

Linked Data Manager



Jimmie Prow
Florida Department of Transportation
Engineering CADD Systems Office
Jimmie.Prow@dot.state.fl.us
(850) 245-1626

WELCOME

- Please turn off/silence your cell phones.
- Questions???
- ✓ Please feel free to ask questions as we go...



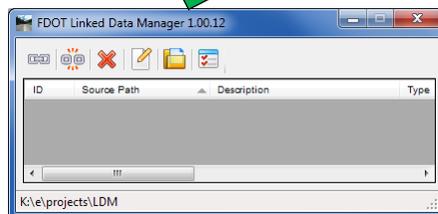
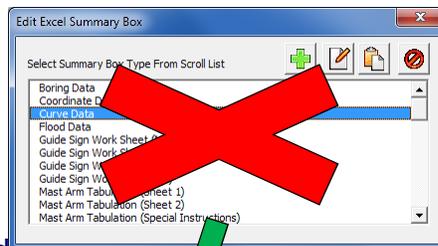
Objectives

- Learn what Linked Data Manager is and how to use to increase productivity and efficiency within the design workflow



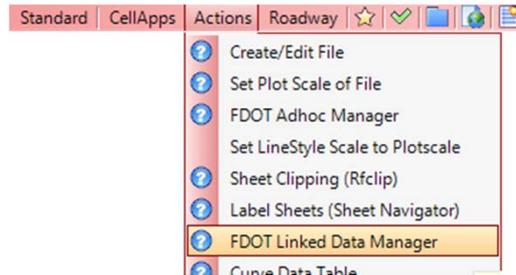
What is Linked Data Manager?

- A tool developed for FDOT to link data files to MicroStation design files
 - Replacing the old Edit Excel Summary Box VBA
 - Uses *.txt, *.xls, *.xlsx, and *.csv files
 - LDM works in one direction – Data Source to MicroStation
 - Any changes made in MicroStation are NOT saved back to the data source.

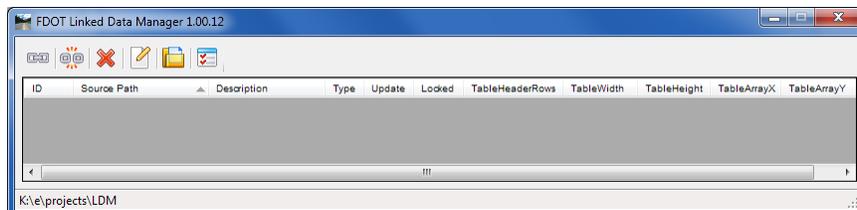


Accessing Linked Data Manager

- On the FDOT Menu...
 - Actions > FDOT Linked Data Manager



Linked Data Manager

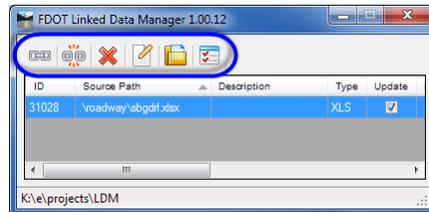


- Creates Interactive links with Source Files
 - Using FDOT Templates
 - Selecting your own files
- Customizable User Settings for the Site and Project levels



Linked Data Manager

- Tool Icons (Left to Right)
 - Create New Link
 - Delete Link
 - Delete Link and Graphics
 - Link Settings
 - Opens Link Information dialog box for selected link
 - Project Settings
 - Opens Projects Settings dialog box to create/edit Project graphic settings file
 - User Settings
 - Opens User Settings dialog box to set the default User settings on the Link Information dialog box

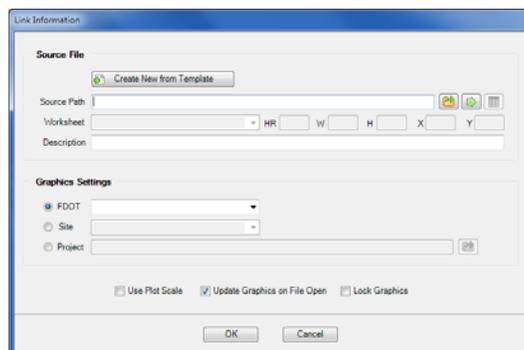


Linked Data Manager



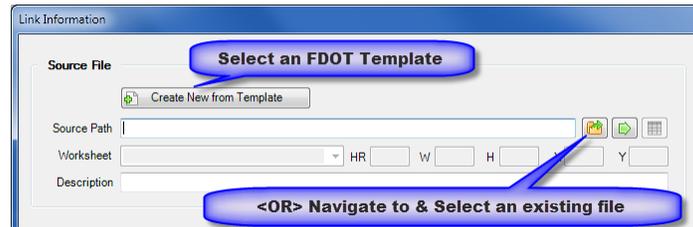
Create New Link

- Opens the Link Information dialog box
 - Source File
 - Graphic Settings
 - User Settings



Linked Data Manager

Source File



Once the source file is selected, the Source Path is populated and other options, as applicable, become available.



