Title: Sematext Logagent Log Shipper Description: Logagent is lightweight log shipper, filebeat, fluentd or rsyslog alternative with out of the box and extensible log parsing, on-disk buffering, secure transport, bulk indexing to Elasticsearch, Kafka, and Sematext

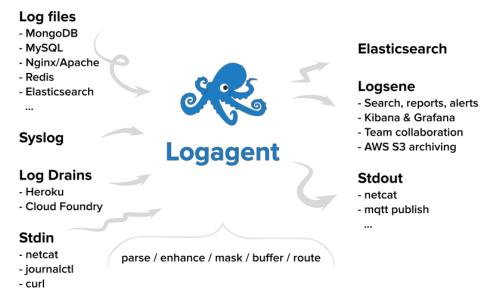


Figure 1: Logagent Logo

### What is Logagent?

Logagent is a modern, open-source, lightweight  $\log$  shipper with a low memory footprint and low CPU overhead!

It comes with out of the box and extensible log parsing, on-disk buffering, secure transport, and log shipping with bulk indexing to any Elastic-search endpoint, including Sematext Logs, Kafka, etc.

If you're eager to get started, here's how you start shipping logs.

```
# Make sure you have Node.js installed
curl -sL https://deb.nodesource.com/setup_12.x | sudo -E bash -
sudo apt-get install -y nodejs

# Install Logagent and run it as a system service
sudo npm i -g @sematext/logagent
sudo logagent-setup -i <LOGS_TOKEN or ES_INDEX>
To read more jump to Installation right away.
```

#### **Features**

Logagent contains an installer when you want to use it as a log shipper. Configuration is done via a simple YAML configuration file. It has a library that supports patterns for log parsing, and it can also be used as a command line tool.

- Install Logagent with:
  - Linux Systemd
  - Linux Upstart
  - Windows service
  - Mac OS X Launchd service
  - Docker
  - Docker Swarm
  - Kubernetes
- Log shipping with a disk buffer ensures no loss of data
- A simple YAML configuration file
- Built-in data parser with configurable patterns
- Command-line tool
- Plugins:
  - Inputs (files, streams, sockets, databases)
  - Input filters (grep/grok filters)
  - Outputs (Elasticsearch, Sematext Cloud, Kafka, etc.)
  - Output filters (SQL aggregation of parsed data, enrichment of data)
- Node.js API

## **Installation Options**

- Install as a system service
- Run as a Docker Container
- Deploy to Heroku as Heroku Log drain
- Deployment to Cloud Foundry as Cloud Foundry Log drain (thus usable with Pivotal, IBM Bluemix, etc.)

### Configuration

After installing Logagent, run logagent-setup to create a system service and start shipping logs right away. This will also create a simple YAML configuration file for you in /etc/sematext/logagent.conf.

# Global options

options: # print stats every 60 seconds printStats: 60 # don't write parsed logs to stdout suppress: true # Enable/disable GeoIP lookups # Startup of logagent might be slower when downloading the GeoIP database geoipEnabled:

<sup>&</sup>quot;'yaml hl\_lines="18 19 24 25 27 29 30 35" # /etc/sematext/logagent.conf

false # Directory to store Logagent status and temporary files # this is equals to LOGS\_TMP\_DIR env variable diskBufferDir: /tmp/sematext-logagent

input: # a list of glob patterns to watch files to tail files: - '/var/log/\*\*/\*.log'

output: # index logs in Elasticsearch or Sematext Logs sematext: # output a name, e.g., elasticsearch, sematext, etc. module: elasticsearch url: https://logsene-receiver.sematext.com # default Elasticsearch index or Sematext Logs token to use index: # indices for shipping logs to multiple locations indices: : # list of log sources or filenames - syslog.log - access.log - auth.log: # list of RegEx matching a log source or filename - .wifi. - .bluetooth. "'

#### Command-line Tool

Logagent can also be **used as a command-line tool**. To use Logagent only as a command-line tool running **logagent-setup** and using the default configuration file is not needed.

- Works with **Unix pipes**, **stdin**, and **stdout**
- Log parser and format converter
  - text to JSON
  - line delimited JSON or YAML

```
cat access.log | logagent --yaml
```

• Import files into Elasticsearch

```
cat access.log | logagent -n nginx -e http://localhost:9200 -i logs
```

• Watch multiple log files in the terminal

```
logagent -yaml -g '/var/log/**/*.log'
```

• Store logs in Elasticsearch

```
logagent -e http://localhost:9200 -i logs
```

#### Built-in Log Parser

You can configure custom data patterns for parsing logs.

- Log format detection and intelligent pattern matching
- The pattern library includes a set of popular log formats for databases, web servers, message queues, etc.
- Easy to extend with custom patterns and Javascript transform functions
- Hot reload of changed pattern definitions without service restart
- Auto-detection of date and numeric fields
- Masking of sensitive data with configurable hashing algorithms (SHA-1, SHA-256, SHA-512, ...)

 $\bullet$  GeoIP lookup with automatic GeoIP DB updates (Maxmind GeoIP-Lite files)

# Plugins

A comprehensive collection of plugins for data input, processing, and output are available. See the complete list of Logagent Plugins.

## API

Logagent is an npm package and can add log parsing to Node.js applications.

# Related Packages

- Logsene-CLI Enables searching logs in Sematext Logs from the command-line