State of West Virginia Department of Transportation





WDOT OpenRoads Designer Workspace Installation Guide

April 2025

WVDOT ORD Frequently Asked Questions

What is the WVDOT OpenRoads Designer (ORD) Workspace?

The WVDOT ORD Workspace is West Virginia Department of Transportation's Workspace files for the Bentley OpenRoads Designer Connect Edition software. The WVDOT ORD Workspace contains resources, standards and tools necessary for designing projects in accordance with WVDOT Standards.

What version of OpenRoads Designer is the WVDOT Workspace certified for?

The WVDOT ORD Workspace is currently certified for use with **OpenRoads Designer Connect Edition**, **Version 10.12.02.4**. The most current version of the WVDOT Workspace is **WVDOT_Standards_20.1**.

Where is the configuration file version information found?

The current and previous versions of the configuration file(s) are listed in the WVDOT_Standards_20.1.cfg file under both the Organization-Civil and Workspaces folders.



How do I install the WVDOT ORD Workspace?

There are 2 methods for installing OpenRoads Designer and the WVDOT Workspace. The WorkSpace files/standards can be installed as a (1) local copy to an individual users' machine using the default OpenRoads Designer install path or (2) installed/stored on a server location or other local folder. It is important to decide which type of installation you want and follow the instructions for installation carefully. Please read this Installation Guide before beginning the installation process.

Can computers have both SS4 and ORD loaded?

Yes, there is no requirement to remove SS4. Both can be installed and co-exist on the same machine.

Is there Bentley training available for OpenRoads Designer CE?

Yes. The Bentley LEARN site has training for OpenRoads Designer Connect Edition and other Connect Edition applications.

Installation Guide:

Installing OpenRoads Designer - Local Installation for Standalone Workstation (Use Standard Bentley Configuration):

This section provides steps for installing the WVDOT workspace on the local machine. This install will use the local default installed path from Bentley OpenRoads Designer.

Part 1 – Installing OpenRoads Designer; Local/Default Configuration:

- 1. Download **OpenRoads Designer CONNECT Edition v10.12.02.4** from the Bentley Software Center.
- 2. Launch the installer (.exe) for Bentley OpenRoads Designer Connect Edition by right-clicking on the previously downloaded executable (*Setup_OpenRoadsDesignerx64_10.12.02.4.exe*) file and selecting **Run As Administrator.**
- 3. On the first page of the Installation Wizard, toggle on any desired additional *Companion Features* or *Applications* and the *End User License Agreement* option and select **Install**.

OpenRoads Designer CONNECT Edition	
OpenRoads Designer CONNECT Edition	Configure
Companion Features	
GenerativeComponents (Optional-Free)	Show More 🗸
Companion Applications	
Bentley LumenRT CONNECT Edition - Update 13 (This Companion Product or a higher version is already installed)	Show More 🗸
I accept the End User License Agreement	Install

4. Wait patiently as OpenRoads Designer CONNECT Edition installs.



5. Upon Completion, select Finish.



Part 2 – WVDOT ORD Workspace; Local Configuration:

- 1. Download the *WVDOT_ORD_Workspace_20.1* executable file.
- 2. Launch the executable (.exe) by double-clicking on the file name.

			-
VDOT_ORD_Work	space_20.1.exe		3/27/202
2 7-Zip self-extract	ting archive	×	
Extract to:			
D:\			
	Extract	Cancel	

3. For the **Extract To:** field, click on the **button** and browse to **C:\ProgramData\Bentley\OpenRoads Designer CE\Configuration**. This is the default local location for the *Configuration* folder when OpenRoads Designer is installed.

NOTE: The Program Data folder is a hidden so be sure to change the Windows View settings to see hidden folders.

