EnerVest Delivers Enterprise GIS Integration with Kingdom and FME

Agenda / Schedule

- Introductions

- Business Case

- Technical Solution

- Reader / Writer Examples

- Business Impacts

- Contact Information
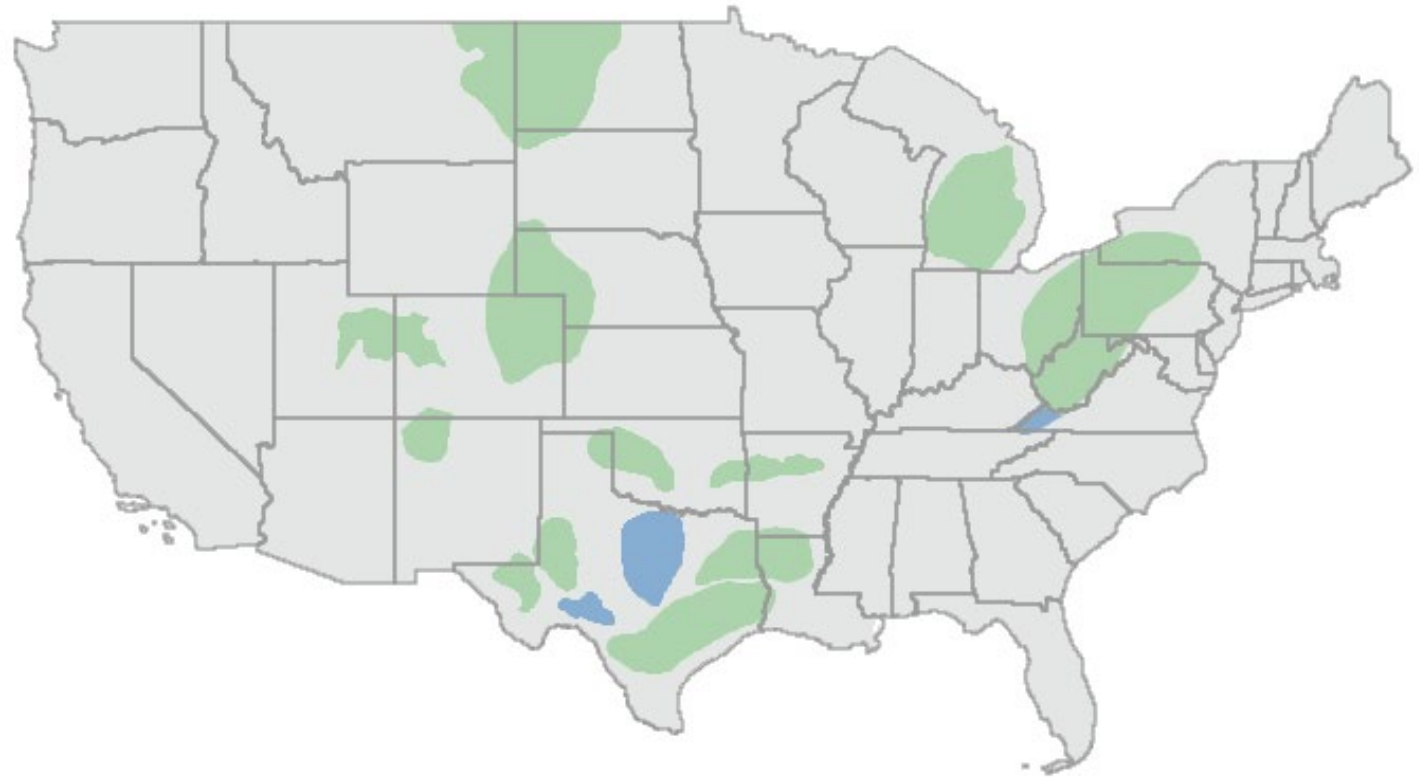
Introductions – Who is LOGIC?

Enterprise GIS Services

- GIS strategy assessments / roadmaps, planning, design

- Custom Esri Web AppBuilder Widgets

- Enterprise GIS implementations

- Fit-for-purpose business solutions

- Integration with line of business systems

- Knowledge transfer, governance, & training

- Ongoing support, maintenance, upgrades

Introductions – Who is EnerVest?

- EnerVest is a private equity firm with its own operating company.
- We own and operate North American assets for our investors and our business partners.

