

# Questions and Answers

AutoCAD® MEP software is the version of AutoCAD® software for mechanical, electrical, and plumbing designers.

AutoCAD MEP software is the version of AutoCAD software for mechanical, electrical, and plumbing (MEP) designers. Creating and sharing construction documents is more efficient with the system's intuitive system drawing and design tools. Together with the built-in design calculators, these tools help increase accuracy and accelerate design. The familiar environment offers you the opportunity for immediate productivity gains with the flexibility to learn additional features at your own pace. The industry-leading DWG™ file format makes it easy to share and communicate designs with architects and structural design professionals. AutoCAD MEP software provides immediate productivity opportunities for MEP professionals familiar with AutoCAD software.

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# 1. General Product Information

## 1.1 What is AutoCAD MEP?

AutoCAD MEP is the AutoCAD software-based design and construction documentation solution for mechanical/electrical/plumbing (MEP) engineers, designers, and drafters. Increase productivity, accuracy, and coordination by maximizing the efficiency of your AutoCAD-based engineering workflow, while minimizing coordination errors between mechanical, electrical, and plumbing engineering design teams as well as with architects and structural engineers.

## 1.2 Is AutoCAD MEP software the product that used to be called Autodesk Building Systems?

Yes. AutoCAD MEP was formerly known as Autodesk® Building Systems software. To better align the Autodesk product line with the needs and requirements of customers in the AEC industry, Autodesk has modified the names of some products, which was reflected in the 2008 product line release.

## 1.3 Why should I switch to AutoCAD MEP software?

AutoCAD MEP software offers the same familiar benefits and operating environment as standard AutoCAD software. In addition, AutoCAD MEP provides the opportunity to improve your MEP design process with purpose-built tools for mechanical, electrical, and plumbing/piping/fire protection design and documentation. Also, because AutoCAD MEP uses the industry-leading DWG file format, you can share your design information with other disciplines using both AutoCAD and Revit®-based software applications.

The user interface for AutoCAD MEP software will be quite familiar to AutoCAD users, making the transition from one to the other relatively easy. Because the common MEP design tools are presented in a visual manner that is easy to understand, you can focus less on dialog boxes and the drafting process and more on creating your designs.

## 1.4 Can I rely on my AutoCAD software knowledge to use AutoCAD MEP?

AutoCAD MEP builds on the speed, performance, and familiarity of AutoCAD software, so AutoCAD users have a strong foundation from which to learn.

As always, training can improve your productivity and speed of learning. A variety of excellent training aids are available, including self-paced e-Learning options for subscription customers, Autodesk® Official Training Courseware (AOTC), and customized training available through resellers. For more information, contact your Autodesk Authorized Reseller or visit [www.autodesk.com/training](http://www.autodesk.com/training).

## 1.5 Content is very important to our business. What content has been added to AutoCAD MEP 2009?

New catalog content related to the water and wastewater industry will be made available to Subscription customers. Other new content includes things such as larger-diameter pipe and fittings as well as several valves, pumps, blowers, conveyors, gates, centrifuges, and diffusers. In addition, manufacturers such as Lindab and Yorkshire have created their own AutoCAD MEP part catalogs available from their websites.

## 2. Technology

### **2.1 What are the electrical system design improvements in AutoCAD MEP 2009?**

Substantial improvements have been made to the electrical functionality of AutoCAD MEP 2009 software. Circuit Manager is now a modeless window similar to the Tool palettes or Properties palette so it can be kept open during design. Demand factors have been revised, and new load categories have been added to manage demand factor values for electrical devices. Panels can be linked together, and loads are shared across panels with appropriate demand factors applied. Panel-to-panel connections are shown offset in Circuit Manager. The electrical project database is now a separate, nonproduction file (.epd file extension). Panel schedules are now based on AutoCAD tables, so you can easily create table styles based on company standards.

### **2.2 What are the clash/interference detection capabilities in AutoCAD MEP? What capabilities have been added in the 2009 release?**

The former ClashReport tool has been replaced by a new Interference Detection tool in AutoCAD MEP 2009. You can now find not only hard clashes but also soft clashes for things such as working clearances. You can zoom in to the problem area, resolve the interference, and then navigate to the next one. Insert tags for selected interferences, and add opening symbols for coordination with architects and structural engineers.

