



Civil Simulate

Getting Started

Version: 03/05/2009

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1. INTRODUCTION

Civil Simulate is powerful 3D interactive simulation software, which transforms civil engineering design into highly sophisticated 3D simulation.

Civil Simulate is capable of transferring any Civil 3D, CivilCAD and other projects into a 3D simulation.

The software is unique in its ability to merge the design with an orthophoto raster image, and produce an accurate virtual reality 3D vision of complex structures such as junctions, roundabouts, parking lots, bridges, canals, etc. In addition, the designer can utilize the software to demonstrate aerial views while conducting interactive drive-through simulations in different settings, perform distance measurements, and make visibility and safety checks with a push of a button.

3D simulation can be performed in every stage of road design:

- § Existing ground topography
- § Basic road (alignment only)
- § Basic road with profile
- § Full road design (alignment, profile and assembly)

Civil Simulate does it with speed, high accuracy of +/- 2 cm to the CAD model, and most importantly, it has a proven success rate in handling large-scale engineering projects. From the "drawing board" perspective, the planning process is quicker because the designer is provided with a powerful online project-viewing capable tool, which bridges the gaps between the virtual and reality. Changes can be made with a click, saving time and money.

From all the available design tools in today's marketplace, Civil Simulate provides the best cost effective, highest quality simulation, redefining computerized civil engineering.

2. SYSTEM REQUIREMENTS

Civil Simulate system requirements are the same as AutoCAD Civil 3D.

Operating System (32-Bit)

Windows Vista, Windows XP. The 64-bit versions of Windows XP and Windows Vista are supported only in the 32-bit compatibility mode.

Processor

Intel Pentium 4, 3.0 GHz or faster, AMD Athlon 2, 2.0 GHz or faster, or Intel or AMD Dual Core processor 1.6 GHz or faster.

RAM

1 GB (or more)

Graphics card

1280 x 1024 32-bit color video display adapter (True Color) 128 MB or greater, OpenGL®, or Direct3D® capable workstation class graphics card. For Windows Vista, a Direct3D capable workstation class graphics card with 128 MB or greater is required 1024 x 768 VGA with True Color (minimum)

3. INSTALLATION

The installation process has been streamlined by means of the Installation wizard.

1. Insert the Civil Simulate CD or Double click the setup file if downloaded from Civil Simulate web page.
2. Follow the directions of each installation phase.

NOTE: when you select Install without making any changes, the Installation wizard installs the product into c:\program files\civil simulate using the default configuration.

How to Register and Activate Civil Simulate

After Civil Simulate is installed, you can initiate the registration process by launching the product. When launching Civil Simulate, the Product Activation wizard is displayed. Follow directions on the Product Activation wizard to register the software.

NOTE: you can try out the software as a trial version for 30 days by choosing the "evaluate" option at the activation wizard.

How to Launch Civil Simulate

After following the previous step, you will be able to launch Civil Simulate.

Start Civil Simulate from:

- Open AutoCAD Civil 3D to start Civil simulate within AutoCAD Civil 3D
NOTE: If you have AutoCAD Civil 3D installed, a new menu item "Simulate" appears as one of the Civil 3D menus.
- Launch Civil Simulate as standalone by double clicking the desktop shortcut icon. When you install Civil Simulate, Civil Simulate shortcut icon is created on your desktop unless you cleared that option during installation.
- Start menu. Click Start menu à All Programs (or Programs) à Civil Simulate

4. LEARNING HOW TO USE CIVIL SIMUALTE

Civil Simulate provides learning materials to get you started.

User documentation for Civil Simulate contains:

- Getting Started guide (this guide)
- Online tutorials
- User Guide
- Sample files
- About screen

Getting Started Guide

The Getting Started guide introduces important concepts in Civil Simulate.

Reading this guide and working with the sample files will help you get the basic knowledge required on how to use the software.

Online Tutorials

You can visit: http://www.sivandesign.com/CivilSimulate_Tutorials.asp to view Civil Simulate tutorials.

The tutorials offer a quick guided tour of Civil Simulates major features, using realistic engineering drawings and data. For thorough knowledge in Civil Simulate, it is recommended you explore the tutorials after you read the information provided in this Getting Started guide.

