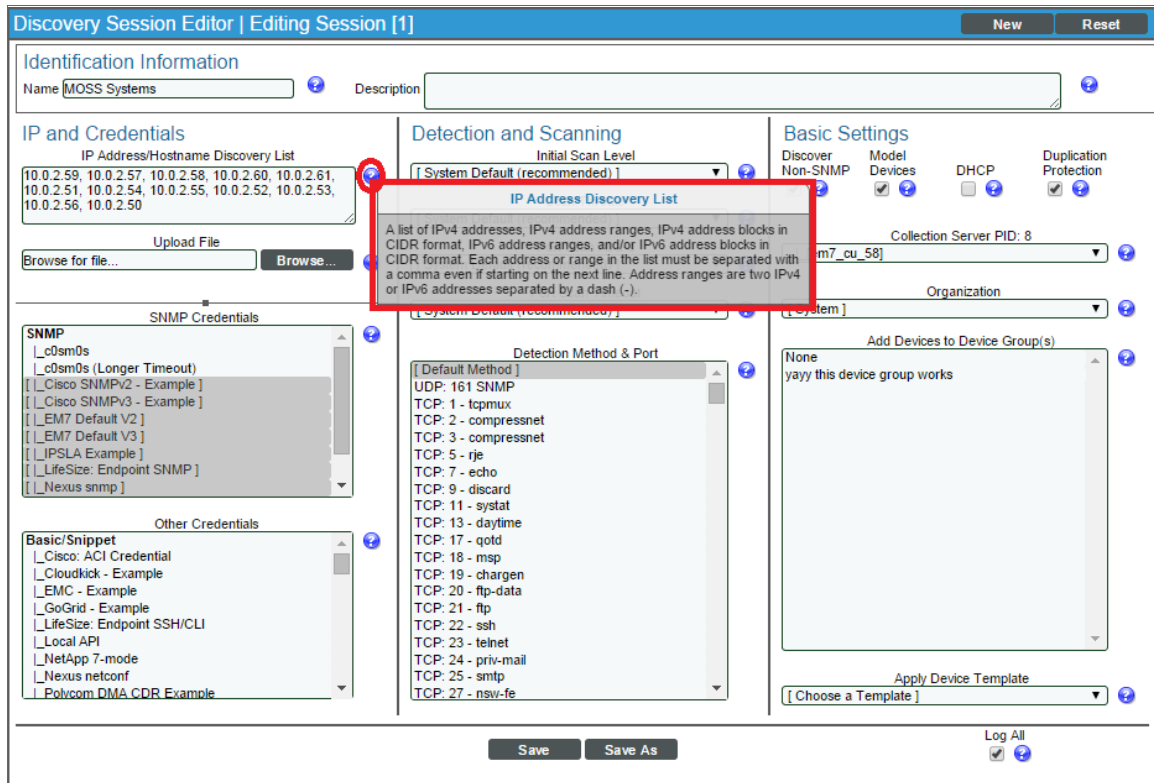
- Drop-down list filters, where you select a value from a list of pre-defined values. SL1 will search the items that match the value you selected. For example, if you select ">=Notice" in the **Current State** filter in the **Device Manager** page, the list of devices will be filtered to include only the devices that have a current state of "Notice" or above.

If you select multiple filters, the list of values will be filtered to include only items that meet all the filter criteria.

**NOTE:** Not all pages include "filter-while-you-type" filters and not all filters support all special characters. For information about the filter and search options on a specific page, click the **[Guide]** button.

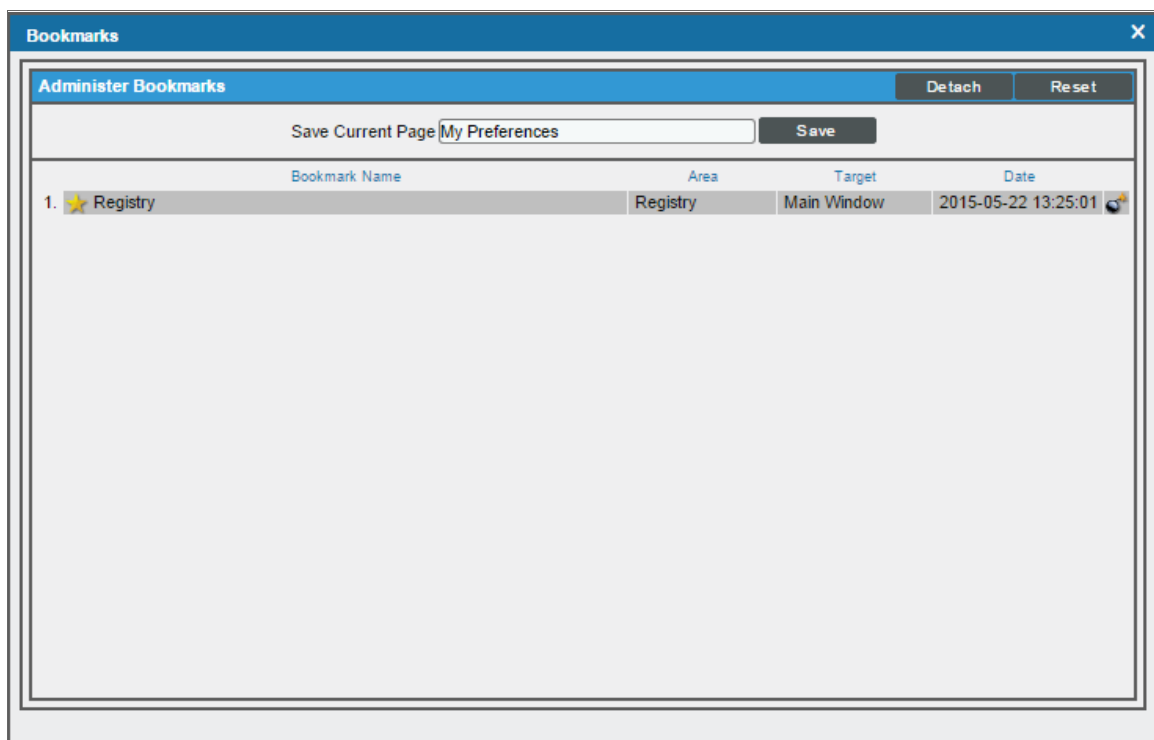
## Tool Tips

Some pages in SL1 include question-mark icons next to one or more fields. These question-mark icons are called Tool Tips. When you move your mouse over a Tool Tip, SL1 displays a brief description of the corresponding field.



## Creating and Using Bookmarks

The **Administer Bookmarks** page (Misc > Bookmarks) allows you to create bookmarks in the classic user interface and quickly navigate to a selected page or to a selected result.



You can bookmark:

- The current page (classic user interface only)
- The results of a search, such as a search for all devices where the name begins with "cisco" (classic user interface only)
- A filtered list, such as a list of all tickets in the "Engineering" queue (classic user interface only)
- An editor page, with drop-down lists already selected. For example, you could bookmark the **Dynamic Applications Create New Application** page, with the Application Type of "XML Performance" already selected. The selected drop-down determines the other fields that appear in the subsequent pages.

### To create a new bookmark:

1. In SL1, navigate to the page and/or results you want to bookmark (classic user interface only).
2. Use the shortcut keys Ctrl + Alt + B to display the **Administer Bookmarks** page.
3. In the **Administer Bookmarks** page (Misc > Bookmarks), supply a value in the **Save Current Page** field. SL1 automatically supplies the page name in this field. You can edit the field to include more descriptive text.



4. Click the **[Save]** button to save the new bookmark.
5. The new bookmark appears at the bottom of the **Administer Bookmarks** page.

*To access an existing bookmark*, click its **star** icon (★). SL1 will display the bookmarked page.

*To delete a bookmark*, click its **bomb** icon (💣).

---

## The Finder Tool

You can access the **Finder** tool from any place in SL1 by entering the following key combinations:

- Ctrl+Alt+F

The **Finder** tool allows you to easily find one or multiple elements in SL1. This prevents you from having to navigate through multiple pages to find the element you are interested in. The **Finder** tool allows you to search for one or more of the following types of elements:

- Organizations
- Devices
- Assets
- IP networks
- Interfaces
- Vendors
- User Accounts
- Virtual Interfaces

**NOTE:** To access the **Finder** tool, accounts of type "user" must be granted one or more access keys that includes the following access hook: Finder. Accounts of type "user" will then be able to view the **Finder** tool.

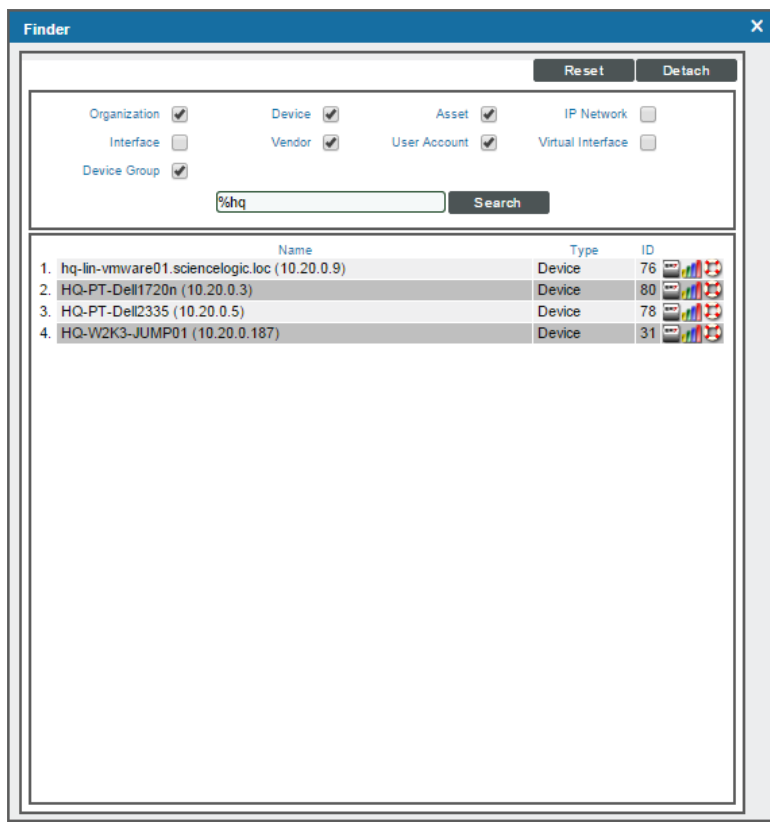
- To search organizations, the user must be granted the access hook Org:View.
- To search for device, the user must be granted the access hook Dev:View.
- To search asset records, the user must be granted the access hook Asset:View.
- To search IPv4 Networks, the user must be granted the access hook Networks:IPv4:View.
- To search interfaces, the user must be granted the access hook networks:Interfaces:View.
- To search vendor records, the user must be granted the access hook Vendor:View.
- To search user accounts, the user must be granted the access hook User:View.
- To search virtual interfaces, the user must be granted the access hook Networks:Interfaces:View.

**NOTE:** When you associate a bandwidth billing-policy with a network interface, SL1 creates a virtual interface. The virtual interface represents a specific instance of the bandwidth billing policy. For example, suppose you create a bandwidth billing-policy. Suppose you apply the policy to the interface "eth0" on the device "cisco\_router1" and to interface "eth1" on device "cisco\_switch". SL1 will create a virtual interface for "eth0" and "eth1".

