



Movicon NExT

14.0 Licesing

Ver.3.4.268

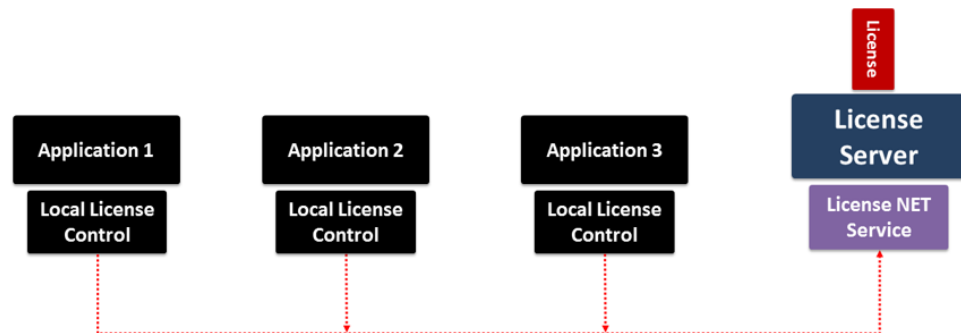
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1. Licenses

1.1. NET Licenses

The Platform.NExT license manager allows net licenses to be managed in a manner that enables better support to those architectures that provide the use of a certain number of network stations with the net license centralized **on one Server station**, or those architectures based on **Windows Terminal Server** (or Remote Desktop). Architectures such as these require the use of the Platform.NExT NET license services.



This diagram shows an example of stations distributed in a network where each application searches for an active net license.

Those who use a network architecture can therefore choose to use just the one license centralized on the server instead of installing one individual license on each network station. In this way, each remote user can then run the software by logging on with the one license installed on the server.

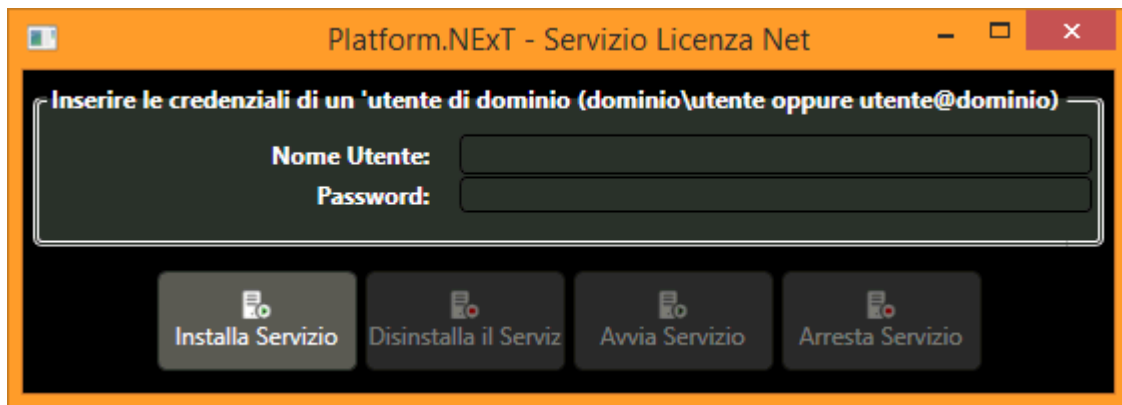
This is achieved by using the Platform.NExT net service. This is a small server application that is installed on the PC station that hosts the NET license (which may be in the form of a USB hardware dongle or a software activation code, also known as softkey, indifferently). This service manages the net license user authentication process. Each user must be configured in each individual remote workstation needing to share the NET license, which resides in the network station where the Service has been installed, by indicating the name and port as described below.

How to install the Net Service to enable NET License use

To enable the use of the net license by all the remote network stations you must first install the net license's net service.

This net service consists of a small application called MSZService.exe which is installed in the station designated to host the net license by using the 'Net Service' command from the Dongle ribbon.

When clicking this ribbon command a Net Dongle Server settings window will show:



The Net Server may ask you for domain user access credentials that will entail entering a User Name and password.

By using this window you will be able to execute the commands relating to the license service in the station which it is operating in:

Install Service: installs the Net License application as local Windows Service

Uninstall Service: removes the Net License service

Start Service: starts service application for the Net License

Stop Service: stops service applications for the Net License

Once the service has been installed and started up correctly, it will read the network license installed in the same PC and proceed with user authentication according to the maximum number of users enabled on the purchased license.

