VM instructions

These VMs work with VirtualBox.

We have had inconsistent results importing the VM in VMWare.

We have not tested importing the VMs into any other virtualization environments, but the file is in Open Virtualization Alliance (OVA) format, so it may work.

Import the `QuaggaVM.ova` file from the USB stick or from the link at www.bgpexpert.com/course.php

You can do or finish the exercises by yourself by running two additional VMs, one that is the ISP router and one that is a peer router. For this, create two duplicates of the imported VM.

Make sure the VM's network interface is connected to the Ethernet or Wi-Fi interface that you use to connect to the test network and is configured for *bridge* mode.

Don't forget to select "reinitialize the mac addresses of all network cards"!

Disable your computer's firewall or make sure that it allows TCP to/from ports 179 and 2605.

Make sure you have a configuration sheet.

Start the VM.

Login as `root` with password `cursus`

Type `./getconfigs.sh <letter>`

I.e., if your router is router Q, type `./getconfigs Q`

If your network interface isn't `enp0s3` (check with the ifconfig command), you need to change your interface name in the file `/etc/quagga/zebra.conf`

If the above was successful, type `./startquagga.sh`

Type `telnet localhost 2605`

Login with password `cursus`

Type `enable`

Again use password `cursus`

You are now ready to configure BGP.

For the additional routers, start the two additional copies of the VM. On one, use

Type `./getconfigs.sh <number>`

The number is the ASCII value of the letter used for the first VM. So 65 for A, 81 for Q, 90 for Z. Then add 100. So if the first VM was Q, use 181. This is the ISP router.

Type `./getconfigs.sh <number>`

Here, the number is the previous number plus 100. So if the previous VMs are Q and 181, respectively, this one is 281. This is the second router that is pre-configured as a peer.