

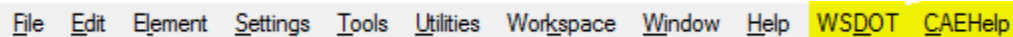
## WSDOT Resources for CAE Applications

### Overview

WSDOT Computer Aided Engineering (CAE) Support provides resources for WSDOT's civil engineering design (Power InRoads) and drafting (MicroStation) applications. These resources help produce electronic data to required WSDOT specifications, and include symbol & line style libraries, feature code definitions, and custom tools & macros. These tools and files are used by all drafters and engineers at WSDOT, and are available as a zip file for our external partners. Using common resources ensures consistency between internal and external customers.

The WSDOT Resources are stored separately from your application software and any other customized resources that you have on your workstation. They can be located on the local drive or a network location. The parent folder - created as part of the framework - contains the resources in a set of subfolders. MicroStation and Power InRoads shortcuts can then be created that open the applications and point to the resource set location.

Successful installation and configuration of the WSDOT resources will result in **WSDOT** and **CAEHelp** pull down menu options.



### Installation Instructions

Installation includes downloading and unzipping the resource set, then copying the WSDOT.cfg file to the application install folder(s).

1. Download the resource zip file from <http://www.wsdot.wa.gov/Design/CAE/Updates.htm> and place it on your desktop.

Create a folder to hold your WSDOT resource set. It can be located on any of your local or network drives. The path can't include any spaces. If you already have a location with WSDOT standards previously installed, go to **Updating WSDOT Resources** later in this document.

2. Open the zip file on your desktop and use **Extract All** to place the resources in your new resource folder.

Example:

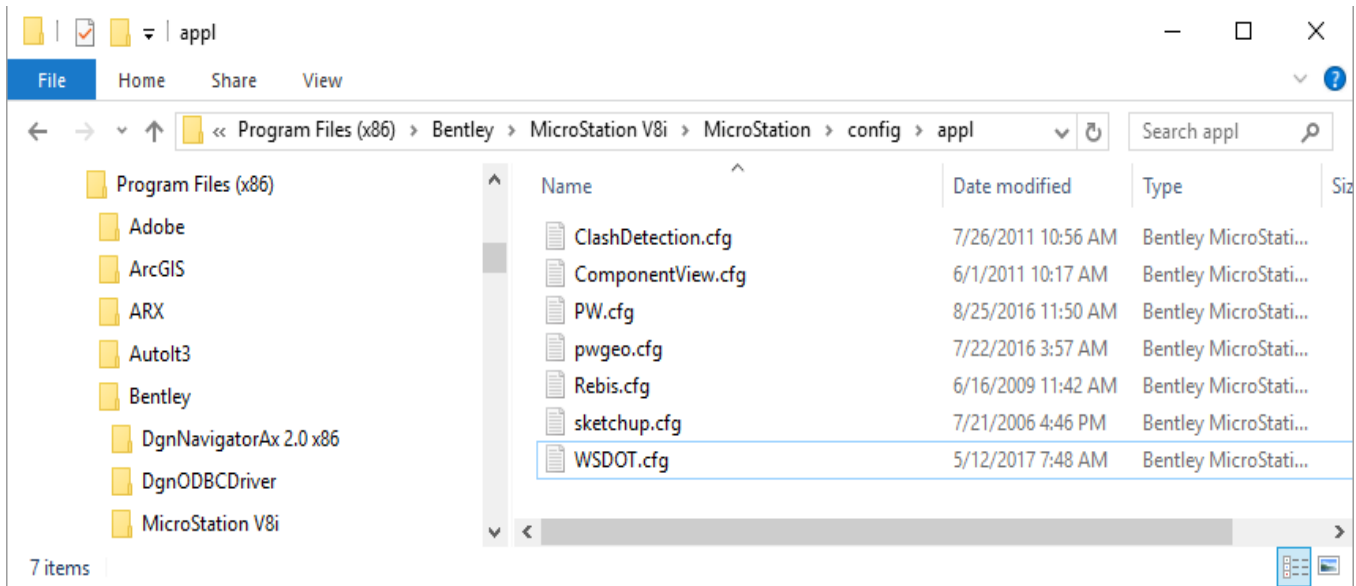
Create *F:\CAD\_Standards\WSDOT* to hold the WSDOT CAD Resources.

Open the desktop zip file and **Extract All** to *F:\CAD\_Standards\WSDOT*. The resources will be installed as *F:\CAD\_Standards\WSDOT\WSDOT\_1.3*.

For your new WSDOT Resources to be discoverable, a configuration file needs to be added to both MicroStation's and Power InRoad's startup sequence. The configuration file *WSDOT.cfg* is in the top folder of the resource set.

3. Copy the *WSDOT.cfg* file to the MicroStation and Power InRoads *Appl* folders.

As shown below, the file needs to be in `\config\appl` under your MicroStation AND Power InRoads installations. The specific path for your installations can vary depending on your operating system and installation options, but usually defaults to `C:\Program Files (x86)\Bentley\MicroStation V8i\MicroStation` and `C:\Program Files (x86)\Bentley\PowerInRoads V8i\PowerInRoads` on Windows 64 bit systems.