User guide

The Civil Simulate Help system is provided as a PDF with a table of contents, an index, and a search function. You can print out the topics which you find interest in. The User Guide is available under Civil Simulate help menu, or within AutoCAD Civil 3D under 'Simulate' menu à help.

Sample files Provided with Civil Simulate

To help you learn how to use Civil Simulate and experience its features, Civil Simulate media includes sample projects either for standalone use or projects for AutoCAD Civil 3D.

Sample Files for AutoCAD Civil 3D

Under *C:/Program files/ Civil Simulate/ Samples/ Civil-3D Samples* folder you can find AutoCAD Civil 3D project samples (in DWG format), which can be opened from AutoCAD Civil 3D and then be simulated using Civil Simulate menu within Civil 3D menu:

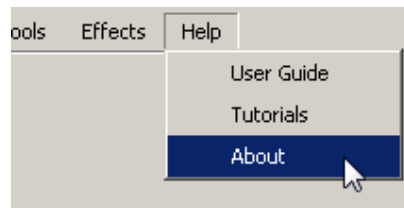


Sample Files for Civil Simulate standalone

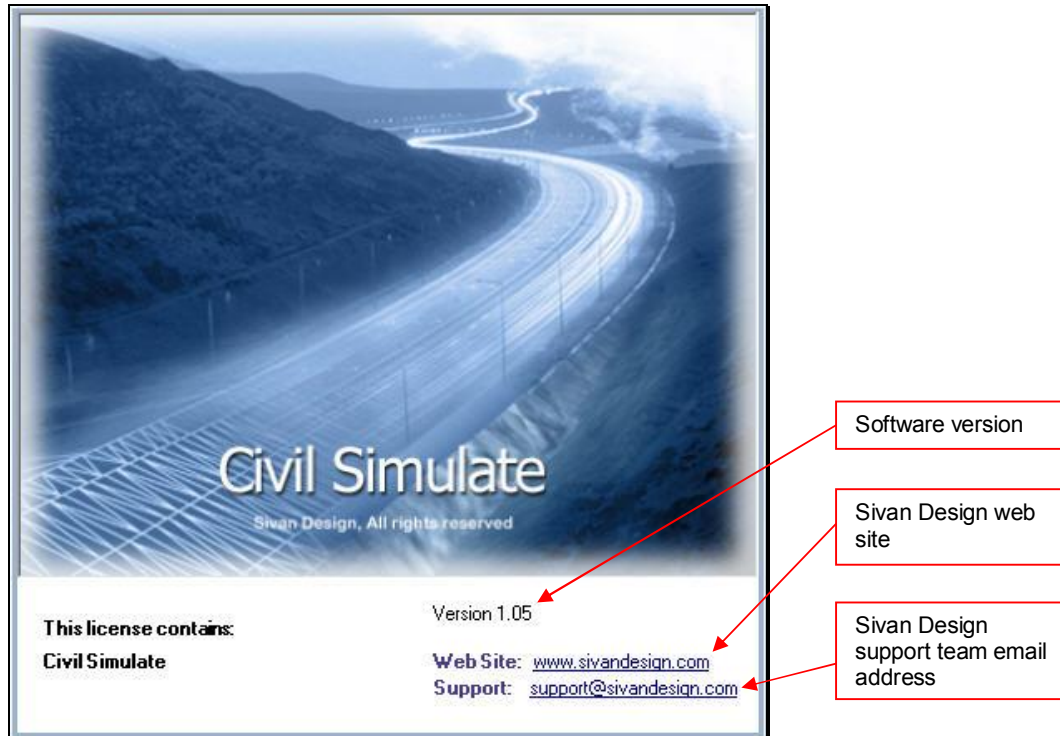
The default location of the standalone sample files is: *C:/Program files/ Civil Simulate/ Samples* folder. Under Samples folder you can find standalone samples (in cvu format) which can be opened directly from Civil Simulate software.

About screen

From Civil Simulate main menu, select Help à About.



The following window will appear on the screen:

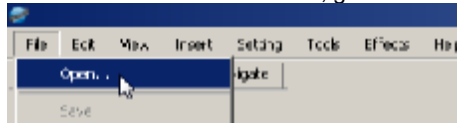


Click the mouse to close the window.

