

# SNA Fall 19 Retake

Service description

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## **Task:**

Implement Docker-based logging service which collect logs from applications container, Nginx and hosts's system logs using Fluentd

### 1) **System overview**

All required services starts from docker-compose:

**Fluentd** - Daemon that collects logs from applications and host

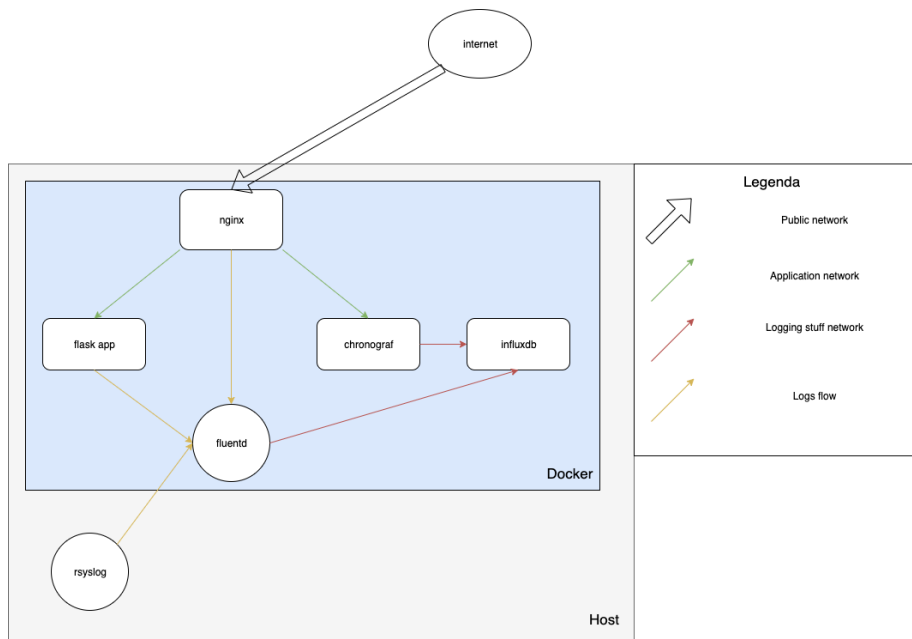
**Influxdb** - Data storage for our logs

**Chronograf** - GUI for Influxdb

**Nginx** - Reverse proxy for all System

**Web** - Simple flask app

System network diagram:



## 2) Used docker images

- **influxdb:1.7.4** official Influxdb image, Dockerfile can be found in /influx directory
- **fluentd-influxdb:latest** official fluent image with installed plugin for Influxdb, Dockerfile can be found in /fluent directory
- **chronograf:latest** official Chronograf image, Dockerfile can be found in /chronograf directory
- **nginx:latest** official Nginx image

- **rome314/sna-retake-flask:latest** image of my flask application from DockerHub, Dockerfile can be found in /flask directory

### 3) **Already implemented/Need to be implemented**

Done:

- Plug-and-play system:

Only you need for running system is clone repository and run one script

- Handling all system logs from host machine
- Created dashboards for Chronograf which need to import manually

TODO:

- Auto-import predefined dashboards to Chronograf:

I could not import dashboards to Chronograf in automated way

- Add graphs and plots to dashboards
- Parse syslogs by sources, types

### 4) **Used to Test:**

- AWS t2.micro instance
- Ubuntu Server 18.04 LTS
- Docker, docker-compose
- rsyslog