How to enter a NET License

The procedure used to enter a Network License is the same one used for entering normal licenses with one exception. The network license has to be programmed with the NET option.

1. If the license is in the form of a SGLOCK dongle simply plug it in the Server machine where the MSZService.exe application is running.
2. If the license is in the form of a software license, you will need to enter the license file in the "C:\ProgramData\Progea\Movicon.NExT" path. The "Soft Key" used for generating the license can be retrieved by starting up the MSZService.exe from the console or by using the "File – License Manager" command from the Movicon ribbon.

NET License access and User Authentication

To use a NET license from any one of the remote stations you will need to configure the remote station locally in order to do so.

The license control system of each Platform.NExT application searches for a valid license at startup by performing a sequence of verification events: first it checks for the presence of a local license. When found, this license will be given priority over any other net licenses (as described in the License Manager section). If no local license is detected, the system will search in the network of the Net License Service manager. If found the system will then proceed with local license authentication according to the maximum number of users permitted by the net license.

The local MSZ.dll.config file needs to be configured to indicate which network PC the system must search for the net license in.



The Server name (HostName) and port (ServerPort) settings to use for detecting the license service can be modified in the MSZ.dll.config file. These settings are to be modified by expert users directly within the file using a text editor (such as Notepad):

```
<setting name="HostName" serializeAs="String">
  <value>localhost</value>
</setting>
```

Where the "localhost" default name is to be substituted with the name of the network station in which the net license service is installed.

It is also possible to change the network port's default number 62873 in the same file. If you change the port number, make sure it corresponds to both the one used in the server and the remote stations as well.

The Platform.NExT NET license manager creates a list of the users that are connected. When the maximum number of users enabled on the license has been reached, additional connections will not be accepted: in this case applications that exceed the User limit will not be entitled to license activation and will therefore function in Demo mode.

The connected and authenticated Users are managed by the Net Licence Server by adding users when they connect and removing them when they disconnect (for example when Platform.NExT application in network is closed correctly, the net Service updates the list to allow other users to connect).



In this way the net license manager is able to offer a more dynamic license use. This will allow systems to engage or free the number of users enabled on the license as required. Please keep in mind that when opening several product instances in the same PC (using the same user) each instance will engage one licensed user.



Be warned that certain circumstances may arise for which Users will not be able to notify their log out correctly, for example if the application is aborted manually or in the event of anomaly while closing. It is for this reason that each time a user requests access to the net service, a check is first made to see if their name is already on the list and if so only their date of access is updated.

NET License status info

Information relating to the status of the net license use is provided In the "License Manager" window of each station.

This window gives information on:

- **Nr. of Users currently connected by the Net Service**
- **The maximum number of users enabled on the purchased and installed NET License**

Keep in mind that the License Manager window will always show the "Local Site Code" as well. Each Site Code is local regardless of the net license. In fact a Local station can always install local license if needed regardless whether or not a net license has been installed.

Installing a NET License Service manually

Up to now we have described how to install the NET License Service and the way it functions using the Platform.NExT product and its tools. Therefore, the end result would be to have the Platform.NExT installed in the Server station hosting the Net License. However, the Net license service can also be used without having to install the Platform.NExT locally.

This can be done by an **expert user** by taking into account the above and the following:

1. The MSZService.exe application and its MSZService.exe.config file can be copied and installed manually in the PC station that manages the net license. This executable can be started up as a Windows Service or from console (arg: -noservice). In the second case the local SiteCode and other useful information will be displayed in the DOS window. This information will include the number of enabled users (when license is acknowledged) and the number of users who have used the service.
2. This local Site Code can be used for obtaining a Net License directly from Progea which then must be copied in the C:\ProgramData\Progea\Movicon.NExT folder manually.
3. Expert users can change the port (ServerPort) settings, which will be used by the service to accept User authentications, directly within the MSZService.exe.config file.

NET License for Windows Terminal Server or Remote Desktop systems

Using architecture based on Microsoft Terminal Server (WTS) or Remote Desktop Server operating systems requires a NET license as described above.

The number of NET license users will correspond to the number of Terminal Server Users that the Server architecture has to manage.

