



Managing Logs and Events

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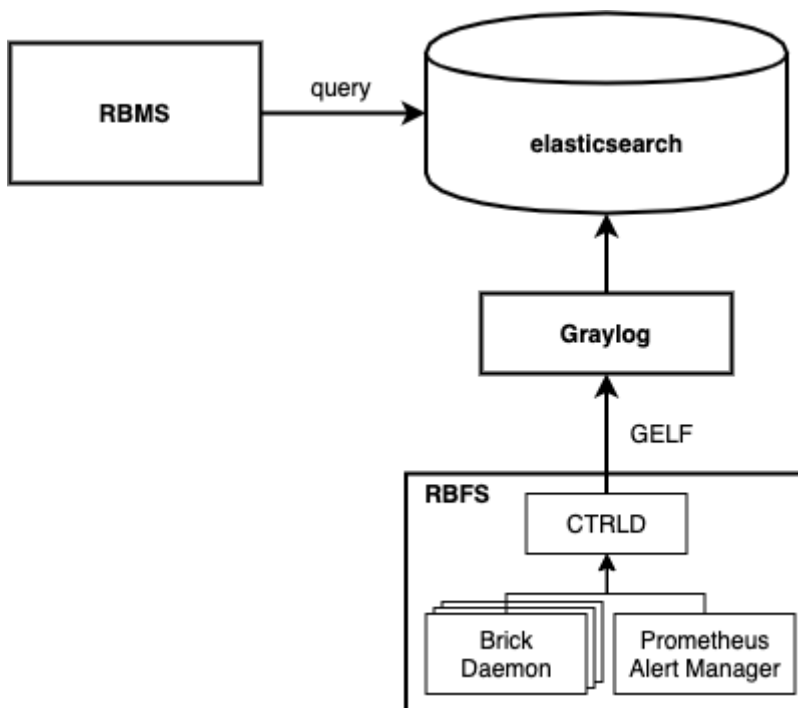
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1. Managing Logs

1.1. Introduction

In order to understand the RBMS log viewer it is key to understand the RBFS logging concept. RBFS stores log information in Brick Data Store (BDS) tables. The BDS is an in-memory database developed by RtBrick and optimized for the networking domain. The BDS log tables contain only the raw data of a log event. Exporters pass the raw data to a template string to create a human friendly log message.

By default RBFS exports log messages in GELF format. The **Graylog Extended Logging Format (GELF)** is a JSON representation of the Syslog protocol, with the option to add custom fields.



The CTRLD forms the egress node for all GELF messages. CTRLD receives log messages from brick daemons, augments the GELF message with the element name, element role, serial number and pod name and forwards it to the configured GELF endpoint. In addition, CTRLD receives all notification of the Prometheus Alert Manager running on the switch and translates them to GELF messages. Last but not least, CTRLD generates GELF messages to log events.

All messages are sent to a configured GELF endpoint. The GELF endpoint stores the data in a central log database. The GELF message is already a structured message. Thus the endpoint does not have to create a log message into a structured record.

