Vanyek:

We're an IT company called LinkWave solutions, specializing in networking. We were approached by the Hungarian Hotel Complex company in Budapest. Here you will find a motel, a café, and a hotel.

Zoli:

The motel, called Laguna motel, is as it is in its name, just a small place with a few rooms which can accommodate a few people per room. It has a small reception where people can check in and out.

The café, the place where hotel guests are recommended to go if they want to drink a quality coffee or eat some light food. The café also has a bar which opens its doors in the night hours for the public, and an administration room where paperwork is done for the café shop.

Our most important part is the New York Hotel where for the illustration we only made 2 rooms on two different levels of the hotel, we also created the managers office where the hotel managers can do their office work and paperwork as well. We also made the security guards room too because we have a WEB and DATA server in their room and the camera system.

Last but not least, we made our place too on the topology, the system operators work here, and we have quite a few servers, one DNS-DHCP-SYSLOG server and an EMAIL-TFTP-FTP-NTP server. The system administrators can reach every sites inside network topology.

Finally, we have a home office worker, who works with the office workers from home.

The sites are connected through multiple routers and private networks.

Márk:

Now let me summarize what our code does. This code automates the process of updating the enable password on a Cisco router, ensuring security and periodic password rotation. The code begins with importing two modules: time and netmiko. We used the time module to add a delay (in seconds) between password changes. Netmiko provides a convenient interface for interacting with network devices, including Cisco routers. After importing the necessary modules, we entered the parameters of the desired router such as the IP address, device type, credentials for authentication and the current enable password. Then the get\_new\_enable\_pwd()function prompts the user to input a new enable password. The next function (change\_enable\_pwd(router\_parameter, new\_enable\_password)) connects to the router with ssh using the provided parameters and changes the password to the new one. The updated password is displayed to the user. The script enters an infinite loop to repeatedly change the enable password. After each password change, it waits for a week (time.sleep(604800) before asking for another change.

Vanyek:

We have several servers in the network, which is exactly 4. You provide them with many functions and redundant solutions. The whole test network was simulated using a MikroTik router. With this we gave IP addresses to our 2 GUI windows servers and 2 linux debian servers. We also have 1 windows client for testing.