

How to start using Graylog

#### Welcome on Stackhero's documentation!

Stackhero provides Graylog instances that are ready for production in just 2 minutes! Including TLS encryption (aka HTTPS), customizable domain name, email server, backups and updates in just a click.

Try our managed Graylog cloud in just 2 minutes

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## **Create a first input in Graylog**

An "input" is where Graylog will get your logs.

You can send your logs to Graylog using TCP or UDP.

Graylog can also obtain your logs from an API, a Kafka queue, a RabbitMQ server and a lot of other methods.

For this example, We will create a raw UDP input.

On Graylog interface, go to "System" then "Inputs".

Select "Raw/Plaintext UDP" and click on "Launch new input".

Configure your input like this and valid the form:

• Node: select your node

• Title: RAW UDP

• Port: 5555

On your computer, open a terminal and send an UDP message to your Graylog server (don't forget to replace XXXXXX per your service domain name):

From macOS: echo "Hello Graylog from UDP" | nc -u -w1 -c XXXXXX.stackhero-network.com 5555 From Linux: echo "Hello Graylog from UDP" | nc -u -w1 XXXXXX.stackhero-network.com 5555

Go back to Graylog and click on "Search": you should see your message 🎉



Congrats, youhave sent your first message to Graylog!

Now you can create some real inputs and dashboards.

To help you, we recommend to use the Graylog's official documentation.

#### **Graylog codes examples**

You will find some codes examples in our git repository

### Send Rsyslog logs to Graylog using TLS encryption

You have a Rsyslog client and want to send your logs to Graylog, in a secured way.

Here is how to it:

- First, create a "Syslog TCP" input on Graylog. Give it a title and validate the form.
  - ⚠ Do not activate any TLS option on Graylog's input. TLS will be handled directly by a reverse proxy on your instance and will not be handled by Graylog.
- Then, go to your Graylog service configuration in Stackhero dashboard and enable the "TLS encryption" for the Syslog TCP port 514.
- Finally, configure your Rsyslog as follow, and replace XXXXXX.stackhero-network.com per your instance hostname:

```
global(
 DefaultNetstreamDriver="gtls"
 DefaultNetstreamDriverCAFile="/etc/ssl/certs/ca-certificates.crt"
*** action(
 type="omfwd"
 target="XXXXXX.stackhero-network.com"
 port="514"
 protocol="tcp"
 KeepAlive="on"
 KeepAlive.Interval="30"
 StreamDriver="gtls"
 StreamDriverMode="1"
 StreamDriverAuthMode="x509/name"
 ResendLastMSG0nReconnect="on"
 queue.filename="fwdRule1" # unique name prefix for spool files
 queue.type="LinkedList"
 queue.maxDiskSpace="256m"
 queue.saveOnShutdown="on"
 action.resumeRetryCount="-1"
 action.resumeInterval="30"
```

Restart your Rsyslog server and try to send a log with the command logger This is a test.

That's it, you are now sending your logs directly to Graylog in a secure way, using TLS encryption!

## Error "failed to parse field [XXXX] of type [YYYY]"

Maybe you will get an error like "org.elasticsearch.index.mapper.MapperParsingException: failed to parse field [time] of type [long] in document with id 'xxxx'".

You can see this error in "logs", available in Stackhero dashboard, or in your Graylog admin panel, in "System" / "Overview" / "Indexer failures".

This error means that you sent a log with a value for the field time that was a different type that Elasticsearch was waiting for (in that case, a "long" type).

Graylog uses the dynamic mapping feature of Elasticsearch. When you first send a log, Elasticsearch will try to guess the type of the fields.

So if you send a log containing a field time with 1234 as a value, Elasticsearch will define this field type as a numeric one (long).

If you send another log then with the field time set as abcd, which is a string this time, Elasticsearch will reject it because it expected to have a numeric value.

Note that the field name time is just an example, as the long type. It could be any field name and any type.

