

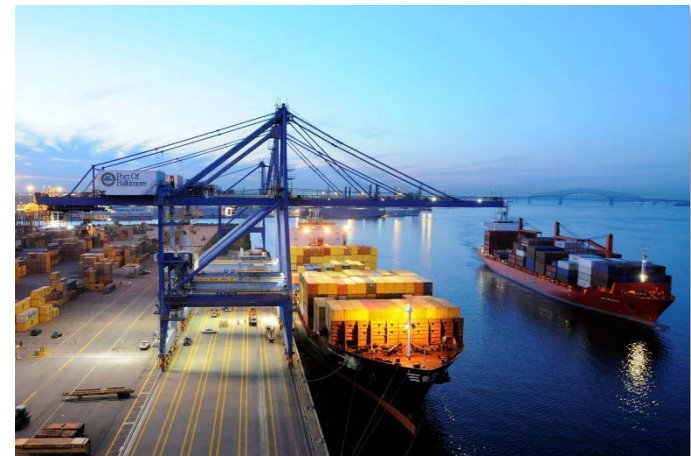


Port View

Improving Knowledge Management through GIS

Agenda

- MPA Data Maintenance Process
 - Managed CAD Workspace
 - CAD to GIS Crosswalk and FME
- MPA Port View Application
 - Overview
 - Demonstration
 - Way Ahead



MPA Data Maintenance Goals

- ✓ Identify business needs and what geospatial and attribute info is necessary to meet those needs (ongoing process)
- ✓ Establish CAD and GIS standards that align with business needs
- ✓ Make it easy for consultants to meet CAD standards
- ✓ Enable seamless conversion from CAD to GIS and vice versa
- ✓ Make it easy to import geospatial data into and export data out of MPA's system regardless of format



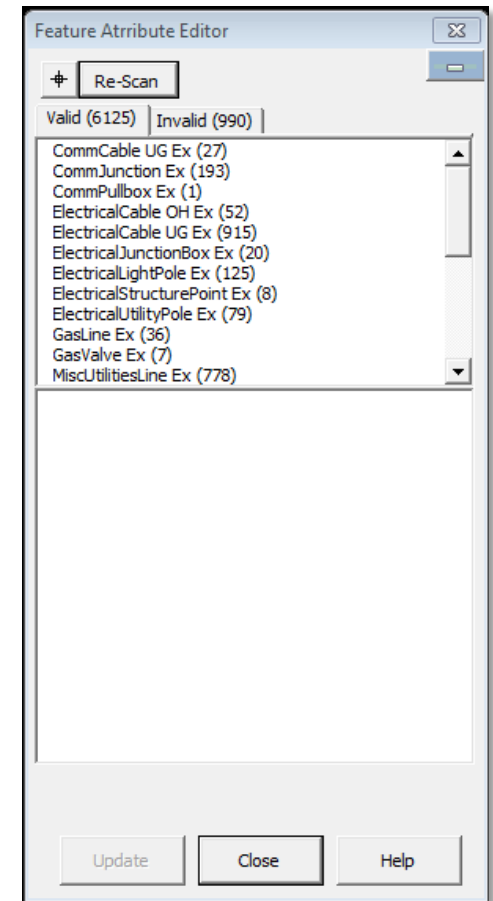
Managed CAD Workspace

- MPA developed a managed CAD workspace by implementing Bentley ProjectWise
- Files in a workspace are read/write for administrators and engineers working the project and read-only to all other users
- Managed workspace is implemented at the application level as well as the folder level
 - Application level assures that every DGN file in ProjectWise inherits the MPA CAD standards
 - Folder level delivers additional workspace customization according to the type of work being performed (Arch, Civil, or Survey)



