

MSCAD 2005 Upgrade Information

What's new in MSCAD 2005?

As a company that wants the best for our customers, we decided that it was time to closely look at the cad engine and confirm that it meets our customer's expectations, as well as our own. Some of the questions we asked ourselves were:

- Is the CAD engine providing our customers with all the functionality they need?
- Is the CAD engine stable?
- Is the CAD engine easy to customize?
- Does the CAD engine provide MicroSurvey with a platform that is competitive with other products on the market?
- How compatible is it with AutoCAD?

So we started looking at alternatives just to make sure we were not missing out on something that could breathe new life into our products. We looked at a CAD engine called IntelliCAD and we soon realized we may have found something that could take MSCAD to a new level.

Who and What is IntelliCAD?

The IntelliCAD Technology Consortium is an independent organization committed to promoting a cooperatively developed CAD engine. In July we signed up with IntelliCAD as an API member which gave us access to IntelliCAD installs and technical information about the product. We decided that we would build a test version running in IntelliCAD and began development of an alpha version of MSCAD 2005. It took us all of July and August to build the alpha version and we began our in-house trials in September.

To help us learn more about IntelliCAD, Darcy Detlor attended the World IntelliCAD Conference in September. Attending the meeting was very beneficial and he came back to Canada with a new outlook on MSCAD's future.

- He learned that IntelliCAD has a strong development team, almost twice as large as FelixCAD.
- They run extensive regression tests on their cad engine. Over 46,000 drawings are used during their testing sessions.
- They also use hundreds of script files that test the integrity and stability of the CAD engine.
- They have an online web site that allows their Commercial members to access their bug database to see what bugs have been reported, and what bugs they are currently working on.
- They are currently working on a new version that has incredible speed enhancements.
- They hate bugs as much as we do, and try to fix them as quickly as possible.

IntelliCAD has been around for many years and they have a very loyal following. In mid November we joined the IntelliCAD Technology Consortium as a Commercial Member which gives us full access to the source code. This is something that we have never had before and it will give us even more flexibility and control over the product.

To learn more about the consortium visit the web site at www.intellicad.org.

What will the new CAD Engine do?

Just a few of the IntelliCAD Engine Improvements:

- Offsets now works on 3D linework.
- Object selection can now be done based upon their properties (color, linetype, etc.).
- New Align command.
- Ray and Construction lines.
- Dynamic wheel zoom that zooms into the location you are pointing with your cursor.
- Trim and extend to 3D objects. No more need to flatten or use SCALEZ.
- Dashed linetype on curved polyline support.
- Multiple Layout tabs (Paper Space Sheets).
- Enhanced distance entry. For example if you use the line command, when prompted for the end point, simply type the distance and a line will be drawn using this length.
- Line Weights while viewing or plotting, allows you to specify line thickness based on layers instead of line color.
- IntelliCAD Explorer which can be accessed from the CAD Tools menu. Provides a common area where you can access all your settings for layers, linetypes, text styles, blocks, dimension styles, views and coordinate systems.
- Right-click support that allows you to right click on objects. This brings up a context menu containing commands that you can use to edit the object.
- Improved raster support. Support for BMP, CALS Type 1 (.cg4, gp4, .cal, .g4), EOSAT Ver B, JFIF, PCX, PNG, Sun Raster and SPOT.
- Geo-Referenced raster support. The new raster engine can read embedded position information, or the user can specify a separate position file. Position files that we support are RAT, TFW and RES.
- Customizable toolbars, from inside the program, as you work.
- No more annoying Drawing_0.
- Increased speed.
- MSCAD 2005 now creates native DWG files.
- Improved DIM options
- Improved Print/Plot options
- More hatch patterns
- And much more ...

So will it be a big adjustment learning MSCAD 2005?

Overall you should not find it difficult to get up to speed with MSCAD 2005. The main interface, menus and toolbars are essentially the same as the ones you have been using in MSCAD 2004. There are no major new survey related functions added (just a few enhancements); all our development time has been spent integrating our existing code with IntelliCAD.

What's up with the three versions of MSCAD 2005?

