

Installing MicroGDS 2010

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MicroGDS 2010: February 2010

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Introduction

These installation instructions describe how to install MicroGDS 2010. Before you install MicroGDS, we suggest that you first read through these installation instructions.

It is recommended that you also read the MicroGDS 2010 readme.txt file on the MicroGDS website as it may contain information that was not available when these installation instructions were produced.

Informatix believe that MicroGDS install procedures are now compatible with Microsoft Group Policy Objects (GPO), therefore allowing remote installation. If you would like any further information, please contact Informatix Software International Limited.

Minimum requirements

Informatix now provide 32-bit and 64-bit versions of MicroGDS. If you have a 64-bit machine, you can run the 32-bit version on a 64-bit machine, but not the other way around.

If you have a 64-bit machine and you have existing MicroGDS CPD databases, you might want to consider installing the 32-bit version of MicroGDS. MicroGDS CPD databases are created with Jet 4.0 and Microsoft do not provide a 64-bit version of the Jet driver.

Although the installation procedure is the same for both MicroGDS Entry Level and MicroGDS Collaboration, the system requirements are different. This section lists the minimum configuration required to install a MicroGDS product.

Before you install a MicroGDS product on your computer, ensure it has **at least** the following:

- Windows XP (SP3), Windows Vista (SP2), or Windows 7 running on hardware which meets Microsoft's minimum requirements for that operating system.
- 200 MB disk space to install a MicroGDS product
You will require an additional 400 MB disk space to install the 'Rendering textures' for MicroGDS Collaboration.
- a graphics card that has the following specification:
 - DirectX 9 compatible graphics card, with 3D acceleration
 - 128 MB graphics memory
 - DirectX 9.0c (included with the MicroGDS installation)
 - an up-to-date graphics driver for the card

If you experience graphics card problems, we recommend that you download and install the latest Windows Hardware Quality Labs (WHQL) certified driver from your manufacturer.

For working with large 3D models in MicroGDS, we also recommend the following:

- CPU with 2 or more processors, running at 2 GHz or faster
- 2 GB RAM (or 3 GB for Windows Vista)

For very large models, you will need a 64-bit operating system with 4 GB or more RAM.

Prerequisites for installing MicroGDS 2010

Before you can install MicroGDS, the following software must be installed on your computer:

- .NET Framework 3.5 (SP1)
- DirectX 9.0c (February 2010)

When you start the MicroGDS installation, the Setup program checks for the required software and can install any missing components from the MicroGDS DVD automatically.

You should also take the update to Internet Explorer 8 which is offered by Microsoft Update.

Regional settings

MicroGDS uses the properties in the standard Windows Regional and Language Options for its international settings. Amongst other things, these settings control how numbers are displayed and the format of the time and date. In MicroGDS, the following settings are of particular relevance:

- **Decimal symbol (on the Number property sheet)**
The character used to separate whole numbers from decimal places, for example 232.5 (UK) or 232,5 (Germany).
- **Digit grouping symbol (on the Number property sheet)**
The character used to group the digits in large numbers, for example 122,667. This is used when you construct dimensions.
- **List separator (on the Number property sheet)**
The character used to separate the items in a list. In the UK this is usually the comma (,). For example, one method of typing in coordinates is to use the comma to separate the X, Y, and Z coordinates (for example, 300,500,750).
The list separator is important when you use the Edit Copy, and Edit Paste Special commands to exchange data between applications.
- **Date format (on the Date property sheet)**
The order in which the day, month, and year appear, and the date separator used. For example, select dd/mm/yy to display the date as 05/10/08.
The date format is used, for example, in text blocks that use the secondary annotation ^{^(Time)} reference.

You can check or change your Windows date, time, language, and regional options from your Control Panel. For more details, refer to your Windows documentation.

Installing MicroGDS 2010

When you have checked that your computer meets the minimum system requirements, you can install MicroGDS 2010.

If you are installing MicroGDS for the first time, follow the steps below.

To upgrade from an earlier version of MicroGDS, see *Upgrading MicroGDS* on page 3.

