You can send structured logs via syslog by putting a JSON within the message part of your log, according to the CEE standard. For example, to do a quick test via netcat:

```
$ echo 'my-host my-process[1234]:@cee: {"logsene-app-token":"LOGSENE_APP_TOKEN_GOES_HERE", '
```

If you have your rsyslog, syslog-ng or syslogd daemon already set up to send logs to your application, all you need to do is to make your structured messages comply to CEE. For example:

```
$ logger '@cee: {"logsene-app-token":"LOGSENE_APP_TOKEN_GOES_HERE", "hello":"world"}'
```

## How it works

The only special thing here is to begin your message with a "CEE cookie" that says "@cee:". Optionally, the cookie can be followed by a whitespace. Then, insert a JSON with fields and values of your choice, although CEE and Project Lumberjack suggest a list of standard fields which should have the same name across applications.

We'll parse your JSON and index it, along with the following fields from your log:

- timestamp. Normally specified by your syslog daemon or the application logging to it. If it's not specified, like in the netcat example above, we'll set it to the time when it arrived to us
- hostname. It's the *my-host* string in the netcat example above. Normally, the syslog daemon provides your host name automatically
- **severity**. Normally specified by your syslog daemon. If it's not specified, like in the netcat example above, it will be *notice*
- facility. Normally specified by your syslog daemon. If it's not specified, like in the netcat example above, it will be *user*
- syslog-tag. It's the *my-process*[1234]: string in the netcat example above. Otherwise, the application provides it to the syslog daemon. For example, with logger, your tag will be "logger:"
- **source**. It's the part of the syslog tag without the optional PID and the characters that surround it (*my-process* in the example above), and it's useful for filtering only logs from the same source

So the log above will appear similar to this (pretty-printed):

```
{
   "@timestamp":"2012-12-03T11:42:54.644758+01:00",
   "host":"my-host",
   "severity":"notice",
   "facility":"user",
   "syslog-tag":"my-process:",
   "source":"my-process:",
```

```
"logsene-app-token":"LOGSENE_APP_TOKEN_GOES_HERE",
    "hello": "world"
}
```

## How do I specify a timestamp, severity and facility via netcat?

In the previous netcat example, only the minimum fields are specified: a host name, a tag, and a message. But you can add those by putting a string that complies to RFC-3164. The timestamp field can also be a standard, high-precision, RFC-3339 timestamp. For example, let's say you want Severity to be Critical and Facility to be User: