

AudioTools® Server System Requirements

The overall performance of an AudioTools Server processing node* depends on several factors. Some processes rely more heavily upon CPU resources, and others are more dependent on network/storage speed. To get the best performance, AudioTools Server relies on a combination of a fast network storage connection, high CPU clock speeds, and fast local storage for scratch and temporary files. See below for details.

Supported Deployment Environments

Current commodity server hardware for physical deployment on-premise (HP DL380, Dell PowerEdge R740, or equivalent), similarly commissioned virtual machines or cloud machine images. Note that network and storage recommendations also apply to any virtual or cloud machine.

Operating System

Microsoft Windows Server 2012 R2, Server 2016, Server 2019, or Microsoft Windows 10 Pro. Microsoft .NET 3.5 feature must be installed on the Server OS. All other versions of Windows or other operating systems are not supported.

USB License Dongle

Each AudioTools Server node that is not connected to a license server requires a physical CodeMeter USB dongle for the licenses. If running AudioTools Server on a virtual machine, the USB dongle must always be available to the virtual machine, either by using a suitable USB-to-Ethernet device server or by features of the virtualization software. Virtual machines and cloud instances running AudioTools Server can also be licensed via an AudioTools LicenseServer node, and therefore do not require a connection to a USB dongle.

CPU

As a rule of thumb, the maximum number of concurrent processes that a processing node can run is roughly equal to the number of available CPU cores. The performance of processes that are mainly CPU-based, like loudness measurement, depends on the CPU clock speed, so the faster, the better. Dual 6-core Xeon or higher is preferred for systems that process a lot of concurrent jobs (5-10 or more). For systems that process only a few (1-4) concurrent jobs, an i7 CPU can be considered, as it provides higher processing speed per single core.

*AudioTools Server nodes that do not process files, like separate Workflow Control nodes or a LicenseServer, require only a simple, desktop-class computer with a Gigabit Ethernet network interface. We highly recommend a mirrored system drive for those nodes.

Memory

24GB or more, 32GB recommended when processing large QuickTime files

Network Storage

When processing media files (especially MXF) on shared network storage, like Isilon or MediaGrid, AudioTools Server requires a broadband connection to that storage, ideally 10GbE or faster. If the shared storage is a SAN, AudioTools Server requires its own fiber connection to that SAN. In cases where a high-speed connection to fast, shared storage is not available, consider copying the source media files to the AudioTools Server node and processing them locally. See “Local Storage.”

Local Storage

During processing, AudioTools Server creates and processes temporary files, like audio files extracted from an MXF or QuickTime container. In most cases, we recommend processing those temporary files on a local volume, rather than on the network storage, to reduce network traffic. This local volume should be a hardware-controlled RAID 0, ideally consisting of 4 discs (or more), or alternatively SSD storage. The total required capacity depends on the number of files processing at the same time, the total size of those files, and whether the MXF or QuickTime source files are localized.

Amazon AWS machine instance requirements

For Amazon AWS deployments, an **m5xx.2xlarge** or **m5xx.4xlarge** or comparable EC2 instance is recommended for any worker node at minimum (AWS specifications as of October 2020 or later). A LicenseServer or load balancing only node requires an **m5xx.large** or comparable EC2 instance. Details of the implementation may have in impact on whether to select EBS instance storage only, or NVMe-SSD instance storage.

