Ticketing

SL1 version 8.9.0

Table of Contents

Chapter

1

Introduction to Ticketing

Overview

This chapter provides an overview of Ticketing and how to use it 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:

What is a Ticket?

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.

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.

Who Should Read This Manual

This manual is intended for users and administrators who view, create, edit, assign, and resolve tickets.

Chapter

2

Viewing Tickets

Overview

In SL1 you can view, create, and edit tickets, among other features. You can perform these tasks in the **Ticket Console** page. In the **Ticket Console** page you can view a list of open tickets and ticket information such as Queue and Severity, create a new ticket, view a ticket's properties, and edit a ticket.

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:

The Ticket Console Page

The **Ticket Console** page (**[Tickets]** tab) contains a list of open tickets. From the **Ticket Console** page you can view a list of open tickets, create new tickets, edit one or more existing tickets, filter, search, and sort the list of tickets, and generate reports for one or more tickets.

By default, the **Ticket Console** page displays a list of open tickets that you are allowed to view. The bottom of the page displays a legend that lists the number of tickets of each severity. You can click on one of the severities in the Severity Legend at the bottom of the **Ticket Console** page to filter the currently displayed list to include only tickets of the selected severity.

The **Ticket Console** page contains a number of fields that display information about each ticket. The fields that are displayed in the **Ticket Console** page are defined in your user *preferences*. The **Ticket Console** page can display the following fields:

> **TIP:** To sort the list of tickets, click on a column heading. The list will be sorted by the column value, in ascending order. To sort by descending order, click the column heading again. The *Modified Date* and *Resolved Date* columns sort by descending order on the first click; to sort by ascending order, click the column heading again.

- *Organization*. Organization to which the ticket is assigned. This organization might or might not be associated with the ticket's queue.
- *Description*. Description of the problem or request. This field is color coded based on the ticket's severity.
- *Severity*. Severity of the ticket. Possible choices are:

- **Sev 0/Healthy**. Ticket is not urgent.
- **Sev 1/Notice**. Ticket requires attention but is not problem-related.
- **Sev 2/Minor**. Ticket needs to be investigated before the issue becomes more severe.
- **Sev 3/Major**. Ticket requires immediate investigation.
- **Sev 4/Critical**. Ticket requires immediate attention.

- *Queue*. Ticket Queue to which the ticket is assigned.
- *TID*. Unique ID assigned to the ticket. SL1 automatically generates this.
- *State*. Displays the ticket state (if assigned) associated with the ticket. Ticket state is a custom-defined ticket parameter. The definition of a ticket state includes logic that you can use to control workflow.
- *Ticket Age*. Days, hours, and minutes that have elapsed since the ticket was created.
- *Element Name*. Element to which the ticket is assigned.
- *Element Name*. Name of entity (frequently a device) associated with this ticket. Clicking on an elements icon leads to the properties page for that element.
- *Element Type*. Description of the entity. The choices are:

  - *Organization*.
  - *Device*.
  - *Device Group*.
  - *Asset record*.
  - *IP Network*.
  - *Interface*.
  - *Vendor*.
  - *User Account*.
  - *Virtual Interface*.

- *Status*. Status of the ticket. The choices are:

  - *Open*. Ticket has been created.
  - *Working*. Someone is working on the ticket.
  - *Pending*. The ticket has been acknowledged, and ticket is awaiting the next action.
  - *Resolved*. Issue has been resolved.

- *Parent TID*. The ID number of the ticket's parent ticket. If the ticket does not have a parent ticket, the column will show a value of "--".
- *Category*. Descriptive category assigned to the ticket. Administrators can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the list of possible categories in this field. Clicking on a category name filters the list of tickets by category.
- *Assigned To*. User the ticket is assigned to.

- *Source*. Original source for the ticket. The list of possible sources can be customized by a system administrator in the **Select Objects Editor** page (System > Customize > Select Objects). Default choices are:

  - *Automated*. Ticket was created automatically when an event occurred. An administrator has configured SL1 to behave this way.

  - *Email*. An email about an issue prompted this ticket.

  - *External*. An external source created this ticket.

  - *Internal*. Ticket created in SL1.

  - *Phone*. A phone call about an issue prompted this ticket.

- *Created By*. User who created the ticket.

- *Create Date*. Date and time when the ticket was created.

- *Modified By*. The user who last modified the ticket.

- *Modified Date*. The date the ticket was last modified.

- *Resolved By*. Username of the user who resolved the ticket.

- *Resolved Date*. For tickets with a status of "Resolved", the date the ticket was resolved. To learn how to view resolved tickets, see *Resolving Tickets*.

- *Chargeback*. The amount of work that has been billed to a ticket, in minutes.

- *Escalation*. Specifies the number of times a ticket has been escalated. This field cannot be edited. Clicking on an escalation value leads to the **[Logs]** tab in the **Ticket Editor** page for the selected ticket. Choices are:

  - *0*. Ticket has not been escalated.

  - *1*. Ticket has been escalated once.

  - *2*. Ticket has been escalated twice.

  - *3*. Ticket has been escalated three times.

- *Custom fields*. The **Ticket Console** page can also display custom fields defined in the embedded custom form for the ticketing application. Custom fields are defined in the **Application Forms** (System > Customize > Form Fields) page.

NOTE: To filter the list of tickets in the **Ticket Console** page, use the "search as you type" function in any column heading in the **Ticket Console** page. You can further filter tickets by selecting a specific queue in the **Show All Queues** drop-down list in the upper right of the page, or by using the Advanced Filter tool ( ). To learn how to use the Advanced Filter tool, see the section *Using the Advanced Filter Tool*.

Customizing the Display of the Ticket Console

You can customize the display of the **Ticket Console** by hiding the header bar. To hide the header bar, click on the arrow in the top right of the **Ticket Console** (above the **[Guide]** button).

Users can also customize the appearance of the **Ticket Console** page from two places:

- The **Account Preferences** page (Preferences > Account > Preferences). In this page you can define the appearance and behavior of the **Ticket Console** page and the **Event Console** page.

- The **Ticket Console Preferences** page. In this page, you can customize the display and behavior of the **Ticket Console** page. You can access this page by going to the **Ticket Console** page, clicking the **[Actions]** menu and then selecting *Console Preferences*. In the **Ticket Console Preferences** page, you can customize the following:

    - *Page Refresh Rate*. Specifies how often the **Ticket Console** page in SL1 will be refreshed. The possible choices are between 15 seconds and 1 hour.

    - *Console Height*. Specifies the vertical height of the **Ticket Console** page. A larger height allows more tickets to be displayed on a single page, but may require vertical scrolling. The choices are 400 pixels–2400 pixels.

    - *Table Row Height*. Affects the row height of all pages that display a table in the main content pane, including the **Ticket Console** page. You can also change this setting in the **Event Console Preferences** page (Events > Actions > Console Preferences), the **Account Preferences** page (Registry > Accounts > User Accounts > wrench a user account > Preferences), and the system **Account Preferences** page (Preferences > Account > Preferences). Changing the setting for row height in any of those pages 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.

    - *Page Result Count*. Specifies the number of results to be displayed on each page. The choices in this field are limited based on the *Console Height* setting, and range from 25–500.

    - *View Assigned Tickets Only*. If you select this checkbox, by default, only tickets assigned to you are displayed in the **Ticket Console** page.

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

NOTE: When you edit the list of columns in the *Ticket Console Columns* field, 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 this page is updated.

Filtering and Searching

The **Ticket Console** page includes the following tools for searching and filtering the list of tickets that is displayed in the page:

- The *Filter By Queue* drop-down list in the upper left allows you to filter the displayed list of tickets, based on ticket queue. When you select a ticket queue, the **Ticket Console** page will display only tickets that are members of the selected ticket queue.

- You can also search ticket notes and the columns that you choose not to display in the **Ticket Console** page. To do this, click the *Search on Extra Fields* icon (🔍) in the upper left of the **Ticket Console**. You can search by multiple notes and multiple columns. Note that if the **Ticket Console** page does not display a column, you cannot use the "filter while you type" feature to search for tickets by that column. In this situation, you can use the *Search on Extra Fields* feature.

  - To use the *Search on Extra Fields* feature:

  1. Go to the **Ticket Console** page.

2. Click on the magnifying glass icon (🔍).

3. In the *Search* drop-down list, you can select either *Ticket Notes* or select from a list of columns that are not displayed in the **Ticket Console** page.

4. In the *text to match* field to the right of the *Search* drop-down list, enter the text you want to search for.

5. The **Ticket Console** page will automatically display a list of tickets that match the search criteria.

6. To search by a second note or column, click on the plus sign icon (+). Repeat steps 3 and 4.

7. The **Ticket Console** page will display only tickets that match all the criteria you defined in the *Search on Extra Fields* field. If you defined additional search criteria using the "filter while you type" fields and/or the *Filter By Queue* drop-down list, the **Ticket Console** page will display only tickets that match all the criteria you defined in each search tool.

- The "filter while you type" fields at the top of the page allow you to filter the list tickets by one or more of the ticket parameters.

- You can access the Advanced Filter Tool, where you can enter more complex filters, based on your current configuration of SL1 (for example, for the *Assigned To* field, selecting one or more user names from a list of all user accounts in SL1).

- After filtering the list of tickets, you can save your filter as a Custom View.

Filter While You Type

You can filter the list of tickets in the **Ticket Console** page by one or more parameters. Only tickets that meet all the filter criteria will be displayed in the **Ticket Console** page.

For each filter except *Create Date*, *Modified Date*, and *Resolved Date*, enter text into the desired filter-while-you-type field. The **Ticket Console** page searches for tickets that match the text, including partial matches.

By default, the cursor is placed in the left-most filter-while-you-type field. You can use the <Tab> key or your mouse to move your cursor through the fields.

The list of tickets is dynamically updated as you type.

You can also use *special characters* to filter each parameter.

The **Ticket Console** page includes a filter for each column you selected to display. You can specify one or more parameters to filter the display of tickets. Only tickets that meet all the filter criteria will be displayed in the **Ticket Console** page.

You can filter by one or more of the following parameters, depending on the columns you have selected to display. The list of tickets is dynamically updated as you select each filter.

- For each filter except *Create Date*, *Modified Date*, and *Resolved Date*, you must enter text to match against. SL1 will search for tickets that match the text, including partial matches. Text matches are not case sensitive.

- For *Create Date*, *Modified Date*, and *Resolved Date*, only those tickets that match all the previously selected fields and have the specified modified date will be displayed. The choices are:

  - *All*. Display all tickets that match the other filters.
  - *Last Minute*. Display only tickets that have been created within the last minute.
  - *Last Hour*. Display only tickets that have been created within the last hour.
  - *Last Day*. Display only tickets that have been created within the last day.
  - *Last Week*. Display only tickets that have been created within the last week.
  - *Last Month*. Display only tickets that have been created within the last month.
  - *Last Year*. Display only tickets that have been created within the last year.

Special Characters

You can include the following special characters to filter by each column except those that display date and time:

> **NOTE**: When searching for a string, SL1 will match substrings by default, even if you do not include any special characters. For example, searching for "hel" will match both "hello" and "helicopter". When searching for a numeric value, SL1 will not match a substring unless you use a special character.

String and Numeric

- , (comma). Specifies an "OR" operation. Works for string and numeric values. For example:

  "dell, micro" matches all values that contain the string "dell" OR the string "micro".

- & (ampersand). Specifies an "AND " operation. Works for string and numeric values. For example:

  "dell & micro" matches all values that contain both the string "dell" AND the string "micro", in any order.

- ! (exclamation point). Specifies a "not" operation. Works for string and numeric values. For example:

  "!dell" matches all values that do not contain the string "dell".

  "!^micro" would match all values that do not start with "micro".

  "!fer$" would match all values that do not end with "fer".

  "!^$" would match all values that are not null.

  "!^" would match null values.

  "!$" would match null values.

  "!*" would match null values.

  "happy, !dell" would match values that contain "happy" OR values that do not contain "dell".

> **NOTE**: You can also use the "!" character in combination with the arithmetic special characters (min-max, >, <, >=, <=, =) described below.

- * (asterisk). Specifies a "match zero or more" operation. Works for string and numeric values. For a string, matches any string that matches the text before and after the asterisk. For a number, matches any number that contains the text. For example:

  "hel*er" would match "helpers" and "helicopter" but not "hello".

  "325*" would match "325", "32561", and "325000".

  "*000" would match "1000", "25000", and "10500000".

- ? (question mark). Specifies "match any one character". Works for string and numeric values. For example:

  "l?ver" would match the strings "oliver", "levers", and "lover", but not "believer".

  "135?" would match the numbers "1350", "1354", and "1359", but not "135" or "13502"

String

- ^ (caret). For strings only. Specifies "match the beginning". Matches any string that begins with the specified string. For example:

  "^sci" would match "scientific" and "sciencelogic", but not "conscious".

  "^happy$" would match only the string "happy", with no characters before or after.

  "!^micro" would match all values that do not start with "micro".

  "!^$" would match all values that are not null.

  "!^" would match null values.

- $ (dollar sign). For strings only. Specifies "match the ending". Matches any string that ends with the specified string. For example:

  "ter$" would match the string "renter" but not the string "terrific".

  "^happy$" would match only the string "happy", with no characters before or after.

  "!fer$" would match all values that do not end with "fer".

  "!^$" would match all values that are not null.

  "!$" would match null values.

NOTE: You can use both ^ and $ if you want to match an entire string and only that string. For example, "^tern$" would match the strings "tern" or "Tern" or "TERN"; it would not match the strings "terne" or "cistern".

Numeric

- 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 would match 1, 2, 6, 345, etc.

  "-5" matches 5 and less. So 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.

Additional Examples

- "aio$". Matches only text that ends with "aio".
- "^shu". Matches only text that begins with "shu".
- "^silo$". Matches only the text "silo", with no characters before or after.
- "!silo". Matches only text that does not contains the characters "silo".
- "!^silo". Matches only text that does not start with "silo".
- "!0$". Matches only text that does not end with "0".
- "!^silo$". Matches only text that is not the exact text "silo", with no characters before or after.
- "!^". Matches null values, typically represented as "--" in most pages.
- "!$". Matches null values, typically represented as "--" in most pages.
- "!^$". Matches all text that is not null.
- silo, !aggr". Matches text that contains the characters "silo" and also text that does not contain "aggr".
- "silo, 02, !aggr". Matches text that contains "silo" and also text that contains "02" and also text that does not contain "aggr".
- "silo, 02, !aggr, !01". Matches text that contains "silo" and also text that contains "02" and also text that does not contain "aggr" and also text that does not contain "01".
- "^s*i*l*o$". Matches text that contains the letter "s", "i", "l", "o", in that order. Other letters might lie between these letters. For example "sXiXlXo" would match.
- "!^s*i*l*o$". Matches all text that does not that contains the letter "s", "i", "l", "o", in that order. Other letters might lie between these letters. For example "sXiXlXo" would not match.
- "!vol&!silo". Matches text that does not contain "vol" AND also does not contain "silo". For example, "volume" would match, because it contains "vol" but not "silo".
- "!vol&02". Matches text that does not contain "vol" AND also contains "02". For example, "happy02" would match, because it does not contain "vol' and it does contain "02".
- "aggr,!vol&02". Matches text that contains "aggr" OR text that does not contain "vol" AND also contains "02".
- "aggr,!vol&!infra". Matches text that contains "aggr" OR text that does not contain "vol" AND does not contain "infra".
- "*". Matches all text.
- "!*". Matches null values, typically represented as "--" in most pages.
- "silo". Matches text that contains "silo".
- " !silo ". Matches text that does not contain "silo".
- " !^silo$ ". Matches all text except the text "silo", with no characters before or after.
- "-3,7-8,11,24,50-". Matches numbers 1, 2, 3, 7, 8, 11, 24, 50, and all numbers greater than 50.

- "-3,7-8,11,24,50-,a". Matches numbers 1, 2, 3, 7, 8, 11, 24, 50, and all numbers greater than 50, and text that includes "a".

- "?n". Matches text that contains any single character and the character "n". For example, this string would match "an", "bn", "cn", "1n", and "2n".

- "n*SAN". Matches text the contains "n", zero or any number of any characters and then "SAN". For example, the string would match "nSAN", and "nhamburgerSAN".

- "^?n*SAN$". Matches text that begins with any single character, is following by "n", and then zero or any number of any characters, and ends in "SAN".

Using the Advanced Filter Tool

In the **Ticket Console** page, you can specify one or more parameters to filter the display of tickets. Only tickets that meet all the filter criteria will be displayed.

The Advanced Filter Tool allows you to make selections instead of manually typing in a string to filter on.

The Advanced Filter Tool also allows you to Prefilter the list of tickets and then continue filtering again if necessary.

> **TIP:** To select multiple entries in the Advanced Filter Tool, hold down the **[<Ctrl>]** key and left-click the entries.

- After selecting a filter, you can reduce the number of options displayed in the other filters by clicking the **[Prefilter]** button for the filter. When **[Prefilter]** is clicked, SL1 calculates how many tickets would be displayed if the chosen filters are applied. The options displayed for the other filters are reduced to those that apply to the potential list of displayed tickets. For example, suppose that five organizations are defined in SL1. Suppose that all the tickets with a severity of "Critical" are associated with either the "System" or "East Coast NOC" organizations. Initially, all five organizations will be displayed in the *Organizations* filter. If you select "Critical" in the *Severity* filter, then click the **[Prefilter]** button, the *Organizations* filter would display only the organizations "System" and "East Coast NOC".

- After selecting all filters, click the **[Apply]** button to apply the filters to the list of tickets.

- To reset each field to empty and apply no filters, click the **[Reset]** button.

> **NOTE**: For user-level users, the Advanced Filter Tool allows you to view and select only organizations of which you are a member and elements which you are allowed to view (based on your organization membership and Access Keys)

To access the Advanced Filter Tool:

1. Go to the **Ticket Console** page.

2. Click on the funnel icon ( ).

3. The Advanced Filter Tool will display advanced filters for each column in your default display.

NOTE: Unlike the "filter while you type" feature, the Advanced Filter Tool is not applied to the list of tickets until you click the **[Apply]** button or the **[Prefilter]** button.

---

4. In the Advanced Filter Tool, you can filter by one or more of the following filters:

- *Organization*. Select from a list of organizations in SL1. The **Ticket Console** page will display only tickets that have a matching organization.

- *Description*. In the *Match Any* fields, you can enter one or more text strings to match, including special characters. The **Ticket Console** page will display tickets that have a description that matches any of the text strings.

- *Severity*. You can select from a list of ticket severities. The **Ticket Console** page will display only tickets that have a matching severity.

- *Queue*. You can select from a list of ticket queues in SL1. The **Ticket Console** page will display only tickets that are in a matching ticket queue.

- *TID*. In the *From* and *To* fields, you can specify a range of ticket IDs. The **Ticket Console** page will display only tickets that fall within that range of ticket IDs.

- *State*. You can select from a list of ticket states. The **Ticket Console** page will display only tickets that have a matching state.

- *Ticket Age*. You can enter text to match, including special characters, and the **Ticket Console** page will display only tickets that have a matching ticket age.

- *Element Name*. In the *Match Any* fields, you can enter one or more text strings to match, including special characters. The **Ticket Console** page will display tickets that have an element name that matches any of the text strings.

- *Element Type*. You can select from a list of element types that are already associated with tickets. The **Ticket Console** page will display only tickets that have a matching element type.

- *Status*. You can select from a list of all possible ticket statuses. The **Ticket Console** page will display only tickets that have a matching status.

- *Parent TID*. In the *From* and *To* fields, you can specify a range of parent ticket IDs. The **Ticket Console** page will display only parent tickets that fall within that range of parent ticket IDs.

- *Category*. You can select from a list of categories that are already associated with the existing tickets. The **Ticket Console** page will display only tickets that have a matching category.

- *Assigned To*. You can select from a list of accounts to which tickets have already been assigned. The **Ticket Console** page will display only tickets that have a matching username in the *Assigned To* field.

- *Source*. You can select from a list of all sources that have already been assigned to tickets. The **Ticket Console** page will display only tickets that have a matching source.

- *Created By*. You can select from a list of accounts that have already created tickets. The **Ticket Console** page will display only tickets that have a matching username in the *Created By* field.

- *Create Date*. In the *From* and *To* field, you can specify a range of ticket dates, in the format *yyyy-mm-dd hh:mm:ss*. The **Ticket Console** page will display only tickets with a create date that falls within that range of dates.

- *Modified By*. You can select from a list of accounts that have already modified tickets. The **Ticket Console** page will display only tickets that have a matching username in the *Modified By* field.

- *Modified Date*. In the *From* and *To* field, you can specify a range of ticket dates, in the format *yyyy-mm-dd hh:mm:ss*. The **Ticket Console** page will display only tickets with a modified date that falls within that range of dates.

- *Resolved By*. You can select from a list of accounts that have already resolved tickets. The **Ticket Console** page will display only tickets that have a matching username in the *Resolved By* field.

- *Resolved Date*. In the *From* and *To* field, you can specify a range of ticket dates, in the format *yyyy-mm-dd hh:mm:ss*. The **Ticket Console** page will display only tickets with a resolved date that falls within that range of dates.

- *Chargeback*. In the *From* and *To* field, you can specify a range of hours. The **Ticket Console** page will display only tickets that fall within that range of hours of chargeback.

- *Escalation*. In the *From* and *To* field, you can specify a range of escalations. The **Ticket Console** page will display only tickets that fall within that range of escalations.

> **TIP:** You can perform an advanced filter and then perform a second advanced filter on the results of the first advanced filter. You can perform an advanced filter multiple times, to perform multiple filters.

Saving a Custom View

You can save a filtered list of tickets created with either the filter-while-you-type tool, the **Search on Extra Fields** tool, and/or the advanced filter tool. When you do so, you are creating a *custom view*. You can then return to the page at any time and display the custom view, without having to filter the list again.

To save a custom view:

1. Go to the **Ticket Console** page.

2. Using the filter-while-you-type tool, the Search on Extra Fields tool, and/or the advanced filter tool, filter the list of tickets.

3. In the *Custom View* drop-down list, select *new custom view*.

4. Click the **[Save]** button.

5. You will be prompted to enter a name for the new custom view.

6. The new custom view now appears in the **Custom View** drop-down list.

7. To display the custom view, select it from the *Custom View* drop-down list.
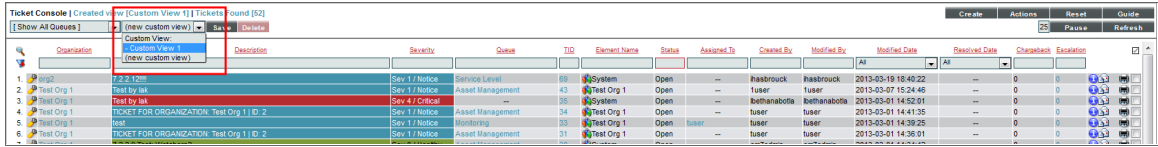
8. To delete the custom view, select it from the *Custom View* drop-down list and then click the **[Delete]** button. The custom view will no longer appear in the *Custom View* drop-down list.

Select Action Drop-Down Lists

The drop-down list in the lower right of the **Ticket Console** page allow you to apply actions to all selected tickets (to select a ticket, click on its row in the **Ticket Console**). The drop-down lists allow you to:
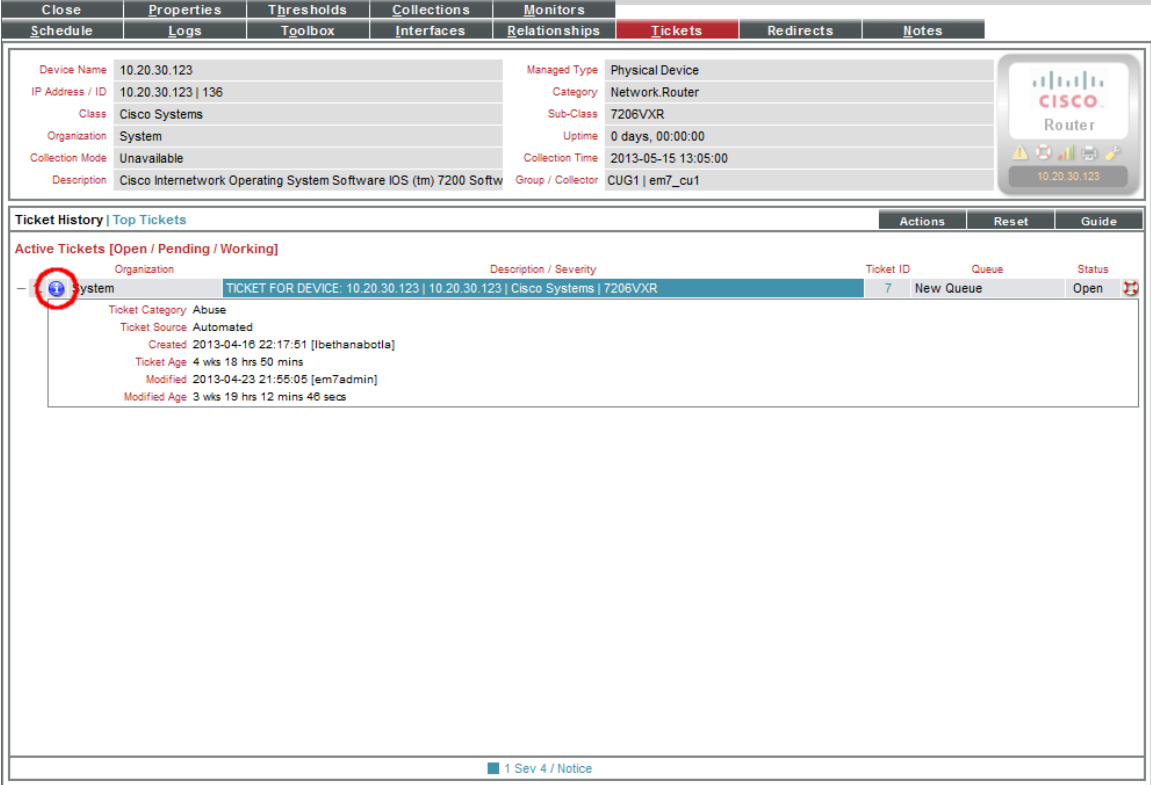
- Update the edit date of each selected ticket
- Take ownership of each selected ticket
- Print a report about the selected tickets
- Resolve the selected tickets
- Change the state, queue, assigned user, severity, status, source, or category of each selected ticket.
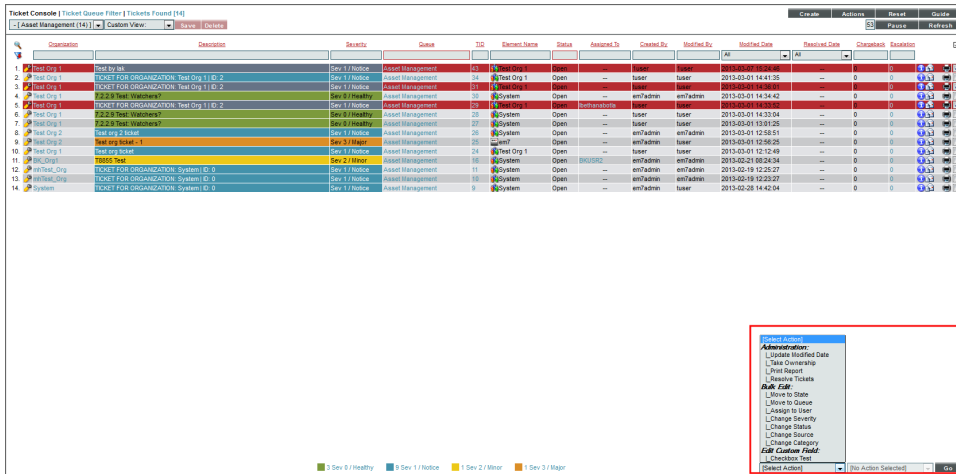
Viewing Tickets for a Single Device

You can view a list of all open, pending, or working tickets associated with a single device from the **Ticket History** page. You can also access the **Ticket Editor** page for the ticket directly from this page if you require more detail about the ticket. To view tickets for a single device:

1. Go to the **Device Manager** page (Registry > Devices > Device Manager).

2. In the **Device Manager** page, find the device for which you want to view tickets. Click its wrench icon (🔧).

3. Click the **[Tickets]** tab to display the **Ticket History** page. The **Ticket History** page displays a list of tickets and information for the device.

4. In the **Ticket History** page, find the ticket you are interested in. Click its Information icon (ℹ️).

5. The **Ticket Summary** modal page for that ticket is displayed.

You can also access the **Ticket Editor** modal page from the **Ticket History** page. To access the **Ticket Editor** page:

1. Go to the **Device Manager** page (Registry > Devices > Device Manager).

2. In the **Device Manager** page, find the device for which you want to view tickets. Click its wrench icon (🔧).

3. Click the **[Tickets]** tab.

4. In the **Ticket History** page, find the ticket you are interested in. Click its life ring icon (🛟).

5. The **Ticket Editor** page for that ticket is displayed. From the **Ticket Editor** page, you can also access the tabs for all the other pages in the Ticket Panel.

To learn more about the **Ticket Editor** page, see the section on *Viewing Ticket Details*.

Viewing My Tickets

From the **Ticket Console** page you can view a list only of tickets that are assigned to you, as opposed to the entire list of tickets in SL1. This is helpful if you are required to do work on tickets, and want to see only tickets necessary for you to complete your work.