If you are installing MicroGDS on multiple computers, guidelines are provided to standardise the installations. For details, see *Multi-user installations* on page 7.

► To install MicroGDS

MicroGDS may need to replace system files and update settings in your system registry. Therefore, ensure that you have sufficient privileges to do this.

- 1 Log on with administrator privileges.
- 2 Insert the MicroGDS DVD into your DVD drive.
- 3 Browse to either the 32 or 64-bit folder on the DVD as appropriate.
If any supporting software (listed on page 1) is not installed on your computer, the Setup program displays a list of the missing requirements.
Note that if you are installing the 32-bit version of MicroGDS on a 64-bit machine and you wish to run custom applications, you will need to install the 'MicroGDS 2010 64-bit Application Support' library. This is selected by default.
- 4 To install any items listed, click OK and follow the instructions on screen.
When all supporting software has been installed, the MicroGDS Setup program configures the Windows Installer.

- 5 The first Welcome screen offers you the option to read the Readme file. Ensure that you check it for information that may not have been available when these instructions were produced.
When you have read the details, click Next to display the software Licence Agreement.
- 6 When you have read and agreed to the software Licence Agreement, click the ‘I accept the terms...’ option and then click Next.
- 7 From the Custom Setup options, select the MicroGDS product you have purchased, to install.
To choose the destination for where a product is installed and whether or not to install subfeatures, click the icon next to the product name and select from the popup menu.
The icon indicates the install state of a feature. For an explanation of each icon, click the Help button at the bottom of the window.
Note that you cannot select a subfeature without installing the associated MicroGDS product.
The following subfeatures are available:
 - Project Administrator: This enables project managers to work with multi-user project data directly.
 - Rendering textures: available only when installing MicroGDS Collaboration.
Rendering textures comprise the standard MicroGDS textures and the Real World Textures. This requires approximately 400 MB.
You can use the Space button to view the disk space available to install the selected MicroGDS features.
- 8 Specify where you want the software to be installed.
 - to install MicroGDS to the default destination folder, click Next
 - to install MicroGDS to a different folder, click Change, locate the folder you require, and then click OK. Then click Next to continue.
If you have an existing MicroGDS installation which you would prefer not to uninstall until you have had some experience with using MicroGDS 2010, ensure that you install MicroGDS 2010 in a different folder from your current MicroGDS installation. It is recommended that you install MicroGDS in the default folder called ‘MicroGDS 2010’.
Note that after you have installed MicroGDS 2010, you will not be able to run custom applications with earlier versions of MicroGDS.
- 9 Click Install.
- 10 When installation is complete, click Finish.
- 11 If prompted, restart your system.

After installation, we recommend that you run the Microsoft Windows Update utility to ensure that you have the latest versions of all newly-installed files. You can run this from the Windows Start menu or by going to <http://www.update.microsoft.com> in a web browser.

File Associations are set up automatically during installation. This enables you to open a file associated with MicroGDS by double-clicking on the file name in Windows Explorer. If the associations are broken for any reason, you will need to re-establish them. To do this, run the File Associations program from the Applications folder on the MicroGDS 2010 program menu.

Upgrading MicroGDS

The preferred way to upgrade to MicroGDS 2010 is to uninstall any previous version of MicroGDS, and then install MicroGDS 2010 (as described on page 2). Note that you should first read *Uninstalling MicroGDS* on page 6, before you uninstall a version of MicroGDS.

Some users may prefer not to uninstall their earlier version of MicroGDS until they have had some experience with using MicroGDS 2010. The next section describes the procedures to follow if you need to install MicroGDS 2010 and MicroGDS 8.x (or later) side-by-side on a computer, and arrange for an API custom application to run against either.

If you no longer need to use applications with MicroGDS 8.x, ignore the following section. Your existing applications will work correctly with MicroGDS 2010, whether or not you rebuild them.

The API with multiple versions of MicroGDS

The procedures in this section explain how to use custom API applications with multiple versions of MicroGDS.

.NET applications

The considerations in this section apply to VB.NET, C#, and Managed C++ applications.

CadLink and CadFiler

These API functions are provided, for .NET applications, by the *MGDSNet* library assembly.

