OHDOT_SheetManager.mvba

Description:

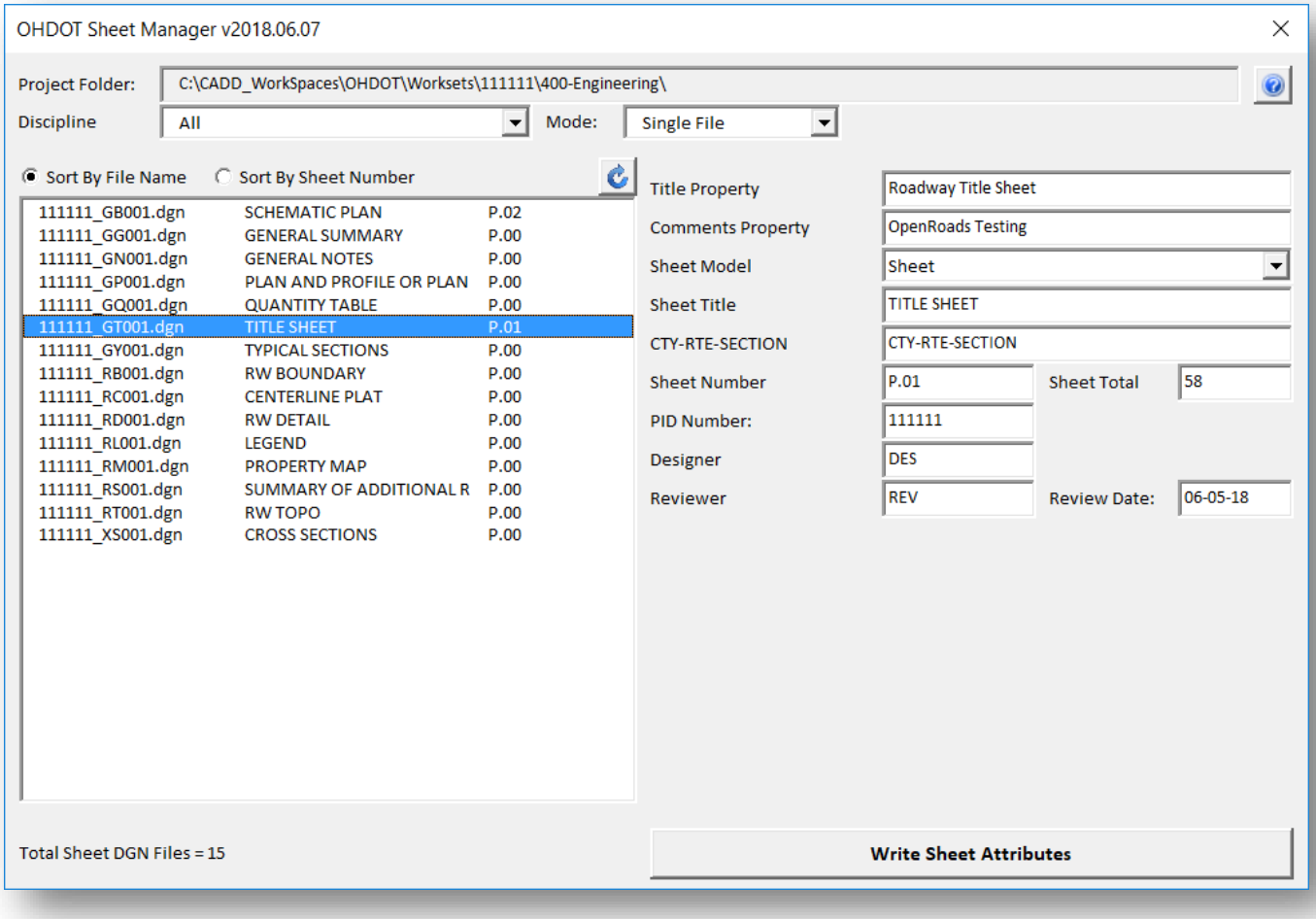
The OHDOT_SheetManager application is used to manage MicroStation Tags assigned to ODOT's sheet border cells. This application is compatible with the new sheet borders issued with the ODOT CADD Standards for MicroStation and OpenRoads Designer Connect Edition. Sheets generated with previous versions of ODOT's CADD Standards are not compatible with this application.

Loading the Application:

The application is loaded in MicroStation Connect Edition or OpenRoads Designer Connect Edition by selecting the Sheet Manager icon from the Ohio DOT Workflow.

Application Operation:

When the application is opened, a dialog like the example below is opened.



Project Folder

The **Parent Folder** is used to define the root folder for the WorkSet. The value is defined by the following MicroStation configuration variable:

_USTN_WORKSETROOT

If this variable is not defined, the user must use the browse icon to select the WorkSet root location. The 400-Engineering folder is the default folder for the WorkSet.

The program assumes that an ODOT Folder Structure is in place as defined in the **ODOT CADD Engineering Standards Manual**.