MSCAD 2005 is available in three versions: Premium, Standard and Basic. All three versions will have a similar look and feel which will make it easier for companies who have multiple versions of MSCAD. MSCAD 2005 Standard has everything the Premium version has minus the Design and Modeling functions. MSCAD 2005 Basic has everything the Standard version has minus the powerful CAD drawing commands. The upgrade from all previous versions of MSCAD will be to MSCAD 2005 Premium. The upgrade from MS 98 or MSX 2001/2002 will be to MSCAD 2005 Basic.

Will MSCAD 2005 overwrite my existing copy of MSCAD or MSX?

MSCAD 2005 will install by default to C:\Program Files\MicroSurvey\MSCAD2005. We recommend that you leave it there. This will allow your MSCAD 3.1, 2001, 2002, or 2004 to continue to run in its original folder so you can transition cleanly and easily.

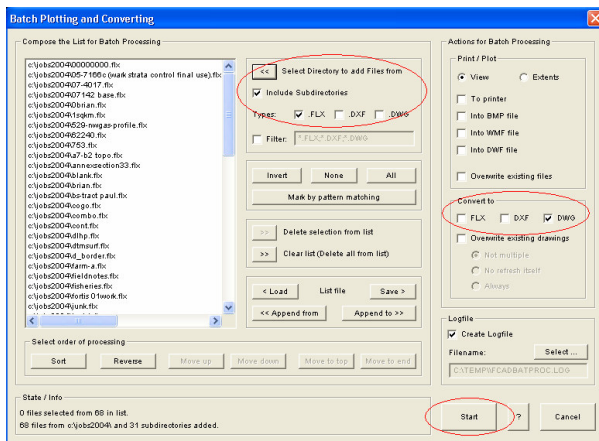
Should I un-install my current version of MSCAD 3.1, 2001, 2002, or 2004 prior to installing MSCAD 2005?

We suggest keeping your current version installed until after you install MSCAD 2005 and have tested it to make sure it installed ok. You will need to use your previous version of MSCAD to convert your FLX files to DWG so that they can be opened in MSCAD 2005. When you're satisfied that everything is running ok, you can un-install your older version.

What will happen to all my old jobs? Can I still use them?

MSCAD 2005 uses the IntelliCAD engine which works with DWG files rather than FLX files, so you will need to convert them from FLX to DWG within your previous version of MSCAD. This can be done very easily using the Batch Processing abilities in MSCAD 2004 to convert your FLX files to DWG:

- 1) Open up MSCAD 2001/2002/2004
- 2) Press Cancel on the Project Manager window without opening any drawings.
- 3) Pause MSCAD by going to File > Batch Processing > 1. Pause MSCAD
- 4) Start up the Batch Processing command by going to File > Batch Processing > 2. Batch Process Files.
- 5) You will be asked whether or not to save the current drawing. If the only file that is open is Drawing_0.flx, then you can choose "Don't save the current drawing (discard changes)". Then press Continue.
- 6) Ensure that "Include Subdirectories" is checked, so that any files in nested subdirectories will be included in the conversion process.
- 7) At "Types:" ensure that FLX is checked, and that DXF and DWG are unchecked.
- 8) Press the "Select Directory to add Files from" button and select your data directory (for example, c:\jobs2004), and press OK. Repeat this step for any other data directories on your computer.
- 9) In the "Convert to" section, select DWG
- 10) Press Start to begin processing your files. You will see your drawings open one at a time as they are saved to a DWG file. This may take quite some time if you have a lot of FLX drawings.
- 11) After batch processing is complete, go to File > Batch Processing > 3. Restart MSCAD



For more information, refer to the online tech note "Batch Conversion from FLX to DWG"

What about the drawing file? Is it different for 2005?

Yes, MSCAD 2005 uses a new CAD engine called IntelliCAD. IntelliCAD is completely compatible with AutoCAD, and it uses industry standard DWG drawing files. Older versions of MSCAD can read DWG files, but you will need to convert them to an older DWG format depending on your version of MSCAD. From the File Menu you can use the SAVEAS command and save your project back to previous DWG versions. Refer to the table to see what DWG version can be handled by your version of MSCAD.