To filter the list of tickets in the **Ticket Console** page and display only those tickets that are assigned to you:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Click the [**Actions**] menu in the top right of the page and select *My Tickets*.
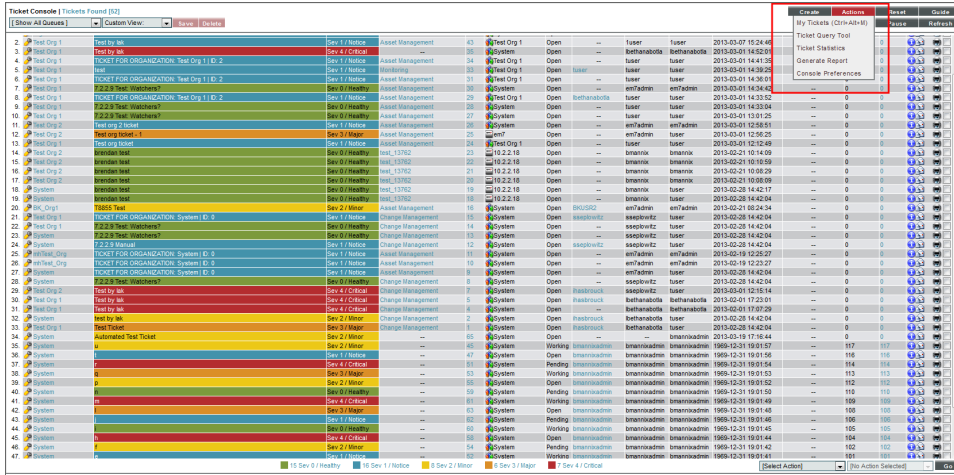
3. The **Ticket Console** page will now only display tickets that are assigned to you.

Viewing Ticket Details

Along with the information displayed in the **Ticket Console** page, you can view additional information on a ticket. The Ticket [**Properties**], [**Logs**], [**Automation**], and [**Message**] tabs, in the Ticketing panel is a group of tabs that allows you to view and edit further information on an individual ticket. The following section will provide details on each tab.

Viewing the Ticket Editor Page

Viewing the Read-Only Information

The **Ticket Editor** page can display the following read-only information:

- *Description*. Description of the problem or request.

- *Organization*. Organization to which the entity is assigned. This organization might or might not be associated with the ticket's queue. Clicking on the icon displays the **Organizational Summary** page for the organization.

- *Element*. Element associated with this ticket. Can be an organization, device, asset record, IP network, interface, vendor, or user account. Clicking on the icon displays details about the element. To edit the element, click the binoculars icon (🔍). The **Finder** page appears, where you can search for another element.

- *Parent Ticket*. If applicable, the ticket that has a parent relationship with the current ticket. Clicking on the icon displays read only details about the parent ticket.

- *Aligned Tickets*. If applicable, the ticket(s) that has a child relationship with the current ticket. Clicking on the icon displays a list of child tickets. From this list, you can view the **Ticket Editor** page for each child ticket.

- *Aligned Event*. If applicable, the event that is associated with the ticket. Clicking on the icon displays read-only details about the event.

- *Ticket Age*. For tickets that are not yet resolved, displays the years, months, days, hours, and minutes that have elapsed since the ticket was created.

- *Time To Resolve*. For resolved tickets, displays the number of years, months, days, and hours until the ticket was resolved.

- *Resolved On/By*. For resolved tickets, displays the date and time the ticket was resolved and the user who resolved the ticket.

- *Created On/By*. Date and time ticket was created and the user who created the ticket.

- *Modified Age*. For tickets that are not yet resolved, displays the number of years, months, days, hours, minutes, and seconds since the ticket was last modified.

- *Modified On/By*. Date and time ticket was last modified and the user who modified the ticket.

Viewing Ticket Properties

The **Ticket Properties** are listed below the **Ticket Editor**. The **Ticket Properties** pane displays the Ticket Description, Sub-Organization, Ticket State, Status, Severity, Category, Source, Queue, and Assigned User. It also displays any embedded fields you include.

Viewing Notes & Attachments

The **Notes & Attachments** pane displays notes about the ticket. The notes were created in the **Ticket Editor** page or with the **Notepad Editor** modal page. By default, the entries are listed from latest to earliest. You can toggle the **[Ascending]** and **[Descending]** buttons to change the order in which the notes appear.

To expand the **Notes & Attachments** pane to fill the entire **Ticket Editor** page, click the **[Maximize]** button. To reduce the **Notes & Attachments** pane back to its original size, click the **[Restore]** button.

Each entry includes the username, date and time, and text of the comment.

The user who created the note can also cloak it. Based on the Access Hook that defines cloaking, a cloaked note can be viewed only by: The user who created the note; all users of type "administrator"; or users in the same organization as the user who created the note, who have Access Hooks that allow them to view the ticket where the cloaked note resides and also have the Access Hook "Ticket:Notes:Cloaked."

Depending on the Access Keys associated with your user account, you can perform the following on each note entry:

- **To view a note's attachment**, click the paperclip icon ( ).

- **To edit the content of a note**, click the wrench icon ( ). The **Notepad Editor** modal page appears. You can update the note, format the text, insert content from a saved template, and add an attachment, image, or video to the note. Click the **[Save]** button to save your changes.

- **To delete a note**, click its bomb icon ( ).

The Ticket Logs Page

The **Ticket Logs** page displays the history of a selected ticket. Each change made to the ticket, from its creation to the current time, is displayed in a table in this page. The table lists these changes chronologically, with the oldest first. To view the **Ticket Logs** page:

1. Go to the **Ticket Console** page (**[Tickets]** tab)

2. Find the ticket for which you want its history. Select its wrench icon ( ).

3. In the **Ticket Editor** page, select the **[Logs]** tab. The **Ticket Logs** page appears.

4. The **Ticket Logs** page displays the following information for each action performed on the ticket:

   - **Date/Time**. Date and time the action was performed.

   - **Type**. Type of action performed. Note that when a ticket is updated with a Run Book Automation policy, SL1 will create a log entry of type "Automation" to specify that the actions were performed by a Run Book Automation policy.

- *Message*. Description of the action performed.
- *Modified By*. User who performed the action.
- *Age*. Ticket age when the action was performed.
- *Severity*. Severity of the ticket at the time the action was performed.
- *Status*. Status of the ticket at the time the action was performed.
- *Queue*. Ticket queue assigned to the ticket at the time the action was performed.
- *Assigned*. User to whom the ticket was assigned at the time the action was performed.

The Event Actions Log Page

The **Event Actions Log** page displays information about the automated actions that were performed for the event associated with a ticket. To view the **Event Actions Log** page:

1. Go to the **Ticket Console** page (**[Tickets]** tab).
2. Find the ticket for where you want to view its automation policy.
3. Click its wrench icon ( ).
4. From the **Ticket Editor** page, click the **[Automation]** tab. The **Event Actions Log** page appears.
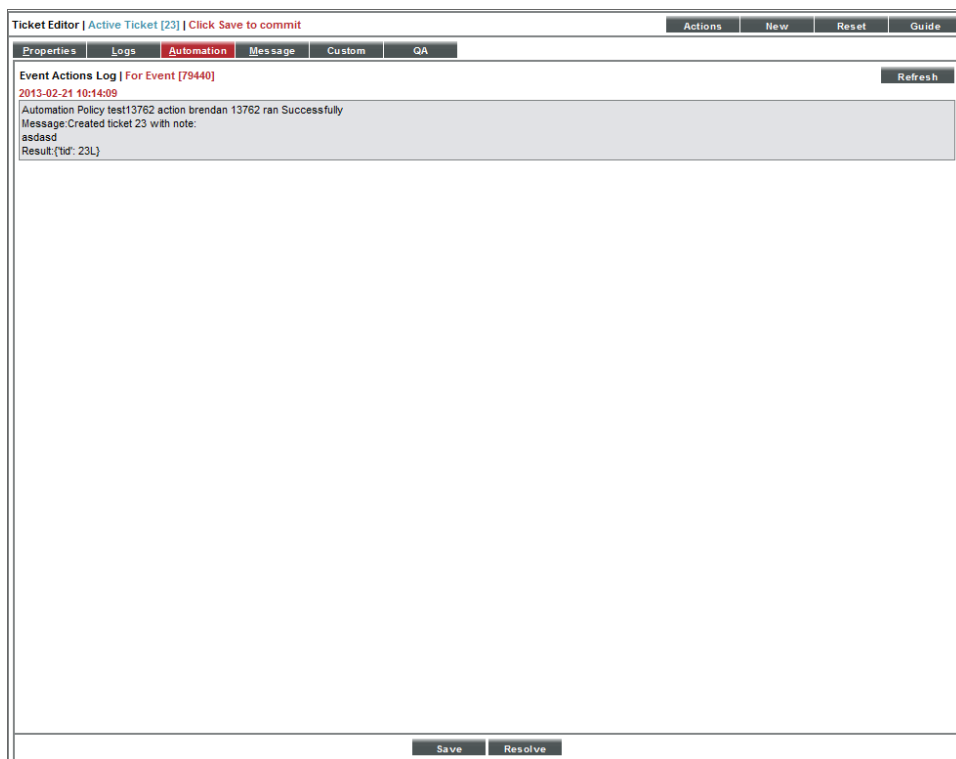
Viewing the Automation Logs

The **[Automation]** tab in the **Ticket Editor** page displays a history of all automation actions that SL1 executed in response to the event associated with the ticket.

Each entry in the **Event Actions Log** page includes:

- The date and time when the action was executed.
- The automation policy that triggered the action.
- The name of the action policy.
- The result of the action.

To learn more about automation policies, see the manual *Run Book Automation*.

The Send Message Tab

The **Send Message** page allows you to manually create email messages about a selected ticket. You can communicate about events and tickets with the appropriate team members without leaving SL1. At any time, you can manually send an email message about a selected ticket from the **Message** tab.

In addition, SL1 can automatically generate and send email messages when:

- A ticket is created. By default, email is sent to the ticket creator and ticket assignee.
- A ticket is assigned to a user. By default, email is sent to the ticket creator and ticket assignee.
- A ticket's status changes. By default, email is sent to the ticket creator and ticket assignee.
- You can also define one or more users (in addition to the ticket's creator or assignee) who will be considered watchers for a ticket. When the ticket is created, assigned, or changes status, SL1 will automatically send email notifications to the list of watchers.

> **NOTE**: If in the **Behavior Settings** page (System > Settings > Behavior, the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

> **NOTE**: To learn more about ticket watchers, including assigning a watcher to a ticket and alerting a watcher of a ticket, see *Ticket Emails and Watchers*.

To send an email about a selected ticket:

1. Go to the **Ticket Console** page (**[Tickets]** tab).
2. Find the ticket for which you want to send an email. Click its wrench icon (🔧).

3. In the **Ticket Editor** page, click the **[Message]** tab. The **Send Message** page appears.

Creating a Message

From the **Message** tab you can manually create and send an email message about a ticket. To create an email, supply values in each of the following fields:

- *TO*. Enter the email addresses of the people you want to notify about the ticket. By default, this field automatically includes the email address of each watcher for this ticket. You can delete one or more of these email addresses. You can also manually enter other email addresses, separated by commas, in this field.

- *CC*. Enter the email addresses of the people you want to receive a copy of the email message. If you enter a list of email addresses, separate them with commas.

- *BCC*. Enter the email addresses of the people you want to receive a blind copy of the email message. If you enter a list of email addresses, separate them with commas.

- *Subject*. This field will be populated automatically with the severity and a description of the selected ticket or event. You can delete this text and manually enter a subject.

- *Sender's Address*. Allows you to specify the "From" address that will appear in the email. You can use the **Ticket Queue Properties** modal page (Registry > Ticketing > Queues > Edit/Create) to define the default value that appears in this field. You can specify that the field will contain either the queue email address or the email address of the last user to edit the ticket. You can also manually enter an email address in this field.

> **NOTE**: By default, the *Sender's Address* field includes the email. If no such email address is defined for the ticket's queue, by default the *Sender's Address* field will contain the email address of the current user.

- *Message Format.* SL1 formats the email for specific displays. Choices include:

  - *HTML Formatted*. SL1 includes relevant information about the ticket, as a formatted table. SL1 also includes more details, including ticket history, with this method. This is the default method.

  - *Text Formatted*. SL1 includes relevant information about the ticket, as unformatted text.

  - *Pager Formatted*. SL1 includes a condensed set of ticket information, formatted for a pager.

- *Message Priority*. Specifies flags to add to message. Some, but not all, mail clients will display a flag for high-priority messages. You can select from the following:

  - *Normal Priority*. Message is marked with normal priority.

  - *Urgent Priority*. Message is marked with urgent priority.

  - *Low Priority*. Message is marked with low priority.

- *Show Ticket Logs*. If you select this checkbox, the complete Ticket Log is included with the email.

- *Show Cloaked Notes*. If you select this checkbox, the email will include cloaked comments from the Notes & Attachments section of the ticket. By default, cloaked comments are not included in email messages about the ticket.

> **NOTE**: The *Show Cloaked Notes* checkbox appears only for users who have been granted the Access Hook "Ticket:Notes:Cloaked".

- *Add to Ticket Notes*. If you select this checkbox, the entire text of the email is added to the Notes & Attachments section of the ticket.

- *Message*. By default, SL1 includes all of the information about the ticket from the **Ticket Editor** page, plus all information from the **Ticket Logs** page. SL1 also includes a link to the ticket. However, you can delete this text and enter your own. You can also include a document template, image, or video in this field.

To send the email, click the **[Send]** button.

Organizational Tickets
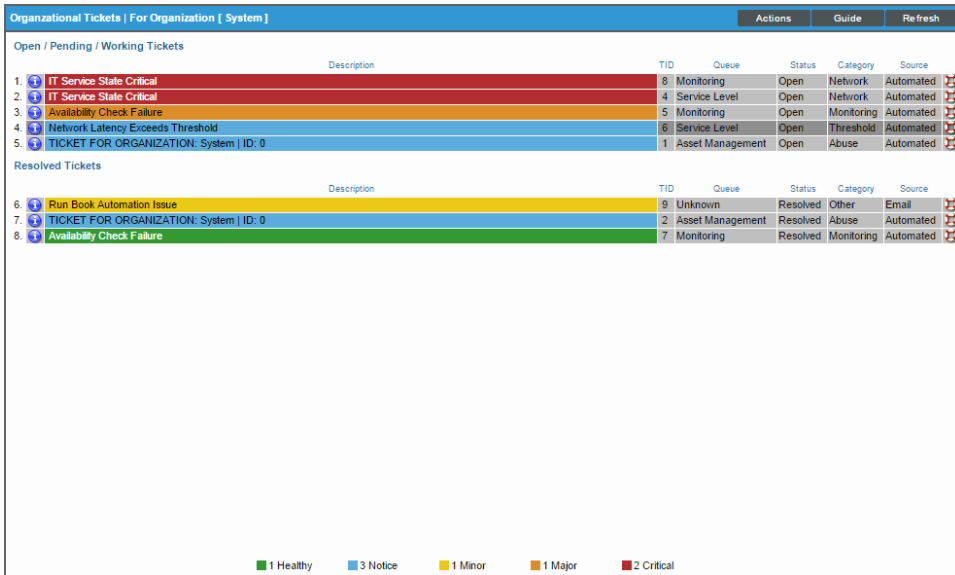
The **Organizational Tickets** page displays all open, pending, working, or resolved tickets associated with the organization. The **Organizational Tickets** page displays only critical information about each ticket. If you require more detail, you can access the **Ticket Editor** page for the ticket, directly from this page.

To get to the **Organizational Tickets** page:

1. Go to Registry > Accounts > Organizations.
2. Click the wrench icon (🔧) next to the organization for which you wish to view tickets.
3. Click the **[Tickets]** tab.

Viewing the List of Tickets

The **Organizational Tickets** page displays a list of all tickets of all statuses that are associated with the organization.

Tickets with a **Status** of *Open*, *Pending*, or *Working* appear in a pane at the top of the page. Tickets with a **Status** of *Resolved* appear in a separate pane at the bottom of the page.

For each of these tickets, the **Organizational Tickets** page displays the following:

- *Description*. Description of the problem or request.
- *Severity*. Severity of the ticket. This is represented by the background color of the description field. Choices are:

  - *Critical*. Critical tickets are those that require immediate attention.
  - *Major*. Major tickets are those that require immediate investigation.
  - *Minor*. Minor tickets are those that need to be investigated before problems become severe.
  - *Notice*. Notice tickets are those that require attention but are not problem-related.
  - *Healthy*. Healthy tickets are those that are not urgent.

- *TID*. Unique ID assigned to the ticket. This ID is generated by SL1.
- *Queue*. Ticket Queue to which the ticket is assigned.

- *Status*. Status of the ticket. The choices are:

  - *Open*. Ticket has been created.

  - *Pending*. Ticket has been acknowledged.

  - *Working*. Someone is working on the ticket.

  - *Resolved*. The ticket has been resolved and closed.

- **Ticket Category**. Descriptive category assigned to the ticket. The list of possible categories is customized by the system administrator in the **Select Objects Editor** page (System > Customize > Select Objects).

- **Ticket Source**. Original source for the ticket. Choices are:

  - *Automated*. Ticket was created automatically when an event occurred. An administrator has configured SL1 to behave this way.

  - *Email*. An email about an issue prompted this ticket.

  - *External*. An external source created this ticket.

  - *Internal*. Ticket created in SL1.

  - *Phone*. A phone call about an issue prompted this ticket.

Viewing the Ticket Summary Page

From the **Organizational Tickets** page, you can access the **Ticket Summary** modal page for each ticket. To access the **Ticket Summary** page for a ticket:

1. In the **Organizational Tickets** page, find the ticket you are interested in. Click its information icon ( ).

2. The **Ticket Summary** modal page for that ticket appears.

Accessing the Ticket Editor page for a Ticket

From the **Organizational Tickets** page, you can access the **Ticket Editor** page and all the tools in the ticket panel. To access the **Ticket Editor** page and all the tools in the ticket panel for a single ticket:

1. In the **Organizational Tickets** page, find the ticket you are interested in. Click its life-ring icon ( ).

2. The **Ticket Editor** page for that ticket appears. From the **Ticket Editor** page, you can also access the tabs for all the other pages in the Ticket Panel.

> **NOTE:** For more information on viewing an organization's Critical Contact List, Product Usage List, or Organizational Sub-Locations, see the *Organizations and Users* manual.

Chapter

3

Creating and Editing Tickets

Overview

This chapter describes manually creating tickets, creating a ticket from an event, automatically generating tickets, and editing a ticket 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:

Manually Creating a Ticket

In some cases, you might want to manually create a ticket instead of creating a ticket from an event. When you manually create a ticket, you must supply values in each field, because SL1 does not automatically populate them.

There are two ways you can manually create a ticket from the **Ticket Console** page. The first option is to:

1. Go to the **Ticket Console** page ([**Tickets**] tab).
2. Click the [**Create**] button in the upper right of the page.
3. The **Ticket Editor** modal page appears. Enter values in the following fields:

- *Description*. A brief description of the problem or ticket. If you create a ticket from an event in the **Event Console**, this field is populated automatically by SL1.

- *Organization*. Select the organization with which the ticket will be associated in the drop-down menu. If you create a ticket from an event in the **Event Console**, this field is populated automatically by SL1.

- *Element*. By default, this field includes the element associated with this the event. Can be an organization, device, device group, asset record, IP network, interface, vendor, or user account. To change the element or find another element, click the binoculars icon (🔍). The **Finder** page appears, where you can search for another element.

- *Aligned Event*. If applicable, the event that is associated with the ticket. Clicking on the icon displays read-only details about the event.

- *Ticket Description*. Description of the problem or ticket. By default, this field includes the Event Message from the event. You can edit this field to suit your business requirements.

- *Alternate Location*. This field appears only if the selected organization has one or more alternate locations. If the selected organization has one or more alternate locations, you can select one of those locations in this field.

- *Ticket State*. Custom parameter, defined in the **Ticket States** page (Registry > Ticketing > Custom States). Allows you to add additional workflow restrictions to a ticket.

- *Status*. Status of the ticket. The choices are:

  - *Open*. Ticket has been created.
  - *Pending*. Ticket has been acknowledged.
  - *Working*. Someone is working on the ticket.
  - *Resolved*. Issue has been resolved.

- *Severity*. The severity of the problem. When a ticket is created from an event in the **Event Console**, this field is populated automatically by SL1 with the event's severity. The choices are:

  - Severity 5/Healthy
  - Severity 4/Notice

- Severity 3/Minor
- Severity 2/Major
- Severity 1/Critical

- **Category**. Descriptive category assigned to the ticket. You can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the list of possible categories.

- **Source**. Original source for the ticket. You can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the list of possible sources. The default choices are:

  - *Automated*. Ticket was created automatically when an event occurred. An administrator has configured SL1 to behave this way.
  - *Email*. An email about an issue prompted this ticket.
  - *External*. An external source created this ticket.
  - *Internal*. Ticket created in SL1.
  - *Phone*. A phone call about an issue prompted this ticket.

- **Queue**. *Ticket Queue* to which the ticket will be assigned. When you select a Ticket Queue, SL1 will populate the **Assigned User** field with a list of members from the specified queue.

- **Assigned User**. User who is responsible for resolving the ticket. This drop-down list contains entries for each user assigned to the specified Ticket Queue and who has a Login State of *Active*. When a ticket is assigned to a user, SL1 automatically sends the user an email message as notification.

- **Custom Fields**. If your SL1 system includes embedded custom fields for tickets, you can supply a value in those fields.

4. Click the **[Save]** button.

5. The **Ticket Editor** page appears, where you can further define the ticket.

The second option is to:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Click the wrench icon (🔧) for a ticket.

3. The **Ticket Editor** modal page appears. In the **Ticket Editor** modal page, click the **[New]** button.

4. The **Ticket Editor** modal page appears. The **Ticket Editor** modal page contains the same fields as described above.

5. To save the ticket, click the **[Save]** button.

Adding & Editing Notes to a Ticket

The **Notepad Editor** allows you to enter notes or comments about a ticket.

To add a note to a ticket, click the **[New Note]** button in the **Ticket Editor** page. A new instance of the **Notepad Editor** will appear in the **Notes & Attachments** pane. To edit a note, click the wrench icon (🔧) for the note you want to edit.

- In the **Notepad Editor**, you can format the text and include links, images, and videos in a note. Each link included in the **Notepad Editor** will open in its own window.

- The *Note Type* field allows you to specify whether the note text will be saved as Plain text or HTML. The default value is HTML. The note will retain this mime type in the API, the *Message tab* of the Ticket Editor, and in the report generated from the *Report Creator modal page*.

- You can also use a document template to create a note.

- To add an attachment to a note, click the paperclip icon (   ), and then click the **[Browse]** button to choose the file you want to attach to the note.

> **NOTE**: If an attachment has been prohibited by a *Ticket Attachment Blacklist* item, the attachment will fail and SL1 will display an error message.

- In the **Notepad Editor**, you can select the *Cloaked* checkbox. When you select this checkbox, the note you create in the **Notepad Editor** is "cloaked". A cloaked note can be viewed only by:

  - The user who created the note

  - All EM7 users of type "administrator"

  - Users in the same organization as the user who created the note, who have Access Hooks that allow them to view the ticket where the cloaked note resides and who also have the Access Hook "Ticket:Notes:Cloaked"

  - Recipients of emails about the ticket, sent from the **Send Message** pane, with the *Show Cloaked Notes* checkbox selected

- Click the **[Save]** button to save all the changes you made in the **Ticket Editor** page.

> **NOTE**: When SL1 generates an email about a ticket, the email will NOT include any attachments that were added to notes in the ticket. To view and open attachments, the email recipient must follow the link to the actual ticket on SL1.

Creating a Ticket From an Event

Events are messages that are triggered when a specific condition is met. For example, an event can signal that a service has gone down or that a device is exceeding CPU or disk space thresholds, or it can simply display the status of a managed element. In SL1 you can create tickets in response to an event.

> **NOTE**: If you have selected *Create/View External Ticket* for the global setting *Event Console Ticket Life Ring Button Behavior* in the **Behavior Settings** page (System > Settings > Behavior), you cannot create a ScienceLogic ticket from the **Event Console**.

To create a ticket from an event:

1. Go to the **Event Console** page (**[Events]** tab).

2. Find the event for which you want to create a ticket. Click its life ring icon ().

3. The **Ticket Editor** page appears. The **Ticket Editor** page displays the same read-only information described in the section **Viewing the Ticket Editor Page** in *Viewing Tickets*. You can also enter values in the fields in the Ticket Properties pane described in the *Manually Creating a Ticket* section of this chapter.

4. To add an optional note to the ticket, enter text into the **Notepad Editor**. To add additional notes, click the **[New Note]** button and new instance of the **Notepad Editor** will appear in the **Notes & Attachments** pane.

NOTE: When you create a new ticket, the **Notepad Editor** automatically opens a blank note. If you don't include any text in the blank note, SL1 does not save the note with the ticket.

- In the **Notepad Editor**, you can format the text and include links, images, and videos in a note. Each link included in the **Notepad Editor** will open in its own window.

- You can change the size of the pane for the note by dragging the lower-right corner of the pane.

- You can add an attachment to a note by clicking the paperclip icon (), and then clicking the **[Browse]** button to choose the file you want to attach to the note.


NOTE: If an attachment has been prohibited by a *Ticket Attachment Blacklist* item, the attachment will fail and SL1 will display an error message.

- You can also use a document template to create a note.

- In the **Notepad Editor**, you can select the *Cloaked* checkbox. When you select this checkbox, the note you create in the **Notepad Editor** is "cloaked". A cloaked note can be viewed only users who have the Access Hook "Ticket:Notes:Cloaked".

5. Click the [Save]button.

Tickets From Email

SL1 can automatically generate tickets based on received email messages. The **Tickets From Emails** page (Registry > Ticketing > Email Tickets) allows users to configure:

- One or more destination email addresses that external programs can send email messages to. All email messages sent to the specified email addresses will be turned into tickets by SL1.
- Default ticket templates to use when creating the tickets.
- Default reply messages to send back to the email originator.

To configure SL1 to generate a ticket from an incoming email, you must perform the following steps:

1. Define System Settings that allow SL1 to receive incoming email messages. To learn more about inbound email, see the manual *Configuring Inbound Email*.

2. Ensure that the DNS server that handles name-service for the ScienceLogic network is configured correctly to direct email messages to SL1.

3. In the **Tickets From Emails** page, define a ticket-from-email policy. To learn how to create a ticket-from-email policy, see the section *Creating a Ticket From Email Policy*.

4. Configure the third-party system to send ticket messages to SL1 via email.

Creating a Ticket From Email Policy

Perform the following steps to create a Ticket From Email policy:

1. Go to the The **Tickets From Emails** page (Registry > Ticketing > Email Tickets).
2. Click the **[Create]** button to bring up the **Add Policy** page.
3. To create a Ticket from Email policy, enter a value in each of the following fields:

- **Policy Name.** Enter a name for the policy. Can be any combination of alpha-numeric characters, up to 64-characters in length.

- **Destination Email.** Enter the email address that ticket emails will be sent to in the field. Can be any combination of alpha-numeric characters, up to 64-characters in length. Each Ticket from Email policy should have a unique email address.

  - The domain specified in this field must be defined in the Authorized Email Domains field in the **Email Settings** page (System > Settings > Email).

  - A DNS MX record must already exist or be created for the email domain specified in this field (the email domain is the part of the email address after the "@" character). The DNS MX record must map the domain to the email server. Each Database Server includes a built-in email server. When creating the DNS MX record, use the fully-qualified name of the appliance as the name of the email server.

- **Reply Email.** Enter the email address that SL1 will send notification emails from. Users will reply to this email address to add notes to tickets created from email.

- **Ticket Template.** Select a ticket template from the drop-down list. For more information on creating a ticket template, see *Ticket Templates*. The ticket template used will define the ticket queue and other attributes of tickets created by this policy.

- **Ticket Access.** Select a security level from the drop down list. The following options are available:

- *Open Access.* Any email sent to the **Destination Email** address will create a ticket.

- *Any Registered Users.* Email sent to the **Destination Email** address from an email address associated with a user account in the SL1 system will create a ticket.

- *Registered Users in Queue.* Email sent to the **Destination Email** address will create a ticket if:
    - The "from" email address is associated with a user account in the SL1 system.
    - The user account also has access to the ticket queue defined in the ticket template.

- **Email Note Visibility.** Select whether incoming emails are added to the ticket as cloaked or uncloaked notes. For more information about cloaked notes, see *Viewing Notes and Attachments*. The following options are available:

    - *Message body as uncloaked note.* The message body of incoming emails will be added to the ticket as an uncloaked note that is visible to all users who can view the ticket.

    - *Message body as cloaked note.* The message body of incoming emails will be added to the ticket as a cloaked note that is visible only to users who can view cloaked notes for the ticket.

You can enter messages that will be sent as an automatic notification email based on the result of an inbound email sent to the **Destination Email** address. Automatic notification emails will be sent from the **Reply Email** address. You can enter message text for any number of the five results. If there is no message defined for a result, no reply email will be sent when that result occurs. The possible results are:

- **Ticket Creation Successful.** A ticket has been created successfully from the email.

    - If included in this field, the characters "%t" (without quotation marks) will be replaced with the ticket ID of the newly created ticket.

    - If included in this field, the characters "%W" (without quotation marks) will be replaced with a link to the newly created ticket.

- **Error: Sender not in Queue.** Optional. You can enter text in this field, and SL1 will include the text in reply emails when the original sender is not a member of the default ticket queue.

- **Ticket Creation Failed.** Optional. Users can enter text in this field, and SL1 will include the text in reply emails when an email fails to generate a ticket.

- **Ticket Change Status/Update.** Optional. You can enter text in this field, and SL1 will include the text in reply emails when an email has successfully updated a ticket.

- If included in this field, the characters "%t" (without quotation marks) will be replaced with the ticket ID of the newly created ticket.

- If included in this field, the characters "%W" (without quotation marks) will be replaced with a link to the newly created ticket.

- **Error: Sender not Registered.** Optional. You can enter text in this field, and SL1 will include the text in reply emails when the original sender is not a registered user.

