Autodesk® Civil Engineering Solution

Questions and Answers

This document provides questions and answers about the Autodesk Civil Engineering Solution, which includes the new AutoCAD® Civil product, as well as AutoCAD® Civil 3D®. You will also find information on the plans for AutoCAD® Land Desktop. Questions and Answers for AutoCAD Civil 3D can be found in the document entitled *AutoCAD Civil 3D 2009 Questions and Answers*.

Contents

1.	General Civil Engineering Solution Information	. 2
2.	AutoCAD Land Desktop and AutoCAD Civil 3D – Land Desktop Companion .	. 4
3.	Sales Paths and Availability	. 6
4.	Installation, Configuration, and Licensing	. 6
5.	Compatibility and Interoperability	. 7
6.	Consulting, Training, and Support	. 9
7	Subscription	9



1 General Civil Engineering Solution Information

1.1 What products make up the Autodesk Civil Engineering Solution?

The Autodesk Civil Engineering Solution includes:

- AutoCAD Civil: Provides civil engineering technicians, drafters, and surveyors with a focused design and construction documentation solution.
- AutoCAD Civil 3D: Provides a more comprehensive civil engineering solution with analysis and simulation capabilities for the civil engineer and designer.

As AutoCAD Civil 3D has continued to mature with analysis and simulation capabilities, the product has grown beyond the needs of the civil engineering technician, drafter, and surveyor. The introduction of AutoCAD Civil provides a solution that delivers a more appropriate level of value for the technician, drafter, and surveyor, at a lower price point.

1.2 What is the difference between AutoCAD Civil 2009 and AutoCAD Civil 3D 2009?

The functionality in AutoCAD Civil 2009 is a subset of that in AutoCAD Civil 3D 2009. AutoCAD Civil 3D includes incremental functionality to support analysis and simulation more appropriate for civil engineers and designers. Both AutoCAD Civil and AutoCAD Civil 3D are model-centric solutions and can be used together seamlessly within the same organization. The following table provides a high level comparison of the two products. More details on functionality for both products can be found at www.autodesk.com/civil.

	AutoCAD Civil	AutoCAD Civil 3D
Target User and Application	Civil engineering technician, drafter, and surveyor for developing design information and delivering documentation.	Civil engineer and designer responsible for design, analysis, and simulation.
Drafting and Documentation	Plan production and draftingDrafting styles and standardsReporting	Same as AutoCAD Civil
Design	Surfaces and gradingParcelsCorridor modeling and road designPipe layout	Same as AutoCAD Civil
Surveying and Coordinate Systems	 Import raw survey data Traverse and least squares adjustment Survey figures COGO Coordinate system setting and transformations Survey database 	Same as AutoCAD Civil
Data Management and Team Coordination	 Data shortcuts and xrefs Advanced data management with Autodesk® Vault (included) 	Same as AutoCAD Civil
Data Exchange and Interoperability	DGN, LandXML, Google Earth [™] , and SDF	Same as AutoCAD Civil + GIS and raster data formats including ESRI SHP, TIF, and more.

	AutoCAD Civil	AutoCAD Civil 3D
Stormwater Analysis and Simulation	No	Stormwater analysis and simulation with Hydraflow Storm Sewers Extension, Hydraflow Hydrographs Extension, and Hydraflow Express Extension
Geospatial Analysis and Mapping	No	Includes geospatial analysis and mapping functionality from AutoCAD® Map 3D
Land Desktop Project Support	Import/Export only	Subscription customers can download AutoCAD® Civil 3D® – Land Desktop Companion from Subscription Center

1.3 Can I just buy AutoCAD Civil or does it need to be used in combination with AutoCAD Civil 3D?

AutoCAD Civil can be used on its own or in conjunction with AutoCAD Civil 3D. AutoCAD Civil provides a focused design and construction documentation solution for civil engineering technicians, drafters, and surveyors. For some organizations, AutoCAD Civil will provide all the functionality needed. Adding seats of AutoCAD Civil 3D allows you to get more value from the model by taking advantage of analysis and simulation capabilities for optimizing designs.

1.4 Are AutoCAD Civil and AutoCAD Civil 3D both 3D products?

AutoCAD Civil and AutoCAD Civil 3D both share the same information model and both support 2D and 3D workflows. AutoCAD Civil is the solution for civil engineering technicians, drafters, and surveyors who are responsible for developing design information and the delivery of construction documentation. AutoCAD Civil 3D extends the capabilities of AutoCAD Civil with incremental functionality for optimizing designs with analysis, simulation, and visualization capabilities. Both applications benefit from a model-centric workflow that keeps designs and documentation automatically coordinated.

