

Rules for Shift Problem Module 2

DNS and Web Server

1. The Practicum will be held on **Monday, October 24, 2022, from 10.00 WIB** until **Wednesday, October 26 2022 at 22.00 WIB**.
2. When the time is up, please export your GNS3 project file and send it to your test assistant by email.
3. The application installation script and its configuration must be placed in the root directory (/root). Use *shell scripting* lectures ([link](#)) as your guiding friend.

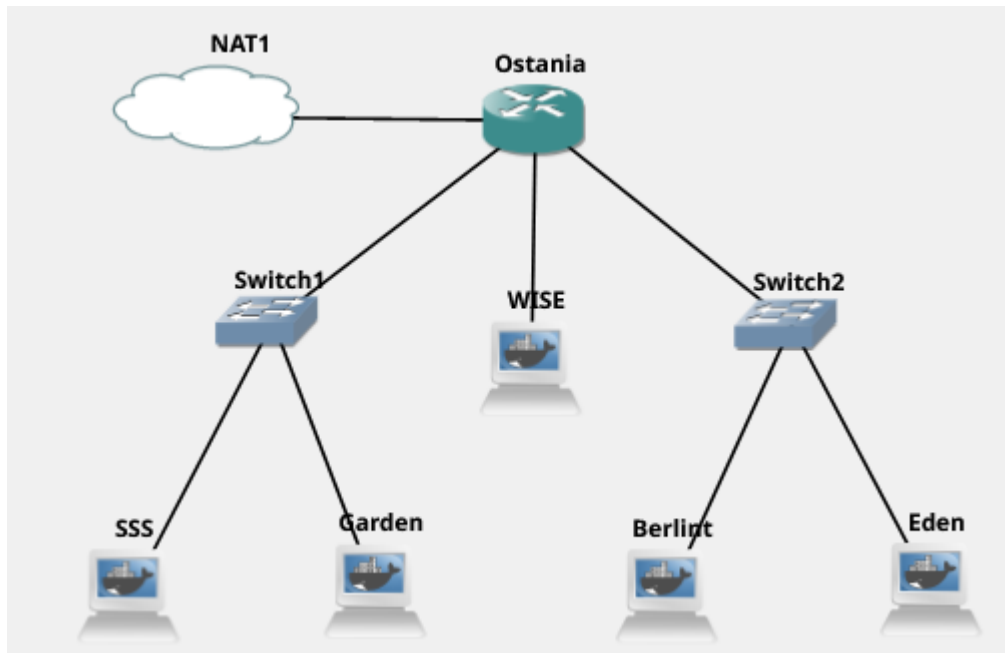
Example :

```
root@WISE:~# pwd
/root
root@WISE:~# vi script.sh
root@WISE:~# cat script.sh
apt-get update
apt-get install nano
root@WISE:~# bash script.sh
Hit:1 http://archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://security.ubuntu.com/ubuntu xenial-security InRelease [99.8 kB]
Get:3 http://archive.ubuntu.com/ubuntu xenial-updates InRelease [99.8 kB]
Get:4 http://archive.ubuntu.com/ubuntu xenial-backports InRelease [97.4 kB]
Get:5 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [2560 kB]
Get:6 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [984 kB]
Get:7 http://archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [1544 kB]
Fetched 5384 kB in 21s (247 kB/s)
Reading package lists... Done
Reading package lists... 1%
```

4. You are not allowed to ask for configuration from the assistant. Use Google as your friend.
5. If there is no notification for revision from the assistant, it means that all questions are correct and can be done.
6. The test assistant for demos and revisions will be notified on **Monday, October 26, 2022 at 21.00 WIB**.
7. Contact test assistant no later than **Thursday, October 27, 2022 at 12.00 WIB**.
8. Rules for the official report will follow the rule presentation file.

Suggestion: It's important to make **backup** for your configuration outside of GNS3 project to avoid unwanted things.

Twilight (黄昏 (たそがれ) , <Tasogare>) is a spy who comes from a country named Westalis. For the sake of maintaining peace between Westalis and Ostania, Twilight with a pseudonym Loid Forger (ロイド・フォージャー, *Roido Fōjā*) under WISE organisation run his operation in Ostania by doing espionage, sabotage, tapping, and possibly murder. Here is a map of the Ostania country :



WISE will be used as DNS Master, Berlind as DNS Slave, and Eden will be used as Web Server. There are 2 clients, namely SSS and Garden. All nodes are connected to Ostania as the router, so they can access the internet (1).

To make it easier to get information about the mission from Handler, help Loid create the main website by accessing wise.yyy.com with alias **www.wise.yyy.com** on the wise folder (2). After that he also wants to create a subdomain **eden.wise.yyy.com** with alias **www.eden.wise.yyy.com** whose DNS is set on WISE and leads to Eden (3). Also create a reverse domain for the main domain (4). To stay in touch if the WISE server has some problem, make Berlind also as the DNS Slave for the main domain (5). Because there is a lot of information from Handler, make a special subdomain for operations **operation.wise.yyy.com** with alias **www.operation.wise.yyy.com** delegated from WISE to Berlind with IP leads to Eden on the folder operation (6). For more specific information about Operation Strix, create a subdomain via Berlind with access **strix.operation.wise.yyy.com** with alias **www.strix.operation.wise.yyy.com** that leads to Eden (7).

After configuring the server, then we need to configure the Web Server. First, with **www.wise.yyy.com** web server. Firstly, Loid needs a web server with DocumentRoot at /var/www/wise.yyy.com (8). After that, Loid also needs that url **www.wise.yyy.com/index.php/home** can be **www.wise.yyy.com/home** (9).

Next, on **www.eden.wise.yyy.com** subdomain, Loid needs an asset storage with DocumentRoot at /var/www/eden.wise.yyy.com (10). However, on /public folder, Loid just wants to do directory listing (11). Not only that, Loid also wants to prepare an error 404.html file on /error folder to replace the error code on apache (12). Loud also asks Franky to make a virtual host configuration for him. This virtual host aims to be able to access asset files **www.eden.wise.yyy.com/public/js** into **www.eden.wise.yyy.com/js** (13).

Lois asks that **www.strix.operation.wise.yyy.com** can only be accessed through port 15000 and port 15500 (14) with username authentication Twilight and password opStrix and file at /var/www/strix.operation.wise.yyy (15) and everytime IP Eden accessed it will automatically redirect to **www.wise.yyy.com** (16). Because **www.eden.wise.yyy.com** website have more visitors and a lot of modifications so there are more random pictures, Loid wants to change the image request that has a substring "eden" will be directed to eden.png. Help Agent Twilight and WISE Organization to keep the peace! (17)