4. Click the **[Save]** button to save the policy.

Automatically Editing a Ticket from Email

You can add notes to a "ticket from email" by sending an email message to SL1.

After SL1 creates a "ticket from email", SL1 automatically sends a notice email to the creator of the ticket when the ticket is created successfully or if the ticket is updated.

The user who receives the automatic notice email can add a note to the ticket by replying back to SL1. To add a note to the ticket, the user who receives the automatic notice from SL1 should:

- reply to the automatic notice.
- not change the subject of the email.
- in the body of the email, include the text to attach to the ticket.

The note from the email message will appear in the **Notes & Attachments** pane of the ticket.

Scheduled and Recurring Tickets

You can view a list of recurring tickets, define new recurring tickets, and edit the properties of existing recurring tickets from the **Schedule Manager** page (Registry > Ticketing > Scheduler).

> **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.

Recurring tickets are automatically generated at regular intervals. For example, recurring tickets can be defined for hourly, daily, weekly, or monthly tasks. Users can then use all the ticket tools and reports in SL1 to track and monitor these recurring tasks.

Viewing the Calendar

The **Recurring Ticket Scheduler** page (Registry > Ticketing > Scheduler) is divided into two parts:

- The right side displays a calendar where you can view, create, and edit scheduled tickets.
- The left side includes buttons that control the display of the calendar on the right side.

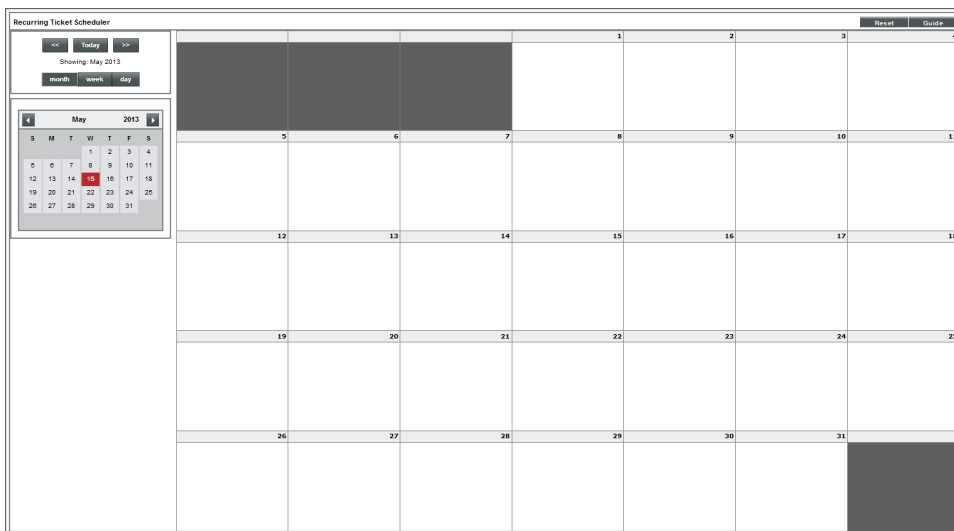The left side of the page contains the following features:

- **[<<]**. Displays the previous month, week, or day (depending on the selected calendar view) in the right pane.
- **[Today]**. Displays the current month, week, or day (depending on the selected calendar view) in the right pane. The left side, in the static calendar, displays the current month, with the current day highlighted.
- **[>>]**. Displays the next month, week, or day (depending on the selected calendar view) in the right pane.
- **[month]**. Displays a monthly calendar in the right pane.
- **[week]**. Displays a weekly calendar in the right pane.
- **[day]**. Displays a daily calendar in the right pane.

- *monthly calendar*. Static calendar that always displays an entire month. The current day's date is highlighted in red.
- **[<]**. In the static, monthly, calendar viewer, displays the previous month.
- **[>]**. In the static, monthly, calendar viewer, displays the next month.

The right side displays the selected calendar (daily, weekly, or monthly).

- All scheduled and recurring tickets are displayed in the calendar.
- In the monthly or weekly view, *clicking on a date* zooms in to the daily view, with increments every hour.
- In the daily view, *clicking on an hour or half-hour* displays the **Schedule Ticket** modal page, where you can schedule a ticket (either one time only or recurring).

In the monthly, weekly, or daily view, clicking on an already scheduled ticket displays the **Ticket Details** page, where you can view or edit the parameters for an already-scheduled ticket.
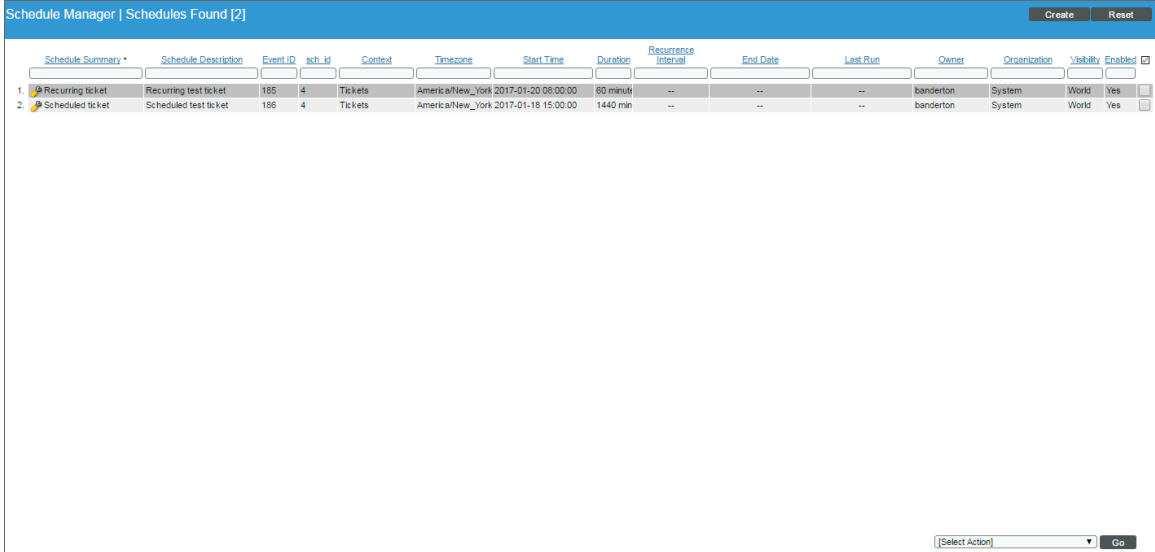

Scheduled and Recurring Tickets

You can view a list of recurring tickets, define new recurring tickets, and edit the properties of existing recurring tickets from the **Schedule Manager** page (Registry > Ticketing > Scheduler).

> **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.

Recurring tickets are automatically generated at regular intervals. For example, recurring tickets can be defined for hourly, daily, weekly, or monthly tasks. Users can then use all the ticket tools and reports in SL1 to track and monitor these recurring tasks.

Viewing the Schedule Manager

The **Schedule Manager** page (Registry > Ticketing > Scheduler) displays the following information about each scheduled or recurring ticket:

- *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 ticket, click its wrench icon (🔧) and update the ticket as needed on the **Schedule Editor** modal page. (For more information, see the section *Defining a Scheduled or Recurring Ticket*.)

Defining a Scheduled or Recurring Ticket

You can schedule a ticket in SL1 from the **Schedule Manager** page. SL1 will automatically create the ticket at the scheduled time.

To define a scheduled or recurring ticket:

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

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.

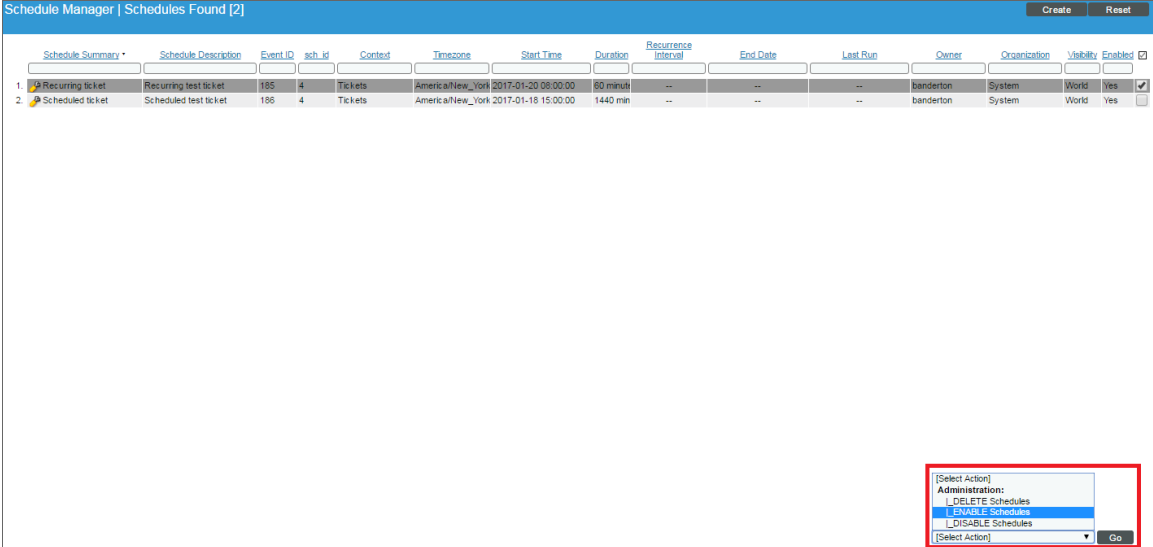- *Description*. Type a description of the scheduled process.

<u>Action Settings</u>

- *Ticket Template*. Select a scheduler ticket template from the list. Ticket templates tell SL1 how to create the ticket and what information to include in the ticket. Ticket templates are defined on the **Ticket Templates** page (Registry > Ticketing > Templates).

4. Click **[Save]**.

Enabling or Disabling One or More Scheduled Tickets

You can enable or disable one or more scheduled or recurring tickets from the **Schedule Manager** page (Registry > Ticketing > Scheduler). To do this:

1. Go to the **Schedule Manager** page (Registry > Ticketing > Scheduler).

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 Tickets

You can delete one or more scheduled or recurring tickets from the **Schedule Manager** page (Registry > Ticketing > Scheduler). To do this:

1. Go to the **Schedule Manager** page (Registry > Ticketing > Scheduler).

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.

Creating a Ticket With an Automation Policy

An automation policy allows you to define the event conditions under which an automatic action should be executed. When the criteria in an automation policy are met by an event, one or more actions are executed. These actions are defined in an action policy.

For example, an automation policy might specify: if the event "illicit process" occurs on device "mailserver01", the event is not cleared within five minutes, and no ticket exists for the event, execute the action policy "create ticket for illicit". The action policy "create ticket for illicit" could create a ticket about the "illicit process" event and request actions to fix the problem.

- In most cases, if you want an automation policy to create a ticket, you should include the criteria "and ticket is not created". This prevents SL1 from creating a duplicate ticket for an event if a user has already manually created the ticket or if a previous instance of the event triggered this automation policy.
- The automation policy should execute an action policy of type "Create a New Ticket".

To read more on viewing, creating, or editing an automation or action policy, including an example on creating an action policy that creates a ticket, see the *Using Run Book Automation* manual.

Editing a Ticket by Defining Automation Policies

SL1 can also automatically edit a ticket with an automation policy. For example, an automation policy might specify: if the event "illicit process" occurs on device "mailserver01", and the event is not cleared within eight minutes, execute the action policy "edit ticket for illicit". The action policy "edit ticket for illicit" could increase the severity of the existing ticket that was previously generated for this event.

If you want to edit an existing ticket that was created with an automation policy, in most cases you will have to create two automation policies: one to create the ticket and one to edit the ticket.

In most cases, if you want an automation policy to create a ticket, you should include the criteria "and ticket is not created". In most cases, if you want an automation policy to edit an existing ticket, you would not include the criteria "and ticket is not created".

To edit an existing ticket, the automation policy should execute an action policy of type "Update an Existing Ticket".

To read more on viewing, creating, or editing an automation or action policy, including an example on creating an action policy that creates a ticket, see the *Using Run Book Automation* manual.

Editing a Single Ticket

You can edit a single ticket from the **Ticket Console**. To edit a single ticket:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Find the ticket you want to edit. Click its wrench icon (🔧).

3. The **Ticket Editor** page appears, where you can edit one or more parameters of the ticket. From this page, you can also access the following tabs and pages and view and edit further details about the ticket:

- *Properties*. The **Ticket Editor** page allows you to view, define, and edit the parameters of a ticket.
- *Logs*. The **Ticket Logs** page displays a history of the selected ticket. Each change to the ticket, from its creation to the current time, is displayed in a table in this page. The table lists these changes chronologically, with the oldest first.
- *Automation*. If the ticket was created with an Automation Policy, this tab is enabled. The **Event Actions Log** page displays a log entry for the ticket that describes the Automation Policy and Action Policy that were used to create the ticket.
- *Message*. The **Send Message** page allows you to create email messages about a selected ticket. This makes it easy to communicate about events and tickets with the appropriate team members, without having to leave SL1.

> **NOTE:** You can also use the *Select Actions* field in the **Ticket Console** page, a Run Book action, or an Escalation Policy to change the value of one or more ticket fields.

> **NOTE**: To learn more about the **Ticket Editor** page, see the section on *Creating a Ticket From an Event*.

4. Click the **[Save]** button in each page where you edit a ticket field.

Editing Multiple Tickets

You can edit multiple or all tickets at once from the **Ticket Console** page. To edit multiple or all tickets:

1. Go to the **Ticket Console** page (**[Tickets]** tab).
2. In the **Ticket Console** page, select the checkbox for each ticket you want to apply the action to. To select all checkboxes for all tickets, select the red checkbox at the top of the page (☑).
3. In the *Select Action* drop-down list, select one of the following actions:

- *Update Modified Date*. For all selected tickets, changes the value of the "modified date" field to today's date.

- *Take Ownership*. For each selected ticket, puts your username in the **Assigned User** field in the **Ticket Editor** page.

- *Print Report*. Generates a report that includes each selected ticket. Leads to the **Report Creator** modal page, where you can define a ticket report, including the information to include in the report and the format in which to generate the report.

- *Resolve Tickets*. Sets ticket status to "resolved". When a parent ticket is resolved, its children tickets are automatically resolved. When you select this option, SL1 displays the **Ticket Resolution** modal page.

- *Delete Tickets*. Deletes each selected ticket from SL1.

NOTE: The *Delete Tickets* option is unavailable by default. To enable the *Delete Tickets* option, you must edit a setting in the main ScienceLogic configuration file (silo.conf). For instructions on how to edit the main ScienceLogic configuration file, see the *System Administration* manual.

- *Move to State*. For each selected ticket, changes the value in the **Ticket State** field in the **Ticket Editor** page. For details on ticket states, see *Custom Ticket States*. In the drop-down list to the right, you can select from a list of allowed ticket states.

- *Move to Queue*. Moves all selected tickets to the selected ticket queue. In the drop-down list to the right, you can select from a list of all existing ticket queues.

- *Assign to User*. For each selected ticket, changes the value in the **Assigned User** field in the **Ticket Editor** page. In the drop-down list to the right, you can select from a list of all users with a Login State of *Active*.

- *Change Severity*. For all selected tickets, changes the value in the "Severity" field. In the drop-down list to the right, you can select from a list of the following severities:

  - *Critical*. Critical tickets are those that require immediate attention.

  - *Major*. Major tickets are those that require immediate investigation.

  - *Minor*. Minor tickets are those that need to be investigated before problems become severe.

  - *Notice*. Notice tickets are those that require attention but are not problem-related.

  - *Healthy*. Healthy tickets are those that are not urgent.

- *Change Status*. For all selected tickets, changes the value in the "Status" field. In the drop-down list to the right, you can select from a list of the following statuses:

  - *Open*. Ticket has been created.

  - *Pending*. Ticket has been acknowledged.

  - *Working*. Someone is working on the ticket.

- *Resolved*. Issue has been resolved. When a parent ticket is resolved, its children tickets are automatically resolved. When you select this option, SL1 displays the **Ticket Resolution** modal page.

NOTE: The *Change Status* option does not appear in this menu if you created custom ticket states and each custom ticket state has the *Force Aligned Status* field set to *Yes*. For details on custom ticket states, see *Custom Ticket States*.

- *Change Source*. For all selected tickets, changes the value in the *Source* field. Administrators can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the list of possible categories in this field. In the drop-down list to the right, you can select from a list of the following sources:

  - *Automated*. Ticket was created automatically when an event occurred. An administrator has configured SL1 to behave this way.
  - *Email*. An email about an issue prompted this ticket.
  - *External*. An external source created this ticket.
  - *Internal*. Ticket created in SL1.
  - *Phone*. A phone call about an issue prompted this ticket.

- *Change Category*. For each selected ticket, changes the value in the *Category* field. In the drop-down list to the right, you can select from a list of all categories. Administrators can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the list of possible categories in this field.

- *Edit Custom Field*. For each selected ticket, displays a sub-list of custom fields. When you select a custom field, you change the value in the field in the **Ticket Editor** page for each selected ticket. In the drop-down list to the right, you can select a value to enter into the selected custom field.

4. Click the **[Go]** button.

5. Each selected ticket will be changed as specified. To see the changes immediately, click the **[Refresh]** button.

Sending an Email about a Ticket

The **Send Message** page allows you to manually create email messages about a selected ticket. To access the **Send Message** page, click the **[Message]** tab in the **Ticket Editor** page. The **Send Message** page makes it easy to communicate about events and tickets with the appropriate team members, without having to leave SL1.

By default, SL1 automatically sends an email message to the ticket assignee when:

- A ticket is assigned to that user
- A ticket is updated

You can also assign one or more watchers to the ticket. A ticket watcher is a user (in addition to the ticket's assignee) that receives email updates about the ticket. If a watcher is added to a ticket, SL1 automatically sends the watcher an email message when certain actions are taken on the ticket.

By default, the following watchers are assigned to a ticket when the ticket is created:

- The user who created the ticket (if applicable)
- Each user who was defined as a watcher in the ticket's ticket template (if applicable)
- Each user who was defined as a watcher for the ticket's initial ticket queue (if applicable)
- Each user who was defined as a watcher for the ticket's initial organization (if applicable)

SL1 automatically generates email messages for a ticket's watchers when:

- An uncloaked note is added to the ticket
- A ticket is moved to a different queue
- A ticket's state has changed
- A ticket's status has changed
- A custom field has changed
- A ticket is resolved
- A ticket is resurrected

> **NOTE**: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

From the **Send Message** page, you can manually create and send an email message about a ticket. To create the email, supply values in the following fields:

> **NOTE**: If the email is sent to a user, SL1 uses the time zone specified for the user (in the **Account Permissions** page). If the email is sent to a user who does not have an account, SL1 uses the System time zone (from the System > Settings > Behavior page).

- *To*. Type the email addresses of the people you want to notify about the ticket. By default, this field automatically includes the email address of each watcher for this ticket. You can delete these email addresses. You can also manually enter other email addresses, separated by commas, in this field.
- *CC*. Type the email addresses of the people you want to receive a copy of the email message. If you type a list of email addresses, separate them with commas.
- *BCC*. Type the email addresses of the people you want to receive a blind copy of the email message. If you type a list of email addresses, separate them with commas.

- *Subject*. This field is populated automatically with the severity and a description of the selected ticket or event. You can delete this text and manually type a subject.

- *Sender's Address*. Allows you to specify the "From" address that appears in the email. You can use the **Ticket Queue Properties** modal page (Registry > Ticketing > Queues > Edit/Create) to define the default value that appears in this field. You can specify that the field contains either the Queue Email Address or the email address of the last user to edit the ticket. You can also manually type an email address in this field.

> **NOTE**: By default, the *Sender's Address* field includes the **Queue Email Address**. If no such email address is defined for the ticket's queue, by default the *Sender's Address* field contains the email address of the current user.

- *Message Format*. SL1 formats the ticket for specific displays. Your choices include:

  - *HTML Formatted*. SL1 includes relevant information about the ticket as a formatted table. SL1 also includes more details, including ticket history, with this method. This is the default method.

  - *Text Formatted*. SL1 includes relevant information about the ticket as unformatted text.

  - *Pager Formatted*. SL1 includes a condensed set of ticket information, formatted for a pager.

- *Message Priority*. Specifies flags to add to the message. Most email clients can display a flag for high-priority messages. You can select from the following:

  - *Normal Priority*. Message is marked with normal priority.

  - *Urgent Priority*. Message is marked with urgent priority.

  - *Low Priority*. Message is marked with low priority.

- *Show Ticket Logs*. If you select this checkbox, the complete Ticket Log is included with the email.

- *Show Cloaked Notes*. If you select this checkbox, the email includes cloaked comments from the **Notes & Attachments** section of the ticket. By default, cloaked comments are not included in email messages about the ticket.

> **NOTE**: The *Show Cloaked Notes* checkbox appears only for users who have been granted the Access Hook "Ticket:Notes:Cloaked".

- *Add to Ticket Notes*. If you select this checkbox, the entire text of the email is added to the **Notes & Attachments** section of the ticket.

- *Message*. By default, SL1 includes all information about the ticket (from the **[Properties]** tab in the **Ticket Editor** page), plus all information from the **[Logs]** tab in the **Ticket Editor** page. SL1 also includes a link to the ticket. However, you can delete this text and type your own. You can also include a document template in this field.

- **[Send]**. Click this button to send the email message.

Chapter

4

Resolving Tickets

Overview

When the requirements of a ticket are satisfied and a solution is implemented, the ticket can be *resolved*. This chapter describes how to resolve tickets, and how to view a list of resolved tickets

After a ticket is resolved, SL1 does not display the ticket in the **Ticket Console** page by default. However, you can view a list of resolved tickets in the **Ticket Console** page if you modify the filters for the page.

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:

Resolving a Ticket

You can resolve a ticket when its requirements are satisfied and a solution is implemented. After a ticket is resolved, SL1 can automatically generate an email and send that email to other users to notify them of the change to the ticket. To set the status of a ticket to resolved:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Find the ticket you want to resolve and click its wrench icon (🔧). The **Ticket Editor** page appears.

3. There are two ways to resolve a ticket from the **Ticket Editor** page, either selecting *Resolve Ticket* from the **[Actions]** menu, or clicking the **[Resolve]** button.

4. To resolve the ticket using the **[Actions]** menu, click the **[Actions]** menu and choose *Resolve Ticket*. The **Ticket Resolution** modal page appears.

5. The **Ticket Resolution** modal page contains the following fields:

   - *Cause*. The cause of the problem associated with the ticket. Administrators can use the **Select Objects Editor** page (System > Customize > Select Objects) to customize the entries that appear in this field. You can also select one of the default options from the list. Default choices are:

     ○ *Customer Change*

     ○ *Facility Failure*

     ○ *Hardware Failure*

     ○ *Human Error*

     ○ *Internal Change*

NOTE: You can use the field above the *Cause* field to filter the list of values. If you enter an alpha-numeric string in the filter field, the *Cause* field will include only values that match the string.

- *Resolution*. Describes how the ticket was resolved. Administrators can use the **Select Objects Editor** page (System > Customize > Select Objects to customize the entries in this field. You can also select one of the default options from the list. Default choices are:

  - *Client Fix*
  - *Internal Fix*
  - *No Change*
  - *Resolved*
  - *Software Fix*
  - *Vendor Fix*

NOTE: You can use the field above the *Resolution* field to filter the list of values. If you enter an alpha-numeric string in the filter field, the *Resolution* field will include only values that match the string.

- *Clear Aligned Events*. If the ticket is associated with an event, the event will be cleared after the ticket is resolved. Select this checkbox to clear the event; do not select it if you would not like to clear the aligned event.
- *Suppress Notifications*. By default, when a ticket is updated, including when its status changes, SL1 automatically sends an email message to the ticket creator, ticket assignee, and any ticket watchers for the ticket. If you select this checkbox, SL1 will not send an email message when the ticket is resolved. By default, this checkbox is not selected and SL1 notifies the ticket creator, ticket assignee, and any ticket watchers when the ticket is resolved.

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignee and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

- *Email Recipients*. This field lists the email addresses that SL1 will automatically send an email message to when the ticket is resolved. By default, SL1 automatically sends an email message to the ticket creator, ticket assignee, and any ticket watchers for the ticket when the ticket is resolved.
- *Additional Email Recipients*. In addition to the ticket creator, user assigned to the ticket, and all ticket watchers, you can specify additional people to be emailed about the resolved ticket. If you want SL1 to notify additional people, you must manually enter their email address(es) in this field.
- *Resolution Note*. You can enter text to include with the resolved ticket. You can format the text and include links and images in this field.

- *Cloak checkbox*. When you select this checkbox, the note you entered in the *Resolution Note* field is "cloaked". A cloaked note can be viewed only by users who have the Access Hook "Ticket:Notes:Cloaked".

6. To resolve the ticket and clear it from the list of active tickets in the **Ticket Console** page, click the **[Resolve]** button at the bottom of the **Ticket Resolution** page. To clear the fields in the *Ticket Resolution* modal page without saving any values, click the **[Reset]** button.

7. You can also resolve the ticket by clicking the **[Resolve]** button located at the bottom of the **Ticket Editor** page. Clicking the **[Resolve]** button will bring up the **Ticket Resolution** page, where you can fill out the fields described above to resolve the ticket.
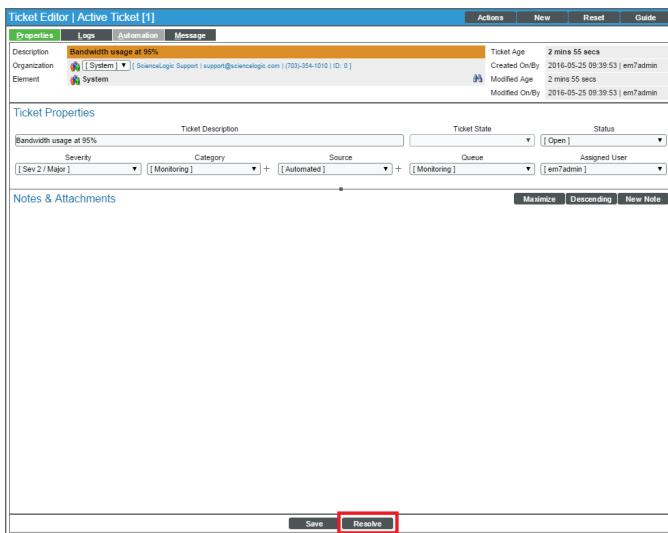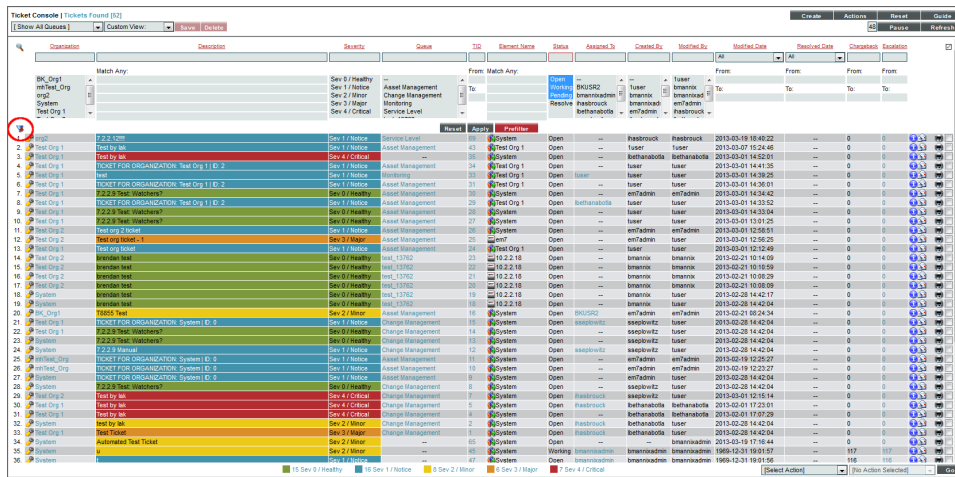
> **NOTE:** You can also use the *Select Action* fields, a Run Book action, or an Escalation Policy to set a ticket's status to "Resolved".

Viewing a List of Resolved Tickets

By default, the **Ticket Console** page displays a list of active tickets only. You can, however, define additional filters that cause the **Ticket Console** page to display tickets that are resolved. This can be helpful if you have a ticket and would like to see how similar tickets were resolved, or you would simply like to see a full ticket history. To view a list of resolved tickets:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. In the **Ticket Console** page, click the Funnel icon ( ) in the upper left of the page.

3. The Advanced Filter Tool displays a list of options for filtering the list of tickets in the **Ticket Console** page. You can define a filter for one, multiple, or all columns in the **Ticket Console** page. For example, you can choose to view tickets from certain organizations only, certain queues only, or certain severity only.

4. In the *Status* field, by default, all statuses are highlighted except for Resolved. To display tickets with a status of Resolved, select *Resolved* in this field. You can select multiple options by holding down the **<Shift>** key.

NOTE: After selecting one or more filters, you can reduce the number of options displayed in the remaining filters by clicking the **[Pre Filter]** button. When **[Pre Filter]** is clicked, SL1 calculates how many tickets would be displayed if the chosen filters are applied. The options displayed for the remaining filters are reduced to only those that apply to the potential list of displayed tickets. For example, suppose that five organizations are defined in your implementation of SL1. Initially, all five organizations will be displayed in the Organizations filter. Suppose that all tickets with a severity of "Critical" are associated with either the "System" organization or the "East Coast NOC" organization. Now suppose you select "Critical" in the Severity filter, then click the **[Pre Filter]** button. The Organizations filter would display only the organizations "System" and "East Coast NOC".

