

Deploying Haystack Applications

In order to distribute an application that you build with the Haystack Code Generator for .NET you need to create a “Runtime License”. This runtime license is distributed as a stand-alone file that goes into the same folder as your .EXE or in the root of your web application. This chapter describes how to create a runtime license using the Runtime License Creator.

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Runtime License Creator Utility

Start Haystack and select **File | Create Runtime License** from the menu as shown in Figure 1.

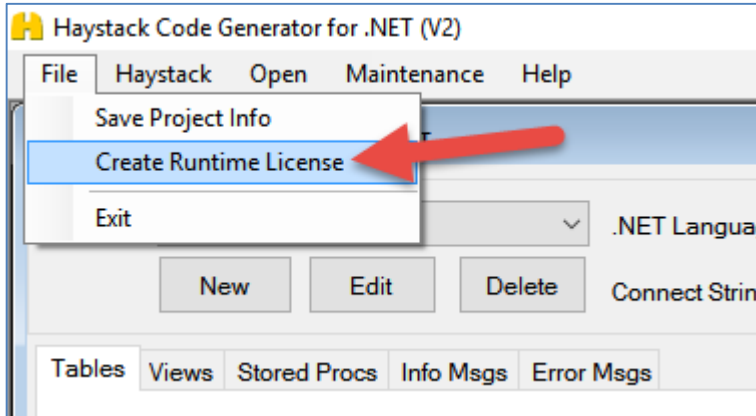


Figure 1: Click the Create Runtime License menu.

When the utility appears, it will look like Figure 2.

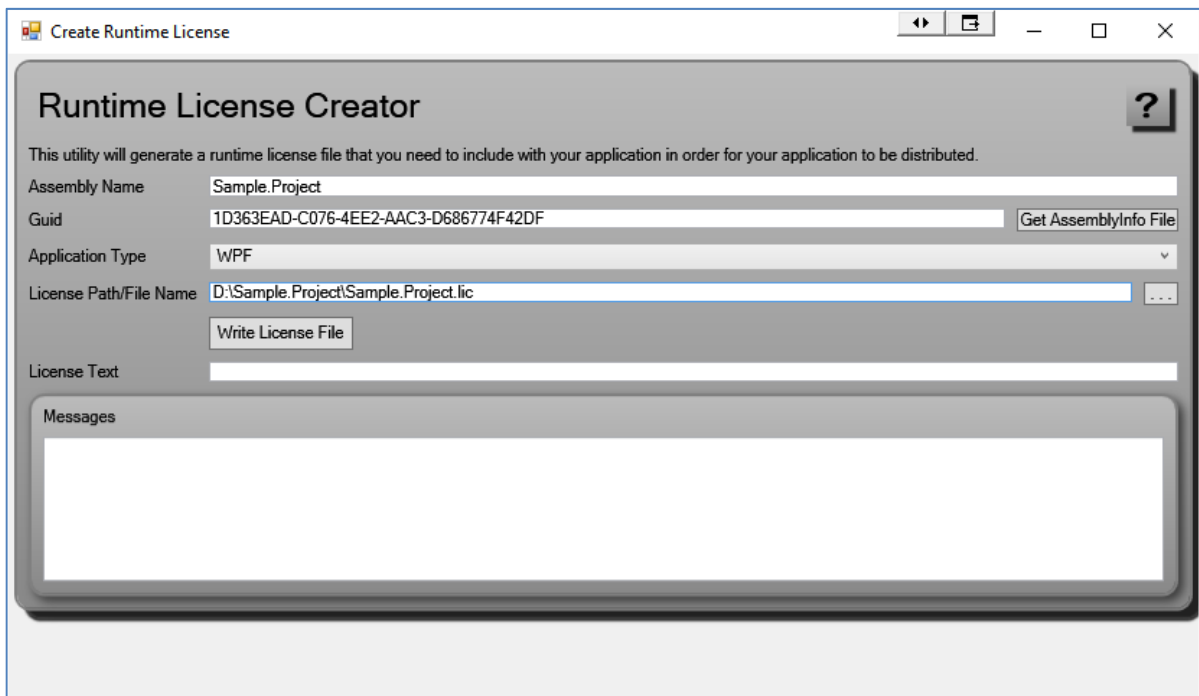


Figure 2: Create a runtime license from the Assembly Name and the GUID of the assembly for your application.

