CDOT Project Creation and PCF File Management

This document explains the operation of the Project Creation utility, the benefits of using it, and how to manage the resources it creates. The Project Creation utility performs two functions; first it creates a project specific folder and file structure based on CDOT standards and second it creates a **Project Configuration File** (PCF) which stores variables to simplify file management for the user. The PCF file is utilized by both MicroStation and InRoads environments.

PCF files are extremely useful when multiple users are accessing the same project directory across the network, or when DGN files are moved from one directory to another. Refer to the *CDOT InRoads XM Project Defaults Management.pdf* workflow for specific information regarding the benefits to InRoads users.

This version of the workflow is specific for CDOT's implementation of MicroStation XM. The PCF file defines a single project directory that MicroStation defaults to when opening up a DGN file or referencing model files.
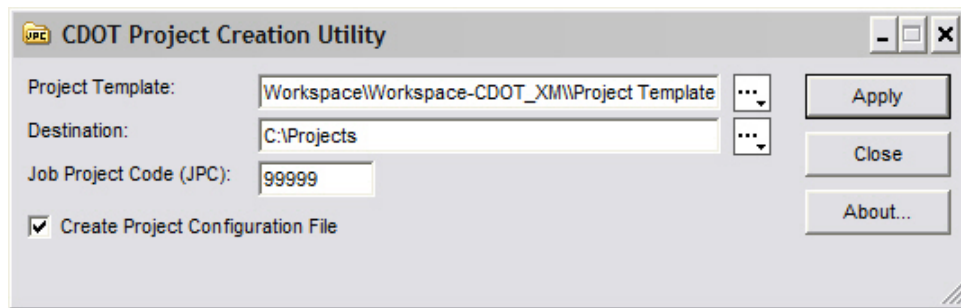
Creating the Project Directory

1. The project directory is created by running the **Project Creation Utility** program. To access this program go to **Start > All Programs >_CDOT_CADD_Information > Create Project Directory Structure**.
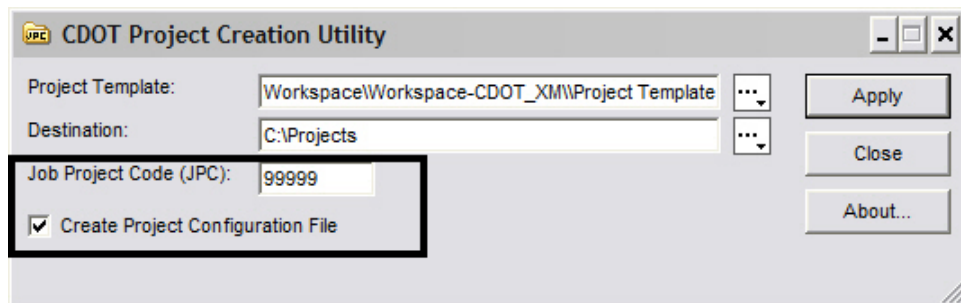
2. After selecting the Create Project Directory Structure program, the following dialog box will appear.

3. Enter the 5 digit Job Project Code (JPC). For this example we will use 99999. Verify the *Create Project Configuration File* box is checked **ON**. This should be on by default. This will create a customized PCF file for the project identified in the JPC field. Details about managing this file will be covered in the next section of this workflow.

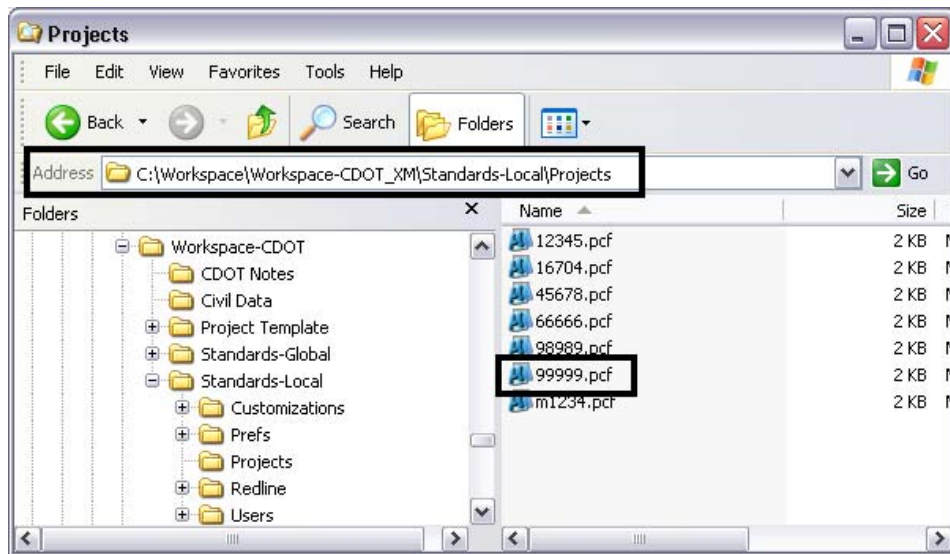4. Select **Apply**. After the program has executed, select **Close**

