



## Questions and Answers

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## 1. General Product Information

### 1.1 What is AutoCAD 2002?

AutoCAD® 2002 is the leading general design application that lets you maximize the value of your design data with new and improved collaboration tools. It is the foundation for collaborative design and the industry-specific solutions that take your design to the next level. The desktop solutions built on the AutoCAD 2002 foundation include Autodesk® Architectural Desktop 3.3, AutoCAD® Mechanical 6, Autodesk® Mechanical Desktop® 6, Autodesk® Map 5, and Autodesk® Land Desktop 3.

AutoCAD 2002 accelerates the use of design data across design teams, throughout your organization and beyond, helping you get your designs to market faster. And AutoCAD 2002 is easy to implement within your organization, providing DWG and application compatibility across the 2000 series (AutoCAD 2000 and AutoCAD 2000i).

Created for design professionals in fast-paced environments, it continues to offer the CAD user improved performance and enhanced design-centric tools. AutoCAD 2002 provides CAD managers with standards and deployment management tools to efficiently share data across the design team, which translates into improved profitability. Its new/improved license management features help IT managers to better leverage their company's Autodesk® software assets for improved return on investment.

### 1.2 What are the main features and benefits of AutoCAD 2002?

The key features in AutoCAD 2002 fall into four main areas:

#### Data Flow and Integrity

- DesignXML extends the value of your DWG data by allowing external applications and processes to both consume and create design data seamlessly, accelerating the flow of design information throughout your organization and beyond.

- CAD Standards automates the interrogation of and adherence to your organization's drawing protocols. The automation of standards checking reduces your company's risk and exposure to liability.
- The Enhanced Attribute Extract tool allows the extraction of block attribute data to comma-separated text (CSV), Microsoft® Excel (XLS), and Microsoft Access (MDB) file formats. You can now easily publish and summarize attribute data at the project level.

### **Team Collaboration**

- Publish to Web is an updated feature that now includes templates and themes as well as the capability for you to customize it. Manufacturers can also use it to publish product data in Autodesk's i-drop™ format.
- My Files on Point A provides simple Inter-net storage for users of the Autodesk® Point A design portal. Access to My Files inside AutoCAD allows you to post, share, and retrieve files if you don't have an existing web storage space.
- Internet Folders provides flexibility within AutoCAD to leverage the Web for collaboration and file storage, allowing the use of any WebDAV site for file storage and sharing.
- ETransmit is now standards-enabled. You can now transmit your design data with the appropriate design standards used to build and validate the design. Third parties who receive the data can check their own work against the standards used by the authoring company.
- Standards are now URL-enabled. The CAD Standards feature is enhanced to support URLs for inter-file references. Your company's standard can be located at any intranet or Internet URL for convenient access by the entire design team throughout the enterprise and virtual corporation, regardless of their location.

### **Ease of Integration and Advanced License Management**

- FLEXlm replaces Elan license manager with current technology. This allows you to leverage your existing investments in NLM capabilities with increased reliability and better support.
- SAMreports-lite allows CAD managers and IT managers to track and report on license usage and maximize ROI on their technology investment by assuring full utilization of software assets.
- Runtime switching between network and stand-alone licenses enables network license users to acquire stand-alone usage in order to work remotely. Separate C-Dilla-based stand-alone licenses must be purchased to take advantage of this feature.
- No file format changes. AutoCAD 2002 does not change the DWG format, guaranteeing 100 percent file compatibility and protecting your investment in AutoCAD 2000 files already in production.
- Binary compatibility: AutoCAD 2002 is compatible with applications and scripts written for AutoCAD 2000 and AutoCAD 2000i.

### **Powerful CAD Platform**

- With Associative Dimensioning, you can modify dimensioned geometry in drawings, and the dimensions automatically adjust to the modified geometry. This feature also improves support for paper space dimensions of model space objects (trans-spatial references), eliminating the need for manual updating of this type of dimension when the associated model space geometry is modified.
- The Block Attribute Manager enables you to modify attributes within a block without having to explode or redefine that block, and all changes are immediately reflected in the existing block insertions.

- The Enhanced Attribute Editor is a faster and more accurate way of managing individually selected block attributes.
- Layer Translator translates layer names and properties in a drawing file from one standard to another. Drawing files (DWG), standards files (DWS), or previously saved Layer Translator files are used as references for standard layers. Translation information can be saved and reused to allow quicker conversion of future drawings.
- Text Scaling. Are you often forced to perform text-scaling operations, sometimes on large numbers of objects? Improved scaling and alignment control reduces the number of manual adjustments necessary and will encourage usage of Layouts.

The best way to learn about these features is to experience them yourself. Order a free trial version at [www.autodesk.com/autocad-ordertrial](http://www.autodesk.com/autocad-ordertrial).

### **1.3 If I'm using AutoCAD Release 14, why should I upgrade to AutoCAD 2002 or an AutoCAD 2002-based product?**

AutoCAD 2002 is now the third release since AutoCAD Release 14, so you can expect significant improvements in the product, as well as in the new AutoCAD 2002-based products. We're proud to acknowledge that Release 14 was a powerful version of AutoCAD, particularly for the production-level CAD user. Now, the AutoCAD 2002 foundation product has new features that enable drafters and designers to significantly improve their overall productivity. AutoCAD 2002 also has additional communication and collaboration tools that will save your project team time and money. With AutoCAD 2002, you get the right design information into the right person's hands at the right time, unlike ever before.

