Elasticsearch Security using **X-Pack**

1. **X-Pack** is an Elastic Stack extension that bundles security, alerting, monitoring, reporting, and graph capabilities into one easy-to-install package.
2. To use X-Pack we need, **Elasticsearch** & **Kibana**
3. **X-Pack** helps us to control the **Authentication** and **Authorization** of Elasticsearch

* *Authentication* is the process of determining whether someone is who they claim to be.

**E.g.** allowing the user to access based on the credentials username/password.

* Authorization*is the function of specifying access rights to resources.*

***E.g.***Restricting the access of indexes by Read/Write.

1. X-Pack is not a separate service/process and it’s just plugin which has to be added with Elasticsearch/Kibana
2. Through Kibana, we can monitor logstash as well.

Install X-Pack on Elasticsearch, Logstash and Kibana

**Note:** Stop the services first. Install the plugin and then start the services again

$ELASTICSEARCH\_HOME/bin/elasticsearch-plugin install x-pack

$LOGSTASH\_HOME/bin/logstash-plugin install x-pack

$KIBANA\_HOME/bin/kibana-plugin install x-pack

Once the installation is done, start the services again.