Browse For Folder		\times
Specify a location for e	xtracted files.	
	LicenseService	^
	Licensing	
>	MicroStation	
>	MicroStation CONNECT Edition	
>	MicroStation V8i (SELECTseries)	
>	OpenRail Designer CE	
>	OpenRailDesigner	
×	OpenRoads Designer CE	
>	Configuration Eula Organization-Civil Organization-Civil OrgenRoadsDesigner PowerGEOPAK PowerGEOPAK V8i (SELECTseries) PowerInRoads PowerInRoads	
	PowerinRoads V8i (SELEC Iseries 10)	
>	SharedContent	
>	SUDA	~
Make New Folder	OK Cancel	

- 4. Select the *Configuration* folder and click **OK**.
- 5. Select Extract.

e	×
Roads Designer CE\Co	onfiguration
Extract	Cancel
	e Roads Designer CE\Co Extract

- 6. The WVDOT workspace files are copied to the *Configuration* folder.
- 7. When prompted to Replace Organization *C:\ProgramData\Bentley\OpenRoads Designer CE\Configuration\Organization\standards.cfg* click **No to All**.

NOTE: The Organization folder structure and standards.cfg file are installed by default with OpenRoads Designer so we do not need to replace them. The Organization folder/folder structure is just a blank folder structure where additional standards can be added on top of any Workspace selected. It will not harm the Workspace Standards or Installed OpenRoads Designer files if this folder structure is overwritten, but it is not necessary to replace it.

Confirm F	File Replace	Х	
Destination folder already contains processed file.			
Would yo	ou like to replace the existing file		
	C:\ProgramData\Bentley\OpenRoads Designer CE\Configuration\Organization\ standards.cfg 6837 bytes Modified: 2020-01-15 04:46:14		
with this	one?		
	Organization\ standards.cfg 6837 bytes Modified: 2020-01-15 04:46:14		
	Yes Yes to All Auto Rename		
	No No to All Cancel		

- 8. Navigate to the *C:\ProgramData\Bentley\OpenRoads Designer CE\Configuration\Workspaces* folder and open the *WVDOT_Standards_20.1.cfg* file using Notepad or any other text editor.
- 9. In the *WVDOT_Standards_20.1.cfg* file, comment out the line pointing to a custom configuration by adding a '#' to the beginning of the line.
- 10. Uncomment the line pointing to the default installed/configuration path by removing the '#' from the beginning of the line.



11. Once those edits are made the config file should look like the lines below:
 # Custom Config Variable to point to WVDOT Worksets Folder - Server Install
 #WVDOT_WORKSETSROOT = \$(_USTN_CUSTOM_CONFIGURATION)WVDOT_WorkSets/

Local Install WVDOT_WORKSETSROOT

= \$(_USTN_CONFIGURATION)WVDOT_WorkSets/

- 12. Close the .*cfg* file and save it.
- 13. Launch OpenRoads Designer.
- 14. Under the *WorkSpace Menu* you should now see **WDOT_Standards_20.1** under *Example Configuration*.

OpenRoads Designer CONNECT Edition

WVDOT_Standards_20.1 •	
Search	<u>م</u>
Example Configuration	A
Imperial Standards	
Metric Standards	
Training and Examples	
WVDOT_Standards_20.1	· ·
No WorkSpace	Change the current WorkSpace
Create WorkSpace	
Configuration Migration	

Installing WVDOT ORD Workspace - Server Installation (Use Custom Configuration Path):

This section provides steps for installing the **WVDOT OpenRoads Designer Workspace** on a server that can be accessed by multiple users or other local folder.

NOTE: If you have already installed OpenRoads Designer on your machine and used the default install path but would like to change to a Custom Configuration, please skip to section below titled: <u>Manually Setting up a</u> <u>Custom Configuration</u>.

Part 1 – Installing OpenRoads Designer; Custom Configuration:

- 1. Download **OpenRoads Designer CONNECT Edition v10.12.02.4** from the Bentley Software Center.
- Launch the installer (.exe) for Bentley OpenRoads Designer Connect Edition by right-clicking on the previously downloaded executable (*Setup_OpenRoadsDesignerx64_10.12.02.4.exe*) file and selecting Run As Administrator.
- 3. On the first page of the Installation Wizard, select **Configure** from the top right corner of the dialog.