RBMS queries log events from the log management system to provide quick access

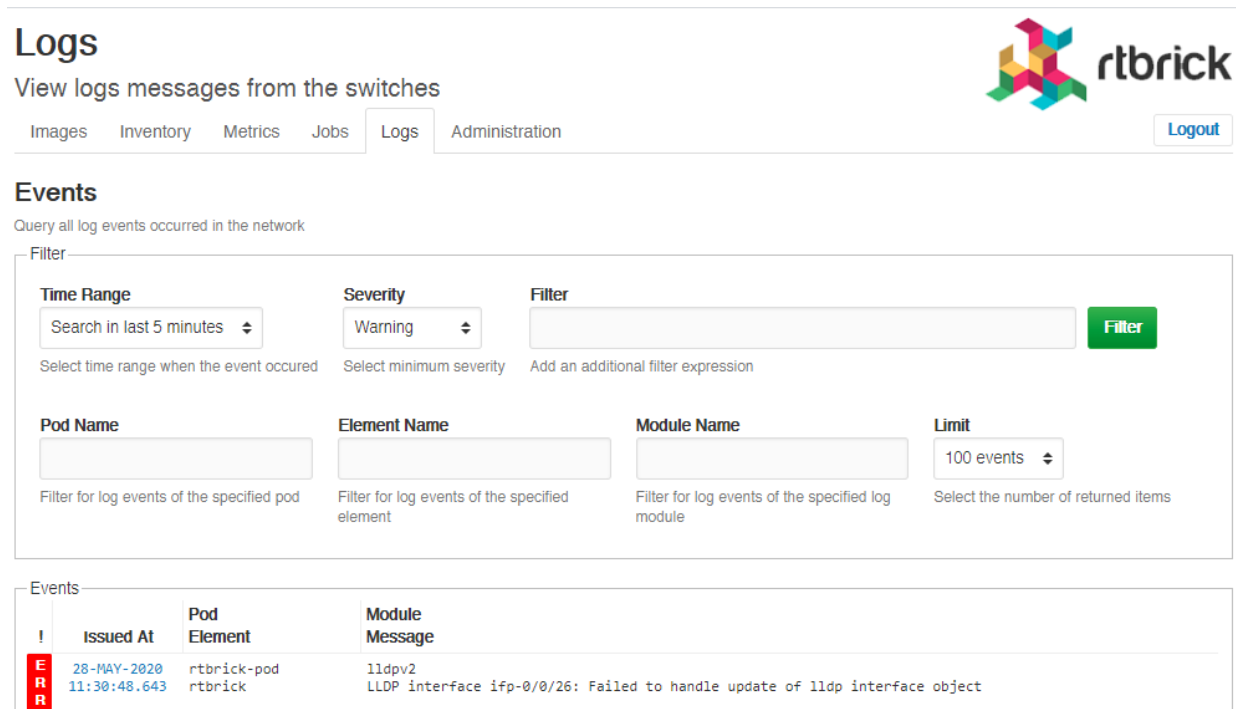
to log messages. In addition, RBMS links all log messages to the inventory records to quickly inspect the state of an element.

1.2. Viewing log events

The log viewer reads log records from the Elasticsearch database. The query is formed from the resource inventory data and can be amended by the operator to fine-tune the result set. You can inspect the details of a log message in the RBMS UI.

To view the list of logs

1. Click the **Logs** tab. The list of all log events occurred in the network within the last five minutes having at least *WARNING* severity appears.



Logs

View logs messages from the switches

Images Inventory Metrics Jobs **Logs** Administration [Logout](#)

Events

Query all log events occurred in the network

Filter

Time Range: Search in last 5 minutes (Select time range when the event occurred)

Severity: Warning (Select minimum severity)

Filter: (Add an additional filter expression)

Pod Name: (Filter for log events of the specified pod)

Element Name: (Filter for log events of the specified element)

Module Name: (Filter for log events of the specified log module)

Limit: 100 events (Select the number of returned items)

Events

!	Issued At	Pod Element	Module Message
ERROR	28-MAY-2020 11:30:48.643	rtbrick-pod rtbrick	lldpv2 LLDP interface ifp-0/0/26: Failed to handle update of lldp interface object

2. Click the timestamp of the event that you want to view.

1.3. Filtering log events

To filter the list of logs

1. Click the **Logs** tab. The list of all log events occurred in the network appear.

Logs

View logs messages from the switches



Images Inventory Metrics Jobs **Logs** Administration

[Logout](#)

Filter

Time Range

Search in last 15 minutes ↕

Select time range when the event occurred

Severity

Warning ↕

Select minimum severity

Pod Name

pod1.blr

Filter for log events of the specified pod

Filter

element_name:"li.pod1.blr"

[Filter](#)

Enter filter query to search for certain elements only.

2. Specify the filter criteria to filter the log events.