5. GETTING STARTED EXERCISES

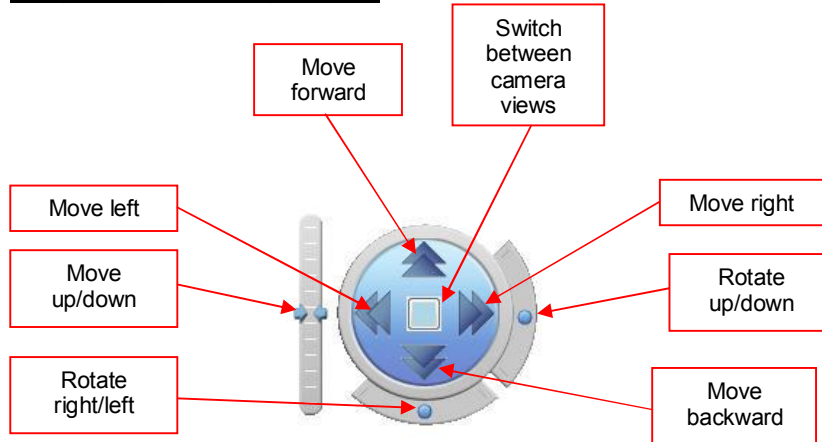
Open standalone sample project from Civil Simulate

1. Launch Civil Simulate software.
Note: If you are working with the trial version, you'll be asked to 'Activate' or 'Evaluate' the software.
2. From Civil Simulate main menu, go to 'File → Open'.



3. Browse to Civil Simulate samples folder (*C:/Program files/ Civil Simulate/ Samples*).
4. Select 'Fly-Over.cvu' file and click the 'Open' button. The flyover simulation will load.
5. Navigate around using the following navigation options:

Navigate using the Navigation tool



Navigate using the Keyboard

In order to use the keyboard for navigation,


click on 'Navigate' button

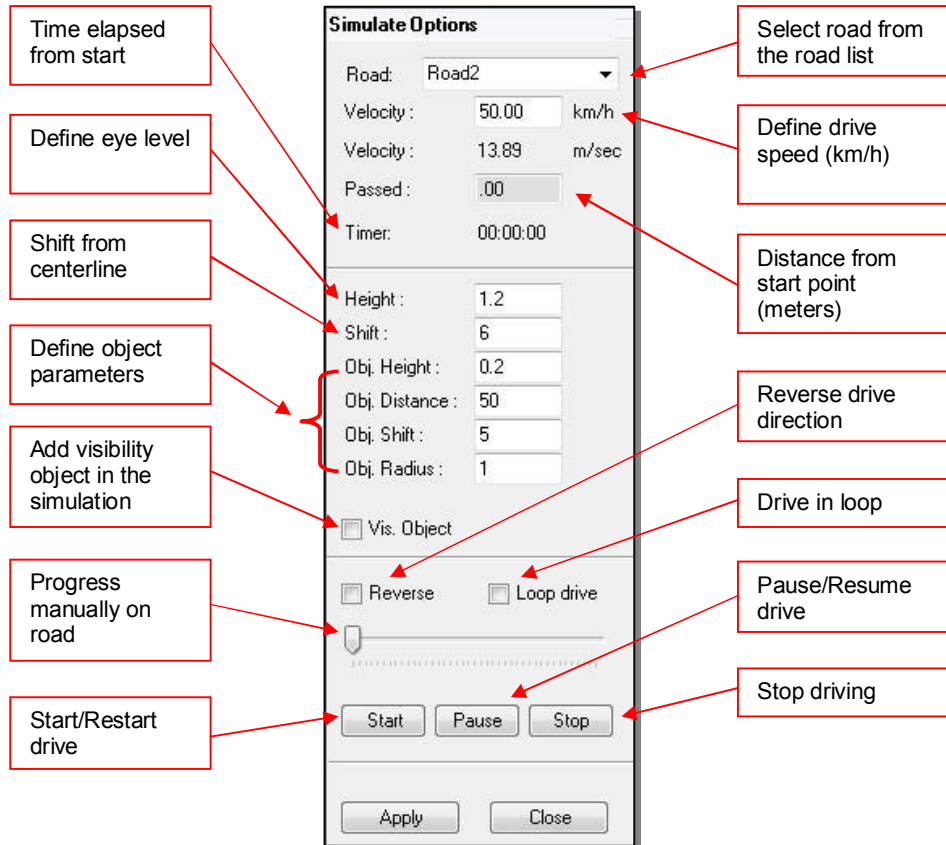


Key	Operation
Shift	Move Down
Ctrl	Move Up
S	Move Backward
W	Move Forward
A	Rotate Left
D	Rotate Right
↑	Move Forward
↓	Move Backward
→	Rotate Right
←	Rotate Left

