

title: Sematext Syslog-ng Integration description: Ship your logs to Sematext centralized monitoring and logging platform with syslog-ng. Configure sources to collect all system messages and tail files, tag logs, configure destination with Token and IP-based authentication, and bind sources to destinations

Overview

syslog-ng is a modern syslog daemon that's focused on flexibility and portability. It also has an easy to use configuration format that helps you ship your logs to a Logs App in 3 steps:

1. **sources.** syslog-ng can listen to local syslog traffic, can tail files and more
2. **destinations.** You can send your logs to Logs Management App via UDP, TCP or RFC-5425 TLS Syslog
3. **bind sources to destinations.** Once you have your sources and destinations defined, you have to define paths by linking sources and destinations with the log statement

Configure Sources

Sources enable syslog-ng collect the logs you want to send to Logs Management App. You can use `system()` to collect all the local syslog messages from that system. You can put this at the beginning of your `/etc/syslog-ng/syslog-ng.conf`, along with your configuration version. We recommend running version 3.19 or later:

```
@version:3.19
source local_logs {
    internal();
    system();
};
```

To download a more recent version of syslog-ng than the one on your system, take a look at the download page of syslog-ng.

Tailing Files

syslog-ng can also listen to other inputs, such as files, TCP or UDP.

To tail a file, you'll use the `file()` source and point it to the right file. If that file doesn't contain syslog-formatted messages, you'll need to tell syslog-ng not to try and parse it, and if you need multi-line support, you should specify that, too:

```
source jetty_log { file("/var/log/jetty" flags(no-parse) multi-line-mode(indented)); };
```

Configure Destinations

There are two options to properly configure your destination:

- with your Logs Management application token (which is what we recommend)
- or by authorizing your public IPs from the Logs Management App UI.

After you choose your authentication method, you'll configure your destination according to the protocol you prefer: UDP, TCP or TLS. For all cases, your endpoint will be **logsene-syslog-receiver.sematext.com** / **logsene-syslog-receiver.eu.sematext.com** (if using Sematext Cloud Europe)

Token Authentication

To enable token authentication, get the token of your Logs Management application from the list of Logs Management applications. Then, put it in the `template()` statement of your Logs Management App destination. See working examples below. The end result is a CEE-formatted JSON syslog message that contains your token in the **logsene-app-token** field.

IMPORTANT: For JSON formatting that enables token authentication to work you'll need syslog-ng version 3.3 or later and the **libjson** syslog-ng plugin. The **libjson** plugin is typically provided by the **syslog-ng-json** package of your distribution.

IP-based Authentication

The alternate method for authentication is by pre-authorizing your public IP in Logs Management App's UI. Here is a complete guide on how to do that. If you choose this path, you don't need the `template()` statement from the code snippets below.

UDP

To send logs over the fire-and-forget UDP protocol, you can add a destination like the one below to **/etc/syslog-ng/syslog-ng.conf**. If you're using token-based authentication, you'll have to fill in your Logs Management application token. If you've authorized your public IP, the `template()` statement should be removed:

```
template sematext {
    template("<${PRI}>1 ${ISODATE} ${HOST} ${PROGRAM} ${PID} - - $(format-json --pair message)");
};

destination sematext {
    udp("logsene-syslog-receiver.sematext.com"
        port(514)
        # template() statement should be removed if you authorized your IP
        template(sematext)
    );
};
```

TCP

For TCP, the destination will look similar to the one for UDP, the only change is in the `protocol()` statement. Make sure your real token is there or remove the `template()` statement if you've authorized your IP:

```
template sematext {
    template("<${PRI}>1 ${ISODATE} ${HOST} ${PROGRAM} ${PID} - - $(format-json --pair message)"
};

destination sematext {
    tcp("logsene-syslog-receiver.sematext.com"
        port(514)
        # template() statement should be removed if you authorized your IP
        template(sematext)
    );
};
```

TLS

For configuring RFC-5425 TLS Syslog, you'll configure the destination in a similar fashion to plain TCP, except for adding `tls()` statement and pointing it to your certificates directory and **changing the port to 10514**:

```
template sematext {
    template("<${PRI}>1 ${ISODATE} ${HOST} ${PROGRAM} ${PID} - - $(format-json --pair message)"
};

destination sematext {
    tcp("logsene-syslog-receiver.sematext.com"
        port(10514)
        tls(
            ca_dir("/etc/ssl/certs")
            peer_verify("required_trusted")
        )
        # template() statement should be removed if you authorized your IP
        template(sematext)
    );
};
```

Bind Sources to Destinations

After configuring your source and destination the last step is binding the two:

```
log {
    source(local_logs); destination(sematext);
};
```

If you're tailing files or you defined other sources, you need to bind them to the **logsene** destination in order to have those messages shipped to your Logs Management application as well. For example:

```
log {
    source(jetty_log); destination(sematext);
};
```

Then, restart syslog-ng and you should see your logs in the Logs Management App UI or Kibana.

Logs Tagging

From your syslog messages, Logs Management App will populate a number of special fields, such as the **source** and **host**. You can also configure syslog-ng to add a tag to logs matching certain criteria. This is useful when you want to quickly identify a special kind of logs. For example, you could tag events that come to the “kern” facility with a severity/level of “err” as “kernel errors”.

To achieve this, you can define a filter that matches such events. Then, you'd define a destination similar to the ones described above, where you'd add a **tags** field. Finally, you'd define a **log** statement where you bind your source, the newly defined filter and the newly defined destination:

```
filter user_tests { facility(kern) and level(err) };

template sematext {
    template("<${PRI}>1 ${ISODATE} ${HOST} ${PROGRAM} ${PID} - - $(format-json --pair message)");
};

destination sematext {
    tcp("logsene-syslog-receiver.sematext.com"
        port(514)
        template(sematext)
    );
};

log { source(all_syslog); filter(user_tests); destination(sematext); flags(final); };
# main Logsene "log" statement will be defined below
```

Notice the **final** flag to this log statement - this prevents syslog-ng from sending matched events twice (once with tags and once without). Make sure you place the log statement with tags before your main log statement.