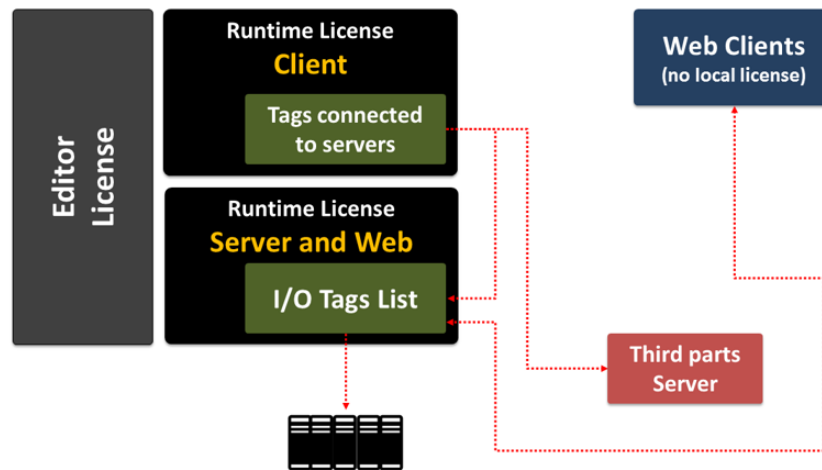
1.2. System Protection

The Platform.NExT software product is protected against unauthorized use by means of the hardware or software license. The license that authorizes the use of the software product can be purchased in two different modes according to customer needs:

1. **USB Hardware Dongle**
2. **"SoftKey" Activation code**

At startup and while operating the system runs a sequence of checks to verify the presence of a local USB hardware dongle, then a local software licence and finally a net license.

If none of these licenses are detected, the system will enter into Demo mode (Evaluation Mode) with all the functions and features as described below.



The hardware dongle can be used as a floating license and therefore is easily transportable from one PC to another without being subjected to any hard disk problems that may occur. The softkey code has a greater advantage over the hardware dongle as it does not carry the risk of theft, being misplaced or damaged.

In both cases, the unlock protection code needs to be obtained from Progea and requires the purchased product's serial number and any correlated options.



If a hardware dongle or softkey code is not detected at system startup, the system will start up in demo mode with the features described below.

Developer License

Platform.NExT has a developer mode (Editor, or Design Mode) to enable users to configure and program projects that will then be launched into runtime mode. You need to have a Developer License in order to design engineer the project. Each Developer License comes with a two hour project runtime. When starting up the project in runtime from editor mode with the Developer License, the user will be notified that a Runtime License is needed.

Alternatively, the user can always purchase a license that has both Development and Runtime modes.

Runtime License

Platform.NExT projects are launched directly into Runtime mode (<start> option in command line) or by switching from Editor mode to Runtime mode.

Executing Projects in Runtime requires the presence of a regular Runtime License, otherwise the project will be run in Demo mode for a period of two hours only.



The Platform.NExT runtime licenses are modular and scalable. They can be purchased according to your actual project design needs to save on costs according to the official price list options.

For further information please do not hesitate to contact the Progea Sales Offices or local dealer.

Evaluation Mode

If a valid license is not being used, the product will function in Demo mode.

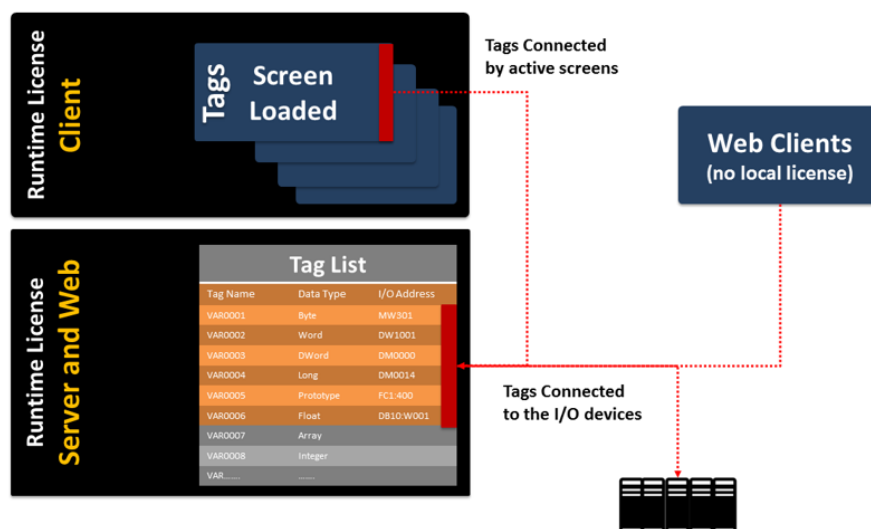
The product is normally used in Demo mode for evaluation purposes and not for professional use according to the terms and conditions stipulated in the user license (EULA).