1.5 Are the data management and team coordination capabilities that are available for AutoCAD Civil 3D also available for AutoCAD Civil?

Yes. Both AutoCAD Civil 3D and AutoCAD Civil provide the same scalable approach to data management and team coordination that addresses the needs of organizations, regardless of size or structure.

- External References: Leverages familiar xref workflows to label civil data contained in externally referenced drawings.
- Data Shortcuts: For small project teams that require the need to informally share project data across a project.
- Autodesk Vault: For organizations that require more advanced data management, including change management, version control, permissions, and archiving.

Regardless of the data management and team coordination approach that is used, AutoCAD Civil and AutoCAD Civil 3D can be used together seamlessly within an organization.

2 AutoCAD Land Desktop and AutoCAD Civil 3D– Land Desktop Companion

2.1 What are the plans for AutoCAD Land Desktop and the AutoCAD Civil 3D – Land Desktop Companion?

Since the late 1990s, AutoCAD® Land Desktop software has been the design and documentation solution of choice for more than 100,000 civil engineering and surveying professionals around the world. We want to thank those customers that have made Land Desktop a critical part of their workflow over the years and we look forward to continuing to provide solutions that meet your challenges in the future.

As technology has advanced and the challenges facing engineering organizations have become increasingly complex, we have decided it is time to look beyond Land Desktop to technology that better addresses the demands of today's engineering organizations. As a result, AutoCAD Land Desktop 2009 and the AutoCAD Civil 3D – Land Desktop Companion 2009 will be the final releases of Land Desktop and we will redirect resources to more rapidly expand the capabilities of AutoCAD Civil and AutoCAD Civil 3D.

2.2 Can I still buy AutoCAD Land Desktop 2009?

AutoCAD Land Desktop 2009 will remain on the Autodesk price list until spring 2009; however, effective July 8, 2008, subscription for AutoCAD Land Desktop will no longer be available. Customers with current AutoCAD Land Desktop subscription contracts, including multi-year, will continue to receive subscription benefits through the end of their contract.

2.3 What options are available for AutoCAD Land Desktop customers?

Customers that are using Land Desktop primarily for documentation and design may wish to migrate to AutoCAD Civil. Land Desktop customers looking for a more comprehensive civil engineering solution that adds analysis and simulation capabilities for the civil engineer and designer may wish to migrate to AutoCAD Civil 3D. Migrating to AutoCAD Civil 3D also provides access to the AutoCAD Civil 3D – Land Desktop Companion via Subscription Center and provides a means for obtaining incremental seats of Land Desktop Companion for supporting legacy projects.

Customers migrating from AutoCAD Land Desktop to AutoCAD Civil do not have access to the Land Desktop Companion; however, they can continue to use AutoCAD Land Desktop for a period of 18 months to facilitate the transition to AutoCAD Civil (see Question 3.2 for details).

2.4 How do I support legacy Land Desktop-based projects for my organization?

To continue to support legacy workflows for AutoCAD Land Desktop-based projects, AutoCAD Civil 3D subscription customers can download AutoCAD Civil 3D – Land Desktop Companion via Subscription Center according to the following schedule:

- Land Desktop Companion 2009 available for download June 2008
- Land Desktop Companion 2008 available for download March 2008

Alternatively, subscription customers can request media for prior versions of AutoCAD Civil 3D (which includes AutoCAD Civil 3D – Land Desktop Companion) according to the Autodesk Subscription prior use policy (see Question 4.3).

Starting July 8, 2008, the Land Desktop Companion will no longer be available in the AutoCAD Civil 3D box. However, Autodesk will continue to make Land Desktop

AUTODESK CIVIL ENGINEERING SOLUTION QUESTIONS AND ANSWERS

Companion available to AutoCAD Civil 3D subscribers on Subscription Center for a period of time to support legacy workflows.

AutoCAD Civil 3D – Land Desktop Companion will not be available to AutoCAD Civil 2009 subscription customers. However, customers migrating from AutoCAD Land Desktop to AutoCAD Civil can continue to use their AutoCAD Land Desktop for a period of 18 months to facilitate transition (see Question 3.2 for details).