You are going to need the assembly name of your application, the application Guid of your application, and the type of the application. All of these values will be hashed together to create a unique license key that can only be used by your final assembly. No other assembly will be able to use this unique key. This

protects our DLLs from being used by anyone else, and protects your application as well.

Get the Assembly Name

The Assembly name you need is the EXE of your application or the DLL of your web application.

To retrieve the Assembly name open the Project Properties of your application as shown in Figure 3.

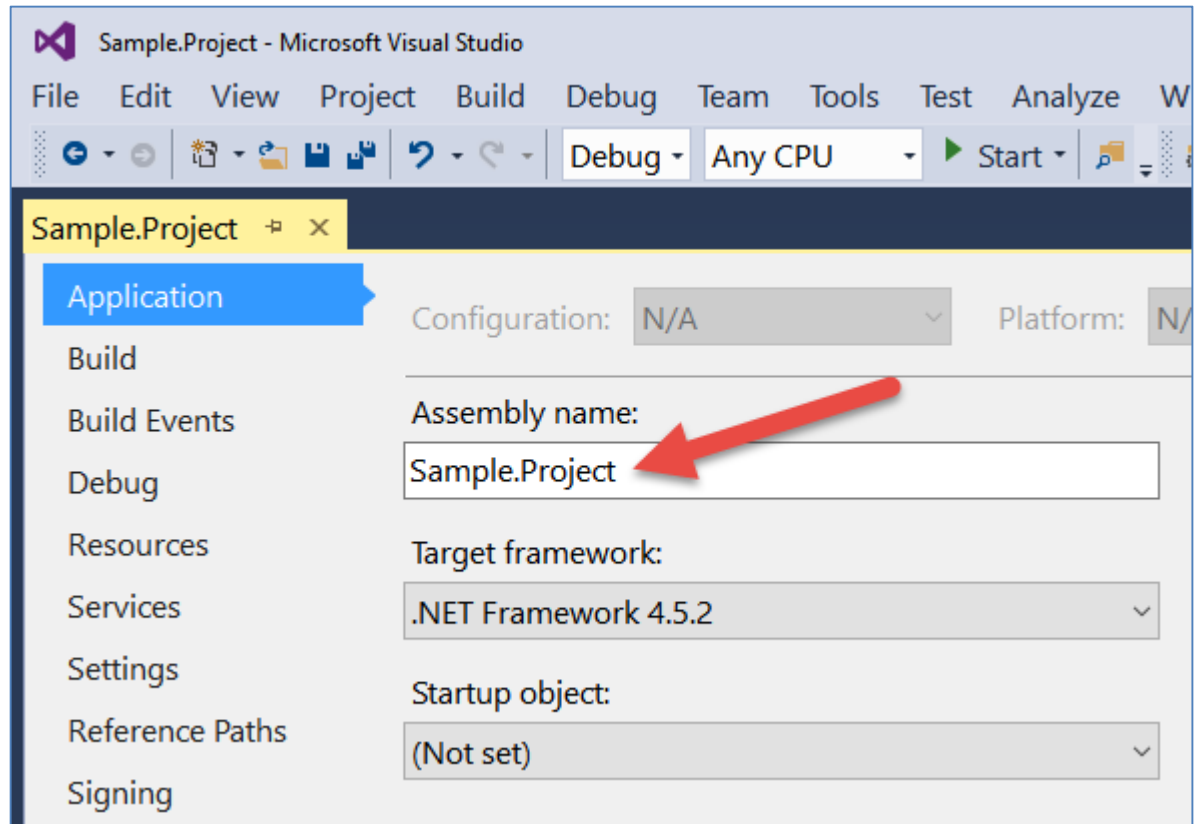


Figure 3: Get the Assembly name from the application properties window.

Copy the Assembly name exactly as it appears into the Runtime License Creator utility.

Get the Assembly Guid

When you create an application in Visual Studio a Guid is normally created for the application. There are some types of applications where a Guid is not created, however, you can add a Guid as you will see in the next section.

Again, from the Project Properties window you can click on the **Assembly Information...** button.

This will display a dialog like the one shown in Figure 4.

Copy the Guid in the GUID field and paste it into the Runtime License Creator utility.

