

## Common instructions on Taitaja-tasks

### Common instructions:

- Unless otherwise instructed, always use password "Qwerty7". This password also is default password for all preinstalled servers, unless otherwise instructed.
- Server names must be configured as instructed in the task
- Linux-servers are installed by default without graphical interface. Windows servers are preinstalled with graphical interface, unless otherwise mentioned.
- All installed servers and services must be in english, unless otherwise mentioned. This can affect in evaluation points
- If in the assignment it is not clearly instructed how to do certain things, you can configure the service any way you want, so that the functionality is working as instructed. The functionality will be tested.
- Replace "X"-letter in tasks with your competitor number.  
For example: <http://taitajaX.local> => <http://taitaja9.local>

**IMPORTANT! Please read the whole task before starting. Making notes on competition assignment papers is allowed. All devices will be restarted before evaluation, so make sure that everything works after reboot.**

Your customer has ordered from you some maintenance services on the company server. Your colleague already started working on the server, so you might find some settings preconfigured on the server. You have been left the private SSH-key for root-user, so you can login with that key to server or by using the Hyper-V console.

Debian OS has been preinstalled on server and it should have the following settings (you might need to change some of these)

- IP: 10.99.22.12
- MASK: 255.255.255.0
- GW: 10.99.22.1

The firewall has been preconfigured.

## The server

### Specifications

The server is a basic webserver for the website of the company.

CPU	2
RAM	2GB
Hard drive	30GB
Hostname	web.taitaja2017.com

### HTTP-server

- Install Moodle on the domain taitaja2016.com
  - Download the newest Moodle-version (3.3) from the official page of Moodle and install it
  - Create username admin and password "Taitaja2017kilpailu!"
  - The Moodle front page needs to have a text "Compatitor X website" and you can also add a greeting to the judges
- Create another domain extra.taitaja2017.com.
  - Enable directory listing
  - Add a picture on the web root directory which you need to find from "POMO"-machine. The image filename is "IMG\_0018.JPG"
- Configure HTTPS on taitaja2017.com domain. Redirect all http-requests to https

### MySQL

- Create MySQL database and a MySQL user "kilpailijaX" for the website. The name of the database must be "moodleX" and the MySQL user must only have permissions to access this database.

- Create a backup script for the website database which saves MySQL-dump every 10 minutes. The backups must be found on /opt/database-backup/ with name taitaja2017.com-HOUR-MINUTE-DAY-MONTH-YEAR.sql  
Maximum amount of backup files at one time is 10 backups. Alternatively you can also create full backup of MySQL-databases.

## DNS

- Install DNS-service
- Configure DNS-service as instructed in the assignment

## SSH and Fail2ban

- Allow password-logins on everyone else except the root-user
- Configure fail2ban to block Brute Force attacks on SSH. Configure the locktime as 15 minutes

## Samba

- Configure a shared folder "yhteinen" to the group "user"

## Firewall

- The company is very strict about security and server must have all ports blocked by default. Only open ports are SSH & ICMP (type 8 ping)
- Configure firewall as instructed in the assignment and do only needed changes for the functionality

## Users and groups

User	Password	Group	Home directory
pirkko	Qwerty7	user	/home/pirkko
mikko	Qwerty7	user	/home/mikko
ilkka	Qwerty7	admin	/home/ilkka

Admin-group must have permissions to execute sudo

## Workstation

The boss has forgotten the password for users root and "pomo" on POMO-PC-virtual machine.

The workstation cannot be reinstalled, because there are some important files and programs preinstalled.

Reset users password and configure them as "Qwerty7"

The workstation should get dynamic IP-address from the workstation network

## Network

- Only one network with IP-addresses 172.22.X.0/24.
- Configure DHCP-service on Mikrotik, share 10 – 100 IPs
  - Configure DNS server IP-address to DHCP
  - Configure Default Gateway to DHCP
- The server must have the last available IP-address on the network
- Configure Mikrotik password "Qwerty7".
- Shut down WLAN-connections on Mikrotik