But you can reach further with your design data. Autodesk has the right solution for your industry—whether you're in building design, manufacturing, land development, or geographic information systems. AutoCAD, the world's leading general design application, is the foundation for Autodesk's industry-specific applications. Unlike products that simply automate tasks, Autodesk design solutions improve your business processes by extending the value of your design data beyond the creator for increased workflow productivity, speed to market, and profitability.

If you plan to upgrade, consider moving to the right solution for your needs, while still working in a familiar AutoCAD environment. AutoCAD 2002 is the foundation for the following industry-specific applications:

- **Autodesk Architectural Desktop 3.3** (ADT) is the model-based design solution for architectural design development and construction documentation. ADT respects your existing work processes and your investment in legacy design information, providing a secure migration path from traditional drafting to the model-based design approach. Facilitating data reuse rather than redrafting, ADT improves coordination and accuracy of drawings and increases productivity by reducing design cycle time. Accommodating varying work styles, ADT allows designers to work in 2D or 3D or to move fluidly between modes as a design evolves.
- **AutoCAD Mechanical 6**, powered by the AutoCAD 2002 foundation, is the AutoCAD for 2D mechanical design and engineering for all manufacturing industries.
- **Autodesk Mechanical Desktop 6** is the 3D mechanical design product for mechanical engineers who prefer to work in the native AutoCAD 2002 environment. It unites parametric 3D solid modeling, with free-form surfaces, and 2D/3D wireframe for mechanical engineers, designers, and drafters in all industries who prefer to work in the native AutoCAD environment.
- **Autodesk Map 5** is the solution for engineers, planners, utility managers, and technicians who require precision mapping and GIS analysis. It allows you to create, maintain, and produce maps and geographic data, integrate multiple data types and file formats, use

powerful GIS analysis tools, and perform thematic mapping and direct Oracle database linking as well as filling the client role to Autodesk® GIS Design Server.

- **Autodesk Land Desktop 3** is for land planners, surveyors, civil engineers and designers, drafters, and other professionals who need land development specific features such as COGO, terrain modeling, parcel and alignment manipulation, and annotation functionality. It includes the AutoCAD 2002 foundation plus the mapping utilities, drawing entity sharing, and added intelligence of Autodesk Map 5 for improved productivity.

For more information on these AutoCAD 2002-based products, contact your Authorized Autodesk Reseller or visit the Autodesk Product Center at [www.autodesk.com](http://www.autodesk.com).

#### **1.4 I'm using AutoCAD 2000. Why should I upgrade to AutoCAD 2002 or an AutoCAD 2002-based product?**

AutoCAD 2002 provides many productivity and collaboration benefits over AutoCAD 2000, and because there is no file format change to contend with, the upgrade is virtually painless. If you work with attribute data, you will find AutoCAD 2002 a great time saver, with useful tools to help with managing attributes inside a drawing as well as publishing that information to external applications. In addition, the associative dimensioning and text scaling features make dimensioning and annotating your drawings a snap.

AutoCAD 2002 also has tools to help manage the sharing of design data with others:

- Publish to Web allows you quickly and easily post a design to an intranet or Internet web page and automatically send out a notification e-mail to others on your project team.
- If you ever have to integrate data from subcontractors and consultants with your own design, you will find the CAD Standards checker and Layer Translator tools a boon to your productivity. You can quickly and easily see if design data complies with your office standards, and if it doesn't, you can identify where the discrepancies are and have them rectified.

#### **1.5 I'm using AutoCAD 2000i. Why should I upgrade to AutoCAD 2002 or an AutoCAD 2002-based product?**

AutoCAD 2002 adds significantly to the already productive 2000i feature set by delivering more powerful design/drafting tools, superior collaboration and data management capabilities, and significantly improved license management features.

Here are a few examples. With AutoCAD 2002-based products you can seamlessly manage standards throughout your organization and across your LAN, your WAN, and the Internet using the AutoCAD 2002 CAD Standards features. Associative Dimensioning is a major step forward in creating and managing annotations within a drawing, dramatically streamlining the design process and improving your interactivity with AutoCAD. And using FLEXlm, you can now have the world's most powerful network licensing capabilities for maximizing the ROI on your AutoCAD seats.

You should consider optimizing upgrade benefits by moving to the right product for your needs. This may be the best time to move to an Autodesk industry-specific solution that is built on the AutoCAD 2002 foundation.

#### **1.6 What are the key differences between AutoCAD LT 2002 and AutoCAD 2002?**

Both AutoCAD 2002 and AutoCAD LT® 2002 use the same software architecture and technology. And both offer collaboration functionality that enriches, expands, and simplifies your design processes to save time and cost. But AutoCAD 2002 is the complete platform, including all of the features found in AutoCAD LT 2002, plus more. AutoCAD 2002 delivers additional capabilities in the following key areas:

**Breadth-of-Drawing Productivity Features**—AutoCAD 2002 offers new drawing functionality, including layer and attribute management tools, which allows you to add intelligence to your

designs. AutoCAD 2002 also includes quick dimensioning, additional viewport options, and database connectivity enhancements that AutoCAD LT 2000i does not have.

**Tools for the CAD Manager**—AutoCAD 2002 now includes CAD Standards functionality, which allows CAD managers to review and administer standards across the whole design team. Every file shared among your team members readily accrues expensive discrepancies and errors, if unchecked. You need tools for administrating standards that really save you time and assure you of compliance in every respect. AutoCAD LT 2002 does not offer this capability.