MSCAD Version:	Compatible DWG version:
MSCAD 3.1	
MSCAD 2001	R14 DWG
MSCAD 2002	2002 DWG
MSCAD 2004	2004 DWG
MSCAD 2005	2006 DWG

What about the database file? Is it different for 2005?

No, MSCAD 2005 uses the same database file as did MSCAD 2002 and 2004. However, if you need to open a MSCAD 2005 drawing in a previous version always use the SAVEAS command in the File Menu, and save it to an older DWG format, as discussed above.

If you need to open your drawing in MSCAD 3.1 or 2001, you will need to create the older-style .PST database file. To do this, run the command MsPoints > Other Program Ties > MicroSurvey Database MSD to PST.

What about all the other files? Are they different for 2005?

All other files types created by MSCAD 2005 such as surface files, alignment files, batch files etc, are completely interchangeable between MSCAD 2002, 2004 and 2005.

How do I install the new version?

To install, you must be logged in with an Administrator account. Please contact your network administrator if you do not have Administrator access. Insert the CD that you received when you purchased the upgrade into your CDROM drive. The install wizard should automatically start for you. If it doesn't simply browse to your CDROM drive and execute the setup.exe file. Follow the on-screen instructions to step through the installation. Once the install is complete you will need to register your version of MSCAD 2005.

Do I really need an Administrator account?

You need an Administrator account only to install MSCAD 2005 and then to run it for the very first time on your computer. After that, you can use your normal account; it will not matter whether it is an Administrator or Limited account.

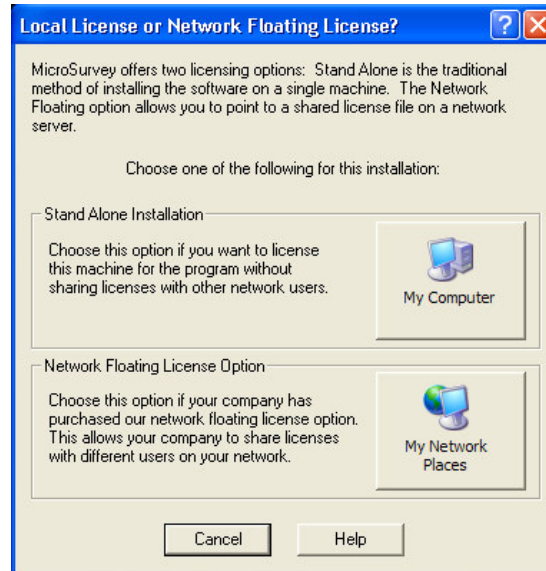
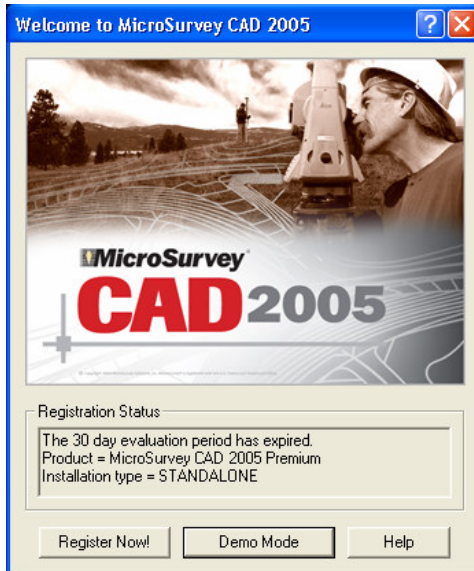
I inserted the new CD in my drive and nothing seems to happen. Is the CD damaged or did I do something wrong?

If your CD does not automatically start the install wizard you can try the following. 1) Insert the CD into your drive and close the CD door while holding the <shift> key down on the keyboard. 2) Go to the Windows Explorer program and change to the CD drive that contains your new CD. 3) Double click on the setup.exe file to start the install procedure.

If this doesn't work you may have a damaged CD, contact your sales representative for another CD.

I've got it installed. How do I register it?

