



Data Acquisition

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Data Acquisition

- Quickly and easily assimilate disparate data types into your project
- Use of symbology and annotation from native feature tables preserves user investment
- Export to design
 - ❑ *Geometry (GPK, ALG, FIL, XML)*
 - ❑ *Terrain Model (TIN, DTM, MXROAD, XML)*
- Runs with InRoads, GEOPAK, MXROAD as a supplement or alternative to native versions of survey tools.

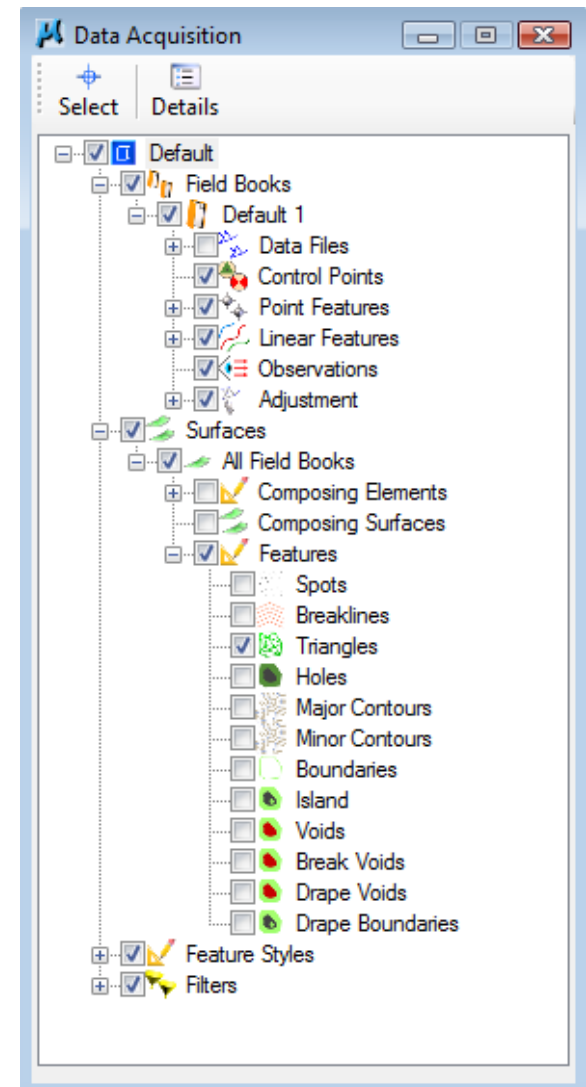
Concepts

- ***Improved User Experience***

- More efficient
- Intuitive
- Much easier to learn

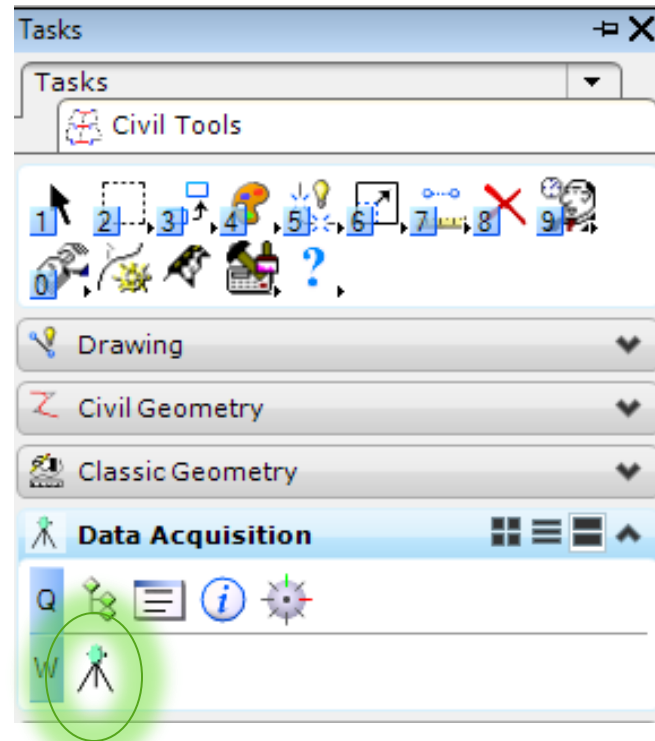
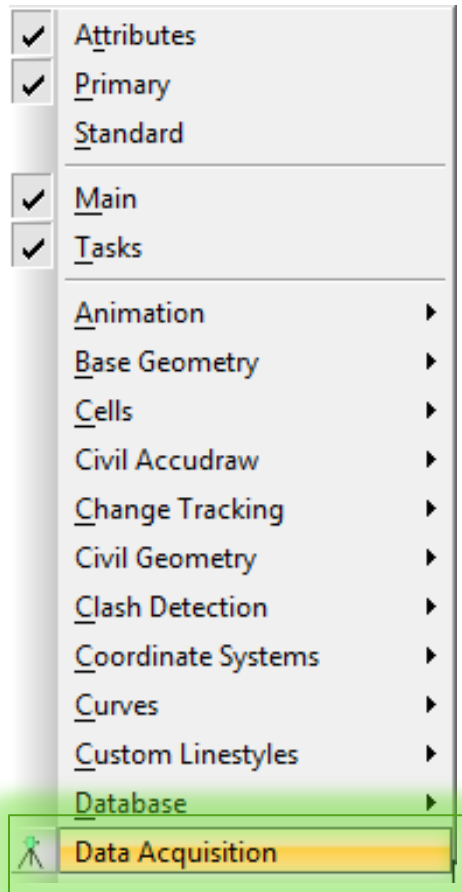
- ***DGN Data Store***

- No external files
- UNDO/REDO



Accessing Data Acquisition

- ***MicroStation Tools > Data Acquisition***

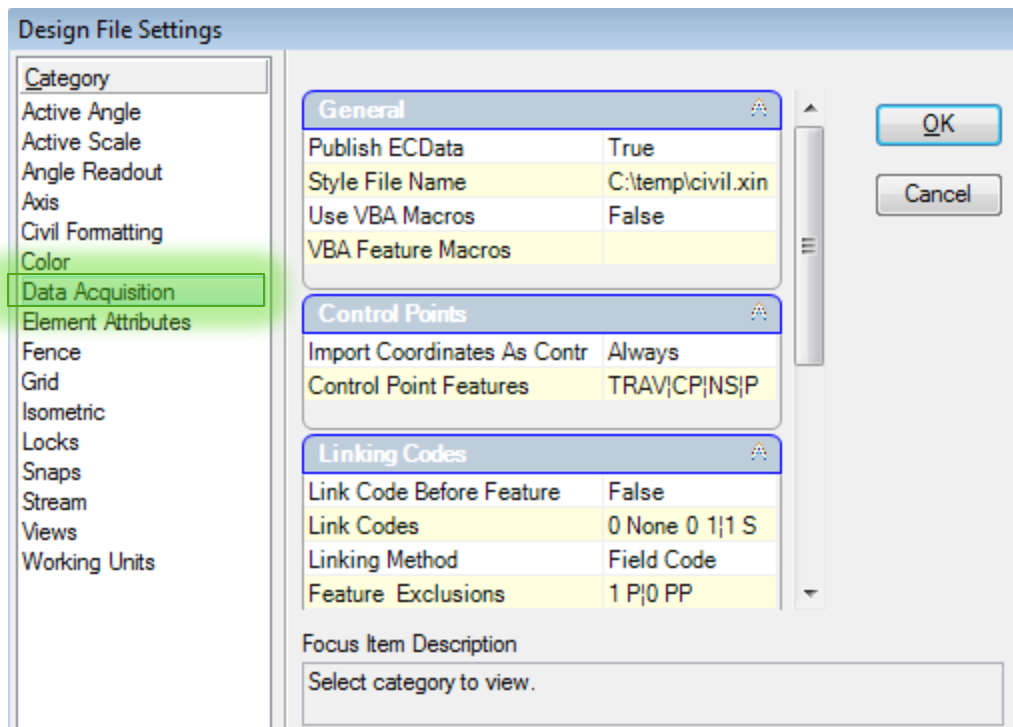


Introduction

Data Acquisition Preferences

- **MicroStation Settings > Design File**

Note that DA must be running for DA preferences to be exposed.



Data Acquisition Preferences

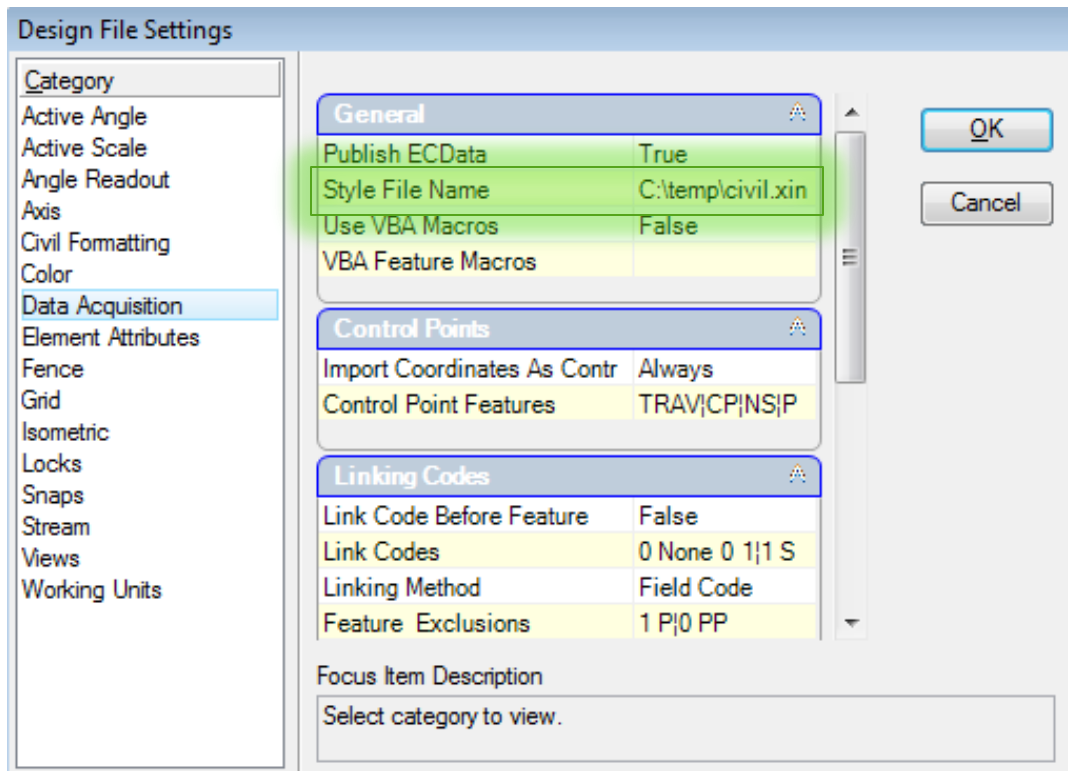
We'll look at more of the preferences in detail later, but I want to point out two important preferences up front.