The functions that have restricted use in Demo Mode (or Evaluation Mode) are:

- Runtime is restricted to two hours only. The project will automatically close after two continuous hours of running in Demo Mode. If the project was launched into runtime from the editor environment, it will automatically stop after two hours and return back to editor mode.
- All the features can be used during the permitted two hour Runtime mode. This includes the use of an unlimited number of variables, screens, alarms and Communications Drivers.

1.3. I/O Tag Count

Product licenses are sized according to how many I/O Tags (variables) the project has. To determine the license size, tags are counted differently for the Movicon.NExT I/O Data Server module and the display modules (Client) due to the fact that Client and Server licenses may be independent from each other.



Runtime License I/O Data Server

All the Tags defined in the Server's Address Space and connected to the field (e.g. using the Communication Driver or third party OPC UA Server) are counted.

This means all Tags with set "I/O physical address" properties.

If the number of Tags connected to the field exceeds the value defined on the license when starting the Server, a warning message will appear prohibiting the Server to startup.

Runtime License Movicon HMI Client

All the Tags connected to the Server for active screens are counted. Therefore all those 'In Use' by the Client model including those connected to the Server independently

from which one is being used, whether Platform.NExT or a third party OPC UA Server, and independently from whether the Tags on the Server are connected to the field or not.

Therefore the Client Runtime license needs to be sized according to the maximum number of Tags connected to the server at the same time. In cases where this limit is exceeded, a warning message will appear and the screen will not connect the tags.

Tag Definition

For License clarity, the Tag definition is used and stands for any variable type: bit, byte, word, double, long. This means that each Tag can define data up to 64 bits.

Each member of Structure or Array variable types is counted as one Tag for license purposes.

1 Tag = Each individual data type in a variable from 1 to 64 bits.

Note: Each array or structure member is considered as 1 Tag



Each Tag, independently from the fact that it is byte, word, long, double type, can be pointed to within its single bit in accordance with the appropriate syntax provided for assigning Tags in objects.

1.4. License Options

By using the "Find License" command in the Dongle ribbon you will be able to view all the data relating to the installed license if activated correctly.

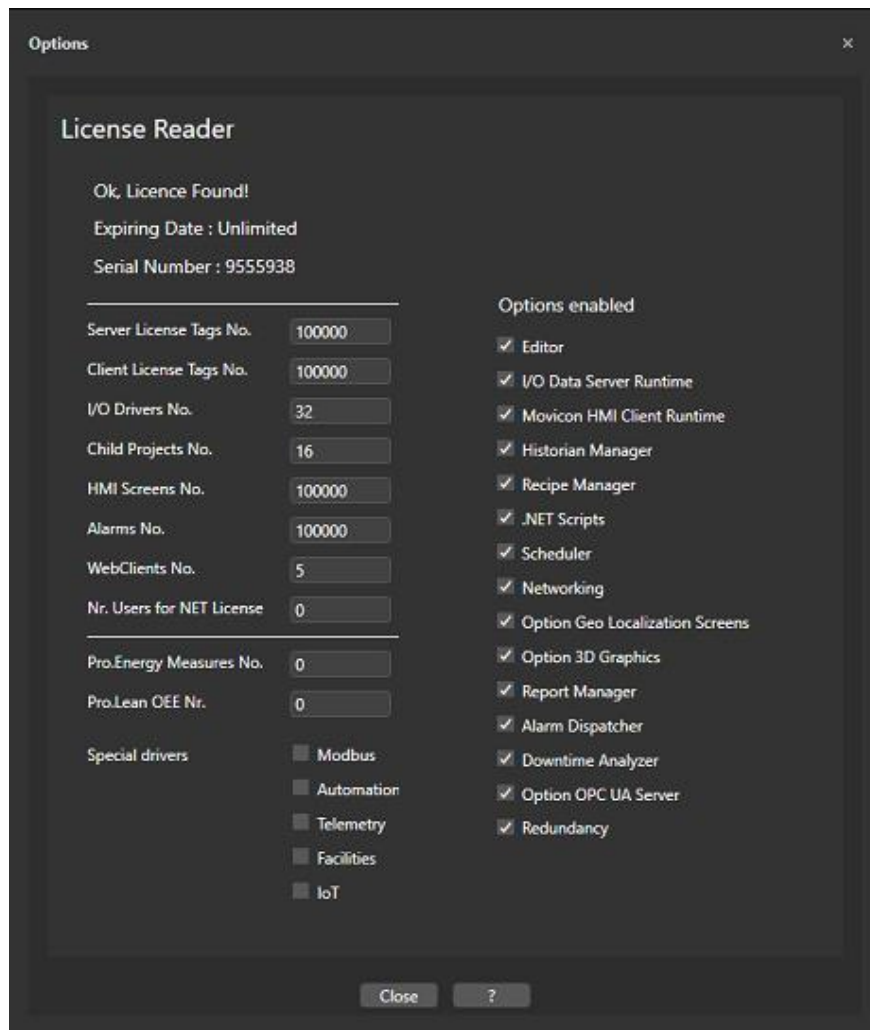
According to company policy product licenses are modulated not only in function with the number of Tags but also according to the optional modules and functionalities available.

