Creating and Managing Standard WSDOT CAE Projects

Reference: WSDOT Electronic Engineering Data Standards

Overview

Creating Projects

The **WSDOT Create Project** utility increases the efficiency of a CAE project by generating a standard folder structure that is used statewide as well as maintains project information that makes it searchable. This standard structure also acts as an archive template for future use.

The tool also sets up MicroStation and InRoads to work with that project more effectively.

It is highly recommended that the project be created on a network path that is accessible by all direct team members.

An exception to this rule is a field surveyor utilizing a laptop. Refer to the Moving a Standard WSDOT CAE Project section below for information about that process.

Adding Team Members

Once a project is created, other team members may want to work in that project. In the background, the **WSDOT CAE Create Project** utility generates project-specific resources and pointers. Each new team member may join the project and set their applications up to use all the project resources efficiently. This also works for support groups and other collaborative efforts.

Moving Projects

Existing standard CAE projects created by the utility may need to be moved from the local machine to a network resource. The current utility does not directly accommodate this however; there is a short process that allows the project data to be moved to a new location.

This document will step through the following processes:

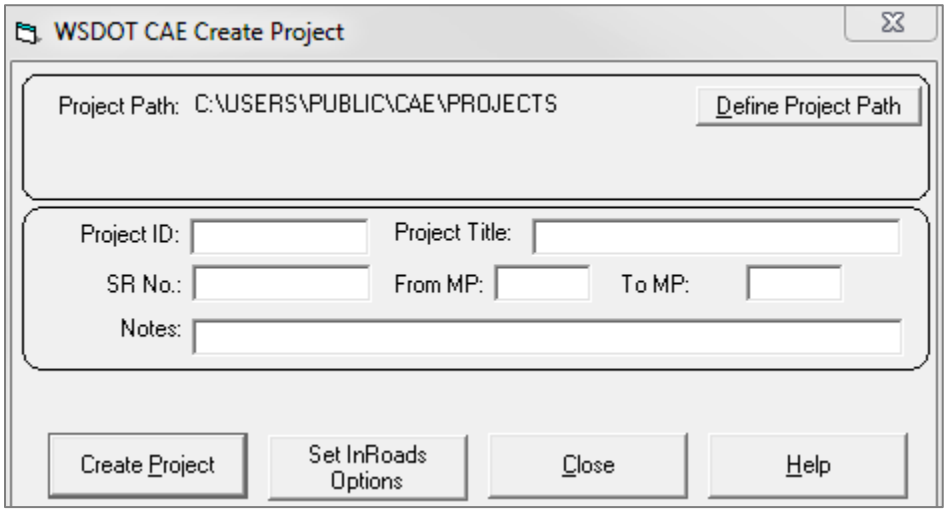
- Creating a WSDOT CAE Project
- Setting Up Additional Team Members
- Moving or Renaming a Standard WSDOT CAE Project

Creating a WSDOT CAE Project

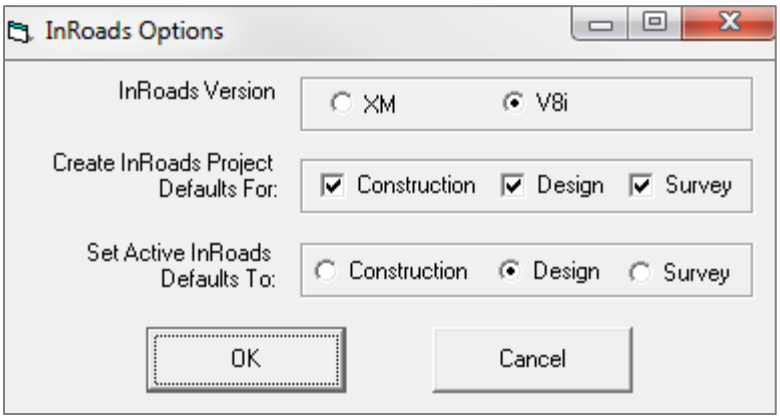
The **WSDOT CAE Create Project** tool is accessed from the Windows Start > All Programs > Engineering Applications > WSDOT Utilities area. A Windows Explorer shortcut dialog, pointing to the *C:\Users\Public\CAE\Standards\WSDOT\Utilities* folder, opens.

1. Double-click on **Create WSDOT Project** utility
    - Click **Yes** to allow User Account Control access.
    - The **WSDOT CAE Create Project** dialog appears.

