

# Configuring OpenRoads Designer on a Server and Combined with MicroStation

There are different methods to store a workspace configuration on a server or other folder. This document describes two methods recommended when setting up OpenRoads Designer. In addition, the same workspace configuration setup for OpenRoads Designer can be used by MicroStation.

First let's get clear a confusing bit of vocabulary because unfortunately the word "workspace" gets used to mean two different things. The folder structure and configuration variables as a collection are commonly referred to as a workspace. In this document, we use the term *workspace configuration* to describe this folder structure and configuration. New to the CONNECT Edition software is the ability to select a WorkSpace when opening a file. Notice the capitalization of the W and S when we refer to the selectable WorkSpace which is a component of the workspace configuration.

It is important to understand that OpenRoads Designer contains the MicroStation workspace configuration so there is no need to combine them, just point both MicroStation and OpenRoads designer to a copy of the OpenRoads Designer workspace configuration. Different WorkSpaces (selectable in the user interface) for MicroStation and OpenRoads Designer can still be used if desired even though they are all stored on a single workspace configuration (folder structure) on the server.

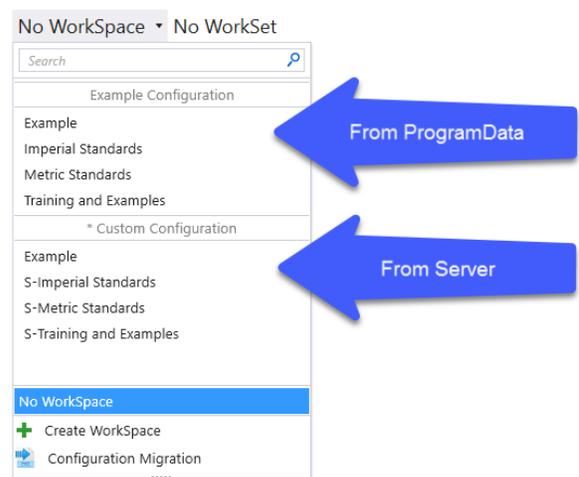
## Method 1a: Redirect the entire workspace configuration folder structure using .cfg files

NOTE: While this method is the most straight forward because you can redirect everything with a single variable, it limits your ability to store workspace configuration files and project files in separate server locations. Storing project files in a separate server location is a common request. If that is required skip to Method 2.

When this method is used MicroStation and OpenRoads designer see BOTH the WorkSpaces delivered in the ProgramData folder and the server location. These are presented in the user interface as the *Example Configuration* and *Custom Configuration* respectively. If you prefer not to see both of these in the user interface, skip to Method 2.

1. Copy the entire `C:\ProgramData\Bentley\OpenRoads Designer CONNECT 10.xx.00\Configuration\` folder to a server location.
2. Point OpenRoads Designer to the server folder.

### OpenRoads Designer CONNECT Edition



- a. Edit the file C:\ProgramData\Bentley\OpenRoads Designer CONNECT 10.xx.00\Configuration\ConfigurationSetup.cfg
  - b. Define the server location of the **Configuration** folder by setting the `_USTN_CUSTOM_CONFIGURATION` variable. For example:
    - `_USTN_CUSTOM_CONFIGURATION= //Server_Name//Configuration/` or
    - `_USTN_CUSTOM_CONFIGURATION= S:/Configuration/`
3. Point MicroStation to the server folder.
    - a. Copy the ConfigurationSetup.cfg from the OpenRoads Designer folder and put it in the MicroStation folder (C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\).

### Method 1b: Redirect the entire workspace configuration folder structure using Windows

An alternative method is to define the `_USTN_CUSTOM_CONFIGURATION` variable as a Windows environment variable instead of editing the configuration file for each product installed on a machine. The advantage is the variable is defined once for all products.

