Introduction to PLTS

Sandi Belson
ESRI Washington DC RO
Seminar overview

- PLTS at a glance
- PLTS Foundation Tools
  - Data Editing and Maintenance
- The GIS Data Reviewer
  - Quality control
  - Visual and Automated Checks
- Map Production System-Atlas
  - Map Series creation
  - Map surround
- Job Tracking for ArcGIS (JTX)
  - Workflow management
General production workflow

Capture

Store

Edit

Review

Output

Edits

Geospatial database

Document & correct errors

Maps

Data
PLTS

- **Production Line Tool Set**
  - Extends ArcGIS Desktop for production
  - Streamlines GIS database creation and maintenance
  - Provides an environment for data review
  - Creates high-quality cartographic products

- **Two tiers**
  - PLTS Foundation
    - Base production tools
  - PLTS Solutions
    - Industry specific product standards and templates
PLTS Foundation

- Provides base production tools
  - Workflow management
  - Data creation and editing tools
  - Data quality control tools
  - Cartographic production tools

- Two purchase options
  - All of PLTS Foundation
  - Separate components
    - Not Foundation tools
PLTS Solutions

- Installed on top of PLTS Foundation
  - Comes with PLTS Foundation
- Industry specific tools
  - Data schemas
  - Quality control checks
  - Cartographic templates
  - Map surround
  - Special tools
- Can have more than one installed

Federal User Conference 2008
Foundation Tools

- **Streamlined Editing**
  - Single-click editing
  - New editing tasks
  - Pre-attribution of features

- **Attribution efficiency**
  - Additional Table of Contents tabs
  - Build favorite attribute combinations
  - On-the-Fly validation

- **Data Loading tools**
  - Batch processing
  - Multiple sources to multiple targets
Editing in PLTS

- Conceptually same as in core ArcGIS
- Enhancements made to accessibility of tools
  - More toolbars
  - One click activation
- Additional editing tasks
- Additional editing tools
- Table of contents
  - Manage target layer
  - Pre-attribution of features
Editing environment

- Controlled through
  - Table of Contents tab
  - Toolbars
Using the Target Tab

- Target layer & Attributes
  - Attribute features
    - Using defaults
      - Modify & apply
    - Using favorites
      - Customized default values
    - Copy from exiting features
  - Using favorites
    - Local area attributes
    - Ex: BuildP defaults
      - Subtype: BuildingPoint
      - BFC: 0 – Unknown

Want
- Subtype: BuildingPoint
- BFC: 5 – Government Administration
- LMC: 1 – Landmark
On the fly validation

- Preliminary check of attribute values
  - Attributes checked before feature is created
  - Helps to maintain data quality
  - Catch the errors before Data QC

- Accessed from the PLTS Target and PLTS Selection tab

- PLTS Knowledge base
  - Suite of tables
  - Controls valid attributes and feature symbology, and more
Selecting features

- **Same selection options as core**
- **PLTS Selection Tab**
  - Lists selected features & attributes
  - Browse selected features
  - In an edit session:
    Update attributes of features
    Transfer attribute values

---

### PLTS Editing Environment

**Selection tools**

---

### Table of Contents

<table>
<thead>
<tr>
<th>Selection</th>
<th>Total Selected: 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>bnd</td>
<td></td>
</tr>
<tr>
<td>CoastL</td>
<td></td>
</tr>
<tr>
<td>CoastlineShoreline</td>
<td></td>
</tr>
<tr>
<td>D743032805E4</td>
<td></td>
</tr>
<tr>
<td>PolbndA</td>
<td></td>
</tr>
<tr>
<td>hrd</td>
<td></td>
</tr>
<tr>
<td>CoastA</td>
<td></td>
</tr>
<tr>
<td>tra</td>
<td></td>
</tr>
<tr>
<td>RoadL</td>
<td></td>
</tr>
</tbody>
</table>

---

### Fields (not using)

<table>
<thead>
<tr>
<th>Field Alias Names</th>
<th>Attribute Value</th>
<th>Attribute Value And Description</th>
<th>Run-Time Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJECTID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FCsubtype</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gfid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>source</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f_code</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>slt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vdc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shape_Length</td>
<td>1.32054712919</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Options

- Transfer To Target
- Create Favorite
- Don't use Field Filter Table
- Copy Attribute
- Copy All Attributes
- Copy Field Info
- Textbox Editor Only
Data Migration Tools

- **VPF Importer**
  - Import direct to geodatabase

- **Data Load Automation Tool**
  - Cross-Reference Database
    - Mapping feature class and attribute information
    - Target to Source
    - Supported source data formats
      - Coverage
      - Shapefile
      - Geodatabase
  - Pre-Load Validation tool
Demo: Foundation tools

- Editing in PLTS
  - New feature creation
  - Attribution functionality
GIS Data ReViewer