---
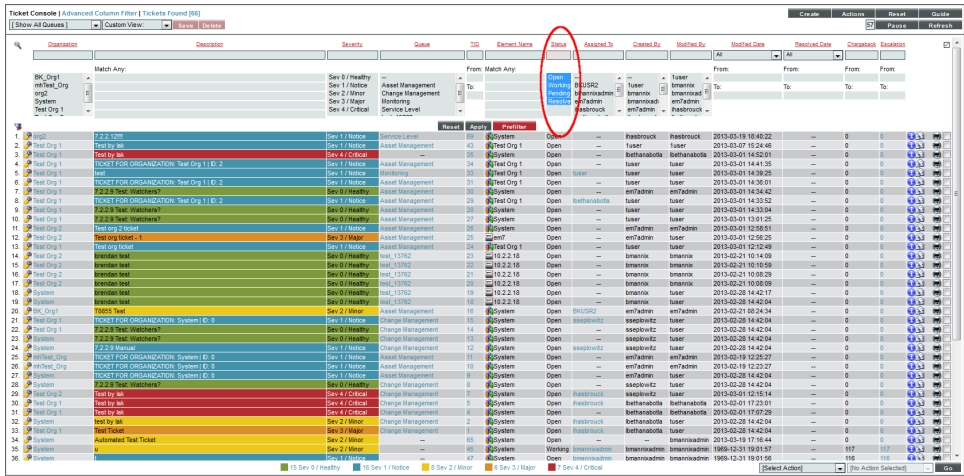
5. To apply the new filters, click the **[Apply]** button. To reset the filters and disregard any changes, click the **[Reset]** button.

Chapter

5

Ticket Watchers

Overview

By default, SL1 automatically sends an email message to the ticket assignee when:

- A ticket is assigned to that user
- A ticket is updated

You can also assign one or more watchers to the ticket. A ticket watcher is a user (in addition to the ticket's assignee) that receives email updates about the ticket. If a watcher is added to a ticket, SL1 automatically sends the watcher an email message when certain actions are taken on the ticket.

By default, the following watchers are assigned to a ticket when the ticket is created:

- The user who created the ticket (if applicable)
- Each user who was defined as a watcher in the ticket's ticket template (if applicable)
- Each user who was defined as a watcher for the ticket's initial ticket queue (if applicable)
- Each user who was defined as a watcher for the ticket's initial organization (if applicable)

SL1 automatically generates email messages for a ticket's watchers when:

- An uncloaked note is added to the ticket
- A ticket is moved to a different queue
- A ticket's state has changed
- A ticket's status has changed
- A custom field has changed

- A ticket is resolved

- A ticket is resurrected

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

This chapter includes the following topics:

Assigning a Watcher to a Ticket

In addition to the ticket assignee, SL1 automatically sends an email to each ticket watcher when:

- An uncloaked note is added to the ticket
- A ticket is moved to a different queue
- A ticket's state has changed
- A ticket's status has changed
- A custom field has changed
- A ticket is resolved
- A ticket is resurrected

Each ticket's creator is automatically assigned to the list of watchers.

NOTE: To enable automatic notification of all users in the "Ticket Watchers" list, you must first select the checkbox *Notify Watchers of Changes* in the **Ticket Queue Properties** modal page.

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

The **Ticket Watchers** modal page displays a list of all users assigned to the ticket's queue and all users in the same organization as the ticket.

To define a watcher for a ticket:

1. Go to the **Ticket Console** page (**[Tickets]** tab).
2. In the **Ticket Console** page, find the ticket you want to define a watcher for. Click its wrench icon (🔧). The **Ticket Editor** page appears.

3. In the **Ticket Editor** page, click the **[Actions]** menu and select *Watchers*.
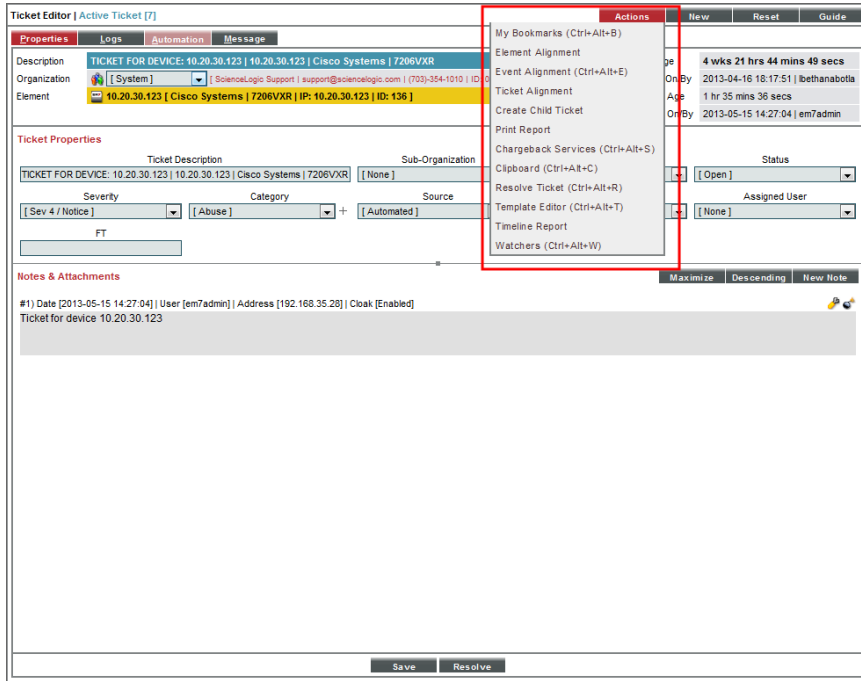
4. The **Ticket Watchers** modal page appears.
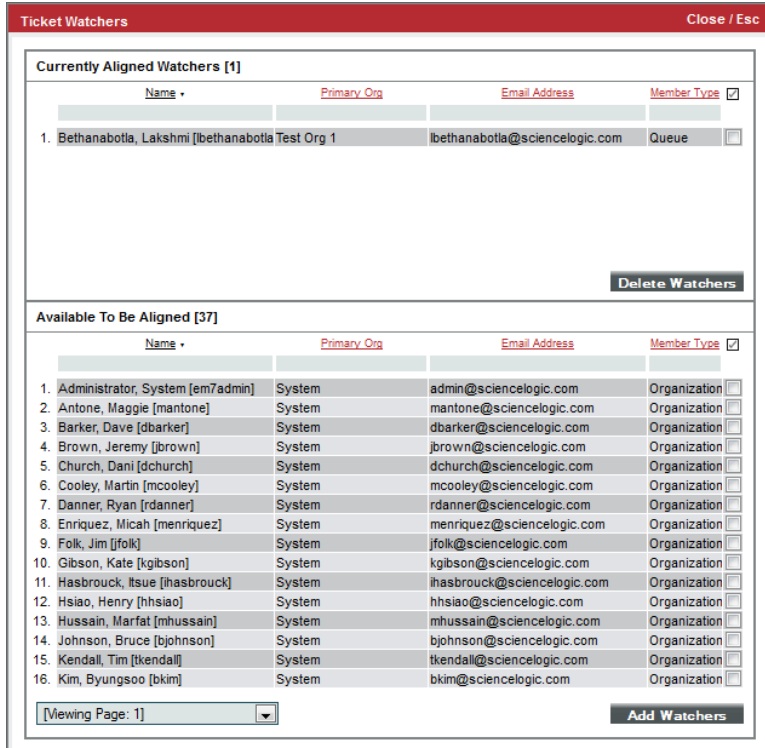
5. The **Ticket Watchers** modal page displays a list of all users assigned to the ticket's queue and all users in the same organization as the ticket. By default, each user who was defined as a watcher for the ticket is already selected.

NOTE: Users whose *Login State* is set to *Suspended* on the **Account Permissions** page will not display in the list of users in the **Ticket Watchers** modal page. For details about suspending user accounts, see the *Organizations and Users* manual.

6. To assign one or more users as watchers for the ticket, select their checkboxes. If you do not select the checkbox, the corresponding user will not be a watcher for the ticket.

7. Click the **[Save]** button to the save the list of watchers. The selected watchers will now automatically receive an email if the ticket is edited or its status changes.

Behavior of Watchers

Although SL1 automatically creates the list of watchers when a ticket is created (ticket creator, watchers from the ticket template, watchers for the ticket queue, and watchers for the organization), throughout the life of the ticket, SL1 will not automatically change the list of watchers.

For example, if you move a ticket to a new ticket queue (different queue than the initial ticket queue for the ticket), SL1 will not add watchers from the new queue to the list of watchers for the ticket or remove watchers from the old queue from the ticket.

If you change the list of watchers for a ticket queue, SL1 does not make any changes to existing tickets. SL1 will not update the list of watchers for existing tickets.

If you change the list of watchers for an organization, SL1 does not make any changes to existing tickets. SL1 will not update the list of watchers for existing tickets.

You can manually remove a watcher that was automatically added by SL1.

Disabling Ticket Links in Notification Emails

User can optionally remove links to tickets in notification emails that are sent to ticket watchers. To do this, you must edit settings in the ScienceLogic configuration file (silo.conf).

To add the settings to remove ticket links:

1. Either go to the console of the SL1 appliance or use SSH to access the server.

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

3. Enter the following at the command line:

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

4. This is the file where users can customize the silo.conf file. In step #7, you will execute a command that sends these changes to the system silo.conf file.

5. In the [LOCAL] section of the file, add the following line:

```
suppress_ticket_link = 1
```

6. Save your changes and exit the file (:wq).

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

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

8. Log in to SL1, go to the **Ticket Console** page and create a ticket. When the ticket is updated, the View Ticket link should not appear in the assignment message, update notification messages, or manual ticket notifications.

NOTE: This does not affect escalations.

NOTE: For more information about the ScienceLogic configuration file, see the *System Administration* manual.

Chapter

6

Parent-Child Relationships and Chargeback Service

Overview

You can align a ticket with an event and with an element. You can also create parent-child relationships between tickets. Ticket alignment can be helpful if you have multiple tickets with the same issue, or have multiple events that can be handled with one ticket.

You can also align a ticket with a product or service and track the hours worked on a ticket.

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:

Parent-Child Relationships

SL1 allows you to align tickets in parent-child relationships. You can create parent-child relationships when there are multiple tickets for a single issue, or if multiple tickets are related or interdependent. Keep in mind when creating parent-child relationships that:

- When the parent ticket is resolved, all children tickets might be automatically resolved as well if the parent ticket's queue is configured to do so.

- Moving the parent ticket to another queue has no effect upon the children tickets.

- Changing the severity of the parent ticket has no effect upon the children tickets.

- Except for "resolved", changing the status of the parent ticket has no effect upon the children tickets.

- Likewise, changing the queue, changing the severity, and changing the status of a child ticket have no effect upon the parent ticket.

To create a parent-child relationship between tickets, you must first decide which ticket will be the parent and which ticket(s) will be the child. After this is complete:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. In the **Ticket Console** page, find either the parent ticket or the child ticket. If you are going to assign multiple children to a single parent ticket, it is easiest to select the parent ticket.

3. Click the wrench icon for that ticket (🔧). The **Ticket Editor** page appears.

4. In the **Ticket Editor** page, click the **[Actions]** menu and select *Ticket Alignment*.
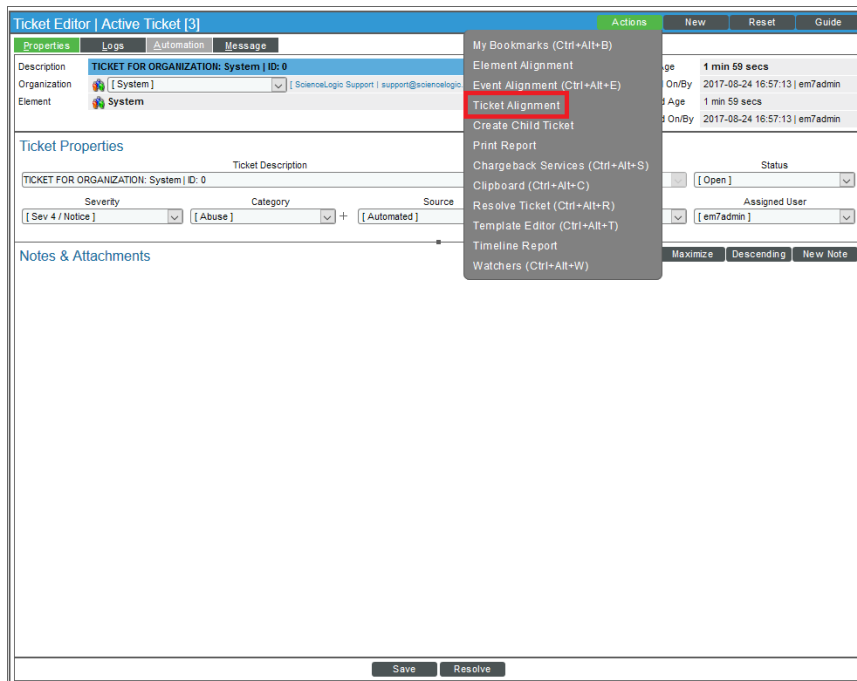
5. The **Ticket Alignment** modal page appears.
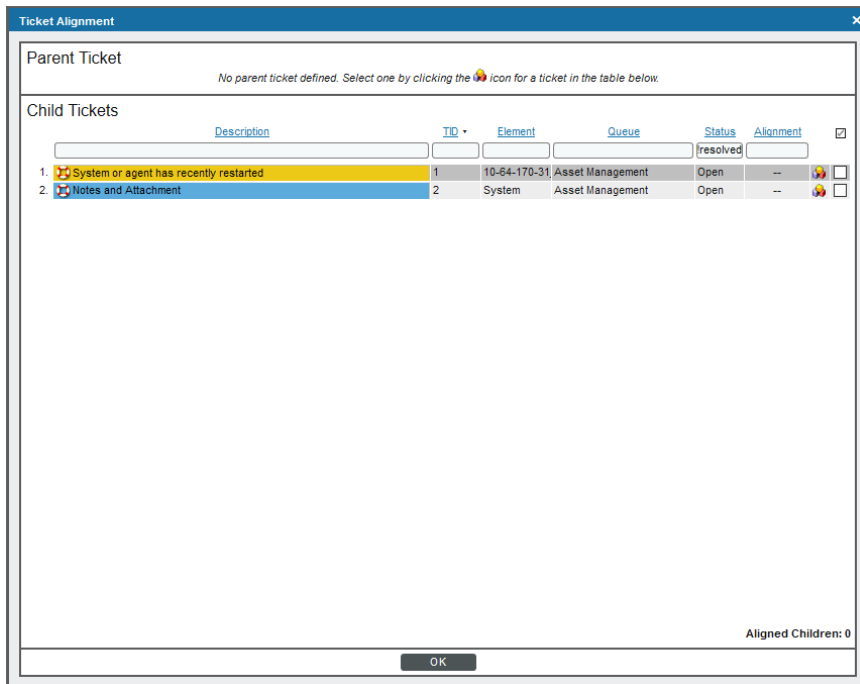
6. The **Ticket Alignment** modal page features a list of tickets in the system. To define a ticket as the parent ticket of the current ticket, click the building blocks icon ( ). The ticket will now appear in the *Parent Ticket* field. To remove a parent ticket from the current ticket field, click its bomb icon ( ).

7. To assign single or multiple tickets as child tickets, select their checkbox(es). To remove a child ticket from the current ticket, deselect its checkbox.
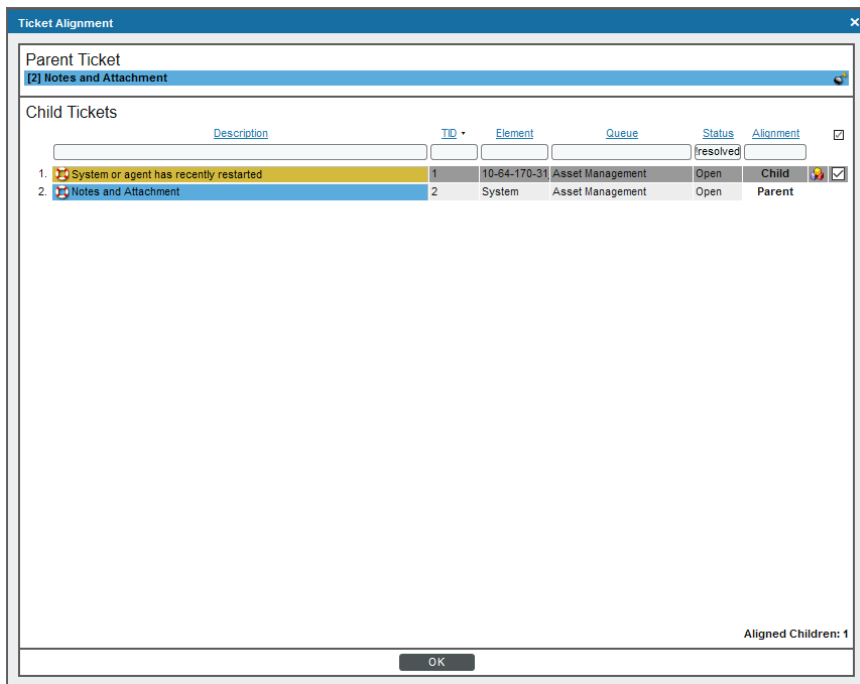
> **NOTE**: The *Element* column displays the name of the entity (frequently a device) associated with this ticket. The *Alignment* column informs you of whether a ticket is a parent of the current ticket, a child of the current ticket, or does not have a parent-child relationship.

8. When you have finished aligning tickets, click the **[Save]** button. Repeat steps 1-7 for each ticket you want to designate as a parent or child ticket.

9. When a ticket has a parent ticket, the **Ticket Console** page displays the building blocks icon () in the far right column. Clicking on the icon displays details about the parent ticket.

You can also create a new ticket as a child ticket to a currently opened ticket. To do so:

1. Go to the **Ticket Console**.

2. In the **Ticket Console** page, find the parent ticket. Select the wrench icon () for the ticket.

3. In the **Ticket Editor** page, select the **[Actions]** menu and choose *Create Child Ticket*.

4. SL1 creates a new ticket:

   - The read-only field *Parent Ticket* references the name of the parent ticket.

   - By default, the *Description* field is set to *New Ticket*.

   - By default, the *Status* field is set to *Open*.

   - All remaining fields have the same values as the parent ticket.

   - You can edit the values in each field of the child ticket.

Event Alignment

SL1 allows you to associate an existing ticket with an event, even if the ticket was not originally created from an event. This is helpful when you want to automatically clear an event when a ticket has been resolved. You can also change the event associated with an existing ticket.

If a ticket addresses multiple events, you might find it helpful to align the ticket with multiple events. When the ticket is resolved, SL1 can automatically clear the selected event(s).

To align a ticket with one or more events:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. In the **Ticket Console** page, find the ticket you want to align with an event. Select its wrench icon (). The **Ticket Editor** page appears.

3. In the **Ticket Editor** page, select the **[Actions]** menu and choose *Event Alignment*.
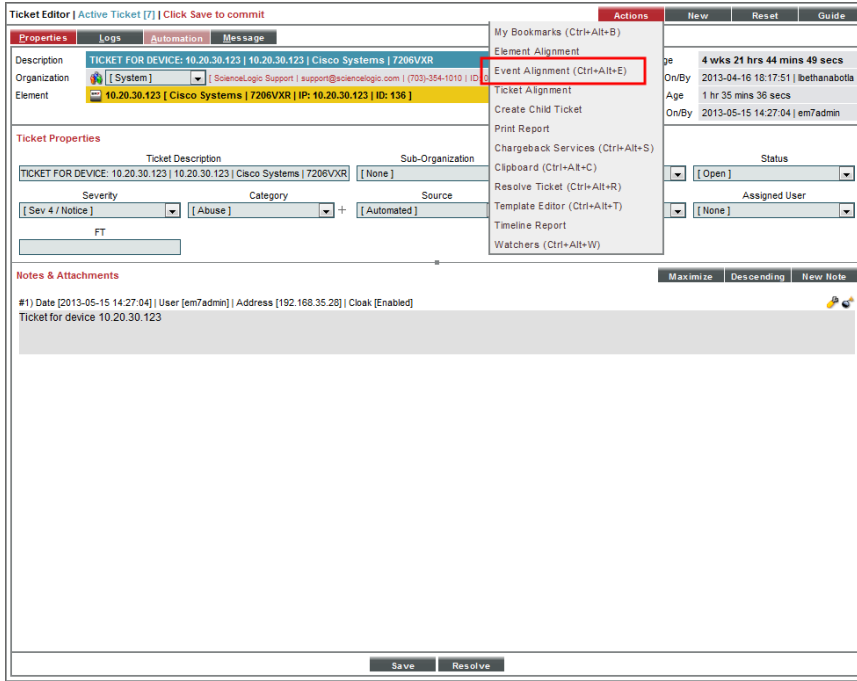
4. The **Event Alignment** modal page appears.

5. The **Event Alignment** page displays a list of all active events in SL1. From this list, you can select one or more events to align with the current ticket.

6. Select the **[Save]** button to save your changes to the ticket.

7. The **Ticket Editor** page will now display a value in the read-only field *Aligned Events* with an Event (⚠)
    icon. Selecting this icon will display details about the event(s) aligned with the ticket.
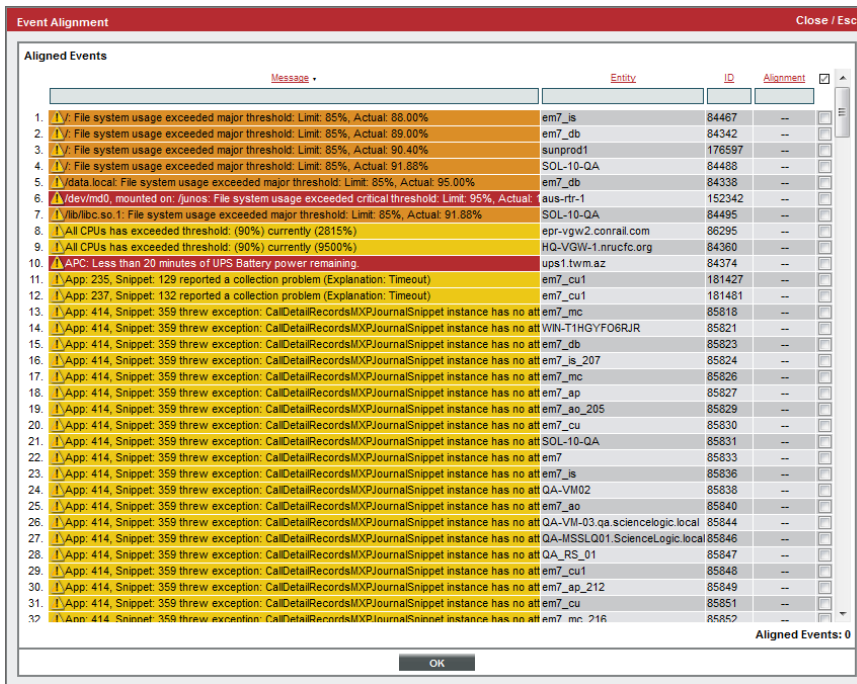
Element Alignment

SL1 allows you to align an existing ticket with an element, or change the current element aligned with a ticket. This can be helpful if, for example, a ticket is created on a device, but you also want to associate the interface with the ticket.

To align an existing ticket with an element:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Find the ticket you want to align with an element. Select its wrench icon (🔧). The **Ticket Editor** page appears.

3. In the **Ticket Editor** page, select the **[Actions]** menu and choose *Element Alignment*.
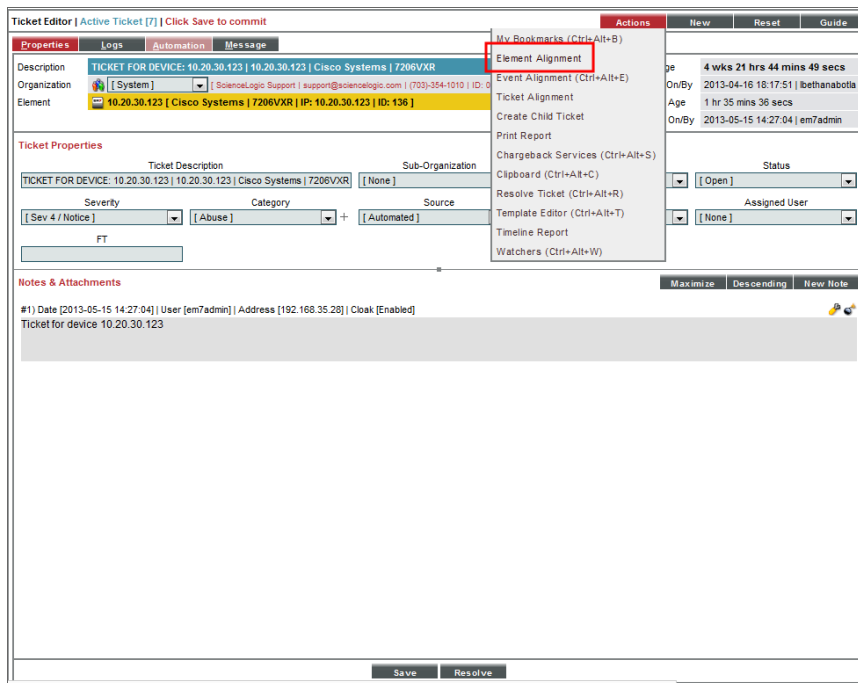
4. The **Finder** modal page appears.

5. The **Finder** modal page contains a list of all element types with checkboxes. To search for a specific type of element, select the checkbox for that element's type. You can select more than one element type to search for.

6. In the *Search* field, enter a string to match against element names. Select the **[Search]** button to display the results.

7. To align an element with the ticket, select the life ring icon ( ).
8. The **Ticket Editor** page appears, with the new element displayed in the read-only *Element* field.

Chargeback Service

SL1 includes a tool that allows you to align a ticket with a product or service and then track the hours worked on a ticket. The combination of product or service plus the number of hours worked make up a chargeback service. Possible product or service offerings can be found in the **Product Catalog** page (Registry > Business Services > Product Catalog). When you align a chargeback service with a ticket, SL1 automatically adds a note to the **Notes & Attachments** pane. You can also generate a Quick Report on chargeback services for each organization (Reports > Create Reports > Quick Report > Ticket Billing). You can use this Quick Report to create a bill for each organization.

To add chargeback time to a ticket:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Find the ticket for which you want to create a chargeback service. Select its wrench icon (🔧). The **Ticket Editor** page appears.

3. In the **Ticket Editor** page, select the **[Actions]** menu and choose *Chargeback Services*.
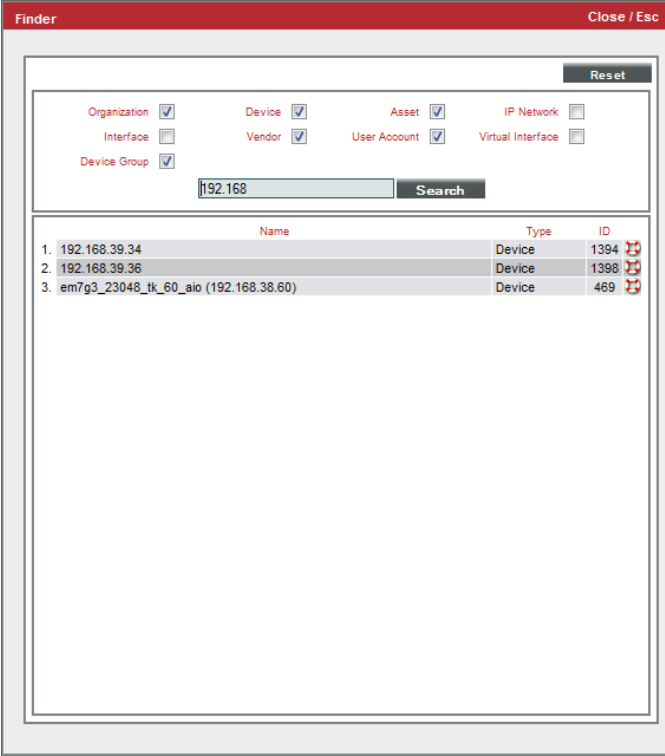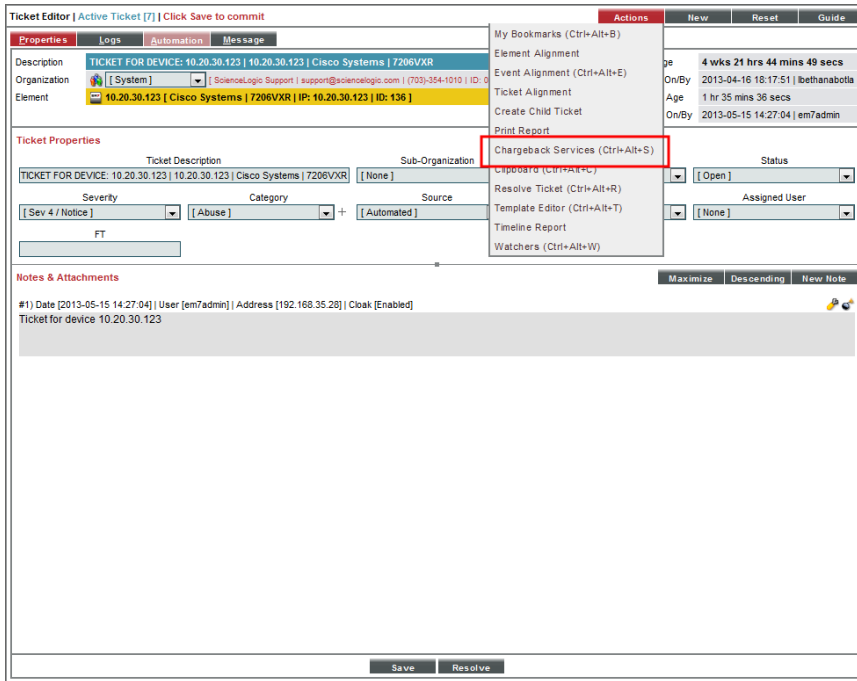

4. The **Chargeback Service** modal page appears.
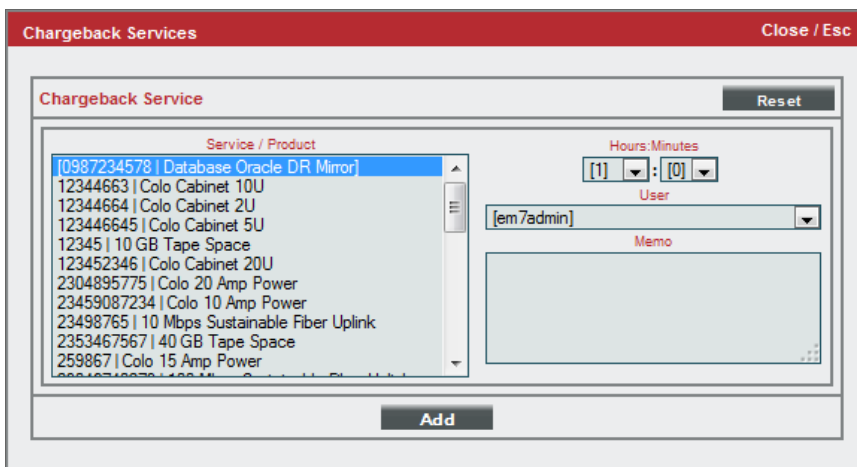
5. The **Chargeback Service** modal page contains the following fields:

- *Service/Product*. This drop-down list contains a subset of the product SKUs defined in the **Product Catalog** page (Registry > Business Services > Product Catalog). To select a service/product, highlight it.