The "Find License" window shows all the details of the features enabled on the license (USB dongle or softkey) inserted in the system.

If no license is detected a "License not found!" message will be displayed at the top of the window and "Demo Mode" will be displayed at the bottom.

In Demo Mode all the license options will be enabled and the counters will be set with the highest value but the system will only be allowed to function in runtime for a maximum of two hours.

- The license can be Client-Server type, "Client Only" or "Server Only". Therefore the optional functions vary depending on which license is being used.



When the window is opened a control check is run on the installed license in order to show the license features according to the functions described below:

Editor

When enabled this option uses the project in Design Mode to allow the editing and developing of any project type.

Net Client Nr.

This parameter indicates the number of contemporary users or Windows Terminal Server users per NET license.

Child Projects Nr.

This parameter indicated the maximum number of child projects that can be declared in the project.

Pro.Energy Measures No.

This License parameter indicates the maximum number of measures to be managed in the Pro.Energy project.

Pro.Lean OEE Nr.

This license parameter indicates the maximum number of resources/machines that are to be managed with the OEE within thePro.Lean project.

Optional Server functions

I/O Data Server Runtime

When enabled, this option allows runtime execution of the I/O Data Server module. Note that the I/O Data Server module must be enabled for the Alarm and Historian Managements.

Historian Manager

When enabled, this option consents runtime execution of the Historian, a function provided by the I/O Data Server module. The Historian provides the use of Data Logger and Historical recording engines. If this option has not been enabled on the license, the server's data recording engines will not startup in runtime.

Recipe Manager

When enabled this option consents execution of the runtime "Recipe" modules. The recipe modules allow the user to manage and view archived data and direct communications with field devices.

.NET Scripts

When enabled this option consents the "VB.NET Script" to be used in runtime as a resource both on server and client. It can also be used as code in screen objects. This means that the Script code interpreter engine is enabled for the entire system.

Movicon HMI Client Runtime

When this option is enabled, the MoviconNExT module can be executed in runtime, therefore the HMI client towards the PlatformNext server or other servers.

Scheduler

When enabled this option allows the command scheduler server, i.e. the Scheduler Module, to be started up in runtime. If this option is missing, the Scheduler Module will startup in Demo Mode and work for two hours only.

OPC UA Server

This option is used to enable the OPC UA Server runtime functionality. In this case the I/O Data Server will expose its Tags to OPC UA Clients (i.e. third party software applications, third party HMI etc.), using the OPC UA connectivity standard specifications.

When this option is disabled the project Tags will not be exposed to other third party OPC UA Servers.

Redundancy

When enabled this option exposes the Server redundancy functionality locally. The redundancy function (server hot backup) manages two or more servers in 'fault tolerant' mode by synchronizing both real-time and historical data.

Please note that this functionality must be enabled in each individual server in order to synchronize.

This functionality is continuously active and available in Client stations for dynamic and intelligent data search and exchange with the active server.

Alarm Dispatcher

When enabled, this option allows the Alarm Dispatcher module to startup in runtime to send alarm and message notifications. Without this option enabled, the Alarm Dispatcher Module will startup and function in Demo Mode for two hours only.

Server License Tags Nr.

This field displays the maximum number of Tags that can be used by the Server Module. This count is performed on those Tags defined in the Server's Address Space and connected to the field.

I/O Drivers Nr.

This field displays the maximum number of Communication Drivers that can be used by the I/O Data Server in the project.

Alarms Nr.

This field displays the maximum number of Alarms that can be used in the project. This number can be exceeded in design mode but not in runtime mode which will ignore and not manage those alarms exceeding the maximum limit set.

Web Clients Nr.

This parameter indicates the number of Client Users that can access the project simultaneously when published in HTML5.