### Create WSDOT MicroStation and Power InRoads shortcuts

Because the resource set is in a location that you chose and the program executables may be in different locations in different offices, we do not provide shortcuts to the applications with the WSDOT resources.

An easy way to create custom shortcuts is to copy the provided vendor shortcuts, and edit them. The custom shortcuts need to have a target that uses your normal command to start the application appended with an extra switch that specifies the location of the WSDOT resources.

This switch is text added to the end of your normal MicroStation/Power InRoads command in the form:

```
-wsWSDOT_Resources={Path_to_WSDOT_CAE_Resources}\{Resource_Set_Name}
```

where

`{Path_to_WSDOT_CAE_Resources}` represents the full path to your WSDOT CAE resources folder established in Step 1.

`{Resource_Set_Name}` represents the resource set folder name for the shortcut.

Example:

Your WSDOT CAE resources folder is `F:\CAD_Standards\WSDOT` and the current downloaded resource set is `WSDOT_1.3`.

The target line of your shortcut would be:

```
"C:\Program Files (x86)\Bentley\MicroStation V8i\MicroStation\ustation.exe" -  
wsWSDOT_Resources=F:\CAD_Standards\WSDOT\WSDOT_1.3\
```

**NOTE:** there must be a space between the executable path and the *-ws* switch, and the “-ws” must be typed (copying and pasting from this document will result in the incorrect “-“ character), and there must be a trailing “\”.

Icons (.ico) are located in the top level of the resource set if you want to change the look of your custom WSDOT shortcut.

Open both MicroStation and Power InRoads and verify that the application is using WSDOT resources. There should be both WSDOT and CAEHelp pulldowns added to the applications.

### Updating WSDOT Resources

When WSDOT CAE updates the resources, we post a new zip file on the WSDOT CAE website.

Each WSDOT resources set is versioned. Any user of the resources can verify the version and know that all the resource files are up to date. To see which version of the resources you have installed, open the file **version.txt**, which is in the top level of the resource folders.

If the published resources are a later service patch than you have installed, follow the instructions below.

1. Download the resource zip file from <http://www.wsdot.wa.gov/Design/CAE/Updates.htm> to the desktop.
2. Go to your existing resource folder and delete/rename the existing WSDOT\_1.3 folder.
3. Open the zip file on your desktop and use **Extract All** to put the resources in your existing resource folder. Your existing icon should not need to be modified.

Example:

To upgrade from 1.3.9 to 1.3.12 with resources stored in *C:\users\Public\CAD\Standards*:

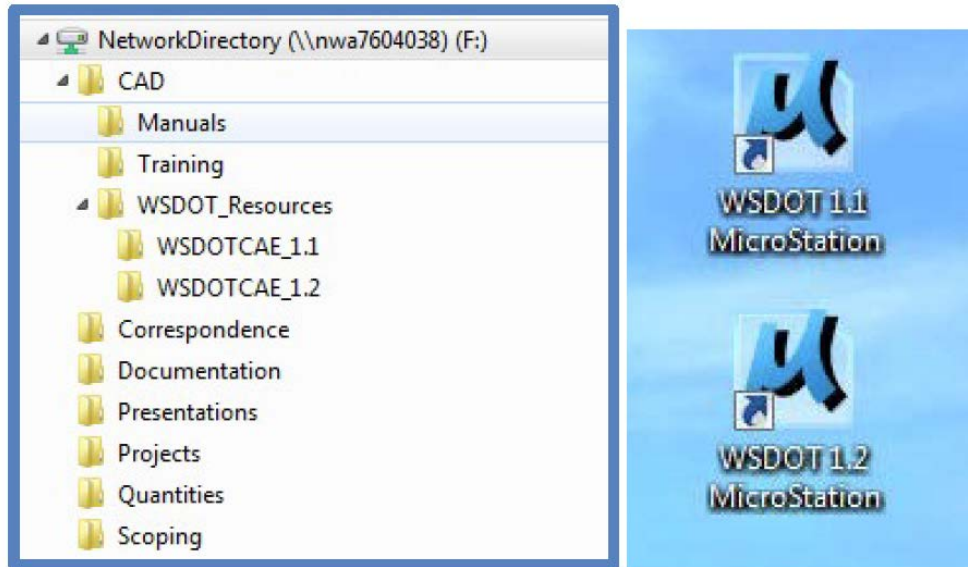
Download *WSDOTCAE\_1.3.12.zip* to your desktop.

Delete or rename *C:\users\Public\CAD\Standards\WSDOT\_1.3*.

Open *1.3.12 zip* file and **Extract All** to *C:\users\Public\CAD\Standards*. The new resources will be installed to *C:\users\Public\CAD\Standards\WSDOT\_1.3*, and your shortcuts will point to them.

## Installing Additional Sets of WSDOT Resources

It is sometimes useful to have multiple versions of resources, and multiple sets of WSDOT resources can exist in your resource folder. Follow the new installation instructions above to create a secondary set of resources with unique folder locations and shortcuts.



For questions or comments on this tech note, contact your regional CAE Support Coordinator or the WSDOT CAE Help Desk at (360) 709-**8013**.