1. Start the Window Control Panel.
2. Select System > Advanced > Environment Variables.
3. Define a new variable named `_USTN_CUSTOM_CONFIGURATION` with a value set to the location of the **Configuration** folder on the server. Be sure to include the trailing slash which is required by MicroStation when defining folder paths.
4. Inspect the *ConfigurationSetup.cfg* file for each product and make sure there are no uncommented lines that read `_USTN_CUSTOM_CONFIGURATION=`. Add a comment (# symbol) to the beginning of the line. If you do not do this MicroStation or OpenRoads Designer will read this line and overwrite the Windows environment variable definition with blank.

```

1 #-----
2 # ConfigurationSetup.cfg - Configures the root Configuration directory
3 # for Your Organization
4 #
5 # The main function of this configuration file is to allow user to specify
6 # the root Configuration directory to activate. The active Configuration
7 # directory is represented by _USTN_CONFIGURATION. By default, it points to
8 # the installed Configuration defined by _USTN_INSTALLED_CONFIGURATION,
9 # which can consist of example WorkSpaces and WorkSets.
10 # If your organization has its own Configuration directory, you can define
11 # _USTN_CUSTOM_CONFIGURATION to that directory path and use it as follows.
12 #
13 # _USTN_CUSTOM_CONFIGURATION = D:/../MyConfiguration/
14 # _USTN_CONFIGURATION : ${ _USTN_CUSTOM_CONFIGURATION}
15 #-----
16
17 #-----
18 # START: The section defines user selection at the time of installation.
19 # These lines are generated by installer.
20 [General]
21 _USTN_CUSTOM_CONFIGURATION=
22
23 [SetConfiguration]
24 %if !defined ( _USTN_USER_CONFIGURATION)
25 %if defined ( _USTN_CUSTOM_CONFIGURATION) && ( ${ _USTN_CUSTOM_CONFIGURATION} != "" ) && exists ( ${ _USTN_CUSTOM_CONFIGURATION} )
26 _USTN_CONFIGURATION = C:/ProgramData/Bentley/MicroStation CONNECT Edition/Configuration/
27 %endif
28 %endif

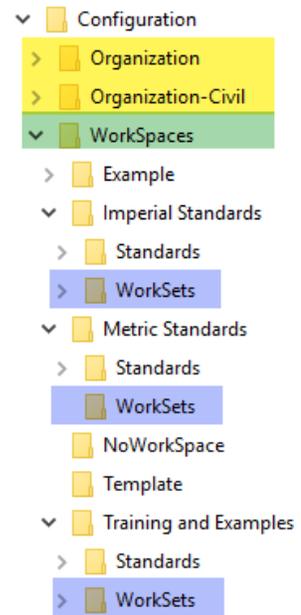
```

### Method 2a: Individually redirect parts of workspace configuration using .cfg files

The workspace configuration is made up of three parts that load in successive order. Those parts are the *Organization* (including *Organization-Civil*), the *WorkSpace*, and the *WorkSet*. The

software loads the definitions and resource files from the Organization level, then the WorkSpace, and then the WorkSet. This means the Organization is essentially the base resources and then additional resources specific to a company (WorkSpace) or project (WorkSet) are layered on to either append to or replace what is defined by the higher part or level.

Organization vs Organization-Civil – The standard (MicroStation) workspace configuration includes a folder structure named Organization. The resources added this folder structure are always loaded no matter which WorkSpace is selected. This is good if there is only one base standard used. However, what if work is done for several different countries, or owners, or departments of transportation each of which have base standards they require be used. This is the purpose of the Organization-Civil folder. In this folder are sub-folders that each contain **a different base standard**. You can have as many base standards as necessary for your needs. For example, if work is done with 4 US DOTs there is a folder for each DOT. Or if work is done in 2 different countries there would be a different folder for each country's base or localized standards. Which base standard is used is specified by the variable CIVIL\_ORGANIZATION\_NAME which must be defined in each Workspace.cfg file. This allows different WorkSpaces to use different base standards as necessary instead of automatically loading the same base standard from the Organization folder for all WorkSpaces.