- *Hours:Minutes*. Designate the amount of billable time spent working on this ticket. This drop-down list contains units of billable hours. The entries in this drop-down list are defined in the **Select Objects Editor** page (System > Customize > Select Objects).

- *User*. The user that worked on the ticket. This drop-down list contains a list of all users in SL1. By default, the field is populated with the current user's login.

- *Memo*. You can provide a note on the work that you did, or anything else necessary for the customer to know. Can be up to 100 characters in length.

6. To add the chargeback service to the ticket, select the **[Add]** button. To reset the fields in the **Chargeback Service** modal page without saving your changes, select the **[Reset]** button.

Chapter

7

Ticket Queues

Overview

Ticket queues allow you to organize and filter tickets. Organizing tickets by ticket queues and then assigning users to ticket queues allows each user to see only the tickets that are relevant to him/her.

SL1 allows you to view the list of existing ticket queues, define new ticket queues, edit existing ticket queues (including adding and removing users from the queue), and define and edit the list of "watchers" for each ticket queue from the **Ticket Queue Management** page (Registry > Ticketing > Queues).

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

- To view a pop-out list of menu options, click the menu icon (▤).

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

This chapter includes the following topics:

Viewing the List of Ticket Queues

The list of ticket queues can be found in the **Ticket Queue Management** page (Registry > Ticketing > Queues). The **Ticket Queue Management** page displays a list of ticket queues and information on each queue. To view a list of ticket queues:

> **TIP:** To sort the list of ticket queues, click on a column heading. The list will be sorted by column value, in ascending order. To sort by descending order, click the column heading again. The **Edit Date** column sorts by descending order on the first click; to sort by ascending order, click the column heading again.

1. Go to the **Ticket Queue Management** page (Registry > Ticketing > Queues).

2. The **Ticket Queue Management** page is displayed. For each ticket queue, the following information is displayed:
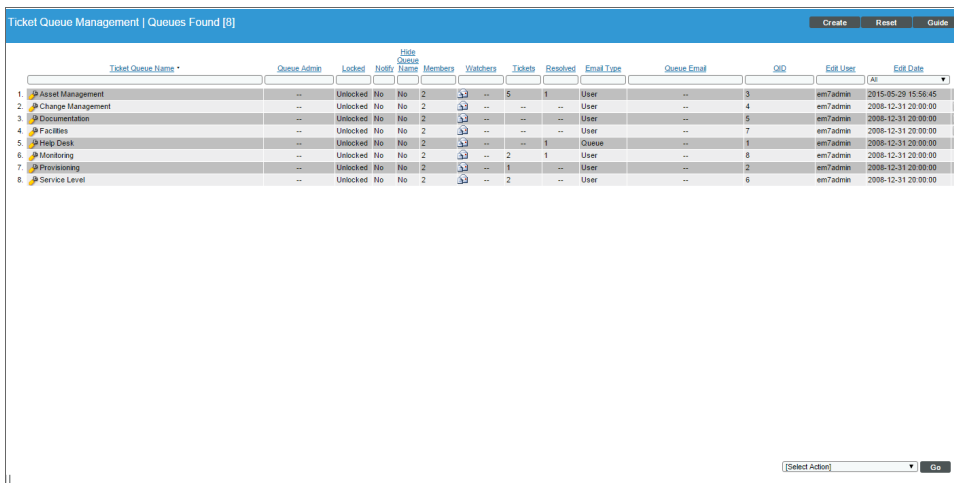

- **Ticket Queue Name**. Name of the ticket queue.
- **Queue Admin**. Username of the queue's Administrator.
- **Locked**. Specifies whether or not the queue is locked for editing. If so, only the queue administrator can edit the queue's properties.
- **Notify**. Specifies whether or not the queue Administrator is automatically notified when a ticket is resolved.
- **Hide Queue Name**. Specifies whether or not the queue name is hidden to non-queue members on the **Ticket Console** page and **Ticket Editor** page. If hidden, the queue's name appears as "Restricted Queue" to non-queue members.
- **Members**. Number of users assigned to the ticket queue.

- *Watchers*. Number of watchers for each ticket in the ticket queue. If you click on the envelope icon ( ), SL1 displays the **Ticket Queue Watchers** modal page, where you can define or edit the list of watchers for the ticket queue.

- *Tickets*. Number of tickets assigned to the ticket queue.

- *Resolved*. Number of resolved tickets assigned to the ticket queue.

- *Email Type*. Specifies the value that will appear in the *From* field when an email is sent from the **Message** tab (either automatically by SL1 or manually by a user). Choices are:

   - *Queue*. The *From* field in email from the **Message** tab in the **Ticket Editor** page will contain the value specified in the *Queue Email Address* field.

   - *User*. The *From* field in outgoing emails from the **Message** tab in the **Ticket Editor** page will contain the name of the user who last edited the ticket.

- *Queue Email*. If the *Email Type* field specifies Queue, this field specifies the email address that will appear in the *From* field in all emails sent from the **Message** tab in the **Ticket Editor** page.

- *QID*. Unique numeric ID assigned to the ticket queue by SL1.

- *Edit User*. Name of the user who created or last edited the definition of the ticket queue.

- *Edit Date*. Date and time the ticket queue was created or last edited.

Viewing Ticket Queue Properties and Editing a Ticket Queue

The **Ticket Queue Properties** page allows you to define a new ticket queue or edit the properties of an existing ticket queue.

To view a ticket queue's properties and/or edit the ticket queue:

1. Go the **Ticket Queue Management** page (Registry > Ticketing > Queues).

2. Select the ticket queue that you want to view or edit. Click its wrench icon ( ).

3. The **Ticket Queue Properties** page appears. You can view or edit the following fields:

- *Ticket Queue Name*. Name of the ticket queue. Can be any combination of alphanumeric characters, up to 48 characters in length.

- *Description*. A description of the ticket queue and escalation procedure. Can be any combination of alphanumeric characters, up to 560 characters in length.

- *Custom Forms*. Allows users to add custom fields to existing pages and to add custom tabbed pages to sets of pages. These custom fields and custom tabs are defined in the **Application Forms** page (System > Customize > Form Fields). When you select a custom form, it appears in the ticket panel for each ticket in the queue.

> **NOTE:** Each custom tabbed form appears only in tickets in ticket queues that included the custom tabbed form in the *Custom Forms* field. Custom embedded fields appear in all tickets.

- *Required Custom Fields*. Each ticket assigned to the queue will include a list of custom fields that the user *must* populate before saving the ticket. SL1 will not save the ticket until these custom fields are populated. These custom fields and custom tabs are defined in the **Application Forms** page (System > Customize > Form Fields).

> **NOTE:** If a custom field was defined as "required" in the in the **Form Create** page (System > Customize > Form Fields > create/edit), you will not have the option to define the field as "required" for the queue because the field will be required for all queues.

- *Queue Administrator*. User who is visible to all members of the queue and to whom all members, regardless of account type or organization, can assign tickets. (By default, Users can assign tickets only to queue members who are in their organization and to the Queue Administrator.)

- **Ticket Email Type**. Specifies the value that will appear in the *From* field in outgoing ticket emails sent from the **Message** tab (either automatically by SL1 or manually by a user). Choices are:

  - *Queue Email Address*. The *From* field in emails from the **Message** tab in the **Ticket Editor** page will contain the value specified in the *Queue Email Address* field. Select this option when you want all emails associated with the ticket queue and sent from the **Send Message** page to have a single sender.

  - *Authenticate User*. The *From* field in outgoing emails from the **Message** tab in the **Ticket Editor** page will contain the name of the user who last edited the ticket.

- **Queue Email Address**. The *From* field in emails associated with the ticket queue and sent from the **Message** tab in the **Ticket Editor** page will contain the value specified in this field.

- **Notify Watchers of Changes**. If selected, applies to all tickets in the ticket queue. If selected, when a user defines a list of watchers for a ticket queue or for an individual ticket, SL1 automatically notifies those watchers when:

    - An uncloaked note is added to the ticket

    - A ticket is moved to a different queue

    - A ticket's state has changed

    - A ticket's status has changed

    - A custom field has changed

    - A ticket is resolved

    - A ticket is resurrected

> **NOTE**: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

- **Queue Locked to Admin Only**. This queue definition can be edited only by a user designated as the Queue Administrator or a user of type "Administrator". This includes adding and deleting members to the queue.

> **NOTE:** You can select and save *Queue Locked to Admin Only* only if the field *Queue Administrator* is set to a user other than *None*. If the *Queue Administrator* field is set to *None*, SL1 will not save the queue as *Queue Locked to Admin Only*.

- **Email Last Ticket Comment in Updates**. Select this checkbox if you want the last comment made in a ticket to be emailed to users when that ticket is updated.

NOTE: If the last comment was cloaked, emails that are automatically sent to the ticket's watchers when the ticket is updated will *not* include the last comment. This behavior occurs even if *Notify Watchers of Changes* and *Email last Ticket Comment in Updates* have been enabled and even if the watcher has access to view cloaked notes.

- *Hide queue name from non-queue members*. If selected, when non-queue members view tickets in the **Ticket Console** page and the **Ticket Editor** page, this queue's name will appear as *Restricted Queue*.
- *Auto-Resolve Children with Parent Ticket*. If selected, when a ticket is assigned to this queue and its status is set to *Resolved*, the status for all child tickets is automatically set to *Resolved*. If not selected, when a ticket is assigned to this queue and its status is set to *Resolved*, the status of all child tickets is not affected.
- *Queue Members*. The field displays a drop-down list of all users defined in SL1. Select the checkbox of each user you want to add to the queue. To remove a user from the queue, deselect the checkbox.

NOTE: If your account is of type "user", the *Queue Members* field displays only a list of users who are in your organization(s).

4. If you have changed the name of the ticket queue, click the **[Save As]** button. If you have made edits to other fields but have not changed the ticket queue's name, click the **[Save]** button.

NOTE: The **[Save]** button and the **[Save As]** button do not appear if the queue has been set to *Queue Locked to Admin Only* and you are not the Queue Administrator or a user of type "Administrator".

Creating a New Ticket Queue

Along with viewing and editing already existing ticket queues, you can create a new ticket queue.

To create a new ticket queue:

1. Go to the **Ticket Queue Management** page (Registry > Ticketing > Queues).
2. In the **Ticket Queue Management** page, click the **[Create]** button in the upper right of the page.

3. The **Create a New Ticket Queue** modal page appears, with the same fields as the **Ticket Queue Properties** page.

4. After filling out the necessary fields, click the **[Save]** button to save the new ticket queue.

5. The ticket queue will now appear in the list in the **Ticket Queue Management** page. To delete the new ticket queue, or any other ticket queue in the list, click the queue's bomb icon (💣).

Adding and Removing Users in a Ticket Queue

You can add a single or multiple users to a ticket queue from the **Ticket Queue Properties** page, or you can remove one or more users from the ticket queue.

To add or remove user(s) to a ticket queue:

1. Go to the **Ticket Queue Management** page (Registry > Ticketing > Queues).

2. Find the ticket queue for which you want to add or remove users. Click its wrench icon (🔧).

3. The **Ticket Queue Properties** page appears. The page includes the **Queue Members** pane, which contains a list of all users in SL1.

4. If the user is already a member of the queue, the checkbox next to his/her name will be selected. If the user is not a member of the queue, the checkbox next to his/her name will not be selected.

5. To add a user to the ticket queue, select his/her checkbox. To remove a user from the ticket queue, unselect his/her checkbox.

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

Adding and Removing Watchers to a Ticket Queue

You can add single or multiple watchers to a ticket queue from the **Ticket Queue Management** page, or you can remove single or multiple watchers from the ticket queue. SL1 will automatically send email notifications to the list of watchers when:

- An uncloaked note is added to the ticket
- A ticket is moved to a different queue
- A ticket's state has changed
- A ticket's status has changed
- A custom field has changed
- A ticket is resolved
- A ticket is resurrected

NOTE: To enable automatic notification of all users in the "Ticket Queue Watchers" list, you must first select the checkbox *Notify Watchers of Changes* in the **Ticket Queue Properties** modal page.

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

To add or remove watcher(s) to a ticket queue:

1. Go to the **Ticket Queue Management** page (Registry > Ticketing > Queues).

2. In the **Ticket Queue Management** page find the ticket queue that you want to add or remove watchers to. Click its Edit Ticket Queue Watchers icon ( ).

3. The **Ticket Queue Watchers** modal page appears and displays a list of members in the specified ticket queue.
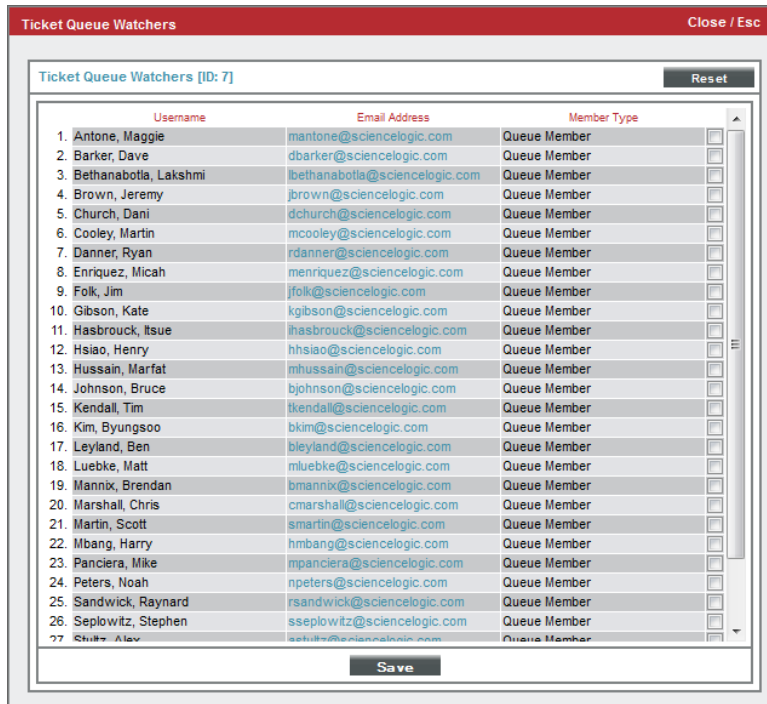
NOTE: Users whose *Login State* is set to *Suspended* on the **Account Permissions** page will not display in the list of users in the **Ticket Queue Watchers** modal page. For details about suspending user accounts, see the *Organizations and Users* manual.

---

4. To add a ticket watcher to the ticket queue, select the user's checkbox. If a user had previously been added as a watcher and you would like to remove them as a watcher, deselect the users' checkbox.

5. To save your changes, click the **[Save]** button.

Deleting One or More Ticket Queues

From the **Ticket Queue Management** page, you can delete an empty ticket queue. If a ticket queue contains one or more tickets, including resolved tickets, you cannot delete the ticket queue. If you try to delete a ticket queue that contains one or more tickets, you will be prompted to move the tickets to another queue. After moving the tickets, you can delete the ticket queue.

To delete a ticket queue:

1. Go to the **Ticket Queue Management** page (Registry > Ticketing > Queues).

2. In the **Ticket Queue Management** page, select the checkbox for each queue you want to delete. To select all checkboxes for all queues, select the gray checkbox (☑) at the top of the page.

3. In the *Select Action* drop-down list, select *Delete Ticket Queue*.

4. Click the **[Go]** button to delete the selected queue(s).

Chapter

8

Custom Ticket States

Overview

A custom ticket state is an additional ticket parameter. The definition of a ticket state includes logic that you can use to control workflow. Using a custom ticket state, you can specify that tickets with the custom state will always have a specified status and ticket queue. You can also specify that tickets with a custom state can be moved only to the specified ticket queue(s) and can be changed only to specified custom states.

You can create, edit, or delete custom ticket states from the **Ticket States** page (Registry > Ticketing > Custom States).

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

- To view a pop-out list of menu options, click the menu icon (≡).

- To view a page containing all of the menu options, click the Advanced menu icon (　···　).
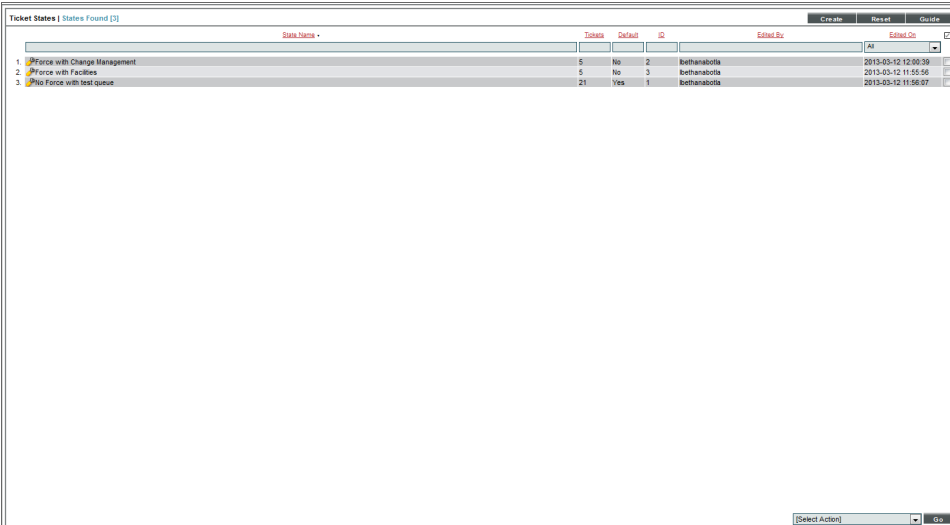
This chapter includes the following topics:

Viewing a List of Existing Ticket States

You can view existing custom ticket states from the **Ticket States** page (Registry > Ticketing > Custom States). The **Ticket States** page displays a list of existing ticket states.

To view a list of exiting custom ticket states:

1. Go to the **Ticket States** page (Registry > Ticketing > Custom States).

2. For each custom ticket state, the **Ticket States** page displays the following information:

> **TIP:** To sort the list of ticket states, click on a column heading. The list will be sorted by the column value, in ascending order. To sort by descending order, click the column heading again. The *Edit Date* column sorts by descending order on the first click; to sort by ascending order, click the column-heading again.

-   *State Name*. Name of the custom ticket state.
-   *Tickets*. Number of tickets aligned with the ticket state.
-   *Default*. Specifies if this is the default ticket state. SL1 automatically assigns the default ticket state to new tickets.
-   *ID*. A numeric ID, generated by SL1, that uniquely identifies this ticket state.
-   *Edited By*. The user who created or last edited the ticket state.
-   *Edited On*. The date and time the ticket state was created or last edited.

Creating a Custom Ticket State

You can create a custom ticket state from the **Ticket States** page. After you create a custom ticket state, it will appear in the *Ticket State* field when defining or editing a ticket in the **Ticket Editor** page.

To create a custom ticket state:

1. Go to the **Ticket States** page (Registry > Ticketing > Custom States).

2. In the **Ticket States** page, click the **[Create]** button. The **Ticket State Definition** modal page appears.

3. In the **Ticket State Definition** modal page, supply a value in each of the following fields:

   - *State Name*. Name of the ticket state. Can be any combination of alphanumeric characters.

   - *Aligned Ticket Status*. When tickets are assigned the ticket state, SL1 will automatically assign this status to the ticket. Choices are:

     - None
     - Open
     - Working
     - Pending
     - Resolved

   - *Force Aligned Status*. Specifies whether users can change the original ticket status for tickets that are assigned the ticket state. Choice are:

     - *No*. Within the **Ticket Editor** page, users can edit the ticket status (specified in the *Align Ticket Status* field) assigned to tickets that use this ticket state.

     - *Yes*. Users cannot change the ticket status (specified in the *Align Ticket Status* field) assigned to tickets that use this ticket state.

- *Change Status*. For all selected tickets, changes the value in the "Status" field. In the drop-down list to the right, you can select from a list of the following statuses:

  - *Open*. Ticket has been created.
  - *Pending*. Ticket has been acknowledged.
  - *Working*. Someone is working on the ticket.
  - *Resolved*. Issue has been resolved. When a parent ticket is resolved, its children tickets are automatically resolved. When you select this option, SL1 displays the **Ticket Resolution** modal page.

NOTE: If all Ticket States have the *Force Aligned Status* field set to *Yes*, the **Ticket Console** page will not display the *Change Status* option in the **Select Actions** menu.

- *Default Ticket Queue*. When tickets are assigned the ticket state, SL1 will automatically assign the tickets to the selected Ticket Queue. Select from the list of all available ticket queues.
- *Force Queue on State Change*. Specifies whether users can change the original ticket queue for tickets that are assigned the ticket state. Choices are:

  - *No*. Within the **Ticket Editor** page, users can edit the ticket queue (specified in the *Default Ticket Queue* field) assigned to tickets that use this ticket state.
  - *Yes*. Users cannot change the ticket queue (specified in the *Default Ticket Queue* field) assigned to tickets that use this ticket state.

- *Allowable Ticket Queues*. If you select one or more ticket queues from this list, in the **Ticket Editor** page, users can change the ticket queue (specified in the *Default Ticket Queue* field) assigned to tickets that use this ticket state. Users can move tickets only to the queues selected in the *Allowable Ticket Queues* field. If you don't want to allow users to change a ticket's queue, do not select any ticket queues in this field.
- *Allowable new states*. If you select one or more ticket states from this list, in the **Ticket Editor** page, users can change the ticket state assigned to tickets that use the current ticket state. Users can move tickets only to the ticket states selected in the *Allowable new states* field. If you don't want to allow users to change a ticket's ticket state, do not select any ticket states in this field.
- *Key(s) to set this State*. Specifies the access keys required to assign this ticket state to a ticket. Displays a list of all existing access keys. You can select one or more access keys.

  - If you do not specify an access key, no specific access keys are required to assign this ticket state to a ticket.

- *Make this the default state*. Select this checkbox if you would like this custom state to become the default custom ticket state.

4. To clear the values you have inserted, click the **[Reset]** button. To save the new ticket state, click the **[Save]** button.

Editing and Deleting Custom Ticket States

You can edit and delete existing custom ticket states from the **Ticket States** page. You can edit individual custom ticket states, and delete multiple or all ticket states.

To edit a custom ticket state:

1. Go to the **Ticket States** page (Registry > Ticketing > Custom States).

2. In the **Ticket States** page, find the ticket state you want to edit. Click its wrench icon (🔧). The **Ticket States Definition Editor** modal page appears:

3. You can edit the values in one or more fields described above in the section *Creating a Custom Ticket State*.

4. Click the **[Save]** button to save your changes to the ticket state. Click the **[Save As]** button to save your changes as a new ticket state.

You can also delete individual, multiple, or all custom ticket states from the **Ticket States** page.

To delete one or more custom ticket states:

1. Go to the **Ticket States** page (Registry > Ticketing > Custom States).

2. In the **Ticket States** page, find the ticket state(s) you want to delete. Select its checkbox (☑).

3. Select the checkbox for each ticket state you want to delete.

4. In the **Select Action** drop-down list at the bottom of the page, select *Delete State(s)*. Click the **[Go]** button.

5. If no tickets are currently using the ticket state, each ticket state is deleted.

6. If one or more tickets are currently using one or more of the ticket state(s) selected for deletion, the **State Removal** modal page appears. In this page, you are asked to perform an action before the ticket state can be removed. Your choices are:
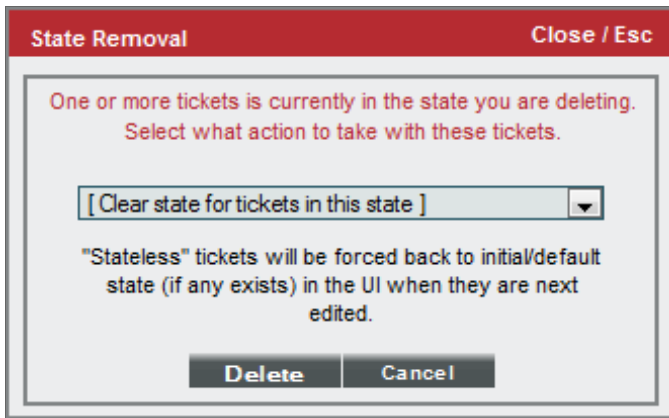
- *Clear state for tickets in this state*. Each ticket that was using the deleted ticket state will be assigned the default ticket state (if one exists) or will not have a ticket state.

- *Set tickets in this state to a different state*. If you select this option, you can select a New State to assign to the tickets that are currently using the deleted state.

- *New State*. Displays a list of ticket states. The selected ticket state will be assigned to affected tickets as a replacement for the deleted ticket state.

7. After selecting an option, click the **[Delete]** button to apply the option and delete the selected ticket states.

Example: Creating Custom Ticket States

In this example we will create different ticket states for a ticket going through a quality assurance workflow. We will create four different ticket states and pass a ticket through the workflow stages—from ticket creation to resolution—using these custom states.

In this example we will assume we are a company providing Internet service to customers. Our company has a designated workflow for tickets and already has two defined ticket queues: Quality Assurance and Workflow Manager. To read more about creating a ticket queue, see *Ticket Queues*.

After a ticket for a problem is created, the ticket will go to the Quality Assurance queue, where a member of the team will work on the ticket. After work has been completed on the ticket, it must be passed to the Workflow Manager before the ticket can be resolved. In this example we will create custom ticket states to make passing a ticket through the stages of workflow as efficient as possible.

Our first ticket step is to create a custom ticket state for tickets that have been created and assigned to a user in our Quality Assurance team. To create this custom ticket state:

1. Go to the **Ticket States** page (Registry > Ticketing > Custom States).

2. In the **Ticket States** page, click the **[Create]** button. The **Ticket States Definition Editor** page appears, where we defined the following values:

- *State Name*. We named our custom state "Ticket Assigned".

- *Aligned Ticket Status*. Because this is custom state for a ticket that has just been created, we set this field to "Open".

- *Force Aligned Status*. Because we want the user assigned this ticket to have the ability to change the ticket's status, we selected "No."

- *Default Ticket Queue*. This is the queue the ticket will be sent to after it has been assigned a custom state. We selected "Quality Assurance."

- *Allowable Ticket Queues*. After work has been completed on a ticket, we want the user to be able to send the ticket to the manager of workflow. We selected "Workflow Manager" so the user can pass the ticket to this queue. We also selected "Quality Assurance," because we want the ticket to initially be assigned to this ticket queue.

- *Allowable new states*. Because we haven't created all of our ticket states yet, we left this field blank. After we have created all of our custom states, we can edit the "Ticket Assigned" state to add custom states.

- **Key(s) to set this State**. Because we do not want users to pass a ticket without manager approval, we selected a custom Access Key, "Ticket: Resolve." In this example we can assume this key will allow a user to work on a ticket, but will not allow them to resolve the ticket. To learn more about creating Access Hooks and Access Keys, see the manual **Access Permissions**.

- **Make this the default state**. We selected this checkbox to make all created tickets use this custom state.

3. Click the **[Save]** button to save the "Ticket Assigned" custom ticket state.

4. We must now create three more custom ticket states: "Ticket - Work Complete", "Ticket - Failed", and "Ticket - Passed".

5. To create the "Ticket - Work Complete" custom state, repeat steps 1-2 with the following changes in the **Ticket State Definition** page:

   - **State Name**. Name the custom state "Ticket - Work Complete."

   - **Aligned Ticket Status**. Align to ticket status "Pending", because the work has been finished on the ticket but needs to be passed to the workflow manager before the ticket can be resolved.

   - **Allowable Ticket Queue**. Select "Workflow Manager".

   - **Key(s) to set this State**. Because the manager of workflow will be working on this ticket at this custom state, we granted them all access permissions.

6. To create the "Ticket - Failed" custom state, repeat steps 1-2 with the following changes in the **Ticket State Definition** page:

   - **State Name**. Name the custom state "Ticket - Failed".

   - **Allowable Ticket Queue**. Select "Workflow Manager" and "Quality Assurance."

7. To create the "Ticket - Passed" custom state, repeat steps 1-2 with the following changes in the **Ticket State Definition** page:

   - **State Name**. Name the custom state "Ticket - Passed".

   - **Aligned Ticket Status**. Align to ticket status "Resolved".

   - **Allowable Ticket Queues**. Leave this field blank. Because the ticket has passed and can be resolved, it does not need to be assigned to another ticket queue.

8. We now have our four custom ticket states created and can add **Allowable new states** to each created state. An allowable state lets you define the additional custom ticket state(s) a ticket can be assigned based on its current ticket state.

