

Software specifications

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
All	Oracle or OpenJDK Java 7 or 8	Open Source	N/A	N/A	http://www.oracle.com/technetwork/java/javase/downloads/index.html	N/A	Windows 7+ Linux Mac OS X
All	Elasticsearch 2.3.2	Open Source	N/A	N/A	https://www.elastic.co/downloads/elasticsearch	512MB Memory	Windows 7+ Linux Mac OS
2,3,4,7	Elasticsearch-head	Open Source	N/A	N/A	https://github.com/mobz/elasticsearch-head	512MB Memory	Windows 7+ Linux Mac OS
2,3,6	Bigdesk	Open Source	N/A	N/A	http://bigdesk.org/	512MB Memory	Windows 7+ Linux Mac OS
2,4,5,6,7	Kibana	Open Source	N/A	N/A	https://www.elastic.co/downloads/kibana	512MB Memory	Windows 7+ Linux Mac OS
4, 6,7	Marvel	Proprietary	Yes	\$1000/year for 5 nodes, \$250/year for each 5-node bundle	https://www.elastic.co/downloads/marvel	512MB Memory	Windows 7+ Linux Mac OS

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5,6,7	Kopf		N/A	N/A	https://github.com/lmenezes/elasticsearch-kopf	512MB Memory	Windows 7+ Linux Mac OS
5	Nagios	Open Source	N/A	N/A	https://www.nagios.org/downloads/	1GB Memory	Linux

Installation Notes

All instructions are for Ubuntu Linux 16.04, the operating system used in Monitoring Elasticsearch.

Installing Java

See instructions at: <https://www.digitalocean.com/community/tutorials/how-to-install-java-with-apt-get-on-ubuntu-16-04>

OpenJRE/OpenJDK

```
sudo apt-get update
sudo apt-get install default-jre
sudo apt-get install default-jdk
```

Oracle JDK

Add the Oracle repositories to Ubuntu 16.04

```
sudo add-apt-repository ppa:webupd8team/java
sudo apt-get update
```

Install Java 7

```
sudo apt-get install oracle-java7-installer
```

Install Java 8 (recommended)

```
sudo apt-get install oracle-java8-installer
```

Installing Elasticsearch

Install Elasticsearch .deb file

```
wget https://download.elastic.co/elasticsearch/elasticsearch/elasticsearch-2.3.2.deb
```

```
sudo dpkg -i Elasticsearch-2.3.2.deb
```

Verify installation by visiting: <http://localhost:9200/>

Installing Elasticsearch-head

After installing Elasticsearch, install Elasticsearch-head as a plugin

```
sudo /usr/share/elasticsearch/bin/plugin install mobz/elasticsearch-head
```

Verify installation by visiting: http://localhost:9200/_plugin/head/

Installing Bigdesk

After installing Elasticsearch, install Elasticsearch-head as a plugin

```
sudo /usr/share/elasticsearch/bin/plugin install lukas-vlcek/bigdesk
```

Verify installation by visiting: http://localhost:9200/_plugin/bigdesk/

Installing Kibana

Download, extract, and start Kibana:

```
wget https://download.elastic.co/kibana/kibana/kibana-4.5.1-linux-x64.tar.gz
tar xzvf kibana-4.5.1-linux-x64.tar.gz
cd kibana-4.5.1-linux-x64
./bin/kibana
```

Verify installation by visiting: <http://localhost:5601/>

Installing Marvel

After installing Elasticsearch, install Marvel-agent as a plugin

```
sudo /usr/share/elasticsearch/bin/plugin install mobz/elasticsearch-head
```

After installing Kibana, install the Marvel user interface

```
cd kibana-4.5.1-linux-x64
bin/kibana plugin --install elasticsearch/marvel/2.3.3
bin/kibana
```

Verify installation by visiting: <http://localhost:5601/>

Installing Kopf

After installing Elasticsearch, install Kopf as a plugin

```
sudo /usr/share/elasticsearch/bin/plugin install lmenezes/elasticsearch-kopf/2.0
```

Verify installation by visiting: http://localhost:9200/_plugin/kopf/

Installing Nagios

See installation instructions for Ubuntu 16.04 at: <https://help.ubuntu.com/lts/serverguide/nagios.html>

Install nagios on a machine you want to monitor

```
sudo apt install nagios3 nagios-nrpe-plugin
```

Install Nagios Remote Plugin Executor (NRPE) on Nagios monitoring server:

```
sudo apt install nagios-nrpe-server
```

Verify NRPE installation by visiting: <http://nagios-monitoring-server/nagios3>