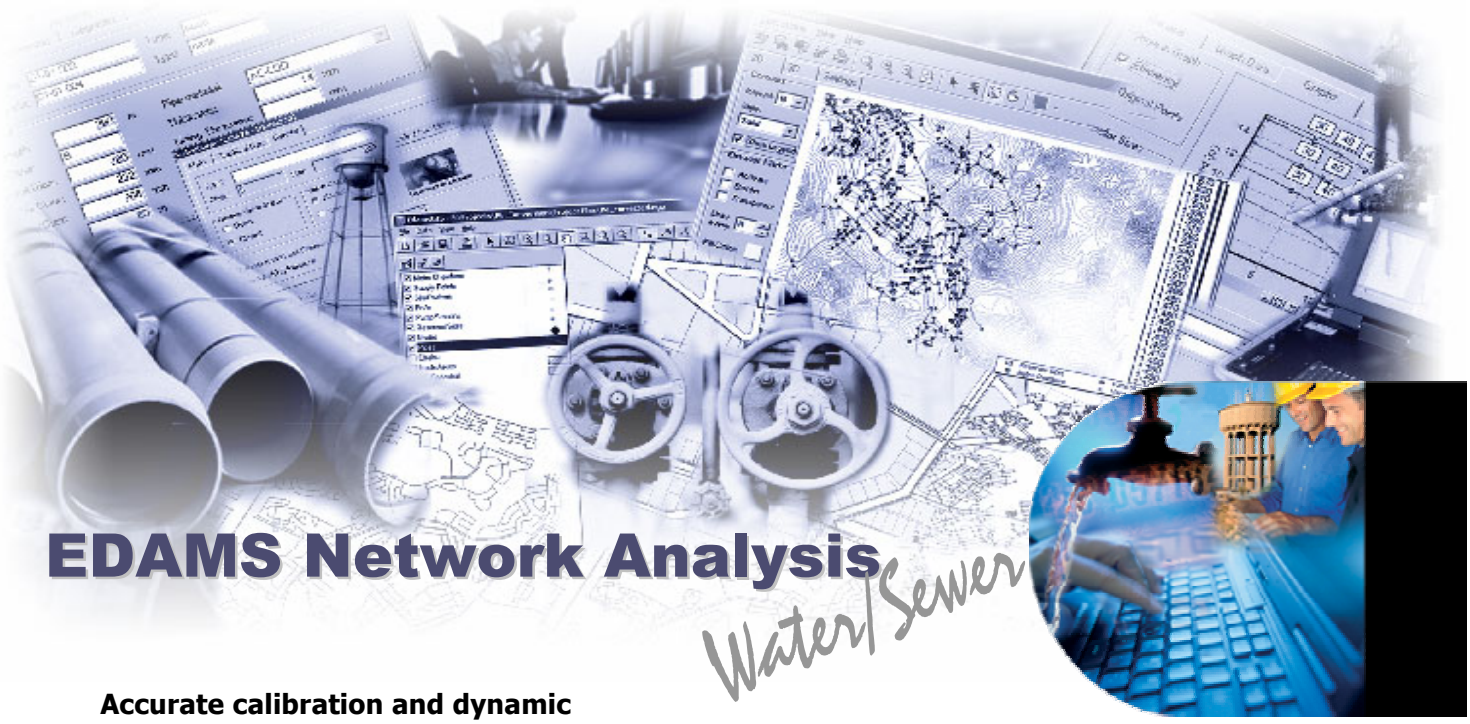


EDAMS Network Analysis

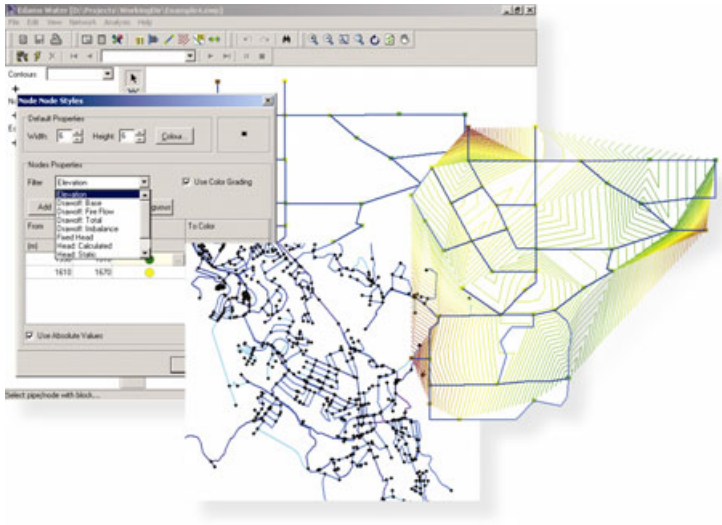
Water/Sewer

Accurate calibration and dynamic modelling and analysis of water and sewer distribution networks

EDAMS Network Analysis brings you all the tools you need for fast and effective network design, analysis and optimisation. Its easy to use graphical interface and strong visual tools combined with its support for digital terrain modelling make it a uniquely powerful, yet intuitive, network analysis system.

EDAMS Network Analysis is available in two versions – *Water* and *Sewer*. Both share a common architecture based on industry-specific methodologies developed by EDAMS Technology over the last twenty years, but offer feature-sets reflecting their target fields.

Tightly integrated with other Utility products in the EDAMS Management Systems range, both *EDAMS Network Analysis Water* and *Sewer* provide extensive growth paths.



Powerful Modelling Tools

EDAMS Network Analysis enables you to easily and accurately model a network of any size and complexity under any scenario. You can identify and design cost-effective system improvements, increase customer levels of service, and balance design and operational objectives.

