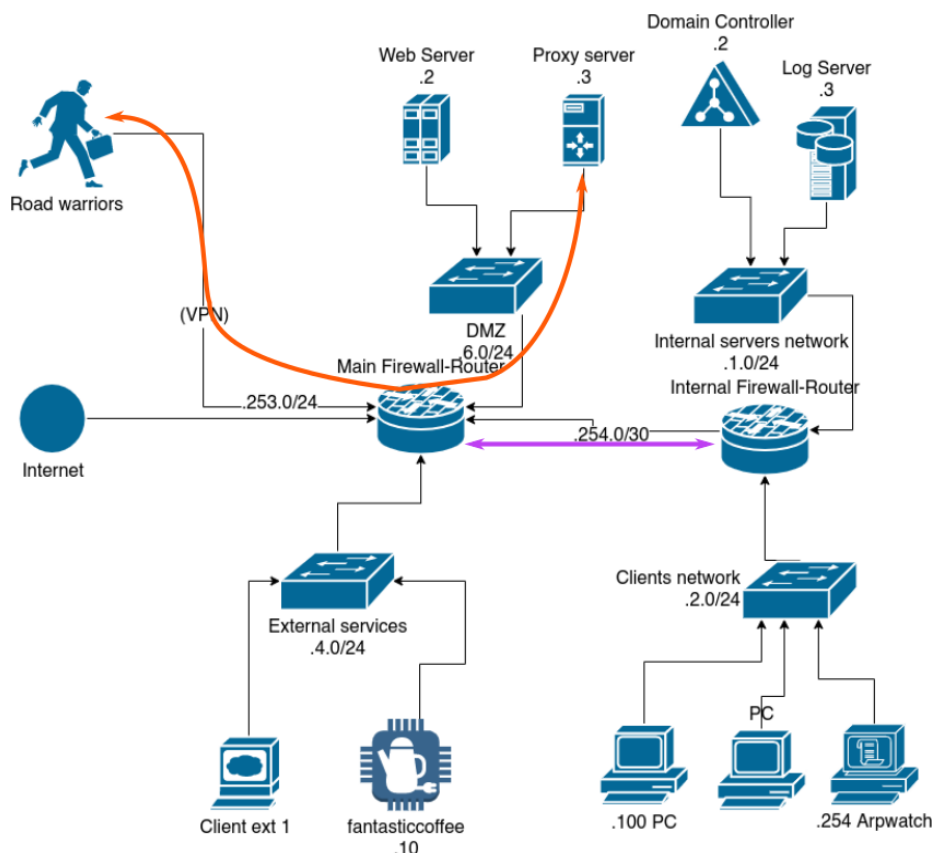


## Assignment 2 (v.1.0): VPN on ACME co.

In this assignment you have to properly configure two new services running on the ACME co. networks. In particular, a VPN for the road warriors employee and a VPN tunnel between the Main and the Internal routers (that are actually running on two different branch offices). The two VPNs have to work with IPv4, whereas IPv6 is optional.

You can choose ONE between any of the three options: openvpn, IPsec or wireguard. Please, discuss your choice in the report.



### Road-warriors VPN requirements

You have to properly setup the proxy server to act as the VPN gateway, namely a gateway for the road warriors of ACME co. You have to create the following users:

- Becca
- Huck
- Jim

The users connected to the VPN have to be able to access the internal server network and the client network. This means that, if needed, the firewall rules of both Main Firewall-Router and Internal Firewall router have to be properly adjusted. You have to decide the security level, the authentication mechanism and the implementation software.

### Main-Internal VPN tunnel

You have to properly setup a VPN tunnel between the two routers, since the actual connection is running on an insecure medium: any packet running between the two routers should go through the VPN tunnel, namely, should be encrypted.

### Scheme of your hand-in

You have to prepare a document that reports the activity you have performed to realize the assignment. When uploading your report in classroom, you have also to include the details about how to test the VPN connections of the three accounts above mentioned.

The document should be named ACME\_XX\_a2\_report.pdf and should be included together with the

exported firewall configurations in a .zip file named ACME\_XX\_a2.zip. The zip file is the only thing your group has to hand-in in classroom (possibly only one of the members). The document should be clear and concise (few pages, please...) and have at least the following pieces of information:

1. Group number
2. Student names and numbers
3. Initial brainstorming, where you write your considerations and observations about what to do and how. Here you have to motivate the choice you made for the whole setup.
4. Details about the VPN setup for the road warriors (namely, the installation procedure, together with installed packages, if any, and configuration files, and account setup)
5. Details about the VPN for the Main-Internal VPN tunnel
6. Test of the new configuration
7. Final remarks