## Searching for One or More Elements

To use the **Finder** tool to search for one or more elements:

1. From any page in SL1, press Ctrl + Alt + F. The **Finder** tool appears:

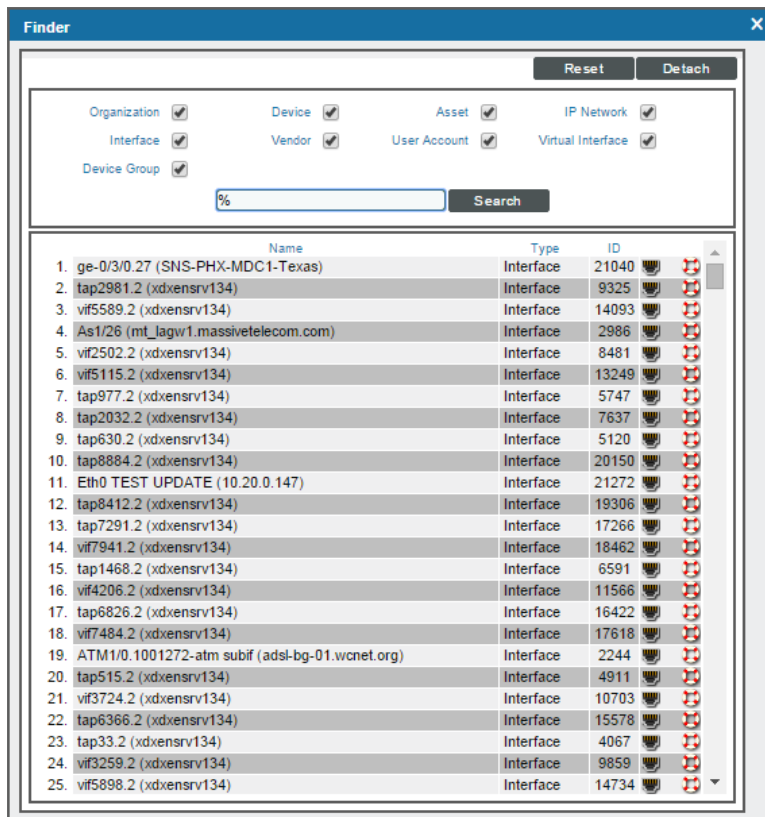


2. In the **Finder** modal page, select the checkboxes for the element types you want to search. Choices are:
  - Organizations
  - Devices
  - Assets
  - IP networks
  - Interfaces
  - Vendors
  - User Accounts
  - Virtual Interfaces
3. In the **Search** field, type the whole string of text or a partial string of text for which you want to search.
4. You can include the asterisk (\*) wildcard in the **Search** field.
  - If placed at the beginning of a string, the asterisk says "match on this string, preceded by any number of any characters".
  - If placed at the end of a string, the asterisk says "match on this string, followed by any number of any characters."
5. Click the **[Search]** button.
6. The elements that match the search requirements are displayed at the bottom of the **Finder** page.

## Viewing a List of All Elements in SL1

To use the **Finder** page to view a list of all elements in SL1:

1. From any page in SL1, enter Ctrl + Alt + F.



2. On the **Finder** page, select all the checkboxes.
3. In the **Search** field, type "%" (percent).
4. Click the **[Search]** button. A list of all elements in SL1 is displayed at the bottom of the **Finder** page.

## Viewing the Results Table

After clicking the **[Search]** button, SL1 will display a list of elements that match the selected element type and search string.

From this list of results, you can:

- **View an element's properties.** To do this, click on its icon (the icon will vary, depending upon the element).
- **View reports for some elements.** To do this, click on the bar graph icon ().
- **Create a ticket about an element.** To do this, click on the life ring icon ().

---

## Getting Help from Guides

Each main page in SL1 contains a **[Guide]** button. Clicking this button displays help text in a modal page. In SL1, this online help is called a "guide". Guides provide detailed explanations of the function and fields in each page.

### Viewing the List of Guides

The **Guide Browser** page displays a list of all guides in SL1. To get to the **Guide Browser** page, go to System > Tools > Guide Browser.

**NOTE:** To access the **Guide Browser** page, accounts of type "user" must be granted one or more access keys that includes the following access hook: System, System>Tools>Guide Browser. Accounts of type "user" will then be able to view and search guides in the **Guide Browser** page.

### Searching for a Guide by Title

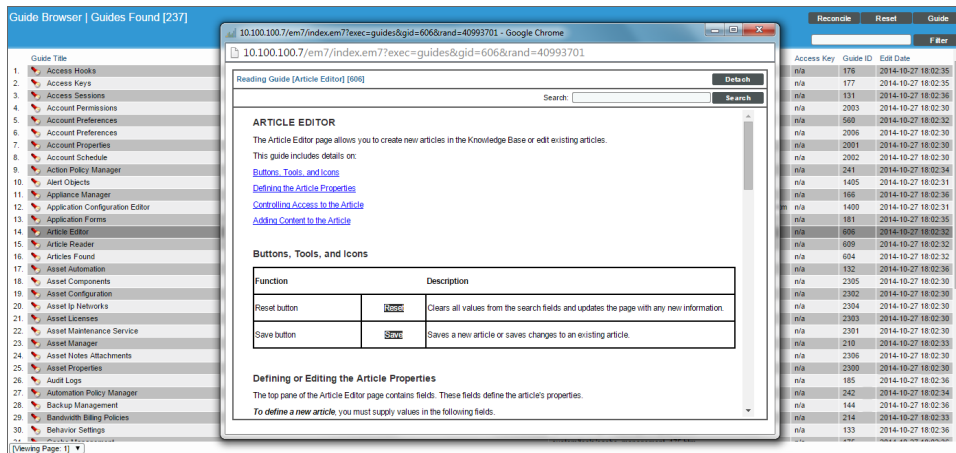
The **Guide Browser** page includes a tool for searching the list of guides. The search field at the top of the page allows you to search for guides by guide title. Each guide has the same name as its corresponding page in SL1.

To search for a guide by guide title:

1. Go to System > Tools > Guide Browser.
2. In the **Guide Browser** page, enter the following in the search field in the upper right:
  - **Guide Title.** Will search for all guides with a guide title like the one entered in this field. In this field, you must manually enter the text to search for. You can use the following special characters in this field.
    - \* Match zero or more characters preceding the asterisk. For example:  
"dell\*" would match "dell", "dell2650", "dell7250" and "dell1700N".  
"\*dell\*" would match "mydell", "dell", "dell2650", "dell7250" and "dell1700N".
    - % Match zero or more characters preceding the asterisk. This special character behaves in the same way as the asterisk.
3. When you click the **[Filter]** button, the **Guide Browser** page will be refreshed and will display only guides that match the search parameters.

## Viewing a Guide from the Guide Browser

From the **Guide Browser** page, you can view the contents of a guide.



To view a guide:

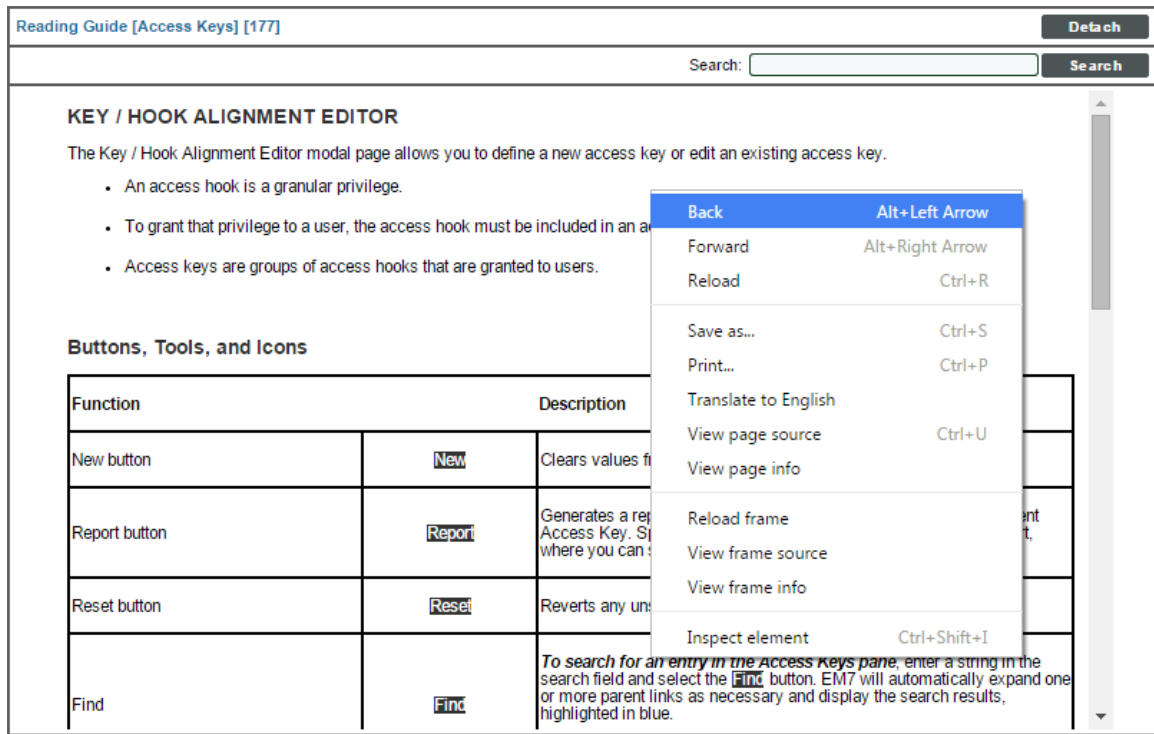
1. Go to System > Tools > Guide Browser.
2. In the **Guide Browser** page, in the list of guides, find the guide for which you want to view the content. Click its flashlight icon ( ).
3. The **Reading Guide** modal page appears and displays the contents of the guide.

## Viewing a Guide from a Page in the ScienceLogic Platform

- To view a guide in a page in SL1, click the [**Guide**] button.
- To detach the guide from the current page in SL1 and view the guide in its own browser page, click the [**Detach**] button.