2.5 What programs and tools are available to help customers make the transition from AutoCAD Land Desktop to AutoCAD Civil or AutoCAD Civil 3D?

Autodesk has developed a number of resources to help AutoCAD Land Desktop customers migrate to AutoCAD Civil and AutoCAD Civil 3D. Programs and tools include, but are not limited to:

- AutoCAD Land Desktop Customer Transition Program: AutoCAD Land Desktop customers may be eligible to take advantage of special promotional pricing to migrate to either AutoCAD Civil, AutoCAD Civil 3D, or AutoCAD Map 3D. Contact your Autodesk Authorized Reseller for more information.
- Moving from Land Desktop to Civil 3D Guide: The Moving from Land Desktop to Civil 3D guide is intended to help you transition from using AutoCAD Land Desktop to using AutoCAD Civil 3D as your primary engineering design application. It will help you understand the many benefits of moving to AutoCAD Civil 3D, how your current workflows may change as a result of the move, and how to prepare for the move.
 (http://images.autodesk.com/adsk/files/civil_ldt_to_c3d0.pdf)
- Getting Started Guide: The AutoCAD Civil 3D 2009 Getting Started guide introduces you to AutoCAD® Civil 3D® and provides hands-on experience, using sample data included on the product media. It also contains descriptions of the most significant features and provides a quick tour of the user interface.
 (http://images.autodesk.com/adsk/files/civil_3d_gsg0.pdf)
- Tutorials: The AutoCAD Civil 3D Tutorials offer an in-depth guided tour of the major features, using realistic engineering drawings and data. For thorough knowledge of AutoCAD Civil 3D, it is recommended that you explore the tutorials after you have read through the conceptual information provided in the Getting Started guide. The tutorials and sample data sets are included on the product media.

 (http://images.autodesk.com/adsk/files/civil_tut0.pdf)
- Autodesk Official Training Courseware: See your local reseller for a variety of instructor-led training classes supported by quality training materials.

AutoCAD Civil and AutoCAD Civil 3D as smooth as possible.

2.6 Will DVD versions of the AutoCAD Civil 3D – Land Desktop Companion 2009 be available?

AutoCAD Civil 3D – Land Desktop Companion 2009 will only be available via download from Subscription Center.

3 Sales Paths and Availability

3.1 I'm currently an AutoCAD Civil 3D customer and am interested in moving to AutoCAD Civil. What are my options?

Your Autodesk Authorized Reseller can help identify what product is best for your situation. If you do choose to move from AutoCAD Civil 3D to AutoCAD Civil, you will no longer be licensed to use AutoCAD Civil 3D – Land Desktop Companion or the other analysis and simulation functionality unique to AutoCAD Civil 3D. If you want to continue to do production work with AutoCAD Land Desktop you should maintain your AutoCAD Civil 3D subscription.

3.2 I am currently an AutoCAD Land Desktop user looking to move to AutoCAD Civil. Can I continue to use my AutoCAD Land Desktop?

To ease migration from AutoCAD Land Desktop to AutoCAD Civil, a provision has been made for AutoCAD Land Desktop users that crossgrade to AutoCAD Civil. The following language is included in the in-box letter that comes with AutoCAD Civil:

Notwithstanding anything to the contrary in the EULA for AutoCAD Civil, if you have validly purchased a crossgrade license from AutoCAD Land Desktop to AutoCAD Civil, you can continue to use the AutoCAD Land Desktop seat from which you crossgraded for a period of 18 months from the time you install AutoCAD Civil. Also, the legacy AutoCAD Land Desktop seat cannot be installed separately from your AutoCAD Civil installation. Finally, AutoCAD Civil subscription does not include either AutoCAD Land Desktop or AutoCAD Civil 3D – Land Desktop Companion as part of the product or subscription benefit.

3.3 Are AutoCAD Civil and AutoCAD Civil 3D available worldwide?

At this time, AutoCAD Civil is only available in the US and Canada in US English only. AutoCAD Civil 3D is available worldwide. The changes around the availability of AutoCAD Land Desktop and the AutoCAD Civil 3D – Land Desktop Companion apply worldwide.

3.4 I am currently using a competitor's product and would like to buy AutoCAD Civil. What options are available to me?

Contact your Autodesk Authorized Reseller for information on competitive trade up options.

4 Installation, Configuration, and Licensing

4.1 Can I install AutoCAD Civil 2009 on the same computer as AutoCAD Civil 3D 2009?

Yes both products can be installed on the same computer.