Style File Name

Data Import Types

Style File Name

- ***Preserving your investment in your existing features***

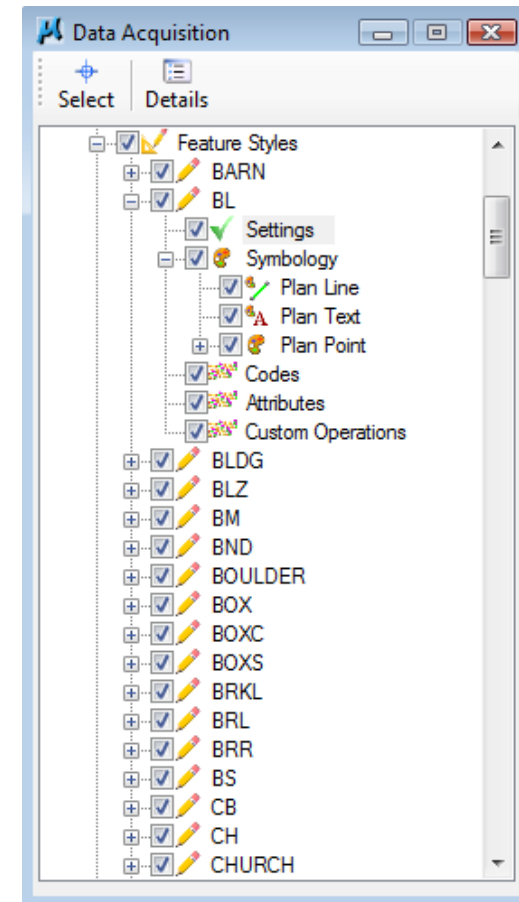
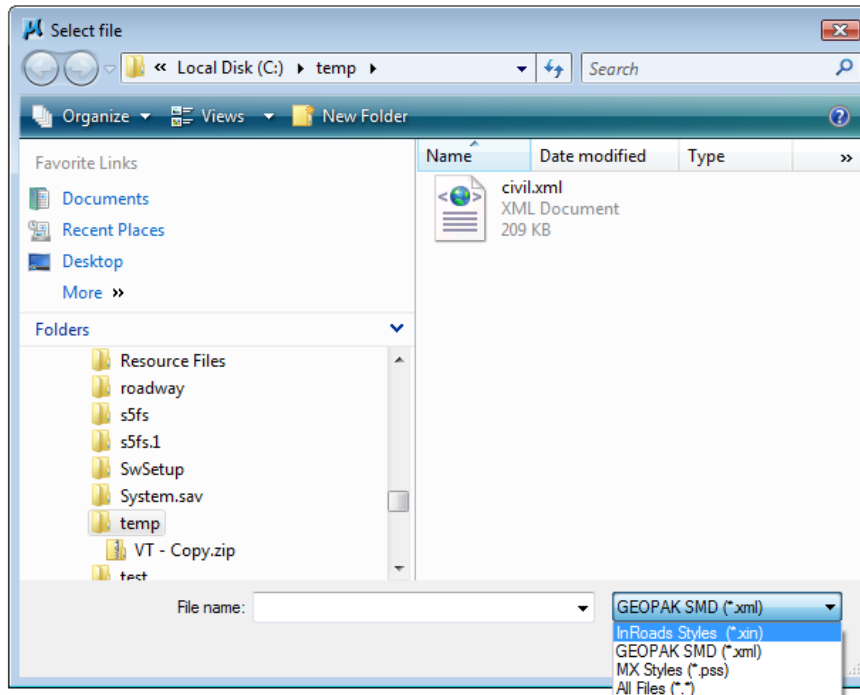