Note: The Create Project program now allows the creation of "M" projects

5. Open up Windows Explorer again and browse to **C:\Projects\99999** to verify the project folder and corresponding folder structure was created.
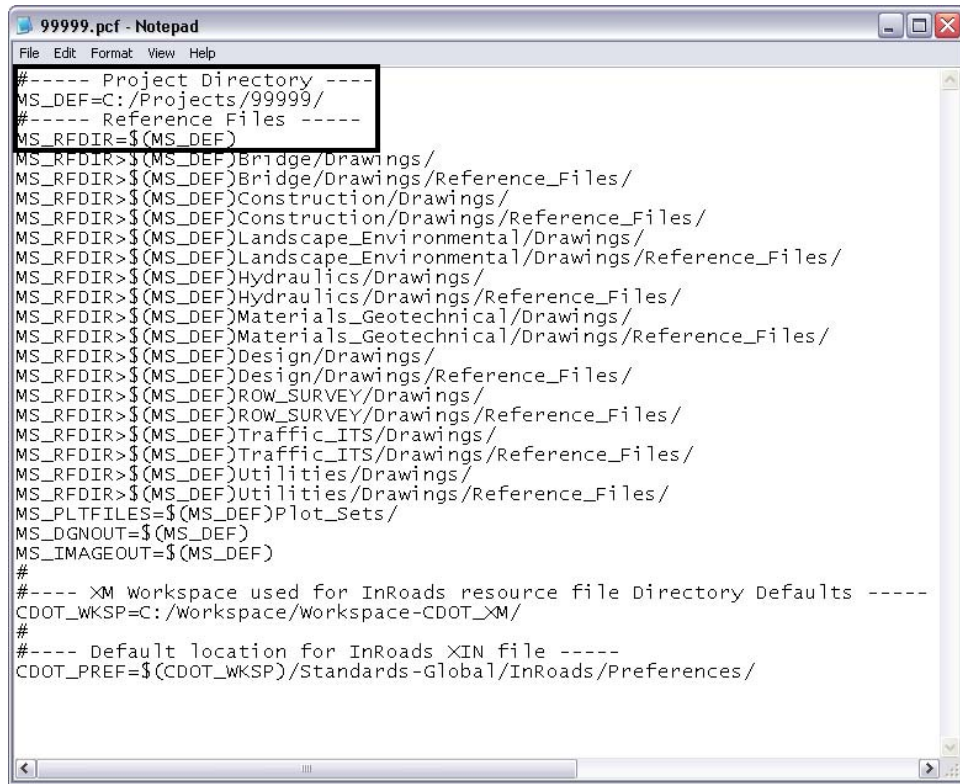
Managing the PCF File

Opening the PCF File

1. View the PCF file that was created when the CreatePrjDir program was executed. In Windows Explorer browse to **C:\Workspace\Workspace-CDOT_XM\Standards-Local\Projects** and open the **99999.pcf** file using Note-pad.
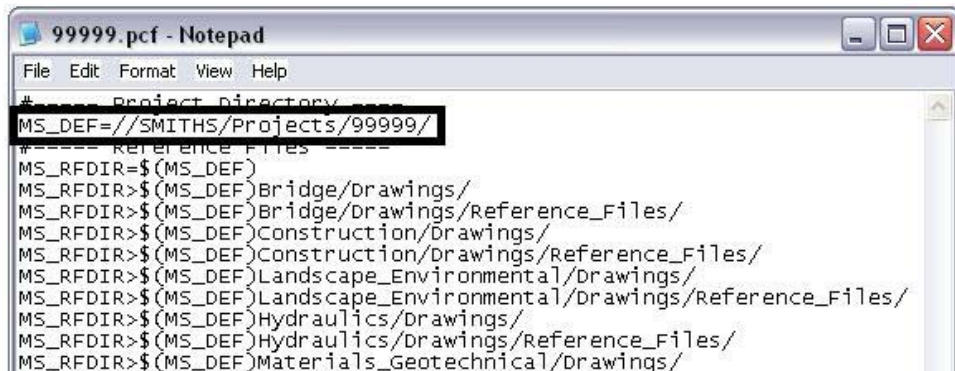
2. Notice that the second line of text displays **MS_DEF=C:/Projects/99999/**. The Project Creation Utility program places the newly created project location on this line. MicroStation reads this line as a configuration variable and sets the primary Search Path to this location. When MicroStation reads the variable '**MS_DEF**' it substitutes the default project location (C:/Projects/99999/). If we look under Reference Files below, all of the paths are set with the (MS_DEF) substitution. This means, whenever you browse for a file to reference (or more specifically a 'model' file), MicroStation will automatically point to the correct directory.