4.2 What are the system requirements for AutoCAD Civil 2009?

The system requirements for AutoCAD Civil 2009 are the same as the system requirements for AutoCAD Civil 3D 2009. Visit www.autodesk.com/civil for complete system requirements.

4.3 What are the prior use rights for AutoCAD Civil 3D and AutoCAD Land Desktop subscription customers?

The following applies to both AutoCAD Civil 3D and AutoCAD Land Desktop subscription customers.

 Subscription customers can run up to three eligible versions back from the 2009 product release without having originally owned those versions (i.e. 2009, 2008, 2007 and 2006).

AUTODESK CIVIL ENGINEERING SOLUTION QUESTIONS AND ANSWERS

- Subscription customers can use up to the total number of licenses of the product under subscription.
- Technical support is offered on the current release and three versions back.
- Subscription customers who do not have the previous versions of the software may request available media through Subscription Center at www.autodesk.com/subscriptionlogin

For more information on how you can use previous versions, refer to Section 2.4 of the Subscription Terms and Conditions, which can be found on Subscription Center at www.autodesk.com/subscriptionlogin. These terms and conditions apply to customers with existing subscription contracts; customers renewing a contract or purchasing additional products on subscription; and customers adding new products or services to an existing contract.

4.4 How will a network configuration be handled where there are both AutoCAD Civil and AutoCAD Civil 3D licenses?

In a network configuration where there are both AutoCAD Civil and AutoCAD Civil 3D licenses, AutoCAD Civil will first check for and use an AutoCAD Civil network license if one is available. If it does not find an AutoCAD Civil license, it will use an AutoCAD Civil 3D license. The opposite is not true—AutoCAD Civil 3D will not use an AutoCAD Civil network license.

4.5 How is the non-network version of AutoCAD Civil 3D – Land Desktop Companion 2009 licensed?

Both AutoCAD Civil 3D and AutoCAD Civil 3D – Land Desktop Companion use the same stand-alone license. There is no separate registration or license activation for Land Desktop Companion. AutoCAD Civil uses its own stand-alone license and cannot be used for Land Desktop Companion.

5 Compatibility and Interoperability

5.1 Are AutoCAD Civil and AutoCAD Civil 3D drawings and model data compatible?

Yes. The drawings and objects are the same in both applications and can be shared seamlessly.

5.2 Can I open drawings created in previous versions of AutoCAD Civil 3D in AutoCAD Civil 2009?

Yes. When a file that was created in an earlier version of AutoCAD Civil 3D is opened with AutoCAD Civil 2009, both the drawing and objects are updated to the 2009 format when the drawing is opened and saved.

5.3 Can I save drawings in AutoCAD Civil 2009 for use in previous versions of AutoCAD Civil 3D or AutoCAD software?

Just as with AutoCAD Civil 3D, an AutoCAD Civil 2009 drawing can be opened directly by any application based on AutoCAD 2007 or later. However, while the drawing version is the same, the civil model version is different. Therefore users who open an AutoCAD Civil 2009 drawing in AutoCAD Civil 3D 2007 or 2008 will be unable to modify or interact with the model. All base AutoCAD operations will be enabled.

You can also export the AutoCAD Civil 2009 drawings to the DWG format for use with previous versions of AutoCAD. However, when this is done, the civil model will be

AUTODESK CIVIL ENGINEERING SOLUTION QUESTIONS AND ANSWERS

extracted as AutoCAD primitives. AutoCAD Civil 2009 provides a batch drawing converter that enables users to export and convert an entire folder of drawings on demand.

5.4 Can I share an AutoCAD Civil 2009 drawing with others who are using AutoCAD 2009?

Yes. You can share AutoCAD Civil 2009 drawings with AutoCAD 2009 users. However, AutoCAD 2009 users should install the AutoCAD Civil 2009 object enabler so that they can edit AutoCAD Civil labels in the drawing without affecting the model. When the file is reopened in AutoCAD Civil 2009, the drawing loses no information and all edits are in place. The object enabler is included on the AutoCAD Civil 2009 software installation DVDs and can also be downloaded from the Autodesk website.

Note: The AutoCAD Civil 2009 object enabler can be installed only on the 2009 family of products.