	? _ ×
OpenRoads Designer CONNECT	Edition
OpenRoads Designer CONNECT Edition	Configure
Companion Features Click here to configure OpenRoads Des	signer CONNECT Edition $arphi$
GenerativeComponents (Optional-Free)	Show More 🗸
Companion Applications	
Bentley LumenRT CONNECT Edition - Update 13 (This Companion Product or a higher version is already installed)	Configure Show More ∨
✓ I accept the End User License Agreement	
Cancel	👻 İnstall

4. The Application Install Location dialog appears. Do not change the Application Path. Select Next.

NOTE: The Application Path can be changed if desired but is not necessary.

 OpenRoads Designer CONNECT Edition 	×
OpenRoads Designer CONNECT Edition	
Application Install Location Where do you want to install this application?	
Application Path	
C:\Program Files\Bentley\OpenRoads Designer CONNECT Edition\	
Back Cancel Next	$\mathbf{>}$

5. The Configuration dialog appears. Select the **Custom Configuration (plus Delivered Configuration)**

option. Then select the button to browse and create the folder in which you will install the *WVDOT ORD Workspace* after completing the installation of OpenRoads Designer.

OpenRoads Designer CONNECT Ed	♀ _ × ition
OpenRoads Designer CONNECT Edition	
Configuration ⑦ What type of Configuration do you want to set up?	
Delivered Configuration	
Custom Configuration (plus Delivered Configuration)	
Delivered Configuration C:\ProgramData\Bentley\OpenRoads Designer CE\ Browse to the location of your Custom (shared or network) Configuration Custom Configuration	 Browse
Back Cancel	Next

6. Browse to the desired server location you want the *WVDOT ORD Workspace* to reside and select **Make New Folder**. Create a folder called **ORD_Custom_Configuration**.

NOTE: The folder name can be any name desired. It is not required that the name of the folder be ORD_Custom_Configuration. This is the name being used for the purpose of this document.

7. Select the new Configuration folder, *ORD_Custom_Configuration*, and click **OK** to accept your server location selection and close the *Browse For Folder* dialog.

Browse For Folder	X Browse For Folder X
 Music Pictures Windows (C:) Data (D:) Workspace Server CDOT CTAs LEARN Content MDT RSH Server Training Training_Conferences TxDOT Linestyles WOrkspaces WVDOT 	 Music Pictures Windows (C:) Data (D:) Workspace Server ORD_Custom_Configuration CDOT CTAs LEARN Content MDT RSH Server Training Training Training Training Training Training Training Workspaces

8. The selected path/folder will show in the *Custom Configuration* field. Click **Next** to continue with the installation.



9. You may check the *Desktop Shortcut* option, as shown, if desired. Select **Done** to continue with the installation.



10. You are now returned to the initial installation dialog. Toggle on any desired additional Companion Features or Applications and the *End User License Agreement* option and select **Install**.



11. Wait patiently as OpenRoads Designer CONNECT Edition installs.



12. Upon Completion, select Finish.



Part 2 – Installing WVDOT ORD Workspace; Custom Configuration:

- 1. Download the *WVDOT_ORD_Workspace_20.1* executable file.
- 2. Launch the executable (.exe) by double-clicking on the file name.

		-	
VVDOT_ORD_Workspace_20).1.exe		3/27/202
2 7-Zip self-extracting arch	ive	×	
Extract to:			
D:V			
	Extract	Cancel	

3. For the **Extract To:** field, click on the **under and an analysis of the Custom Configuration Path/folder** (_ORD_Custom_Configuration) created while installing OpenRoads Designer in Part 1.

