

Set Up the Development Environment for Portal Customization

Last Modified on 03/28/2023 9:23 am EDT

Overview

Before you start to customize the portal, you need to prepare the development environment, which can be a dedicated server or your local computer. This preparation involves installing the 3rd-party software and Cora Orchestration components required to apply the customization.



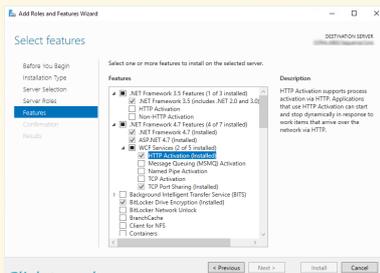
Watch a [demo](#) of the setup process.

Set up the development environment

The first step for setting up the environment is to download and extract the **Cora Orchestration Custom PS Scripts** ZIP file from the repository and run the **oneClick_Install_Env_Local.ps1** function.

IMPORTANT

Make sure that the WCF HTTP Activation service is installed and enabled on the Windows server.



[Click to enlarge.](#)

Prerequisites

Before you begin, make sure that you have:

- Set up a Cora Orchestration database
- The connection string to the database
- A valid product license
- Access to the Cora Orchestration repository

NOTE

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

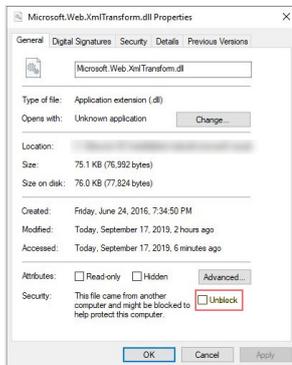
Procedure

1. Download and extract the **CustomPSScripts ZIP** file from the [repository](#).

IMPORTANT

The folder to which you extract the **CustomPSScripts ZIP** is your *customization working folder*. You must run all the PowerShell functions from this folder.

2. In the downloaded structure, locate the **tools** folder.
3. Under the **tools** folder, do the following:
 - a. Create a folder named "License", and place the Cora Orchestration license files in it.
 - b. Confirm that the *secrets.json* file is updated with the correct database connection string.
 - c. Right-click the *Microsoft.Web.XmlTransform.dll* file, and then click **Properties**.
 - d. On the General tab, if there is a Security section, make sure that the **Unblock** checkbox is selected.



4. Locate the **2_download_Original_File_Local.ps1** PowerShell script, and set the portal version and port value.

Parameter	Description	Type
FLOW_TIME_VERSION	Variable that specifies the portal version	Numeric
-Port	Value that determines the portal number	Numeric

5. Run the **oneClick_Install_Env_Local.ps1** function.
6. Optional: Install the [Redux Developer Tools](#) browser extension.
7. Restart your computer.

NOTE

At a later stage, the portal version and port value parameters will be added to the **oneClick_Install_Env_Local.ps1** function, and there will be no need to edit them separately.

PowerShell screen after deployment

```

name variable + snapshot_original
name variable + https://repo.corasequence.digital/repository/CoraSequenceFiles/FlowtimeApp/Flowtime_Premium_10.1.0.342.zip
name variable + C:\Template\deploy
name variable + C:\Template\deploy\Flowtime_Premium_10.1.0.342.zip

Flowtime Premium 10.1.0

Folder :
snapshot_original

Attempting stop...

Internet services successfully stopped

Name      ID      State      Physical Path      Bindings
----      -
CoraSequenceFlow 2      C:\inetpub\wwwroot\CoraSequenceFlowtime 1      http *:9090:
time 1

The variable: 'sequence:secrets:providerTypes' was added successfully, variable value is: 'File'
The variable: 'sequence:secrets:configFile' was added successfully, variable value is: 'C:\Template\deploy\tools\Secrets.json'
VERBOSE: Applying IIS configuration on site 'CoraSequenceFlowtime 1' for Forms authentication
VERBOSE: Setting default.aspx as the default document
VERBOSE: Setting ASP.NET Impersonation (False)
VERBOSE: Setting Anonymous Authentication (True)
VERBOSE: Setting Windows Authentication (False)
VERBOSE: Configuring sequence.engine authentication section
VERBOSE: HTTPS binding not detected, setting configuration for HTTP
VERBOSE: Starting configuration for CoraSequenceFlowtime 1
VERBOSE: Configuring WCF
VERBOSE: Configuring session
VERBOSE: Configuring cookies
VERBOSE: Configuring XSRF
VERBOSE: Saving configuration to CoraSequenceFlowtime 1

Attempting start...

Internet services successfully started

```

Required 3rd-party components

The `oneClick_Install_Env_Local.ps1` function installs the required 3rd-party components.

