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Download Trial version of the software you need from the appropriate product page or from the Downloads page: http://www.2dtg.com/support/download_demo. Trial version is fully functional, but valid for 30 days only.

1. Licensing Options

2DTG offers a range of software licensing options. Most 2DTG software uses industry-standard Protection Plus and Safe Net licensing technologies for maximum ease of deployment and flexibility.

1.1 Stand-alone License

Stand-alone (Single) licenses are intended for use by one person on one computer (workstation). They may not be run from a server. Every stand-alone license comes with its own **License id** and **License password**, which unlocks the software for perpetual use. Those unlocking parameters are good for any number of stand-alone licenses of one software product purchased within the **single Order**. Software activation can be done online with a single click over the Internet or manually:

- by logging into the customers account on 2DTG's site (Customer Center > My Account > Orders > Manually Unlock License)
- via e-mail
- over the phone.

Stand-alone license is locked to the computer, on which it was activated, and may not be transferred to another computer. If the computer was upgraded or rebuilt the license may still be valid if its major components had not been changed.

1.2 Concurrent Network License

Concurrent network licenses are intended to serve multiple users from a network server. The software is installed to a network share and all workstations will need to have read/write/execute permissions. The restriction is placed on the number of users who can access the software at the same time, i.e., concurrently. Concurrent network licenses are a very cost-effective way to serve many people who need to use the software occasionally and "log off" when finished. Concurrent network license utilizes NetFloat technology and come with one **License File**, regardless of the number of users. Software activation is only required from one instance (either workstation or server) – it will enable all instances to have access.

Network license does not support on-line activation. Only e-mail and telephone activation modes are available.

1.3 USB Dongle License

2DTG offers Sentinel HASP HL hardware-based protection keys that feature the strongest software protection and is considered to be virtually tamper-proof.

It enables software portability, so it can be used on any PC to which the Sentinel HASP HL key is connected, and it does not require an Internet connection to activate the product.

2. Single workstation License

2.1 Evaluation Mode

You will see online activation dialog when you run our program/library for the first time on your computer:



Click "Evaluate ..." if you wish to use it in a trial mode or click "Purchase ... Online" if you are ready to purchase.

If you choose evaluation mode, system will be reminding you that it is running in the trial mode every time when you start the Product, showing a number of days left in your evaluation period.

Once the product is purchased you will be supplied with a **License ID** and a **Password**, which will be sent to you in purchase confirmation e-mail. Keep it handy when you are ready to activate.

2.2 Online Activation

Start the application/library. From the online activation dialog (above) click "Activate ..."

Assuming that your computer has a connection to Internet, in the new opened window click the upper line – "Activate ... Online".



In the new Window enter your **License ID** and **Password** received from 2DTG.



Once you press the **Continue** button the Product will communicate to our server. If the license is validated the Product will activate.

Your will receive a confirmation message that your license is activated on the next online dialog window.

2.3 Manual Activation

If you do not have a connection to the Internet you can activate the Product manually.

Click "**Activate Manually"** – see picture at the step #4 above and follow through step #5 – License ID/password validation.

Important

When requiring a License ID/password on the **Manual Activation** Options the application will still attempt to verify the license status with our server if an Internet connection is available.

The next user's activation dialog will look like the following:



Manual activation assumes two possible options, as follows:

- Manual Unlock on the 2DTG site.
 Login into My Account (Customer Center>My Account>Order # >Manual Unlock).
 On that page you will need the same parameters to Unlock the license: License ID, License Password, User Code 1 and User Code 2.
- **Telephone activation** requires you to call to obtain the activation codes. You shall give us two "User codes" from the activation dialog above, and we will use these codes to create the activation codes for you.

After you received the **Activation Code 1** and **Activation Code 2** enter them in the activation dialog above and click Continue.

Your will receive a confirmation message that your license is activated on the next dialog window.

2.4 Activating 64-bit library

64-bit library requires two additional files for unlock and operation, compare with a 32-bit one. If we include Product LOGO file - it's four files altogether:

- Decoding Library [Product Name abbreviation].dll, for example: DM_PRO.dll;
- IP2Lib64.dll; and
- XML-file having syntax: [Product Name].xml, for example: DM Decoding Enterprise.xml.
- Product LOGO file (**ProdLogo_**.bmp**) is also recommended but not strictly required.

