Network Installation

This document examines the varied installations methods and advantages and disadvantages for each setup. Contact your school's Technology Coordinator for guidance with network installation.

TYPES OF SECURE BROWSER SETUPS

- **Browser Installed on Local Machines**
  - Installation on Individual Machines (manual)
  - Installation on Individual Machines (through a network)

- **Browser Installed on the Network**
  - Access from a Shared Network Drive – in this setup, the secure browser is stored on the shared network drive and clients directly access the executable.
  - Thin Client Setup – in this setup the client depends entirely on the server to run the browser.

Installation on Individual Machines (manual)
In this case the browser is installed by copying the installer using a traditional media, or by downloading the browser from the Internet or network drive. The installer is then run on each individual machine and the installation is verified.

Advantages	Disadvantages
▪ faster loading time because the browser does not have to access the network ▪ less demand on the network because computers don't have to access browser files ▪ browser performance is dependent on the individual computer only ▪ may simplify troubleshooting because issues are easier to detect if they are isolated to one machine	▪ time consuming installation process ▪ updated browsers (if any) will have to be individually by computer

Installation on Individual Machines (through a network)
In this case, the user may use various network setups to push the browser to different machines. This could be done by copying the relevant files to the various locations on the client machines or using programs (OS and third party) to run the installers on different client machines over the network.

Advantages	Disadvantages
▪ faster loading time because the browser does not have to access the network ▪ less demand on the network because computers don't have to access ▪ browser files browser performance is dependent on the individual computer only ▪ may simplify troubleshooting because issues are easier to detect if they are isolated to one machine	▪ requires advanced knowledge of the network configuration and network installation processes ▪ limited installation support (difficult to test installation across all possible network setups) ▪ users might not verify if browsers are functioning correctly on each individual machine once browsers are pushed to each machine

Access from a Shared Network Drive

In this case the browser files are installed on the network in a shared drive setup. The individual test machines connect to the server and run the browser executable from the shared drive. The browser files are then transferred to a temporary folder on the client machine and run from that location.

Advantages	Disadvantages
▪ faster initial installation because the browser files only need to be copied to the shared drive ▪ browser performance is dependent on the individual computer only (after the files are transferred)	▪ browser files need to be transferred from the shared drive each time the application is run ▪ potential network bottleneck when multiple browsers are opened at the same time (which could hinder test response times) ▪ difficult to verify that browsers are functioning correctly on each individual machine

Thin Client Setup

In this setup, the browser is installed on a server. Clients without a hard drive connect to the server and run the browser from the server. Though the browser is running on the server, the display is shown on the individual client machines and seems the browser to be running on the client itself.

Advantages	Disadvantages
▪ low-end client machines can be used as long as they have good network capabilities and a powerful server ▪ faster installation time because the browser files only need to be copied to the server	▪ high demand on the server; each individual machine requires ongoing display data ▪ performance relies heavily on the server ▪ non-test-related processes on the server slow overall performance for all clients ▪ difficult to troubleshoot individual machines