## ICT & Infra S3 SNO-Week13: Multivalued answers records

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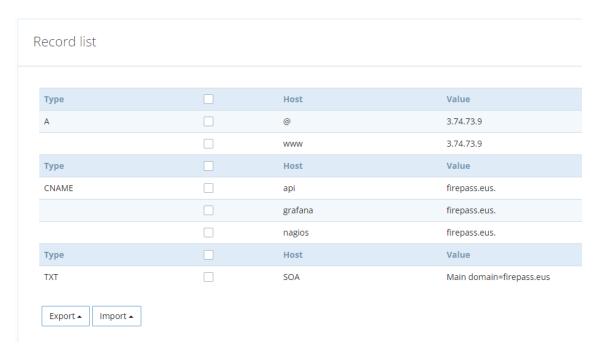
## Introduction

This week we gave a lecture on proxy managers. This tool plays as a forwarder of requests from the public network to the private network.

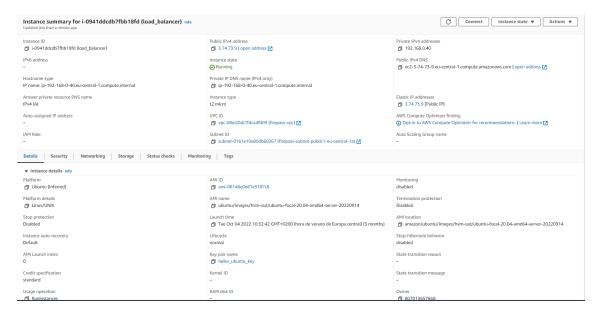
Basically, this service picks up the request from the domain or subdomain that is made and returns the response associated with the request.

## Assignment 1: Create a multivalued answers record Solution:

First, we will create the list of records.



Next we will create an instance with a static ip in aws.

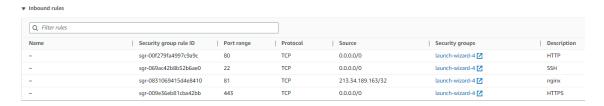


Later, we will install Docker compose and deploy a container with the nginx proxy manager image. As we can see, we will map ports 80, 81 and 443. Also, we will save the volumes in the system so that in case of a crash it will be restored.

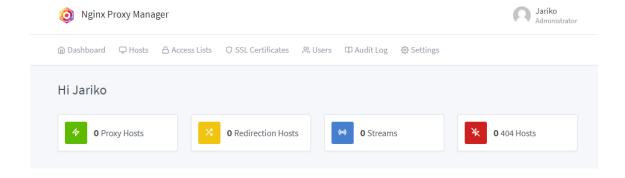
```
ubuntu@ip-192-168-0-40:~/dockercompose$ cat docker-compose.yml
version: '3'
services:

nginx:
   image: 'jc21/nginx-proxy-manager:latest'
   container_name: app
   restart: always
   ports:
        - '81:81'
        - '80:80'
        - '443:443'
   volumes:
        - ./nginx_proxy_manager_data:/data
        - ./nginx_proxy_manager_letsencrypt:/etc/letsencrypt
```

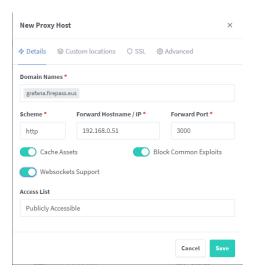
Once the ports have been mapped, we will create a security group in which we will open the ports. One port is port 81, this is the administration port and that is why it does not open to the public but opens to a single ip.



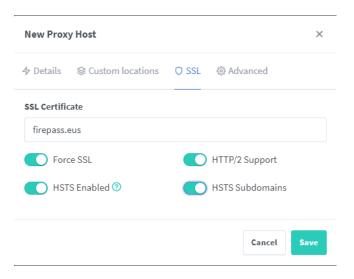
Once finished, we enter the administration console and enter the proxy hosts section.



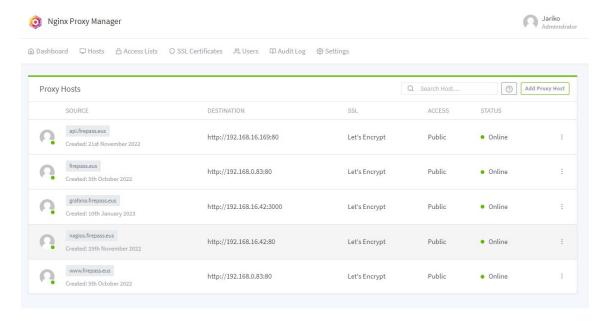
In this section we add all the services we have to expose them publicly and associate them to the subdomain previously created.



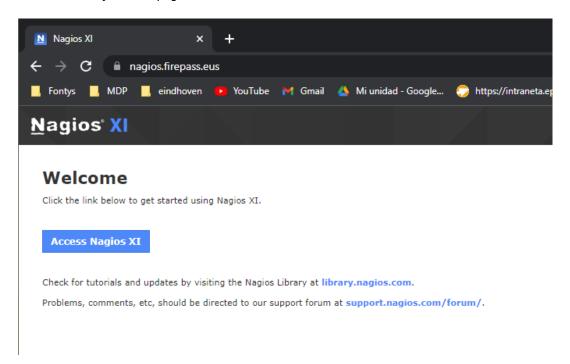
Another important point is to associate the proxy host. This is done through the SSL tab where we enable the wildcard certificate.



Once created, all records should be online and available to everyone.



As we can see in the case of searching for nagios.firepass.eus we see that we are redirected to the nagios server instead of the web page.



Finally, we see that using the nslookup command we can see that although the subdomains share public ip we are redirected to different sites by the previously created subdomain.

```
C:\Users\heiko>nslookup
Servidor predeterminado: dns.google
Address: 8.8.8.8

> nagios.firepass.eus
Servidor: dns.google
Address: 8.8.8.8

Respuesta no autoritativa:
Nombre: firepass.eus
Address: 3.74.73.9
Aliases: nagios.firepass.eus
> grafana.firepass.eus
Servidor: dns.google
Address: 8.8.8.8

Respuesta no autoritativa:
Nombre: firepass.eus
Address: 3.74.73.9
Aliases: grafana.firepass.eus
```