## Navigating Within a Guide

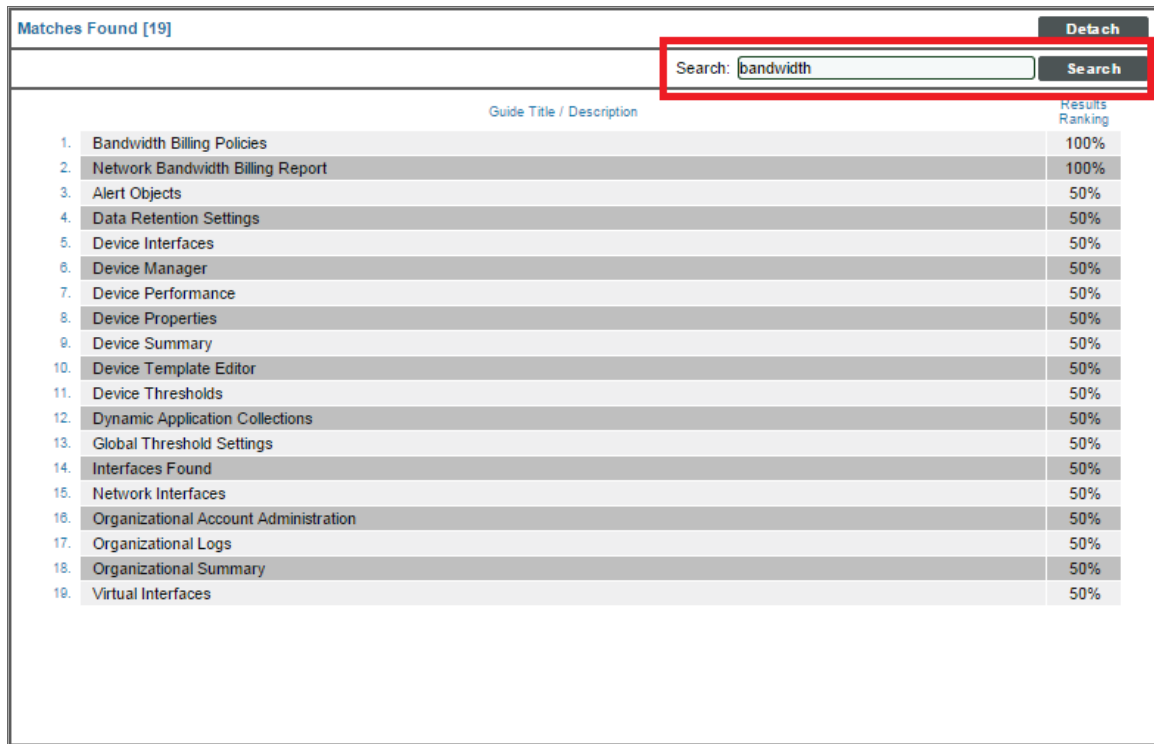
Each guide is displayed in the **Reading Guide** modal page. In the **Reading Guide** modal page, you can navigate back and forth through linked guides by:



- Right-clicking and selecting *Back* from the pop-up menu
- Right-clicking and selecting *Forward* from the pop-up menu

## Searching All Guides

After you have opened a guide and are in the **Reading Guide** modal page, you can search for all guides that contain a specified text string.



To search all guides for those that contain a text string:

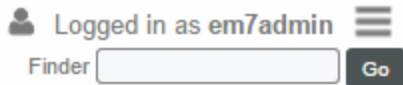
1. Go to any page in SL1. Click the **[Guide]** button.
2. The **Reading Guide** modal page appears and displays the contents of the guide.
3. The **Reading Guide** modal page contains a **Search** field and a **[Search]** button.
4. Enter a string in the **Search** field and click the **[Search]** button.
5. The **Reading Guide** page will be cleared of text and will display a list of guides that contain the text string.
6. Clicking on one of the guides in the search results displays the selected guide in the **Reading Guide** page.
7. Right-clicking and selecting *Back* from the pop-up menu returns you to the list of search results.

---

## The Toolbox

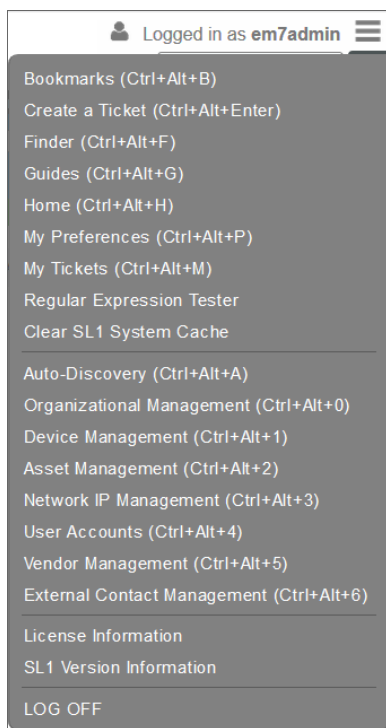
The Toolbox appears in the upper right of the window in the classic user interface of SL1:







The Toolbox displays the following:

- **Logged in.** Displays the name of the current user. When you hover over the username, the IP address for the current session appears.
- **Finder.** If you enter a string in this field and click the **[Go]** button, SL1 uses the **Finder** tool to search all possible element types. The results are returned in the **Finder** tool page.
- **Toolbox.** Clicking on the **[Toolbox]** button displays a set of links to commonly accessed pages and the shortcut keys for those pages. The **[Toolbox]** button also displays links for *License Information* and *SL1 Version Information*.
  - The *License Information* link leads to a pop-up page with a list of all third-party licenses included in SL1.
  - The *SL1 Information* link leads to a pop-up page with information about the current version of SL1.



You can also access the following Toolbox options from the menu bar on the left () and from the Advanced menu ():

- *Bookmarks* (Misc > Bookmarks)
- *Finder* (Misc > Finder)
- *Guides* (Misc > Guides)
- *Clear SL1 Cache* (Misc > Clear SL1 Cache)
- *Regular Expression Tester* (Misc > Regular Expression Tester)
- *SL1 License Info* (Misc > SL1 License Info)

## Overview of SL1 Features

---

### Overview

This chapter provides an overview of the features and terminology in 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:

<b>Architecture</b> .....	<b>29</b>
<i>SL1 Appliance Functions</i> .....	29
<i>Message Collection</i> .....	30
<b>Organizations and Users</b> .....	<b>30</b>
<i>Organizations</i> .....	30
<i>Users</i> .....	30
<b>Credentials</b> .....	<b>31</b>
<b>Discovery</b> .....	<b>32</b>
<b>Device Administration</b> .....	<b>32</b>
<i>Virtual Device</i> .....	32
<i>Component Device</i> .....	33
<b>Events</b> .....	<b>33</b>
<b>Automation</b> .....	<b>33</b>

<i>Business Services</i> .....	34
<i>Application Health</i> .....	34
<i>Dynamic Applications</i> .....	35
<i>PowerPacks</i> .....	35
<i>Maps</i> .....	36
<i>Dashboards</i> .....	37
<i>Reports</i> .....	38
<i>Custom Reports</i> .....	38
<i>Embedded Reports</i> .....	38
<i>Ticketing</i> .....	39
<i>Asset Management</i> .....	39

---

## Architecture

There are two types of SL1 systems:

- **All-In-One.** In this type of system, a single **appliance**, such as a server, handles all the functions of SL1. The monitoring capacity of an **All-In-One** system cannot be increased by adding additional appliances.
- **Distributed.** The functions of SL1 are divided between multiple appliances. A **Distributed** system can be as small as two appliances, or can include multiple instances of each type of appliance.

## SL1 Appliance Functions

There are five general functions that a SL1 appliance can perform. In large SL1 systems, a dedicated appliance performs each function. In smaller systems, some appliances perform several functions. This section describes each function and the SL1 appliances that can perform each function.

## User Interface

Administrators and users access the user interface through a web browser session. In the user interface, you can view collected data and reports, define organizations and user accounts, define policies, view events, and create and view tickets, among other tasks. The appliance that provides the user interface function also generates all scheduled reports.

**NOTE:** The Administration Portal appliance communicates only with the Database Server appliance and no other SL1 appliance. All connections between the Administration Portal and the Database Server are encrypted in both directions.

## Database

The appliance that provides the database function is responsible for:

- Storing all configuration data and data collected from managed devices.
- In a distributed system, pushing data to and retrieving data from the appliances responsible for collecting data.
- Processing and normalizing collected data.
- Allocating tasks to the other appliances in the SL1 system.
- Executing automation actions in response to events.
- Sending all Email generated by the system.
- Receiving all inbound Email for events, ticketing, and round-trip Email monitoring.

## Data Collection

The SL1 appliances that perform the data collection function retrieve data from monitored devices and applications in your network at regularly scheduled intervals. In a distributed system, appliances that perform the data collection function also perform some pre-processing of collected data and execute automation actions in response to events.

## Message Collection

The SL1 appliances that perform the message collection function receive and process inbound, asynchronous syslog and trap messages from monitored devices. When installed on a device, the SL1 agent also sends asynchronous messages to the appliance performing message collection.

## API

SL1 provides a REST-based API that external systems can use to configure SL1 and access collected data. For example, the API can be used to automate the provisioning of devices in SL1.

The API is available through the **Administration Portal**, the **All-In-One Appliance**, and the **Database Server**.

For more information about SL1 architecture, see the **Architecture** manual.

---

# Organizations and Users

All policies, events, tickets, users, and other elements in SL1 are associated with an organization. An **organization** is a group for managing elements and user accounts.

## Organizations

The basic characteristics of an organization are:

- A unique name (required).
- Users who are members of the organization.
- Elements (for example, devices) associated with the organization.

Organizations can be defined by geographic areas, departments, types of devices, or any structure that works best for your needs. For example, for a business with multiple locations, an administrator might create organizations named Boston, New York, and DC. Another administrator might create organizations named for departments, like Finance, Sales, Marketing, and Engineering.

## Users

In SL1, there are two broad types of user accounts:

- **Administrators.** By default, users of type "administrator" are granted all permissions available in SL1. Administrators can access all tabs and pages, and perform all actions and tasks on all entities, regardless of

organization.

- **Users.** Accounts of type "user" are assigned key privileges. Key privileges are customizable by the administrator and grant users access to pages and tabs and permit users to view information and perform tasks in SL1. These key privileges are defined by the SL1 system administrator from the **Access Keys** page (System > Manage > Access Keys).

**NOTE:** To learn more about Access Keys and how they affect user accounts, see the **Access Permissions** manual.

For more information about Organizations and Users, see the **Organizations and Users** manual.

---

## Credentials

**Credentials** are access profiles (usually username, password, and any additional information required for access) that allow SL1 to retrieve information from devices and from software applications on devices. Discovery uses SNMP credentials to retrieve SNMP information during initial discovery and nightly auto-discovery. If SL1 can connect to a device with an SNMP credential, SL1 deems that device "manageable" in SL1.

Dynamic Applications use credentials to retrieve SNMP information, database information, SOAP information, XML information, XSLT information, and WMI information. Proxied Web Services use SOAP/XML Host credentials to pass authentication information to external web services.

SL1 includes a type of credential called "Basic/Snippet" that is not bound to a specific authentication protocol. You can use this type of credential for Dynamic Applications of type "WMI", of type "snippet", and when defining system backups. "Basic/Snippet" credentials can also be used for monitoring Windows devices using PowerShell.

SL1 includes a type of credential that allows Dynamic Applications of type "Snippet" to use SSH to communicate with a remote device. To use these Dynamic Applications, you must define an SSH credential.

SL1 includes a type of credential that allows Dynamic Applications to retrieve data from Windows devices. If you align a Dynamic Application for PowerShell with a PowerShell credential, SL1 assumes that you want to use its built-in agentless transport to communicate with Windows devices.

**NOTE:** If necessary, a single device can use multiple credentials. If more than one agent or application is running on the device, each agent or application can be associated with its own credential. During discovery, SL1 will use the appropriate credential for each agent.

For more information Credentials, see the **Discovery and Credentials** manual.

---

## Discovery

**Discovery** is the tool that automatically finds all the hardware-based devices, hardware components, and software applications in your network. You must provide the discovery tool with a range or list of IP addresses and/or a list of fully-qualified domain names (hostnames), and the discovery tool determines if a device, hardware component, or software application exists at each IP address. For each device, hardware component, or software application the discovery tool "discovers", the discovery tool can collect a list of open ports, DNS information, SSL certificates, list of network interfaces, device classes to align with the device, topology information, and basic SNMP information about the device.

The Discovery tool also determines which (if any) Dynamic Applications to align with the device. If the discovery tool finds Dynamic Applications to align with the device, the discovery tool triggers collection for each aligned Dynamic Application.

