

Setup Nginx Login for Kibana

Consideration

The current ELK setup allows anyone with office IP to access Kibana page as long as he/she has the public IP and port of the Kibana server. This is not ideal as Kibana allows the user to delete important logs and dashboard. Thus, we need to restrict the access for security such as login section. Unfortunately, the free version of ELK does not provide login feature out of the box so we need to find other alternatives.

Nginx will be used to implement the login section. It is known for its efficient use of resources and most importantly, free of charge.

Setup

Note: the steps below assume there is already a complete ELK setup and no Nginx setup in the server.

Modify these parts of Kibana config file at /etc/kibana/kibana.yml. Port 5611 is a random port, as long as it is not 5601. This is because port 5601 has been configured in the iptables so we keep it that way to minimize changes needed. Port 5601 will be used in Nginx setup.

```
server.port: 5611
server.host: "localhost"
```

Install Nginx and Apache2-utils if not done so

```
sudo apt-get install nginx apache2-utils
```

Setup a user for Nginx login. Enter strong password when prompted.

```
sudo htpasswd -c /etc/nginx/htpasswd.users <username>
```

Edit the Nginx available sites at /etc/nginx/sites-available/default. As mentioned in the first step, we will use port 5601 set in 'listen'

```
server {
    listen 5601;
    server_name <public ip of the Kibana server>;
    auth_basic "Restricted Access";
    auth_basic_user_file /etc/nginx/htpasswd.users;

    location / {
        proxy_pass http://localhost:5611;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
    }
}
```

Ensure that /etc/nginx/sites-enabled/default points to /etc/nginx/sites-available/default, usually in the form of a soft link

Restart Kibana and Nginx

```
sudo service kibana restart  
sudo service nginx restart
```

Verify the login section has been setup correctly, Try to login with valid and invalid users.

Done!