2021-22 TIMS Server Specs – Recommendation

Physical Server – Recommended Specs (==*see below for preferred Virtual Server==**)**

• **Windows Server 2019 (x64)**
• **Microsoft SQL 2019 standard with v18 sql management studio** (make both available for us to install)
• Intel Xeon or MD Opteron Quad-core processor running at 2.4 Ghz or faster
• 16 GB RAM minimum, ==**prefer 32 GB RAM**==
• Two drives **both minimum** 250GB, C: for OS and D: available storage in a RAID (1,5,6,10) array
• Microsoft SQL will be installed on the same server that the TIMS software will reside
• ==**If SQL is pre-installed**== (not preferred), perform a default installation with Database Engine and SQL Management Studio. TIMS staff will need an account within the installed SQL instance to have all administrative access. Most sites have allowed the local TIMS support account to perform the necessary tasks within the SQL Management Studio to avoid using the domain account and this access is on the local server.
• **Microsoft Office 2019** including: Excel, Word, PowerPoint, and Access.
• **Microsoft .net framework 3.5** installed (or make the installer files available)
• **Remote Desktop Services** (RD) role with licensing for users of TIMS pre – configured – typically client access licensing (CALs) for as many users you anticipate having access to the server (we normally set up five users DM01, DM02, DM03, DM04, and DM05). TIMS staff requires remote access to the server through RDP, preferably through a VPN product ==**(our preference is Cisco Any Connect)**== then RDP through to the server.
• A printer(s) with drivers compatible with operating system – networked printers are just fine and more easily recognized now
• TIMS staff will need a user account with domain level AD service account privileges; this account will be accessed only by TIMS support staff located at UNC Charlotte or NC State to aid in installing the necessary TIMS services on an as-needed basis. As a suggestion, other sites have given TIMS staff the user domain account of TIMS.domain; whatever works for the district to aid you in identifying authorized domain users. Also, TIMS staff will need a local server administrative account with full administrative rights to provide day-to-day support as necessary; other sites have named this account support. Having the two accounts keeps the TIMS staff out of any domain access unless absolutely necessary.
• Server must be addressable from the internet – port 80 TCP for HTTP access.
• Server will need internet access and SFTP access during installation and upgrades so necessary files for installation and future upgrades may be downloaded; port 22 TCP for SFTP access.

==***The server may be a virtual server**== – in addition to the above requirements, the virtual machine should be configured with a single virtual CPU with four or more cores, rather than four separate CPUs each with a single core (typically referred to as a single "socket" with 4 CPU cores).

==**Java Updates:**== During the installation of the TIMS web applications, the specific version of **Java (v8.101)** required for functionality is installed. Allowing updates to Java while the TIMS dependent services are running will break Java. For this reason, it is strongly suggested to not update or change the installed version of Java after the TIMS software is installed without specific instruction or guidance from the TIMS support staff.