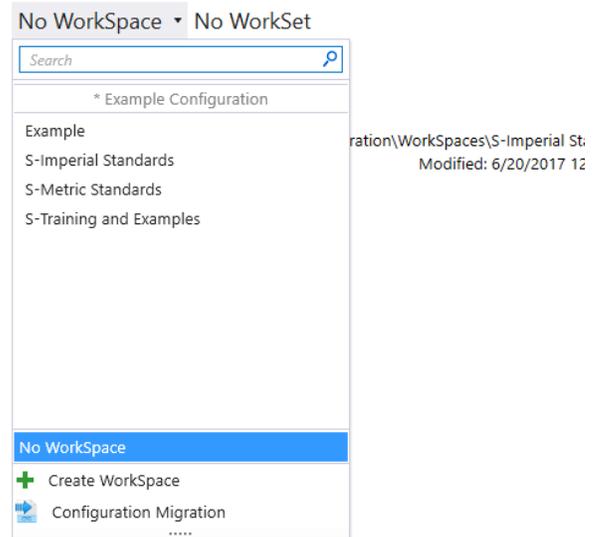
The Organization level can be used in combination with the Organization-Civil level to define foundation standards that will be loaded for all WorkSpaces. For example, a company cell library or sheet border that should be available to all projects no matter which DOT or country base standard is being used could be stored at the Organization level.

The products are delivered with all three of these parts stored in the Configuration folder. The *Organization* (including Organization-Civil when OpenRoads Designer is loaded), and the *WorkSpace* have their own folders at the root of the Configuration folder. The *WorkSet* is a child of the *WorkSpace* and this is stored in a subfolder within each *WorkSpace*.

Using this method to configure your workspace configuration provides the flexibility to separate these parts so they can be stored at different locations if desired.

Also, using this method MicroStation and OpenRoads Designer only uses the WorkSpaces on the server and present just those in the user interface Example Configuration section. The WorkSpaces delivered in the ProgramData folder are not shown in the user interface.

## OpenRoads Designer CONNECT Edition



1. Copy the complete `C:\ProgramData\Bentley\OpenRoads Designer CONNECT 10.xx.00\Configuration\` folder to a server location.
2. Point OpenRoads Designer to the server folder.
  - a. Edit the file `C:\ProgramData\Bentley\OpenRoads Designer CONNECT 10.xx.00\Configuration\WorkspaceSetup.cfg`
  - b. Define server location of the **Organization-Civil** folder by setting the `MY_CIVIL_ORGANIZATION_ROOT` variable. For example:
 

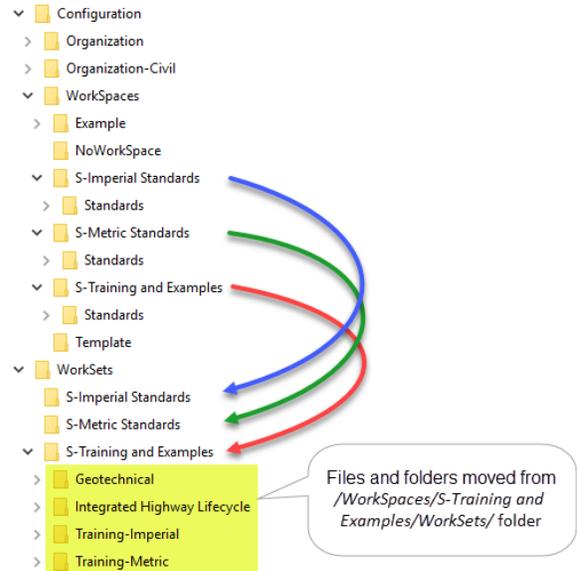
```
MY_CIVIL_ORGANIZATION_ROOT = //Server_Name/Configuration/Organization-Civil/ or
MY_CIVIL_ORGANIZATION_ROOT = S:/Configuration/Organization-Civil/
```
  - c. OPTIONAL – If standards have been included at the Organization level in addition to the Organization-Civil level, the location of the **Organization** folder must be defined by adding the `_USTN_ORGANIZATION` variable to the `WorkspaceSetup.cfg` file. This variable is not defined in the `WorkspaceSetup.cfg` file by default. For example:
 

```
_USTN_ORGANIZATION = //Server_Name/Configuration/Organization/ or
_USTN_ORGANIZATION = S:/Configuration/Organization/
```
  - d. Define location of the **WorkSpaces** folder on the server by setting the `MY_WORKSPACES_LOCATION` variable. The `WorkSpaces` folder does NOT need to be a child of the `Configuration` folder. It can be in a different folder or even a different server. A common configuration is to store the base standards in the `Organization-Civil` folder on a read-only server location and the project data in the `Workspace` and `WorkSet` at another location. For example:
 

```
MY_WORKSPACES_LOCATION = // Server_Name/WorkSpaces/ or
MY_WORKSPACES_LOCATION = S:/Configuration/WorkSpaces/
```

