

Building Cora SeSequence V9.x Applications

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V9.2

Overview

When you install Cora SeSequence V9.x, you can install pre-built applications or build customized applications.

You need to build customized applications, if your system requires any of the following:

- Adding a custom activity or a Cora SeSequence extension.
- Editing the default configuration or layout, such as styles, grids, and columns.
- Adding custom content to an application, such as adding additional commands or pages to Flowtime.

Before you begin

Before you build applications, make sure that:

- ✔ The database is set up.
For more details, see [this article](#).
- ✔ You have the VISX extensions required for the application that you are building.
You can download the extensions from the CoraSeSequenceFiles folder in the [Cora SeSequence](#) repository.

NOTE

You need credentials to access the Cora SeSequence repository. Contact [Support](#) to obtain credentials.

- ✔ The feed to the latest [NuGet packages](#).
- ✔ The latest [PowerShell modules](#) are installed.
Click [here](#) to view a sample PowerShell script.
- ✔ The required custom code is ready to be packaged.

Building applications

Building customized applications involves the following main steps:

1	Setting up your computer with the files required to build applications.
2	Building your customized applications.
3	Creating the deployment package

1. Set up the computer

1. Install the VSIX extension files:
 - a. Double click any of the **.vsix** extension files.
 - b. Select the Visual Studio you want to which you want to install the project templates.
 - c. Click **Install**.
 - d. Click Close.
2. Set up the NuGets feed:
 - a. On your computer, open Visual Studio, and go to **Tools > Options**.
 - b. Select **NuGet Package Manager>Package Sources**.
 - c. At the upper-right corner, click **+**.
 - d. Enter a name for the NuGet feed.
 - e. Set the Source to the location of [the repository](#), and then click **OK**.

Your computer is ready to build new Cora SeSequence applications.

2. Build customized applications

This procedure describes how to create customized applications. You build your customized applications using the project templates provided with the VSIX extensions. There are six project templates:

- Flowtime
- Administration
- BRS
- ADSS
- JES
- WebAPI



Click [here](#) to view a demonstration of the procedure.

Procedure

IMPORTANT

Before you start this procedure, make sure that you already have created a project that contains the custom code.

1. On the build machine, open Visual Studio and create a new project.
 - a. Locate a Cora SeSequence project template, for example, Cora SeSequence Administration.
 - b. Enter a meaningful project name, and then click **Create**.
 - c. If this is the first project, you also create a solution, by providing it a name.
 - d. Right click the new solution, and then select **Add>New Project**.
 - e. Locate the remaining Cora SeSequence project templates that are relevant for your deployment and add them as new projects to the solution.
 - f. To view the NuGet packages that have been installed in the solution's selected templates, right click the solution, and then select **Manage NuGet Packages for Solution**.
 - g. To expose the content of the selected NuGet packages, right click your solution, and then select **Rebuild Solution**.
The expected result is a "*Rebuild all succeeded*" message.
2. Add the project with the custom code to the solution.
 - a. Right click the custom project and select **Manage Nuget Packages**.
The feed opens in Browse option and displays a list of all available Cora SeSequence Nugets.

- b. Locate and install the **PNMsoft.Build.NugetPackager**.
This NuGet packages the custom code as a NuGet that Cora SeSequence can use.
 - c. Locate and install the NuGet **Genpact.CoraSeSequence.Administration**.
This NuGet connects the custom code with the Cora SeSequence applications.
3. Build the NuGet package for the custom code.
 - a. To add the **nuspec** file, go to **Add>New Item>Text File**.
The name of the file should be the NuGet's project name with a nuspec extension.
 - b. Add and edit the nuspec manifest as follows:
 - `id` : Enter the NuGet name.
 - `version` : Enter a version number. Expected format is 1.0.0.0.
 - `description` : Enter a description of the custom code.
 - `authors` : Enter your team's name.
 - `files` : Map all the files, content and DLLs, to their locations and appropriate applications.
 4. Customize the project.
 - a. Add another text file and name it **Directory.Build.props**.
 - b. Add an XML as the file content, and edit it as follows:
 - `NuspecPath` : Mandatory property that sets the path of the relevant nuspec file to NuGet package.
 - `NuGetVersion` : Sets the version of the NuGet package.
 - c. Rebuild the custom activity project.
The new NuGet is created at C:\localnugets (default location).
 - d. To add the newly created NuGet to the custom application, right click the solution, and then select **Manage NuGet Packages for Solution**.
 - e. To locate your new NuGet, click **Browse**.
 - f. Select the projects to which you want to add the Nuget, and install it on these projects.
 - g. Right click the solution and select **Rebuild Solution**.
This action adds the code from the NuGet to the selected applications.
The expected result is a "*Rebuild all succeeded*" message.