With *EDAMS Network Analysis* you can model and analyze networks with the familiarity and ease-of-use of a Windows-based operating system. The system allows you to establish complex control arrangements for network components so you can edit and model any possible operational scenario.

Using the system's built in Digital Terrain Modeller (DTM), you are also able to view modelling scenarios from a number of different graphical perspectives, with changes made to one representation simultaneously updated across all models.

Flexible Data Handling

Data can be manually captured or imported from ASCII files or *EDAMS Network Asset Management.* Network elements can then be manipulated in a schematic form - where component attributes are specified - or in a true-to-scale geographical representation displaying actual coordinates and pipe lengths.

The visual appearance of pipes, nodes and other network elements can be intuitively defined. Network elements are displayed thematically with colour values representing user-defined variables. Different views of nodes, pipes and contours can be saved together and several network views can be displayed in separate windows.

The built-in DTM will generate contours automatically if external ground elevations data are available in ASCII format. If no such data exists, it will generate contours from manually entered node elevations. Such contours can represent demand, pressure and head as well as elevation, in the case of water networks, or the loads on sewers and manholes.

EDAMS Technology

Redefining Utility Management

Element data can optionally be shown in table format to simplify comparison between elements and reveal data errors, whilst, for further flexibility, you can also export data to Excel spreadsheets.

Summary of Features

Standalone Editing

- Full range of data editing capabilities
- Edit elements in schematic or DTM mode
- Specify boundary conditions to model network behaviour
- Control analysis behaviour via parameters

Graphical Display

- User-definable network elements
- Contours show demand, pressure and head or load as well as elevation
- Display multiple network views in windows

Digital Terrain Model

- Import external ground elevations from ASCII files
- DTM builds contours from node elevations if no data exists
- Contours can represent water pressures or sewer loads

Data Views

- Show element data in grid or spreadsheet format
- Supports data export to Excel format

Extended Simulation

- Model accumulative effect on key network components over time
- Set up demand distributions and network behaviour parameters

Water Quality (Water)

- Trace movement of water constituents
- Analyse influence of water quality variables at any network source

Steady State Analysis

- Control steady state analysis through run parameters
- Solve networks iteratively using linear approximations of flow

Fire Rating Curves (Water)

- User-definable fire rating curves
- Model and analyse demand at specific nodes

Cost Optimisation

- User-definable libraries with price and pressure data
- Use the cost optimisation module to automatically repeat analyses

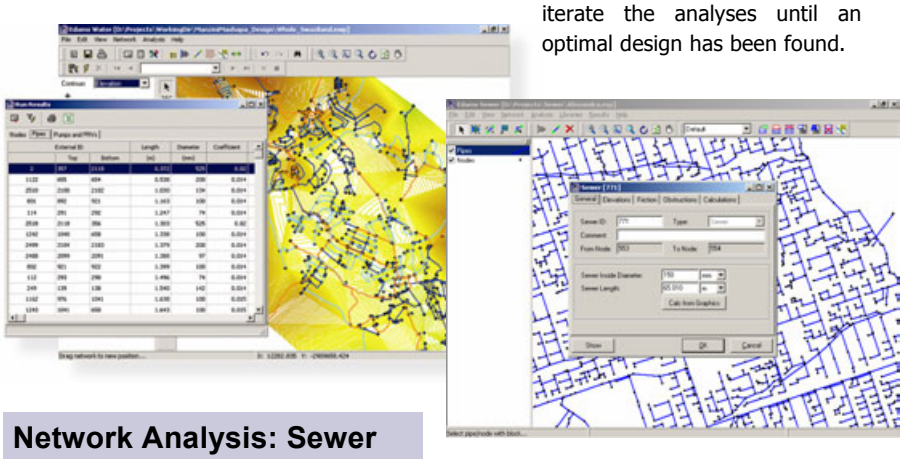
Growth Path

- Integrate with other EDAMS Management Systems

Network Analysis: Water

EDAMS Network Analysis: Water performs fast, reliable and comprehensive hydraulic and dynamic water quality modelling, extended simulation and control.

Its simulation capabilities and integrated water quality components are based on the widely-used EPANET industry standard, and it also provides links to GIS through demand and asset management systems for modelling live demand data.



Network Analysis: Sewer

EDAMS Network Analysis: Sewer offers a complete set of tools for analysing and modelling real sewage loads. Networks can be analysed to calculate the load at any manhole, see if any obstructions are in the way or too close, under-sized pipes can be identified to satisfy the required minimum velocity and the network optimised to provide cost-efficient design

Extensive Analytical Tools

Steady State Analysis

You can analyse a distribution network under steady state conditions, controlling various aspects of the analysis through runtime parameters, and then solve the network iteratively - using a linear approximation of the flow or load equations with a graphical output of pressures and loads.

Extended Simulation

The system also supports extended simulation analysis where the accumulative effect over time on key network components can be determined. This facilitates accurate control of simulations by allowing you to precisely define demand distributions and network behaviour parameters.

Cost-Optimisation

Pipe sizes can be optimised to provide the most cost-efficient design for a network by setting up a library of pipes with associated prices and minimum allowed pressures or loads. You can then employ the built-in cost optimisation module to iterate the analyses until an optimal design has been found.

Flexible Growth Path

The real power of *EDAMS Network Analysis* comes to the fore when used in conjunction with other EDAMS Management Systems. Its dedicated interface with *EDAMS Network Asset Management* enables the seamless bi-directional transfer of network data and element attributes.

Used in conjunction with *EDAMS Demand Management*, *EDAMS Network Analysis* can utilize real demands and enable dynamic network modelling that provides a realistic representation of actual network performance.

Contact us for more information on our products, services or Partnership Program

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Redefining Utility Management