For more information Discovery, see the *Discovery and Credentials* manual.

---

## Device Administration

As part of monitoring your network, SL1 collects data using common networking protocols. Most collected data is associated with a **device** in SL1. A device in SL1 is a record that can represent:

- Physical network hardware, for example, servers, switches, routers, printers, etc.
- A component of a larger system, for example, a data store in a hypervisor system, a blade server, etc.
- Any other entity about which you want to collect data, but want or need to associate that data with a container that does not correspond directly to a physical device or a component. For example, you might configure a device record that represents a web site or a cloud service.

SL1 allows you to monitor and manage hardware and applications within your network. SL1 provides a network-wide view through a "single pane of glass." This means that you can monitor status, create policies, define thresholds, and receive notifications, all through a single, browser-based application.

## Virtual Device

A **virtual device** is a container for collected data. A virtual device can be used when you want to:

- Monitor a device or application that doesn't support TCP/IP, SNMP, or both. The device's data can be pushed to SL1 via another method (for example, email) and stored in a virtual device.
- Monitor multiple SNMP agents on a single device. In such a case, one of the SNMP agents (for example, a hardware agent) can be associated with the device and another SNMP agent (for example, an agent that monitors a software application) can be associated with a virtual device.
- Isolate and monitor specific parameters separately from their originating device. For example, you might want to monitor a database and keep its data separate from the hardware data you are collecting from the host device.



## Component Device

SL1 uses Dynamic Applications to retrieve data from a management device and discover each entity managed by that management device. SL1 then uses that retrieved data to create a device for each managed entity. In some cases, the managed entities are nested.

- In SL1 a managed entity is called a **component device**. A component device is an entity that runs under the control of a physical management device.
- In SL1, the **root device** is the physical device that manages one or more component devices.
- In SL1, a **parent device** is a device that has associated entities modeled as component devices. A parent device can be either a root device or another component device.

For more information about Devices, see the **Device Management** manual.

---

## Events

One of the quickest ways to monitor the health of your network is to look at events. You can view events on the **Events** page in SL1.

**Events** are messages that are triggered when a specific condition is met. For example, an event can signal if a server has gone down, if a device is exceeding CPU or disk-space thresholds, or if communication with a device has failed. Alternately, an event can simply display the status of a managed element.

SL1 generates log messages from incoming trap and syslog data, and also when SL1 executes user-defined policies. SL1 then uses these log messages to generate events. SL1 examines each log message and compares it to each event definition. If a log message matches an event's definition, SL1 generates an event instance and displays the event on the **Events** page.

Each event includes a description of the problem, where the problem occurred (device, network hardware, software, policy violation), a pre-defined severity, the time of first occurrence, the time of most recent occurrence, and the age of the event.

SL1 includes pre-defined events for the most commonly encountered conditions in the most common environments. You can also create custom events for your specific environment or edit the pre-defined events to better fit your specific environment.

For more information about Events, see the **Events** manual.

---

## Automation

SL1 includes automation features that allow you to specify actions you want SL1 to execute automatically when specific event conditions are met. Automation in SL1 is divided into two parts:

- An **automation policy** defines the event conditions that can trigger an automatic action.
- An **action policy** defines an action that can be triggered by an automation policy. An action policy can perform one of the following tasks:
  - Send an email message to a pre-defined list of users and/or external contacts.
  - Send an SNMP trap from SL1 to an external device.
  - Create a new ticket.
  - Update an existing ticket. An action policy can change the status and/or severity of an existing ticket and/or add a note to an existing ticket. For this action policy to trigger successfully, a ticket must be associated with the event that triggered the action.
  - Write an SNMP value to an existing SNMP object on an external device.
  - Query a database.
  - Run a custom python script, called a snippet.
  - Send an SNS Message to a Topic ARN (Amazon Resource Name). All subscribers to the Topic ARN will receive the message.

For more information about Automation, see the **Run Book Automation** manual.

---

## Business Services

A **business service** includes one or more technical services that provide value to internal or external customers. Some examples of business services include verifying Internet access or website hosting, online banking, remote backups, and remote storage. Usually a business service includes an associated Service Level Agreement (SLA) that specifies the terms of the service.

Create the following types of services on the **Business Services** page, in the following order:

1. **Device Service**. Monitors a set of related devices, such as all devices from a specific region.
2. **IT Service**. Monitors a service that IT provides to your organization. An IT service is made up of one or more device services.
3. **Business Service**. Monitors a service your organization provides to your customers. A business service is made up of one or more IT services.

For more information about Business Services, see the **Business Services** manual.

---

## Application Health

An **application** is a collection of one or more devices running a similar set of software or processes. You can monitor the **application health** of that set of devices in SL1 to ensure that the software running on the devices is performing the actions the software is supposed to be performing. If you are using the SL1 agent or an agent-related PowerPack to collect data, you can monitor the system processes for a dynamic list of devices.

An application is made up of application components and a status policy:

- An **application component** is a specific group of devices running the software or process you want to monitor with SL1. An application component has process rules for matching processes reported by an SL1 agent. These process rules act as a filter, and an SL1 agent device is only considered to be part of an application component if at least one process rule is currently matching. An application can contain more than one application component, depending on your monitoring needs.
- A **status policy** contains a set of rules that define the health, availability, and risk criteria for the devices want to monitor.

For more information about Application Health, see the **Application Health** manual.

---

## Dynamic Applications

**Dynamic Applications** are the customizable policies that tell SL1 what data to collect from devices and applications. For example, suppose you want to monitor a MySQL database running on a device in your network. Suppose you want to know how many insert operations are performed on the MySQL database. You can create or edit a Dynamic Application that monitors inserts. Every five minutes (for example), SL1 could check the number of insert operations performed on the MySQL database. SL1 can use the retrieved data to trigger events and/or to create performance reports.

SL1 includes Dynamic Applications for the most common hardware and software. You can customize these default Dynamic Applications to suit your environment. You can also create custom Dynamic Applications.

Dynamic Applications in SL1 support a variety of protocols to ensure that SL1 can always communicate with the devices and applications in your network and retrieve information from them. Dynamic Applications can use the following protocols to communicate with devices:

- SNMP
- SQL
- XML
- SOAP
- XSLT (uses SOAP and XSLT to convert XML data to a new format)
- WMI (Windows Management Instrumentation), including WMI and WBEM
- Windows PowerShell
- Custom Python applications (called "snippets") for proprietary or more complex data retrieval

For more information about Automation, see the **Run Book Automation** manual.

---

## PowerPacks

A **PowerPack** is an exportable and importable package of one or more Dynamic Applications, device classes, device templates, event policies, custom reports, dashboard widgets, dashboards, run book policies, run book actions, ticket templates, credentials, proxy XML transformations, themes, device categories, device dashboards, and/or IT service policies.

You can use PowerPacks to share customized content among SL1 systems and to download customized content from ScienceLogic.


You can create a PowerPack on a SL1 system to export one or more Dynamic Applications, device classes, device templates, event policies, custom reports, dashboard widgets, dashboards, run book policies, run book actions, ticket templates, credentials, proxy XML transformations, themes, device categories, device dashboards, and/or IT service policies. You can then import that PowerPack on another SL1 system to install the Dynamic Applications, device classes, device templates, event policies, custom reports, dashboard widgets, dashboards, run book policies, run book actions, ticket templates, credentials, proxy XML Transformation, themes, device categories, device dashboards, and/or IT service policies.

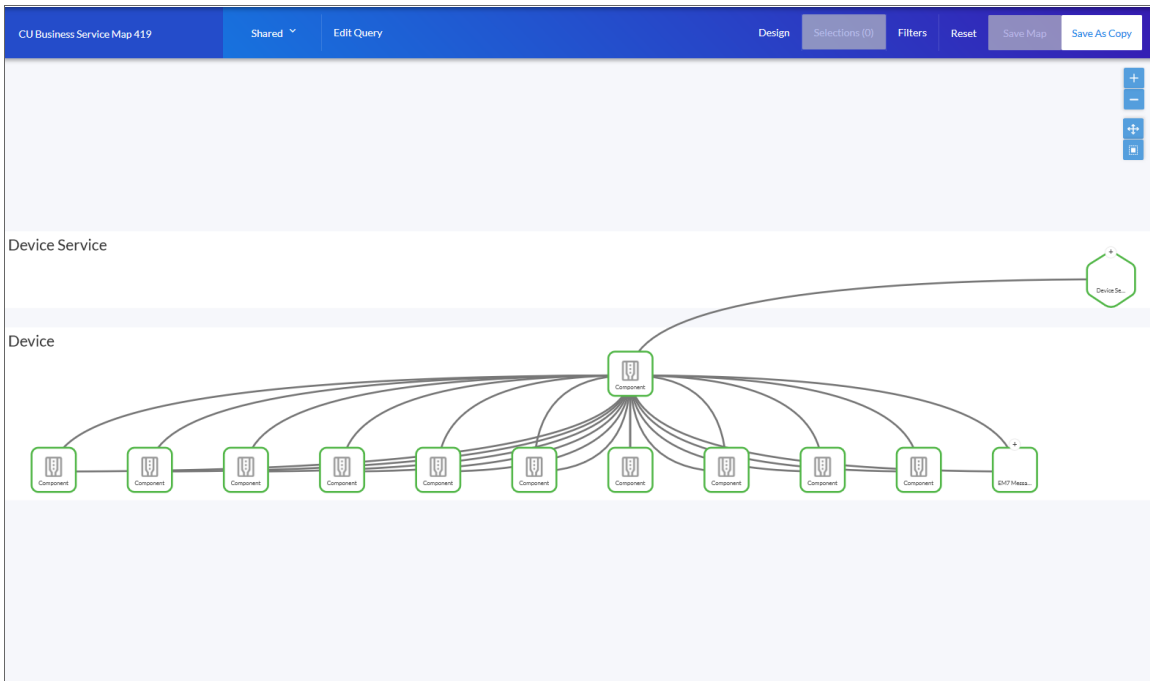
For more information about PowerPacks, see the **PowerPacks** manual.

---

## Maps

A **Map** is a visual representation of the various devices and related elements, also called **Nodes**, in your environment that have been discovered by SL1. A map displays the important details and relationships associated with those nodes.

To navigate to the **Maps** page, click the Maps icon (  ). The following is an example of a map:



A map contains include the following graphical elements:

- **Nodes.** Shapes that represent Devices, Topology Elements, Applications, Application Components, and Services defined in SL1. The shape of the node represents its type.
- **Edges.** Lines with or without arrows that represent the relationships between nodes.

For more information about Maps, see the **Maps** manual.