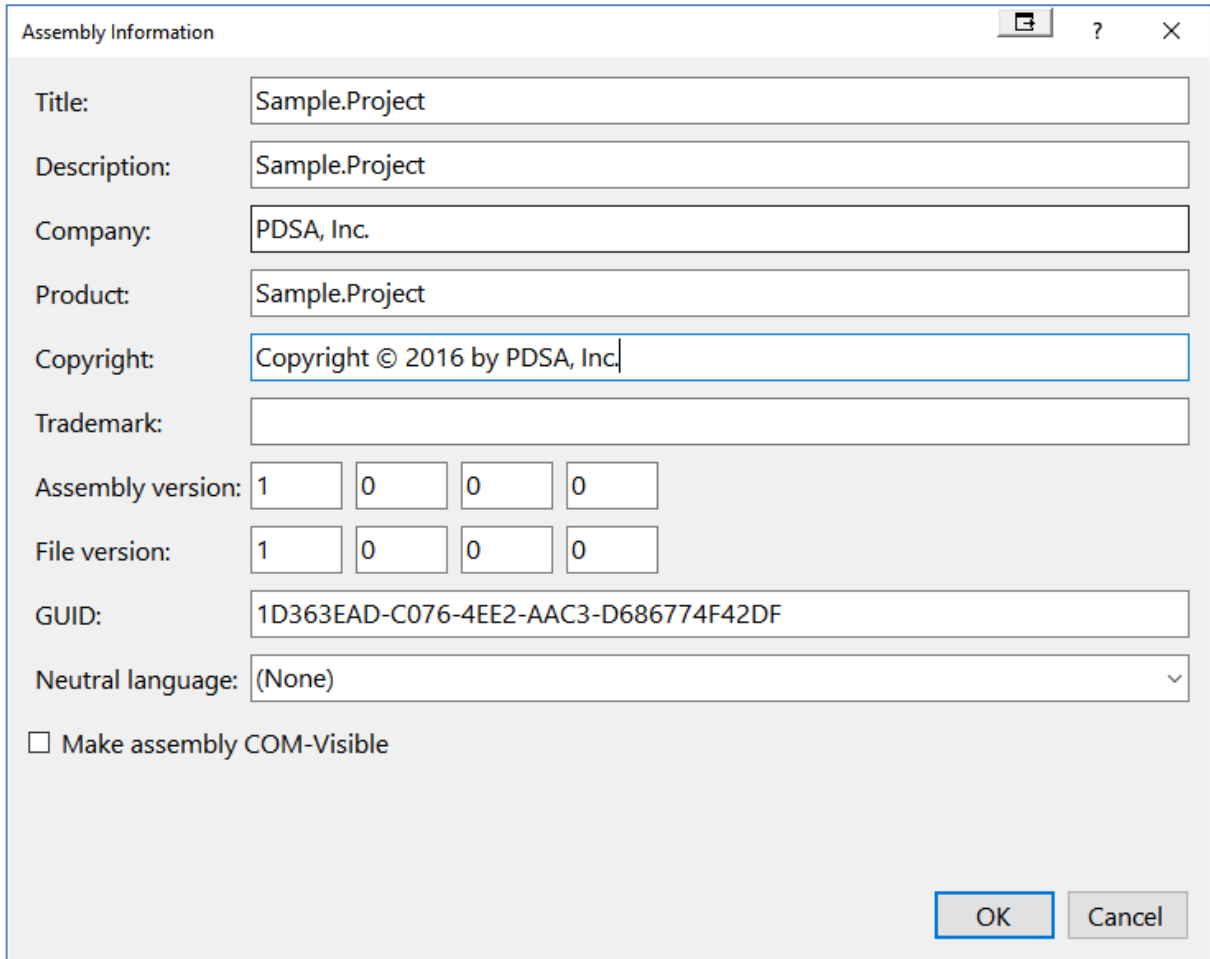


Figure 4: Get the Guid from the application properties window.

Creating a Guid

If the GUID is not present in the Assembly Information dialog, you can create one using Visual Studio.

Close the Assembly Information dialog and from the Tools menu, select Create GUID as shown in Figure 5.