9. To edit a ticket state, click its wrench icon (🔧) to bring up the **Ticket State Definition** page. For the custom ticket states we created, we added the following **Allowable new states**:

   - **Ticket - Assigned**. After a ticket has been created it will be assigned to a member of the Quality Assurance team. That team member will work on the ticket until complete. We added the "Ticket - Work Complete" state to this custom state. A ticket with a state of "Ticket - Assigned" can be moved to the state "Ticket - Work Complete".

- *Ticket - Work Complete*. After work has been completed on a ticket, it needs to be sent to the workflow manager to review (pass or fail) the ticket. We added "Ticket-Failed" and "Ticket-Passed" to this custom state. A ticket with a state of "Ticket - Work Compete" can be moved to either the state "Ticket - Failed" or the state "Ticket - Passed"

- *Ticket - Failed*. If a ticket is failed it will need to be sent back to the Quality Assurance team for more work. We added "Ticket - Assigned" to this custom state. A ticket with a state of "Ticket - Failed" can be moved to the state "Ticket - Assigned".

- *Ticket - Passed*. Because the ticket has been passed and can be resolved, we did not add any more allowable custom states.

We have now created our four custom ticket states and can pass a ticket through them. In this example we will assume a ticket has been created due to a spelling error in our company's customer portal.

After the ticket has been created:

- It will use the "Ticket Assigned" custom state

- It will be assigned to a user we specify in the Quality Assurance queue:

- In this example we will assume that the user completed this work on the ticket.

- The user changes the status of the ticket to "Pending".

- The user will now need to send the ticket to the workflow manager for approval.

- In the *Ticket State* drop-down list, the only custom state available is "Ticket-Work Complete". The user selects this option, and SL1 will automatically assign the ticket to the "Workflow Manager" queue:

- After the ticket has been changed to the "Ticket-Work Complete" state, the workflow manager can review the ticket and determine if it will pass or fail.

- In this example the workflow manager has found the spelling error still exists on the portal, and the ticket will need to be failed. In the *Ticket State* field, the manager can select the state "Ticket-Failed."

- After the ticket is moved to the state "Ticket - Failed". the ticket will automatically be reassigned to the Quality Assurance queue.

- Now that the ticket is failed back to the Quality Assurance queue, it will need to be set back to its original state of "Ticket Assigned" so a member of the Quality Assurance team can begin working on it again. The "Ticket Assigned" state is the only other state available in the *Ticket State* drop-down list. Because the ticket is currently already in the Quality Assurance queue, selecting the "Ticket Assigned" custom state will not change the queue.

- The ticket is now back in its original custom state. We can assume that the user has worked on the ticket again and has changed the state to "Ticket-Work Complete" to send to the portal manager.

- After reviewing the ticket and seeing the work has been completed, the portal manager can now pass the ticket. When the manager changes the ticket state to "Ticket - Passed", the manager can change the ticket's status to Resolved (the **Aligned Ticket Status** for "Ticket - Passed" is set to *Resolved*). To learn more about resolving tickets, see *Resolving Tickets*.

Chapter

9

Ticket Reports

Overview

SL1 allows you to view and print reports on a single ticket and multiple tickets in your system. You can also view and print a ticket statistics report that displays information on each ticket queue and the status of tickets, and a timeline report showing changes to a ticket's severity, status, queue, and assigned user over time.

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:

Generating a Report for a Single Ticket

You can view and print reports for a single ticket in the **Ticket Console** page. These reports can be created in multiple formats, and can display a range of information, from a full report to a minimal report.

To generate a report on a single ticket:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. In the **Ticket Console** page, find the ticket you want to view a report on. Either:

   - Select its printer icon (🖨).

     Or:

   - Select its wrench icon (🔧), select the **[Actions]** button, and then select *Print Report*.

3. The **Ticket Report Creator** appears and allows you to specify the information to include in the report and the format in which to generate the report.
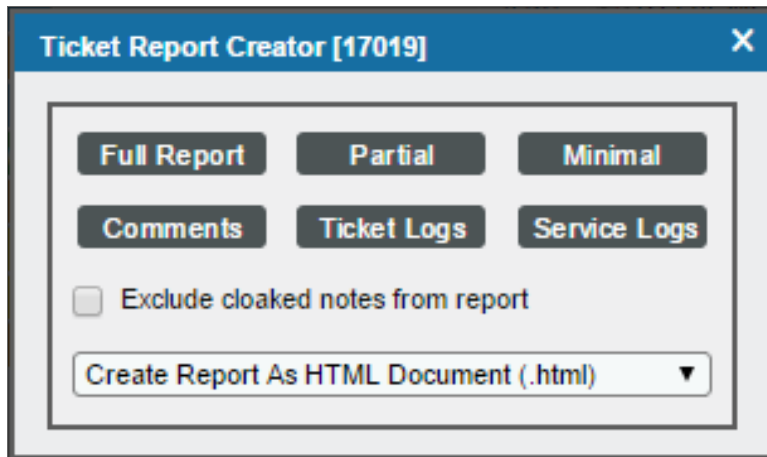
4. Select from the following list of formats to generate the report:

   - Create Report as HTML Document
   - Create Report as PDF Document
   - Create Report as OpenDocument Spreadsheet
   - Create Report as Excel Spreadsheet

5. Select one of the following options to specify the information to include in the report:

   - *Full Report*. Includes a section on Ticket Properties and Ticket Time (includes all information from the **Ticket Console** page plus additional information from the **Ticket Editor** page); a section on Ticket Miscellaneous (name of queue administrator and information on other settings and options for the ticket); a section containing all the entries in the **Notes & Attachments** pane in the **Ticket Editor** page; and a section on Ticket Logs that includes all the log entries for the ticket as displayed in the **[Logs]** tab in the **Ticket Editor** page.

   - *Partial*. Includes a section on Ticket Properties and Ticket Time (includes all information from the **Ticket Console** page plus additional information from the **Ticket Editor** page); a section on Ticket Miscellaneous (name of queue administrator and information on other settings and options for the ticket); and a section containing all the entries in the **Notes & Attachments** pane in the **Ticket Editor** page.

   - *Minimal*. Includes a section on Ticket Properties and Ticket Time (includes all information from the **Ticket Console** page plus additional information from the **Ticket Editor** page), and a section on Ticket Miscellaneous (name of queue administrator and information on other settings and options for the ticket).

   - *Comments*. Includes all the entries in the **Notes & Attachments** pane in the **Ticket Editor** page.

   - *Ticket Logs*. Includes all the entries in the **[Logs]** tab in the **Ticket Editor** page.

   - *Service Logs*. Includes all the products selected in the **Chargeback Service** modal page for the ticket.

- *Exclude cloaked notes from report*. If you select this checkbox, cloaked comments are not included in the report.

6. After you have selected the format and the information to be displayed, SL1 will generate the report. You can immediately view the report, or save it to a file for later viewing.

Generating a Report for Multiple Tickets

The **Ticket Console** page contains a list of tickets in SL1. From the **Ticket Console** page you can generate a report on all, multiple, or a single ticket in SL1. The report will contain all the information in the **Ticket Console** page.

To generate a report for all or multiple tickets in SL1:

1. Go to the **Ticket Console** page ([**Tickets**] tab).

2. Optionally, apply filters so that the **Ticket Console** page displays only tickets you want to include in the report.

3. In the **Ticket Console** page, select the [**Actions**] button in the top right and select *Generate Report*.

4. The **Export current view as a report** modal page appears. Select from the following output formats in which to generate the report:
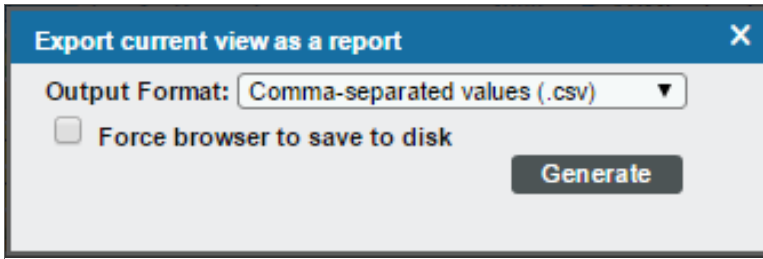
- Comma-separated values (.csv)
- Web page (.html)
- OpenDocument Spreadsheet (.ods)
- Excel Spreadsheet (.xlsx)
- Acrobat Document (.pdf)

5. Select the **[Generate]** button to generate the report. If you selected the *Force browser to save to disk* checkbox in the **Export current view as a report** modal page, you will be promoted to designate a location to save the report before you can view the report.

Ticket Statistics

SL1 allows you to generate a ticket statistics report, that displays information about each ticket queue and the status of tickets. You can access the Ticket Statistics report in the **Ticket Console** page.

To access the Ticket Statistics report:

1. Go to the **Ticket Console** page (**[Tickets]** tab).
2. In the **Ticket Console** page, select the **[Actions]** menu and choose *Ticket Statistics*.

3. The **Ticket Statistics** report appears.
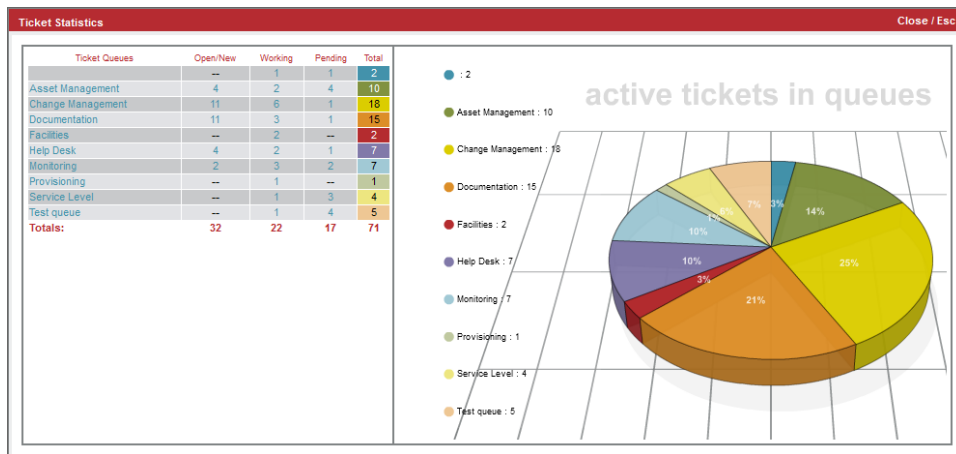
4. The **Ticket Statistics** report displays a table, with a row for each ticket queue. Each row displays the following about a ticket queue:

- *Open/New*. Number of tickets in the queue with the status "Open."

- *Working*. Number of tickets in the queue with the status "Working."

- *Pending*. Number of tickets in the queue with the status "Pending."

- *Total*. Total number of tickets in the queue.

  - The *Totals* row at the bottom of the table displays the total number of tickets of each status.

> **NOTE**: You can click on the name of each queue, and SL1 will display the **Ticket Console** page, with only tickets from the selected queue displayed. You can also click on tickets of each status (either within a queue or from the Total row), and SL1 will display the **Ticket Console** page, with only tickets of the selected status displayed.

5. The pie graph displays ticket distribution by ticket queue.

- Each slice of the pie represents a ticket queue. The legend on the left maps slice color to ticket queue.

- The graph displays information by percentage. Compared to the total number of tickets, each slice displays the percentage that belong to a specific ticket queue.

Timeline Report

SL1 allows you to view a timeline report for an individual ticket. A timeline report displays the changes made to a single ticket, over time. You can view this report from the **Ticket Editor** page.

To view a timeline report:

1. Go to the **Ticket Console** page (**[Tickets]** tab).

2. Find the ticket for which you want to view a timeline report. Select its wrench icon (🔧). The **Ticket Editor** page appears.

3. In the **Ticket Editor** page, select the **[Actions]** menu and choose *Timeline Report*.
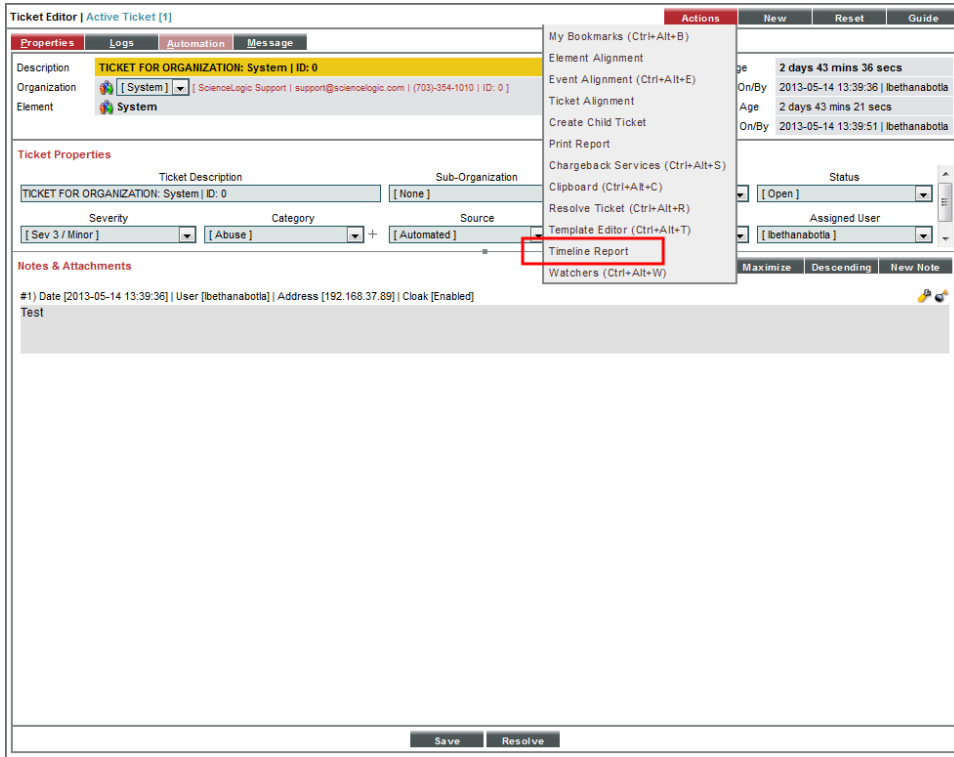
4. The **Timeline Report** page appears and displays the following information:
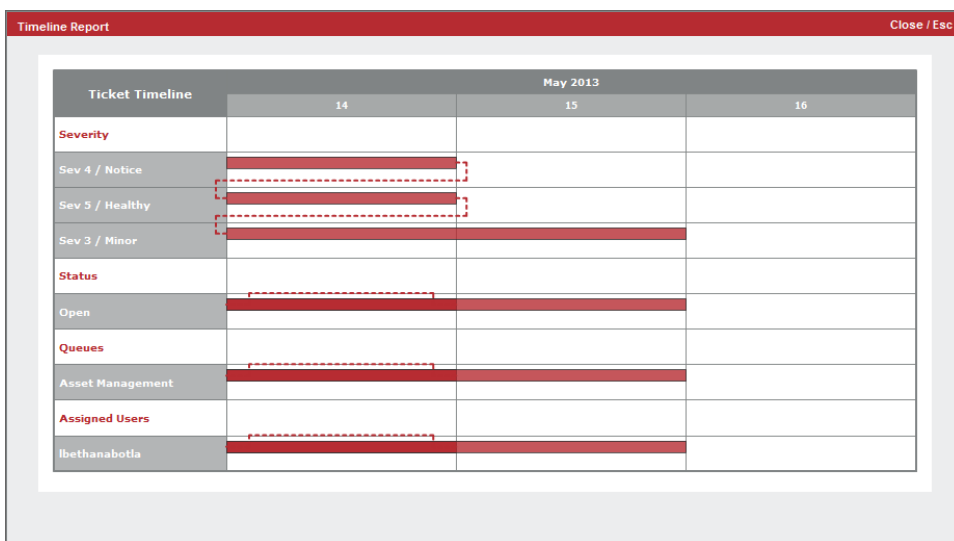
- **Severity**. You can view each severity assigned to the ticket, from the initial severity when the ticket was created to the current severity. Each severity is listed in the order it occurred and is aligned with the appropriate date. Mousing over each entry displays the date and time the severity was changed.

- **Status**. You can view each status assigned to the ticket, from the initial status when the ticket was created to the current status. Each status is listed in the order it was assigned and is aligned with the appropriate date. Mousing over each entry displays the date and time the status was changed.

- **Queues**. You can view each ticket queue assigned to the ticket, from the queue when the ticket was created to the current queue. Each queue is listed in the order it was assigned and is aligned with the appropriate date. Mousing over each entry displays the date and time the queue was changed.

- **Assigned Users**. You can view each user assigned to the ticket, from the assigned user when the ticket was created original to the current user. Each user is listed in the order he/she was assigned and is aligned with the appropriate date. Mousing over each entry displays the date and time the user was changed.

Chapter

10

Ticket Escalations

Overview

SL1 allows you to create and edit ticket escalation policies. Ticket escalation policies automatically perform actions on a ticket when the specified conditions have been met.

For example, the escalation conditions could be "if a ticket has a severity of 'major', is three days old, and has not yet been assigned to a user." When a ticket meets those conditions, the escalation policy could perform the actions "change ticket's severity to 'critical' and assign the ticket to the queue administrator."

NOTE: Each ticket escalation policy can act on a specific ticket only once; a policy cannot escalate a specific ticket multiple times.

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:
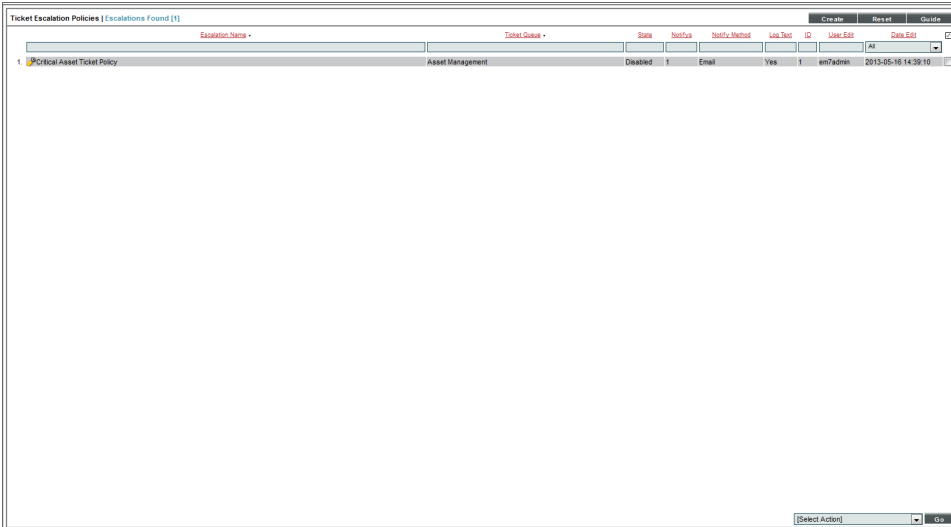
Creating and Editing a Ticket Escalation Policy

You can create and edit a ticket escalation policy from the **Ticket Escalation Policies** page (Registry > Ticketing > Escalations). From the **Ticket Escalation Policies** page you can also enable or delete one or multiple ticket escalation policies.

To create a ticket escalation policy:

1. Go to the **Ticket Escalation Policies** page (Registry > Ticketing > Escalations).
2. In the **Ticket Escalation Policies** page, select the **[Create]** button in the upper right of the page.

3. The **Create New Escalation Policy** modal page appears and displays the following fields:

- *For Ticket Queue*. Ticket queue to associate with this escalation policy. You can select from a list of all ticket queues. The escalation policy will act on tickets in this ticket queue.

- *Policy Name*. Name of the escalation policy. Can be any combination of alphanumeric characters, up to 64 characters in length.

- *State*. Specifies whether or not the escalation policy is enabled or disabled. Choices are:

  - *Disabled*. Makes escalation policy inactive. SL1 will not execute the policy.

  - *Enabled*. Makes escalation policy active. SL1 will execute the policy when ticket conditions are met.

Escalation Condition

These seven fields specify the conditions that must be met before SL1 will execute the ticket escalation policy. All seven conditions must be met before SL1 will execute the policy.

- *Ticket Status Threshold*. In this field, you can specify a ticket's status as part of the escalation condition. A ticket must have the specified status before SL1 will execute the escalation policy. Choices are:

  - When ticket state is open

  - When ticket state is working

  - When ticket state is pending

  - When ticket has not been resolved

  - When ticket has been resurrected (that is, when a previously resolved ticket is set to a status other than "resolved").

- **Ticket Severity Threshold**. In this field, you can specify a ticket's severity as part of the escalation condition. A ticket must have the specified severity before SL1 will execute the escalation policy. Choices are:

  - and SEVERITY is equal to or greater than "Sev 4 / Critical"

  - and SEVERITY is equal to or greater than "Sev 3 / Major" (includes major and critical)

  - and SEVERITY is equal to or greater than "Sev 2 / Minor" (includes minor, major, and critical)

  - and SEVERITY is equal to or greater than "Sev 1 / Notice" (includes notice, minor, major, critical)

  - and SEVERITY is equal to or greater than "Sev 0 / Healthy" (includes all severities)

- **Age Type Threshold**. In this field, you can specify a ticket's age as part of the escalation condition. A ticket must have the age specified in this field (and the next three fields) before SL1 will execute the escalation policy. Choices are:

  - and ticket's create age is..

  - and ticket's last update age is..

- **Minutes Threshold**. The number of minutes that have elapsed. Choices are None and 1-59 minutes, in increments of 1 minute.

- **Hours Threshold**. The number of hours that have elapsed. Choices are None and 1-23 hours, in increments of 1 hour.

- **Days Threshold**. The number of days that have elapsed. Choices are None and 1 day to 3 months, in increments of 1 day.

- **User Action Threshold**. In this field, you can specify user actions as part of the escalation condition. A ticket must have the specified user action before SL1 will execute the escalation policy. Choices are:

  - and ticket is not yet resolved

  - and ticket is not yet assigned

  - and ticket is not yet updated

Escalation Action

These four fields specify the actions that will be executed by the ticket escalation policy.

- **Severity Action**. In this field, you can specify how the escalation policy will affect the ticket's severity. If a ticket meets all the thresholds (specified in the Escalation Condition fields), the escalation policy will automatically change the ticket's severity. Choices are:

  - Make no change to ticket severity

  - Increment ticket severity by one

  - Increment ticket severity by two

  - Increment ticket severity by three

- **Queue Action**. In this field, you can specify how the escalation policy will affect the ticket's queue. If a ticket meets all the thresholds (specified in the Escalation Condition fields), the escalation policy will

automatically change the ticket's queue. Choices are:

- ○ LEAVE in <ticket's current queue>
- ○ MOVE to <entry for each ticket queue>

- **User Action**. In this field, you can specify how the escalation policy will affect the ticket's "owner" (assigned user). If a ticket meets all the thresholds (specified in the Escalation Condition fields), the escalation policy will automatically change the ticket's assigned user. Choices are:

- ○ Keep MEMBER assignment (if possible)
- ○ ASSIGN to member <entry for each user>

NOTE: There are cases when SL1 will override *keep MEMBER assignment (if possible)*. If the current user assigned to the ticket is removed from the ticket's queue, or if the ticket is moved to a queue in which the current user is not a member, the ticket will be assigned to the queue administrator.

- **Notify Action**. In this field, you can specify whether or not the escalation policy will notify users when the escalation actions are performed. If a ticket meets all the thresholds (specified in the Escalation Condition fields), the escalation policy can automatically notify users. Choices are:

- ○ Don't notify any queue members
- ○ Notify selected queue members
- ○ Notify selected queue members & watchers

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field **Automatic Ticketing Emails** is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

- **Ticket Status Action**. In this field, you can specify how the escalation policy will affect the ticket's status. If a ticket meets all the thresholds (specified in the **Escalation Condition** fields), the escalation policy will automatically change the ticket's status. Choices are:

- ○ Make no change to ticket status
- ○ Set ticket status to: *Open*
- ○ Set ticket status to: *Working*
- ○ Set ticket status to: *Pending*
- ○ Set ticket status to: *Resolved*

Notification Action

If a ticket meets all the conditions (specified in the Escalation Condition fields), the escalation policy can automatically notify users. In this pane, you can specify who the escalation policy will notify when the policy is executed.

- *Queue Members*. You can select one or more users from the list of all queue members (for the queue specified in the *For Ticket Queue* field). If a ticket meets all the thresholds in the escalation policy, the selected users will be notified of changes executed by the escalation policy and of the current status of the ticket.

- *Non-Queue Members*. You can select one or more users from the list of all users who are not members of the queue (queue was specified in the *For Ticket Queue* field). If a ticket meets all the thresholds in the escalation policy, the selected users will be notified of changes executed by the escalation policy and of the current status of the ticket.

> **NOTE**: On the **Behavior Settings** page (System > Settings > Behavior,if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

Add Message to Ticket

In this field, you can enter text that will automatically be added to the **Notes & Attachments** pane of the **Ticket Editor** page for the ticket. This field is optional.

- *Cloaked*. If a note is added to the ticket as part of the escalation, that note will be cloaked. A cloaked note can be viewed only by users who have been assigned the Access Hook "Ticket:Notes:Cloaked".

4. Select the **[Save]** button, to save the new policy.

Editing a Ticket Escalation Policy

After you have created a ticket escalation policy, you can edit the policy from the **Ticket Escalation Policies** page when needed.

To edit a ticket escalation policy:

1. Go to the **Ticket Escalation Policies** page (Registry > Ticketing > Escalations).

2. Find the ticket escalation policy you want to edit. Select its wrench icon (🔧).

3. The **Editing Escalation Policy** modal page appears, with the same fields described above. You can edit any of these fields.

4. If you have edited the policy and changed its name, select the **[Save As]** button. If you have edited the policy but have not changed its name, select the **[Save]** button.

Viewing the List of Ticket Escalation Policies

The **Ticket Escalation Policies** page (Registry > Ticketing > Escalations) displays a list of existing ticket escalation policies. For each ticket escalation policy, the following information is displayed:

- *Escalation Name*. Name of the escalation policy.

- *Ticket Queue*. Ticket queue associated with this escalation policy.

- *State*. Specifies whether or not the escalation policy is enabled or disabled

- *Notifies*. Number of users selected in the *Notification Action* field.

- *Notify Method*. Specifies whether the escalation policy will send Email notifications when the policy is executed, based on the selection in the *Notify Action* field.

- *Log Text*. Specifies whether the Ticket Escalation Policy has a value in the *Add Message to Ticket* field. "Yes" means that the *Add Message to Ticket field* contains a value; "No" means that the *Add Message to Ticket* field does not contain a value.

- *ID*. SL1 automatically assigns this unique, numeric ID to each escalation policy.

- *User Edit*. User who created or last edited the escalation policy.

- *Date Edit*. Date and time the escalation policy was created or last edited.

Filtering the List of Ticket Escalation Policies

The **Ticket Escalation Policies** page includes nine filters. You can filter the list of escalation policies by one or multiple of the following parameters: escalation policy name, ticket queue, state, number of people to notify, notification method, log text, ID, user who created or last edited the policy, date the policy was created or last edited. Only escalation policies that meet all the filter criteria will be displayed in the **Ticket Escalation Policies** page.

You can filter by one or more of the following parameters. The list of escalation policies is dynamically updated as you select each filter.

- For each filter except *Date Edit*, you must enter text to match against. SL1 will search for escalation policies that match the text, including partial matches. Text matches are not case sensitive. You can use the following special characters in each filter:

    - , Specifies an "or" operation. For example: "dell, micro" would match all values that contain the string "dell" OR the string "micro".

    - ! Specifies a "not" operation. For example: "!dell" would match all values that do not contain the string "dell".

    - & Specifies an "and" operation. For example: "cisco & catalyst" would. match all values that contain the string "cisco" AND the string "catalyst".

- *Escalation Name*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching policy name.

- *Ticket Queue*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching ticket queue.

- *State*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching state (enabled or disabled).

- *Notifies*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching number of users selected in the *Notification Action* field.

- *Notify Method*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching value in the *Notify Action* field.

- *Log Text*. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching value in the *Add Message to Ticket* field. "Yes" means that the *Add Message to Ticket* field contains a value; "No" means that the *Add Message to Ticket* field does not contain a value.

- **ID**. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching ID. SL1 automatically assigns this unique, numeric ID to each escalation policy.

- **User Edit**. You can enter text to match, including special characters (comma, ampersand, and exclamation mark), and the **Ticket Escalation Policies** page will display only escalation policies that have a matching username in the *User Edit* field.

- **Date Edit**. Only those escalation policies that match all the previously selected fields and have the specified creation date or last-edited date will be displayed. The choices are

  - *All*. Display all escalation policies that match the other filters.

  - *Last Minute*. Display only escalation policies that have been created within the last minute.

  - *Last Hour*. Display only escalation policies that have been created within the last hour.

  - *Last Day*. Display only escalation policies that have been created within the last day.

  - *Last Week*. Display only escalation policies that have been created within the last week.

  - *Last Month*. Display only escalation policies that have been created within the last month.

 - *Last Year*. Display only escalation policies that have been created within the last year.

Performing Administrative Tasks on One or More Policies

The **Ticket Escalation Policies** page contains a drop-down field in the lower right called *Select Action*. This field allows you to apply an action to multiple ticket escalation policies simultaneously.

To apply an action to multiple policies:

1. Go to the **Ticket Escalation Policies** page (Registry > Ticketing > Escalations).

2. In the **Ticket Escalation Policies** page, select the checkbox for each policy you want to apply the action to. To select all checkboxes for all policies, select the red checkbox at the top of the page.