When a .NET application is built, it remembers the versions of library assemblies (such as *MGDSNet*) it was built against, and will naturally try to run against that same version, even if a later one is installed. When MicroGDS 2010 is installed, however, we provide a *publisher policy file* which specifies that applications built against earlier versions of *MGDSNet* are to use the MicroGDS 2010 version instead.

The result of this publisher policy is that an application built on a MicroGDS 8.x or later application will continue to function, without further intervention, if MicroGDS 2010 is installed and used. This is convenient for users who simply upgrade their version of MicroGDS and cease using the older one. However, it also means that, once MicroGDS 2010 is installed, that application will not operate with earlier versions of MicroGDS; any attempt to start a conversation with a MicroGDS 8.x session will fail.

If you wish to continue to use the application with MicroGDS 8.x, you must disable the effect of our publisher policy. You can do this by placing a suitable *application configuration file* in the directory containing the application executable. The contents of the file should be as follows:

```
<?xml version='1.0' encoding='UTF-8' standalone='yes' ?>
<configuration>
  <runtime>
    <assemblyBinding xmlns='urn:schemas-microsoft-com:asm.v1'>
      <dependentAssembly>
        <assemblyIdentity
          name = 'MGDSNet'
          publicKeyToken = '331b4a25733fc606'
          culture = 'neutral'
        />
        <publisherPolicy
          apply = 'no'
        />
      </dependentAssembly>
    </assemblyBinding>
  </runtime>
</configuration>
```

For example, if you have an application `D:\Applications\Spiral.exe`, you need to create a text file `D:\Applications\Spiral.exe.config` (the name is important) which contains the exact text shown above. The important part in the above is the `<publisherPolicy apply = 'no' />` which causes the application to ignore our publisher policy and continue to use the version of *MGDSNet* against which it was built.

Note that if you build an application against the MicroGDS 2010 version of MGDSNet it will always use that version, and cannot be persuaded to run against a MicroGDS 8.x session. If you need to create new applications which can be used, using the mechanisms described above, with either version of MicroGDS, then you must build them against the MicroGDS 8.x version of MGDSNet.

CadEvent

Unfortunately, the situation with the event manager is less satisfactory. These functions are provided by the CADEV060 OCX which uses Microsoft's COM mechanisms, and it is not possible to have more than one version of a particular COM object available concurrently. Once you have installed MicroGDS 2010 on a computer, the MicroGDS 8.x version of the event manager becomes unavailable.

If you need to re-enable it in order to run an application against a MicroGDS 8.x session, you will need to execute the command:

```
regsvr32 "C:\Program Files\Informatix\MicroGDS 8.0\ Programs\CADEV060.OCX"
```

If you have not installed MicroGDS 8.x in the default location, adjust the path appropriately. To re-enable MicroGDS 2010 again, execute a similar command for the CADEV060.OCX file in the MicroGDS 2010 installation directory.

These commands require system administrator privileges.

Legacy applications

The considerations in this section apply to VB6 and unmanaged C++ applications.

CadLink and CadFiler

These API functions are provided, for VB6 applications, by the library DLLs cadlnk60 and cadflr60. When a traditional application is built, it records only the names of the DLLs it uses. When the application is run, it searches for a DLL of that name in the following places:

- 1 The *application folder* containing the application executable.
- 2 The windows *system directory* (for example, C:\WINDOWS\SYSTEM32).
- 3 The folders in the *PATH* environment variable.

When MicroGDS is installed, it places the cadlnk60 and cadflr60 DLLs in the system directory, updating any copies from previous releases. This enables applications to find and use these DLLs without any other special action on their part, and it means that users who upgrade MicroGDS can keep using their existing applications with MicroGDS 2010. However, it also means that, once MicroGDS 2010 is installed, applications run on that machine will not operate with earlier versions of MicroGDS—any attempt to start a conversation with a MicroGDS 9.x session will fail.