To resolve this issue, you have to redefine the type that Elasticsearch is waiting for.

You will get more informations on this on the official Graylog documentation.

To update the Elasticsearch mapping, simply go to the new article.

#### **Update the Elasticsearch mapping**

You have first to activate the Elasticsearch access in Stackhero dashboard. Go to your Graylog service, then "configure", and activate the Elasticsearch access.

⚠ Be careful with what you are doing here as you can totally block your Elasticsearch and even lost your data! If you don't understand what you are doing, don't do it.

First, we will define our new mapping. Here, we redefine the field time to the type string.

You will get a list of available types in Elasticsearch field datatypes documentation.

Edit as wanted and save this content to a file named graylog-custom-mapping.json:



Then, post this file with this curl command: curl -u 'admin' -X PUT -d @'graylog-custom-mapping.json' -H 'Content-Type: application/json' 'https://XXXXXX.stackhero-network.com/elasticsearch/\_template/graylog-custom-mapping?pretty'

Don't forget to replace XXXXXX.stackhero-network.com per your instance domain name.

You should have this reply:

```
{
    "acknowledged" : true
}
```

Finally, you can check that the mapping has been updated with this command: curl -u 'admin' -X GET 'https://XXXXXX.stackhero-network.com/elasticsearch/graylog\_deflector/\_mapping?pretty'

# **Error "Unable to write audit log entry"**

If you see an error like Unable to write audit log entry because there is no valid license or Not running cleanup for auditlog entries in MongoDB because there is no valid license it is because you have activated Graylog Enterprise without entering a license.

If you have a license, enter it in your Graylog interface.

If you don't have a license, simply disable Graylog Enterprise in Stackhero dashboard.

## Other articles about Graylog that might interest you

Choose inputs types

How to choose the right Graylog input type

Configure inputs

How to configure Graylog inputs

Handle retention

How to configure retention

Alerting
 How to send Graylog alerts by email, Slack or Mattermost

 Enterprise license
 How to handle Graylog Enterprise license

Using with Node.js

How to send logs from Node.js to Graylog

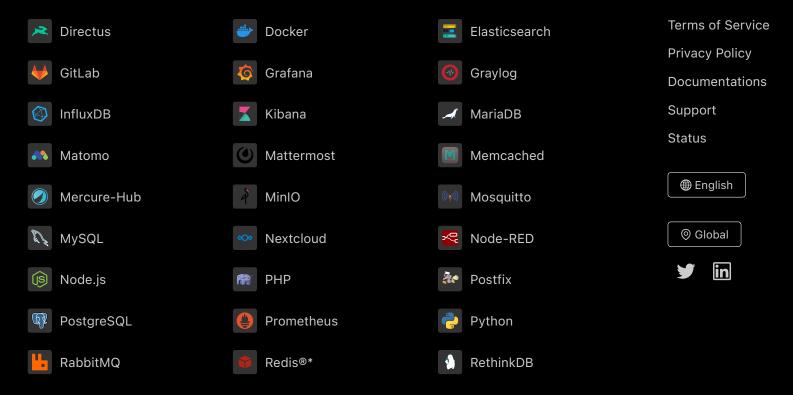
Using with Dot NET

How to send logs from .NET/Serilog to Graylog

Using with Python

How to send logs from Python to Graylog

#### Our Managed Services



Directus, Docker, Elasticsearch, GitLab, Grafana, Graylog, InfluxDB, Kibana, MariaDB, Matomo, Mattermost, Memcached, Mercure-Hub, MinlO, MongoDB, Mosquitto, MySQL, Nextcloud, Node-RED, Node.js, PHP, Postfix, PostgreSQL, Prometheus, Python, RabbitMQ, Redis®\*, RethinkDB are trademarks and property of their respective owners. All product and service names used on this website are for identification purposes of their open sourced products only and do not imply endorsement. Stackhero is not affiliated to these trademarks or companies.

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