3. OPTIONAL – It is possible to store WorkSet (project) folders at a different location than the WorkSpace. **CAUTION - Make sure this is really what is desired before implementing this option because it will cause additional administrative effort each time a new WorkSpace or WorkSet is created. This optional setup should **only be considered** if you have a requirement to isolate the project files (the WorkSet) from the WorkSpace. In the vast majority of situations this step can and should be skipped.**

- a. Create a new folder on the server for the WorkSets.
- b. Create a new folder in the WorkSets folder for EACH WorkSpace. The folders must be the same name as the WorkSpace.
- c. MOVE the existing files and folders from the /WorkSpaces/{WorkSpace name}/WorkSets/ folder to the new /WorkSets/{WorkSpace name}/ folders created in step 3b. Do not copy the WorkSets folder itself, just the contents (files and sub folders).



IMPORTANT – If you choose to use this option there is an error in the WorkspaceSetup.cfg file delivered with OpenRoads Designer, CONNECT Edition (10.00.00.120) and Update 1 (10.01.00.15). The highlighted portion of the file below needs to be changed from MY\_WORKSPACES\_LOCATION to MY\_WORKSET\_LOCATION.

```

%if defined (MY_WORKSET_LOCATION) && exists (%(MY_WORKSET_LOCATION))
    _USTN_WORKSETSROOT = % (MY_WORKSPACES_LOCATION)%( _USTN_WORKSPACENAME) /
%else
    _USTN_WORKSETSROOT = % ( _USTN_WORKSPACEROOT)WorkSets/
%endif

```

4. Point MicroStation to the server folder.
  - a. Copy the WorkspaceSetup.cfg from the OpenRoads Designer folder and put it in the MicroStation folder (C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\).

### Method 2b: Individually redirect parts of workspace configuration using Windows

An alternative method is to define the MY\_CIVIL\_ORGANIZATION\_ROOT and MY\_WORKSPACES\_LOCATION variables as Windows environment variables instead of editing the configuration file for each product installed on a machine. The advantage is the variables are defined once for all products.

1. Start the Window Control Panel.
2. Select System > Advanced > Environment Variables.

3. Define a new variable named MY\_CIVIL\_ORGANIZATION\_ROOT with a value set to the location of the **Organization-Civil** folder on the server. Be sure to include the trailing slash which is required by MicroStation when defining folder paths.
4. OPTIONAL – If standards have been included at the Organization level in addition to the Organization-Civil level, define a new variable named \_USTN\_ORGANIZATION with a value set to the location of the **Organization** folder on the server. Be sure to include the trailing slash which is required by MicroStation when defining folder paths.
5. Define a new variable named MY\_WORKSPACES\_LOCATION with a value set to the location of the **WorkSpaces** folder on the server. Be sure to include the trailing slash which is required by MicroStation when defining folder paths.