2. Select a project path. The project path must already exist.
   - Click on the **Define Project Path** button
   - The Project Path dialog appears
   - Select the drive and location for your project
   - Click on the **Accept Project Path** command



3. Provide project information:
   - Enter the *Project ID*
   - For InRoads, this can be the 6 character project ID (for example: **XL1234**)
4. Enter the *Project Title,* primary SR number, milepost limits, and notes.
5. Set the InRoads options as appropriate.
   - Click the **Set InRoads Options** button



   - **InRoads Version** determines the version of InRoads files to be created with the project (such as XIN for InRoads XM InRoads V8i)

- **Create InRoads Project Defaults For** determines whether registry (.REG) files for the different disciplines are created or not. .REG files are used to set the project defaults, so if Construction is checked, a **projname-Con** option will be available in the InRoads **Project Defaults** command, and selecting that option will point InRoads to the **EngDataConst** folder. Users may want to limit these options to the minimum needed to keep the Project Default list more manageable.
- **Set Active InRoads Defaults To** determines which of the **Project Defaults** options will be the active one in your next InRoads session. This can be easily changed within InRoads.
- Click the **OK** button to exit InRoads options and return to the WDSOT CAE Create Project dialog.

6. Create the project.
   - Click the **Create Project** button

Setting Up Additional Team Members

Once a user creates the project, InRoads and MicroStation will recognize the project for that user. To set other team members up to access the project, follow these steps:

For MicroStation

1. Open MicroStation.
2. In the MicroStation File Open dialog, select the **Project** dropdown menu and chose the project.

   The application should automatically navigate to the project's CAD folder.

For InRoads

1. Use Windows Explorer to browse to the project location.
2. Find the **ProjectName-Des.reg**, **ProjectName-Con.reg** and/or the **ProjectName-Sur.reg** file. These files are located in the **EngDataDesign**, **EngDataConst** and **Survey** project folders respectively.
3. Double-click on each of these, selecting the preferred discipline last. Click **YES** to add the registry entries, then acknowledge that they have been entered.
4. Launch InRoads.
5. To verify, select the File > Project Defaults command and review the current settings.

Moving a Standard WSDOT CAE Project

It is sometimes necessary to change locations of a project that was originally created on a local drive, for example, to a network resource, or copy a project to a laptop from a network resource for use in the field.

There is more to the project structure than the data files. There are resource files that are generated for that project in its specific location. Renaming or moving the project using Windows Explorer will disconnect this functionality.

Currently, the most efficient way to move or copy the project folder structure is to create a new project in the new location. Then move or copy the data files to the new project folder structure. Lastly, in InRoads, delete the project defaults for the old project.

For MicroStation references, toggle off the *Save Relative Path* option. The files will then find the references in the new location.

Note that in the WSDOT resource environment, MicroStation searches the **<ProjectName>/CAD/BaseFiles** folder by default for references.

Renaming a Standard WSDOT CAE Project

There are currently no tools available to rename a standard WSDOT CAE project. The process would be similar to moving a project as above, and then renaming and referencing files according to the new project name.

There is more to the project structure than the data files. There are resource files that are generated for that project in its specific location. Renaming or moving the project using Windows Explorer will disconnect this functionality.

Technical Details

The following section describes the files and resources created or impacted by the **WSDOT CAE Create Project** utility.

General

The project folder structure source is *C:\CAE_rsc\Common\ProjectShell.*

The entries made for Project ID, Title, and Notes are stored in an ASCII text file (**ProjectName.txt**) located in the project root. In the future, this will function with an automated documentation process.

For MicroStation

The CAD subfolder is generated regardless of any settings.

A **ProjectName.pcf** file is generated and stored in the project path (same level as the project folder). This enables the MicroStation Manager's project selector to recognize the project.

The **ProjectName.pcf** file includes a default directory so that when the project is selected in the MicroStation Manager, it will automatically navigate to the CAD folder of that project.

The intent is that if all projects are stored in the same location, all of the **ProjectName.pcf** files are in the same path. When opening MicroStation, the manager will allow browsing to project CAD folders with a single click.

The **WSDOT CAE Create Project** utility does not set critical resource variables in MicroStation such that it is mandatory to use the MicroStation Manager > Workspace > Project selection command.

This function is voluntary and is intended to enhance productivity rather than control it.

For InRoads

The **EngDataDesign** and **Survey** subfolders are generated regardless of any settings.

The utility will copy the *C:\Users\Public\CAE\Standards\WSDOT* files into the same location.

Windows registry files are generated that contain the InRoads **Project Defaults** and stored in the project folder. There is one file generated for each discipline selected.

Each file is entered into the registry of the local machine for the **current user**. Each file is suffixed with the discipline, for example, **XL1234-Design.reg** and **XL1234-Survey.reg**.

These names are consistent with the resulting InRoads project defaults.

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