Style File Name

XML – generated from a GEOPAK SMD

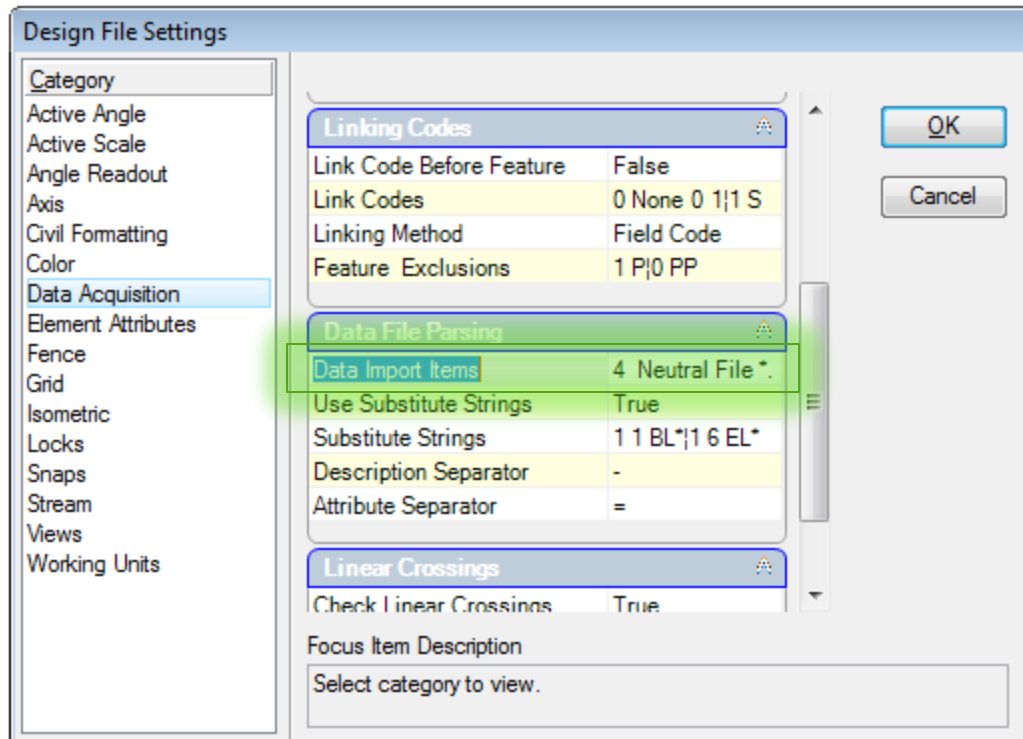
XIN – InRoads Styles file

PSS – MX Styles file



Data Import Items

- ***Allows access to all data types supported within DA***



Data Import Items

- **Customizable**

The screenshot shows the 'Data Import Items' dialog box with a table of data import items. The 'Use' column for the 'InRoads' item is highlighted with a green circle, and a dropdown menu is open showing 'True', 'False', and 'Use' options. The 'Add' button is also highlighted with a green circle.

Use	Vendor	Title	Filter	FileTypeln	FileTypeOut	Executa	Executa	FormatFi	Arg
True	NeutralFile	Neutral File	*.xnf	None	Neutral				
True	GEOPAK	Geopak Intermediate File	*.out	None	Intermediate				
False	InRoads	InRoads Intermediate File	*.fwd	None	Intermediate			Survey.ti	
True	MX	MX Intermediate File	*.wrw	None	Intermediate				
True	LandXML	LandXML	*.xml	None	LandXML				
True	LandXMLAdvance	LandXML Advanced	*.xml	None	LandXML				
True	LeicaDBX	Leica DBX	*.xcf	None	None				
True	TrimbleLinkEngine	Trimble Link Engine	*.job	None	None				
True	FieldGenius	Field Genius	*.dbf	None	None				
True	CAiCE Project	Caice Project	*.pt4	None	LandXML				
True	LandDesktopProje	Land Desktop Development	*.dfm	None	LandXML				
True	GEOPAK	Caice	*.kcp	RawFile	Intermediate				
True	GEOPAK	Caice SRV	*.srv	RawFile	Intermediate				
True	GEOPAK	Observation OBS	*.obs	ObsFile	Neutral				
True	GEOPAK	SDMS	*.prj	RawFile	Neutral		Sdms.ex		
True	GEOPAK	SDMS Strip Tags	*.prj	RawFile	Neutral		Sdms.ex		Stri
True	GEOPAK	Florida Fieldbook	*.ff	RawFile	Neutral		Fftoobs.		
True	GEOPAK	Trimble DC	*.dc	RawFile	Intermediate				
True	GEOPAK	Lietz-Sokkia SDR33 14Char	*.sdr	RawFile	Intermediate				
True	GEOPAK	Lietz-Sokkia SDR33 4Digit	*.sdr	RawFile	Intermediate				
True	GEOPAK	Lietz-Sokkia SDR2	*.sdr	RawFile	Intermediate				
True	GEOPAK	TDS 48,95,FS2	*.rw5	RawFile	Intermediate				
True	GEOPAK	TDS 48,95,FS2	*.cr5	CoordFile	Intermediate				

Demo

Improved User Experience

- DRAG...a data file...
- DROP...into Data Acquisition...
- Planimetrics are automatically and immediately drawn
- On the fly data reduction and adjustment
- Automatic Surface Generation
- Fully associative geometry and surfaces

DGN Data Store

- Data is stored in the DGN.
- Therefore all the following become available:
 - Undo/Redo
 - Design history
 - File protection
 - Digital signatures
 - Etc.