**Tools for the IT Manager**—AutoCAD 2002 network license management technology allows IT managers to maximize return on your company's technology investment. AutoCAD LT 2002 does not offer advanced network license management features like the reporting and flexible license management tools included with AutoCAD 2002. AutoCAD LT 2002 only provides a tool to help deploy the product in a network environment.

**Drawing and System Performance**—AutoCAD 2002 saves time for the everyday CAD user with functions like faster file open and save operations, drawing caching for faster switching between tabs, and the capability to leverage multiple processors on a single system. These are capabilities that AutoCAD LT 2002 cannot offer.

**Customization**—The AutoCAD 2002 platform offers fully extensible drawing and application customization through APIs such as Visual LISP™, VBA, and ActiveX. AutoCAD LT 2002 is not an extensible product.

**3D Design Capabilities**—AutoCAD 2002 allows you to create, modify, render, and navigate 3D objects. AutoCAD LT 2002 does not.

## 2. Pricing and Availability

### 2.1 When is AutoCAD 2002 available?

AutoCAD 2002 is available worldwide in International English beginning June 15, 2001.

### 2.2 When can we expect localized versions of AutoCAD 2002 to ship?

AutoCAD 2002 is available in the following additional languages beginning June 15, 2001:

French, Italian, German, Spanish

The following language versions will be available 30–60 days after June 15, 2001:

Japanese, Korean, Traditional Chinese, Simplified Chinese, Nordic, Czech, Hungarian, Polish, Russian

### 2.3 When will the AutoCAD 2002-based applications be available?

Applications built on the AutoCAD 2002 foundation that will be available on June 15, 2001, include Autodesk Architectural Desktop 3.3, Autodesk Mechanical Desktop 6, and AutoCAD Mechanical 6. Autodesk Map 5 and Autodesk Land Desktop 3 will be released approximately 30–45 days thereafter. AutoCAD 2002 OEM and ObjectDBX™ OEM will be released approximately 30 days from the AutoCAD 2002 release date.

### 2.4 Can I try AutoCAD 2002 before I buy it?

Yes. You can try it out by requesting an AutoCAD 2002 Trial CD. This full-functioning version of AutoCAD 2002 is available as a free 15-day trial version. You may order the Trial CD from your Authorized Autodesk Reseller or online at [www.autodesk.com/autocad-ordertrial](http://www.autodesk.com/autocad-ordertrial). If you're an AutoCAD Release 14 user, this is an ideal way for you to try AutoCAD 2002. Please note that this trial version cannot be installed on a PC that has AutoCAD 2000 or 2000i already installed on it.

If you decide to purchase AutoCAD 2002, simply press the Buy button when you launch the AutoCAD 2002 Trial CD. You will be directed to an Autodesk e-commerce partner to purchase

AutoCAD, or if you prefer, you can identify the Autodesk reseller in your area. In the United States and Canada, you can call 800-964-6432 for the reseller nearest you or visit [www.autodesk.com/store](http://www.autodesk.com/store). In other countries, please visit your country-specific Autodesk.com website for more information.

### **2.5 Can I try AutoCAD 2002 side-by-side on my computer with AutoCAD 2000 or 2000i?**

No, AutoCAD 2002 is built on the same platform as AutoCAD 2000 and 2000i and is not designed to run side-by-side with those versions. We understand that many customers may want to do this, but to achieve our compatibility goals, enabling side-by-side operation with AutoCAD 2000 and 2000i was not possible.

AutoCAD 2002 software will overwrite AutoCAD 2000i or AutoCAD 2000 if installed on the same computer. However, AutoCAD 2002 can be installed side by side with any 2002-based version of our industry-specific products including Autodesk Mechanical Desktop, AutoCAD Mechanical, Autodesk Architectural Desktop, Autodesk Land Desktop, or Autodesk Map software.

### **2.6 Specifically, why is it that AutoCAD 2000/2000i and AutoCAD 2002 won't run side-by-side?**

One issue of paramount importance to Autodesk customers is maintaining third-party application compatibility from 2000 to 2000i to 2002. These applications rely on specific components and registry settings being exactly what and where the application expects them to be. In order to preserve third-party application compatibility, the applications must interact with AutoCAD 2002 exactly the same way they would with AutoCAD 2000/2000i. The only way to reliably achieve that is to overwrite existing AutoCAD 2000/2000i components with newer AutoCAD 2002 components. This prevents us from running the two versions side-by-side.

### **2.7 Can I try AutoCAD 2002 side-by-side on my computer with AutoCAD Release 14?**

Yes, AutoCAD 2002 will run side-by-side with Release 14 and earlier versions of AutoCAD. Since application compatibility with those versions is not an issue, this was easily enabled.

### **2.8 What are the new purchasing options for AutoCAD 2002?**

AutoCAD 2002 is now available to you by subscription. For the latest information on the Autodesk Subscription Program, including availability and purchase requirements, visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription) or contact your Authorized Autodesk Reseller.

You can also rent AutoCAD 2002 as a term-based license for periods of 30, 60, or 90 days. Autodesk Rental Products are currently only offered in the Americas.

If you are an Autodesk major account customer, you may also benefit from self-hosting AutoCAD from your own servers.

### **2.9 What are the benefits of an AutoCAD subscription?**

The Autodesk Subscription Program is the easiest way to keep your AutoCAD software up to date. For an annual fee, subscription provides a budget-conscious way to ensure you're always using the most current technology. Features of the program include

- Free access to all upgrades released during the subscription term
- Free download of all AutoCAD 2002 extensions made available during the subscription term
- Free e-Learning courses on extensions (Note: Initially in English only)

You also can choose to enroll in Autodesk direct online support for added assurance.