Editing the PCF File

3. If multiple users are accessing the same project directory, the PCF file will need to be distributed to everyone on the team accessing the project directory. Each member of the team should have their own copy of the PCF file and it should be saved to the same location, *C:\Workspace\Workspace-CDOT_XM\Standards-Local\Projects*

4. When team members are sharing the project manager's machine, the path *MS_DEF=C:/Projects/99999/* will need to be updated to reflect the path of the computer that is being shared i.e., MS_DEF=//CDOTUSER/Projects/99999/ (MS_DEF=//SMITHS/Projects/99999/ be sure to note the double "//"). After the edit has been made to the PCF file, select File > Save in Notepad.
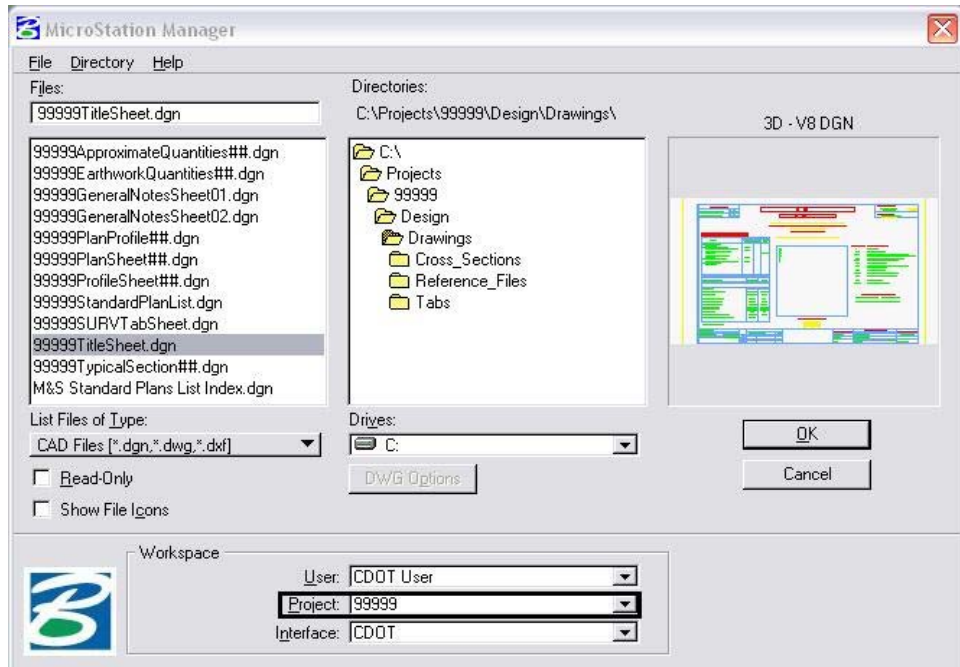
```
99999.pcf - Notepad
File  Edit  Format  View  Help
#------ Project Directory ----
MS_DEF=//SMITHS/Projects/99999/
#------ Reference Files -----
MS_RFDIR=$(MS_DEF)
MS_RFDIR>$(MS_DEF)Bridge/Drawings/
MS_RFDIR>$(MS_DEF)Bridge/Drawings/Reference_Files/
MS_RFDIR>$(MS_DEF)Construction/Drawings/
MS_RFDIR>$(MS_DEF)Construction/Drawings/Reference_Files/
MS_RFDIR>$(MS_DEF)Landscape_Environmental/Drawings/
MS_RFDIR>$(MS_DEF)Landscape_Environmental/Drawings/Reference_Files/
MS_RFDIR>$(MS_DEF)Hydraulics/Drawings/
MS_RFDIR>$(MS_DEF)Hydraulics/Drawings/Reference_Files/
MS_RFDIR>$(MS_DEF)Materials_Geotechnical/Drawings/
```

Note: Each person desiring to work on the project must be given appropriate access to the folders they will be working with. The Project Manager should determine the level of Access. Contact the help desk for additional assistance on sharing files and changing security settings.