Demo

Point and Chain Editing

- **Multiple Options**
- **Automatic Surface Updating**
 - Even of merged surfaces
- **Crossing Breaklines**

Demo

Demo

Surface Generation

- Surfaces can be generated from a myriad of different data types.

Raw

Aerial

Point Clouds

Raster

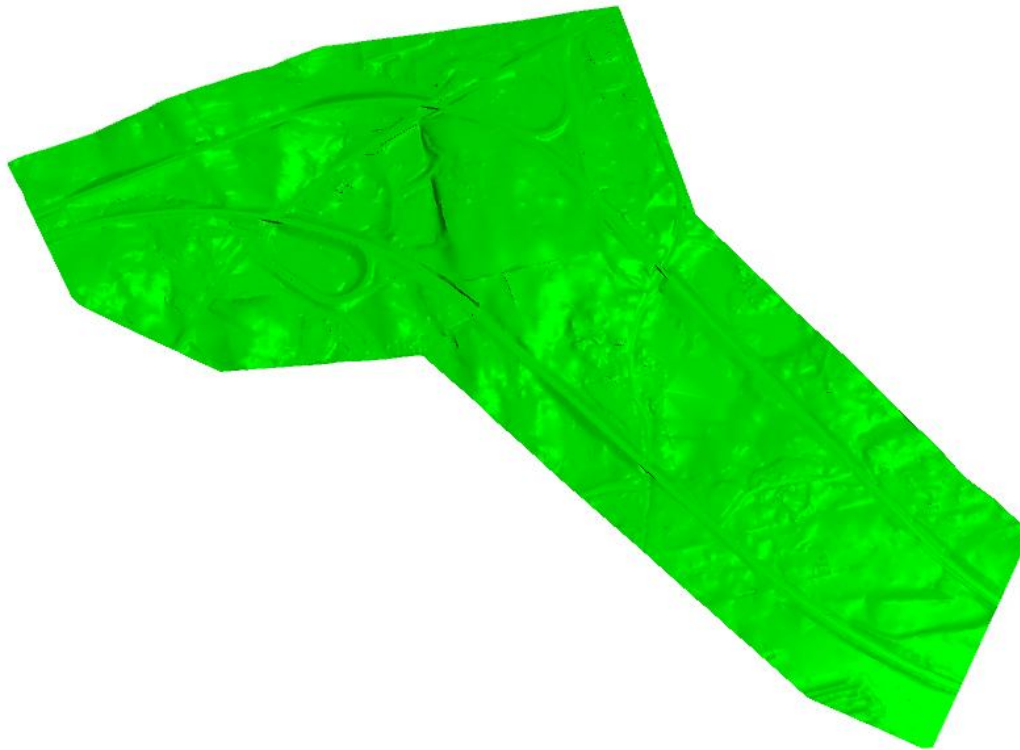
DEM

SHP

etc.

