

# Set Up the Development Environment for Portal Customization

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## 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.



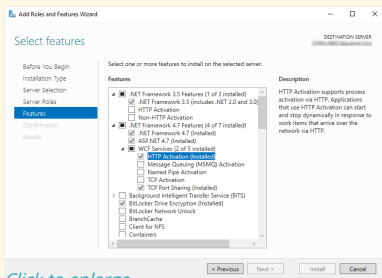
Watch a [demo](#) of the setup process.

## 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.

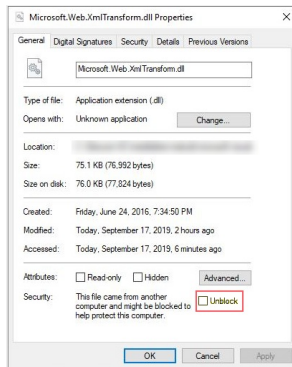
## Procedure

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"> <li>• <a href="#">GitLens</a></li> <li>• <a href="#">Prettier</a></li> <li>• <a href="#">Jest</a></li> <li>• <a href="#">Test Explorer UI</a></li> </ul>
Latest NodeJS	Download the <a href="#">LTS Version</a>
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"> <li>• IIS: .NET Framework 3.5</li> <li>• IIS: .NET Framework 4.8 Advanced Services</li> <li>• Windows: Identity Foundation</li> <li>• Windows WCF HTTP Activation</li> </ul>
<a href="#">WriteAscii</a>	For PowerShell functions

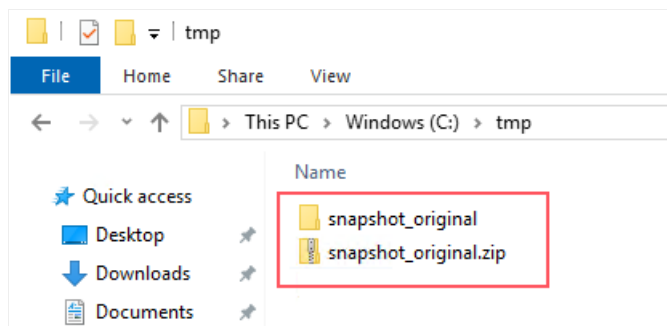
## Additional software

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**.

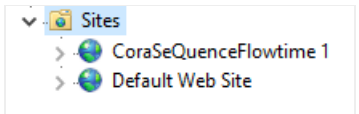
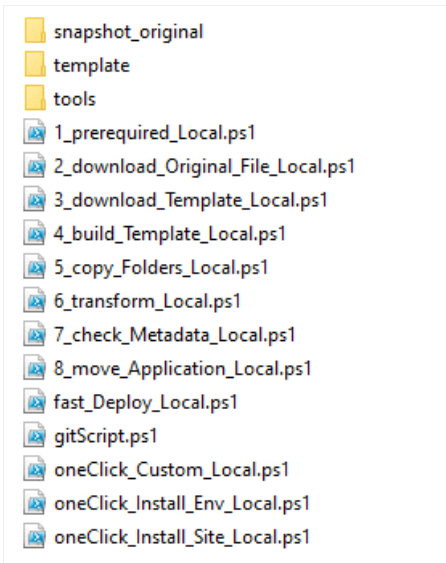


- Downloads the Template project from the [repository](#), and unpacks it in the folder from which you ran the **oneClick\_Install\_Env\_Local.ps1** function.

## 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
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IIS	Customization working folder
	

### 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.