

AMPMC .NET SE Study DRM

General Description of the protection mechanism

When protecting the study the source code is exported to an assembly (DLL), which is protected by any NET obfuscator. MC .NET SE features the Confuser Ex obfuscator. User can also use any other obfuscator. When importing the protected study a class inherited from the encrypted assembly is created. The encrypted assembly is connected via references.

In case the Study is used on several computers at the same time, the last user disconnects all connected users in 5 minutes.

To integrate licensing system into your studies the following steps are required:

1. Register with MultiCharts LLC as a developer;
2. Select a name for the Study;
3. Add a DRM call code to your Study;
4. Create a protected Study;
5. Distribute the licenses among the users.

Step by step instructions

Step 1: Register with MultiCharts LLC as a developer

To do this:

Send an e-mail to support@multicharts.com. Your e-mail address will be used as your login

The password for the DRM system will be sent to you via e-mail.

Step 2: Select a name for the Study

After you receive your password you should log in to lic.mcauth1.com server using your login and password.

Then, go to the **Study Name** section.

| | | |
|---|---------|-------|
| Study Name  | License | Trial |
|---|---------|-------|

| Name | Created | Trial period | Default license period |
|--|-------------------------|------------------------------|--|
| No data. Click "New item" to add a new item. | | | |
| <input type="button" value="New item"/> | | | |

Initially this section is empty.
You should register the name which will be used for the study identification.
To do this click the **New item** button:

| | | |
|-------------------|---------|-------|
| Study Name | License | Trial |
|-------------------|---------|-------|

| Name | Created | Trial period | Default license period |
|---|-------------------------|------------------------------|--|
| No data. Click "New item" to add a new item. | | | |
|  <input type="button" value="New item"/> | | | |

Then, fill in all the fields:

| | |
|------------------------|---|
| Name | <input type="text" value="Moving Average"/> |
| Trial period | <input type="text" value="0"/> day(s) |
| Default license period | <input type="text" value="365"/> day(s) |

The following information should be indicated:

- Name - unique name, for example, Moving Average.
- Trial period (in days, set to 0 for no trial period);
- Default license period;

Step 3: Add a DRM call code to your Study

Add the VerifyLicense function call to your study in constructor and set the registered study name and your login as parameters. For example:

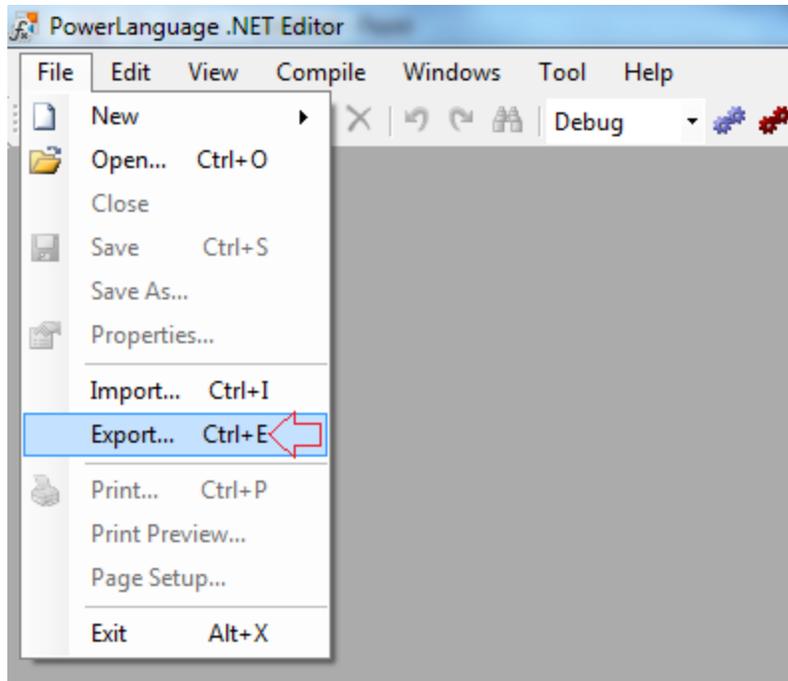
```
public MovingAverageIndicator(object _ctx) : base(_ctx){  
    VerifyLicense("Moving Average", "Adam.Smith@gmail.com");  
}
```

Study name and e-mail are not case-sensitive.