Once installed, the first time you start the program you will see our startup dialog. Press the **Register Now!** button. You will then see a Local or Network License dialog where you can choose to register it either as a Stand Alone Installation or as a Network Floating License. If you do not know which license type to choose, select Stand Alone Installation by clicking on the My Computer button. Follow the steps and you will be registered in no time.



Press the “Create Registration Form to FAX or Email” button at Step 1, fill out the form it gives you and send it in to us. We will contact you with the appropriate Registration Keys, which you can enter in at Step 2.

How do I register it with my network license?

The floating network license file must be located in a mapped network drive accessible by your computer. If it is not already mapped, open a Windows Explorer or My Computer window and go to Tools > Map Network Drive. Please contact your network administrator for specific information on what drive and folder need to be mapped.

Once MSCAD 2005 is installed, the first time you start the program you will see our startup dialog. Press the **Register Now!** button, then press the My Network Places button. Browse to the mapped directory containing your floating license file (microsurvey.lic) and press Open. You will see a message indicating that you are now registered via a network license, and reminding you to not disconnect from the network before exiting MSCAD 2005. The program will remember where to look for the network file, and the next time you start the program all you will need to do is press the **Register Now** and **My Network Places** buttons. You will not be prompted again for the network location unless that directory changes or is no longer available.

Do you still have hardware locks available?

No. Hardware locks were discontinued with the release of MSCAD2004 but with MSCAD2005 we now have many new options that will assist you. You can even check out a licence to a laptop for a period of time.

Can I continue to use my older version of MSCAD while MSCAD 2005 is installed?

Yes you could, but there is no need to do so, once you have batch converted your FLX files to DWG. MSCAD 2005 has everything in it that the older version did as well as hundreds of improvements and new features. You may run the older version for a period of 30 days while you are becoming more comfortable with the new version. At this time you must uninstall the old version. You are not permitted to run the two versions on two computers. This is not a new license - it is an upgrade and replaces the old version.

I have taken many hours to setup my AutoMap library to work as desired. What is going to happen to all that work?

All you need to do is copy the CSV file that you created in MSCAD 3.1, 2001, 2002 or 2004 into MSCAD 2005. Then as you have done before, load it and use it anytime you require. If you had saved your CSV file under the name MSCAD.CSV then we recommend that you give it a new name in MSCAD 2005.

You will need to update the paths for the symbols that may be associated with your Automap library if you used MSCAD specific symbols. For example, if you created your library with MSCAD 2004 you may see something like: C:\MSCAD2004\MSCAD\blocks\ICI_AP.FLX for a symbol path. When you remove MSCAD 2004 from your computer the path will no longer exist and you will need to update your AutoMap library to look in C:\Program Files\MicroSurvey\MSCAD2005\MSCAD\blocks\.....

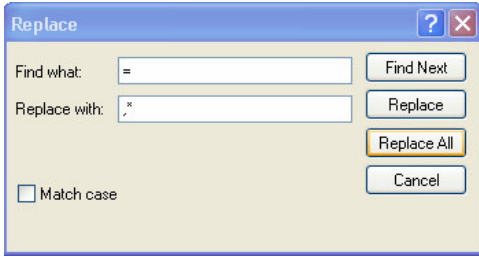
MSCAD 2005 will automatically scan through your AutoMap library to convert the symbol paths to use DWG files rather than FLX files.

New capabilities were also added to AutoMAP and when you read in an older library file, it will automatically have these new fields added to it. You would then need to modify these fields in the AutoMAP Library Editor, to take advantage of them.

