



BENTLEY® EXPERT DESIGNER ELECTRIC

INTELLIGENT STREAMLINED DESIGN FOR ELECTRIC UTILITIES

Bentley Expert Designer Electric improves the efficiency and throughput of distribution design by merging network design and work management in a single environment. Bentley Expert Designer Electric employs an architecture that is GIS and WMS independent, allowing enterprises to easily integrate it into existing work environments.

Integrated with the Enterprise

Bentley Expert Designer includes sophisticated functionality for design layout, work order management, estimating, optimization, structural analysis, job closeout, and process measurement and tracking. Supported platforms include MicroStation®, ESRI ArcGIS, GE Energy Smallworld, and Oracle Spatial. Bentley Expert Designer Electric also interfaces with a variety of work management systems to streamline the process of managing projects from inception to completion.

A Comprehensive Utility Design Application

Bentley Expert Designer Electric is fully-featured and integrates network modeling, design engineering, and detailed asset and cost data. It provides designers with unique decision support tools to help them simulate real-time operating conditions and determine best practice solutions with feedback along the way.

On-the-fly Design Cost Estimating

Take advantage of the productivity achieved through on-the-fly calculations and cost estimates. Users know the cost of each component as it is added to the design. It eliminates the need for time-consuming iterations between design and work management.

Design Version and Cost Comparisons

Create new design versions and compare the cost of constructing each version. Easily compare options and verify that alternatives have been evaluated. This accelerates project approval through simulation and comparison of options.

Optimized Wire and Equipment Sizing

The powerful analytical engine in Bentley Expert Designer Electric optimizes equipment characteristics. It selects the minimum cost equipment, while allowing for acceptable design margins. Costs are minimized without impacting reliability or Quality of Service (QOS).

Automatic Compatible Unit Assignment

Bentley Expert Designer Electric automatically assigns compatible units through a system that maps equipment and installation characteristics to standard units.

Support for In-House and Contractor Labor

Bentley Expert Designer Electric supports utilities that use a mix of labor types, allowing them to make the best decisions and achieve the lowest costs by evaluating the costs associated with different labor options.

Rapid Layout of Facilities

With Bentley Expert Designer Electric, users drag and drop features into their designs using a convenient, dockable catalog. Job defaults are in place to make sure rules-of-thumb for design are followed. The approach guarantees standardization by ensuring designers follow guidelines.

Configurable Business Work Flow

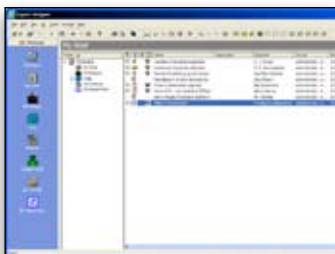
Bentley Expert Designer Electric offers a fully configurable workflow engine. Even complex workflows can be easily managed by the product.

Support for Work Management and Asset Management Solutions

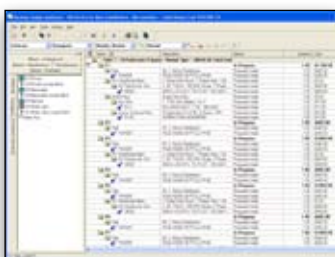
Standard message-based interfaces are implemented quickly, saving costly development time while reducing the risk of budget and schedule overruns.

Seamless Integration with Bentley Electric V8 XM Edition

Distinctive inference technology raises the bar for ease-of-use and user productivity. User productivity is maximized through repeatable workflows and a streamlined drawing process that minimizes the number of clicks from a tabular user interface or a Bentley Electric GIS view.



Task-based view shows work requests.



On-the-fly design cost estimating.

SYSTEM REQUIREMENTS

Processor

Intel Pentium or AMD Athlon

Operating System

Windows Vista, Windows Vista x64, Windows XP Professional (SP2 or later), Windows XP Professional x64, Windows Home Edition (SP2 or later), Windows Tablet PC Edition, Windows 2000 Professional (SP3 or later), Windows 2000 Server, Windows Server 2003 (SP1 or later)

Software prerequisite

MicroStation V8 XM Edition

Memory

512 MB memory minimum, 1 GB recommended

Disk Space

1 GB free disk space (including the 500 MB install footprint for a complete installation of MicroStation and Bentley Map)

ABOUT BENTLEY

Bentley Systems, Incorporated is the global leader dedicated to providing comprehensive software solutions for sustaining infrastructure. Architects, engineers, constructors, and owner-operators are indispensable in improving our world and our quality of life; the company's mission is to improve the performance of their projects and of the assets they design, build, and operate. Bentley sustains the infrastructure professions by helping to leverage information technology, learning, best practices, and global collaboration – and by promoting careers devoted to this crucial work.