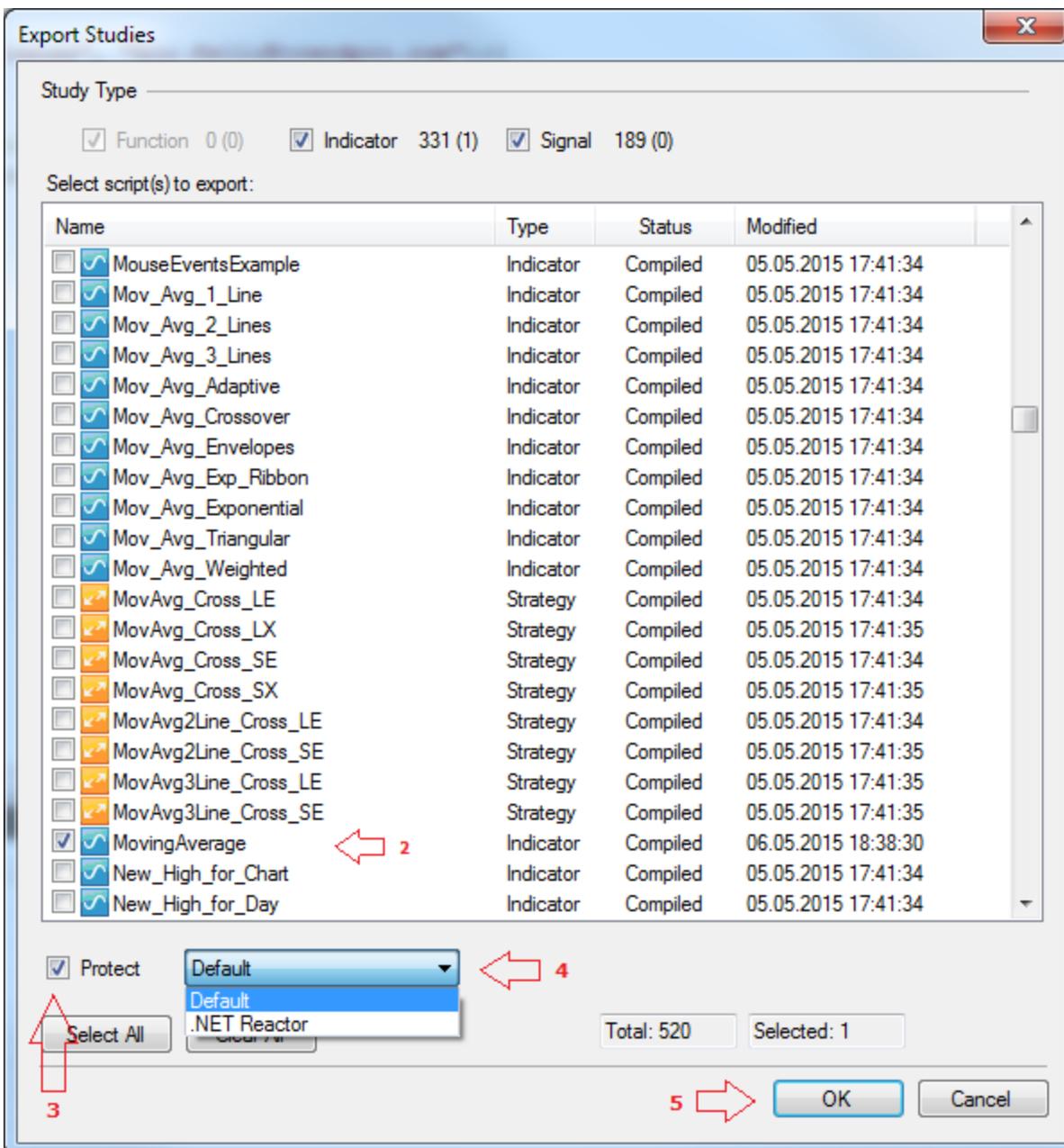
Step 4: Create a protected study

After the study is connected to DRM, it should be exported to a PLN file with protection. To do this the following should be done in Power Language Editor:

1. In the main menu click **File** and select **Export...**,



2. Select the study to export,
3. Enable the **Protect** option,
4. Select a protection tool (the drop-down list is visible only if the **Protect** option is enabled),
5. Click **OK**.



Exported study can be distributed to the users.

Notes

1. Study can be used without registration only if a trial period other than 0 is indicated when creating the study. When the trial period ends the study will ask for the key necessary to continue working with the study.
2. You can protect the assembly using the built-in obfuscation tool or configure the application to use any other tool. The following obfuscators do not need additional configuration in Power Language Editor: NET Reactor, Agile DOT NET, dotfuscator and Cli Secure.

Step 5: Managing licenses

Go to the **Licenses** section to create a key

| | | |
|------------|--|-------|
| Study Name | License  | Trial |
|------------|--|-------|

| <u>User</u> | <u>MC User ID</u> | <u>Study Name</u> | <u>Key</u> | <u>From</u> | <u>To</u> |
|--|-------------------|-------------------|------------|-------------|---|
| No data. Click "New item" to add a new item. | | | | | |
| | | | | | <input type="button" value="New item"/> |

Initially the table is empty. To allow the user to use your study you should create a license. To do this click the **New Item** button.

| | | |
|------------|----------------|-------|
| Study Name | License | Trial |
|------------|----------------|-------|

| <u>User</u> | <u>MC User ID</u> | <u>Study Name</u> | <u>Key</u> | <u>From</u> | <u>To</u> |
|--|-------------------|-------------------|------------|---|---|
| No data. Click "New item" to add a new item. | | | | | |
| | | | |  | <input type="button" value="New item"/> |

The following information should be indicated for the new license:

- User name, which will be used to display the user who has purchased the study (not required);
- Select a study from the drop-down list;
- The key will be generated automatically;
- Date will be determined automatically: Default License Period will be added to the current date. The date also can be set manually.

| | |
|------------|--|
| User | <input type="text" value="John Doe"/> |
| Study Name | <input type="text" value="Moving Average"/> ▼ |
| Key | <input type="text" value="5F92E0C9-8643-4CDE-9FE4-54377F224476"/> <input type="button" value="Generate new item"/> |
| To | <input type="text" value="05 . 05 . 2016"/> |

After clicking the **OK** button the license is created and the key can be sent to the user.