Component	Details
Visual Studio Code	For a better developing experience working with Visual Studio Code, it's recommended to download the following extensions: <ul style="list-style-type: none"> • GitLens • Prettier • Jest • Test Explorer UI
Latest NodeJS	Download the LTS Version
Microsoft URL Rewrite	Module for IIS
Chocolatey package manager for Windows	Package manager for Windows
.NET Framework 4.8	-
Git-LFS	Git Large File Storage replaces audio samples, videos and other large files with text pointers inside Git and stores the file contents on a remote server.
Notepad++	-

Component	Details
Microsoft Windows and IIS features	<ul style="list-style-type: none"> • IIS: .NET Framework 3.5 • IIS: .NET Framework 4.8 Advanced Services • Windows: Identity Foundation • Windows WCF HTTP Activation
WriteAscii	For PowerShell functions

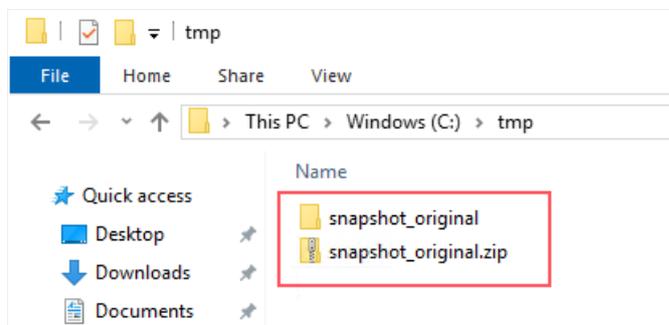
Additional software

It is recommended to install the [Redux Developer Tools](#) extension for your browser. You need this extension to develop React components with state, which may be required for advanced customization scenarios.

Cora Orchestration components

Besides downloading and installing the required 3rd-party software, the **oneClick_Install_Env_Local.ps1** function does the following:

- Installs the PowerShell modules with the required functions to deploy and configure Cora Orchestration.
- Deploys the portal web application in IIS in this location **C:\inetpub\wwwroot\CoraSeQUENCEFlowtime 1**.
- Creates a snapshot of the deployed portal site in this location **C:\tmp\snapshot_original**.

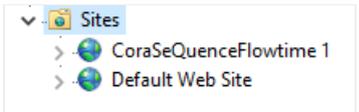
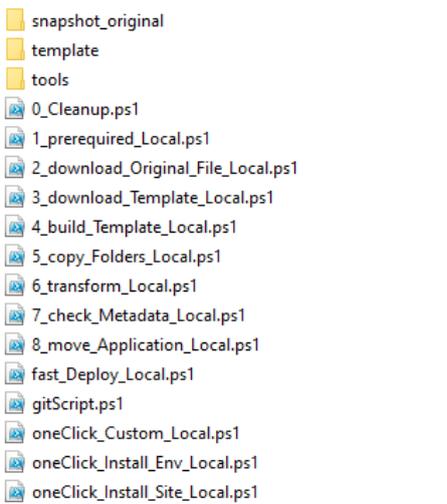


- Downloads the Template project from the [repository](#), and unpacks it in the folder from which you ran the **oneClick_Install_Env_Local.ps1** function.

Validate the development environment setup

After setup, check that the **CoraSequenceFlowtime 1** site has been added to the IIS Sites folder, the prerequisite 3rd-party software have been installed, and that the customization working folder includes the required components.

IIS	Customization working folder
-----	------------------------------

IIS	Customization working folder
	 <p>NOTE 0_Cleanup.ps1 is available from V10.3 onwards.</p>

Redeploy the development environment

In case you have already deployed development environment and for some reason you need to redeploy the portal with the Template project, run only the **oneClick_Install_Site_Local.ps1** PowerShell function.

1. Remove the **CoraSeQuenceFlowtime 1** site and all its contents from IIS.
2. Delete all the existing files from the customization working folder, except the PowerShell functions and the Tools folder.
3. Run the **oneClick_Install_Site_Local.ps1** PowerShell function.