Discipline

The Discipline drop-down menu displays the name of each discipline specific folder found under the 400-Engineering folder that contains a Sheets folder. When a discipline is selected, the list of files is updated to show any MicroStation design files that are contained in the Sheets folder for that discipline. There is also an **All** option in the Discipline drop-down. When this is selected the list of files is updated to show any MicroStation design files that are contained in the Sheets folder for all discipline folders for that project.

Mode

The program includes the operation modes listed below.

Single File

This mode allows users to manually review and update all the sheet attributes found in the selected design file. If the selected file contains more than one sheet model, the Sheet Model item is used to select the sheet to be edited.

Multi-File

This mode allows users to select multiple files from the file list to update sheet title block parameters that are common to multiple sheet types.

Excel Output

This mode will read all the design files in the currently selected Discipline Sheets folder and write all the sheet attributes to Excel. If the Discipline is set to All then all design files found in all the Discipline's Sheets folders are read.

Excel Read

This mode is used to read sheet attributes from an Excel file and write the values to the design files.

Each mode is described in further detail below.

Sort by File Name / Sort by Sheet Number / Refresh

The file list can be sorted by file name or sheet number. The Refresh button is used to reread the file list.

File List

The file list contains a listing of all the MicroStation design files found in the Sheets folder for the selected Discipline. The file name, Title Property, and last Sheet Number are displayed in the list.

To the right of the File List is the list of attributes for the sheet cell found in the sheet model of the selected design file.

If more than one sheet cell is found in the selected model, the user is notified that the program cannot be used for this file as shown below. Only one sheet per model is permitted.

Double-clicking on a file name in the File List will open the file and the selected Sheet Model in the file. It is not necessary to open the file in order to update the sheet attributes.

Write Sheet Attributes

The Write Sheet Attributes button is used to write the sheet attribute values to the selected file in Single File mode, or the selected files in Multi-File model.

The selected file does not have to be open to write the sheet attributes, however, the user does need to have write access to the file to update the sheet attributes.

As the attributes are written to the file, the sheet number in the File List is updated if it has been changed.

Single File Mode

This option is used to edit sheet attributes, one file at a time. When a file is selected from the list, the right side of the dialog displays design file properties and sheet attributes for the selected file. The sheet attributes will vary depending on the file selected and the sheet cell that is found in the file.

Parameters that are common to all design files are defined below:

Title Property

This item displays the MicroStation Title property for the selected design file. The value can be edited and is updated when the Write button is selected.

Comments Property

This item displays the MicroStation Comments property for the selected design file. The value can be edited and is updated when the Write button is selected.

Sheet Model

This item contains a list of all the sheet models that are found in the selected design file. The sheet attributes for a sheet cell found in the selected model are listed below this item.

When a design file with multiple sheet models is encountered, the sheet number displayed in the File List is read form the last sheet number is also displayed.

Below the Sheet Model, sheet parameters are displayed according to the ODOT sheet cell found in the selected sheet model.

Values entered are written to the file when the Write Sheet Attributes button is selected. Two of the parameters merit additional documentation.

Annotation Scale

If the ODOT sheet cell that is found in the select Sheet Model contains a scale bar, the Annotation Scale and the current values of the scale bar are displayed. If the values have not been assigned, values of 0 are displayed. Click on the Annotation Scale item to compute the appropriate scale values for the scale bar. These values will be written to the file when the Write button is selected.

North Arrow

If the ODOT sheet cell that is found in the selected Sheet Model contains a north arrow insertion point, the program will search the selected file/model for a cell placed within 0.1 Master Units from the north arrow insertion point. If a cell is found, the name of the cell will be displayed. If no cell is found, the user has the option to place the standard ODOT north arrow cell, "NARROW", at the insertion point. The cell is scaled by the Annotation Scale value and is placed at a zero-degree rotation in the file.

Multi-File Mode

Multi-File mode allows users to update a limited set of sheet attributes that are common to every sheet type. To update multiple files

- Select the Discipline
- Select the file(s) you wish to update in the File List
- Enter the attribute values
- Select the Write Sheet button to write the sheet attributes to the selected files

If the selected file(s) contain multiple sheet models with an ODOT sheet cell, the sheet cell in each sheet model is updated.

Excel Output Mode

Sheet attributes for a selected discipline, or for the entire WorkSet, can be read and exported to an Excel file by use of the Excel Output mode.

Select Write Excel File to initiate the process. Excel is opened and the values are written to the file as each design file is read.

Note that the Excel file has not been saved when it is initially generated and must be manually saved by the user.

The first row in the Excel file is a header row that describes the content of each column. If an attribute is not applicable to a specific sheet cell, the value is listed as "---NA---".

Items that do not have a value defined are blank in the Excel file.

Excel Input Mode

An Excel file generated by use of the Excel Output mode can be edited are re-read to update the sheet title attribute values for each file listed in the Excel file.

Use the Browse icon to select the Excel file to process.

Choose the Read File command button to initiate the process.

You must have read access to all the design files in order for the program to update the files. If a problem is encountered, an error report is generated.

Updates:

Version 2018.07.20

Initial release for MicroStation and OpenRoads Designer Connect Edition

Contacts

For any questions, suggestions, or problems with this document please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

https://odot.formstack.com/forms/cadd_servicerequest