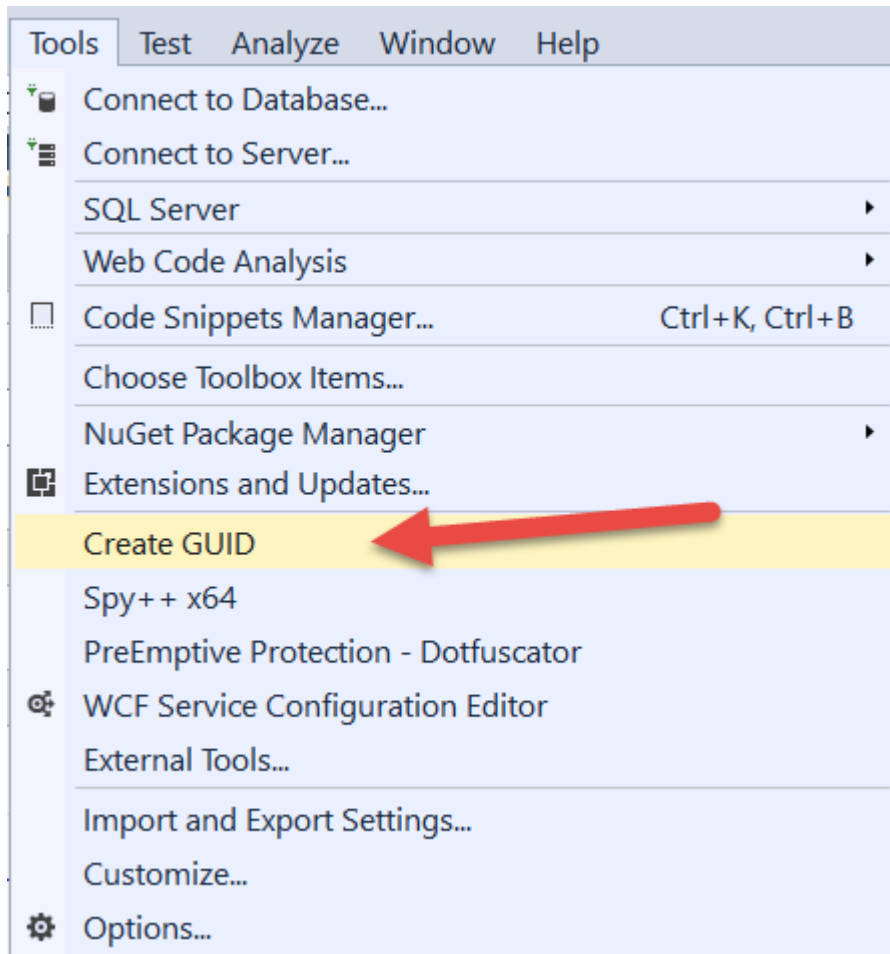


Figure 5: You can create a Guid from the Tools menu.

Select either option 5 or 6 and click on the Copy button.

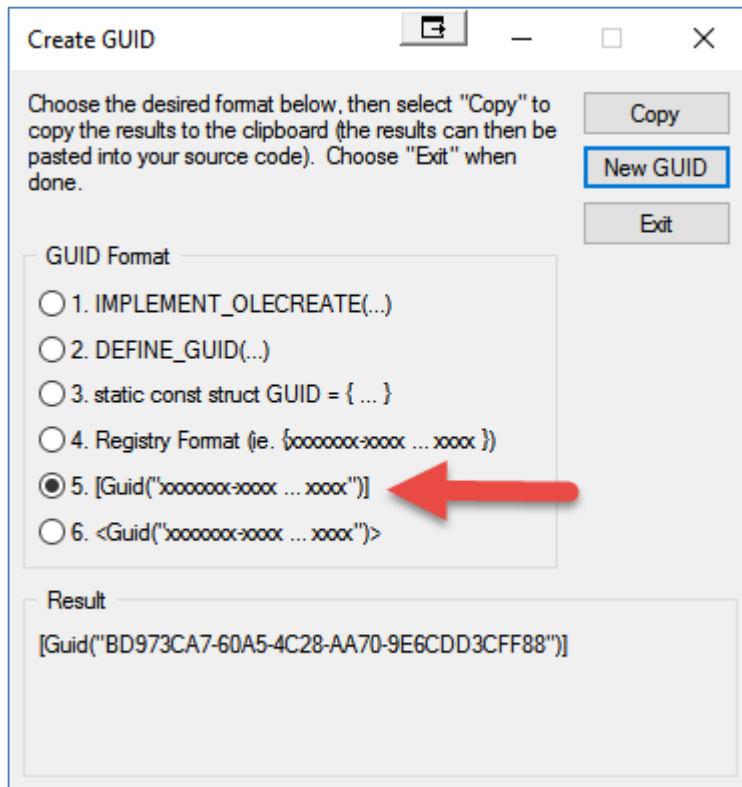


Figure 6: The Create GUID dialog will generate a few different formats of a Guid.