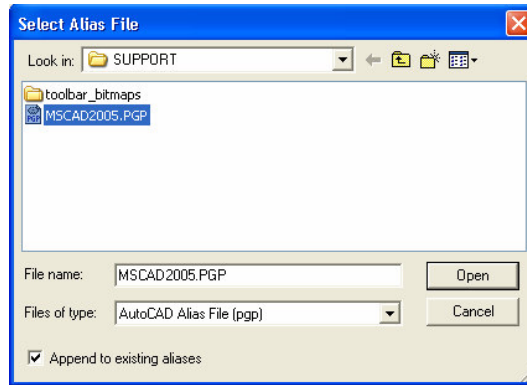
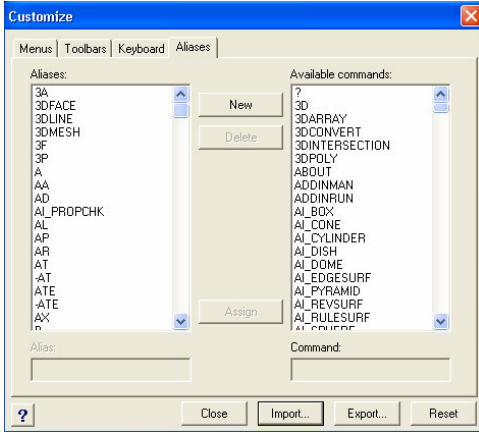
I have setup many aliases in MSCAD 3.1, 2001, 2002, and 2004 and I really would prefer not to have to do them all again in MSCAD2004. Is there a quick way to convert these over so I don't lose them?

The original alias's are saved in a file called SAMPLE.KEY or MicroSurvey.key located in your MSCAD----\CFG folder. All you need to do is open this file in WordPad, find the section marked [ALIAS COMMANDS], highlight the alias's you wish to save, with your mouse, and then Copy it to the clipboard. Then open the MSCAD2005.PGP file found in the Program Files\MicroSurvey\MSCAD2005\SUPPORT folder. Pick on the last line under the list and Paste your old list into the new file. Because the new IntelliCAD engine requires this list to be in a different format, click on Edit > Replace, in the "Find what:" field enter = and in the "Replace

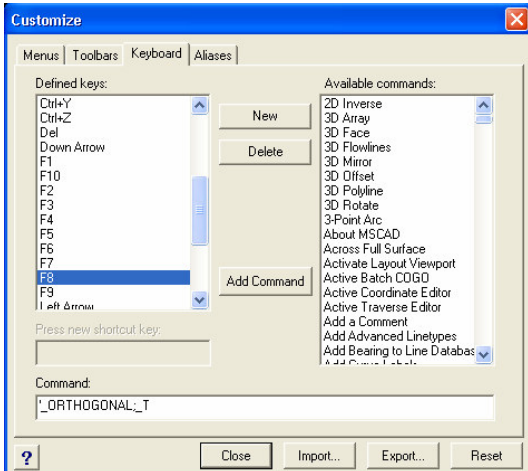
with:” field enter ,* then press Replace All. Then check for any duplication of keys and correct appropriately. Close the file and save your changes.



Now open MSCAD 2005, and go to Cad Tools > Customize. Click on the Aliases tab, and press the Import... button. Change the "Files of type:" to AutoCAD Alias File (pgp), then browse to the file C:\Program Files\MicroSurvey\MSCAD2005\SUPPORT\MSCAD2005.PGP and press open.



I have setup several Hotkeys in MSCAD3.1/2001/2002/2004 and I really would prefer not to have to do them all again in MSCAD2005. Is there a quick way to convert these over so I don't lose them?



Because MSCAD 2005 is using the new IntelliCAD engine, hotkeys created in previous versions can not be used, so you will need to manually re-enter them in MSCAD 2005. Open MSCAD 2005, and go to Cad Tools > Customize, and click on the Keyboard tab. To add a new hotkey, press the New button, then press the key you want to add, then highlight the desired command from the "Available commands" list and press the "Add Command" button. If you want to change the command for an existing key, highlight it in the "Defined keys" list, erase its entry from the "Command" field, then highlight the desired command from the "Available commands" list and press the "Add Command" button.

If you want to view or print your original hotkeys as a reference, they are saved in a file called SAMPLE.KEY or MicroSurvey.key located in your MSCAD----\CFG folder. All you need to do is open this file in WordPad or Notepad, and find the section marked [FCAD FctKeys] or [ACCELERATOR KEYS]. Some key combinations setup in MSCAD3.1, 2001, 2002, or 2004 may not be available in MSCAD 2005.

I have customized a Palette in MSCAD3.1, 2001, 2002, 2004 and created a new one of my own. What do I do to save them so I can use them in MSCAD2005?

Because MSCAD 2005 is using the new IntelliCAD engine, palettes/toolbars created in previous versions can not be used. It is very easy to create new toolbars in 2005, on the fly, as you work.

