

Requirements for Virtual Server Based Labs

System Requirements

To fully participate in our Virtual Server based online labs, you will need:

- 1 GHz 32-bit (x86) or 64-bit (x64) processor with at least 1 GB of system memory
- Microsoft Windows XP SP3 or Higher
- Microsoft Internet Explorer 6.0 or higher
- Monitor with a minimum screen resolution 1024 x 768 and at least with 16-bit color depth (1280 x 1024 or higher resolution and 32 bit color depth recommended)
- High speed Internet connection (200 Kb/s per user with 1 Mb burst capacity)

ActiveX Control Requirements

In addition to the above, Lab on Demand *Virtual Server* based Labs also require the installation of a Microsoft signed Active-X control to work properly.

- The VMRC ActiveX control (Microsoft Virtual Machine Remote Control) must be installed
 - The first time the user connects to a lab, they are prompted to install the control
 - Power User or Administrator rights and 1MB disk space are required to install the control
 - This is a machine level control, so once it is installed, any normal user can use the control in the browser
- The VMRC protocol must be able to traverse Port 443 for both TCP and UDP traffic on any firewall in between the learner and our lab server farm
- The VMRC ActiveX control traffic cannot traverse a proxy. If port 443 traverses a proxy, an exception for the lab server farm FQDNs and/or IP addresses will need to be configured

Port	Protocol	FQDN	IP Address
443	VMRC	lodvfs01.ttsc.net	65.38.27.11
443	VMRC	lodvfs02.ttsc.net	65.38.27.12
443	VMRC	lodvfs03.ttsc.net	65.38.27.13
...	...	Through...	...
443	VMRC	lodvfs20.ttsc.net	65.38.27.30