For the latest information on the Autodesk Subscription Program, including availability and purchase requirements, visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription) or contact your local authorized representative. AutoCAD subscriptions are sold by Authorized Autodesk Resellers on behalf of Autodesk.

## 2.10 What are the advantages of self-hosting AutoCAD 2002?

If you're an IT or CAD manager in a company holding Autodesk Major Account contracts, you may wish to have your users access and run AutoCAD 2002 from your servers via your internal networks, instead of installing the program on each individual PC. This greatly simplifies license management and control of software standards, and it reduces the IT maintenance issues associated with desktop software installations. Self-hosting also allows you to more cost-effectively deploy AutoCAD 2002 when you have many people who only need occasional use of AutoCAD.

## 2.11 Why would I rent AutoCAD 2002?

The AutoCAD 2002 rental product is currently offered only in the Americas. It is a full-functioning version of AutoCAD 2002 with the same features, compatibility, extensibility, and performance as the standard licensed version. It can be purchased, delivered, and installed in the same way as standard AutoCAD for rental periods of 30, 60, or 90 days.

An AutoCAD rental product is an appropriate option for you if

- You have a project-based need for additional software
- You can get reimbursed for your design costs
- You only have occasional use for AutoCAD
- You need an extended period of time to evaluate the product before making a purchase decision

You may, at any time, renew your rental license for another 30, 60, or 90 days, or even convert to a perpetual license, by paying an additional fee. And, of course, you always have the option of allowing your rental license to expire without any further obligation.

You may order your AutoCAD 2002 rental product from your Authorized Autodesk Reseller.

## 3. Using AutoCAD 2002 to Collaborate

### 3.1 How does AutoCAD 2002 help me collaborate with others?

A design process driven by communication, collaboration, and readily available content helps you cut costs, reduce project cycles, and increase business flexibility. The result is greater profitability. AutoCAD 2002 offers many features that facilitate the design process and collaboration using basic technology that you use every day.

- **eTransmit** saves time and money by securely sending complete DWG files to anyone via e-mail rather than shipping hard copy.
- **AutoCAD Today** is your window into the company intranet or project website, providing content and information to keep better tabs on your projects and connect with colleagues. It provides direct access to the Autodesk Point A design portal for industry-specific news, downloadable design content, secure project hosting, tips and techniques, and more.
- **Publish to Web** makes it easy to display drawing for review by publishing drawings to the Web or your intranet using a wizard with predefined templates.
- **Meet Now** uses Microsoft's NetMeeting technology to provide a real-time way to collaborate with colleagues and partners over the Internet or your intranet.
- **ProjectPoint™ integration** allows you to manage and share drawings and xrefs with your entire project team. With version control, revision history, and advanced permissions, ProjectPoint from Buzzsaw.com lets you manage your project more efficiently. Open and save drawings directly to ProjectPoint from inside AutoCAD by using the File Save As feature.

### **3.2 Can I send all of my drawing information to someone else via e-mail?**

Yes. Using AutoCAD 2002's new eTransmit feature, you can securely send complete DWG files to anyone via e-mail. With eTransmit, you can easily compress and transmit DWG files—including all associated files and xrefs—as a single information set to anyone with e-mail. This means that all the design information travels as a secure, digital packet. There are no lost materials, no confusion about updates, no time spent organizing and arranging for delivery of hard-copy equivalents, and no delivery charges.

### **3.3 How can I communicate important design information with others in real time?**

Whether your team is working together to solve design challenges, or educating one another on new features, being able to share the application makes interaction much more powerful and faster. AutoCAD 2002's Meet Now feature uses Microsoft's NetMeeting technology to provide a way to collaborate in real time over your intranet or the Internet. Access Autodesk's ILS server by clicking the Meet Now button on the AutoCAD 2002 toolbar to get connected. Once you and your colleagues are connected, the automatic application-sharing feature is launched and everyone's PC displays the same information.

### **3.4 How can I post drawings to my company intranet or the Internet?**

Whether you need to maintain an intranet for the design team, or share data with customers and partners, you can now publish design data easily without web expertise using AutoCAD 2002's enhanced Publish to Web wizard. Publish to Web allows you to take a simple step-by-step approach to posting drawings by identifying the web page location, using templates and themes to increase the readability and visual appeal, and then generating the page itself. You do not need to be a web expert to set up, maintain, or update your site. And everyone who needs to can access your content quickly and easily.

### **3.5 What is AutoCAD Today?**

AutoCAD Today is both an integrated feature of AutoCAD 2002 and a window into Autodesk Point A, the Autodesk design portal. AutoCAD Today allows you to leverage the Web while working in AutoCAD 2002 by giving you the ability to access recently used files, utilize content and project information posted by CAD managers, access Autodesk Product Support, find the latest product tips and techniques, and much more.

### **3.6 What is the difference between AutoCAD Today and the Autodesk Point A design portal?**

AutoCAD Today, a feature of AutoCAD 2002, contains content and information provided via Autodesk Point A. AutoCAD Today also offers file navigation tools and project bulletin board capabilities that are not a part of Autodesk Point A. The file navigation tools are available whether you are connected to the Web or not.