Current Operating Areas   Historical Operating Areas
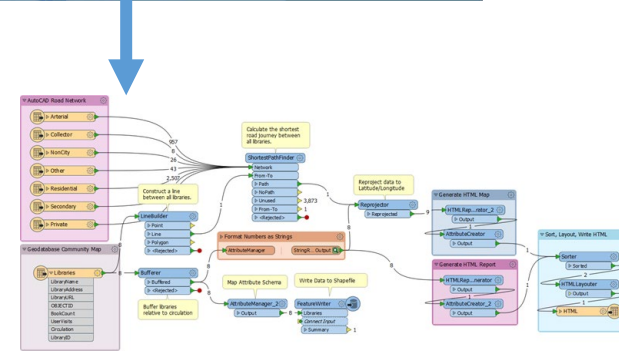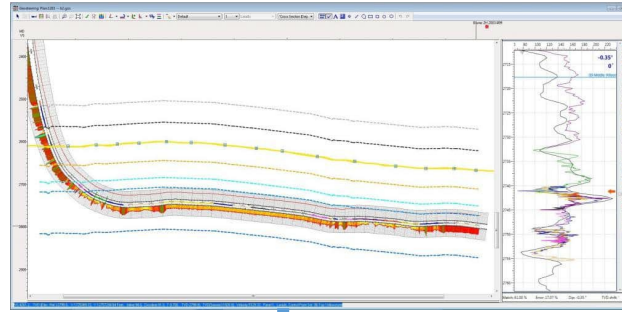
Business Case

Data in Silos / Proprietary Formats

- Our Geoscience Technicians ensure well locations are accurate by comparing multiple internal and external data sources that are available.

- This level of quality control is essential for subsurface modeling and well planning.

- We wanted to enable everyone in the company to view this well data without engineers or landmen needing to tie up an expensive geological interpretation software license to do so.

- EnerVest was looking for a solution to easily extract all our geoscience project's well information into our spatial data warehouse but was unable to find an off the shelf solution.

Technical Solution

IHS's Kingdom > Safe Software's FME > Esri Enterprise > Spotfire

- Kingdom Software Development Kit (SDK)
  - Well Header
  - Deviation survey
  - Zone information
- Custom FME Reader / Writer
- Export Kingdom data to
  - Enterprise GIS environment
  - Analytics data warehouse
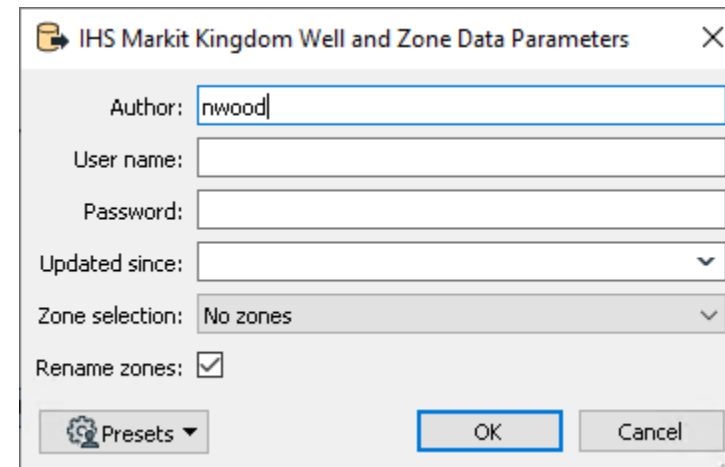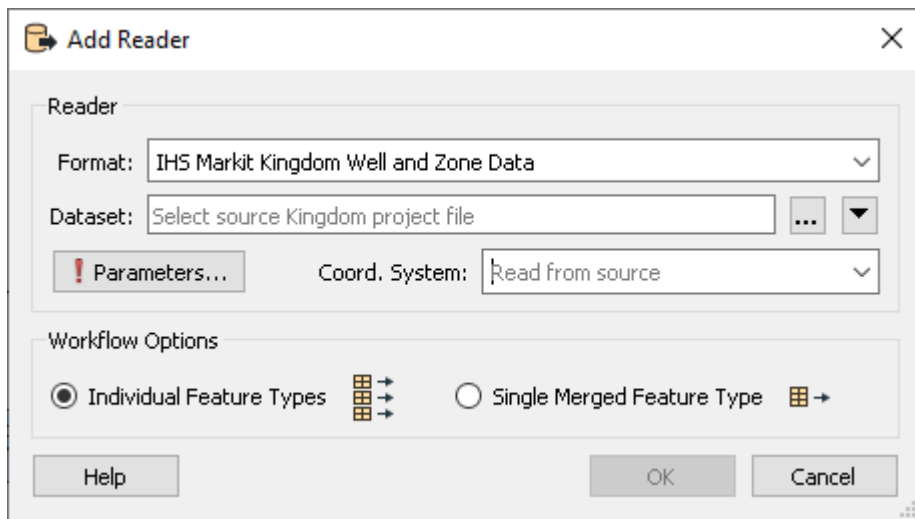- Updating Kingdom projects with zone information with the FME Writer
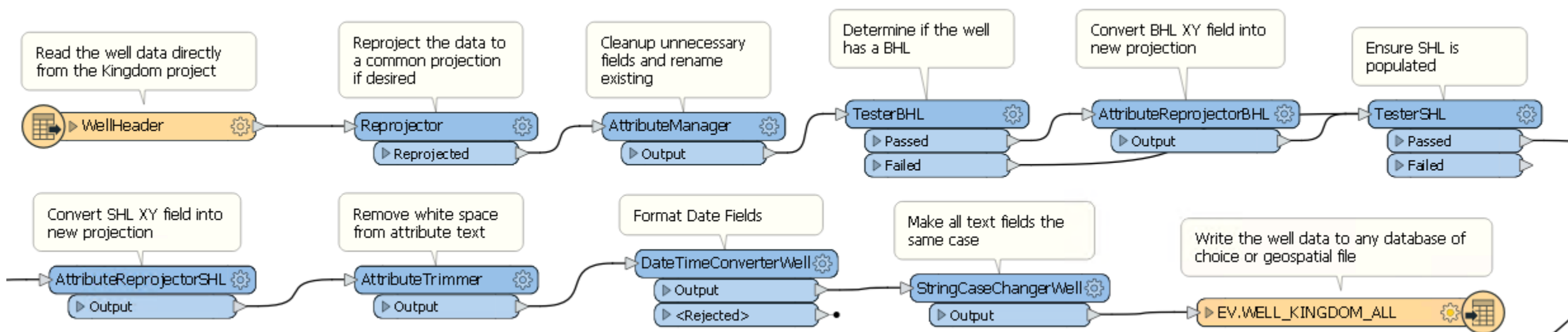
Custom Reader Interface