For more information, visit www.bentley.com

BENTLEY OFFICES

Corporate Headquarters

685 Stockton Drive
Exton, PA 19341 USA
1-800-BENTLEY (1-800-236-8539)
Outside the US +1 610-458-5000

Bentley Systems Europe B.V.

Wegalaan 2
2132 JC Hoofddorp
Netherlands
+31 23 556 0560

Bentley Asia

Unit 1402-06, Tower 1,
China Central Place, No. 81 Jianguo
Road, Beijing, 100025, China
+86 108 518 5220



BENTLEY EXPERT DESIGNER ELECTRIC AT-A-GLANCE

Intuitive Interface

- Adheres fully to Windows application standards
- Design Assistant makes designing easy – drag and drop objects into a design and get automatic compatible unit assignment as well as continuously updated cost information
- Bentley Electric makes graphical design simple. Design Assistant listens to Bentley Electric and reacts with appropriate responses
- Customize the display including toolbars, shortcuts, and other navigational tools
- Workplace Today, a powerful and configurable data organizer, provides intuitive lists for the user's pending, pastdue, and in progress work
- Tracks the timelines of each project and shows which ones need attention
- Calculates the duration of each project and stores notes about project details
- Create designs in the field or in the office with the same user interface, features, and ease of use

Work/Asset Management Support

- Interfaces with work management systems to streamline the process of managing projects from inception to completion
- Retrieves and submits work requests in batch mode or as scheduled events
- Automatically update spatial and WMS databases
- Standard message-based interfaces

Rapid Design Layout

- Can produce designs that are separate from work requests
- Save designs as templates for reuse
- Can temporarily suspend placement rules

- Comprehensive set of configurable tools for laying out features quickly, efficiently, and consistently
- Powerful placement logic based on mapping, construction standards, and user-defined business rules
- Place multiple features and annotations in a single operation
- Provides catalogs of features and units (macro, compatible and material)
- Automatically assigns compatible units to features
- Define default attributes at both a global and feature level
- Supports comments and leader lines to the graphic design

Powerful Editing Tools

- Simultaneously change a group of features regardless of types
- Add facilities and annotations
- Relocate and replace existing features automatically, preserving connectivity

Dynamic Cost Estimates

- Provides real-time cost estimates
- Instant detailed cost breakdowns via integrated report generation
- Supports unit data in the form of macro units, compatible units, and material units
- Compatible unit data can be loaded and updated from an external system
- Includes all labor, materials, and equipment at each work location and for the entire design
- Create customized compatible units and macro units to reflect a job's extra costs

Optimization and Equipment Sizing

- Supports complex engineering calculations
- Determines optimal sizing of conductors, fuses, and transformers
- Determines cost-effective construction solution

- Checks design against network characteristics (such as phasing, voltage, and load estimates)
- Applies company-specific criteria (i.e. maximum allowable voltage drop)
- Recommends minimum equipment ratings that meet industry standards

Built-In Data Model

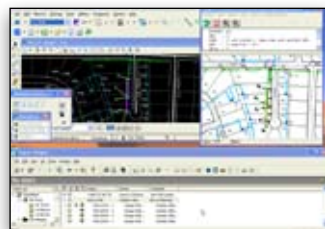
- Built-in framework for organizing and manipulating data structures
- Includes landbase objects and electric objects with pre-defined attributes, relationships, and behaviors
- Can be easily modified to fit a company's business processes

Geospatial Support

- Adheres to Open Geospatial Consortium (OGC) standards
- Field data-capture supported without any sacrifice in functionality
- Choice of GIS environments for designs containing spatial data include: Oracle Spatial, DGN XFM, DGN/RDBMS, ESRI, ArcGIS, GE Energy Smallworld

Reporting and Plotting

- Generate reports: cost estimates, cost comparison of multiple designs, as-built comparisons, plant account reports, bills of materials (both major and minor), and design orders
- Seagate Crystal Reports templates can be easily customized, and information can be accessed with any Open Database Connectivity (ODBC) reporting tool
- Create construction drawings using built-in or custom plotting templates



A wide choice of GIS data stores includes GE Energy Smallworld.



Bentley Electric and Bentley Expert Designer Electric.