Surfaces

- *Aerial Data*



Demo

Surfaces

- *Import from Raster*

DEM

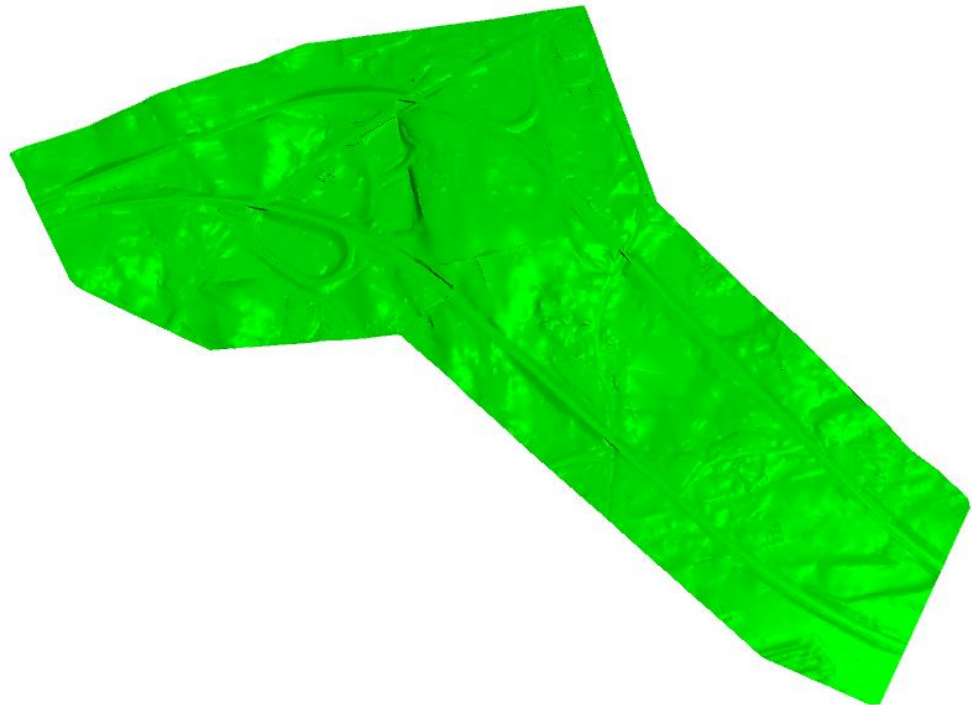
TIF

IMG

DDF

DTED

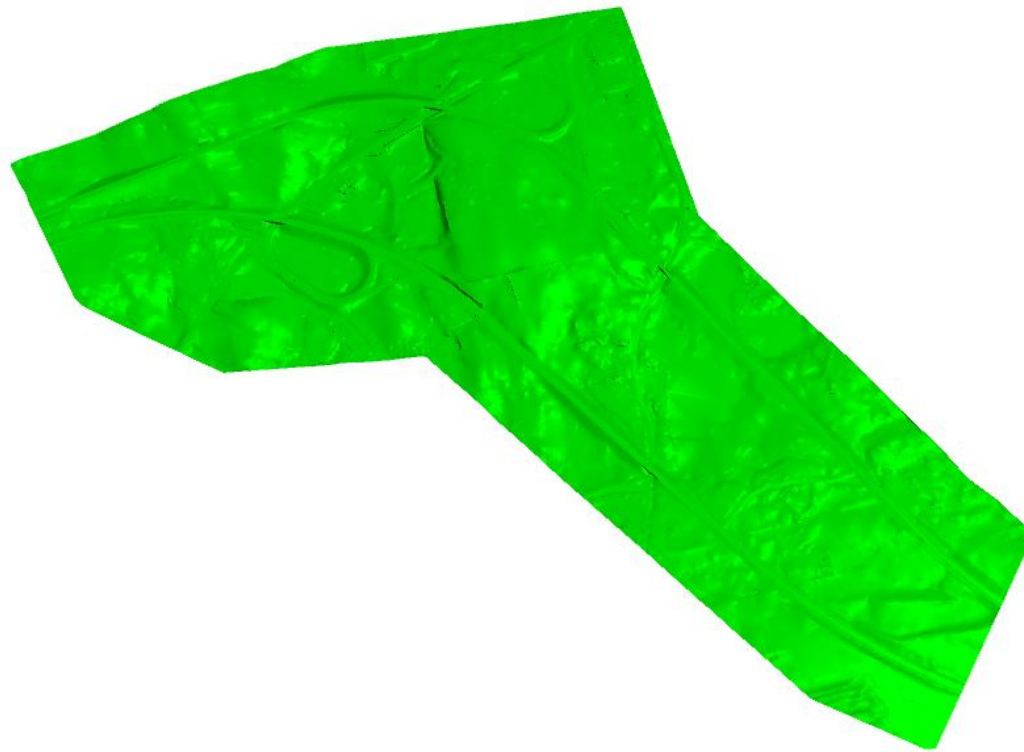
DIM



Demo

Surfaces

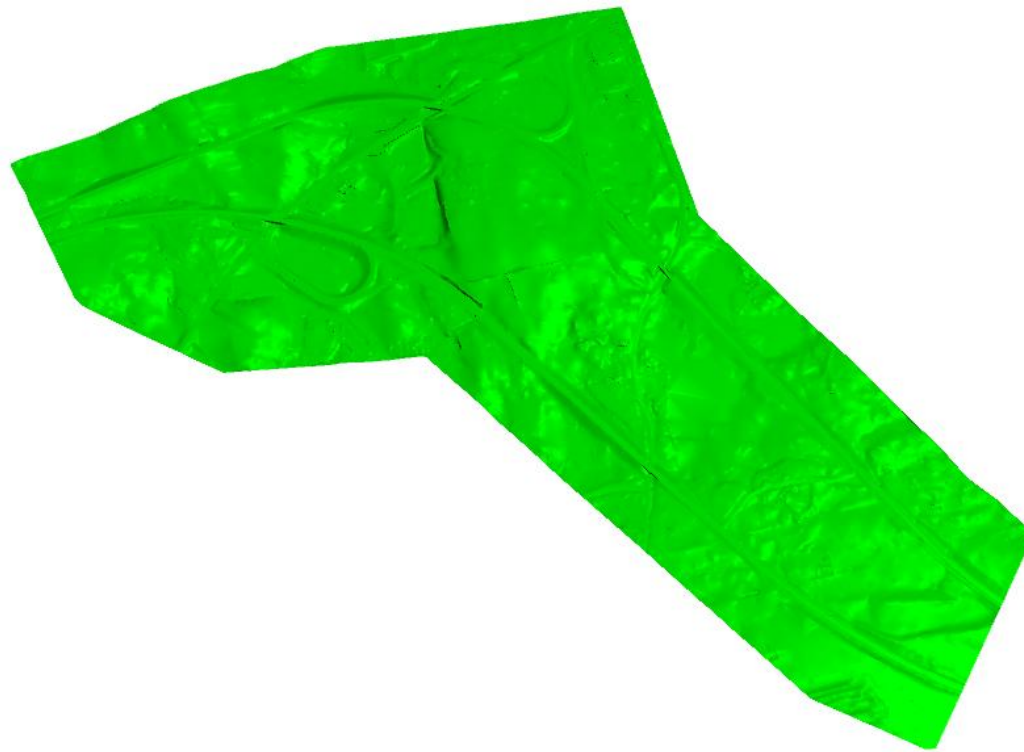