### **2.3 What is Autodesk doing to address the growing demand for design-to-fabrication in the MEP industry?**

AutoCAD MEP has had design-to-fabrication capabilities through third-party vendors such as EastCoast CAD/CAM, QuickPen, and others for several years. For AutoCAD MEP 2009, a strategic partnership was formed with EastCoast CAD to integrate its EC-CAD sheet metal and piping capabilities into AutoCAD MEP software. EastCoast CAD is now able to offer a unique, seamless design-to-fabrication solution within AutoCAD MEP 2009.

### **2.4 How can I support sustainable design efforts using AutoCAD MEP 2009?**

Built-in duct, plumbing, and electrical sizing tools operate on the CAD model to assist with system design for maximum efficiency and to more accurately predict the performance of building systems. Export to gbXML (green building extensible markup language) and API (application programming interface) links enable you to use industry-standard tools such as Trane Trace and Elite to further optimize building designs for energy analysis, lifecycle cost, and other types of building performance analysis. API links to EC-CAD fabrication capabilities help to reduce construction waste.

### **2.5 What integrated tools are available in Autodesk's MEP software solutions to help support sustainable design?**

The following tools are available in AutoCAD MEP, Revit® MEP, or both:

- Duct sizing (AutoCAD MEP, Revit MEP)
- Pipe sizing (Revit MEP)
- Plumbing fixture unit sizing (AutoCAD MEP, Revit MEP)
- Electrical feeder sizing (Revit MEP)
- Panel schedule loads (AutoCAD MEP, Revit MEP)
- Heating/cooling loads (Revit MEP)
- Solar shading (Revit MEP)

- gbXML export to Trace 700, IES-VE, and others (AutoCAD MEP, Revit MEP)
- API link to IES-VE (Revit MEP)
- API link to Elite (AutoCAD MEP)
- API link to EC-CAD (AutoCAD MEP)

## 3. Installation, Configuration, and Licensing

### 3.1 What are the hardware and system requirements?

The recommended hardware and operating system requirements for running AutoCAD MEP 2009 software are:

#### System Requirements

- Intel® Core 2 Duo 2.4 GHz or equivalent AMD Athlon processor for 32-bit, AMD Athlon 64, AMD Opteron for 64-bit, Intel Xeon with Intel EM64T support, Intel Pentium 4 with Intel EM64T support
- Windows Vista® 32-bit (Business, Enterprise, Ultimate, Home Premium), Windows Vista 64-bit (Business, Enterprise, Ultimate, Home Premium), Windows XP Home SP2, Windows XP Professional x64, SP2
- 2 GB RAM
- 2.9 GB disk space for 32-bit, 3.3 GB disk space for 64-bit
- 1024 x 768 True Color display resolution
- 128 MB Video Adapter Card
- Microsoft®-Mouse compliant
- Microsoft Internet Explorer 6.0, SP1 or later
- Download and installation from DVD

#### System Recommendations

- Intel Pentium IV 3.0 GHz or equivalent AMD Athlon 3.0 GHz or greater processor
- Windows XP Professional SP2 or later
- 3 GB RAM for 32-bit, 4 GB for 64-bit
- 4.3 GB disk space for 32-bit, 5.0 GB disk space for 64-bit depending upon installation options
- 1280 x 1024 True Color display resolution
- 256 MB or greater, Direct 3D Video Adapter Card

\* AutoCAD MEP 64-bit cannot be installed on a 32-bit Windows operating system

Please ensure that you have read these requirements before making your purchasing decision.

**3.2 Can Autodesk's MEP software applications take advantage of a 64-bit operating environment?**

There is a native AutoCAD MEP 2009 64-bit version available. Local language availability varies. Check with your local Autodesk reseller for details.

Autodesk will not have native 64-bit support at launch for Revit MEP. However, the benefits of running a 32-bit application in a 64-bit operating system apply. In a 64-bit environment, the Revit MEP processor can consume up to 4 GB versus the 3 GB limit in a 32-bit environment.

**3.3 Does AutoCAD MEP software work in a Windows Vista® environment?**

AutoCAD MEP 2009 software has achieved the "Works with Windows Vista®" and will support the following environments: Windows Vista® 32-bit (Business, Enterprise, Ultimate, Home Premium), Windows Vista 64-bit (Business, Enterprise, Ultimate, Home Premium). In addition, AutoCAD MEP 2009 also takes advantage of some new Windows Vista capabilities, specifically Windows Vista thumbnail previews for DWG and DWF™ files in Windows Explorer, display of properties in the Detail tab of Windows Explorer, and the ability to use the Windows Vista search tools using text strings found in drawing properties, text, mtext, and so forth, in the DWG file.