By default, 2DTG supplies all theses four files located in the same folder as demo-application that would call the library.

We recommend activating decoding library by starting our Demo application and following the Activation Instructions above.

If you are planning to call decoding library from your own application, please, make sure to copy these 4 files to the folder where your application is located.

3. Network (NetFloat) License

Running library over the network requires network license. Though the activation procedure for this license is, basically, similar to the described one, there are some differences that need to be taken into account.

- 1. Network licensing is only supported when running the protected library over the network; this will not work with the application running locally. Network license is not bound to any particular workstation on the network (including Server). That is why it is absolutely critical to use the network path for activation even when calling the application from the local computer.
- 2. DLL would need to be installed to a network share and all workstations will need to have read/write/execute permissions.
- 3. Protected library is always supplied with a License file, which is required both for activation and for operation. License file must reside in the same shared folder as DLL-file. It is recommended that application shall reside here as well, though it's not imperative. If the application is placed

in the different location on the network, the network pass to the DLL has to be carefully selected.

- 4. Activating the DLL from one instance (either workstation or server) will enable all instances to have access.
- 5. Network license does not support on-line activation. Only e-mail and telephone activation modes are available.
- 6. DLL file and activated Configuration file can not be copied into the other shared folder on the network the license will stop working.

3.1 NetFloat Evaluation and Activation

NetFloat delivery package includes protected DLL, License file (say, **license.ini**)and Demo application(s) and can be downloaded from the corresponding product page.

For example, Data Matrix NetFloat package looks as follows:

- Demo_DecWinPro.exe sample application build in Borland Builder 3.0 environment
- Demo_MSVC_Pro.exe sample application build in MSVS 2008 C/C++ DLL x86 environment
- DM_EP.dll Data Matrix Decoding Library
- DM_EP2.ini License (Configuration) File
- Im.bmp sample Data Matrix image

This is a trial package but it is fully functional and can be activated for the required number of seats at any time without installation of the new software.

License file contains expiration date (end of the current quarter, say, "Dec 31, 2012") and 3 network seats.

1. Copy DLL file, License file and application file to any shared folder with RW access and invoke it by network clients from there.

Important:

Even when calling the application from the local computer (Server) it is necessary to use the network path. For example, use: \\test-pc\blankLib\lib\prot\app.exe rather than: c:\temp\blankLib\lib\prot\app.exe. Or — if navigating in Windows Explorer — browse to the app.exe through the Network menu rather than c:\ drive on "My Computer".

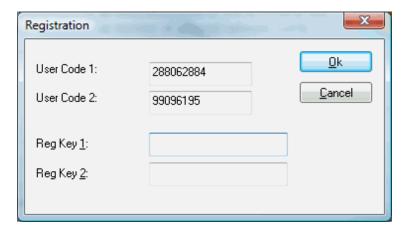
2. If valid (not expired) evaluation license file is found the following message will be displayed on startup:



Click <No> to continue with evaluation.

Up to three instances on the network may participate in the evaluation - this message will be displaced for each of them.

3. If no valid license file found or activation was requested (answer **<Yes>**) activation dialog will display:



waiting for RegKey1 and 2 values to be manually entered.

Important:

If activation was requested (answer **Yes>**) it will be checked that only one client is running now – those one, which requested activation. If more running clients found, then error message will be displayed:

"Activation requires only one running client. More than one client found - close all of them and restart one client to activate the license."

4. Send (via e-mail) User Code 1 & 2 to the Customer Support (or place a call to the 2DTG Customer Support) to receive RegKey1 and 2. You may be asked to specify the number of seats purchased, as well, at this point.

- 5. 2DTG operator will generate RegKey1 and 2 activation codes, verify number of seats allowed (purchased) at this point and send this information to you.
- 6. Your will receive a confirmation message ("Access Granted") that your license is activated on the next dialog window after entering Registration Keys.
- 7. No other activation is required (from the other instances).