The Autodesk® Point A portal, located at <http://pointA.autodesk.com>, is available to anyone with a connection to the Web. This design portal delivers software updates, product tips, industry resources, symbols that you can drag into your drawings, product support, services that complement the design process, and more. (*Note: Currently, Autodesk Point A content is in English only, and some content is customized specifically for the United States and Canada.*)

### **3.7 How does AutoCAD 2002 work with Buzzsaw.com?**

Buzzsaw.com (an Autodesk venture) is a secure, centralized online workspace for everyone in the building design and construction industry. AutoCAD 2002 allows integration with Buzzsaw.com's online project collaboration and print management services. For example, you can directly access, open, and save files and data that are hosted on Buzzsaw.com from within the File Navigation dialog in AutoCAD 2002. And you can publish print-ready documents directly to your local reprographer using the Publish to Plans & Specs™ application that's included on the AutoCAD 2002 CD. Go to [www.buzzsaw.com](http://www.buzzsaw.com) for more information.



### 3.8 How does AutoCAD 2002 work with RedSpark?

The AutoCAD File Navigation dialog box links to services on RedSpark. RedSpark provides interenterprise applications for the development, sourcing, and marketing of engineered products. A spinout from Autodesk, RedSpark provides companies that develop consumer products, medical equipment, industrial equipment, and automotive/aerospace components with tools to connect with their suppliers and customers.

RedSpark's suite of solutions includes RAPIDteam™, an end-to-end collaborative product development (CPD) solution designed to accelerate product development and direct materials sourcing processes; and ProductEdge™, a customer relationship management (CRM) solution designed to power a manufacturer's customer-facing website to serve existing customers and assist in acquiring new clients.

## 4. Performance and Compatibility

### 4.1 Is AutoCAD 2002 faster than AutoCAD 2000 or Release 14?

Yes. Industry standard CAD benchmarks show AutoCAD 2002 to be faster than AutoCAD 2000 and AutoCAD Release 14 for common operations. The AutoGauge Benchmark, developed by the Autodesk User Group International (AUGI®), shows AutoCAD 2002 running from 6 to 38 percent faster on the same hardware.

Specifically, file I/O performance is up by 29 percent, display performance is up by 39 percent, osnap performance is up by 24 percent, and property alterations operations performance is up by 23 percent. For even more speed, AutoCAD 2002 now supports multiple processor computing. On a dual-processor machine AutoCAD 2002 offers an additional 30 percent performance gain compared to AutoCAD 2000 or Release 14 on the same machine. Given the diverse nature of drawing size and design approaches our customers have, we recommend that you measure the benefits of AutoCAD 2002's increased performance for yourself.

### 4.2 Do AutoCAD 2000- and 2000i-based products and third-party applications work with AutoCAD 2002?

Yes, AutoCAD 2002 is both DWG and application compatible with AutoCAD 2000 and AutoCAD 2000i. Applications from third parties—whether they are based on ObjectARX®, COM Automation, VBA/VB, or Visual LISP—that support either product do not require an update. Autodesk has been providing prerelease software and technical guidance to members of the Autodesk Developer Network to ensure that their applications will work for you. You should contact your application developer/supplier if you have any questions regarding your application.

### 4.3 Will the AutoCAD 2000i extensions work with AutoCAD 2002?

No. However, all the modular functionality delivered in the three AutoCAD 2000i extensions is included in AutoCAD 2002. Therefore the AutoCAD 2000i extensions will not install on AutoCAD 2002.

### 4.4 Will there be extensions for AutoCAD 2002?

Yes. Response from customers regarding incremental enhancements to AutoCAD has been very favorable. We plan to continue delivering extensions for the current release.

Extensions are available free of charge to AutoCAD subscribers on the Autodesk Subscription Program. For the latest information on the Autodesk Subscription Program, including availability and purchase requirements, visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription) or contact your Authorized Autodesk Reseller.

**4.5 How are AutoLISP programs affected by changes in AutoCAD 2002?**

AutoLISP® routines, menus, linetype files, hatch patterns, and other programs that have been written for AutoCAD 2000 and AutoCAD 2000i will work in AutoCAD 2002; no changes have been made that would affect them.

**4.6 Has the AutoCAD drawing database changed from AutoCAD 2000 or AutoCAD 2000i to AutoCAD 2002, as it did between AutoCAD 2000 and AutoCAD Release 14?**

No, the AutoCAD 2000, 2000i, and 2002 drawing databases are exactly the same. The new features and functionality developed in AutoCAD 2002 maintain DWG and DXF™ file compatibility between the three releases. You can directly and easily share files between different design teams using AutoCAD 2000/2000i and AutoCAD 2002. In addition, AutoCAD 2002 has a built-in SaveAs function to save drawings in Release 14 format and safely round-trip data between the two releases.

**4.7 Does AutoCAD 2002 read and save drawings created by earlier releases of AutoCAD?**

AutoCAD 2002 shares the same DWG file format with AutoCAD 2000 and 2000i, so it reads and writes files created by those applications natively. AutoCAD 2002 reads all drawing files from previous versions of AutoCAD.

AutoCAD 2002 can save DWG files in the Release 14 format through the “save as” function in the AutoCAD 2002 File menu. AutoCAD 2002 can save files in native Release 13 and 14 formats with no interchange format such as DXF.

AutoCAD Release 12 has a fundamentally different file format that is not object-oriented. The Release 12 DWG file format does not have the data complements to handle intelligent objects and their attributes. Therefore, AutoCAD 2002 does not directly save files in Release 12 format except as DXF files.

As part of the AutoCAD Migration Assistance, available to registered members of Autodesk Point A, we have included a batch-drawing converter that will bring your legacy Release 13 and 14 drawings forward into the latest AutoCAD file format.