3. In the *Select Action* drop-down list, select one of the following actions:
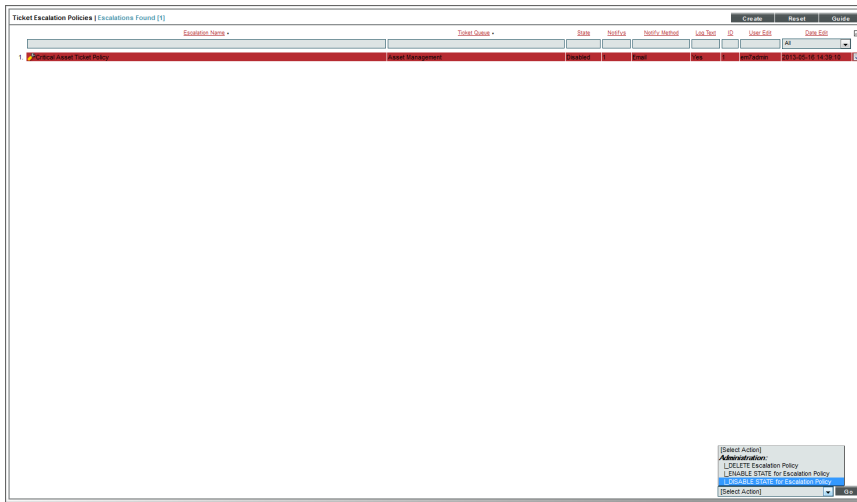
- *DELETE Escalation Policy*. Deletes one or more selected policies.
- *ENABLE State for Escalation Policy*. Activates one or more selected policies. SL1 monitors and acts on tickets in the queue specified in the policy.
- *DISABLE State for Escalation Policy*. Deactivates one or more selected policies.

4. Select the **[Go]** button. The selected action with be applied to each selected escalation policy.

Example Escalation Policy

In this example we will create an escalation policy for a ticket with a severity of "critical." We will define our escalation policy to send an Email to specified users if a ticket with a severity of "critical" is not worked on within a 30 minute time period.

To create this escalation policy:

1. Go to the **Ticket Escalation Policies** page (Registry > Ticketing > Escalations).
2. In the **Ticket Escalation Policies** page, select the **[Create]** button. The **Create New Escalation Policy** page appears.

3. In the **Create New Escalation Policy** page, we defined the following fields:

- *For Ticket Queue*. We selected *Asset Management*. This escalation policy will be enabled for ticket's in the queue *Asset Management*.

- *Policy Name*. We named our policy "Critical Asset Ticket Policy".

- *State*. We want our policy to be active, so we selected *Enabled*.

- *Ticket Status Threshold*. We want our policy to take effect when the ticket hasn't been worked on for a specified amount of time, so we selected *When ticket state is open*.

- *Ticket Severity Threshold*. We want our policy to take effect when ticket severity is Critical, so we selected *and severity is >= Sev 4/Critical*.

- *Age Type Threshold*. We want our policy to take effect after 30 minutes, so we selected *and ticket's create age is…*.

- *Minutes Threshold*. We selected *30 minutes*. If the ticket has not been worked on for 30 minutes, the escalation policy will take effect.

- *Hours Threshold*. We did not define a value in this field.

- *Days Threshold*. We did not define a value in this field.

- *User Action Threshold*. We selected *and ticket is not updated*.

- *Severity Action*. Because our escalation policy is defined with a ticket at its highest severity, we left this field at its default value.

- *Queue Action*. We do not want this ticket to leave the Asset Management queue, so we left this field at its default value.

- *User Action*. We do not want other members working on critical tickets, so we left this field at its default value.
- *Notify Action*. We want selected queue members to be notified of the ticket if it has not been worked on for 30 minutes. We selected *Notify selected queue members*.
- *Ticket Status Action*. We do not want the policy to make any changes to the status of the ticket, so we left this field at its default value of *Make no change to ticket status*.
- *Queue Members*. We selected two members of the Queue to be notified of the ticket by selecting their checkboxes.
- *Non-Queue Members*. We do not want non-queue members working on critical tickets, so we did not add any more members to be notified.
- *Add Message to Ticket*. We entered "Ticket needs immediate attention!" This message will be added to the Email on the ticket.
- *Cloaked*. We selected the **cloaked** checkbox so that only administrators and users that are part of the same organization of the user that created the note can view the note.

After a ticket meeting the criteria has been created, the escalation policy will take effect and Email the selected users that a ticket has been escalated.

# Chapter

11

Ticket Templates

Overview

Ticket templates allow you to standardize and simplify ticket creation in SL1. In a ticket template you provide default values for each field normally defined in the **Ticket Editor** page. You can use ticket templates when:

- Manually creating a ticket from the **Ticket Editor** page.
- Defining an action policy that creates a ticket.
- Defining recurring tickets.
- Defining tickets-from-email policies.

You can create, edit, and delete ticket templates from the **Ticket Templates** page (Registry > Ticketing > Templates).

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

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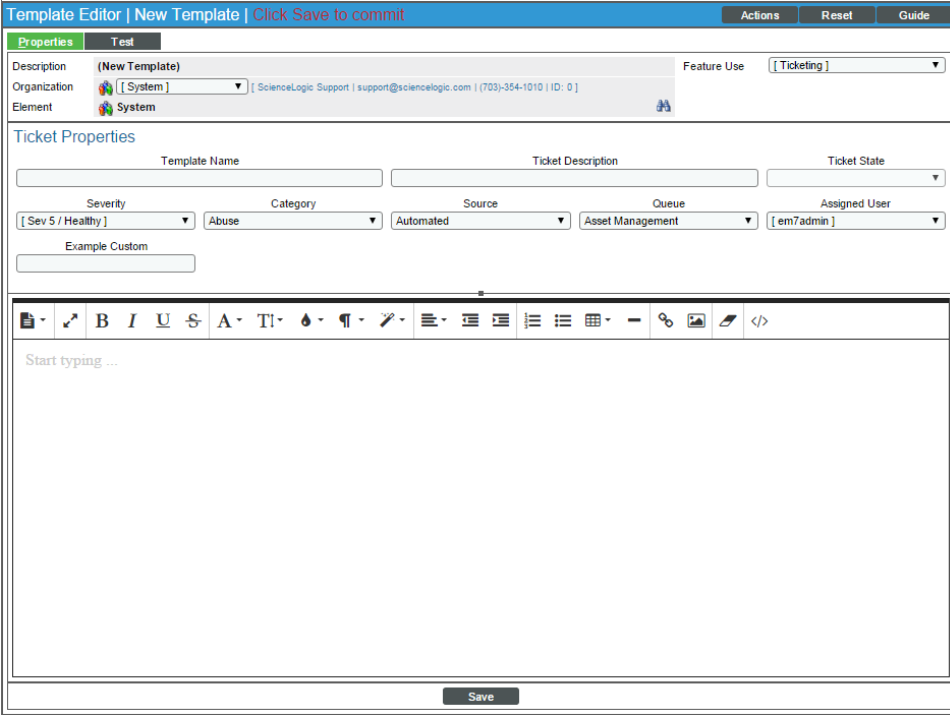- To view a page containing all of the menu options, click the Advanced menu icon (···).

This chapter includes the following topics:

Creating a Ticket Template

Ticket templates can be created, edited, and deleted from the **Ticket Templates** page (Registry > Ticketing > Templates). To create a ticket template:

1. Go to the **Ticket Templates** page (Registry > Ticketing > Templates).
2. In the **Ticket Templates** page, click the **[Create]** button in the upper right of the page. The **Template Editor** page appears.

3. In the **Template Editor** page, supply a value in each field in each tab.

   Properties Tab

   This tab appears for all ticket templates.

   - *Description*. Description of the problem or ticket. This is a read-only field that displays the ticket description that will appear in each ticket created by this template. This field can include one or more event variables, described later in this section.
   - *Organization*. Organization to which the resulting ticket will be assigned. You can select one of the following:

     ○ *Automatically assign*. The resulting ticket will be automatically assigned to an organization. This dynamic feature is useful in Tickets From Emails policies (Registry > Ticketing > Email Tickets).

If this field is set to *Automatically Assign*, when SL1 receives an email message for a Tickets From Emails policy, SL1 will try to match the "from" address in the email message to a user. If successful, SL1 will assign the resulting ticket to the same organization as the user. If SL1 cannot match the "from" address in an email message to a user, SL1 will assign the resulting ticket to the *System* organization.

○ *List of all existing organizations in EM7*. The resulting ticket will be assigned to the selected organization.

- *Element*. Name of the entity (frequently, a device) associated with tickets created with this template. To select an element, click on the binoculars icon ( ) or go to the **[Actions]** menu and choose *Element Alignment*. The **Finder** modal page appears, where you can filter by element type and search for an element.

- **Feature Use**. Specifies where in SL1 this template will be used. Choices are:

  ○ *Automation*. Templates with this Feature Use appear when a user defines an action policy that creates a ticket. Templates with this Feature Use appear in the **Action Policy Editor** modal page, in the *Ticket Template* field.

  ○ *Scheduler*. Templates with this Feature Use appear when a user defines a recurring ticket. Templates with this Feature Use appear in the **Schedule Ticket** modal page, in the *Ticket Template* field.

  ○ *Ticketing*. Templates with this Feature Use appear in the **Ticket Editor** page, in the *Import Template* field.
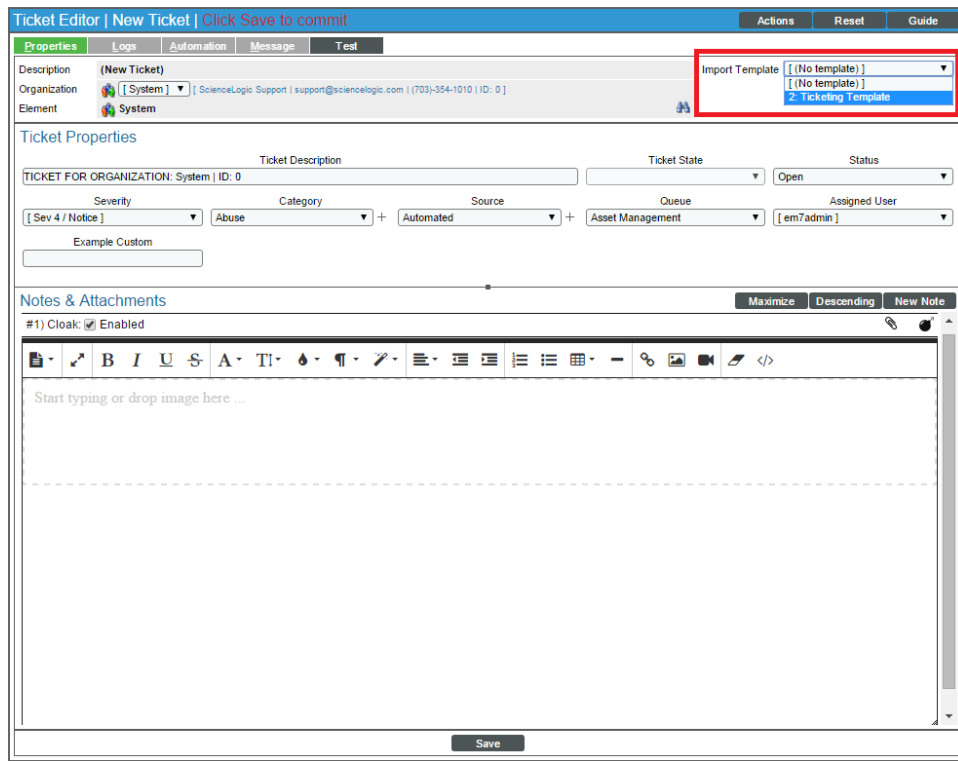
- *Template Name*. Name of the ticket template. This is a required field. If you use a unique name for each ticket template, you can use identical values in the *Description* field and still differentiate between templates.
- *Ticket Description*. Description of the problem or required work. This field can include one or more of the event variables from the following list of variables:

Variable	Source	Description
%1 (one)	Event	Entity Type
%2	Event	Sub-entity Type
%3	Event Policy	Event Policy ID
%4	Event	Text string of the username that cleared the event.
%5	Event	Timestamp of when event was deleted.
%6	Event	Timestamp of event becoming active.

Variable	Source	Description
%7	Event	Event severity (1-5), for compatibility with previous versions of SL1. 1=critical, 2=major, 3=minor, 4=notify, 5=healthy.
%A	Account	Username
%a	Entity	IP address
%B	Organization	Organization billing ID
%b	Organization	Impacted Organization
%C	Organization	Organization CRM ID
%c	Event	Event counter
%D	Event	Timestamp of first event occurrence
%d	Event	Timestamp of last event occurrence
%E	Event Policy	External ID from event policy
%e	Event	Event ID
%F	Dynamic Alert	Dynamic App alert ID
%f	Event Policy	Specifies whether event is stateful, that is, has an associated event that will clear the current event. 1 (one) = stateful; 0 (zero) = not stateful.
%G	Event Policy	Event Category
%g	Asset	Asset serial
%H	Event	URL link to event
%h	Asset	Device ID associated with the asset
%I (uppercase "eye")	Dynamic Alert	For events with a source of "dynamic", this variable contains the index value from SNMP. For events with a source of "syslog" or "trap", this variable contains the value that matches the Identifier Pattern field in the event definition
%i (lowercase "eye")	Asset	Asset Location
%7	Ticket	Subject of email used to create a ticket. If you specify this variable in a ticket template, SL1 will use the subject line of the email in the ticket description or note text when SL1 creates the ticket. **NOTE**: When referring to a ticket, %7 represents the subject line of an email used to create a ticket. When referring to an event, %7 represents severity (for previous versions of SL1).

Variable	Source	Description
%K	Asset	Asset Floor
%k	Asset	Asset Room
%M	Event	Event Message
%m	Automation	Automation Policy Note
%N	Action	Automation Action Name
%n	Automation	Automation policy name
%0 (uppercase "oh")	Organization	Organization
%o (lowercase "oh")	Organization	Organization ID
%P	Asset	Asset Plate
%p	Asset	Asset Panel
%Q	Asset	Asset Punch
%q	Asset	Asset Zone
%R	Event Policy	Event policy cause/action text
%r	System	Unique ID/Name for the current SL1 system
%S	Event	Severity (Healthy-Critical)
%s	Event	Severity (0 - 4). 0=healthy, 1=notify, 2=minor, 3=major, 4=critical.
%T	Dynamic Alert	Dynamic App alert threshold value
%t	Ticket	Ticket ID
%U	Asset	Asset rack
%u	Asset	Asset shelf
%V	Dynamic Alert	Dynamic App alert result value
%v	Asset	Asset tag
%W	Asset	Asset make
%w	Asset	Asset model
%X	Event	Entity Name

Variable	Source	Description
%x	Event	Entity ID
%Y	Event	Sub-entity bane
%y	Event	Sub-entity ID
%Z	Event	Event Source (1-8)
%z	Event	Event source (Syslog - Group)

- *Ticket State*. Custom parameter, defined in the **Ticket States** page (Registry > Ticketing > Custom States). Allows you to add additional workflow restrictions to a ticket.

- *Severity*. The severity of the problem. The choices are:

  - Severity 0/Healthy
  - Severity 1/Notice
  - Severity 2/Minor
  - Severity 3/Major
  - Severity 4/Critical

- *Category*. Descriptive category assigned to the ticket. The list of possible categories can be customized in the **Device Category Editor** page (System > Customize > Device Categories).

- *Source*. Original source for the ticket. Choices are:

  - *Email*. An email about an issue prompted this ticket.
  - *External*. An external source created this ticket.
  - *Internal*. Ticket created in SL1.
  - *Phone*. A phone call about an issue prompted this ticket.

- *Queue*. Ticket Queue to assign the ticket to.

- *Assigned User*. User to assign the ticket to. All members of the ticket queue (specified in the *Ticket Queue* field) appear in this field.

- *Custom Fields*. If your SL1 system includes embedded fields for Ticketing, these fields will appear in the **Template Editor**. If an embedded field is required, you must supply a value for that field in the **Template Editor**.

Custom Tabs

After assigning a ticket queue to a ticket template and saving the ticket template, SL1 can add additional tabs to the **Template Editor** page.

For each tabbed form you selected in the *Custom Forms* field in the **Ticket Queue Properties** page, SL1 will display a tab in the **Template Editor** page.

Each tabbed form is defined in the **Application Forms** page (System > Customize > Form Fields).

For each custom tab, you can define a value for one or more fields. If a custom field is required (either in the **Ticket Queue Properties** page (Registry > Ticketing > Queues > Edit/Create) or in the **Form Creator** page (System > Customize > Form Fields > create/edit), you must supply a value for the field.

4. Click the **[Save]** button to save the template.

Editing and Deleting a Ticket Template

You can edit and delete an existing ticket template from the **Ticket Templates** page. To edit a ticket template:

1. Go to the **Ticket Templates** page (Registry > Ticketing > Templates).

2. In the **Ticket Templates** page, find the template you want to edit. Click its wrench icon (🔧). The **Template Editor** modal page appears with the same fields listed above.

3. In the **Template Editor** modal page, change the values in one or more fields.

4. Click the **[Save]** button to save your changes. If you have changed the name of the ticket template, click the **[Save As]** button.

To delete a ticket template:

1. Go to the **Ticket Templates** page (Registry > Ticketing > Templates).

2. Find the ticket template you want to delete. Select its checkbox (☑).

3. In the *Select Action* drop-down list, select *DELETE Template*.

4. Click the **[Go]** button.

5. The ticket template will be deleted.

Adding Watchers to a Ticket Template

By default, SL1 automatically sends an email message to the ticket assignee when:

- A ticket is assigned to that user
- A ticket is updated

You can also assign one or more watchers to the ticket. A ticket watcher is a user (in addition to the ticket's assignee) that receives email updates about the ticket. If a watcher is added to a ticket, SL1 automatically sends the watcher an email message when certain actions are taken on the ticket.

By default, the following watchers are assigned to a ticket when the ticket is created:

- The user who created the ticket (if applicable)

- Each user who was defined as a watcher in the ticket's ticket template (if applicable)
- Each user who was defined as a watcher for the ticket's initial ticket queue (if applicable)
- Each user who was defined as a watcher for the ticket's initial organization (if applicable)

SL1 automatically generates email messages for a ticket's watchers when:

- An uncloaked note is added to the ticket
- A ticket is moved to a different queue
- A ticket's state has changed
- A ticket's status has changed
- A custom field has changed
- A ticket is resolved
- A ticket is resurrected

NOTE: On the **Behavior Settings** page (System > Settings > Behavior, if the field *Automatic Ticketing Emails* is set to *Disabled*, all assignees and watchers will not receive automatic email notifications about any tickets. By default, the field is set to *Enabled*.

You can define a list of watchers for a ticket template. When a ticket is created using a template, the watchers defined in the template are automatically added to the new ticket's list of watchers. To define a list of watchers for a ticket template:

1. Go to the **Ticket Templates** page (Registry > Ticketing > Templates).
2. To create a new ticket template, click the **[Create]** button. To add watchers to an existing ticket template, click its wrench icon (🔧).
3. In the **Template Editor** modal page, go to the **[Actions]** menu and choose *Watchers*. The **Ticket Watchers** modal page is displayed.
4. In the **Ticket Watchers** modal page, select (or de-select) the checkbox for each user you want to add to the list of watchers for the ticket template. You can remove a user from the list of watchers for the ticket template by de-selecting the checkbox for that user.

NOTE: Users whose *Login State* is set to *Suspended* on the **Account Permissions** page will not display in the list of users in the **Ticket Watchers** modal page. For details about suspending user accounts, see the *Organizations and Users* manual.

5. Click the **[Save]** button to save the list of watchers.

Chapter

12

Ticket Settings and Customization

Overview

SL1 includes various features to customize ticketing, including global settings, settings that affect how users interact with tickets, and ticket customization. You can use global features to affect data retention and Email settings. You can customize the ticketing interface with form fields, and you can grant users access permissions to determine how they can use the ticketing system.

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:

Ticket Attachment Blacklist
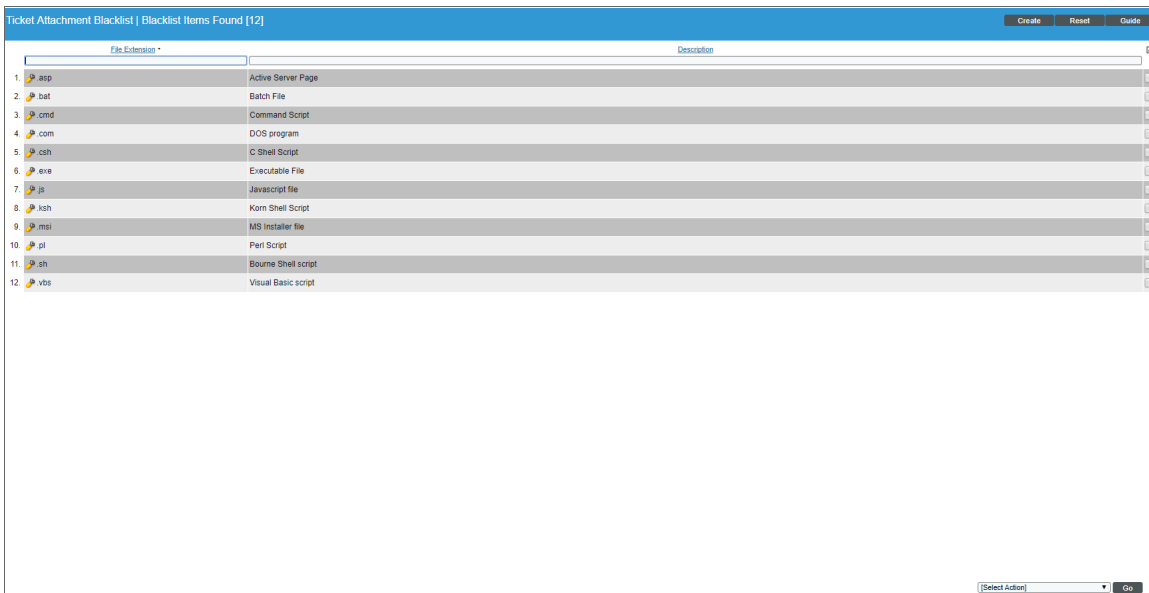
The **Ticket Attachment Blacklist** page (Registry > Ticketing > Attachment Blacklist) displays a list of all file types that cannot be attached to a ScienceLogic ticket. You can define, edit, and delete blacklist items from this page.

If you try to attach a file to a ticket note and that file matches a blacklist item, SL1 will prevent the attachment from being uploaded and display an error message.

The blacklist items apply to ticket notes created with a ticket from email policy, in the Ticket Editor, or in the ScienceLogic API.

Viewing the List of Blacklist Items

The **Ticket Attachment Blacklist** page (Registry > Ticketing > Attachment Blacklist) displays the following information about each blacklist item:

- *File Extension*. The file extension that is blacklisted.
- *Description*. Description of the file extension.

Filtering the List of Blacklist Items

The Filter-While-You-Type fields appear as a row of blank fields at the top of the list. These fields allow you to filter the items that appear in the list.

The list is dynamically updated as you select each filter. For each filter, you must make a selection from a drop-down menu or type text to match against. SL1 will search for entries that match the text, including partial matches. Text matches are not case-sensitive, and you can use special characters in each text field.

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.

You can filter by one or more of the following parameters. Only items that meet all of the filter criteria are displayed on the page.

- *File Extension*. You can type text to match, including special characters, and the**Ticket Attachment Blacklist** page will display only blacklist items that have a matching file extension.
- *Description*. You can type text to match, including special characters, and the **Ticket Attachment Blacklist** page will display only blacklist items that have a matching description.

Special Characters

You can include the following special characters to filter by each column except those that display date and time:

> **NOTE**: When searching for a string, SL1 will match substrings by default, even if you do not include any special characters. For example, searching for "hel" will match both "hello" and "helicopter". When searching for a numeric value, SL1 will not match a substring unless you use a special character.

String and Numeric

- , (comma). Specifies an "OR" operation. Works for string and numeric values. For example:

  "dell, micro" matches all values that contain the string "dell" OR the string "micro".

- & (ampersand). Specifies an "AND " operation. Works for string and numeric values. For example:

  "dell & micro" matches all values that contain both the string "dell" AND the string "micro", in any order.

- ! (exclamation point). Specifies a "not" operation. Works for string and numeric values. For example:

  "!dell" matches all values that do not contain the string "dell".

  "!^micro" would match all values that do not start with "micro".

  "!fer$" would match all values that do not end with "fer".

  "!^$" would match all values that are not null.

  "!^" would match null values.

  "!$" would match null values.

  "!*" would match null values.

  "happy, !dell" would match values that contain "happy" OR values that do not contain "dell".

> **NOTE**: You can also use the "!" character in combination with the arithmetic special characters (min-max, >, <, >=, <=, =) described below.

- * (asterisk). Specifies a "match zero or more" operation. Works for string and numeric values. For a string, matches any string that matches the text before and after the asterisk. For a number, matches any number that contains the text. For example:

  "hel*er" would match "helpers" and "helicopter" but not "hello".

  "325*" would match "325", "32561", and "325000".

  "*000" would match "1000", "25000", and "10500000".

- ? (question mark). Specifies "match any one character". Works for string and numeric values. For example:

  "l?ver" would match the strings "oliver", "levers", and "lover", but not "believer".

  "135?" would match the numbers "1350", "1354", and "1359", but not "135" or "13502"

String

- ^ (caret). For strings only. Specifies "match the beginning". Matches any string that begins with the specified string. For example:

  "^sci" would match "scientific" and "sciencelogic", but not "conscious".

  "^happy$" would match only the string "happy", with no characters before or after.

  "!^micro" would match all values that do not start with "micro".

  "!^$" would match all values that are not null.

  "!^" would match null values.

- $ (dollar sign). For strings only. Specifies "match the ending". Matches any string that ends with the specified string. For example:

  "ter$" would match the string "renter" but not the string "terrific".

  "^happy$" would match only the string "happy", with no characters before or after.

  "!fer$" would match all values that do not end with "fer".

  "!^$" would match all values that are not null.

  "!$" would match null values.

NOTE: You can use both ^ and $ if you want to match an entire string and only that string. For example, "^tern$" would match the strings "tern" or "Tern" or "TERN"; it would not match the strings "terne" or "cistern".

Numeric

- 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 would match 1, 2, 6, 345, etc.

  "-5" matches 5 and less. So 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.

Additional Examples

- "aio$". Matches only text that ends with "aio".
- "^shu". Matches only text that begins with "shu".
- "^silo$". Matches only the text "silo", with no characters before or after.
- "!silo". Matches only text that does not contains the characters "silo".
- "!^silo". Matches only text that does not start with "silo".
- "!0$". Matches only text that does not end with "0".
- "!^silo$". Matches only text that is not the exact text "silo", with no characters before or after.
- "!^". Matches null values, typically represented as "--" in most pages.
- "!$". Matches null values, typically represented as "--" in most pages.
- "!^$". Matches all text that is not null.
- silo, !aggr". Matches text that contains the characters "silo" and also text that does not contain "aggr".
- "silo, 02, !aggr". Matches text that contains "silo" and also text that contains "02" and also text that does not contain "aggr".
- "silo, 02, !aggr, !01". Matches text that contains "silo" and also text that contains "02" and also text that does not contain "aggr" and also text that does not contain "01".
- "^s*i*l*o$". Matches text that contains the letter "s", "i", "l", "o", in that order. Other letters might lie between these letters. For example "sXiXlXo" would match.
- "!^s*i*l*o$". Matches all text that does not that contains the letter "s", "i", "l", "o", in that order. Other letters might lie between these letters. For example "sXiXlXo" would not match.
- "!vol&!silo". Matches text that does not contain "vol" AND also does not contain "silo". For example, "volume" would match, because it contains "vol" but not "silo".
- "!vol&02". Matches text that does not contain "vol" AND also contains "02". For example, "happy02" would match, because it does not contain "vol' and it does contain "02".
- "aggr,!vol&02". Matches text that contains "aggr" OR text that does not contain "vol" AND also contains "02".
- "aggr,!vol&!infra". Matches text that contains "aggr" OR text that does not contain "vol" AND does not contain "infra".
- "*". Matches all text.
- "!*". Matches null values, typically represented as "--" in most pages.
- "silo". Matches text that contains "silo".
- " !silo ". Matches text that does not contain "silo".
- " !^silo$ ". Matches all text except the text "silo", with no characters before or after.
- "-3,7-8,11,24,50-". Matches numbers 1, 2, 3, 7, 8, 11, 24, 50, and all numbers greater than 50.

- "-3,7-8,11,24,50-,a". Matches numbers 1, 2, 3, 7, 8, 11, 24, 50, and all numbers greater than 50, and text that includes "a".

- "?n". Matches text that contains any single character and the character "n". For example, this string would match "an", "bn", "cn", "1n", and "2n".

- "n*SAN". Matches text the contains "n", zero or any number of any characters and then "SAN". For example, the string would match "nSAN", and "nhamburgerSAN".

- "^?n*SAN$". Matches text that begins with any single character, is following by "n", and then zero or any number of any characters, and ends in "SAN".

Creating a Blacklist Item

To define a new blacklist item:

1. Go to the **Ticket Attachment Blacklist** page (Registry > Ticketing > Attachment Blacklist).

2. In the the **Ticket Attachment Blacklist** page, click the **[Create]** button.

3. The **Create a new blacklist item** modal page appears. Supply values in each field:

   - *File Extension*. Specify the file extension that you want to prohibit from ticket attachments. All files with this extension will be prohibited from ticket notes. Do not include the leading period (.).

   - *Description*. Type a description of the blacklist item.