After copying to the clipboard, you will get a GUID that looks like the following:

```
[Guid( "B07000DF-5EF3-4D41-9C5D-849A38268588" ) ]
```

Copy just the GUID portion out from within the double quotes to the clipboard and paste that into the Runtime License Creator utility.

Create License File

The last field you fill in is the name of the license file.

This name must match the same name as your Assembly name for your application.

Next click the **Write License File** button to create your .LIC file.

Add License File to Your Project

Now that you have created your new license file, add it to the root of your project.

Click on this license file and bring up the Properties Window.

Set the “Copy to Output Directory” property to “**Copy always** or **Copy if newer**” (Figure 7).

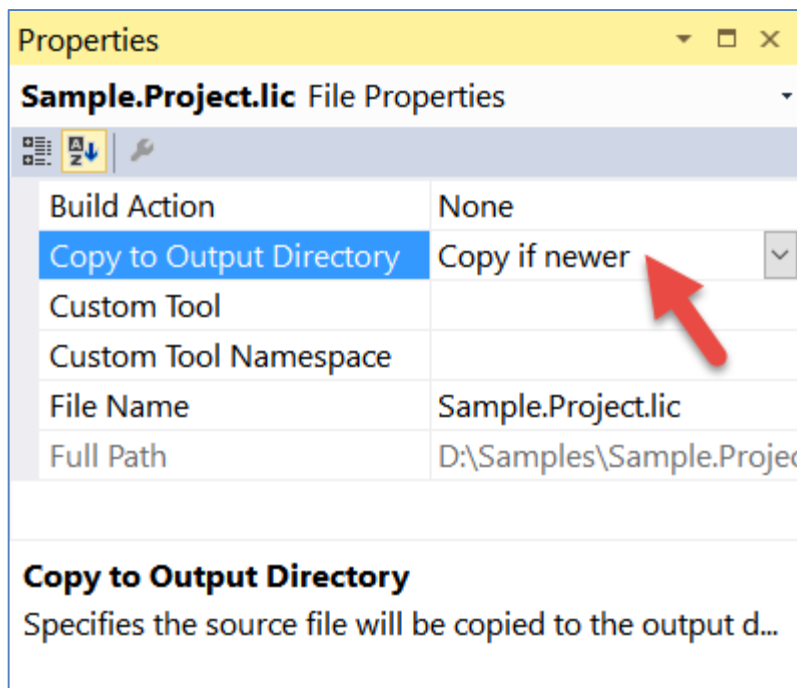


Figure 7: Change the license file to Copy always or Copy if newer to the output directory.

This file needs to be distributed with your final assembly.

WPF Applications

If you are building an .EXE file, you will need to make sure the .LIC file is in the same folder as the .EXE file

MVC Applications

Before you can publish your Web Form or MVC application to your web server you need to add the following code to the Application_Start event procedure in your Global.asax file.

```
protected void Application_Start(object sender, EventArgs e)
{
    PDSA.Common.PDSACheckAssembly.SetEntryAssembly(
        System.Reflection.Assembly.GetExecutingAssembly());
}
```

This will initialize the license code with the main executing assembly. Without this line of code, your application will not run.

The best way to deploy an ASP.NET web project to a QA, Development or Production server is to use the **Publish Web** dialog from the Build menu of Visual Studio.

Bring up your ASP.NET web project in Visual Studio.

Click on your web project in the Solution Explorer window.

Select Build | Publish <NAME OF APP> from the VS Menu

You will see a screen that looks similar to Figure 8.

Follow the instructions in this dialog to publish your web project to your appropriate location.

Be sure to include the .lic file is in the root of your deployed project.