Browse For Folder	×
Specify a location for extracted files.	
> 👌 Music	^
> E Pictures	
> 📑 Videos	
> 🎬 Windows (C:)	
🗸 🔜 Data (D:)	
_Workspace Server	
ORD_Custom_Configuration	
> CDOT	
CTAs VS	
> LEARN Content	
> MDT	
> RSH Server	
> Training	
Training Conferences	
Workmass	
	*
Make New Folder OK C	ancel

4. Select the *Custom Configuration* folder and click **OK**.

5. Select **Extract** and the WVDOT workspace files are copied to the *Custom Configuration* folder.

2 7-Zip self-extracting archiv	e	×
Extract to:		
D:_Workspace Server_ORD_Custom_Configuration		
	Extract	Cancel
	6	

- 6. Launch OpenRoads Designer.
- 7. Under the *WorkSpace Menu* you should now see **WVDOT_Standards_20.1** under *Custom Configuration*.

OpenRoads Designer CONNECT Edition

WVDOT_Standards_20.1 •	_WVDOT_Projects *
Search * Custom Configuration	
WVDOT_Standards_20.1	ion\WVDOT_WorkSets_WVDOT_Proje AM Size: 58 KB
Imperial Standards	
Metric Standards	
Training and Examples	v
No WorkSpace	
 Create WorkSpace 	
Configuration Migration	

Manually Setting up a Custom Configuration:

If you have already installed OpenRoads Designer on your machine and used the default, installed configuration path but would like to change to a Custom Configuration follow the steps below.

NOTE: This is not the recommended approach. It is best to set this path when installing OpenRoads Designer.

- 1. Open *File Explorer* and navigate to the server and/or folder location where you would like to store the WVDOT Workspace Files.
- 2. Create a new folder called *ORD_Custom_Configuration*. This will be your *Custom Configuration* folder.

NOTE: The folder name can be any name desired. It is not required that the name of the folder be ORD_Custom_Configuration. This is the name being used for the purpose of this document.

- 3. In File explorer, navigate to the C:\ProgramData\Bentley\OpenRoads Designer CE\Configuration\ folder.
- 4. Open the **ConfigurationSetup.cfg** in Notepad.
- 5. In the [General] section go to the *_USTN_CUSTOM_CONFIGURATION=* statement and enter the path to your Custom Configuration.

_USTN_CUSTOM_CONFIGURATION=//Workspace Server/_ORD_Custom_Configuration/

6. In the [Set Configuration] section, reset <u>USTN_CONFIGURATION</u> = to its default value, pointing to the local/installed example configuration folder.

_USTN_CONFIGURATION= C:/ProgramData/Bentley/OpenRoads Designer CE/Configuration/

NOTE: Be sure to use forward slashes (/) when defining a path in a Bentley .cfg file.

```
# ConfigurationSetup.cfg - Configures the root Configuration directory
# for Your Organization
#
# The main function of this configuration file is to allow user to specify
# the root Configuration directory to activate. The active Configuration
# directory is represented by _USTN_CONFIGURATION. By default, it points to
# the installed Configuration defined by _USTN_INSTALLED_CONFIGURATION,
# which can consist of example WorkSpaces and WorkSets.
# If your organization has its own Configuration directory, you can define
# _USTN_CUSTOM_CONFIGURATION to that directory path and use it as follows.
#_USTN_CUSTOM_CONFIGURATION = D:/.../MyConfiguration/
#_USTN_CONFIGURATION : ${_USTN_CUSTOM_CONFIGURATION}
# START: The section defines user selection at the time of installation.
# These lines are generated by installer.
[General]
_USTN_CUSTOM_CONFIGURATION=//Workspace Server/_ORD_Custom_Configuration/
[SetConfiguration]
%if !defined (_USTN_USER_CONFIGURATION)
%if defined (_USTN_CUSTOM_CONFIGURATION) && ($(_USTN_CUSTOM_CONFIGURATION) != "") && exists ($(_USTN_
_USTN_CONFIGURATION = C:/ProgramData/Bentley/OpenRoads Designer CE/Configuration/
%endif
%endif
```

- 7. Save and close the *ConfigurationSetup.cfg* file.
- OpenRoads Designer is now setup to use a *Custom Configuration* path. Follow the steps in Part 2 of the previous section: <u>Installing WVDOT ORD Workspace</u>; <u>Custom Configuration</u> to install the WVDOT Workspace.