User’s Guide

**Basic information about Monitor Lizard**

Monitor Lizard is a program designed to report and monitor metric data about host systems. It is comprised of multiple components, however all that needs to be utilized by an end user is the front end web application. To summarize the abstract design and use cases, “Host” refers to the systems being monitored. “Host Tag” is a way for users to group similar hosts. A “Report” is a piece of data reported by a host. The report contains the metric measured, and the value of that metric at the time it was measured. “Users” are assigned to “Teams” and can be alerted about specific reported behavior on hosts. “Alert Rules” are a set of conditions that, when triggered, will create an “Alert” containing information about what host met those conditions, and will simultaneously send notifications to the front end and to the users on a designated team about the issue.

**Initial Setup**

Following all steps to properly deploy Monitor Lizard as described in the Installation guide should result in all necessary components running, and with a Django superuser account created during the setup step of the Web Dashboard setup process. If a new superuser account must be created, it can be done through the command line Django utility *python manage.py createsuperuser*.

**Accessing Monitor Lizard**

After installation, Monitor Lizard is controlled by navigating to your web host with your web browser at *example.com/yoururl/* and *example.com/yoururl/admin/*. The former should navigate to the Monitor Lizard dashboard, and the latter will bring you to the Django Admin page for Monitor Lizard. The majority of database operations are handled by Monitor Lizard itself, however the creation of Host Tags, Users, Teams, and Alert Rules is currently handled through the Django Admin interface. Both the dashboard and Django admin page are authenticated via django superuser accounts, so use them to log in to both.

**Viewing Host Information**

The Monitor Lizard Dashboard will show broad information about all systems at a glance. There is a pie chart that shows a breakdown of the number of alerts grouped by the host tag they are associated with. Hovering over the slices of the pie chart will display which tag they correspond to. The dashboard will also show a list of what metrics are currently being queried on the monitored hosts. Below this, there is a list of all of the alerts that have been reported by systems, with some relevant information. Alerts with severity 0 will be highlighted in red. Below the list of alerts there is a list of Host Tags with their number of hosts, and below that is a paginated list of reports sorted by date.

To look at information about a specific tag, click the hyper-linked tag name within the Host Tag table. This page can only be viewed on host tags with at least one host, and will display information about all the hosts within that tag. To view detailed information about a host, click on the hyperlinked guid for the specific host. This page will display some recent reported metrics and maximums and minimums, and has a graph at the bottom, with the most recent values on the left. The metric shown can be chosen from a dropdown list, and the end date and report count can be specified to view specific reports on metrics with greater granularity.

**Creating and Managing Host Tags**

By default, all hosts will be grouped into the “Unsorted” host tag, which should have been created during the setup step. To create a new tag, navigate to Django Admin (logging in with the same superuser account), click on the “Host tags” button, and then “Add Host Tag”. The name field must be filled in, and users can optionally add a registration key which allows hosts to add themselves to the host tag when registering. If there are any hosts registered within the system, they can be selected to be added to the new Host Tag as well. Multiple hosts can be added by holding “Control” or “Command” and clicking on the desired hosts. After a new host is created, it can be assigned to a host tag in the same way by selecting the existing host tag from the list in Django admin and selecting that host. Names and registration keys can be changed in this manner as well. Click “Save” to save the new or updated Host Tag.

**Creating and Managing Users, Teams, and Alert Rules**

These objects are manipulated similarly to host tags. Alert rules must be assigned to a team on creation and teams must have at least one user upon creation. These objects are all created and edited through the Django Admin page.

**Adding Users**

Click on the Users list within the “Web” category on Django Admin and select “Add User” (do **not** go to the Users list within “Authentication and Authorization”, this is unrelated to Monitor Lizard’s alerting functionality). Fill in a name for the user, and optionally an email address and phone number. Currently, phone alerting is not implemented and email alerting must be configured for your system, so these fields are optional. If any teams are already created in the system, the user can be assigned to them from this page. This page can also be used to edit any information about existing users by selecting them from the Users list. Click “Save” to save the new or updated User.

**Adding Teams**

Click on the Teams list on Django Admin and select “Add Team”. Fill in a name for the team and select at least one User to be on that team to be notified of alerts. Multiple users can be selected by holding down “Control” or “Command” and clicking them from the list. This page can also be used to add new users to existing teams later on. Click “Save” to save the new or updated Team.

**Adding Alert Rules**

Click on the Alert Rule list on Django Admin and select “Add Alert Rule”. All fields are required, so select a Host tag to be monitored, a Team to be alerted, a metric to be tracked, a numeric threshold for that metric, an operator for that threshold, and severity. If the operator “Maximum” is selected, the alert will be created when the value goes above the threshold, and with “Minimum” it will be created if the metric goes below the threshold. The lower the severity number, the more severe the alert should be. Alerts with severity 0 will show up in red on the Monitor Lizard dashboard. This page can also be used to update the alert rules if something needs to be changed later on. Click “Save” to save the new or updated Alert Rule.