You now should have a working Cora SeSequence application ready for debugging on your computer. For more information on AssemblyInfo Class, see [this page](#).

3. Create the deployment package

For your customized application to be deployable, you need to create a deployment package for it.

1. Open Windows PowerShell, and then run the following function:

```
New-CoraSeSequenceDeploymentPackage .
```

Next steps

The next step is to deploy the application.

For more details, see [this article](#).

V9.0-V9.1

Overview

When you install Cora SeSequence V9.0, you can install pre-built applications or build customized

applications.

If your system requires any customization or special code, you need to build your own applications.

Download files

When you build customized applications, you need to download the following SDK Tools file.

SDK Tools
<p>Installer wizard that installs:</p> <ul style="list-style-type: none">• PowerShell Modules• Cora SeQUENCE NuGet packages• VSIX (Visual Studio extension that installs Cora SeQUENCE project templates)
Download

Before you begin

Before you build applications, make sure that:

- ✔ The target server is setup as required.
For more details, see [this article](#).
- ✔ The database is set up.
For more details, see [this article](#).

Building applications

Building customized applications involves the following main steps:

1	Setting up your computer with the files required to build applications.
2	Building your customized applications.
3	Creating the deployment package

1. Set up the computer

1. [Download](#) the SDK Tools to your computer or to a central repository.
2. Install the NuGets and PowerShell modules on your computer or a central repository:
 - a. Double click the **SDK Tools exe** file.
 - b. Select the **I accept the terms in the license agreement**, and then click **Next**.
 - c. Select the **Cora SeQUENCE Feeds** node.
 - d. Click **Change**, and then select a location for the NuGets and PowerShell modules.
 - e. Click **OK**.
 - f. Click **Next**

- g. Click **Install**.
3. Run the SDK Tools installer to install the project templates on your computer:
 - a. Double click any of the **.vsix** extension files.
 - b. Select the Visual Studio you want to which you want to install the project templates.
 - c. Click **Install**.
 - d. Click Close.
4. Set up the NuGets feed:
 - a. On your computer, open Visual Studio, and go to **Tools > Options**.
 - b. Select **NuGet Package Manager>Package Sources**.
 - c. At the upper-right corner, click **+**.
 - d. Enter a name for the NuGet feed.
 - e. Set the Source to the location selected in step 2.c, and then click **OK**.
5. Your computer is ready to build new Cora SeQUENCE applications.

2. Build customized applications

This procedure describes how to create customized applications. You build your customized applications using the project templates provided in the SDK Tools package. The SDK Tools package includes five project templates:

- o Flowtime
- o Administration
- o BRS
- o ADSS
- o JES

6. Add your custom code, package it as a NuGet, and build it.

Procedure

IMPORTANT

Before you start this procedure, make sure that you already have created the required custom NuGets.

- a. Using Visual studio, create a new project:
 - i. Locate the relevant Cora SeQUENCE's project template, and create the project.
 - ii. Right click the solution, and then select **Manage NuGet Packages for Solution**.
 - iii. Make sure that the NuGet package sources are mapped to where the Cora SeQUENCE NuGet packages are located.
 - iv. Update the NuGets to the latest version.

7. NOTE

Use the same project to update the custom code. If you start a new project, you need to adjust the NuGet versions.

- b. Add your own NuGets.
- c. Based on your custom code, set the required configuration, such as connection string and configuration values.

- d. Modify the `AssemblyInfo.cs` file, as required.
- e. Build the project.

8. **NOTE**

During the first build of a project from the templates, you may get the following error:

```
Error CS0234 The type or namespace name 'Runtime' does not exist in the namespace 'PNMsoft.Sequence' (are you missing an assembly reference?) .
```

You can ignore this error.

You now should have a working Cora SeQuence application ready for debugging on your computer.

For more information on AssemblyInfo Class, see [this page](#).

3. Create the deployment package

For your customized application to be deployable, you need to create a deployment package for it.

- a. Open Windows PowerShell, and then run the following function:

```
New-CoraSeQuenceDeploymentPackage .
```

9. **Next steps**

The next step is to deploy the application.

For more details, see [this article](#).