TECHNICAL SPECIFICATIONS

Smart. Simple. Secure.

PURPOSE

Harmonizing Diverse Spatial Data

FuzionView was built to enable the secure visualization of underground utility geospatial data from a wide variety of sources without requiring respective data providers to change how they manage their data or the schema elements that they have used.

FuzionView Leverages Advancements in Geospatial Technology

The capabilities found in FuzionView are the result of substantial advancements in geospatial technology that have occurred over the past 30 years. FuzionView leverages these advancements to:

- Provide secure visualization of underground utility information available from multiple facility operators in one view regardless of how the data managers at those utilities have structured their data
- Make dynamic visualization of data functionally smooth and easy to use on both mobile and desktop platforms
- Facilitate the display of the most current information available – as close to real-time as possible
- Manage access to visualization services in multiple ways so that FuzionView users have been vetted and are only able to see what they need to do their jobs
- Support design engineers, work site planners, locators, excavators, and emergency response personnel by improving business efficiency and dig-site safety

FEATURES

The FuzionView system is made up of multiple components:

FuzionView "Engine" - Major Components

- A database server, Postgres with the PostGIS extension
- A set of APIs for feeding the database with spatial features
- A set of APIs for querying and retrieving the spatial features
- An optional method for securing access to the overall system

Ruby on Rails "Administrative" Stack - Capabilities

- User controls for grouping by organization
- Controls for setting up dynamic internet-based service connections with FuzionView
- Controls for testing the service connections
- Controls for setting up specific spatial data layers for use by the FuzionView harmonized data schema
- Controls for testing, enabling sharing, stopping sharing, and deleting the service connections and spatial data layer sharing configurations
- Controls for sharing organizations to define their respective spatial coverage area so, at their option, they can reduce the number of hits they receive from the FuzionView service

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FEATURES

Demonstrator "Client" Map Interfaces

- The software includes two different methods for demonstrating the display of spatial features on a map
- These two demo options use JSON output APIs to display feature data as an interactive layer on a seamless map – the same as an operational install of FuzionView

Available Documentation

- Comprehensive online documentation
- Demo videos of the system in action
- Demo videos for how the system configuration works and how to on-board new users

TECHNICAL REQUIREMENTS

FuzionView 1.0 Download Elements

- Debian 13 (Trixie)
- KeyCloak is used to provide for OAuth 2.0 security in the download packages. This configuration is such that KeyCloak can be swapped out with other OAuth provider types
- MapServer is used to provide the FuzionView WFS service for accessing the harmonized feature data
- The Postgres database can be swapped out with any other spatially enabled database that MapServer can be connected to. Some popular ones include Postgre/PostGIS, MSSQL, Oracle, SpatiaLite, and GeoPackage

Ready to revolutionize your utility operations?

Contact us today to learn more about FuzionView.

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- **Technical information**
- **Fact sheets**
- **Connection information**
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