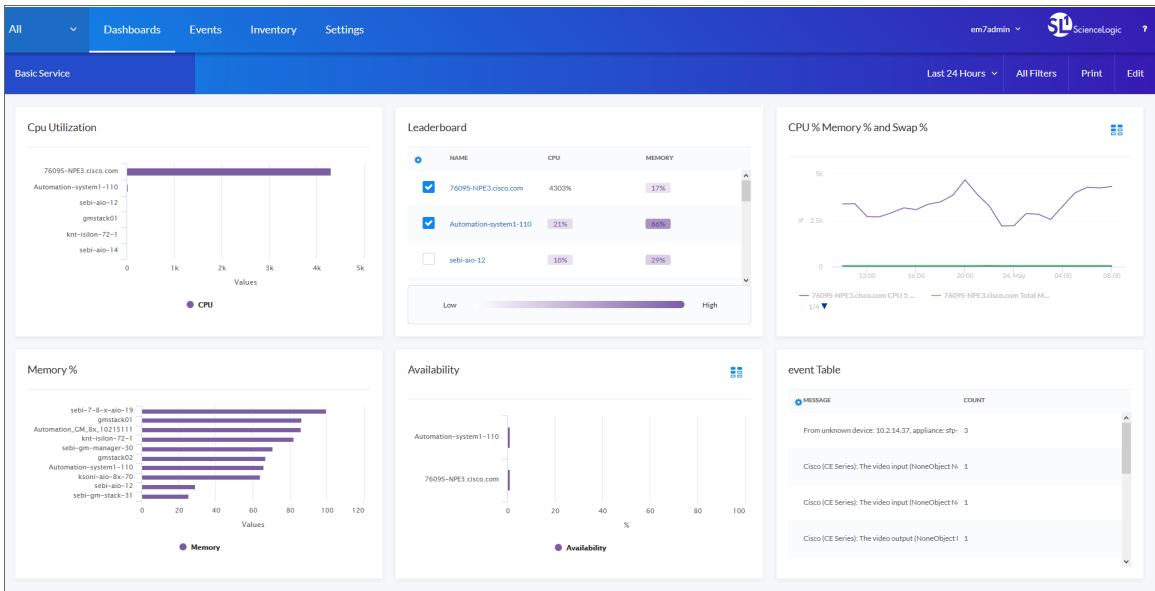
## Dashboards

A **dashboard** is a page that displays one or more graphical reports, called **widgets**. These widgets appear in their own pane, and display charts, tables, and text. Access to dashboards is based on your login credentials, so you can view only dashboard data for which you have access. Also, some dashboards might be private instead of public.

To define a widget, you first select from a list of pre-defined widget definitions, and then customize what will be displayed by the selected widget by supplying values in the option fields provided by that widget.

**NOTE:** If an animated blue line appears under a widget name, the widget is in the process of updating its data. When the line disappears, the widget is done updating.

**TIP:** If an item name displays as a hyperlink in a dashboard, you can click that link to go to the relevant detail or Investigator page for that item. You can click dashboard links to the Investigator pages for devices, events, and services.



For more information about Dashboards, see the **Dashboards** manual.

---

# Reports

## Custom Reports

A **custom report** in SL1 provides users with a collection of information from one or more tables in the ScienceLogic database. This information is populated and generated in different formats, as defined by the user. Users can select from default custom reports provided by ScienceLogic, edit these default reports, or create their own reports. Users can also schedule reports, view a list of archived reports, and Email reports to other users.

A report includes three components:

- An input form where the user selects options and data to include in the report.
- An `.ods` output template that specifies the format of the generated report.
- Gluecode, the code that specifies how to handle the user's input, which data to retrieve, and any processing that needs to be performed on the data.

SL1 includes predefined reports, with defined forms, output templates, and the gluecode. These predefined reports can be modified, and users can create their own custom reports.

## Embedded Reports

Several pages in SL1 allow you to generate a report that contains the information displayed in the page. Reports that are specific to a page are called **embedded reports**. The embedded reports cover the following elements:

- Devices
- Device Interfaces
- System Processes
- Windows Services
- Hardware Components
- Installed Software
- Organizations
- User Accounts
- Access Keys
- Tickets
- Asset Records
- Product Subscriptions
- Vendors

For more information about Reports, see the **Reports** manual.

---

## Ticketing

A **ticket** is a request for work. This request can be in response to a problem that needs to be fixed, for routine maintenance, or for any type of work you require. Tickets are assigned a severity based on the severity of the issue that needs to be fixed or worked on. For example, a server going down might require a critical ticket, whereas a routine maintenance issue might require only a minor ticket. These severities range from healthy to notice, minor, major, and critical.

A ticket can be created manually, or created based on an event. If a ticket is created based on a selected event, most of the ticket fields are populated automatically by SL1. The SL1 can also automatically create a ticket, using Run Book Automation and user-defined parameters.

In SL1 you can view a list of active tickets, create new tickets, edit one or more existing tickets, and generate reports for one or more tickets, among other features.

For more information about Ticketing, see the ***Ticketing*** manual.

---

## Asset Management

An asset is a piece of equipment owned by an organization. An asset record is a collection of information about that asset. In SL1, asset records are usually created for hardware devices, with some of the information populated automatically from collected data. Users can also manually enter information into an asset record.

In SL1, asset records can contain information about:

- The name, make, and model of a device.
- The serial number of a device.
- Function and status of a device.
- Networking information, like host ID, IP address, or DNS server for the device.
- Physical location of the device.
- Description of the network interface.
- Vendor information for the device, including PO or check number, warranty policy, and service policy.
- Hardware information like the amount of memory, CPU, and BIOS or EPROM version.
- Description of each hardware component (if applicable).
- Description of installed software (if applicable).

When possible, SL1 can automatically populate fields in each asset record. SL1 also allows users to create their own tabs and form fields in addition to the ones provided by default.

For more information about Assets, see the ***Asset Management*** manual.

---

# Chapter

# 3



## User Preferences

---

### Overview

This chapter describes the different tools in SL1 that allow you to manage a restricted set of properties for your own account.

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 explains how to use these tools to manage your own account:

<b>Account Preferences</b> .....	<b>41</b>
<b>Schedule Manager</b> .....	<b>45</b>
<i>Viewing the Schedule Manager</i> .....	45
<i>Defining a Scheduled or Recurring Calendar Item</i> .....	47
<i>Enabling or Disabling One or More Scheduled Calendar Items</i> .....	49
<i>Deleting One or More Scheduled Calendar Items</i> .....	49
<b>My Contact Information</b> .....	<b>50</b>



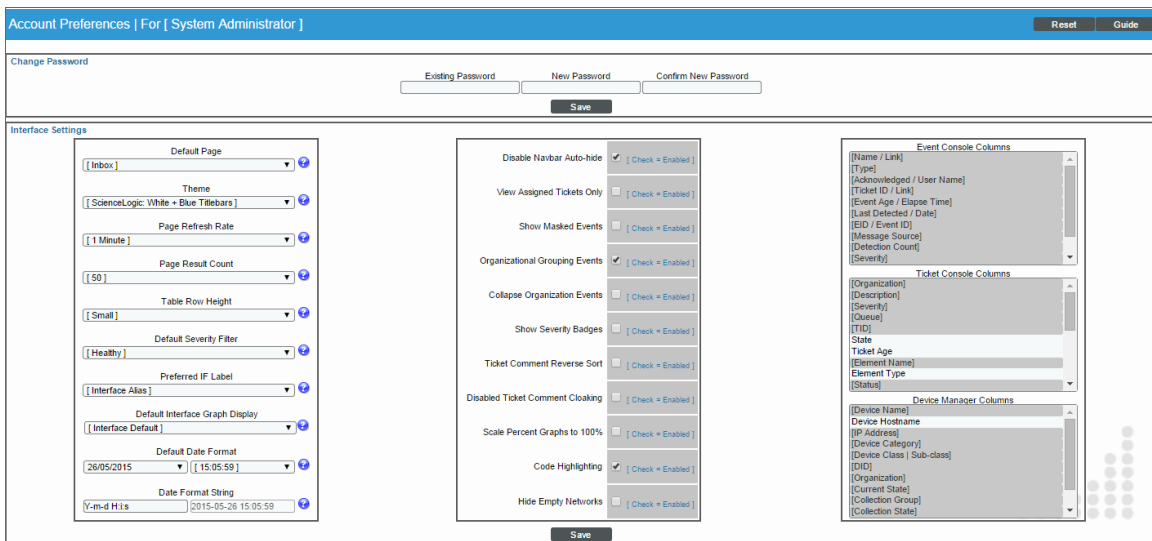
# Account Preferences

The **Account Preferences** page allows you to change your SL1 password and customize some of the behavior and appearance of SL1. The customizations that you choose will appear each time you log in to SL1. They will not affect how SL1 appears to other users.

**NOTE:** To access the **Account Preferences** page, accounts of type "user" must be granted one or more access keys that includes the following access hook: MyPreferences. Accounts of type "user" will then be able to view and edit the settings in the **Account Preferences** page.

To access the **Account Preferences** page:

1. Go to Preferences > Account > Preferences.
2. In the **Account Preferences** page, you can edit one or more of the following fields:



3. The **Change Password** pane allows you to change your password. The following fields appear:
  - **Existing Password.** Your current password. This value must be at least four characters in length and can be up to 64 characters in length.
  - **New Password.** The new password. This value must be at least four characters in length and can be up to 64 characters in length.
  - **Confirm Password.** The new password again. This value must be at least four characters in length and can be up to 64 characters in length.
  - **[Save].** Click this button to save changes in the **Change Password** pane.

4. The **Interface Settings** pane allows a you to define the appearance and behavior of some pages. The **Interface Settings** pane contains the following fields:
- **Default Page.** Displays a drop-down list of pages. The selected page will automatically appear when you log in. If you select *None*, the default page (the Views tab) will appear when you log in.
  - **Theme.** Backgrounds, colors, graphics, and music that will appear when you log in. Theme entries are defined in the **[System]** tab.
  - **Page Refresh Rate.** Specifies how often Event, Ticket, and Views pages in SL1 will be refreshed. The possible choices are from 15 seconds to 60 minutes.
  - **Page Result Count.** Specifies the number of results to be displayed on each page. The choices are 50 to 500.
  - **Table Row Height.** Affects the row height of all pages that display a table in the main content pane. You can also change this setting in the **Event Console Preferences** page, the **Ticket Console Preferences** page, and the system **Account Preferences** page. Changing the setting for row height in this page, the **Event Console Preferences** page, the **Ticket Console Preferences** page, or the system **Account Preferences** page affects the row height in all pages that display a table in the main content pane. Choices are:
    - *Small.* Sets row height to 17 px and font size to 11 px.
    - *Medium.* Sets row height to 27 px and font size to 12 px.
    - *Large.* Sets row height to 35 px and font size to 13 px.
  - **Default Severity Filter.** When a severity is selected, you will see only events of the selected severity and greater in the **Event Console** page.
    - *Healthy.* Will display all events, including events with a severity of Healthy.
    - *Notice.* Will display all events with a severity of Notice, Major, Minor, and Critical.
    - *Minor.* Will display all events with a severity of Minor, Major, and Critical.
    - *Major.* Will display all events with a severity of Major and Critical.
    - *Critical.* Will display all events with a severity of Critical
  - **Preferred IF Label.** Specifies how interfaces will be labeled in all pages and reports that reference network interfaces.
    - *Interface Alias.* Easy-to-remember, human-readable name for the network interface.
    - *Interface Name.* The name of the network interface.
  - **Default Interface Graph Display.** Specifies the default unit of measure for the Hourly Interface Usage graph in the **Device Summary** page. Choices are:
    - *Interface Default.* The Hourly Interface Usage graph displays the amount traffic in the unit of measure specified in the **Measurement** field in the **Interface Properties** page for the interface.
    - *% Utilization.* The Hourly Interface Usage graph displays utilization in percent.

- **Device Summary and Performance Graph Engine.** Specifies the graphing engine the user interface should use on the **Device Summary** page and the Device Performance graphs. Choices are HTML5 Graphs (newest format) and Flash Graphs (legacy format).
- **Default Date Format.** Specifies the default date format that will be used throughout SL1. You can select from a list of possible formats.
- **Date Format String.** Specifies a user-defined date format that will be used throughout SL1. If defined, this date format overrides the default date format. Any date variables supported by the PHP date function can be used.

