

## Virtual Labs Student Connectivity Requirements

## Student Connectivity Requirements for accessing HPE vLabs

Dear Learner,

You are about to sign up or have signed up for a training that utilizes Hewlett Packard Enterprise Virtual Labs (HPE vLabs) for the hands-on portion of its delivery. To maximize your experience with this type of training, please ensure that you have followed these guidelines and met these requirements:

Check your connectivity to the vLabs in either:

- Alpharetta, GA (USA) via
- Boeblingen (Germany) via

https://alfst1.vlabs.hpe.com/speedtest/ https://bbnst1.vlabs.hpe.com/speedtest/

The speed test is a very useful tool whose primary purpose is to identify problematic network connections; however, great speed test results do not guarantee good vLabs performance.

It is recommended to have **100-200 Kbps** available dedicated download bandwidth <u>per vLabs</u> <u>user</u> for a good vLabs experience. This bandwidth is dependent on the amount of graphical display used in a course – with higher use of graphics in the course, you may need higher bandwidth.

Upload speed is usually less than download, and is much less critical, as most of the data (the graphics in the desktop display) is being sent from vLabs to the user – only mouse and keyboard commands are being sent to vLabs. So there is no requirement (or advice) that the speeds be symmetrical.

JITTER should be 35 ms or less.

**<u>PING</u>** (Round Trip Time) should ideally be under 250ms. It will be longer for non-US deliveries than US deliveries. This is less critical than download speed or Jitter, but can indicate problems.

In order to successfully access HPE vLabs, ensure that your firewall and/or proxy server allows http (tcp port 80) and https (tcp port 443) access either to "\*.vlabs.hpe.com", or to the below specific sites:

- vlabs.hpe.com
- gw.vlabs.hpe.com
- alfgw.vlabs.hpe.com

- bbngw.vlabs.hpe.com
- alfgw.vlabs.hpe.com
- cfagw.vlabs.hpe.com

Additional requirements and information about HPE vLabs can be found at <a href="https://vlabs.hpe.com/">https://vlabs.hpe.com/</a>

Sincerely, HPE vLabs support team