- Quality control management system
- Tools for performing data QC
  - Automated review
  - Visual review
- Error documentation
  - Error Location
  - Error information
  - Status
ReViewer storage options

- **Inside or outside of production database**
  - Personal Geodatabase
  - File Geodatabase
  - Enterprise (SDE) Geodatabase

- **Stores**
  - ReViewer dataset
  - ReViewer table
  - ReViewer polygon grids

- **Reviewer dataset spatial reference**
  - Datum must be set to the same as the data being reviewed
The ReViewer Table

- Used to track anomalies found during the review
  - Records information across feature datasets/classes
- Contains additional functionality
  - Tools to navigate and manage records
  - Missing geometry tools
  - Record symbology
ReViewer Sessions

- Opens the environment for review
- Can have multiple sessions
  - Associated with
    - Project
    - User
    - Version
Automated Data Review

- 38 different data checks
  - Some geometry checks
  - Some attribute checks
  - Solutions may contain additional checks

- Can be configured to run one at a time or in batch
  - Termed batch job
  - Streamlines and organizes the automated process
  - Run using the Batch Validate tool
Visual Data Review

- From a selection set
  - Browse Features button
    - Browse through features using dialog
  - Commit to ReViewer Table button
    - All or individual
- Single features
  - Select feature & Identify
  - Commit to ReViewer Table button
- Flag missing features
- Capture missing geometry
Demo: Data Review

- Reviewing data
  - Start a reviewer session
  - Run a data check
  - Run a batch job
  - Conduct a visual review
Map Production System-Atlas

- Cartographic map tools
  - Atlas or map book creation tools
  - Dynamic text elements
  - High quality reference grids
  - Dynamic tables
  - Batch printing and exporting
Creating a series

- **Build Map Series**
  - Comprehensive wizard
  - No assumptions of the data frame properties
- **Build Simple Map Series**
  - Simplified wizard
  - Assumes certain properties of the data frame
  - Properties can be adjusted later
- **Create Map Sheet**
  - Creates map sheet using visible extent
  - Specify layout to use
Area of interest options

- **Data Frame Visible Extent**
  - No polygon feature defining the area of interest (AOI)
  - Choose number of map sheets to create

- **Feature Class**
  - Adds an existing feature class to the TOC
  - Need to select features to include

- **Feature Layer**
  - Uses feature layer from the TOC
  - Need to select features to include
MPS Atlas tab

- Populated once map series is created
- Lists all map sheets
- Status of the map sheet
  - Shared map sheet
  - Single map sheet
- Access map series and map sheet properties
- Printing and exporting options
Managing the series

- **Data Frame Managers**
  - Update data frame properties
    - Rotation angle
    - Spatial Reference
    - Buffer
    - Scale and Extent
    - Area of Interest Intersection
    - Feature Layer Definition Query

- **Add data frames**
Inserting surround elements

- Can insert ArcGIS surround elements
- PLTS surround elements
- Map sheets
  - Shared – all map sheets inherit the surround element
  - Single – only the current map sheet inherits surround element
Dynamic text

- Dynamically updating text elements
- Different options:
  - Computer Name
  - Data Frame Properties
  - Date
  - Feature Attributes
  - Map Properties
  - Time
  - User Name
Grid Manager

- Create grids, graticules, and borders
- Grids created as feature classes
- Visible in data & layout view
- Double precision accuracy
- Additional grid label formats
- Complex AOI shapes
- Multiple UTM zone support
Graphic Table Element

- Dynamic table creation capabilities
- Tables are linked or independent of feature layers
- Ability to include text, symbols, and graphics in tables
- Attributes from map extent
Demo: MPS Atlas

- Working with Atlas
  - Explore existing series
  - Add surround elements
  - Create graphic table
  - Apply grid
Job Tracking for ArcGIS

- Workflow management
  - Whose doing what
    - Job assignment
  - When was it done
    - Job tracking
  - What was done
    - Job tracking
    - Feature transaction history

- Directly integrated with ArcGIS
What do I need?

- **For ArcGIS 9.2**
  - At least an ArcEditor license level
  - An SDE geodatabase
    - Personal SDE, Workgroup SDE, or Enterprise SDE

- **ArcGIS Server**
  - Depends on geodatabase working with
    - Workgroup or Enterprise

- **Job Tracking for ArcGIS (JTX)**
  - Version 3.0.1

---

**ArcGIS Desktop**

+ PLTS Foundation (optional)

**ArcGIS Server**

Integrated server-based GIS

**ArcSDE technology**
Key terminology

- **Job Type**
  - Organization of projects or tasks
  - Work performed by company

- **Job**
  - Single unit of work
  - Usually tied to a specific area or location
  - Can have multiple jobs per Job Type
  - Performed by one or more people
JTX Application

- End user daily interface
- Diving board into the day
- Contains all job information
Demo: JTX

- Examine a Job Type
- Create a new job
- Complete steps in the workflow