Using the PCF File with MicroStation

1. In the MicroStation Manager dialog, the PCF file can be selected from the Work-space portion of the dialog box on the *Project* pull-down menu which will navigate you to the appropriate project folder and define the MS_DEF variable.
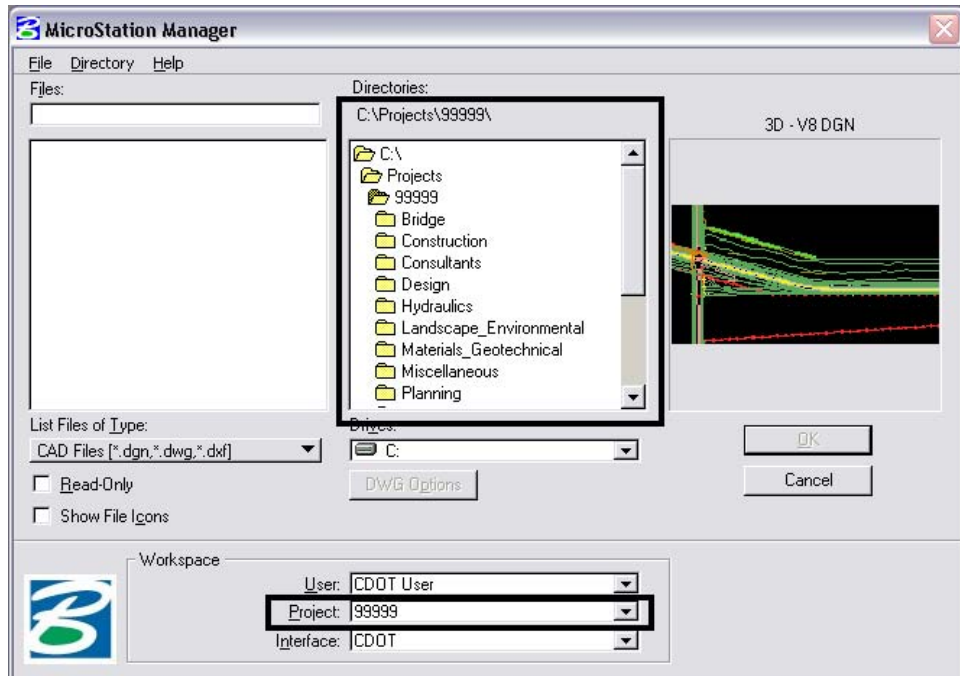

2. If you are working on multiple projects, you will have more than one PCF file to choose from. You can easily switch between projects with this pulldown. Select the arrow to expand the display and choose which project to work on.

3. The file path in MicroStation will be redirected to the project folder after the desired project has been selected. All dialog boxes within MicroStation that require a path to be defined will default to the root directory chosen at the *Workspace > Projects* location.

CDOT Project Creation and PCF File Management.pdf

Note: If your folder structure changes and/or files are moved to different locations than initially pathed to, you can update your reference file attachment location through the PCF file eliminating the need to reattach the reference files in MicroStation. Simply **Edit** the reference file paths in the PCF as illustrated in the example below and **Open** MicroStation. You will notice that the files are now being found. Also note that if *Save Full Path* is used referencing files within MicroStation, changes made to the PCF file will not affect the visibility of the reference file. For this reason *Save Full Path should be used* with caution.

Old Structure

```
MS_RFDIR>$(MS_DEF)/Design/Design_Data/
MS_RFDIR>$(MS_DEF)/Design/Drawings/
MS_RFDIR>$(MS_DEF)/ROW_SURVEY/Deliverables/
MS_RFDIR>$(MS_DEF)/ROW_SURVEY/Design_Data/
```

New Structure

```
MS_RFDIR>$(MS_DEF)Design/Drawings/
MS_RFDIR>$(MS_DEF)Design/Drawings/Reference_Files/
MS_RFDIR>$(MS_DEF)ROW_SURVEY/Drawings/
MS_RFDIR>$(MS_DEF)ROW_SURVEY/Drawings/Reference_Files/
```