5.5 What products does the AutoCAD Civil 2009 object enabler work with?

The AutoCAD Civil 2009 object enabler works with the following products:

- AutoCAD 2009
- AutoCAD[®] Mechanical 2009
- AutoCAD[®] Electrical 2009
- AutoCAD[®] Architecture 2009
- AutoCAD[®] MEP 2009

Note: You do not need to add the AutoCAD Civil 2009 object enabler to AutoCAD Land Desktop 2009 or AutoCAD Map 3D 2009.

5.6 Can I import AutoCAD Land Desktop 2009 project data into AutoCAD Civil 2009?

Yes. AutoCAD Civil 2009 software provides a mechanism to import AutoCAD Land Desktop 2009 project data, including points, surfaces, parcels, alignments, profiles, and pipe runs.

5.7 Can I export AutoCAD Civil 2009 model data back to AutoCAD Land Desktop 2009?

Yes. AutoCAD Land Desktop 2009 and AutoCAD Civil 3D – Land Desktop Companion both include utilities to convert AutoCAD Civil 3D model data into Land Desktop project data. These utilities work for AutoCAD Civil model data as well. The data that can be exported includes points, surfaces, parcels, alignments, profiles, and pipe runs.

5.8 Can AutoCAD Civil 2009 read and write DGN format files for use in MicroStation software?

Yes. AutoCAD Civil 2009 can read and write MicroStation DGN format files.

5.9 How can I share AutoCAD Civil 2009 model data with geospatial applications?

You can export AutoCAD Civil data to a spatial data format (SDF) file that you can use in AutoCAD Map 3D and Autodesk MapGuide[®] Enterprise. The AutoCAD Civil 2009 alignment, point, parcel, and pipe network data is converted to data objects with attributes. SDF files store data as features, which means that you are working with real-world objects rather than geometry. You can also export TIN surface models as DEM files.

6 Consulting, Training, and Support

6.1 What learning and training materials ship with AutoCAD Civil 2009?

AutoCAD Civil 2009 software includes a collection of tools that help you get up and running quickly, such as a *Getting Started* Guide that explains concepts, the help system, a PDF-format user guide, tutorials, and a variety of focused feature guides. Note that while the name AutoCAD Civil 3D may appear in certain places in the AutoCAD Civil documentation, help file, and user interface, the product that you will own, register, activate, and license is AutoCAD Civil.

6.2 Can I request a printed manual for AutoCAD Civil 2009?

Yes. You can order a printed manual via the Business Reply Card that is included in the AutoCAD Civil 2009 box. If you request an AutoCAD Civil printed manual, the request will be fulfilled with an AutoCAD Civil 3D manual in which there will be references to AutoCAD Map 3D and hydrology and hydraulics analysis functionality that is not included in the AutoCAD Civil software. This functionality is only available in AutoCAD Civil 3D 2009.

6.3 Are there any materials to help with the transition from AutoCAD Land Desktop to AutoCAD Civil?

Yes. An extensive *Moving from Land Desktop to Civil 3D* guide is included in the AutoCAD Civil 2009 help system. Note that the process for moving from Land Desktop to AutoCAD Civil is the same as the process of moving from Land Desktop to AutoCAD Civil 3D, so content in this book applies to AutoCAD Civil. Autodesk is continuing to work on making the migration from Land Desktop to AutoCAD Civil and AutoCAD Civil 3D as smooth as possible.

7 Subscription

7.1 Can AutoCAD Civil 2009 be purchased without subscription?

Yes, AutoCAD Civil 2009 can be purchased without subscription. Note, however, that only subscription customers receive product updates, e-learning, and other subscription benefits. Several subscription pricing options are available, including single and multi-year contracts. Contact your Autodesk Authorized Reseller for complete details.

7.2 I'm an AutoCAD Civil 3D Subscription customer who only wants to renew some of my total seats. What options are available to me?

Contact your Autodesk Authorized Reseller who can outline your options and make sure that you are using the software that best fits your current and future needs.

Autodesk, Autodesk MapGuide, AutoCAD, AutoCAD LT, and Civil 3D are registered trademarks or trademarks of Autodesk, Inc., in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

Occasionally, Autodesk makes statements regarding planned or future development efforts for our existing or new products and services. These statements are not intended to be a promise or guarantee of future delivery of products, services, or features but merely reflect our current plans, which may change. The Company assumes no obligation to update these forward-looking statements to reflect any change in circumstances, after the statements are made.

© 2008 Autodesk, Inc. All rights reserved.