NOTE: If activation was requested (answer <**Yes>**, above) the license file is backed up to the **license.ini.bak**. If you change your mind and want to cancel activation and proceed with evaluation, then all you has to do is to restore the license file from previously automatically backed up file: **license.ini.bak** (just by renaming it back to **license.ini**). In this case evaluation process will be resumed until another activation attempt or until expiration.

After successful activation the backup file will be deleted.

Important:

License file gets modified during activation and cannot be "restored" to its default state. If license needs to be "re-activated" for any reason the current license file has to be deleted, original license file, received from 2DTG, shall be copied into the shared folder and new activation codes be requested from 2DTG.

3.2 Special linkage options for the application project

NOTE: It is necessary to use the following settings (Linker/Advanced) for the **calling application** – the **app.exe**:

- /NXCOMPAT:NO
- /DYNAMICBASE:NO

The above settings are required for protective envelope compatibility purposes. These settings should be used for the applications in case of Microsoft programming environments.

Normally there is no need to do anything special for .NET applications calling a wrapped, 32 bit DLL (i.e. via platform invoke). However, if someone having a problem with this, it would be possible to use **editbin** to alter the .NET application so it is compatible (see http://blogs.msdn.com/b/ed_maurer/archive/2007/12/14/nxcompat-and-the-c-compiler.aspx – though this should not be necessary).

For environments other than Microsoft there is only basic recommendation: if someone encounters problems, they could probably use a tool like "peflags" or "editbin" to change the settings on the application/EXE file.

3.3 NetFloat Seat Based Operations

Launch several instances of the application from any computer(s) on the network. You will notice that every instance tries to create and lock a special semaphore file (say, **semaXXX.net**) on its startup, which is associated with the "locked seat" (but not with the particular workstation).

Important:

If not being successful (all seats are locked) the running instance displays the following message: "User Limit Exceeded! Please purchase additional licenses.".

Assuming that you purchased 5 seats when activating the library you will be able to start up to 5 instances on the network. It is important that each of these instances exit the application in the orderly fashion so the semaphore file will be auto deleted from the shared folder.

If the application is terminated abruptly it may leave "open" semaphore file behind meaning that this seat might still be locked – not available for another workstation.

In real life when having "hanged up" clients blocking semaphore files from deletion the situation can be resolved using one of the following approaches:

- Reboot computer hosting shared folder. It will close all the running clients anyway.
- Launch (right click): Computer (hosting shared folder)->Manage->Shared Folders->Open Files
 and close only those semaphore files which are blocked. Do not worry to make a mistake –
 Computer Management tool will not allow you to close semaphore file being in use.

4. Troubleshooting

In some cases our Automation Client can return certain error codes associated with the activation process. Most typical of them are as follows:

Problem	Solution
When trying to activate the product on-line you are getting an error "Could not communicate with the server": "Activation Failed. Code 4" or "Activation Failed. Code 2"	This error means that communication port - port 80 (HTTP) - that activation module is using to communicate to your PC is not allowed in your company network. Ask your network administrator to temporarily open this port or use Manual Activation option. You may also try temporarily disabling any firewall or Internet security software.
During product activation you are getting "Activation Failed. Code 69" error. It may happen both during on-line activation (after entering License # and License Password or during manual activation (after entering 2 activation codes, received from 2DTG's web site or when activating by phone, in the activation dialog window)	In both cases the reason is the same - the activation code was incorrect. This can be caused by a user incorrectly typing in the activation code (manual activation), or it may be caused by attempting to activate with the wrong activation parameter values (on-line activation) – in other words you are trying to activate the wrong product with your License. If you are trying to activate product through the "Manual Unlock" dialog on the web-site, use "Copy-Paste" procedure if it's possible. For activating by phone just try to type in these numbers again. For on-line activation – make sure that your license corresponds to the product you are trying to activate.
When trying to activate the product on-line from local PC you are getting "Activation Failed. Code 305" error	Error 305 should only occur if the HOSTS file (usually <i>C:\Windows\system32\drivers\etc\HOSTS</i>) has been modified. If the user has modified their HOSTS file to attempt to redirect the online license activations to another server, this error will be displayed.