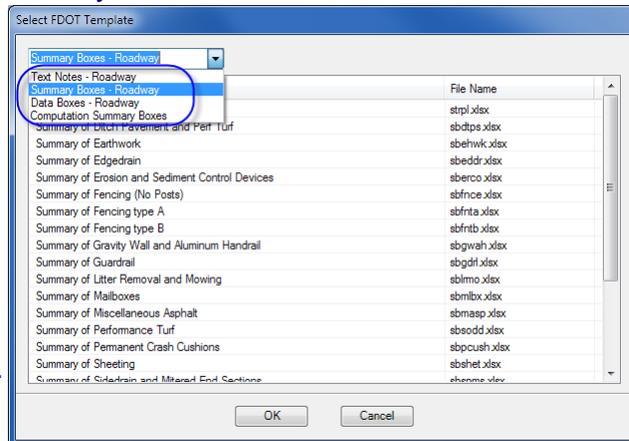
Linked Data Manager

Create New from Template

FDOT has provided numerous Templates. They have been categorized for easy location.

- Text Notes
- Summary Boxes
- Data Boxes
- Computation Summary Boxes

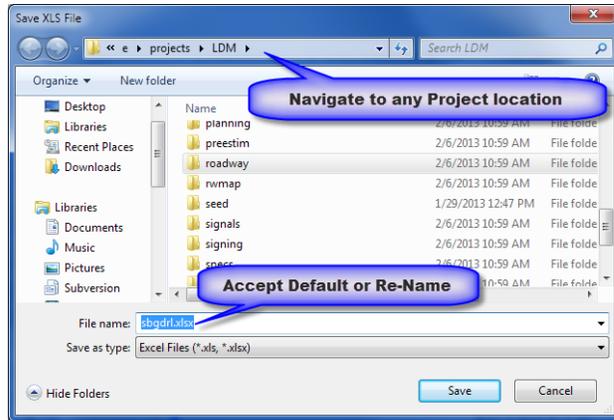
Note: Categories available may vary depending on the workspace selected.



Linked Data Manager

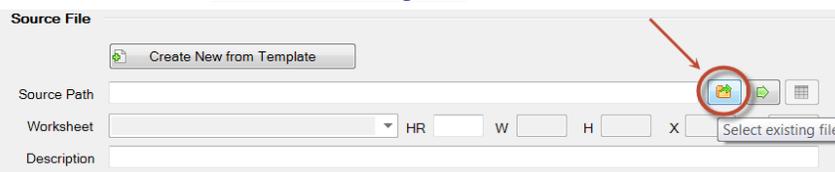
Create New from Template

Once a template has been selected, the Save As dialog will appear. LDM requires that the Source file be saved to the Project directory.



Linked Data Manager

Select existing file



Navigate to any Source file.

Note: if the file is not located in the Project directory, LDM will prompt to copy the file to the project directory.



Linked Data Manager

Source File

Once the Source file has been selected and saved, the Source Path is populated. The Description field may be filled in.

If the Source file is an Excel file, the Worksheet options are available. Options are documented in the Help files.

Note: A single Excel file may be linked to a MicroStation file multiple times using different worksheets within the file.



Linked Data Manager

Open source file

Opens the selected source file in either Excel or Notepad depending on the file type.

Changes can be made to the source file before (or after) inserting into the MicroStation file.

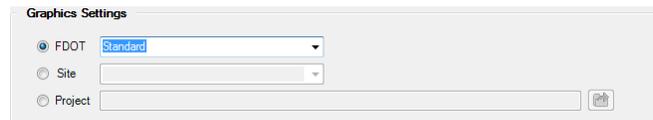


Linked Data Manager

Graphic Settings

Graphic Settings tells LDM how to plot the Source Data into MicroStation. Sets features such as font, levels, line spacing, etc. Controlled by XML files on 3 different levels.

- FDOT – Fdot.LDM.xml
 - FDOT's "Standard" that is delivered with the software.
- Site – Fdot.LDM.SiteSettings.xml
 - Custom Site settings that can be accessed by a group
- Project - <Name>.ldm
 - Custom settings specific to a project
 - Tool within LDM for creation



Linked Data Manager

User Settings

Use Plot Scale Update Graphics on File Open Lock Graphics

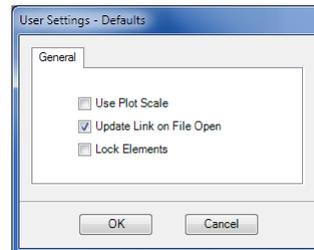
- Use Plot Scale
 - Toggle on when using a Plot Scale other than 1.
 - Note: Will also use Annotation Scale if it is turned on.
- Update Graphic on File Open
 - Synchs Source file with MicroStation graphics on File Open.
- Lock Graphics
 - Locks the MicroStation elements



Linked Data Manager

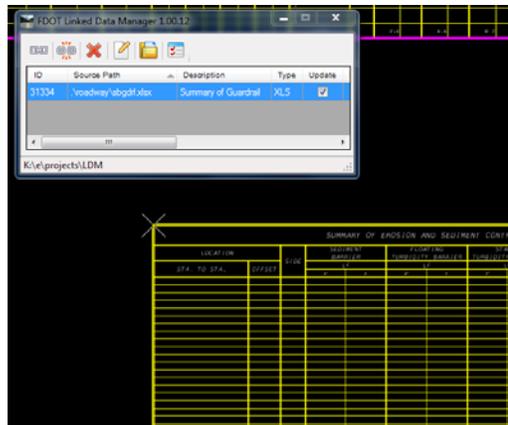
User Settings

- User Settings default settings are controlled through the User Settings dialog box
 - Accessed from the User Settings tool icon



