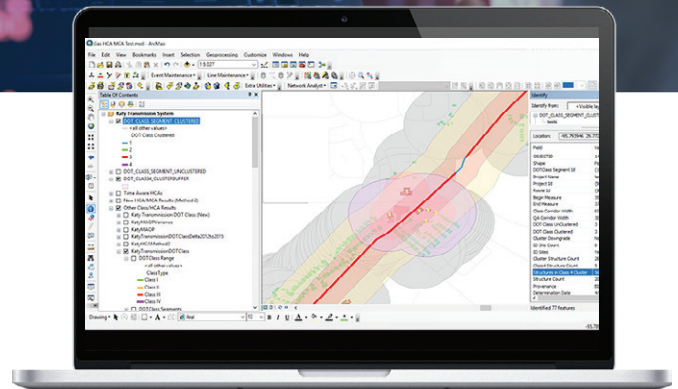


SOFTWARE & TECHNOLOGY: DYNASEG

EN Data Solutions, a sector of ENTRUST Solutions Group, empowers operators to efficiently slice and dice their pipeline data stored in complex industry data models. DynaSeg, EN Data Solutions' specialized dynamic segmentation software, makes it easy to extract the most value for accurate and safe decision-making.

Popular pipeline data models like the Pipeline Open Data Standard (PODS™) and Esri® utility and Pipeline Data Model (UPDM) are optimized for efficient data storage, not for effective data usage. Using those standard pipeline data models for common many functions can require intense computing power and time-consuming efforts. This includes common tasks such as extracting data in risk analysis, preparing U.S. Department of Transportation (DOT) Pipeline and Hazardous Material Safety Administration (PHMSA) National Pipeline Mapping System (NPMS) submissions, and creating DOT annual reports.



DYNASEG IS TIGHTLY INTEGRATED INTO THE ESRI® PLATFORM, SUPPORTS ALL ESRI® VECTOR AND TABULAR DATA FORMATS AND LIVES IN ARCTOOLBOX:

- No proprietary modification of your data model is required.
- Easy deployment. No complicated installation
- Does not require standing up a server, or named user licensing

OUR APPROACH

DynaSeg is part of G2-IS' comprehensive pipeline integrity management software suite, designed to help operators manage risk, ensure compliance, and optimize performance. Software incorporates advanced dynamic segmentation tools, and related utilities, within the Esri® geoprocessing framework.

DynaSeg is explicitly designed to overcome the limitations of Esri® OOTB dynamic segmentation tools – in particular, their inability to handle overlapping linear features in a single-source input layer. Overlapping linear features within a single layer or table are common in pipeline data, e.g. overlapping pressure hydrostatic pressure tests on a single line over time stored in a PODS™ pressure test table.

DynaSeg deals with overlapping features in a single input layer by offering a variety of query, sort, filtering, and data aggregation methods which can be used to summarize or otherwise resolve overlapping features in a single-source layer.

DynaSeg is a generic dynamic segmentation toolkit. It is useful in any processing scenario that involves intersecting and processing multiple linear and point event layers within a linear referencing context. For pipeline operators, these scenarios include:

- Maximum allowable operating pressure (MAOP) calculations for gas transmission lines.
- Maximum operating pressure (MOP) calculations for liquids transmission lines.
- Data processing and conditioning for input into pipeline risk analysis.
- National Pipeline Mapping System (NPMS) submissions.
- DOT annual reporting for gas and liquids transmission lines.
- Texas Railroad Commission T-4 and P-5 submissions. Tax assessments.

- Pipeline database QA/QC.
- Class Location and HCA-MCA analysis (key DynaSeg functions are embedded in the G2-IS Gas HCA Tool).

DynaSeg is also designed to address report automation through scripting and workflow integration. Each component can be used as a single tool, or in combination, giving users the flexibility to create workflows that are simple or complex, depending on the need. The tools work collaboratively within geoprocessing models to automate and document spatial analysis reporting.

EN DATA SOLUTIONS DELIVERS:

DynaSeg offers a powerful set of tools for extraction, recombination, analysis, interpretation, aggregation, and presentation of both numeric and text data, delivering enhanced functionality to data management:

- Segmentation of unlimited tables or layers and extraction of unlimited attribution.
- Resolution of complex data overlaps via sophisticated data sorting and statistical data aggregation functions.
- Calculate minimums, maximums, medians, means, standard deviation, and variances.
- Automatic dissolves of contiguous records with matching attributes and aggregation of other attributes across dissolved records using statistics functions.



1. Plan the Workflow

2. Specify the Parameters

3. Run the Analysis for Reporting