**4.8 How interoperable is AutoCAD 2002 with other Autodesk products?**

AutoCAD 2002 is the foundation for an interoperable family of Autodesk products. Sharing the same database framework component—ObjectDBX for reading and writing drawing files—ensures that the next generation of Autodesk products is all interoperable with AutoCAD 2002. These include 3ds max™ and 3D Studio VIZ®, Actrix® Technical, Volo™ View, Autodesk Map, and AutoCAD Mechanical, and the AutoCAD industry-specific “desktop” products: Autodesk Mechanical Desktop, Autodesk Architectural Desktop, and Autodesk Land Desktop.

**4.9 Can I run AutoCAD 2002 side-by-side with other AutoCAD platform-based applications?**

AutoCAD 2002 can be installed side-by-side with any AutoCAD 2002-based version of our industry-specific products including Autodesk Mechanical Desktop, AutoCAD Mechanical, Autodesk Architectural Desktop, Autodesk Land Desktop, and Autodesk Map software.

**4.10 Does AutoCAD 2002 read drawings created with Actrix Technical?**

Yes, Actrix Technical 2000 files can be saved in the AutoCAD 2002 format.

**4.11 Has the DWG file format changed with AutoCAD 2002?**

No. The DWG file format used in AutoCAD 2002 is the same as the file format used in AutoCAD 2000 and AutoCAD 2000i. This is also the same DWG file format that is used in the Autodesk vertical solutions, like Autodesk Architectural Desktop, AutoCAD Mechanical, and AutoCAD Land Development Desktop.

**4.12 Is AutoCAD 2002 compatible with AutoCAD LT?**

Yes. AutoCAD 2002 is 100 percent DWG-compatible with AutoCAD LT 2002, 2000i, and 2000 drawing files. It can read files from all older versions of AutoCAD LT.

**4.13 Is AutoCAD 2002 compatible with files created by other AutoCAD-based industry-specific solutions?**

Yes. AutoCAD 2002 uses the same DWG file format that is used in all of the Autodesk solutions that are built on AutoCAD 2000, AutoCAD 2000i, and AutoCAD 2002. These solutions include

- AutoCAD Architectural Desktop™ 2 and 2i and Autodesk Architectural Desktop 3 and 3.3
- AutoCAD Mechanical 2000, 2000i, and 6
- Mechanical Desktop® 4 and 5 and Autodesk Mechanical Desktop 6
- AutoCAD® Land Development Desktop 2 and 2i and Autodesk Land Desktop 3
- AutoCAD Map® 2000 and 2000i and Autodesk Map 5

**4.14 Is AutoCAD 2002 compatible with Autodesk CAD Overlay?**

Autodesk is releasing a compatibility update called Autodesk® CAD Overlay® 2002. The update is available to current CAD Overlay 2000i users for a nominal shipping and handling fee. To learn more about this update, visit [www.autodesk.com/cadoverlay](http://www.autodesk.com/cadoverlay).

**4.15 Is AutoCAD 2002 compatible with Volo View?**

Yes. Volo View can view and plot DWG, DXF, and DWF (drawing web format) files created in AutoCAD 2002. Volo View also offers valuable markup and measurement tools that help communicate important information about a drawing. In turn, AutoCAD 2002 can read those markups or measurements and you can then edit a drawing accordingly.

**4.16 Is AutoCAD 2002 compatible with Autodesk mobile solutions like Autodesk Onsite View?**

Yes. Autodesk® Onsite View is built for mobile handheld and tablet computing devices to help you review, mark up, and measure your DWG and DXF drawings electronically right at the point of work—on the construction site, the manufacturing floor, or anywhere you need access to your design information.

Consider this example: You have been editing a landscaping project in AutoCAD 2002 and need to check your drawing on site. Rather than take a large plotted drawing or a cumbersome notebook PC to the site, you can copy and synchronize your AutoCAD 2002 drawing file to Autodesk Onsite View on your handheld device and take it to the site. Perhaps you notice that some measurements in the drawing are inaccurate, or that there is an extra plant that is not included on the drawing. So you mark up the drawing, putting in the correct measurements and elements using Autodesk Onsite View. Back at the office, you save the file back to your PC and use AutoCAD 2002 to open and edit the drawing.

**4.17 Is the plastic digitizer template available for AutoCAD 2002?**

No. Due to low customer demand, this item has been discontinued. However, the icons are available in a DWG format for printing.

**4.18 Do AutoCAD 2000 or 2000i customized menus work in AutoCAD 2002?**

AutoCAD 2002 reads these menus; however, they will not include the new AutoCAD 2002 commands. AutoCAD Migration Assistance has a utility to migrate your existing menus to AutoCAD 2002. This utility requires little or no previous menu customization experience, and you will not be required to edit the menu file. In fact, menus can be migrated from any previous version to AutoCAD 2002.

Associated menu LISP files (with file extension MNL) run without a change in AutoCAD 2002.

**4.19 Do ADI digitizer drivers work with AutoCAD 2002?**

No, digitizers are supported through the WINTAB driver interface only. ADI® digitizer drivers are not supported in AutoCAD 2002. AutoCAD 2002 supports WINTAB drivers from Calcomp/Summagraphics, Kurta, Wacom, and GTCO, as well as a trial version of the Virtual Tablet WINTAB driver. WINTAB drivers can be obtained from the digitizer manufacturer.

