\* Yêu cầu hệ thống:

* Java 12
* NodeJS 12
* Vue-Cli 4.1.1
* Docker: (Các images)
  + docker.elastic.co/elasticsearch/elasticsearch:6.4.3
  + mysql:latest
  + docker.elastic.co/logstash/logstash:5.6.16
* MySQL-Client

\* MySQL:

- Tạo Server MySQL: docker run --name p4\_mysql -e MYSQL\_ROOT\_PASSWORD=12345678 -d mysql

- Tạo user p4\_db: config/mysql/create\_user.sh p4\_db p4\_db 12345678

- Import database: mysqldump -h 172.17.0.2 -u p4\_db -p12345678 database.sql > p4\_db

\* ElasticSearch:

- Tạo Server MySQL: docker run --name p4\_elasticsearch -e "discovery.type=single-node" docker.elastic.co/elasticsearch/elasticsearch:6.4.3

\* Logstash:

- Tạo Server Logstash: docker run --name "p4\_logstash" docker.elastic.co/logstash/logstash:5.6.16

- Config:

+ docker cp config/logstash/mysql-connector-java-8.0.18.jar p4\_logstash:/usr/share/logstash/logstash-core/lib/mysql-connector-java-8.0.18.jar

+ docker cp config/logstash/logstash\_mysql.conf p4\_logstash:/usr/share/logstash/pipeline/logstash.conf

- Restart logstash: docker restart p4\_logstash