- ***SHP Files***



Demo

Surfaces

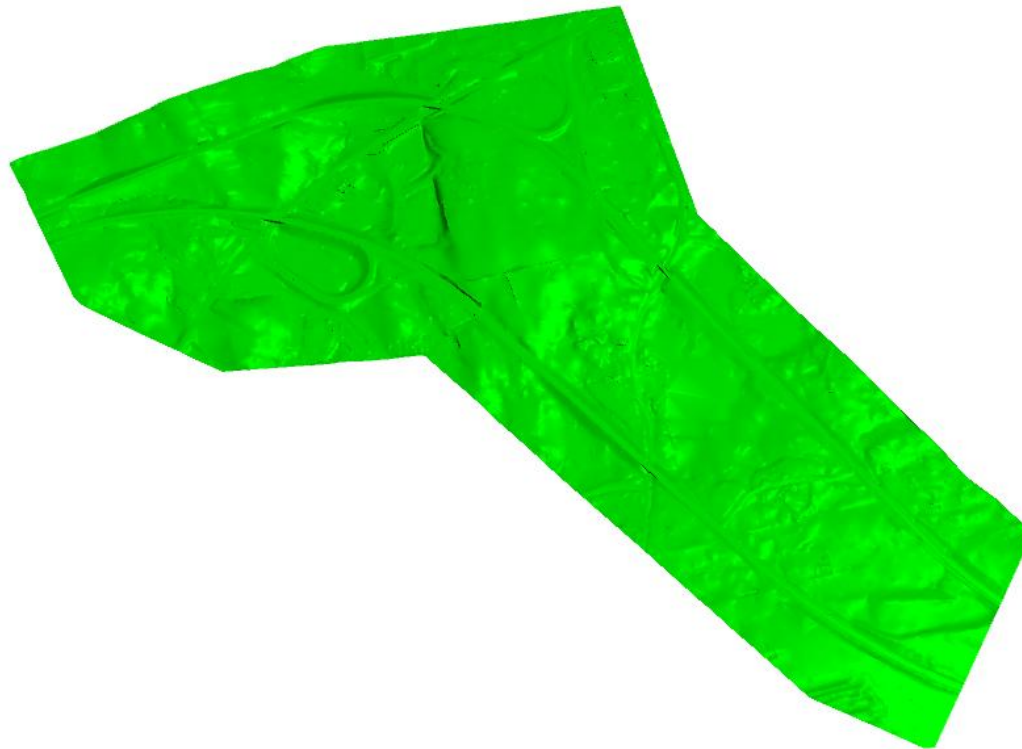
- ***LIDAR***



Demo

Surfaces

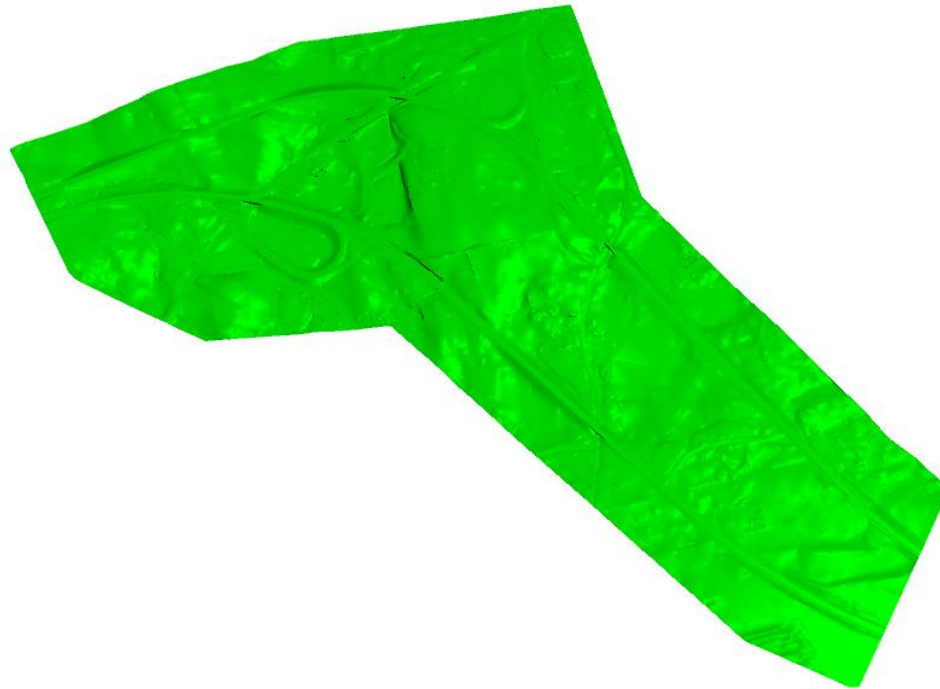
- *Point Clouds*
- **NEW!** in V8i (SELECTseries 2)