**4.20 Do ADI plot drivers work with AutoCAD 2002?**

No. The plotting architecture has been completely rewritten for AutoCAD 2002 based on the Heidi® Device Interface (HDI). This new driver architecture delivers significant enhancements in plotter capabilities and performance. AutoCAD 2002 will continue to ship with HDI drivers for the most popular devices, as well as support the Windows system printer interface.

**4.21 Which new plotters are supported by AutoCAD 2002?**

AutoCAD 2002 includes HDI drivers for the OCE, Xerox, Calcomp, and a new Hewlett Packard Windows system driver that supports Microsoft Windows® 98, Windows Millennium Edition, Windows NT® 4.0, and Windows 2000 Professional. Autodesk has also added a generic HPGL HDI driver that can be used with older HPGL devices. Canon, ENCAD, and Epson are also developing AutoCAD 2002 drivers. For more details on AutoCAD 2002 support, please consult your plotter manufacturer.

**5. Licensing and Deployment****5.1 What changes have been made to the Autodesk License Management (ADLM) feature of AutoCAD?**

In AutoCAD 2002, Autodesk is introducing a new network license manager, FLEXlm. FLEXlm replaces Elan license manager with current technology. This allows large companies to leverage their existing investments in GLOBETrotter's NLN capabilities with increased reliability and better support compared to previous license managers offered by Autodesk. In countries outside of North America where C-Dilla software technology is implemented, runtime switching on a network license allows for switching between network and stand-alone usage. This allows network license users to acquire stand-alone usage in order to work remotely. Separate stand-alone licenses must be available to take advantage of this feature.

In addition, SAMreport-lite allows CAD managers and IT managers to track and report on license usage and maximize the return on their technology investment by assuring full utilization of software assets.

**5.2 Is there an easy way to migrate my legacy AutoCAD Release 14 files to AutoCAD 2002?**

Upgrading to the AutoCAD 2000 platform of products was made easier with the introduction of the AutoCAD Migration Assistance. Now, as part of the AutoCAD Migration Assistance available to registered members of Autodesk Point A there is a batch-drawing converter that will bring your legacy Release 14 drawings forward into the latest AutoCAD file format.

**6. Platforms and System Requirements****6.1 What are the system requirements for AutoCAD 2002?**

The recommended operating system for AutoCAD 2002 is

- Intel® Pentium® II 450 MHz-based PC or AMD K6-II 450 MHz-based PC
- 128 MB RAM
- 200 MB free disk space
- VGA display of 1024x768x64K

- Mouse or other pointing device
- CD-ROM drive
- Microsoft Windows 2000 Professional, Windows 98, Windows Millennium Edition, or Windows NT 4.0 (SP5 or later)

Less capable machines (such as Pentium 233) can run AutoCAD 2002, but the results may be less than ideal. Sufficient swap space is also required to handle installation of AutoCAD 2002 as well as any data or drawing files saved. The use of additional memory or faster processors will directly improve performance and capacity.

### **6.2 Does AutoCAD 2002 take advantage of multiprocessor systems?**

Yes. If you have a multiprocessor machine, you will see significant increases in application performance, especially for graphics and file I/O operations.

### **6.3 Does AutoCAD 2002 take advantage of the Intel Pentium III processor?**

Yes. Our tests show noticeable improvements in 3D graphics timings when AutoCAD 2002 is installed on a PIII processor-based computer.

## **7. API and Technology**

### **7.1 Does AutoCAD 2002 take advantage of OpenGL?**

Yes, AutoCAD's new 3D graphics system takes advantage of OpenGL to rotate, shade, and apply textured materials and lights to 3D models. AutoCAD 2002 supports OpenGL-based software acceleration and OpenGL-based hardware acceleration for the fastest possible 3D performance.

### **7.2 Why is object technology important?**

Object technology represents the new paradigm upon which design software for the next decade will be built. For many years, CAD products have been nothing more than efficient geometry engines. Object technology promises to remove the abstraction of real-world objects into geometry, which will improve user productivity, design integrity and the integration of applications leveraging this technology.

The use of object technology results in smaller files, faster design operations, and easier learning. Applications that leverage this technology are vastly superior for mission-critical design projects to those that do not.

As with any new technology, objects will take some time to realize their full potential. Most independent application developers creating high-end add-on applications are already taking advantage of AutoCAD's object technology.

### **7.3 Does AutoCAD 2002 support COM interfaces?**

AutoCAD 2002 has one of the most complete and robust sets of COM interfaces of any design system available today. Because AutoCAD has the complete, clean, open and published object-oriented kernel of ObjectARX, it is easy to provide COM interfaces to the same object system through the AutoCAD ActiveX object model. Because of this architecture, AutoCAD can be easily customized using any COM or ActiveX client programming language (such as Visual Basic, Borland's Delphi, or Microsoft's J++ Java). In addition, Visual LISP has full access to these same COM interfaces.

### **7.4 Does Visual Basic for Applications—built into AutoCAD—open the door for viruses?**

Visual Basic has been embedded in Microsoft Office for some time. It is certainly possible for a hacker to create a virus in the form of a VBA routine, but it is easy to safeguard against it. First, you are always asked if you would like to open and enable the macro. You must always know and trust the source prior to accepting this option. You should inoculate your system against known viruses.

**7.5 Can I encrypt my VBA application?**

Yes, you can. With the VBA multiple projects feature, you may encrypt or protect your whole application or a part of it. This enables you to provide user-changeable source code along with protected libraries.