**3.4 Do I need to purchase AutoCAD or AutoCAD Architecture in order to run AutoCAD MEP?**

No. AutoCAD MEP 2009 is built on the same technology as AutoCAD® Architecture 2009, which includes all AutoCAD® 2009 functionality. It is an all-in-one, purpose-built AutoCAD for MEP systems engineering design and documentation. You do not need to purchase separate licenses of those products to use AutoCAD MEP.

## 4. Compatibility and Interoperability

**4.1 How can I support my clients' demands for integrated project delivery using Autodesk's MEP software solutions?**

With the development of MEP designs in either platform, the level of information present in the digital design supports clear and complete information transfer between disciplines on the project, streamlining collaboration workflows.

**4.2 Is AutoCAD MEP 2009 software compatible with earlier releases?**

Yes. You can open files created in earlier releases of AutoCAD MEP software and can save files to a format compatible with earlier releases as well.

**4.3 Are AutoCAD MEP software and Revit MEP software files interoperable?**

You can exchange drawing information (2D DWG files) between AutoCAD MEP and Revit MEP software through their respective Export to AutoCAD features. You can also export architectural building elements from AutoCAD MEP and import them into Revit MEP software using the International Alliance for Interoperability's Industry Foundation Class (IFC) standards. With AutoCAD MEP, you can also manually assign IFC classifications for MEP objects such as ducts, pipe, and etc.

In addition, Revit MEP software has the ability to read and write ACIS® solids. This capability gives you a way to export your models from AutoCAD MEP software and then to import or link this 3D information to Revit MEP or Revit® Architecture software.

#### **4.4 Will my third-party applications work with the current release of AutoCAD MEP software?**

Your existing third-party applications may or may not be compatible with the current release of AutoCAD MEP software. Contact your third-party software supplier for details.

## **5. Consulting, Training, and Support**

### **5.1 Where can I find technical support information regarding AutoCAD MEP software?**

You can learn about support options from your local Autodesk Authorized Reseller or distributor. Visit [www.autodesk.com/support](http://www.autodesk.com/support) to find a knowledge base of commonly asked support questions. Also, Autodesk software manuals and documentation are a great source of answers to your support questions.

In addition, Autodesk Subscription customers can get access to direct web support. One-to-one online communication with Autodesk support technicians provides fast, complete answers to your installation, configuration, and troubleshooting questions. For more information about Autodesk Subscription, contact your Autodesk Authorized Reseller or visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription).

### **5.2 What are my options for training?**

Check with your local Autodesk Authorized Reseller for a schedule of AutoCAD MEP software training classes. To locate a reseller, visit [www.autodesk.com/reseller](http://www.autodesk.com/reseller).

Training courses are also offered through Autodesk Consulting and include Autodesk Virtual Classroom Training (online, instructor-led), custom training to match your organization's specific needs, and Autodesk Classroom Training. To obtain more information about Autodesk's training services, visit [www.autodesk.com/training](http://www.autodesk.com/training).

You can also enroll in instructor-led training at Autodesk Authorized Training Center (ATC®) sites around the world. These training centers use Autodesk Official Training Courseware (AOTC) to deliver comprehensive courses for new and intermediate AutoCAD MEP software users. To learn more, visit [www.autodesk.com/atc](http://www.autodesk.com/atc).

## **6. Subscription**

### **6.1 What benefits do I get by subscribing to AutoCAD MEP?**

Autodesk Subscription is the best way to keep your design tools and learning up to date. For an annual fee you get any new upgrades of your Autodesk software and any incremental product enhancements, if these are released during your subscription term, as well as self-paced training options, access to subscription-only modules, and a broad range of other technology and business benefits.

With Autodesk Subscription, you can take advantage of Autodesk e-Learning. Its concise, self-paced online lessons are designed to address crucial application functions and industry practices. Experts in their respective industries developed the lessons to

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challenge and enhance your existing knowledge. By the end of each 15- to 30-minute lesson, you will have worked with the content, demonstrated your knowledge, and have access to the files used in each exercise.

Autodesk Subscription also includes direct web support. You get one-to-one online communication with Autodesk support technicians for fast, complete answers to your installation, configuration, and troubleshooting questions. Web and email communications deliver support straight to your desktop. Plus you have web access to your account, so you can track and manage questions and responses.

For more information about Autodesk Subscription, contact your Autodesk Authorized Reseller or visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription).

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