

KB134: Hardware and operating system requirements

SUMMARY

Omnivex Moxie is powerful software and the following hardware specifications are recommended in order to provide a responsive, agile and robust software experience.

Typically, data and device management software are much less demanding than content management software. Running content management software such as Omnivex Moxie typically requires more computing power. In addition, display systems tend to increase in complexity as users become more experienced with the software and the display network matures. As a result, we recommend exceeding the minimum hardware requirements so that content you develop in the future can still be accommodated by your hardware.

Moxie was developed using Microsoft's .NET framework to take advantage of the graphical functionality in several areas including transparency, 3-D objects, rotation and reflection. Because of this, there is a greater range of hardware that meets the requirements for Moxie.

RECOMMENDED COMPUTER SPECIFICATIONS

These computer configurations are intended to provide a minimum recommendation for a typical system, based on our experience. The following minimum specifications support the use of basic display features in Omnivex software. Advanced software features and sophisticated or complex content may require greater computing power.

Typically, we recommend pre-configured models from well-known computer manufacturers, but a well-built custom computer that meets the requirements can also be used. If you are running Moxie Studio or Moxie Player on your computer we recommend workstation or desktop class components because of the availability of a PCI Express slot and to alleviate performance issues.

Hardware	Moxie Studio	Moxie Data Server	Moxie Player
operating system	Microsoft Windows 7 Professional, see KB308	Microsoft Windows Server 2008 R2 or Windows Server 2012, see KB308	Microsoft Windows 7 Professional or Windows Embedded 8.1 Industry, see KB308
central processor	Dual-core 3.0 GHz or CPU suited to application	Quad-core 3.0 GHz or CPU suited to application	Dual-core 3.0 GHz or CPU suited to application
memory	2 GB	4 GB	2 GB
graphics adapter	AMD Radeon/FireMV or nVidia GeForce/Quadro or Matrox QID/M-series card suited to application	Integrated video or expansion card suited to application	AMD Radeon/FireMV or nVidia GeForce/Quadro or Matrox QID/M-series card suited to application
storage	10 GB free hard drive space (based on space required for multimedia content files and Moxie Studio modules)	10 GB free hard drive space (based on space required for multimedia content files), high-performance SAN delivering fast sequential and random reads/writes for content cache recommended (though any storage system is supported)	10 GB free hard drive space (based on space required for multimedia content files)

OPERATING SYSTEM

Moxie is compatible with all Microsoft Windows operating systems that support .NET Framework 4 (3.5 SP1 for Moxie 6.06 or below) in both the 32-bit (x86) and the 64-bit (x64) editions. With the release of Moxie 6.10, both .NET Framework 4.0 and 4.5 are supported. There are however, stability issues and a lack of support for some of third-party components such as the Adobe Flash Player, Microsoft Internet Explorer and Microsoft Windows Media Player. For this reason, Moxie is installed in its entirety into the 32-bit (x86) directory of 64-bit systems. The Studio and Player applications run in 32-bit mode on all Windows operating systems. All Moxie service applications, even though they are installed into the 32-bit (x86) directory, run natively on 64-bit systems. This ensures the greatest level of stability for Moxie and the features that you use. See KB308 for more details on supported operating systems.

CENTRAL PROCESSOR

The amount of processing power required by Moxie Studio and Moxie Player is determined by the resolution of the screen and the amount of dynamic content that you include in your design. If your Moxie content is graphically intensive, then your performance depends on the capability of your PC's graphics adapter. For example, driving two displays at a high resolution with scrolling data and full-motion video requires more processing capacity than driving a single display at a lower resolution with static text and images.

MEMORY

The amount of RAM required for running Moxie is determined by the operating system, not the applications. For example, Microsoft Windows XP requires a minimum of 128 MB of RAM for basic operating system functions, but a minimum of 256 MB is recommended.

If you are displaying a large amount of dynamic multimedia content in Moxie Studio or Moxie Player you may need more RAM. In these situations, we recommend that you have at least 2 GB of memory to prevent system lag.

DISPLAY ADAPTER

Omnivex software is hardware independent and will function with any display adapter. Many new computers have integrated video included in the controller chipset of the main board, however such limited hardware may restrict the types of design elements that perform at a reasonable frame rate. If you are displaying graphically intensive content in Moxie Studio or Moxie Player, the use of an add-in graphics adapter with a minimum of 512 MB of onboard memory is recommended.

Moxie was developed using Microsoft's .NET framework in order to take advantage of the Windows Presentation Foundation (WPF) graphical subsystem. WPF is different from the Graphics Device Interface (GDI and GDI+ in Windows XP) because it makes better use of the hardware graphics adapter's resources and provides additional functionality in several different areas including transparency, 3D objects, rotation and reflection.

VIDEO CAPTURE (LIVE TV)

If you are displaying live cable TV or a satellite signal on your Moxie Player, you need to have video capture software installed on your Moxie Player PC. Your choice of capture hardware depends on the type of video source, number of video sources per computer and other practical factors such as number of simultaneous capture instances required or computer expansion limitations.

Omnivex software is hardware independent, but not all capture hardware is suitable for digital signage applications. Capture hardware from companies such as ATI, Hauppauge and Winnov work well.

If you are streaming a live video signal from a remote capture source, no special video capture hardware is required, however streaming live video raises other concerns such as network bandwidth requirements and should be discussed with your network administrator.

DATABASE

During the installation process, Moxie gives you the option of using Microsoft SQL Compact Edition 3.5 (included with installation) or Microsoft SQL (purchased separately from a Microsoft authorized provider) for your Moxie database. If you intend on using the logging feature in Moxie, you must install a copy of Microsoft SQL as the log database. The same license may be applicable for your Moxie database, consult your authorized Microsoft provider for information and options for Microsoft SQL.

LOGGING

During the installation process, you have the option to install a Moxie Log Server. The log server collects data, content and script execution logs, from individual players and script engines, and writes them to a Microsoft SQL database. Consult your local Microsoft authorized provider for information about Microsoft SQL.

STORAGE

The amount of hard drive space required for running Omnivex applications is determined by the operating system, not the applications. For example, current versions of Windows take between 1 and 10 GB of storage space while Omnivex applications take anywhere from a few MB to a few hundred MB for installation.

Typically, you should have at least 1.5 times the RAM in free hard drive space. For example, a PC with 2 GB of RAM should have at least 3 GB of free space on the hard drive.