I have several copies of MSCAD 3.1/2001/2002 and a few copies of MS98 / MSX. Can I work in MSCAD2004 and then have another person continue in MSCAD 3.1/2001/2002 or MS98 / MSX?

Yes we can save the file back to the older version from MSCAD 2004 by going under the File menu -> SaveAs and save back to an older DWG format. We do suggest that you upgrade all your copies to the latest version especially if you have MS98, MSX 2001, MSCAD 3.1 or MSCAD 2001. These versions have our older style database (PST) that can make it difficult to keep track of your database files as each project will have a PST and MSD database.

I was lucky enough to have a prerelease or Beta copy of MSCAD 2005. What do I do now with the new CD?

We appreciate your assistance as a Beta tester and we thank you all for your assistance in getting MSCAD 2005 completed. We do recommend that you uninstall your beta copy of MSCAD 2005. Any changes you have made to customize MSCAD 2005 should be backed up. We recommend that you copy the changes out to a safe location prior to installing the new CD and then if desired, copy the files back in over the new ones, after looking at what we have done.

I see that MSCAD 2005 defaults to a working folder of JOBS2005 for my new jobs. Can I still place my jobs in my old folders?

Yes. The default is Jobs2005 but you can save your projects to any directory you want. The MicroSurvey Project Manager now shows the recent jobs you have worked on and allows you to open them directly without having to go to that folder manually.

How do I remove my old MSCAD Version?

Please use the Control Panel > Add / Remove Programs option and remove the program. This will remove any extra files that we installed into the Windows System directory. After the program is removed, there will be a few configuration files left in the MSCAD31, 2001, 2002 or 2004 directory. After you have examined the remaining files in this directory and subdirectories to verify that you haven't placed any valuable files in here, you can delete this directory and subdirectories.

Do I have to reset all of my Labelling Defaults so the Bearings, Distances, Point Numbers, Elevations, and Descriptions all have the size and style of lettering I desire, and had in my previous version?

We do ship the program with our defaults preset to make it easier for new customers to get started immediately. However, it is very simple to reset them back to your desired default settings that you setup in your previous version. All you need to do is take an old job that had the desired labelling defaults and open it in MSCAD 2005. Then go to the MsTools Menu -> MicroSurvey System Defaults -> Save as Default Configuration. This will set it so all new jobs use your previous settings.

I want to plot my first MSCAD 2005 drawing. Can I get my MSCAD 3.1/2001/2002/2004 plot configuration for line width and colors into MSCAD 2005?

Because MSCAD 2005 uses the new IntelliCAD engine, printing is handled differently than in previous versions, and so your previous plot configuration files are not compatible. Please refer to our online Tech Note "Printing / Plotting in MSCAD 2005" to review all of the changes and enhancements.

I see that the menus have changed for MSCAD 2005.

If you are upgrading from MSCAD 3.1, 2001, or 2002 then yes, the menus have changed. We have spent a great deal of time re-organizing the menus in MSCAD 2004 so they're more intuitive to use. In the short term, you will be a little lost but take some time and examine how they've been organized.

If you are upgrading from MSCAD 2004, then only the IntelliCAD menus have changed, including File, Edit, View, Draw, Modify, Settings, and Cad Tools. All of the MicroSurvey menus have retained their MSCAD 2004 organization (or very minor changes).

Where is the Options Bar?

The option bar was a FelixCAD feature. MSCAD 2005 no longer has one but you will see that it has an option menu that appears which is just as useful...

What is this Floating Menu? Can I get rid of it?

First thing you will notice when you use MSCAD 2005 is a floating menu that will appear as you use different commands at the command line. It does operate similar to the FelixCAD option bar, but it might annoy some users. If you want to turn it off, type Config at the command line, and turn off "Display prompt boxes" in the display tab.

How do I load Toolbars?

You can load toolbars by going to the menu that the palette resides in. You will note that each menu item has a toolbar or toolbars listed towards the bottom of the menu. For example to open the Area Toolbar you would go to the MsCOGO Menu and choose the Area Toolbar command.