Demo

Surface Merging

- Automated merging of surfaces.
 - (e.g. Aerial/LIDAR merged with field data)



Demo

Export

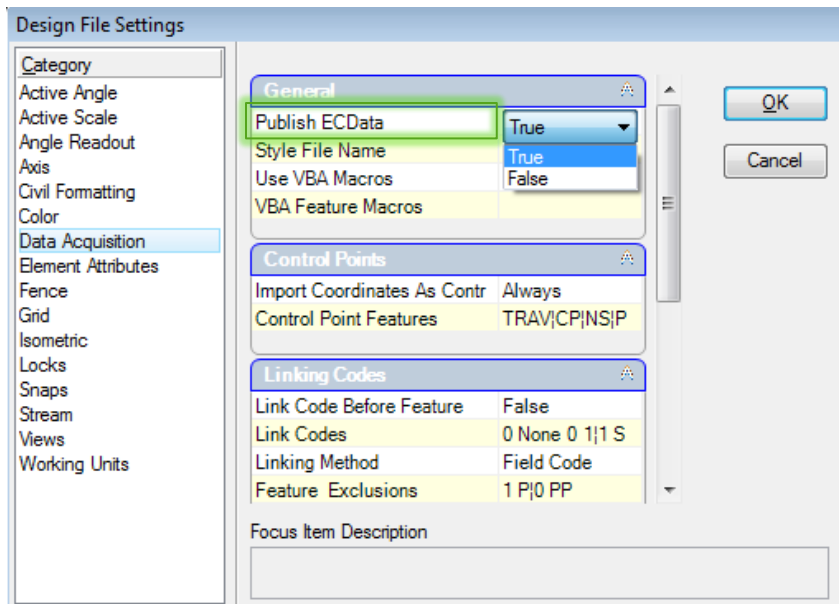
- *Export Geometry*
- Export Surfaces

Demo

Miscellaneous

- ***EC Attributes***

Attaches EC Attribute Data to the elements so that they can be viewed with the MicroStation or Navigator *Items Browser* without a Civil application present

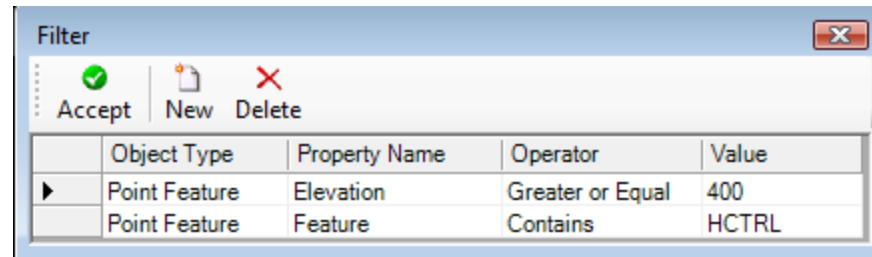
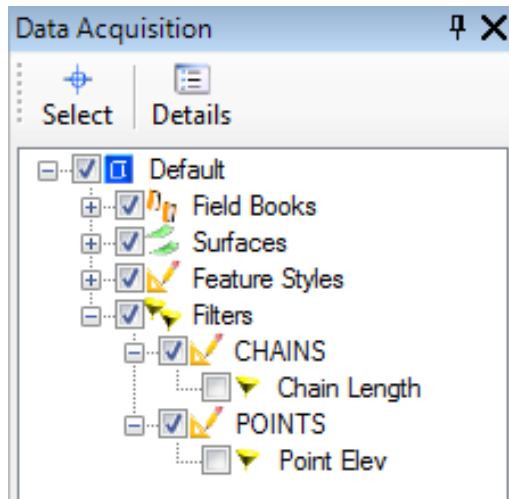


Note: Will slow down processing

Miscellaneous

- **Filters**

Customized filters can be built to filter data based on user specified parameters.



Questions?