Please consider that each remote Client instance is considered as a specific instance and therefore counts as a Web Client user even when executed on the same remote PC.

Special Drivers

The driver license management is divided into 5 macro categories in this section. The 'Automation' and 'Modbus' options are always available for the Movicon NExT and Connex versions. However, these options will need to be activated on the Runtime license for other versions according to the driver you wish to use..



In cases where the licence of selected driver has not been activated for the group it belongs to, a "**The driver[nome driver]has not been initialized properly...**" message will appear.



The "Automation" and "Modbus" options will always be available for the **Movicon NExT** and Connex Versions, while the "Facilities" and "ModBus" options will always be available for the **Movicon NExT BA** version. All other options will still need to be activated on the runtime license according to the driver you wish to use.

Optional Client functions

Geo Localization

When enabled this option allows the Geo-Localization feature to function in runtime on project side. The Geo-Localization feature includes the use of geographic maps and their related features.

3D Manager

When enabled this option allows the Movicon.NExT 3D graphics manager to be used in runtime. If this option is not enabled, it will still be possible to insert 3D objects during design mode but they will not be displayed in Runtime.

Reports Manager

This option enables the used of the Data Analysis and Report objects within the project. When is option is disabled the Data Analysis objects will remain disables and the Reports will not be available for use.

Please note that the Reports are available independently from the licence with using Web Client.

Downtime Analyzer

When enabled this option allows statistical project Alarm Reports to be displayed in runtime to analyse system alarms and downtimes according to the analysis graphs and tables provided to show event frequencies and durations based on set time ranges.

Networking

When enabled, this option allows the Movicon.NExT HMI Clients to connect to the I/O Data Server in runtime when the Movicon.NExT Clients reside in other workstations on the net.

If this option is not enabled, only local clients in the same PC will be able to connect to the Server.

Client License Tags Nr.

This field displays the maximum number of Tags that can be used by the Client Module. This count is carried out on the Tags that the Client connects to the Server, therefore only those Tags being used by active screen

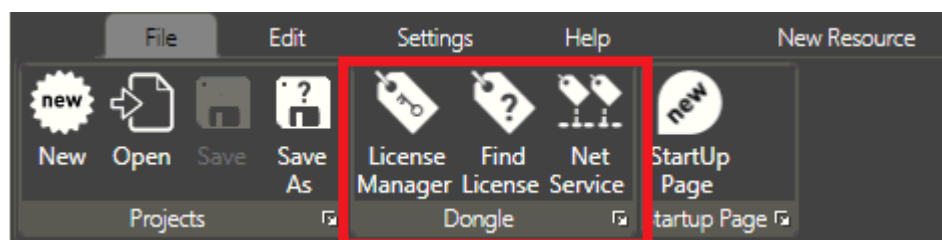
HMI Screens Nr.

This field displays the maximum number of Screens that can be used in the Movicon project for the platform's HMI Client. This number can be exceeded in design mode but not in runtime mode. Once this limit is exceeded in Runtime mode, no other screen can be opened.

1.5. License Manager

The "**License Manager**" command available in the Platform.NExT "File - Dongle" Ribbon is used for accessing the license manager window. By means of using the License Manager, the user can insert, remove, verify or update the installed platform license. If there is no license installed, the "License NOT Found !" message will show. In this case the Demo product version (Evaluation Mode) can be used in order to test and assess its use according to the user license terms and conditions. Otherwise the License Manager can be used for inserting and activating eventual SoftKey software license.

When a valid license is detected, the system will show its information and permit the user to manage it.



This is how the Ribbon looks for accessing the License Manager commands. By using these command you be able to manage, display, insert or remove licenses.

Hardware License (USB SG-Lock)

The product license can be purchased in the form of a hardware key to insert into the USB port of the machine where the product is installed. It is also possible to get a remote USB dongle when using a virtual USB port system (not supplied).

When a hardware license is detected the system will display its Serial Number which is unique to each specific license.

All the information of the installed license is displayed in an appropriate window which can be activated using the "Find License" from the Ribbon.