How do I play the training movies?

For MSCAD 2005, the help movies have been built into the help system. Not only is there a topic listing the available movies you will find that individual topics will have a link to corresponding movies.

I've heard the online help file was improved for MSCAD 2005?

Topics in the help file now contain links to training movies and tell you where the command can be found in the menus. The topics will also list what command name and icon to use. We have also updated the help for the new CAD engine and the survey commands have also been updated.

What happened to the Symbol Palettes from the old Design Menu?

For MSCAD 2004 and 2005 we built a new Symbol Librarian. You will find all the symbols from the Symbol Palettes in this function which you can open by typing **INSYM** at the command line, or pick MsAnnotate > Add Symbols > Symbol Librarian.

A range of new symbols have also been included in 2005 that can also be found in the Symbol Librarian. Any custom symbols from older versions of MSCAD would have to be saved as DWG files to be used in MSCAD2005.

What about the house libraries I have setup in MSCAD2004?

You can simply copy the files from MSCAD2004 to MSCAD2005 and they will work automatically. Copy the following files DB_POLY.ASC from the C:\MSCAD2004\MSCAD folder into the C:\Program Files\MSCAD2005\MSCAD folder. And copy all of the files from the C:\MSCAD2004\MSCAD\HOUSELIB folder into the C:\Program Files\MSCAD2005\MSCAD folder.

What about the Description Translation Library from MSCAD2004?

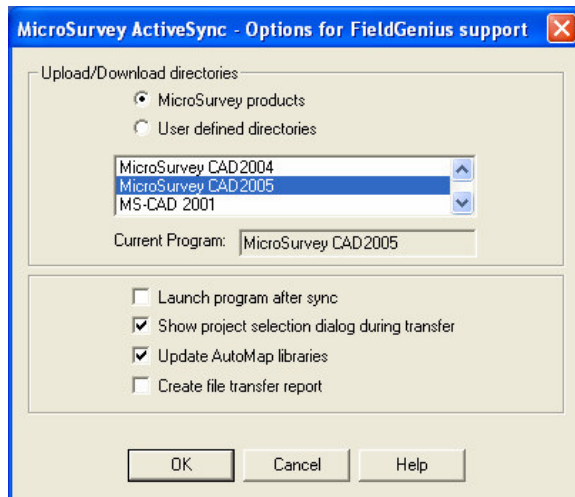
You can simply copy the files from MSCAD2004 to MSCAD2005 and they will work automatically. Copy the following files IC_CCPD.MP, IC_CCPD.ST and IC_CCPD.NX from the C:\MSCAD2004\MSCAD folder into the C:\Program Files\MSCAD2005\MSCAD folder.

When using FieldGenius with MSCAD2005, where do my jobs go now?

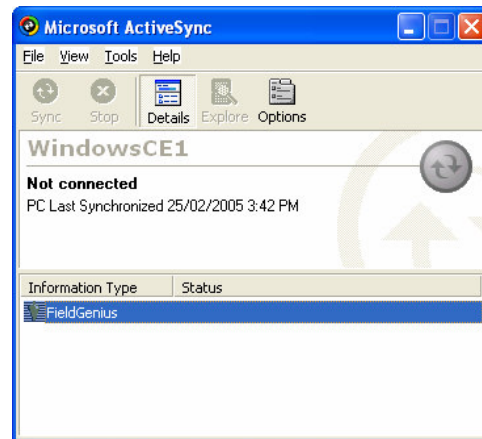
You will need to ensure you set Active Sync to use the MSCAD2005 program instead of MSCAD2004.

Start Active Sync (with no collector connected) and double click on FieldGenius.

Pick on MSCAD2005 from the list.



projects you export from MSCAD2005 will automatically go to the following folder C:\Program Files\MSCAD2005\SyncWizard\Uploads.



If you do not see MSCAD2005 as an option then please go to our web-site and install the newest version of the Active Sync Support Module.

http://www.microsurvey.com/products/fieldgenius/download_fg2005.htm

Your projects will now automatically download to the following folder C:\Program Files\MSCAD2005\SyncWizard\Downloads and MSCAD2005 will see them automatically. The