**7.6 What is Visual LISP?**

Visual LISP™ is the next generation of AutoLISP®. It is fully compatible with AutoLISP and provides all of its functionality, along with access to the new Multiple Design Environment, COM/ActiveX interfaces, event reactors, and more. Visual LISP also provides a complete, powerful new development environment that provides tools for creating and debugging LISP customization and add-on applications including matching parentheses, debugging, source and syntax checking, and more.

**7.7 What is the future for Visual LISP? Will my investment in AutoLISP pay off?**

The use of Visual LISP in AutoCAD 2002 is a clear and direct indicator of the Autodesk commitment to the LISP language and our customers' investment in it. We see Visual LISP opening a new, more Windows-integrated and more vibrant chapter for AutoLISP customization.

**7.8 How compatible is AutoCAD 2002 Visual LISP with AutoLISP?**

Visual LISP is nearly 100 percent compatible with AutoLISP. Minor compatibility differences are due to Visual LISP having stricter adherence to Common LISP standards. Visual LISP disallows the setting of reserved symbols, such as *T* (the internal symbol returned for "true"), to other values. To enable better performance and optimization in AutoCAD 2002, Visual LISP does not allow programmatic (defun) statements by default. If this practice is required for your application, a new function has been added, (defun-q), that skips in-line optimization and allows this practice to continue.

**7.9 Does COM/ActiveX in Visual LISP mean we all have to learn VBA?**

No. Visual LISP has matured to support the world of Microsoft COM and ActiveX objects. Adding ActiveX to Visual LISP was in response to your requests to be able to do more with AutoLISP.

**7.10 Does AutoCAD 2002 still support DCL for dialog boxes?**

Yes. AutoCAD 2002 supports DCL, safeguarding your customization investments.

**7.11 Can AutoCAD 2002 work with custom objects created in Autodesk industry-specific solutions?**

Yes. AutoCAD 2002 can read custom objects created in Autodesk products that use ObjectDBX technology to create those objects. AutoCAD 2002 lets you view these objects automatically using live object enablers—you do not have to install any special plug-ins or viewers. For example, if you need to review a building floor plan created in Autodesk Architectural Desktop, you simply open the drawing file; the 3D wall and window objects that are part of a drawing are instantly viewable and all of the associated data is available.

**8. Customer Support and Training****8.1 How can I easily get technical Customer Support information?**

Available right on the Help menu, inside AutoCAD, Support Assistance contains technical support information about AutoCAD 2002 in Issue/Solution format. The Support Assistance knowledge base also contains links to other support resources and self-help tools to help you get the most out of AutoCAD.

Additional technical support information such as software updates, answers to frequently asked questions, product training resources, customer file libraries, and more is located on the Product Support website on Autodesk Point A at <http://pointA.autodesk.com>.

Also, ask questions and read information about using Autodesk products in the peer-to-peer discussion groups on Autodesk Point A. Autodesk hosts topical discussion groups about specific products, including AutoCAD 2002, and about general topics, such as drafting techniques and customization.

## **8.2 How do I obtain direct, technical customer support?**

Autodesk Systems Centers (ASCs) and Authorized Autodesk Resellers provide telephone support options for AutoCAD and all other Autodesk products. Call 800-964-6432 to locate an ASC or reseller near you, or visit [www.autodesk.com/reseller](http://www.autodesk.com/reseller).

Subscription customers may purchase Autodesk direct online support, which delivers direct support via a web-based support interface, for the product extensions, upgrades, and updates you receive directly from the Autodesk Subscription Program. For complete information, visit [www.autodesk.com/subscription](http://www.autodesk.com/subscription) or contact your Authorized Autodesk Reseller.

Customers in North and South America can get direct telephone support from Autodesk Product Support on a per-incident basis (requires major credit card). For pricing details, visit [www.autodesk.com/safetynet](http://www.autodesk.com/safetynet).

Find a complete list of support options by product and country on the Product Support website at [www.autodesk.com/support-resources](http://www.autodesk.com/support-resources).

## **8.3 What is BigFix?**

BigFix is a new Autodesk service that delivers our technical support to you proactively, alerting you as soon as a potential problem is discovered on your computer. While alerting you to the problem, BigFix can also offer the appropriate solution, allowing you to fix your computer automatically. You can get more information or install BigFix from the Help menu in AutoCAD 2002, or you can visit to the Autodesk Technical Assistance page on Autodesk Point A for more information.

## **8.4 How do I find out if service packs are available for AutoCAD 2002?**

In the event that Autodesk releases a service pack for AutoCAD 2002, it is easy to access and install it using the Live Update feature. Simply open AutoCAD Today and go the Autodesk Point A section. Look at the Highlights window to see if an update is available. AutoCAD 2002 automatically recognizes if you have the most up-to-date release and prompts you if there is an update available. When you click on the link, AutoCAD 2002 will automatically download and install the update seamlessly and painlessly.

## **8.5 Where do I find training courses for AutoCAD 2002?**

Autodesk now offers extensive learning and training services for all Autodesk products through our new eLearning service. Go to Autodesk Point A to find the largest selection of courses for today's design professionals, including online courses, e-courseware and Virtual Classroom Training. Note: Online training is currently available only in the United States and Canada.

You can also attend instructor-led training at Autodesk Authorized Training Centers around the world. These training centers use Autodesk Official Training Courseware (AOTC) to deliver comprehensive courses for new and intermediate AutoCAD 2002 users. Autodesk Authorized Training Centers also deliver custom courses on AutoCAD 2002 and other Autodesk products. To learn more, visit [www.autodesk.com/resellers/atc](http://www.autodesk.com/resellers/atc).

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