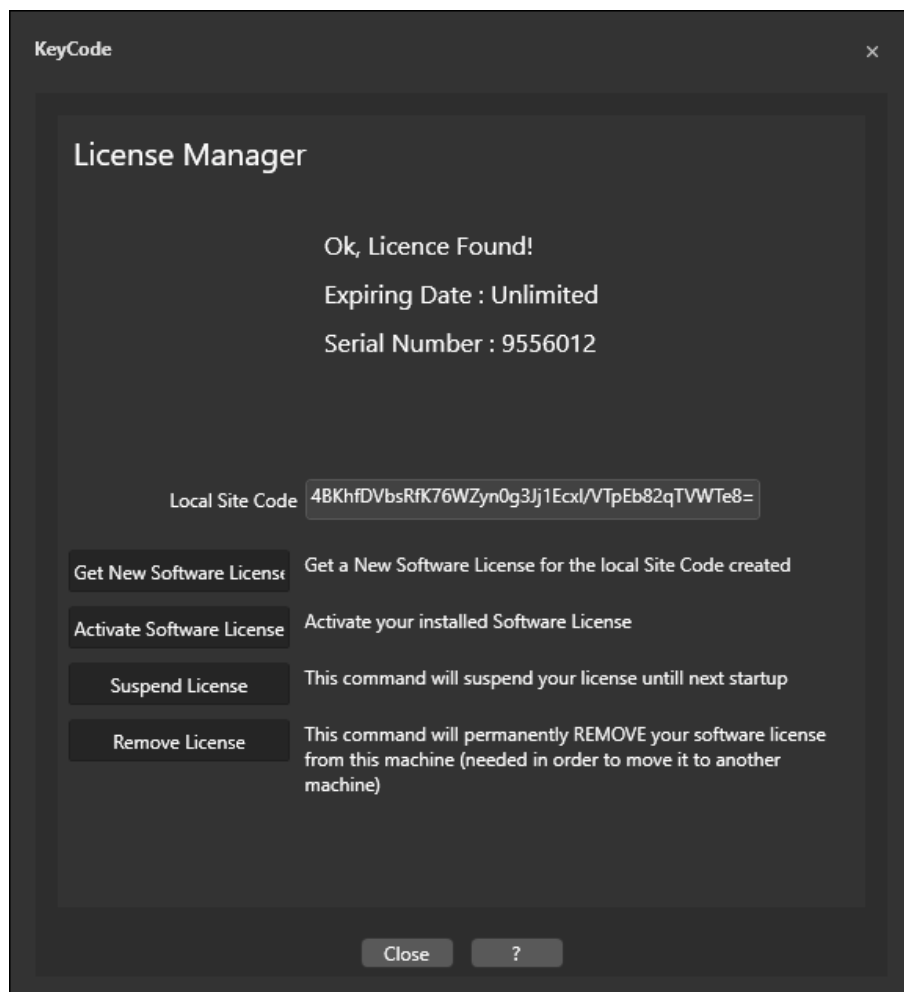
Please note that a USB license hardware dongle cannot be removed or suspended by the License Manager due to the fact that it is manually inserted in the PC's USB's port.

Software License

The product license can be purchased in the form of Softkey which is a software activation code. The softkey is a file containing a unique code which is determined and generated as a consequence of the "Site Code". Therefore in order to obtain a software license you must provide Progea with your "Site Code" which is available in the License Manager window.

The "License Manager" ribbon can be used to access the Software License Manager window's commands.

A window like the one below will display by means of which you can get access to the operative commands on the license.



Expiry Date

It is possible to have a temporary license that is valid for a limited period of time. In this case, based on the sales agreement, the user can install a license that will automatically expire when the fixed time is reached. Information relating to the activated temporary license's expiry can be seen in the License Manager window.

Serial Number

The Serial Number shown in the License Manager window is used to identify the license. This serial number will be required by the Progea sales offices or distributors when license needs to be modified or removed.

The Site Code

A Local Site Code alphanumeric string is displayed in the License Manager window. This code is essential for obtaining a valid activation license. The Local Site Code is unique and tied to the machine in which the product is installed.



The software license is unique and exclusively tied your 'Site Code' which is the local code belonging to the PC from which it was generated. Therefore this code will not work in any other PC.

In order to get a software license you must purchase one from the Progea Sales offices or one of the Progea distributors. The user who purchases a software license will receive a license serial number and a file containing the activation code generated in function with the Site Code. Otherwise they will receive instructions to access the website in order to generate the license online.

Obtaining a new software license

The **"Get New Software License"** command in the License Manager window gets you access to the website reserved for Progea Users in order to generate product licenses online. Once logged on the authorized user can digit the purchased license serial number as instructed by the guided procedure in order to immediately generate the file with the license code to insert and activate in their system.



The software license therefore physically exists in an encrypted file containing the purchased license code which is determined by the local Site Code.