Linked Data Manager

- Once all of the settings are defined, Click OK. This will place the data (text or summary/data box) on the cursor for placement in the MicroStation file.
- Once placed the data may be moved using MicroStation commands without breaking the link

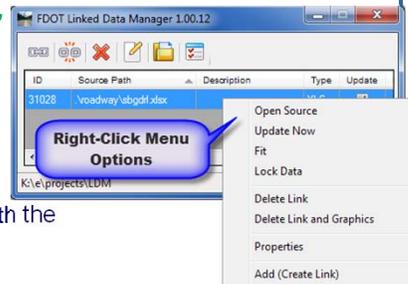


Note: LDM uses true north when placing the information from the data file. The MicroStation view should not be rotated or the link should not be rotated after being placed. Updating a link will rotate the information back to true north.



Linked Data Manager

- Menu Options
 - Open Source
 - Opens Source file to make edits
 - Update Now
 - Synchs the MicroStation graphics with the Source file data
 - Fit
 - Fits the selected link to view in MicroStation
 - Lock Data
 - Locks the MicroStation graphics
 - Delete Link
 - Delete Link and Graphics
 - Properties
 - Opens the Link Information dialog box to modify the link settings for selected link
 - Add (Create Link)



Linked Data Manager

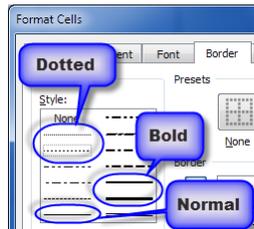
Creating a Link with a CSV File

- 1) Use the Select existing file button to navigate to the desired CSV file.
- 2) Set the number of Header Rows (HR)
- 3) Click on the Open Source Layout File. This file is generated when the CSV file is selected.
- 4) Modify the layout file formatting and save the file.
- 5) Complete the settings options on the Link Information dialog,
- 6) Click OK to place the table in MicroStation.



Linked Data Manager

Format Mapping from Excel to MicroStation



| <i>Excel Line Style Name</i> | <i>Excel Line Style Display</i> | <i>MicroStation Level</i> |
|------------------------------|---------------------------------|---------------------------|
| Normal | ———— | SumBoxLines_dp |
| Dotted |or..... | SumBoxLinesMin_dp |
| Bold | ———— | SumBoxBorder_dp |

LDM reads the formatting from Excel and uses them in MicroStation. This includes:

- ✓ Cell Borders
- ✓ Font/Text Size/Justification
- ✓ Column Width/Row Height
- ✓ Rounding Values

LDM does not use any of the formatting from the txt files. These settings are contained in the settings.xml files.



Live Demonstration



Linked Data Manager

Graphic Site Settings

What are Site Settings?

Customized settings for a group or company that differ from the Standard FDOT settings provided.

How can they be set up?

An example file is located in the FDOT directory.

..\FDOT2010\Apps\LDM\FDOT.LDM.SiteSetting.xml. Make a copy of this file and modify the settings. This file can be located anywhere and renamed to anything desired.

Create/modify the customvars.txt file to include the variable FDOT_LDM_SITEXML and set it to equal to the location of the new xml file. The customvars.txt file should be located in the ..\FDOT2010\workspace\users directory.

Example: FDOT_LDM_SITEXML = M:\FDOT_custom\LDM.xml

Once the settings file and variable have been set up, the Site option can be used on Link Information dialog when creating/modifying links.



Linked Data Manager

Graphic Project Settings

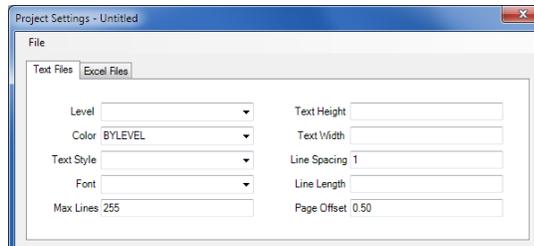
What are Project Settings?

Customized settings for a project that differ from the Standard FDOT settings provided.

How can they be set up?

Create a project settings file using the Project Settings tool inside LDM. The tool has 2 main tabs with all the settings available for both text and excel data sources. It should be saved in the project directory (recommend \symb directory).

Once the settings file has been created, the Project option can be used on Link Information dialog when creating/modifying links. Click on the Select Project Settings File button to navigate and select the file. It will have an .ldm extension.



Questions???



Thank-you for joining today's session.

(850) 245-1626

E-mail: Jimmie.Prow@dot.state.fl.us

OR: ecso.support@dot.state.fl.us

<http://www.dot.state.fl.us/ecso>

FDOT CADD Support Forum On-line

http://communities.bentley.com/communities/user_communities/fdot_cadd_support/default.aspx