- <u>Dataset</u>: Kingdom TKS project file
- <u>Coord System</u>: Need to know a matching EPSG code, if your project is set to feet but uses UTM (meters) the standard codes won't work
- <u>Author</u>: User can only see their own content and that shared globally, use the project administrator login for full read / write project access
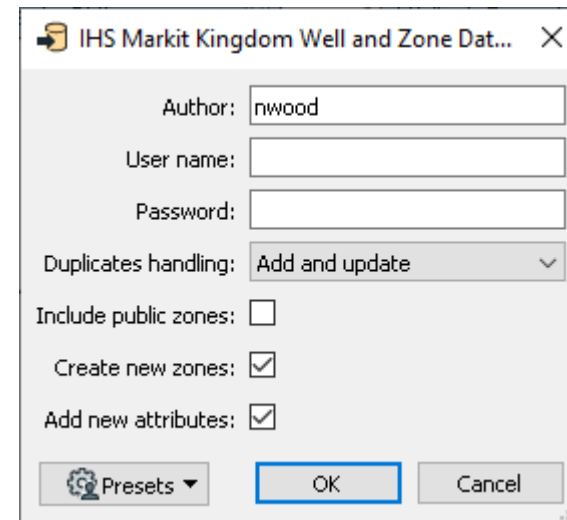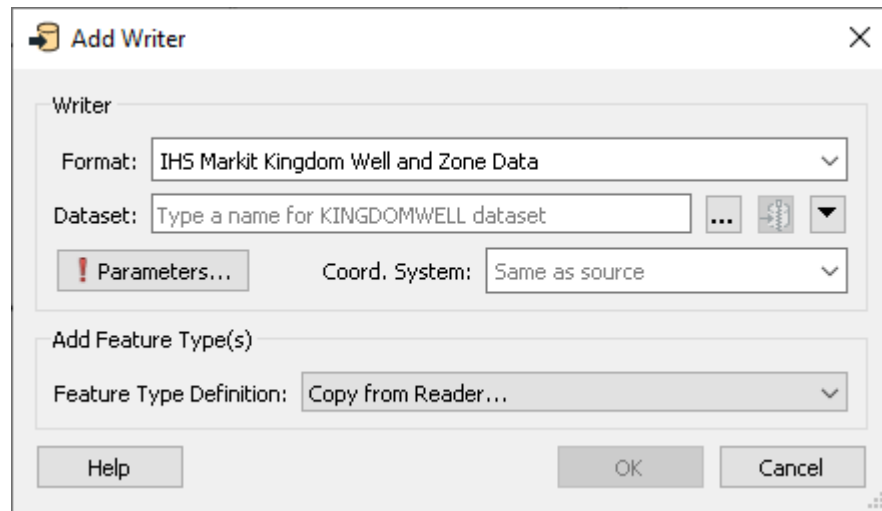- <u>Updated Since</u>: Only read well data recently updated
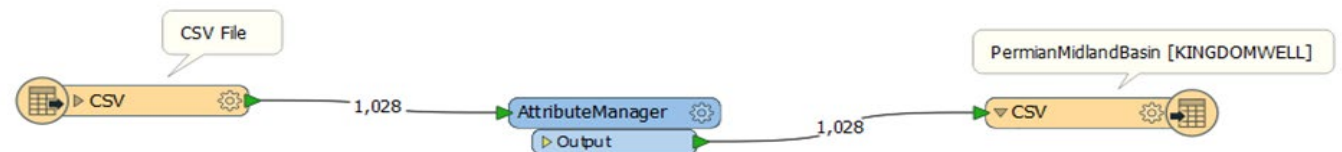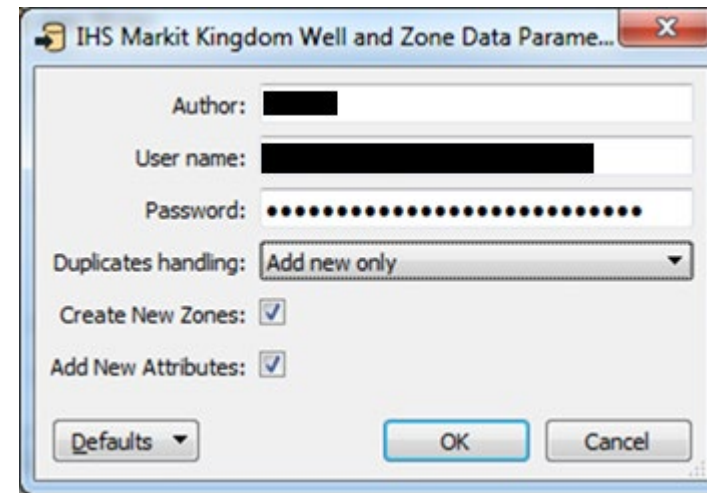
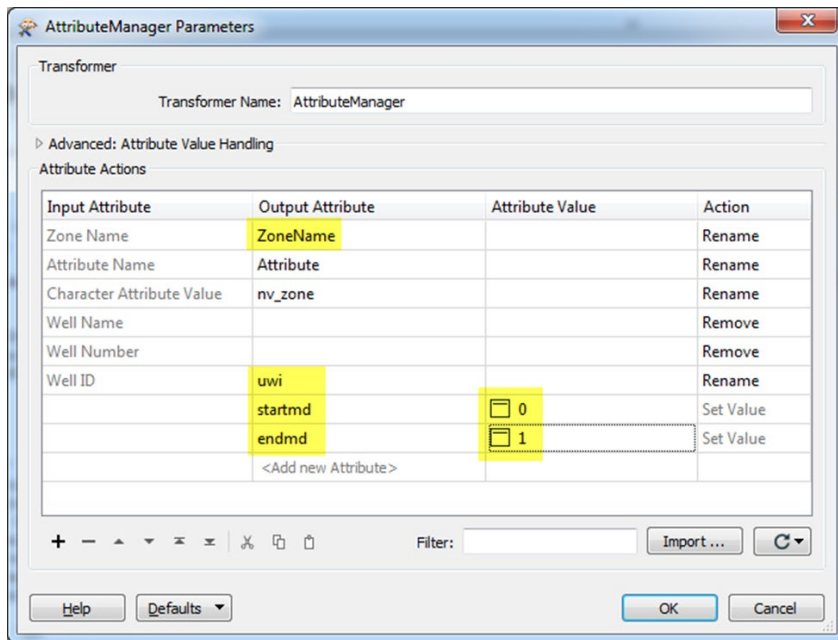# Sample Well Reader Workspace

Custom Writer Interface

- <u>Dataset</u>: Kingdom TKS project file
- <u>Author</u>: Must use the project administrator login to create zones
- <u>Parameters</u>: Flexible options for updating or creating new zones
- <u>Naming</u>: Avoid special characters for author and zone names

Zone Writer

- Use the **AttributeManager** transformer to assign fields to the zone manager fields.

- Add the writer using the **IHS Markit Kingdom Well and Zone Data** format and connect to the **.tks** file

- Enter the credentials for the Kingdom project in the Parameters

- Run the workspace

Business Impact

Centralized Data / Open Data Formats

- Empower Geologists & Geophysicists to utilize Enterprise maps and analytics outside of geoscience apps only
- Decrease the need for expensive geological interpretation software licenses
- Integrates geoscience location information into our spatial data warehouse
- Combines regional data into one dataset for company-wide analytics

Thank You!

LOGIC Solutions Group
10375 Richmond Avenue, Suite 850
Houston, Texas 77042
Mitchell Atwood
mitchell.atwood@logicsolutionsgroup.com
Office 832.619.7885
Mobile 832.498.5295