5. In the **Checkboxes** pane, you can configure features that are toggled on and off.

- **Disable NavBar Auto-hide.** If you select this checkbox, the NavBar pane persists after you click a link. This option is selected by default.
- **View Assigned Tickets Only.** If you select this checkbox, by default, only tickets assigned to you are displayed in the **Ticket Console** page.
- **Show Masked Events.** If you select this checkbox, all events that have been grouped together under a single event description will be displayed in the **Event Console** page. The default behavior of SL1 is to roll up related events under a single description.
- **Organizational Grouping Events.** If you select this checkbox, events will be grouped by organization in the **Event Console** page. The filter-while-you-type fields and the advanced filter tool will appear for each organization grouping and will act only on the events in that organization grouping. You will not be able to apply a single filter to events in multiple organizations.
- **Collapse Organization Events.** If you select this checkbox, all organizations with assigned events will be displayed but will be contracted; the **Event Console** page will display only a list of contracted organizations, which can be expanded by clicking on the plus sign (+). The default behavior of SL1 is to expand each organization and display the list of events for each organization.
- **Show Severity Badges.** If you select this checkbox:
  - The value in the **Severity** column will be displayed as a color-coded badge in the **Event Console** page and the **Ticket Console** page.
  - The value in the **Current State** column will be displayed as a color-coded badge in the **Device Manager** page.

If you do not select the **Show Severity Badges** checkbox:

- In the **Event Console** page, the value in the **Event Message** column and the value in the **Severity** column will be painted with the severity color.
- In the **Ticket Console** page, the value in the **Description** column and the **Severity** column will be painted with the severity color.
- In the **Device Manager** page, the value in the **Device Name** column and the value in the **Current State** column will be painted with the severity color.
- **Ticket Comment Reverse Sort.** In the Notes section of a ticket, sort notes by newest first. If you do not select this checkbox, the user interface displays ticket notes from oldest to newest, with oldest displayed first.

- **Disabled Ticket Comment Cloaking.** When you add comments to a ticket, by default the comments are viewable by all (not cloaked).
- **Scale Percent Graphs to 100%.** Graphs that display percentage on the y-axis will display from 0% to 100%, regardless of the highest actual value. Default behavior is to display from 0% to highest actual value.
- **Code Highlighting.** If selected, enables syntax highlighting in areas of SL1 that display HTML, PHP, Python, and SQL code. If selected, syntax highlighting appears in:
  - The **Snippet Editor & Registry** page for Dynamic Applications of type "snippet" (System > Manage > Applications > create/edit > Snippets).
  - The **Dashboard Widget Editor** page (System > Customize > Dashboards > Widgets > create/edit).
  - The **Database Tool** page (System > Tools > DB Tool).
  - The **Action Policy Editor** page for actions of type "Snippet" and "SQL Query" (Registry > Run Book > Actions > create/edit).
  - The **Report Template Editor** page (Reports > Management > Report Manager > create/edit).
- **Hide Empty Networks.** If you select this checkbox, the **IPv4 Networks** page hides networks that do not include any devices or interfaces.

6. In the **Event Console Columns** pane and the **Ticket Console Columns** pane, you specify the columns that will be displayed by default in the **Event Console** page and the **Ticket Console** page.

- **Event Console Columns.** In this list, you can select the default columns to be displayed in the **Event Console** page.

**NOTE:** From the **Event Console** page, you can also go to the **Event Console Preferences** modal page and edit the list of columns to be displayed in the **Event Console** page. When you edit the list of columns in the **Event Console Preferences** page, the selected list of columns in the **Account Preferences** page is automatically updated. When you edit the list of columns in the **Account Preferences** page, the selected list of columns in the **Event Console Preferences** page is updated.

- **Ticket Console Columns.** In this list, you can select the default columns to be displayed in the **Ticket Console** page.


**NOTE:** From the **Ticket Console** page, you can also go to the **Ticket Console Preferences** modal page and edit the list of columns to be displayed in the **Ticket Console** page. When you edit the list of columns in the **Ticket Console Preferences** page, the selected list of columns in the **Account Preferences** page is automatically updated. When you edit the list of columns in the **Account Preferences** page, the selected list of columns in the **Ticket Console Preferences** page is updated.

---

## Schedule Manager

The **Schedule Manager** page allows you to enter one-time or recurring appointments, meetings, and vacation leave. You can use the **Schedule Manager** page to specify the following:

- Your normal work schedule (for example, in the office on Monday – Friday, but out of the office on Saturday and Sunday)
- Vacation time
- Recurring meetings and appointments (for example, a weekly status meeting that occurs every Tuesday)
- One-time meetings and appointments (for example, a doctor's appointment)



The schedule information you enter in the **Schedule Manager** page is then visible to other users when they click the **View User Account Details** icon () for your account and then click the **[Schedule]** tab.

**NOTE:** To access the **Schedule Manager** page, accounts of type "user" must be granted one or more access keys that includes the following access hook: ACT\_MY\_SCHEDULE\_PAGE. Accounts of type "user" will then be able to view and edit the settings in the **Schedule Manager** page.


**NOTE:** You can also view and manage all scheduled processes from the **Schedule Manager** page (Registry > Schedules > Schedule Manager). For more information, see the **System Administration** manual.

## Viewing the Schedule Manager

The **Schedule Manager** page (Preferences > Account > Schedule) displays the following information about each scheduled or recurring calendar item:

Schedule Manager   Schedules Found [2]															
	Schedule Summary	Schedule Description	Event ID	sch_id	Context	Timezone	Start Time	Duration	Recurrence Interval	End Date	Last Run	Owner	Organization	Visibility	Enabled
1.	 Team Meeting	Team Meeting	179	0	Users	America/New_York	2017-01-20 15:00:00	30 min	Every 1 Week	2017-12-29 13:00:00	--	banderton	System	Organiz	Yes
2.	 Vacation	Vacation	180	0	Users	America/New_York	2017-01-21 00:00:00	10080 n	--	--	--	banderton	System	World	Yes

- **Schedule Summary.** Displays the name assigned to the scheduled process.
- **Schedule Description.** Displays a description of the scheduled process.
- **Event ID.** Displays a unique, numeric ID for the scheduled process. SL1 automatically created this ID for each scheduled process.
- **sch id.** Displays a unique, numeric ID for the schedule. SL1 automatically created this ID for each schedule.
- **Context.** Displays the area of SL1 upon which the schedule works.
- **Timezone.** Displays the time zone associated with the scheduled process.
- **Start Time.** Displays the date and time at which the scheduled process will begin.
- **Duration.** Displays the duration, in minutes, which the scheduled process occurs.
- **Recurrence Interval.** If applicable, displays the interval at which the scheduled process recurs.
- **End Date.** If applicable, displays the date and time on which the scheduled process will recur.
- **Last Run.** If applicable, displays the date and time the scheduled process most recently ran.
- **Owner.** Displays the username of the owner of the scheduled process.
- **Organization.** Displays the organization to which the scheduled process is assigned.
- **Visibility.** Displays the visibility level for the scheduled process. Possible values are "Private", "Organization", or "World".
- **Enabled.** Specifies if the scheduled process is enabled. Possible values are "Yes" or "No".

To edit a scheduled or recurring calendar item, click its wrench icon () and update the calendar item as needed on the **Schedule Editor** modal page.

## Defining a Scheduled or Recurring Calendar Item

You can add a scheduled or recurring meeting, appointment, vacation, or other calendar item for the user in SL1 from the **Schedule Manager** page.

To define a scheduled or recurring calendar item:

1. Go to the **Schedule Manager** page (Preferences > Account > Schedule).
2. Click **[Create]**. The **Schedule Editor** modal page appears.
3. On the **Schedule Editor** modal page, make entries in the following fields:

The screenshot shows the 'Schedule Editor | Creating New schedule' modal window. It has a 'Reset' button in the top right corner. The form is divided into two main sections: 'Basic Settings' and 'Time Settings'.  
**Basic Settings:** Includes a 'Schedule Name' text field, a 'Users' dropdown menu, a 'Schedule Type' dropdown menu, a 'Visibility' dropdown menu (set to '[ World ]'), an 'Organization' dropdown menu (set to '[ System ]'), an 'Owner' dropdown menu (set to '[ banderton ]'), and a 'Description' text field.  
**Time Settings:** Includes 'Start Time' and 'End Time' text fields with a YYYY-MM-DD HH:MM:SS format, a 'Time Zone' dropdown menu (set to '[ America/New\_ ]'), and an 'All Day' checkbox. Below this is a 'Recurrence' section with a 'By Interval' dropdown menu, an 'Interval' text field (set to '0'), and an 'Hours' dropdown menu. At the bottom of the Time Settings section are 'Recur Until' and 'Last Recurrence' dropdown menus, with the latter having a YYYY-MM-DD HH:MM:SS format. A 'Save' button is located at the bottom center of the modal.

### **Basic Settings**

- **Schedule Name.** Type a name for the scheduled process.
- **Schedule Type.** Indicates the scheduled process type (such as Tickets, Reports, or Devices).
- **Visibility.** Select the visibility for the scheduled process. You can select one of the following:
  - *Private.* The scheduled process is visible only to the owner selected in the **Owner** field.
  - *Organization.* The scheduled process is visible only to the organization selected in the **Organization** field.
  - *World.* The scheduled process is visible to all users.
- **Organization.** Select the organization to which you want to assign the scheduled process.
- **Owner.** Select the owner of the scheduled process. The default value is the username of the user who created the scheduled process.
- **Description.** Type a description of the scheduled process.

## **Time Settings**

- **Start Time.** Click in the field and select the date and time you want the scheduled process to start.
- **End Time.** Click in the field and select the date and time you want the scheduled process to end.
- **Time Zone.** Select the region or time zone for the scheduled start time.

**NOTE:** If you want SL1 to automatically adjust for daylight savings time (if applicable), then you must select a named region (such as *America/New York*) in the **Time Zone** field. If you select a specific time zone (such as *EST*) or a specific time offset (such as *GMT-5*), then SL1 will not automatically adjust for daylight savings time.

- **All Day.** Select this checkbox if the scheduled process occurs all day rather than during a specific period of time. If you do so, the **End Time** field becomes disabled.
- **Recurrence.** Select whether you want the scheduled process to occur once or on a recurring basis. You can select one of the following:
  - *None.* The scheduled process occurs only once.
  - *By Interval.* The scheduled process recurs at a specific interval.

If you select *By Interval*, the following additional fields appear:

- **Interval.** In the first field, enter a number representing the frequency of the scheduled process, then select the time interval in the second field. Choices are *Minutes*, *Hours*, *Days*, *Weeks*, or *Months*. For example:
  - If you specify "6 Hours", then the scheduled process recurs every six hours from the time listed in the **Start Time** field.
  - If you specify "10 Days", then the scheduled process recurs every 10 days from the date listed in the **Start Time** field.
  - If you specify "2 Weeks", then the scheduled process recurs every two weeks, on the same day of the week as the **Start Time**.
  - If you specify "3 Months" the ticket recurs every three months, on the same day of the month as the **Start Time**.
- **Recur Until.** Specifies when the scheduled process stops recurring. You can select one of the following:
  - *No Limit.* The scheduled process recurs indefinitely until it is disabled.
  - *Specified Date.* The scheduled process recurs until a specific date and time. If you select *Specified Date*, you must select a date and time in the **Last Recurrence** field.
- **Last Recurrence.** Click in the field and select the date and time you want the scheduled process to stop recurring.

