Energy Utilities (includes ArcGIS MultiSpeak) Data Model

Data Model User Group

Join the data model user group if you are an existing ArcGIS customer and want to learn more about design and architecture of personal or enterprise Geodatabase and become a part of Esri's growing data model community.

Esri has worked with the electric and gas user community to develop data models for energy utilities. Our data models serve as foundational templates that you can use to build utilities applications using ArcGIS.

Downloads - Design Templates

The Design Templates are the result of the community-based design process. The general concepts and terms for this discipline are described here. Tools and examples to create a template data model are also included for advanced users.

Electric

The UML files for the data models can be found at Telvent Miner and Miner where the most current materials are available. Telvent Miner and Miner maintains the data model on behalf of the electric and gas user community.

- Electric Distribution Data Model Reference Book - pdf format, 1051kb (submitted 02/19/2002)
- Electric Transmission Model - .vsd and .gif - zip format, 970kb (submitted 02/16/2005)
- ArcGIS Electric Utility Logical Model .vsd document - vsd format, 451kb (submitted 11/01/2005)

MultiSpeak

The National Rural Electric Cooperative Association (NRECA) has championed a data and interface standard called MultiSpeak® which is an industry-wide software standard that facilitates interoperability of diverse business and automation applications used in electric utilities.

The ArcGIS MultiSpeak® Data Model is a ready-to-use geodatabase data model template that closely conforms to the MultiSpeak 3.0 specification. The ArcGIS MultiSpeak® Data Model template can be customized to meet the needs of Esri users that design and maintain electric networks and associated infrastructure, and will be of particular benefit to those that are planning to implement a MultiSpeak 3.0 interface with their GIS.

- ArcGIS MultiSpeak Design Template - .mdb, .pdf, .vsd, .htm, xml, and .txt - zip format, 1924kb (submitted 04/06/2010)

Gas

Esri has worked with the EGUG community to develop a data model for gas utilities. This model is an industry template suitable for use as the foundation of any organization's enterprise data environment. It has elements that are critical for supporting industry requirements such as asset and facility management, vertical integration, and DIMP.

The data model is maintained by Esri on behalf of the electric and gas user community. Meetings occur yearly at the fall EGUG conference so that the community can define the next steps in its evolution.

- Gas Distribution Data Model Reference Book - pdf format, 890kb (submitted 02/19/2002)
- ArcGIS Gas Distribution Utility Data Model - Visio UML diagram, XMI Case Schema tool import file, 9.3.1 personal geodatabase, 9.3.1 XML Workspace export - zip format, 3000kb (submitted 10/07/2011)

User Forums

Visit the Esri data model discussion forum to share your ideas, thoughts, and questions with other users.