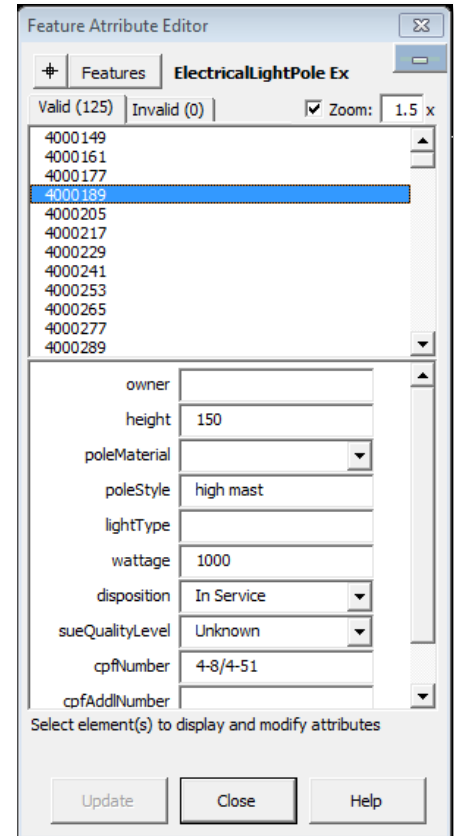
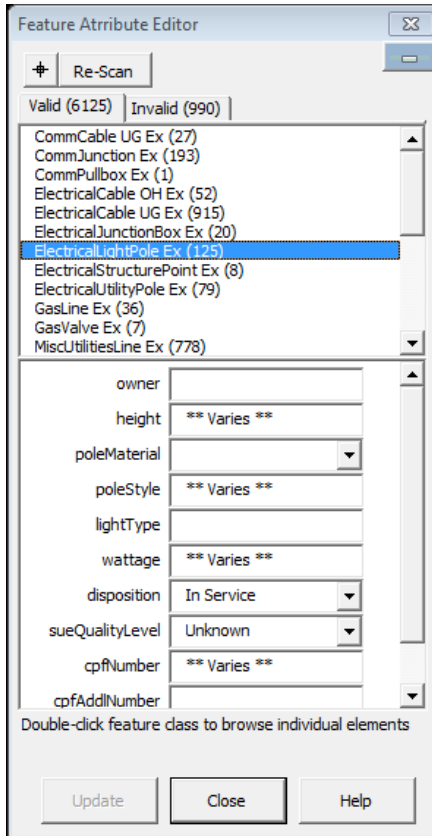
Feature Attribute Editor – Find Valid and Invalid Features

- Scanning for features or selecting them geographically returns all available features
- Features are categorized as valid or invalid per the MPA CAD standards



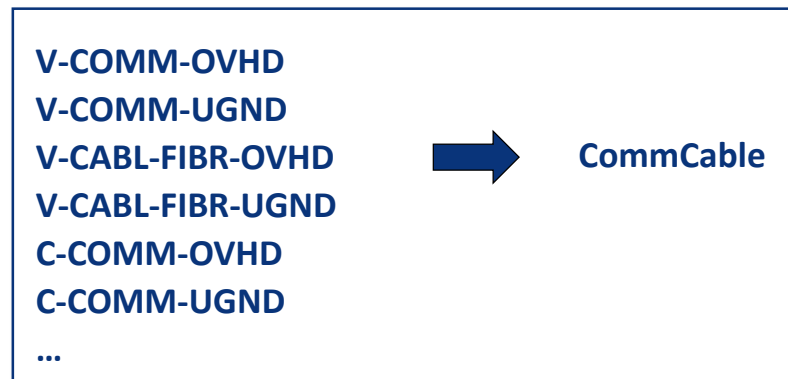
Attributing Features

- Users can choose a group of features or a single feature and update the attributes



