

## Network Licence System Requirements

### Overview:

These programs are primarily designed to run on a conventional Windows server network with Windows client machines. Other configurations are possible and covered below.

### Network:

- A server service and related manager utility form part of the program. In practice, we have found the programs also normally work well if the server / server farm is off-site (e.g. a server farm serving several schools within one organisation), and “multiple schools sharing one server” is a supported scenario.
- A peer to peer (P2P) Windows 10 network is possible, running one of the clients as a “server” though Microsoft limit the number of concurrent connections in this scenario. Linux servers will not work as they are unable to run the service.
- Active Directory network deployment is preferred, though not required. If AD is not possible, note that internal clocks for the server and clients need to be synchronised to within 10 minutes.
- The program runs well on interactive white-boards or secondary display monitors: You may MOVE the Wordshark window to a secondary display after launch. By default, it opens maximised onto the primary display. Sign on as an Admin or Teacher user / Admin / Advanced / Resize window, and follow the on-screen instructions.

### Clients:

- Windows 10, Windows 11. Note that Win RT and Win 10 S mode are NOT compatible. Win10 (Education) is compatible depending on the security parameters selected.
- Mac computers and Chromebooks are NOT compatible.
- 2GHz minimum CPU, 2Gb RAM, 1.5Gb for client deployment(recommended). Running in “Terminal service” mode from a server farm requires minimal hard disk space but needs high-spec servers/infrastructure.
- Working soundcard & driver with speakers or headset connected
- Wordshark only: Microphone (required for some games and for creating recordings for own word lists in Wordshark)
- Display resolution: 1024 x 768 or higher
- Windows 10/11 touch screens are also supported. Larger touch-screens (11+ inches) normally provide a better experience than smaller screens.

### Server:

- MS Windows Server 2012/R2, 2016, 2019, 2022 (NOT Azure)
- 2GHz minimum CPU
- 250Mb of RAM per user (if running terminal services mode). Minimal RAM is used in the recommended “client-deployment” mode, with around 99% of work carried out by client machines.
- 2Gb free hard disk space plus similar for a backup of the media if wished. This can be reduced post-install to well under 1 Gb.
- Display resolution: 1024 x 768 or better
- .NET Framework 4.7.2 (or .NET 3.5 for older servers) is mandatory on the server(s) hosting the service and manager. You do not require .NET Framework on other servers being used for load balancing/running a Server-based install or hosting the data –shared folder.

### **Running Remotely via Citrix / VPN:**

Our licence permits running of our Windows Network products from a suitably powerful Windows Server via RDP/Citrix (remote desktop working) to off-site Windows and Mac computers and to non-windows devices such as iPads & Chromebooks. Allow around 400 Mb RAM for each instance of Wordshark or Numbershark. The server requires the features and services that allow creation of a virtual soundcard. If serving more than around 10 virtualised devices we suggest running the program files from multiple servers and/or multiple-core servers. A SINGLE Windows server hosts the data folder for each program, and Stage 1 of the instructions gives the sharing and security permissions required for these folders.

### **Networks with non-Windows Servers or Clients:**

You MAY use the software on hybrid networks that include a mixture of Windows & Mac OSX clients PROVIDE you deploy the program exclusively to Windows clients and Windows Server(s): If deployed to OSX clients, file-sharing violations and other issues will occur.

The network products do not work with Linux server networks. However, provided the SERVICE and MANAGER are hosted on a Windows machine, the program data folder wordshark-shared may be hosted on a SAMBA/LINUX server or NAS box.