If you wish to continue to use the application with MicroGDS 9.x, you need to arrange that the application loads the MicroGDS 9.x versions of these library DLLs. The simplest way to achieve this is to make a copy of the version 9.x DLLs in the folder containing the application executable. (Note that editing the PATH environment variable will not work, because files in the system directory are found first.)

If you have already installed MicroGDS 2010, the cadlnk60 and cadflr60 DLLs will have been upgraded, so copying them will serve no purpose. There are, however, copies of the MicroGDS 9.x versions of these DLLs, called mgdsfiler08.dll and mgdslink08.dll, in the system directory. So you need to copy:

From the system directory	To the application folder
mgdsfiler08.dll	cadflr60.dll
mgdslink08.dll	cadlnk60.dll

Note that, in contrast to .NET applications, it does not matter which version of `cadlnk60` and `cadflr60` your application was built against. It will load these DLLs from the application folder if they are found there, and from the Windows directory if not. Of course, if you have used functions which are new at version 2010, then you will get errors if the application tries to use the version 9.x DLLs at run time.

CadEvent

The considerations for CadEvent are generally as described above for .NET applications. Note that the CADEV060 OCX is never located by searching directories, so copying it serves no purpose. The version used will always be that most recently registered (using `regsvr32`).

There is an exception if you have used the C++ callable version of the event manager implemented by the `cadevt60` DLL instead of the CADEV060 OCX. This is only likely if you have written your application in C++.

If you have used this C++ callable interface, you can arrange to use the MicroGDS 9.x version by copying the file `mgdsevent08.dll` from the system directory to your application folder, renaming it as `cadevt60.dll`.

Uninstalling MicroGDS

You can uninstall any version of MicroGDS at any time. However, before you do so, ensure that you read the following notes:

- If you have added any files to your current MicroGDS folder that you want to use with MicroGDS 2010, copy these to your new installation folder before you uninstall your current version of MicroGDS.
- When you uninstall MicroGDS, any Library files which were installed with MicroGDS are removed. If you have instance objects in your documents that point directly to the library files, the links will be broken. To avoid this problem in the future, we recommend that you copy the libraries from the installation folder to a suitable location. This will ensure that the library data remains available when future MicroGDS releases are installed.

Alternatively, copy the folders and files before you uninstall your current version of MicroGDS. Then, when you have uninstalled MicroGDS, either:

- copy the folders and files back to their original locations
- or change the instance paths to point to the new locations

- Due to a change in the way MicroGDS saves user preferences and screen layouts, it is not currently possible to migrate settings from previous versions to MicroGDS 2010.
- When you uninstall MicroGDS, the MicroGDS file associations are lost. If you want to use another installed version of MicroGDS, you will need to re-establish the file associations. To do this, run the File Associations program from the Applications folder on the MicroGDS Program menu.
- If you are uninstalling MicroGDS on a machine that has Windows Vista installed, a message may be displayed informing you that an unidentified program wants access to your computer. This is due to the way in which Windows Installer caches Windows Installer (MSI) packages for future transactions which makes the certificate on the package invalid. This message can be ignored.

Multi-user installations

If you have a multi-user licence and are installing on to several computers, you might prefer to store MicroGDS supporting data in a central location rather than on each individual workstation. The individual workstations can be set up to refer to the server on which the MicroGDS data is stored.

There are two processes involved:

- extracting the MicroGDS data from the DVD to a centralised location
- installing MicroGDS on each workstation, referencing the centralised data

The following is provided as a guideline for setting up multiple user installations.

Extracting MicroGDS data

To save disk space, MicroGDS 2010 is compressed on the DVD. To see the content of MicroGDS, you can uncompress the data.

Note that uncompressing MicroGDS does not uncompress other components on the DVD.

► To uncompress MicroGDS

- 1 Insert the MicroGDS DVD into your DVD drive.
- 2 At a command prompt, change to the appropriate folder (32 or 64-bit) on your DVD and type:

```
msiexec /a MicroGDS2010_32bit.msi
```

or

```
msiexec /a MicroGDS2010_64bit.msi
```

After a few moments, the Installation Wizard is displayed.
- 3 When the Installation Wizard is displayed, click Next.
- 4 Specify the folder into which MicroGDS will be uncompressed.