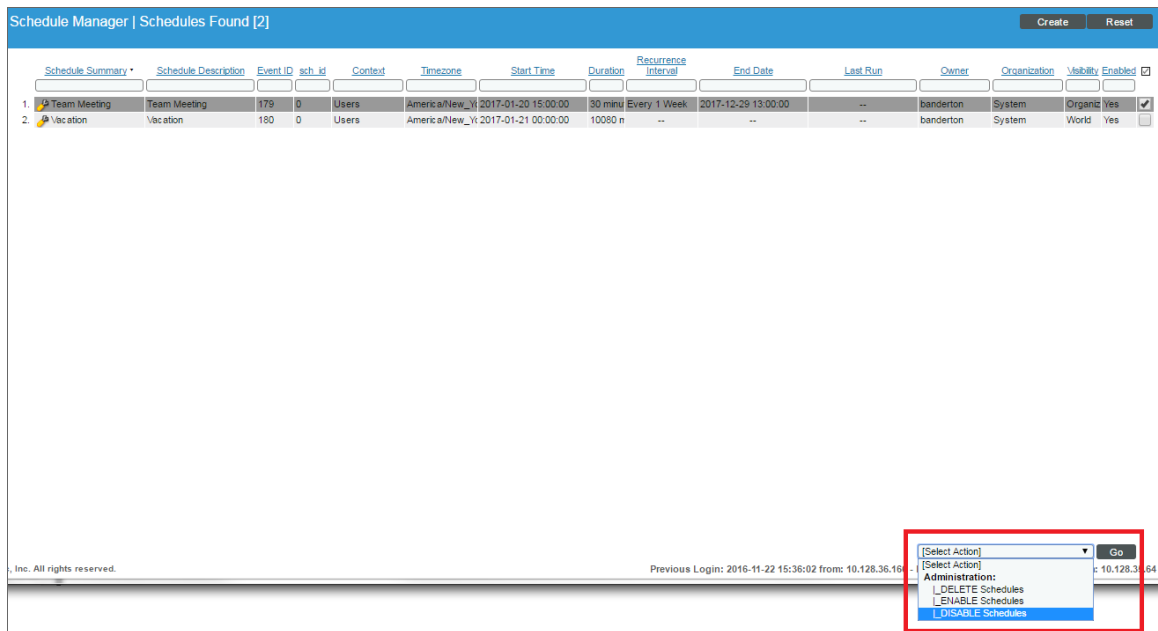
4. Click **[Save]**.



## Enabling or Disabling One or More Scheduled Calendar Items

You can enable or disable one or more scheduled or recurring calendar items from the **Schedule Manager** page (Preferences > Account > Schedule). To do this:

1. Go to the **Schedule Manager** page (Preferences > Account > Schedule).

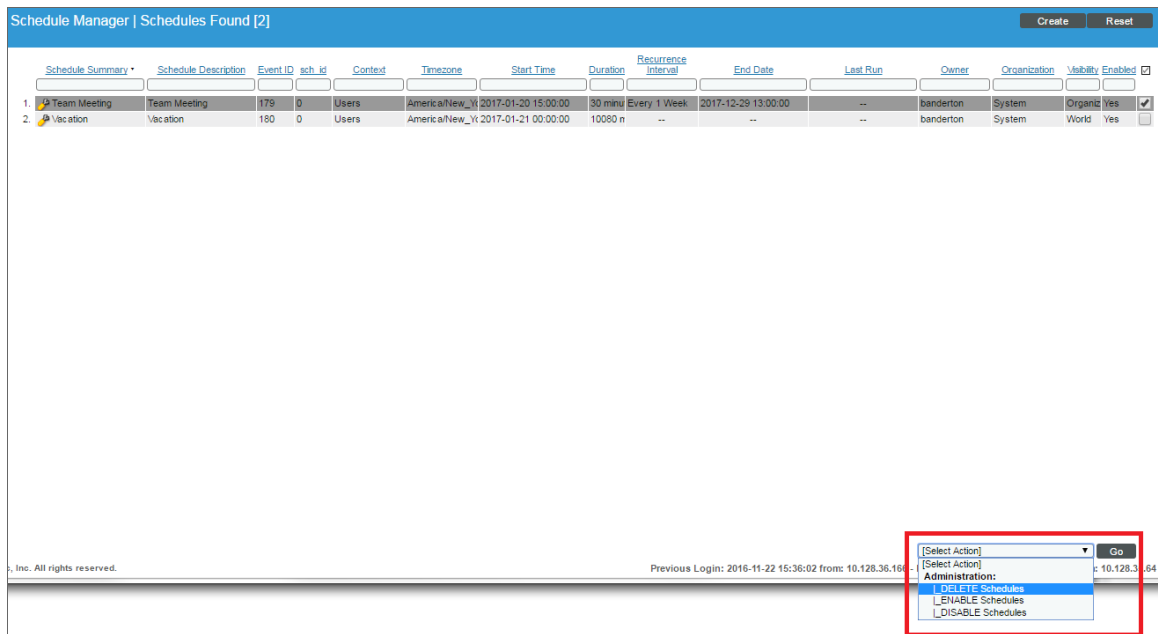


2. Select the checkbox icon for each scheduled process you want to enable or disable.
3. Click the **Select Action** menu and choose *Enable Schedules* or *Disable Schedules*.
4. Click the **[Go]** button.

## Deleting One or More Scheduled Calendar Items

You can delete one or more scheduled or recurring calendar items from the **Schedule Manager** page (Preferences > Account > Schedule). To do this:

1. Go to the **Schedule Manager** page (Preferences > Account > Schedule).



2. Select the checkbox icon for each scheduled process you want to delete.
3. Click the **Select Action** menu and choose *Delete Schedules*.
4. Click the **[Go]** button.

## My Contact Information

The **My Contact Information** page allows you to define or edit your contact information. The contact information you enter in this page is then visible to other users when they click the **View User Account Details** icon (👤) associated with your account anywhere in SL1.

By default, the following fields will be automatically populated with values from your parent organization (if the values have been defined for your parent organization):

- Fax
- Address
- City
- State
- Postal Code
- Country
- Toll Free
- Time Zone

**NOTE:** To access the **My Contact Information** page, accounts of type "user" must be granted one or more access keys that includes the following access hook: MyInfo. Accounts of type "user" will then be able to view and edit the settings in the **My Contact Information** page.

To access the **My Contact Information** page and define or edit your contact information:

1. Go to Preferences > Account > Information.
2. In the **My Contact Information** page, position your cursor in the field you want to define or edit.

The screenshot shows a web form titled "My Contact Information | For [System Administrator]". The form is divided into two main sections. The left section, titled "Personal Information", contains fields for First Name (System), Last Name (Administrator), Title, Department, Phone, Fax, Mobile, Pager, Primary Email (admin@sciencetips.com), Secondary Email, Alternate Email, Pass Phrase (What is your favorite color), and Answer. The right section, titled "Street Address", contains fields for Street Address, Suite/Building, City, State (dropdown), Postal Code, Country (dropdown, currently Afghanistan), and Time Zone (dropdown, currently New\_York). There are also links for "Ask Me Each Time The Timezone Changes" and "Local settings". A "Save" button is located at the bottom of the form.

3. You can edit one, multiple, or all of the following fields:

- **First Name.** Your first name.
- **Last Name.** Your last name.
- **Title.** Your title. This field can be up to 32 characters in length.
- **Department.** Your department. This field can be up to 36 characters in length.
- **Phone.** Your phone number at work. This field can be up to 24 characters in length.
- **Fax.** Your fax number. This field can be up to 24 characters in length.
- **Mobile.** Your cell phone number. This field can be up to 24 characters in length.
- **Pager.** Any other phone numbers for contacting you. This field can be up to 24 characters in length.
- **Primary Email.** Your primary email address. This field can be up to 64 characters in length.
- **Secondary Email.** Your mobile email address, for contacting you via cell-phone or mobile device. This field can be up to 64 characters in length.
- **Alternate Email.** Additional email address for contacting you. This field can be up to 64 characters in length.
- **Pass Phrase.** Questions that verify your account if you forget your password. SL1 does not use this field.
- **Answer.** This field contains the answer to the question selected in the **Pass Phrase** field. This field can be up to 64 characters in length.
- **Street Address.** Your street address at work. This field can be up to 64 characters in length.

- **Suite/Building.** Suite/Building for your location at work. This field can be up to 64 characters in length.
- **City.** City where you work. This field can be up to 64 characters in length.
- **State.** State where you work. You can select from a list of states.
- **Postal Code.** Postal code where you work. This field can be up to 12 characters in length.
- **Country.** Country where you work. You can select from a list of countries.
- **Toll Free.** Toll-free phone number for your work address. This field can be up to 24 characters in length.
- **Time Zone.** Time zone associated with your work address. Select from a list of time zones.

4. Click the **[Save]** button to save your changes.



## Using Advanced Search

---

### Overview

This chapter describes how to create advanced searches in 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:

<b>Performing an Advanced Search</b> .....	<b>54</b>
<b>Components of an Advanced Search</b> .....	<b>55</b>
<i>Fields</i> .....	56
<i>Operators</i> .....	58
<i>Values</i> .....	60
<b>Additional Components of an Advanced Search</b> .....	<b>60</b>
<i>Strings</i> .....	60
<i>Escape characters</i> .....	61
<b>Examples of Advanced Searches</b> .....	<b>62</b>
<i>Advanced Search Examples on the Devices Page</i> .....	62
<i>Advanced Search Examples on the Events Page</i> .....	63
<i>Advanced Search Examples on the Services Page</i> .....	63

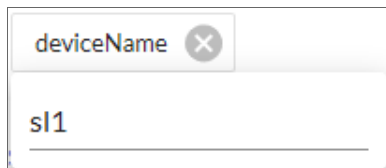
---

## Performing an Advanced Search

SL1 includes an Advanced Search option that lets you use custom search commands to search for data.

To create an Advanced Search:

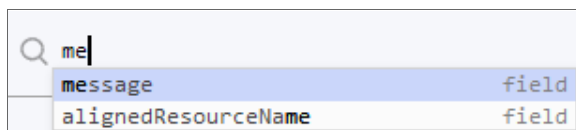
1. Click the gear icon (⚙️) to the right of the **Search** field and select *Advanced*. The search type changes from Basic to Advanced (note the change in font style).
2. Alternately, you can click the menu icon (☰) to the right of the **Search** field to select a search criteria, and then you can filter that search criteria even further by clicking the criteria button and typing additional search information:



3. At the minimum, an Advanced Search requires the following components, in the following order:
  - A **field**. The general type of data for which you are searching, such as a device name or an event message.
  - An **operator**. A word or symbol that specifies the relationship between the field and the value, such as equals or less than.
  - A **value**. A specific aspect or version of the field, such as a name or an amount.

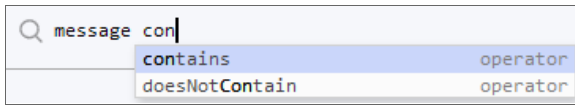
**NOTE:** For more information about fields, operators, and values, see [Components of an Advanced Search](#).


