



## OpenUtilities<sup>®</sup> sisNET

Design, Document, and Manage Energy and Water and Wastewater Networks

OpenUtilities sisNET is a geographical utilities network information system, designed to support digital operations and maintenance workflows at electricity, gas, district energy, and water and wastewater utilities. The comprehensive product suite creates an up-to-date network asset registry and enables decision support through analyses of asset information, network, and topology, along with capabilities such as tracing, thematic mapping, queries, and reporting.

Regardless of an organization's size, OpenUtilities sisNET is a scalable application that provides rapid deployment with out-of-the-box, yet configurable, data models. It delivers essential features for utility asset modeling and a comprehensive list of commodities within a single interface. The application empowers users to analyze both existing and planned network extensions, identify performance issues, risks, critical network elements, and asset replacement needs. Ultimately, enhancing productivity, facilitating informed decision-making, and improving network reliability.

### ENHANCED VISUALIZATION AND MANAGEMENT

OpenUtilities sisNET provides robust 2D and 3D tools through MicroStation's CAD capabilities, including AccuDraw<sup>®</sup> for dynamic control and input, and AccuSnap for intelligent, interactive snapping when creating geospatial objects. It also supports dimensioning, raster management, printing, publishing, and more. Leveraging GIS capabilities from OpenCities Map, it equips operations with essential tools for information analysis. Network analysis features enable various tracing options, such as isolation traces, while thematic mapping facilitates the creation of on-the-spot, semi-permanent and permanent visualizations of utility network assets.

Geospatial analysis evaluates the utility network within its environmental context, assessing potential impacts on surroundings and ensuring compliance with environmental safety regulations. Additionally, OpenUtilities sisNET offers a comprehensive topology of cable networks and pipelines, allowing for detailed analysis of the effects of partial network shutdowns using its extensive database.

### SECURE AND ACCESSIBLE DATA

OpenUtilities sisNET offers secure multiuser editing, which is critical for utilities that require full control of changes made to the asset register. Access to data is made available through various client types:

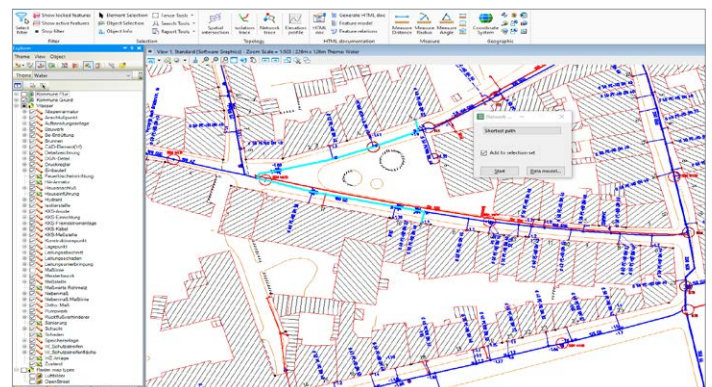
- sisNET and sisFLOW desktop clients – for editing, analysis, and data review.
- sisVIEW field/mobile clients – for disconnected workflows.

- sisIMS web publishing server with internet-based clients – for easy access to network asset data throughout the organization.
- Modifications in OpenUtilities sisNET are conducted in long transactions, effectively isolating assets during the change process to prevent accidental modifications or deletions by others. For multiuser editing, individual users create jobs concurrently in their respective areas of work, whether modifying or enhancing utility network assets. The system tracks these jobs, ensuring job-related data traffic is managed during transactions while keeping the as-built data safe, secure, and up to date.

### EASE OF INTEGRATION AND INTEROPERABILITY

OpenUtilities sisNET can be integrated with other Bentley applications, such as OpenFlows<sup>™</sup> Water, OpenFlows Sewer, and OpenUtilities sisHYD. It can be directly fed into Bentley iTwin<sup>®</sup> solutions to provide a comprehensive and up-to-date digital twin of a utility network. Through its ERP Connector module, the product also integrates with SAP. With the use of BECS (Bentley Enterprise Connection Services), sisNET can be integrated with wider asset management and ERP platforms, including SAP, Maximo, Microsoft Dynamics, and other enterprise IT systems, supporting extended workflows and enterprise information exchange.