4. Click **[Save]** to save the new blacklist item.

Editing a Blacklist Item

To edit an existing blacklist item:

1. Go to the **Ticket Attachment Blacklist** page (Registry > Ticketing > Attachment Blacklist).

2. In the **Ticket Attachment Blacklist** page, find the blacklist item you want to edit and click its wrench icon ( ).
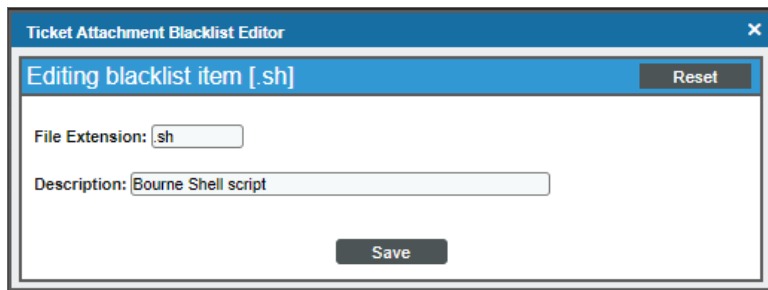
3. The **Editing blacklist item** modal page appears. You can edit one or both of the following fields:

   - *File Extension*. Specify the file extension that you want to prohibit from ticket attachments. All files with this extension will be prohibited from ticket notes. Do not include the leading period (.).

   - *Description*. A description of the blacklist item.

4. Click **[Save]** to save the new blacklist item.

Deleting One or More Blacklist Items

From the the **Ticket Attachment Blacklist** page, you can delete one or multiple blacklist items. To do so:

1. Go to the **Ticket Attachment Blacklist** page (Registry > Ticketing > Attachment Blacklist).

2. In the **Ticket Attachment Blacklist** page, select the checkbox for each blacklist item you want to delete. To select all checkboxes for all blacklist items, select the gray checkbox (☑) at the top of the page.

3. In the *Select Action* drop-down list, select *DELETE Blacklist Items*.

4. Click **[Go]** to delete the selected blacklist items.

System Settings

SL1 includes a set of global configuration settings that affect all the pages and policies in SL1. Some of these global settings affect tickets and ticketing. These settings will be described in this section.

The **Data Retention Settings** page (System > Settings > Data Retention) defines the number of months to retain logs for resolved tickets. To use this global setting:

1. Go to the **Data Retention Settings** page (System > Settings > Data Retention).

2. The *Resolved Ticket* slider determines the number of months a resolved ticket will retain its log information.
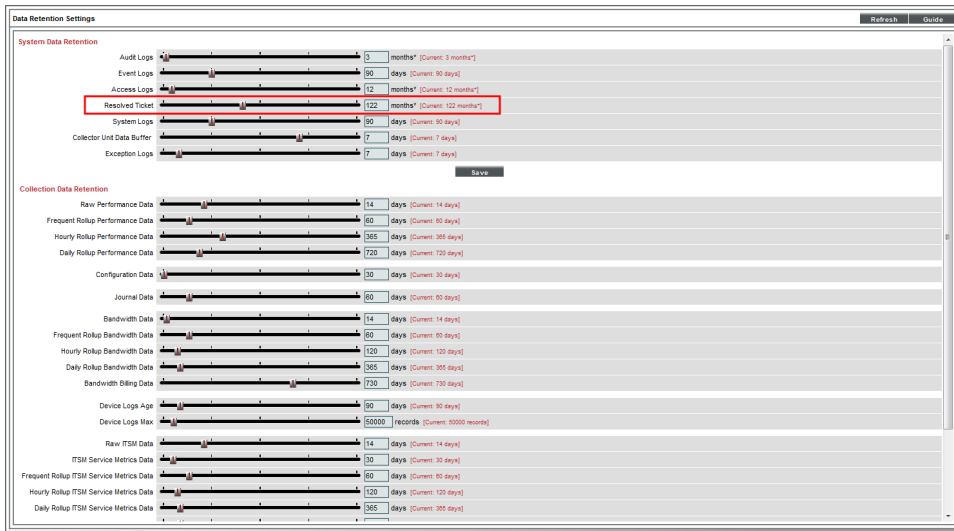
3. You can move the slider to the left or right to set the amount of time SL1 will retain logs for a resolved ticket. You can manually enter a value in the field to the far right of the slider. Log entries that are older than the specified number of months are automatically deleted.

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

In the **Email Settings** page (System > Settings > Email) you can define a global setting that affects ticket Emails. To use this global setting:

1. Go to the **Email Settings** page (System > Settings > Email).
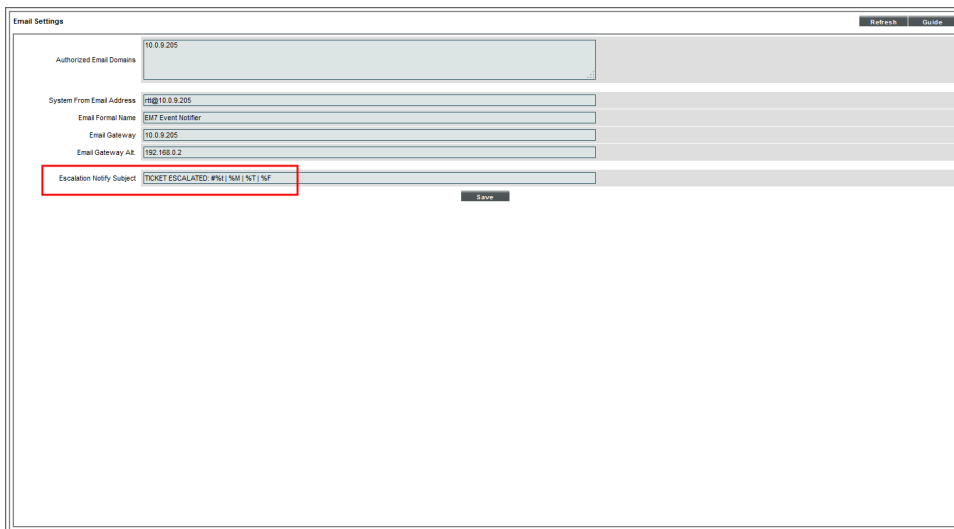
2. The *Escalation Notify Subject* field allows you to include default "Subject" text in Emails generated by Ticket Escalation policies. This field can include up to 64 characters, including one or more variables. For the list of

variables, see the table in *Creating a Ticket Template*.

3. Select the **[Save]** button to save the global setting.

The **Behavior Settings** page (System > Settings > Behavior) allows you to define global parameters that affect ticketing.

To define or edit the ticketing settings in the **Behavior Settings** page:

1. Go to the **Behavior Settings** page (System > Settings > Behavior).

2. In the **Behavior Settings** page, edit the value in the following field:

NOTE: This section includes an abbreviated list of fields. For a description of all the fields in this page, select the **[Guide]** button in the **Behavior Settings** page.

- *Event Console Ticket Life Ring Button Behavior*. Specifies how the life ring icon ( ) in the **Event Console** will behave. Choices are:

  ○ *Create/View EM7 Ticket*. When you select the life-ring icon ( ) for an event in the **Event Console**, SL1 will display the **Ticket Editor** page, where you can define a ScienceLogic ticket and automatically associate it with the selected event. This is the default behavior.

  ○ *Create/View External Ticket*. If an external ticket is aligned with an event, when you select the life-ring icon ( ) for that event (from the **Event Console**), SL1 spawns a new window and displays the external ticket (as specified in the force_ticket_uri field). If an external ticket is not yet aligned with an event, when you select the life-ring icon ( ) for that event, SL1 sets a "request" flag for the ticket and displays an acknowledgment that a new ticket has been requested. You can then use the "request" in run book logic, to create the ticket on the external system.

> **CAUTION:** If you select *Create / View External Ticket* in the **Ticket Life Ring Button Behavior** field, you can no longer create ScienceLogic tickets from the **Event Console**.

- *Hide "New" button on the Ticket Editor*. If you select this checkbox, the **Ticket Editor** page will not display the **[New]** button. This field is unselected by default.
- *Hide "Create a Ticket" in Toolbox menu*. If you select this checkbox, the **Toolbox** menu (three stacked horizontal lines in the upper-left corner) will not display the *Create a Ticket* option. This field is unselected by default.

3. Select the **[Save]** button to save changes in this page.

For more information about integrating events with external tickets, see the **Events** manual.

Customizing Ticket Fields

In addition to the default set of ticket forms, you can add additional custom forms that will appear for all tickets.

Custom fields are called embedded forms and appear in the **Ticket Editor** page. You can define only one embedded form for Ticketing.

Custom tabs are called tabbed forms and appear as a new, user-defined tab in the Ticket panel (the set of tabs that appears when you edit a ticket). You can define as many tabbed forms as you need.

For information about creating embedded and tabbed forms for tickets in SL1, see the **Customizing User Experience** manual.

Access Keys and Permissions

Access Hooks and Access Keys control user access to Tickets and all actions that can be performed on tickets.

An Access Hook controls access to a specific action that can be performed in the user interface. These actions include navigating to a page and viewing and editing information in the system. Access Hooks are intentionally granular, to allow administrators to tightly control access to SL1. For example, an Access Hook "Ticket:View Any" allows a user to view all tickets, but not create or edit tickets.

Access Hooks cannot be directly granted to a user account. To grant the "Ticket:View Any" privilege to a user, the Access Hook must be included in an Access Key.

An Access Key is a group of one or more Access Hooks. When you associate an Access Key with a user account, the user is granted all the Access Hooks within the Access Key. For example, you could create an Access Key called "Manage Tickets." That Access Key could include three Access Hooks: "Ticketing/Ticket: View (allows you to view the **Ticket Console** page), Ticket:View Any, and Ticket:Edit.

Access Keys can be assigned to a user, and can affect the way they are able to view, create, and edit tickets. To read more about access hooks and keys, see the **Access Permissions** manual.

Chapter

13

Generating Events from Tickets

Overview

When actions are applied to tickets, such as a change in the ticket's status, a log message is generated. Users can create an Event Policy to have an event occur each time a log message is generated. This chapter describes the different types of log messages that can be generated from tickets, as well as how to set up an Event Policy for those alerts.

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:

Event Policies

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

SL1 generates log messages both 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 in the **Event Console** page.

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

Event Policies from Tickets

In order to start receiving events from tickets, you need to create an Event Policy. There are six sources of events:

- *Syslog*. Message is generated by the syslog protocol. Syslogs can be sent by devices and proxy devices like MoMs. A syslog is an unsolicited message from a device to SL1. Syslog is a standard log format supported by most networking and UNIX-based devices and applications. Windows log files can be converted to syslog format using conversion tools.
- *Internal*. Message is generated by a ScienceLogic process.
- *Trap*. Message is generated by an SNMP trap. SNMP traps can be sent by devices and proxy devices like MoMs. An SNMP trap is an unsolicited message from a device to SL1. A trap indicates that an emergency condition or a condition that merits immediate attention has occurred on the device.
- *Dynamic*. Message is generated by a Dynamic Application alert.
- *Email*. Message is generated by an email message sent to SL1.
- *API*. Message is generated by inserting a message into the main ScienceLogic database. These messages can be inserted by a snippet automation action, a snippet Dynamic Application, or by an external system.

The source of the events generated from tickets will be *Internal*. To create an Event Policy for tickets:

1. Go to the **Event Policy Manager** page (Registry > Events > Event Manager).
2. Click the **[Create]** button. The **Event Policy Editor** page appears. The **Event Policy Editor** page contains three tabs:

   - *Policy*. Allows you to define basic parameters for the event. This tab is described in the following section.
   - *Advanced*. Allows you to define pattern-matching for the event and also define event roll-ups and suppressions.

- **Suppressions**. Allows you to suppress the event on selected devices. When you suppress an event, you are specifying that, in the future, if this event occurs again on a specific device, the event will not appear in the **Event Console** page or the **Viewing Events** page for the device.
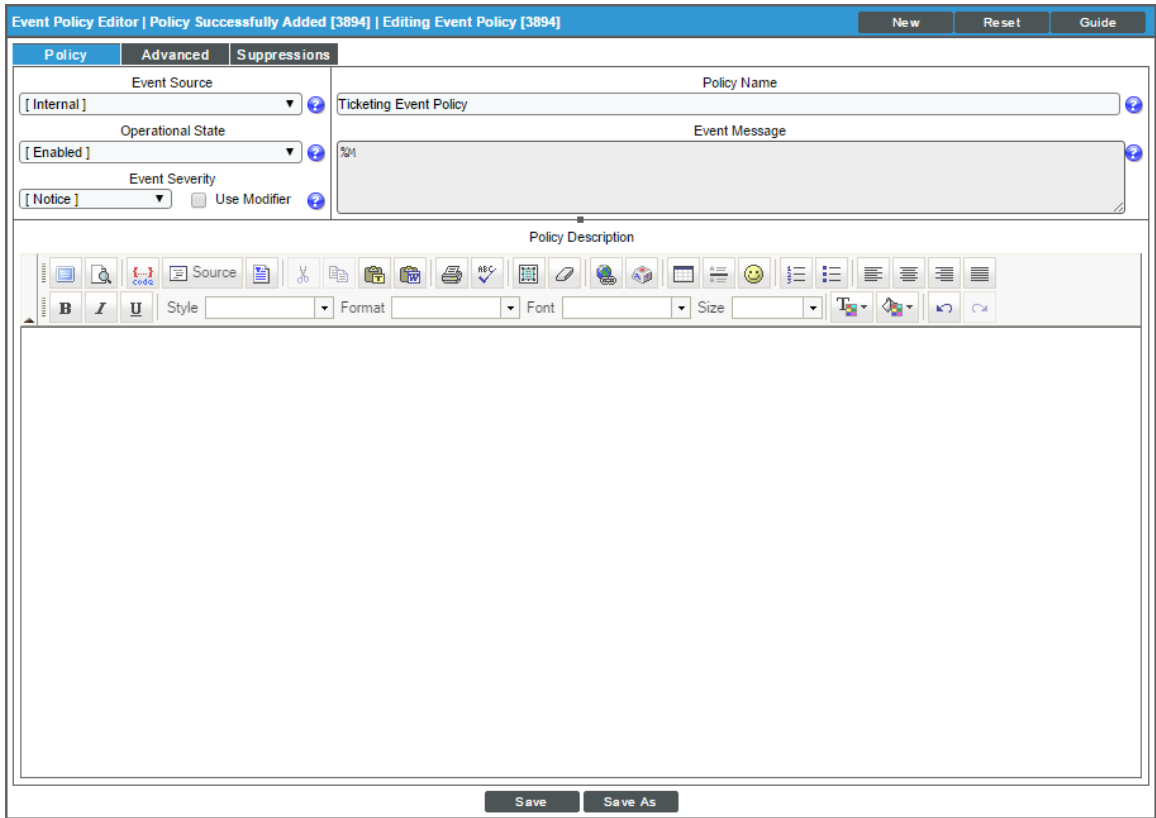
3. Under the **Policy** tab, enter values in the following fields:

   - In the **Event Source** field, select *Internal*.

   - In the **Operational State** field, select *Enabled*.

   - In the **Event Severity** field, select *Notice*.

   - In the **Policy Name** field, provide a name for your Event Policy.

   - In the **Event Message** field, enter "%M". Click the **[Save]** button.

4. Click the **Advanced** tab. In the **Link-Message** field, select the log message from which you want to create an event. The options are:

   - *Ticket Assigned*
   - *Ticket Created*
   - *Ticket Escalated*
   - *Ticket Moved to Queue*
   - *Ticket Resolved*

- *Ticket Resurrected*

- *Ticket State Changed*

- *Ticket Status Changed*

- *Ticket Updated*
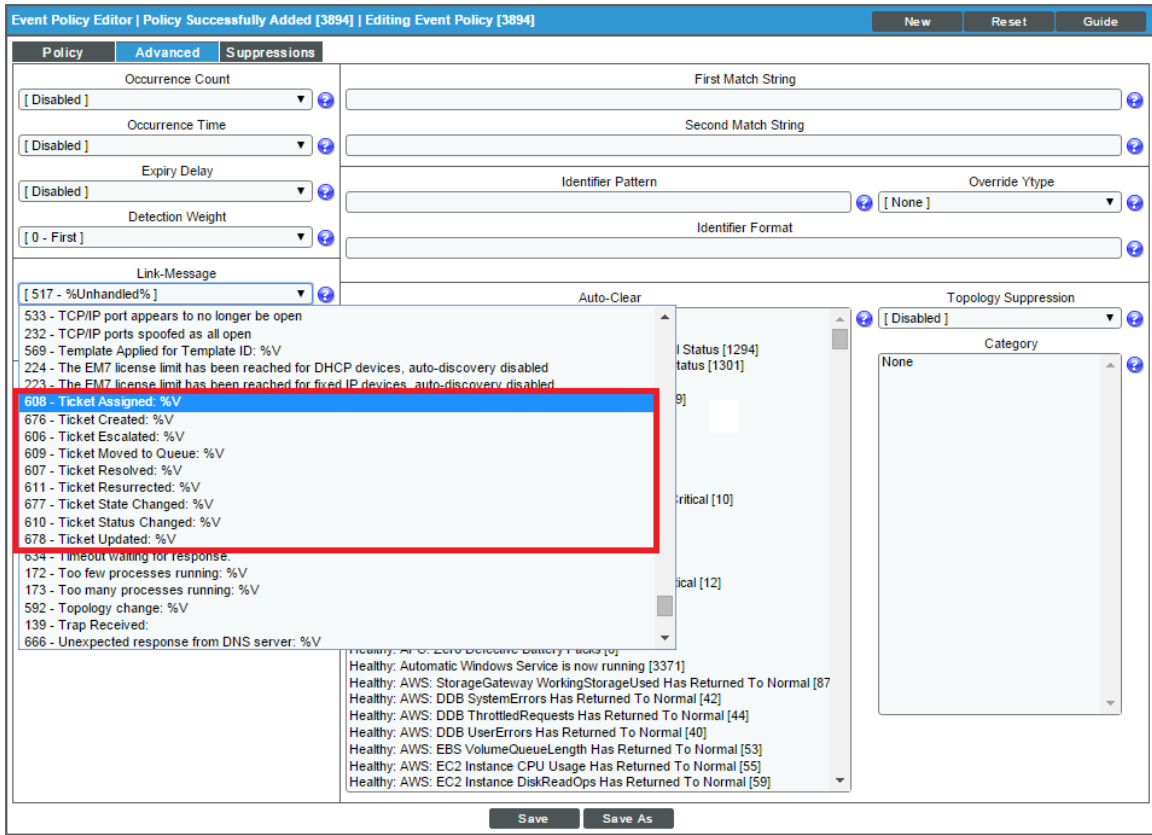
5. When you have selected the log message for your Event Policy, click the **[Save]** button.

You will now need to create an Action Policy and an Automation Policy to define the automatic actions that you want to be executed in response to the ticket event. An Automation Policy defines the event conditions that will trigger the automatic action, while the Action Policy defines that action.

For more details on Automation Policies and Action Policies, and how to define them in SL1, see the *Run Book Automation* manual.

Example Policy

This example will walk you through the creation of an Event Policy that will create an event when a ticket is resurrected.

Creating the Event Policy

To create the Event Policy:

1. Go to the **Event Policy Manager** page (Registry > Events > Event Manager).

2. Click the **[Create]** button. The **Event Policy Editor** page appears.

3. Under the **Policy** tab, enter these values in the following fields:

   - In the *Event Source* field, select *Internal*.

   - In the *Operational State* field, select *Enabled*.

   - In the *Event Severity* field, select *Notice*.

   - In the *Policy Name* field, enter "Ticketing Event Policy".

   - In the *Event Message* field, enter "%M". Click the **[Save]** button.

4. Click the **Advanced** tab. In the *Link-Message* field, select the log message from which you want to create an event. We selected *Ticket Resurrected*.
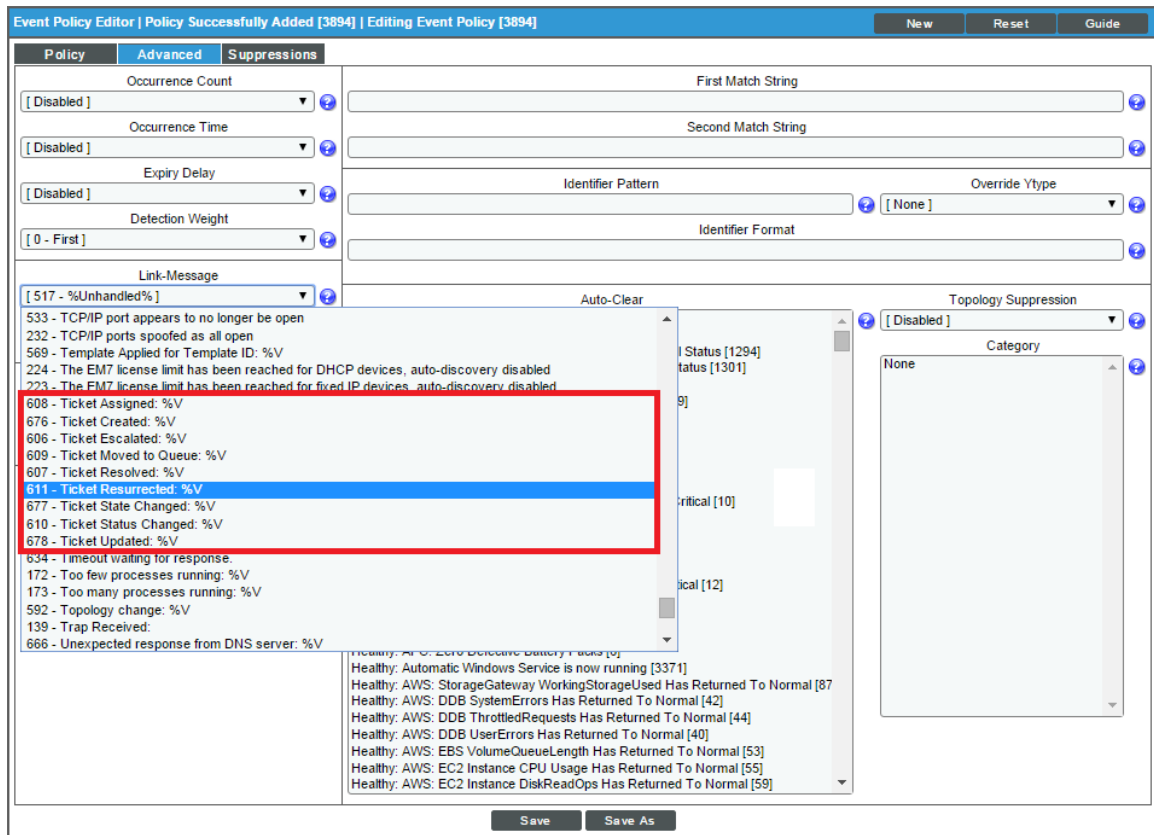
5. When you have selected the log message for your Event Policy, click the **[Save]** button.

Creating the Action Policy

To create an action policy, perform the following:

1. Go to the **Action Policy Manager** page (Registry > Run Book > Actions).
2. In the **Action Policy Manager** page, click the **[Create]** button.

3. The **Action Policy Editor** modal page appears.

4. In the **Action Policy Editor** page, supply a value in each field. For all types of action policies, the first four fields are the same. For this example:

    - In the **Action Name** field, we entered the name "Ticket Policy: Email Bryan".

    - In the **Action State** field, we selected *Enabled*.

    - In the **Description** field, we entered "Email Bryan".

    - In the **Organization** field, we selected *System*.

    - In the **Action Type** field, we selected *Send an Email Notification*.

5. In the **Available Emails** field, we selected *banderton: banderton@sciencelogic.com*, then clicked the **[>>]** button to move it to the **Assigned Emails** field.

6. We left the rest of the fields at their default value and clicked the **[Save]** button to save the Action Policy.

Creating the Automation Policy

To create the automation policy:

1. Go to the **Automation Policy Manager** page (Registry > Run Book > Automation).

2. In the **Automation Policy Manager** page, click the **[Create]** button.

3. The **Automation Policy Editor** page appears.

4. In the **Automation Policy Editor**, supply values in the following fields:

- In the **Policy Name** field, we entered "Example Ticket Resurrection".

- In the **Policy Type** field, we selected *Active*.

- In the **Policy State** field, we selected *Enabled*.

- In the **Organization** field, we selected the *System* organization.

- In the **Criteria Logic** fields, we entered the following values:

  ○ In the *Severity Operator* field, we selected *Severity >=*.

  ○ In the *Severity* field, we selected *Healthy*.

  ○ In the *Elapsed time* field, we selected *and 5 minutes has elapsed,*.

  ○ In the *Status* field, we selected *and event is NOT cleared*.

- The **Match Logic** field is optional, so we left it at its default value.

- The **Match Syntax** field is optional, so we left it blank.

- In the **Repeat Time** field, we selected *Only Once*.

- In the **Align With** field, we selected *Devices*. The **Available Devices** field will appear below, where you can select devices to associate with the automation policy.

- In the *Trigger on Child Rollup* field, we did not select the checkbox.
- In the *Include events for entities other than devices (organizations, assets, etc.)* field, we selected the checkbox.
- In the *Aligned Devices* field, we left the value as *(All Devices)*.
- In the *Available Events* field, we selected *Notice: Ticketing Event Policy* and then clicked the **[>>]** button to move it to the *Aligned Events* field.
- In the *Available Actions* field, we selected *Send Email: Ticket Policy: Email Bryan* and then clicked the **[>>]** button to move it to the *Aligned Actions* field

5. Click the **[Save]** button to save the Automation Policy.

Testing the Event Policy

To test this Event Policy, we created a ticket that we resolved:

After resolving the ticket, we resurrected the ticket in order to create the event:
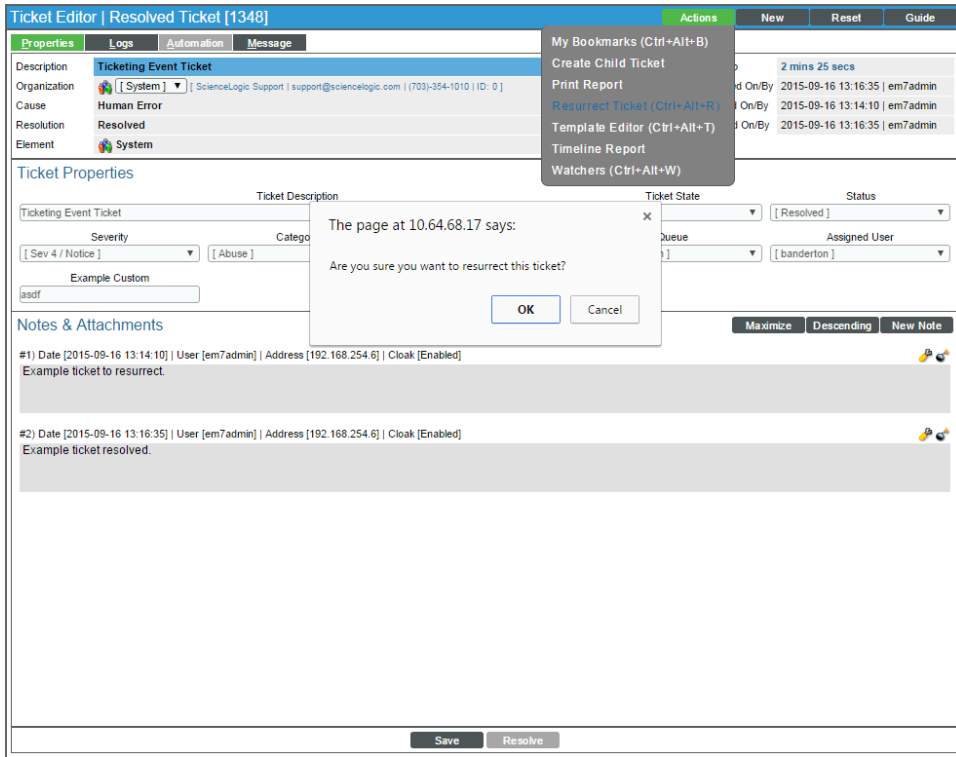
After Resurrecting the ticket, the Event appears in the **Event** console:
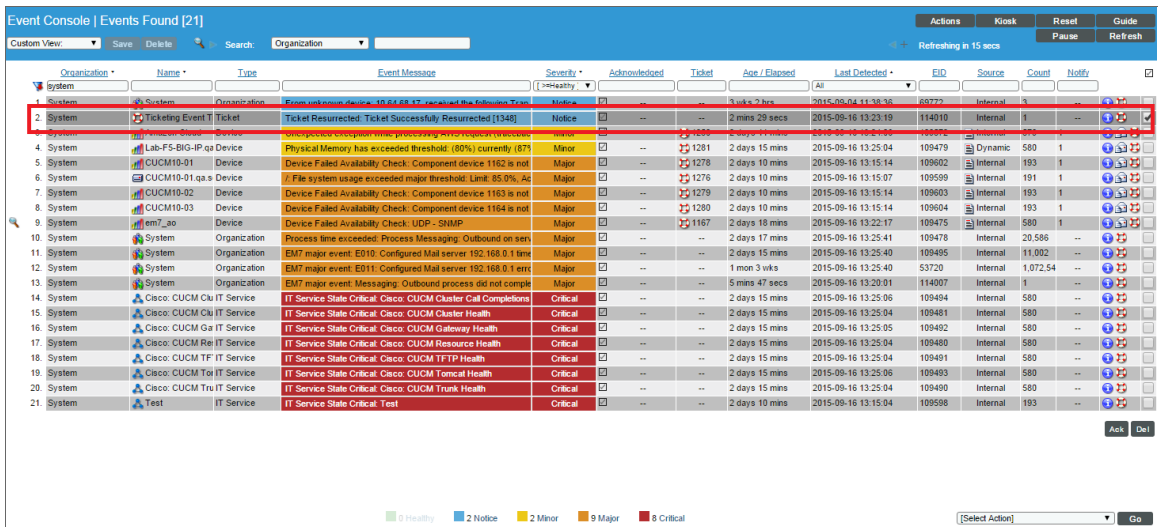
If you click on the information icon (ⓘ) of the event, you can see the **Event Information** page:

The ticket is now resurrected, and an email will be sent to the associated address to notify the user of the resurrection.