New Horizons Computer Learning Centers

Online LIVE (OLL)

Requirements for Elluminate & Hyper-V Based Labs

Requirements for Connecting to Elluminate

SYSTEM REQUIREMENTS

To participate in our Online LIVE class sessions hosted in Elluminate, you must have Java installed and one of the supported Supported OS configurations and recommended versions of Java below.

WINDOWS SYSTEMS:

- 1 GHz 32-bit (x86) or 64-bit (x64) processor with at least 1 GB of system memory
- **Operating System:**
  - Windows XP SP3 (32-bit with a 32-bit JVM)
  - Windows Vista (32-bit with a 32-bit JVM, or 64-bit with a 64-bit JVM)
  - Windows 7 (32-bit with a 32-bit JVM, or 64-bit with a 64-bit JVM)
- **Browser:**
  - Microsoft Internet Explorer 7.0 or higher (IE 9 recommended)
  - Firefox 3.5 or higher
  - Safari 4 or higher
  - Chrome 10.0 or higher
- Sun Java 1.5.0_17 or Sun Java 1.6.0_12 or greater (Most current Java release recommended)
- High speed Internet connection (Cable/DSL or better)

MACINTOSH SYSTEMS:

- G4, G5 or Intel Processor with at least 1 GB of system memory
- **Operating System:**
  - OS X 10.5 (32 bit with 32 bit JVM)
  - OS X 10.6 (64 bit with 32 bit JVM)
  - OS X 10.6 (64 bit with 64 bit JVM)
- **Browser:**
  - Safari 4.0 or higher
- Apple Java 1.5.0_16 (J2SE5 32-bit), Apple Java 1.6.0_07 (J2SE6 64-bit)
- High speed Internet connection (Cable/DSL or better)

OLL VIRTUAL CLASS PORTS AND PROTOCOLS REQUIREMENTS

- The OLL Elluminate classroom session is launched via Java Web Start when a user clicks on the Launch button from within their class page in the LMS
  - Clicking the link downloads a small Java Network Launching Protocol (JNLP) file containing the information necessary to connect to an Elluminate session
  - Java Web Start launches, reads the information in the JNLP file, ensures that the proper Java Resource (JAR) files are in place, and makes the connection to the server
  - Java Web Start detects the proxy settings used by the default Internet browser on the connecting system, and uses the same settings during the connection process
  - Java Web Start supports most proxy configuration scripts and can detect proxy settings in most environments.
  - If Java Web Start **cannot** detect the proxy settings, it will prompt to specify them. In this case it will be necessary to manually configure Java Web Start's proxy settings in order to launch Elluminate. Java Web Start will also prompt for username and password should it encounter an authenticating proxy
- The Collaborative Communication Framework (CCF) is Elluminate's proprietary protocol which uses TCP
- The CCF protocol must be able to traverse Port 80 for both TCP and UDP traffic on any firewall in between the learner and our lab server farm

Port	Protocol	FQDN	IP Address
443	HTTPS	lms.nhcms.net	67.214.100.233
443	HTTPS	elluminate.newhorizons.com	65.38.27.200
80	Java/CCF	el01.newhorizons.com	65.38.27.201
80	Java/CCF	el02.newhorizons.com	65.38.27.202
…	…	Through…	…
80	Java/CCF	el10.newhorizons.com	65.38.27.210

Requirements for Hyper-V Based Labs

SYSTEM REQUIREMENTS

To fully participate in our Hyper-V 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 Vista SP2 or higher
- Microsoft Internet Explorer 7.0 or higher (IE 9 recommended)
- Monitor with a minimum screen resolution 1280 x 960 and at least with 16-bit color depth (1280 x 1024 or higher 32-bit color depth recommended)
- High speed Internet connection (200 Kb/s per user with 1 MB burst capacity)

ACTIVE-X CONTROL REQUIREMENTS

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

- The Microsoft Virtual Manager Self Service Client Active-X 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. Once it is installed, any normal user can use the control
- The VMRDP protocol must be able to traverse Port 2179 for both TCP and UDP traffic on any firewall in between the learner and our lab server farm

Port	Protocol	FQDN	IP Address
2179	VMRDP	lodhv01.ttsc.net	65.38.27.151
2179	VMRDP	lodhv02.ttsc.net	65.38.27.152
2179	VMRDP	lodhv03.ttsc.net	65.38.27.153
…	…	Through…	…
2179	VMRDP	Lodhv30.ttsc.net	65.38.27.180