Asset selections in OpenUtilities sisNET can be used to navigate to the representation of the same assets in the linked ERP/enterprise IT system. Conversely, OpenUtilities sisNET can display the location on the map of assets initially found in the ERP/enterprise IT system. Batch processes ensure that asset information remains synchronized on both sides.



Example of shortest path network trace

## SYSTEM REQUIREMENTS

**MINIMUM:** Windows 10 (64 bit) or higher, Intel® or AMD® processor 3.0 GHz or greater, any industry-standard video card that supports DirectX, 4 GB memory, 25 GB storage

**RECOMMENDED:** 16 GB memory, up to 40 GB disk space

# OpenUtilities sisNET At-a-glance

## MULTIUTILITY NETWORK DATA MANAGEMENT

- ◆ For energy and water/wastewater utilities
- ◆ Multiuser, multiutility
- ◆ Secure administration via job- and authorization managers
- ◆ Operations decision support
- ◆ Improves operations and maintenance workflows
- ◆ Lays the foundation for network asset management and digital twins
- ◆ Enterprise integration
- ◆ Dedicated clients for different user-types
- ◆ Online and offline availability of network information
- ◆ Secures data quality and accessibility

## DATA MANAGEMENT

- ◆ Import and export a wide range of data formats
- ◆ Convert CAD information into intelligent network objects
- ◆ Integrate with third party ERP systems
- ◆ Integrate with network engineering and simulation products
- ◆ Integrate with 3rd part geospatial systems through WMS and WFS
- ◆ Validate data via configurable business rules
- ◆ Maintain an up-to-date asset register
- ◆ Multi-user data editing with long transactions
- ◆ Integrate with digital twin solutions

## DATA MODELING

- ◆ Fully configurable data modeling for:
  - ◆ Multiple graphical representations
  - ◆ Object attributes and object relations
  - ◆ Object and attribute authorizations for access and modification rules
  - ◆ Network connectivity
  - ◆ Business rules for object behavior and data integrity

## USABILITY

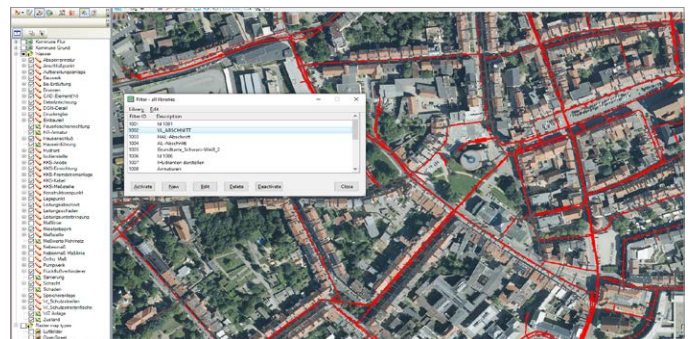
- ◆ All commodities managed in a single, integrated solution
- ◆ Standard and configurable data model and business rules
- ◆ Multiuser editing
- ◆ 2D and 3D options
- ◆ CAD editing and precision capabilities of MicroStation®
- ◆ Geospatial capabilities of OpenCities® Map
- ◆ sisNET client for data editors
- ◆ sisFLOW client for data analysts
- ◆ sisVIEW client for technicians – on/offline viewing and redlining
- ◆ sisIMS client for web viewing

## FEATURES

- ◆ MicroStation and OpenCities Map built-in
- ◆ 2D and 3D
- ◆ Network and isolation tracing
- ◆ Thematic mapping
- ◆ Querying and reporting
- ◆ Query builder
- ◆ Object annotation and dimensioning
- ◆ Plotting
- ◆ Role based editing
- ◆ Cross-sections
- ◆ Longitudinal profiles
- ◆ GPS-integration
- ◆ Export to various CAD, GIS, and iTwin formats



Network trace showing buildings affected by a partial network closure



Example of a thematic map with line styles depending on object attributes