HOW TO INSTALL ELASTIC ENTERPRISE SEARCH

Elastic.co has a product called Enterprise Search, formerly Swiftype, that's aimed at businesses. Enterprise Search is like Google Search for internal company documents—an enterprise search tool for internal documents and files. It lets companies control who can access what documents. You can also use it to search public files on Google Drive, Github, Docker, etc., and write your own API to expose documents and files to internal users.

In this blog post, I'll illustrate how to install Elastic Enterprise Search. In a subsequent post, I'll talk about how to use it.

Install Elasticsearch

First, you have to download and install Elasticsearch —follow these steps. (Note: Enterprise Search will also install Filebeat. Its config file will be located here /usr/share/elasticsearch/enterprise-search-7.5.0/filebeat/filebeat.yml.)

Elasticsearch does not require a paid license, but Enterprise Search does. Luckily, you can use Enterprise Search for free for 30 days to evaluate it.

```
wget
https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-7.5.0-amd64.deb

sudo dpkg -i elasticsearch-7.5.0-amd64.deb
```

Turn on security and bind Elasticsearch to a routable IP address, not localhost, so you could add other machines to the cluster:

```
sudo vim /etc/elasticsearch/elasticsearch.yml

add:

xpack.security.enabled: true
network.host: 172.31.46.15
```

Assuming you are logged in as user **ubuntu** (or change the name to your userid), change all folder permissions to ubuntu. This step is not logical, since you can't run Elasticsearch as root. So, this patches up a step left out of their .deb file.

```
sudo chown -R ubuntu  /usr/share/elasticsearch
sudo chown -R ubuntu /var/log/elasticsearch/
sudo chown -R ubuntu /var/lib/elasticsearch/
sudo chown -R ubuntu /etc/elasticsearch
sudo chown ubuntu /etc/default/elasticsearch
```

Start Elasticsearch. If you cannot start it as a service, because it throws an error, you can start it this way. Note: you cannot run it as root.

```
cd  /usr/share/elasticsearch/bin
nohup ./elasticsearch&
```

Run this command to generate passwords for Elasticsearch; save these passwords somewhere.

```
./elasticsearch-setup-passwords auto

Initiating the setup of passwords for reserved users
elastic,apm_system,kibana,logstash_system,beats_system,remote_monitoring_user
.
The passwords will be randomly generated and printed to the console.
Please confirm that you would like to continue y


Changed password for user apm_system
PASSWORD apm_system =XXXXXXXXX

Changed password for user kibana
PASSWORD kibana =XXXXXXXXX

Changed password for user logstash_system
PASSWORD logstash_system = XXXXXXXX

Changed password for user beats_system
```

```
PASSWORD beats_system = XXXXXXXXXX

Changed password for user remote_monitoring_user
PASSWORD remote_monitoring_user =XXXXXXXX

Changed password for user elastic
PASSWORD elastic = XXXXXXXXXXXX
```

Install Enterprise Search

Now, we'll install Elastic Enterprise Search. Open firewall port 3002 to the public IP address of your server. This is the web interface for Enterprise Search.

```
wget
https://download.elastic.co/downloads/enterprisesearch/enterprise-search-7.5.0.tar.gz

cd /usr/share/elasticsearch

tar xvfx enterprise-search-7.5.0.tar.gz
```

Make these changes:

```
cd enterprise-search-7.5.0

vim config/enterprise-search.yml

ent_search.auth.source: standard
elasticsearch.username: elastic
elasticsearch.password: oe4emGR6Wnwp1wEwiRle
allow_es_settings_modification: true
ent_search.listen_host: 172.31.46.15
ent_search.external_url: http://walkercodetutorials.com:3002
```

Choose a password and start Enterprise Search as shown below. This command looks a little awkward but this is how you both set up an initial password and provide the password on subsequent starts.

```
ENT_SEARCH_DEFAULT_PASSWORD=password bin/enterprise-search
```

To run it in the background, e.g., after you have finished the setup, do:

```
env ENT_SEARCH_DEFAULT_PASSWORD=password nohup bin/enterprise-search&
```

Now login using:

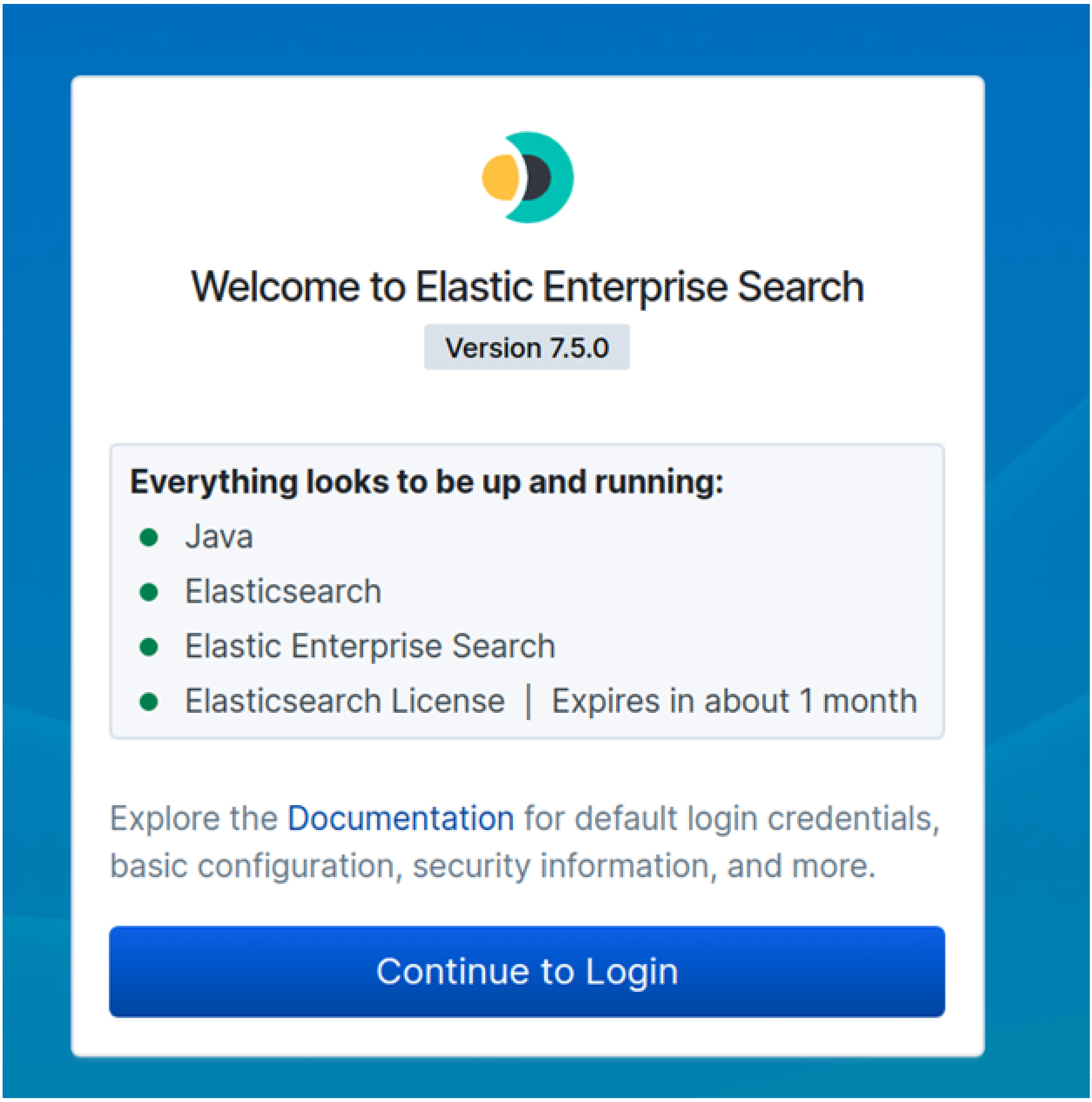
```
userid: enterprise_search
password: password
```

```
 to http://(your server):3002
```

It's important to look at **stdout** when you start the server to make sure it echoes this password. If you don't see this message, erase the software and then delete the indexes that Enterprise Search created in Elasticsearch as shown in the Debugging section below.

```
filebeat.1    | ##########################################################
filebeat.1    |
filebeat.1    | *** Default user credentials have been setup. These are only
printed once, so please ensure they are recorded. ***
filebeat.1    |       username: enterprise_search
filebeat.1    |       password: password
filebeat.1    |
filebeat.1    | ##########################################################
```

Here is the login screen:



Welcome to Elastic Enterprise Search

Version 7.5.0

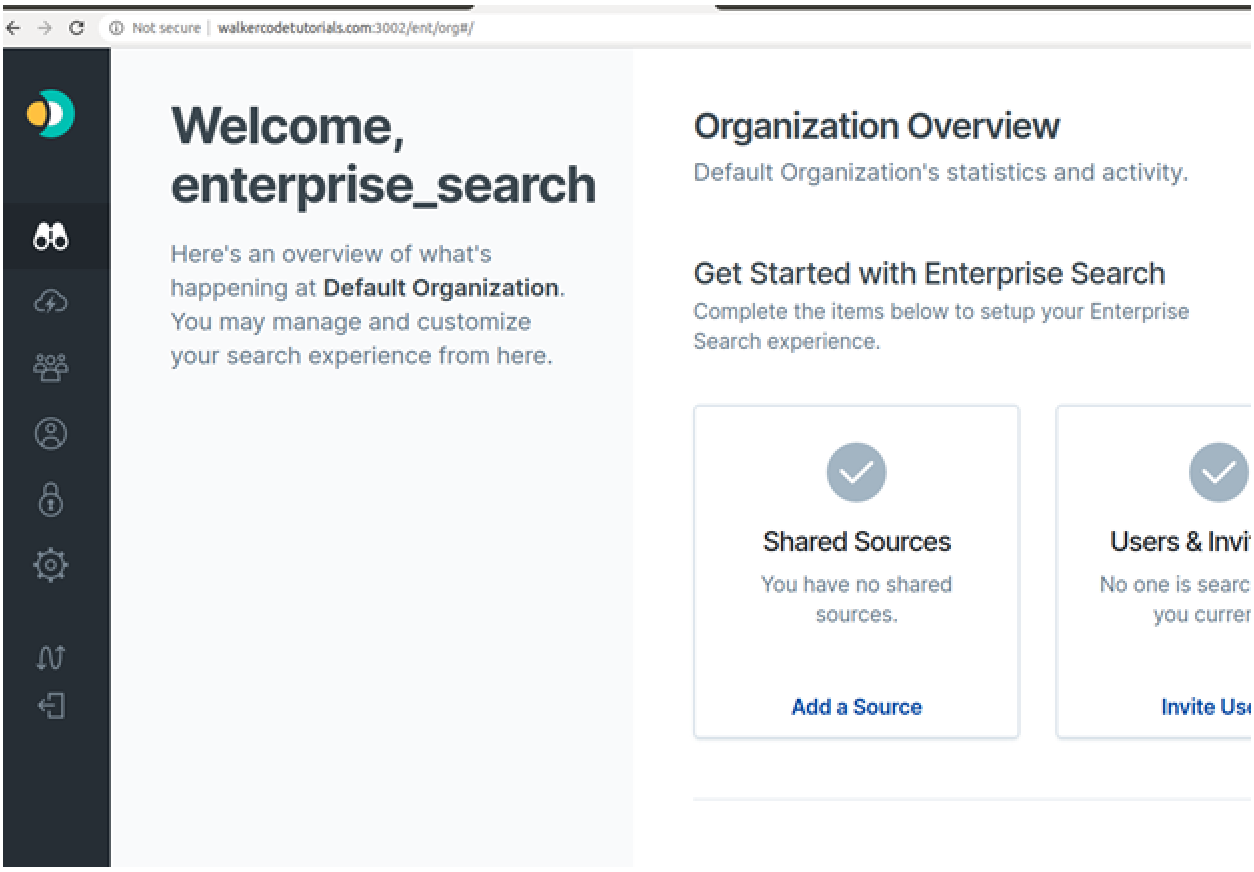
Everything looks to be up and running:

- ● Java
- ● Elasticsearch
- ● Elastic Enterprise Search
- ● Elasticsearch License | Expires in about 1 month

Explore the Documentation for default login credentials, basic configuration, security information, and more.

Here is the

landing page:



Welcome, enterprise_search

Here's an overview of what's happening at **Default Organization**. You may manage and customize your search experience from here.

Organization Overview

Default Organization's statistics and activity.

Get Started with Enterprise Search

Complete the items below to setup your Enterprise Search experience.

Shared Sources

You have no shared sources.

Add a Source

Users & Invi

No one is searc you currer

Invite Us

In the next post, I'll show how to configure Enterprise Search to query Google Drive, Dropbox, and Github.

Debugging Enterprise Search

If anything goes wrong with the Enterprise Search installation, you must delete the indexes that created in Elasticsearch before you repeat the installation.

You can list those indexes like this. Because you turned on security, you need to enter the userid and password. Use the Elasticsearch password auto generated above, not the Enterprise Search one you made up.

```
curl -X GET "http://(your server):9200/.ent-search*?pretty" -u
elastic:(elasticsearch password, not the enterprise search password)
```

Then, delete all of them:

```
curl -X DELETE  "http://(your server)9200/.ent-search*" -u
elastic:(elasticsearch password, not the enterprise search password)
```

Now, reinstall Enterprise Search.