The License file can be generated autonomously on the Progea website or received by email directly from Progea.

A backup copy of the license file can be made as pleased but the license cannot be duplicated in other PC as it is tied to the local site code of the PC where the software is installed.

Activating the software license

Once you have received the software license file directly from the Progea website, sales offices or a Progea distributor, you will need to activate the license.

This is done by using the **"Activate Software License"**, command from the License Manager window. You will be asked to select the license file that you have received. Therefore you must indicate the destination folder of this file which usually has the .mlztrack extension.

Once confirming the selection of this file, the system will activate and register the license by checking it with the Local Site Code.

If this procedure ends successfully, the 'License activation was successful!' message will appear and the product will be correctly licensed for use.

Once this has happened you will be able to view all the details of the installed license in the "Find License" window as described in the below paragraphs.



The 'Activate Software License' must also be used when upgrading the license, for example after purchasing new functionalities or increasing the number of tags.

Suspend License

This command can be used for deactivating the installed license until the next startup. Once you have suspended the license it will function temporarily in "Demo Mode". This command can be used at your discretion for any debug or maintenance activities.

The installed license will be restored and activated when restarting Platform.NExT again.

Remove License

This command is used for deactivating and removing the installed license. When using this command the licence will be permanently deactivated and removed by the system. This command requires user confirmation. Once this command has been confirmed the license will be removed but will operate in "Demo Mode".



IMPORTANT: An alphanumeric code will display when confirming the license removal operation: this code may be required by Progea as proof of license annulment in the event of reissuing a new license to substitute the one removed.

It is important to remember that the local side code does not change and therefore the previously removed license can always be used again if desired by repeating the activation procedures as before.

Remove License

The 'Remove License' command allows you to remove and invalidate the installed license in order to move it to another PC.

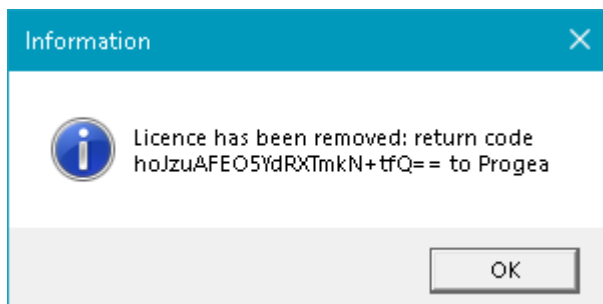
When removing license to upgrade it, use the software license activation procedures.



IMPORTANT: After license removal has been confirmed, a dialog window will display showing the return code to use when contacting Progea to obtain a new license file containing a new Serial Number and Site Code to use in the new PC.

Once the removal procedure has been completed, the system will return back to 'Demo Mode' and it will not be possible to reuse the previous license file again.

However, a different software license can be activated as long as it refers to a different Serial Number than the one used before.



Temporary License

You can obtain a temporary license which is used with a set time limit. In this case, in accordance with the sales agreement, you will be able to install and use this kind of license until its preset time limit expires. The temporary license expiry date will be shown in the License Manager window.

1.6. WebClient License

When a Movicon.NExT project needs to have WebClient access only (either by HTML5 or App), and therefore without any desktop client connections, the license can be configured by inserting only those options needed for WebClient. In this case, for example, you will not need the "Runtime HMI Client" license option, but you will need to define the No. of WebClient Users to connect simultaneously and the No. of Client License Tags to connect at each session. You will also need to enable other additional options such as the "Report Manager" if you wish to see historical data using the Data Analysis or Reports for example.

Configuration with WebServer and I/O Data Server in separate machines

When the system has been configured to startup the project's I/O Data Server in one machine and the IIS WebServer or the WebClient(WPF) App Service in another, you will also need to insert a license in the machine where the IIS WebServer or the App Service is being run. To enable this the license should be configured with the features needed for WebClient, as described above.

In a configuration like this one the following will need to be inserted:

- a 'Server' license in the machine where the I/O Data Server is running without specifying the 'No. of Client License Tags' and 'Tag No. of WebClient Users'.
- a license in the machine with the WebServer (IIS) or App Service configured with only the 'No. of Client License Tags' and 'Tag No. of WebClient Users' options for WebClient, plus any other options needed such as the "Report Manager".

As an alternative, you can also use a centralized license by purchasing a "NET" license to install in any one of the machines and to which all the I/O Data Server and WebServer instances, for example, will connect. In this case the license could also include all the options needed.

