# **HowTo**

### Create a Encryption-Plugin for Cryptool 2.0 using Visual Studio 2008

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### Inhaltsverzeichnis

1	Create a new project in VS2008 for your plugin	2
2	Select the interface, your plugin wants to serve	2
3	Create the classes for the algorithm and for its settings  3.1 Create the class for the algorithm (MD5)	3 3 3 3 3
4	Select and add an image as icon for the class MD5	3
5	Set the attributes for the class MD5	3
6	Set the private variables for the settings in the class MD5	3
7	Define the code of the class MD5 to fit the interface	3
8	Complete the actual code for the class MD5	3
9	Sign the created plugin	3
10	Import the plugin to Cryptool and test it	3
11	Source code and source template	3

#### 1 Create a new project in VS2008 for your plugin

Open Visual Studio 2008 and create a new project:

Select "NET-Framework 3.5, as the target framework (the Visual Studio Express edition don't provide this selection because it automatically chooses the actual target framework), and "Class Library, as default template to create a DLL file. Give the project a unique and significant name (here: "Caesar,), and choose a location where to save (the Express edition will ask later for a save location when you close your project or your environment). Finally confirm by pressing the "OK, button.

Now your Visual Studio solution should look like this:

#### 2 Select the interface, your plugin wants to serve

First we have to add a reference to the Cryptool library called "CrypPluginBase.dll" where all necessary Cryptool plugin interfaces are declared. Make a right click in the Solution Explorer on the "Reference, item and choose "Add Reference,. Now browse to the path where the library file is located (e.g. "C:\DocumentsandSettings\ < Username > \MyDocuments\VisualStudio2008\Projects\CrypPluginBase\bin\Debug,) and select the library by double clicking the file or pressing the "OK" button.

- 3 Create the classes for the algorithm and for its settings
- 3.1 Create the class for the algorithm (MD5)
- 3.2 Create the class for the settings (MD5Settings)
- 3.3 Add namespace for the class MD5 and the place from where to inherit
- 3.4 Add the interface functions for the class MD5
- 3.5 Add namespace and interfaces for the class MD5Settings
- 3.6 Add controls for the class MD5Settings (if needed)
- 4 Select and add an image as icon for the class MD5
- 5 Set the attributes for the class MD5
- 6 Set the private variables for the settings in the class MD5
- 7 Define the code of the class MD5 to fit the interface
- 8 Complete the actual code for the class MD5
- 9 Sign the created plugin
- 10 Import the plugin to Cryptool and test it
- 11 Source code and source template