Installing MicroGDS on the workstations

Large organizations may wish to install MicroGDS on many workstations, each of which might access centrally stored data, such as:

- Licence keyfiles
- Texture libraries
- Symbols, fonts, and standard style files

If you wish to provide a central location for Textures and Fonts, you should create a domain level settings file which references them. By making the settings a policy, users will not be able to override these with local copies.

You can also define the location of licence information by creating a file in the following folder which contains the name of the key file:

```
COMMON_APP_DATA\Informatix\MicroGDS\11.0\licence
```

You may wish to consider using remote installation mechanisms based on Microsoft GPO, so that MicroGDS installation is not carried out at user workstations at all. Due to the number of different products available to control remote installations, it is beyond the scope of this document. However, Informatix would be willing to advise customers on request.

What else is on the MicroGDS 2010 DVD?

The MicroGDS 2010 DVD offers the following components which are in addition to the installation files.

Piranesi Lite Piranesi is an interactive paint system that you can use to produce exhibition quality images from your three-dimensional models. You can save your MicroGDS models to Piranesi EPix file format using the Vedute utility, which is packaged free with Piranesi Lite.

Prerequisites A prerequisites folder containing supporting applications (listed on page 1) that must be installed on your computer before you can run MicroGDS 2010.

Data Upgrade Programs The Setup program scans your computer for the prerequisite requirements and prompts you to install any missing items before installing MicroGDS.

An installation file containing utilities that enable you to upgrade any files created in versions of MicroGDS prior to 6.0.

You must upgrade the files (prior to 6.0) if you want to use them with MicroGDS 2010.

For details about upgrading files, refer to Help.

► To install a component from the MicroGDS DVD

- 1 Insert the MicroGDS DVD into your DVD drive.
- 2 In Windows Explorer, go to your DVD drive and open the folder you require.
- 3 Double-click the executable file (.exe) to begin the installation.
You will be guided through the installation.
- 4 If you are prompted, restart your system.

Following a MicroGDS 2010 installation, it is recommended that you visit the Windows Update web site to access the most recent patches to the libraries used by MicroGDS.

Data compatibility

In MicroGDS 2010, you should be aware of the following data compatibility issues.

Data exchange

In MicroGDS 2010, you can read and change data created with MicroGDS 10.x. There is no conversion required.

However, if you install the 64-bit version of MicroGDS, you will not be able to read existing MicroGDS CPD databases. These databases were created with Jet 4.0 and Microsoft do not provide a 64-bit version of the Jet driver.

MicroGDS releases since 6.1 can read files created by MicroGDS 2010, but some data may be lost if they are resaved. For example, styles often change between MicroGDS releases and if you open a MicroGDS 2010 document in an earlier version of MicroGDS, you may see error messages reporting invalid or extra data found which has been ignored. If you then resave the file, the extra data will be lost.

If you have any files created in versions of MicroGDS prior to 6.0, you must upgrade the files if you want to use them with MicroGDS 2010. To upgrade your files, install the Data Upgrade Programs from the MicroGDS 2010 DVD and then upgrade your files. For more details, see *Upgrading files* in MicroGDS Help.

XML support

The XML format has changed to reflect new features in MicroGDS 2010. The supplied DTD has been updated as MicroGDS2010.dtd, a copy of which can be found in the MicroGDS Programs folder. The DTD is also available from the MicroGDS web site at www.microgds.com

The MicroGDS 2010 program menu

The MicroGDS 2010 program menu appears on your Start menu when you have completed the installation.

The programs and utilities that are shown on the MicroGDS 2010 program menu reflect the type of installation you selected.

The following programs, utilities, and menus can appear on your MicroGDS 2010 program menu:

- the MicroGDS program(s)
- the Read Me file

The Read Me file contains information that was not available when the user guide and help text were produced.

- Help Systems

A number of Help systems that you can use to find information.

- the Applications menu

A number of Visual Basic and .NET programs supplied with MicroGDS. Each program has a corresponding document that tells you how to use the program. You can access the documents directly from the Sample Applications folder in your MicroGDS 2010 installation.

