Moving to OpenRoads Designer - Setting Up Annotation

Presented by:
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Introduction

- The preconfigured annotation resources delivered with OpenRoads Designer CONNECT Edition include a multitude of examples ready for customization
- Automated annotation of horizontal and vertical geometry
- Annotation labeling for customized labeling requirements
Objectives

• Introduction to labeling in OpenRoads Designer CONNECT Edition
  – Place Label tool
  – Automated labeling
• Creating a Text Favorite
• Setting Up the Place Label Tool
• Creating an Annotation Definition
• Exploring the Annotation Manager
• Linking an Annotation Group to a Feature Symbology
• Linking an Annotation Group to a Sheet Seed Definition
Introduction to Automated Labeling – Horizontal Geometry

- Horizontal alignments can be annotated during the creation process or after completed.
- The annotation is automatically associated to the alignment tracking changes in real time.
- The annotation is drawing scale aware.
Introduction to Automated Labeling – Horizontal Geometry

Demo
Introduction to Automated Labeling – Horizontal Geometry
Introduction to Manual Labeling – Horizontal Geometry

Demo
Introduction to Manual Labeling – Horizontal Geometry
Introduction to Automated Labeling – Vertical Geometry

Demo
Introduction to Automated Labeling – Vertical Geometry
Introduction to Manual Labeling – Vertical Geometry

Demo
Introduction to Manual Labeling – Vertical Geometry
Introduction to Automated Labeling – Cross Sections

Demo
Introduction to Automated Labeling – Cross Sections
Introduction to Manual Labeling – Cross Sections

Demo
Introduction to Manual Labeling – Cross Sections
Creating a Text Favorite

- Based on MicroStation Platform technology
- OpenRoads Designer adds Civil based properties
- Currently located in the Text Editor
- Parent-child relationship with Text Styles
Creating a Text Favorite

- The Insert Field option provides access to “computable text”
- OpenRoads categories provide options for Civil based computations
- Favorites Manager
Creating a Text Favorite

• Steps
  – Select the text style
  – Type any non-computed or “static” text
  – Add the field computed text
  – Save the label to a text favorite
  – Rename the text favorite to an appropriate name
Creating a Text Favorite

Demo
Creating a Text Favorite
Setting up the Place Label Tool

• Requires a preconfigured cell or text favorite

• The place label tool in OpenRoads Designer has been enhanced to interact with Civil based elements

• Use the same name for the cell and dimension style to auto-select the dimension style

• Cell libraries are included as an example in our delivered workspace
Creating a Cell for the Place Label Tool

Demo
Creating a Cell for the Place Label Tool
Setting up the Place Label Tool – Dimension Styles

- Dimension and text styles are stored in the Text Favorites DGNLib in the delivered workspace
- Make sure to set the text style
- Use the in-line leader option
- Remember to set the symbology
- Name the dimension style the same name as the cell to trigger automatic selection
Creating an Annotation Definition

- Annotation definitions are stored in the Feature Definition dgnlibs (required)
- Use the delivered examples as a starting point
- Use the export/import capability to move between dgnlibs
- Accessed through Project Explorer
- Annotation definitions are referenced into annotation groups
- Automated bulk annotation setup
Creating an Annotation Definition

- Right-click to create an annotation group
- Right-click on the annotation group to “Manage” the group
- The annotation group manager creates individual annotation definitions that can be shared with other annotation groups
Creating an Annotation Definition

• The annotation group manager uses the active drawing scale to control the size of the visualized text
Creating an Annotation Definition

• Start by importing an annotation xml file from another dgnlib or create your own new entry
• Do not leave the dialog open when switching to a different file
• After completion in the Annotation Manager dialog, it is required to close the dialog to save the changes
Creating an Annotation Definition for a Major Tick Mark

Demo
Creating an Annotation Definition for a Major Tick Mark
Creating an Annotation Definition

• Recommended best practice is to import styles originally delivered in the civil workspace and modify per standards
• Each annotation group must be exported and or imported individually from the Annotation Manager
Annotation Definition Export / Import Process

Demo
Annotation Definition Export / Import Process
Exploring the Annotation Manager

- Context sensitive options based on the category
- Relies on text favorites to compute text such as station labels
- Replacement for the InRoads XIN and GEOPAK DDB files regarding annotation from SELECTseries 4 products
- Uses the active drawing scale for temporary visualization graphics
- Infinite possibilities to accommodate most standards
- Linear 3D and Tabular Annotation
Exploring the Annotation Manager

• The “where” property determines the position of the label(s)
  – Differs depending on the label type
    • Alignment Annotation
      – Increments
      – Stations
      – Horizontal Points
      – Vertical Points
      – In Horizontal Components
Exploring the Annotation Manager

• The “where” property determines which features to label for XS point and segment annotation

• Can label all points or utilize a specific point or segment name list (most efficient processing times)

• Allows for very specific filtering for the ultimate control
Exploring the Annotation Manager

- The “where” property is not used for setting up grid annotations.
Exploring the Annotation Manager

• The “annotate” property sets the type of label
  – Text
  – Cell
  – Line

• The template option allows the selection of an element template to control symbology
Exploring the Annotation Manager

• The “leader” property enables an optional leader line with multiple options for terminators
  – Arrow
  – Circle
  – Square
  – Triangle

• The template option allows the selection of an element template to control symbology
Exploring the Annotation Manager

• The “placement” property sets the location of the label relative to the “where” property and includes:
  – Rotation options
  – Vertical offset options
  – Horizontal offset options
  – Perpendicular offset options
  – Tangential offset options

➢ Note, differing options will appear depending on the label type
Exploring the Annotation Manager

- The “line” property sets the length of the line when the line option is selected to be drawn
Exploring the Annotation Manager

• The “cell” property sets the cell name, scale, and application of the active cell scale
• Activated when the type of label is set to “cell”
Exploring the Annotation Manager

• For grids there are two distinct types:
  – Profile grid (shown here)
  – Cross section grid
Exploring the Annotation Manager

• The profile grid sets the following:
  – Border
  – Major grid properties
  – Minor grid properties
  – Major grid line properties
  – Minor grid line properties
  – Horizontal axis title
  – Vertical axis title
  – Horizontal tick labels
  – Vertical tick labels
Exploring the Annotation Manager

• The XS grid sets the following:
  – Border
  – Major grid properties
  – Minor grid properties
  – Major grid line properties
  – Minor grid line properties
  – Horizontal axis title
  – Vertical axis title
  – Horizontal tick labels
  – Vertical tick labels
Exploring the Annotation Manager

• Frame annotation
• Allows for row annotation setup w/ collision intelligence
Linking an Annotation Group to a Feature Symbology

- Defined in the Feature Symbologies
- Annotation group properties may be defined for:
  - Linear feature symbologies
  - Point feature symbologies
  - Profile feature symbologies
  - Surface feature symbologies
Linking an Annotation Group to a Sheet Seed Definition

• Typically used for profiles and cross sections
• Option 1
  – Predefine in the sheet seed definition file setup
• Option 2
  – Select when creating sheets
Available Training

OpenRoads Designer Workspace Setup: Step 5 - Annotation

All Annotation for OpenRoads Designer is handled via MicroStation Text Favorites and OpenRoads Designer Annotation Groups. This training demonstrates the requirements and provides detailed setup instructional videos. <Less

Find Training (1)

On-Demand

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Thank You