CAD to GIS Crosswalk

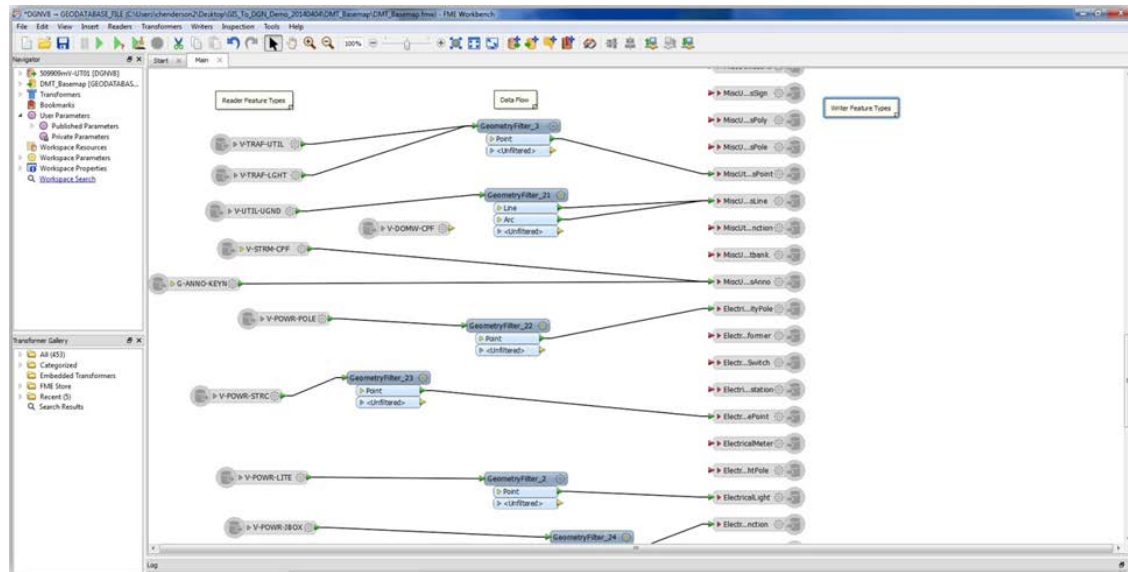
- Crosswalk aligns all layers in MPA's CAD standard with layers in MPA's GIS standard
 - 1:1 matches
 - 1:M matches
 - M:1 matches



- Every CAD layer has a home in GIS and every GIS layer has a home in CAD

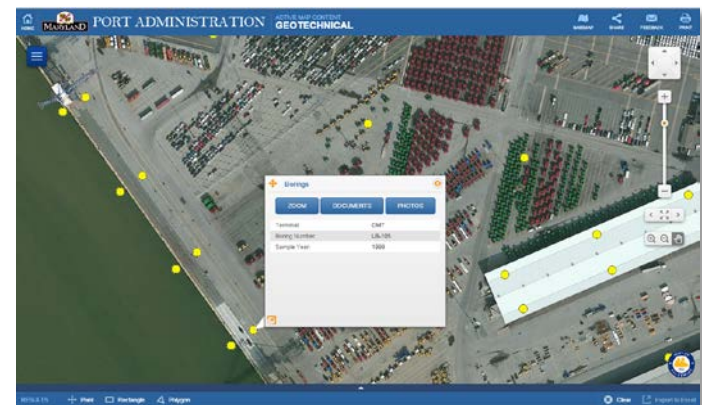
FME

- Once a project is designed, built, and accepted for maintenance, the DGN file is run through FME and translated into GIS
- When a new project is initiated, a designer can request a DGN file of current conditions; GIS basemap is translated into CAD using FME



Port View Application

- JavaScript HTML 5 application
- Provide non-GIS users with access to geospatial information
- Reused Kodiak framework developed in support of Maryland State Highway Administration's Public eGIS and dashboards
- Release 1 to be deployed at MPA this month
- Contents:
 - Utilities
 - Cargo
 - CTP & Other Projects
 - Geotechnical
 - Assets
 - Tenants, Plats, Deeds, and Boundaries



Demonstration

Port View Application



Way Ahead

- Continue to expand quantity and quality of geospatial data
- Port View plans
 - Provide external access
 - Expand contents to include Signs, Security, and Environment
 - Expand available tools
 - Markup map
 - Conflict detection
 - Search
 - Reports
 - Charts
 - Integrate with ProjectWise



Q&A

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