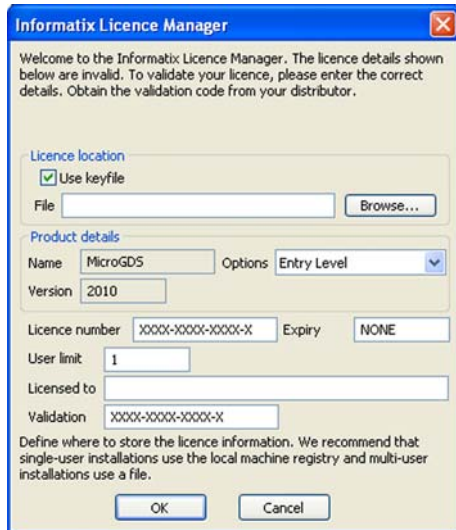
The Applications menu also supplies the following:

- Chat enables MicroGDS users on the same network to send and receive messages.
- DXF Scan is supplied to help you when you import or export DXF/DWG files.
- RenderCube renders sets of images for use in Renderer Environment Shaders and creates QuickTime Cubic Panoramas, if QuickTime™ is installed.
- File Associations are set up automatically during installation. You can open a file associated with MicroGDS by double-clicking on the file name in Windows Explorer. If the associations are broken for any reason, the File Associations program enables you to re-establish the file type associations with MicroGDS.
- ReadXSVS is supplied to import 3D XSVS scenes into MicroGDS.
- Site Modeller reads text primitives from a MicroGDS document and interprets them as spot heights (positions in 3D space).

Using the spot heights collected, a model of triangles in 3D space is constructed. The model can be written back to MicroGDS as line primitives, or as a meshed or solid clump.

Informatix Licence Manager

The first time that you start MicroGDS, the Informatix Licence Manager is displayed. For example:



The Licence Manager uses licence information to control the usage of MicroGDS at your site. MicroGDS allows you a 30 day trial period in which to supply the licence information. The number of days remaining in the trial period is shown on the Licence Manager.

Note that you need to log on as administrator to enter the licence details.

If you are upgrading from an earlier version of MicroGDS, you will require a new validation code. Your original validation code will not work.

Enter your licence details as follows:

- If you are installing an educational version, ensure that you select the appropriate educational licence from the Options list, otherwise the validation code will fail.
- You must type your company name exactly as agreed with your distributor.
- Contact your distributor with your Company name and the licence number on the box. Your distributor will supply you with the necessary validation code.
- The number of users licenced to use MicroGDS, and the expiry date (if MicroGDS is licenced for a limited period only).

If you do not complete the Licence Entry information, it is redisplayed each time you start MicroGDS.

If your licence permits multiple installations (the number of which is shown in the User limit box), you can write the licence details to a key file and then use this file for each subsequent installation.

► To create a key file

- 1 Select the 'Use keyfile' check box.
- 2 In the File box, type the full path for the key file.

It is recommended that you use the *.key* file extension.

You should save the file to a location that can be seen by other computers on the network.

MicroGDS will automatically create the file with the given filename, in the specified location.

- 3 Enter the complete licence details in the Licence Manager.
- 4 Click OK.

The licence information is written to the key file.

When you install MicroGDS on subsequent computers, you can select this file to read the details from the key file, and then, if required select the 'Use local machine registry' check box to write the licence details to the user's registry.

If you click OK on the Licence Manager and the licence details are invalid, you are asked if you want to return to the licence entry form:

- click Yes to return to the Licence Manager and enter the information
- click No to continue to use MicroGDS within your trial period

► **To display information about the licence**

- 1 Start MicroGDS.
- 2 On the MicroGDS Help menu, click About MicroGDS.
The MicroGDS dialog box is displayed.
- 3 To display further information about the licence, click Licence Details.
The Licence Details dialog box is displayed.
- 4 To close the Licence Details dialog box, click Close.
- 5 To close the MicroGDS dialog box, click OK.

If you do not supply the licence information within 30 days, you will no longer be able to start MicroGDS. Contact your MicroGDS distributor who will provide you with a validation code.