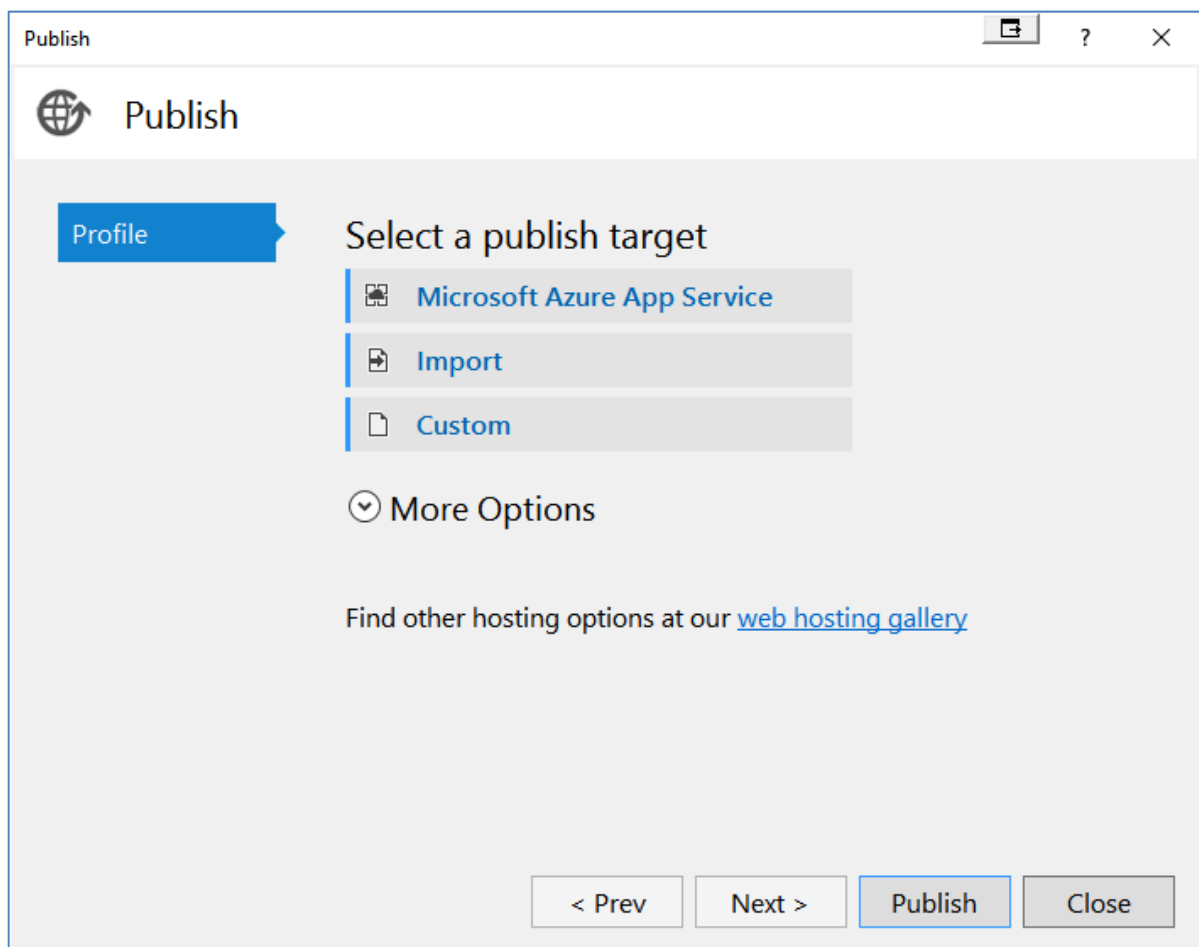


Figure 8: Publish Web dialog will help you deploy your project.

Web API/WCF Applications

Deploying a WCF or Web API Application is just like deploying an ASP.NET Application. You need to create a runtime license file that has the same name as your Web API/WCF Service Application dll. Make sure the license file is in the root of your web site.

Ensure that each WCF Service has a constructor in which you call the `SetEntryAssembly()` method of the `PDSACheckAssembly` class:

```
public MyService() : base()  
{  
    PDSA.Common.PDSACheckAssembly.SetEntryAssembly(  
        System.Reflection.Assembly.GetExecutingAssembly());  
}
```

Other than that, just follow the instructions for deploying an ASP.NET application.

Summary

In this chapter you learned how to use the Haystack Runtime License Creator utility to generate a runtime license for your application.

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