4. Start typing a field name for your search. As you type, SL1 displays a list of available fields in a drop-down menu.




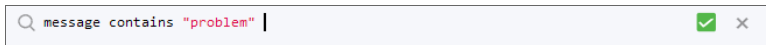
**TIP:** To view a list of all possible search commands at any point in an Advanced Search, press **[Ctrl+Space]**.


5. Select or type a field name and then start typing an operator. Again, SL1 provides a list of available options.




**TIP:** As you type your search command, a red exclamation mark icon (  ) appears at the end of the text field if your command is incorrectly formatted or incomplete. Click the red icon to view additional details.

6. Type a value to complete your search, and type additional search commands as needed. When your search is complete and formatted correctly, a green check mark icon (  ) appears at the end of the text field:



6. Click the **[Search]** button. The results of your search appear.
7. To clear a search, click the gear icon (  ) to the right of a **Search** field and select *Clear Search*.

**TIP:** You can type search commands in the Basic Search field, and then click the gear icon (  ) and select *Advanced* to "translate" your basic search into an Advanced Search.

## Components of an Advanced Search

At the minimum, an Advanced Search requires the following components, in the following order:

- A **field**. The general type of data for which you are searching, such as a device name or event message.
- An **operator**. A word or symbol that specifies the relationship between the field and the value, such as equals or less than.
- A **value**. A specific aspect or version of the field, such as a name or an amount.

The following table contains examples of Advanced Search commands (the quotation marks signify a string of text):

<i>field</i>	<i>operator</i>	<i>value</i>
name	=	"device-name"
counter	>	10
message	contains	'Error'

In the Advanced Search field, you would type these three searches in the following way:

```
name = "device-name"  
counter > 10  
message contains 'Error'
```

You can also include the operators "and" or "or" to your search command. Basic Search in SL1 uses only "and" searches, unless you specify "Any" in your Basic Search.

**NOTE:** When SL1 evaluates an Advanced Search command, it evaluates the "or" expressions first, followed by the "and" filters.

For example, the following search command looks for events that have occurred more than ten times and contain a message with the word "Error" (or "error") :

```
counter > 10 and message contains 'Error'
```

The following search command looks for devices with a name of "device-name" or messages containing the word "Error" (or "error"):

```
name = "device-name" or message contains "Error"
```

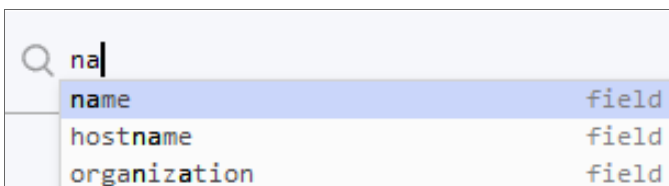
You can use parentheses ( ) to group expressions and to ensure that the expressions are evaluated in the correct order. The following search command looks for either critical events that have only occurred ten times or major events that have occurred more than 50 times:

```
(counter > 10 and status = Critical) or (counter > 50 and status = Major)
```

**TIP:** Searches in SL1 are *not* case-sensitive, so you can use any combination of upper-case and lower-case letters.

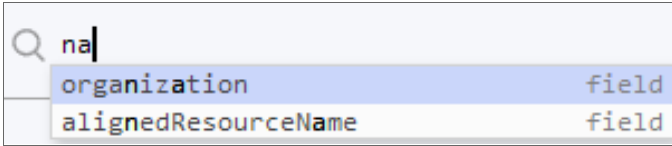
## Fields

For most searches, you start your search command with a field name. When you start typing in an Advanced Search field, SL1 provides a list of potential fields in a drop-down menu that you can select for your search command:





The list of potential fields depends upon the page you are currently on in SL1. The example above is from the **Advanced Search** field on the **Devices** page. If you typed the same letters in the **Advanced Search** field on the **Events** page, the drop-down menu would look like this:



The following table lists some of the more common fields, along with how to use them and examples of search commands that use those fields:

Field name	Purpose	Example
alignedResourceName	Search for the name of a device aligned with a device.	<code>alignedResourceName contains "lab"</code>
asset	Search for an asset aligned with a device.	<code>asset has (assetTag contains 1)</code>
dateCreated	Search for the date and time a device was created.	<code>dateCreated isNotNull</code>
deviceClass	Search for devices belonging to a device class.	<code>deviceClass has (class contains 'Cisco')</code>
deviceGroup	Search for devices belonging to a device group.	<code>deviceGroup has (name contains "Network")</code>
hostname	Search for a device hostname	<code>device has (hostname = "srv")</code>
id	Search for the unique numeric ID assigned by SL1.	<code>id contains "10"</code>
isAcknowledged	Search for events that have or have not been acknowledged.	<code>isAcknowledged = true</code>

Field name	Purpose	Example
message	Search for details about an event message.	message contains "problem"
name	Search for the name of the device	name = "server"
organization	Search for the organization to which the device is assigned	organization has (company = "System")
severity	Search for the severity of an event; severities range from 0 to 4, from Healthy to Critical.	severity in 3,4 Searches for all Major and Critical events.
state	Search for the state of a device; states range from 0 to 4: Healthy, Notice, Minor, Major, and Critical.	state in 0,1,2 Searches for all devices with a state of Healthy, Notice, and Minor.
suppressGroup	Hide data related to the specified group.	suppressGroup = sciencelogic

## Operators

For most searches, you follow a field with an operator. The operator establishes a relationship between the field and the value that comes after the operator.

The following table lists some of the more common operators, along with how to use them and examples of search commands that use those operators:

Operator name	Purpose	Example
and	Include two or more search criteria before producing search results	counter > 10 and message contains "error"

Operator name	Purpose	Example
or	Include at least one of multiple search criteria.	name = "server" or message contains "error"
=, ==, eq, EQ, Eq	The field and the value are equal.	name = "server"
contains	The field includes a specific string.	message contains "primary"
has	The field contains a specific value. The value following "has" must be enclosed in parentheses.	organization has (tollfree contains '800')
in	The field must be part of a specific set of values.	severity in 2,3,4
not	Opposite values; this operator precedes the field name.	not field = abc
<>, !=, neq	The field and the search value are equal.	field != abc
>, gt	The field is greater than the search value.	severity > 3
<, lt	The field is less than the search value.	state < 2
>=, gte	The field is greater than or equal to the search value.	severity gte 3
<=, lte	The field is less than or equal to the search value.	state lte 2

Operator name	Purpose	Example
isNull	The field is empty.	extTicketRef isNull
isNotNull	The field is not empty.	counter isNotNull

## Values

The value you type at the end of a search command depends on the field name and the operator you use. For most searches, you can type the value instead of picking it from the drop-down menu that lists possible search options.

In the following example, the first search value is a string (red text) and the second search value is a numeric value (blue text):

```
Q name contains 'np' and ip beginsWith 192.168|
```

## Additional Components of an Advanced Search

In SL1, you can also search for a specific set of words or characters in a string, or search for calculated sets of data.

### Strings

You can create a search command that searches for a specific set of words in a string. You can use "quotation marks" or 'apostrophes' for your search strings, and strings are not case-sensitive.

The following table lists some of the more common string operators, along with how to use them and examples of search commands that use those string operators:

String operator name	Purpose	Example
beginsWith	Search for strings beginning with a specified value	message beginsWith "Host Resource"
endsWith	Search for strings ending with a specified value	message endsWith 'shutdown'

String operator name	Purpose	Example
<code>contains</code>	Search for strings containing a specified value	<code>message contains "problem"</code>
<code>doesNotBeginWith</code>	Search for strings that do not begin with a specified value	<code>message doesNotBeginWith "front"</code>
<code>doesNotEndWith</code>	Search for strings that do not end with a specified value	<code>message doesNotEndWith 'warning'</code>
<code>doesNotContain</code>	Search for strings that do not contain a specified value	<code>message doesNotContain "codec"</code>

## Escape characters

In double-quoted strings (strings surrounded by quotation marks), you can include quotation marks in the search by *escaping* the quotation marks. To escape those characters, add a backslash before each quotation mark, such as `\"`.

For example:

```
"Error in \"process x\""
```

In single-quoted strings, you can include the single-quote character by escaping it with a backslash, such as `\'`.

For example:

```
'Eric\'s Laptop'  
'Error in "process x"'
```

**TIP:** You do *not* need to add quotes around strings in your search commands. However, if your string contains only numbers, you might want to add quotes around it to ensure that SL1 interprets it as a string.

If you do not include quotes around strings in your search commands, you must escape the following characters with a backslash:

- all empty spaces or white spaces
- comma
- end parenthesis

Examples:

```
Eric's\ Laptop
Error\ in\ "process\ x"
devices\ \ (system\, \ server\)
```

Other than the escape characters mentioned above, you can escape any character. You must escape the backslash character if you want to use it in a string, such as `\\`.

The normal whitespace escape sequences can be used: `\t` (tab), `\n` (new line), `\b` (backspace), `\r` (carriage return), and `\f` (form feed).

You can also use four-digit Unicode hex escape codes in the form `\uXXXX`.

---

## Examples of Advanced Searches

Because the search commands differ for each page in SL1, this section contains a set of search examples based on context.

### Advanced Search Examples on the Devices Page

Search for all devices with a Device ID of 1, 2, or 3:

```
id in 1,2,3
```

Search for all devices with an IP Address that starts with 192.168:

```
ip beginsWith '192.168'
```

Search for all devices with "np" in the Device Name or an IP Address that starts with 192.168:

```
name contains 'np' or ip beginsWith 192.168
```

Search for all mail servers based on the organization's naming conventions (all US-based devices start with the prefix of "us-"):

```
name beginsWith "us-" and name contains "mail" or name contains "smtp"
```

Search for all devices with "01" in the Device Name that belong to the ScienceLogic organization:

```
name contains '01' and organization has (company = sciencelogic)
```

Search for all devices with a Device Category of "Server" or "System":

```
deviceClass has (deviceCategory has (name contains "server")) or deviceClass has (deviceCategory has (name contains "system"))
```

## Advanced Search Examples on the Events Page

Search for events on devices by Device ID of 1, 2, or 3:

```
device has (id in 1,2,3)
```

Search for all events that are errors that have occurred at least 100 times:

```
message beginsWith "Error" and counter >= 100
```

**TIP:** You can copy a working Advanced Search from one tab and include those search commands in an Advanced Search on another tab. Using this approach, you can now filter events based on any data about a device or any other event-related field.

For example, you created the following Advanced Search on the **Devices** page to search for critical devices within a specific IP address:

```
name contains 'rtp' and ip beginsWith '192'
```

On the **Events** page, you could use that search to find events related to that particular set of devices:

```
device has (name contains 'rtp') and device has (ip beginsWith '192')
```

For another example, you created the following Advanced Search on the **Devices** page:

```
deviceClass has (deviceCategory has (name contains 'xtremio'))
```

The corresponding **Events** page search enables you to see events related to that particular set of devices:

```
device has (deviceClass has (deviceCategory has (name contains 'xtremio')))
```

## Advanced Search Examples on the Services Page

Search for Services related to "Network":

```
( name contains 'network' or description contains 'network') or organization has (company contains 'network')
```

Search for devices with a Device Class of "network.router":

```
deviceClass has (deviceCategory has (name contains 'network.router'))
```

Search for devices with a Device Class or Sub-class of "media":

```
deviceClass has (deviceCategory has (name contains 'media')) and deviceClass has (description contains 'media')
```

© 2003 - 2019, 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