Navigate using the mouse

Button	Operation
Left Button	Click and hold the button to rotate left/right or up/down
Right Button	Click and hold the button to move left/right or up/down
Middle Button	Click and hold the button to move forward/backward

6. **Drive Simulation** - From Civil Simulate main menu, go to 'Toolsà Drive Simulation' or click the 'Drive simulation'  button. A new window will open on the right side.
 - a. Click 'Start' button to start driving.
 - b. Change 'Road' from Road1 to Road2 and click 'Start' button again.
 - c. Click 'Close' button to exit drive simulation.



Open sample project file from AutoCAD Civil 3D

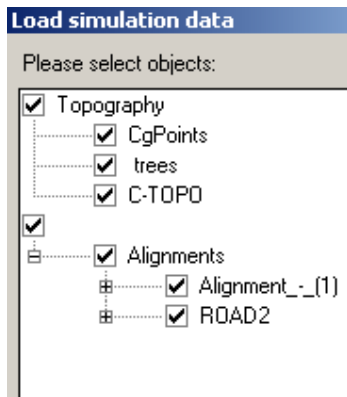
1. Launch AutoCAD Civil 3D.
2. From AutoCAD Civil 3D main menu, select 'File->Open'.
3. Browse to Civil 3D samples folder (*C:/Program files/ Civil Simulate/ Samples/ Civil-3D Samples/FlyOver*) and load the 'flyover.dwg' project.



4. From Civil 3D main menu select 'Simulate' à 'Run Simulation'

Note: If you are working with the trial version, you'll be asked to 'Activate' or 'Evaluate' the software.

5. The 'Load Simulation Data' window will open.

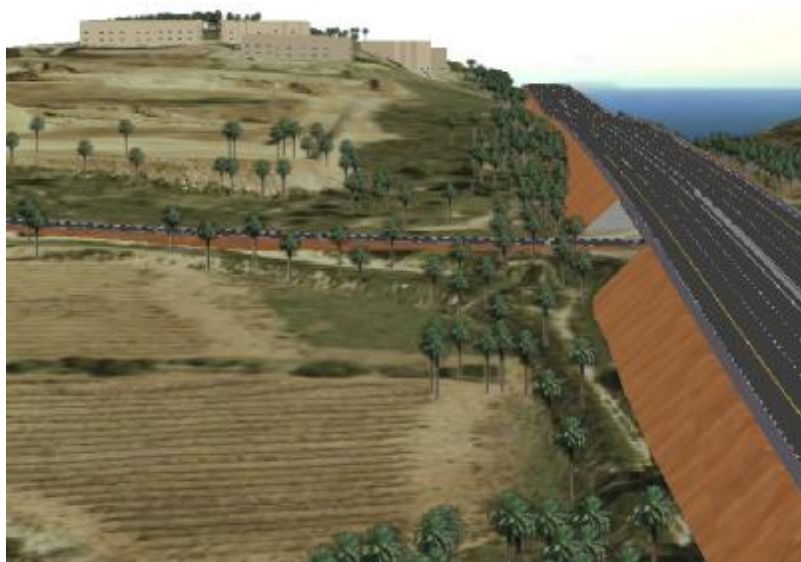


6. Click 'OK' and wait till the Civil Simulate window loads (might take a few seconds since the software is calculating all the surfaces in real-time).

Note: If you are working with the trial version, you'll be asked to 'Activate' or 'Evaluate' the software.



7. Feel free to tryout all the exciting features Civil Simulate offers.



NOTE: For detailed instructions and additional features, please refer to the user guide which is located under 'Simulate' menuàHelpàUser guide, on under 'Simulate' within AutoCAD Civil 3D.