



Meet AssetWise[®]

Digitization Strategy for
Optimal Asset Performance

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Introduction

As the need for increasing production, extending the life of assets, reducing risk, and ensuring reliable data continues to grow, so too does the pressure for insights into asset performance to improve decision-making and achieve operational excellence.

Asset owners face growing problems with:

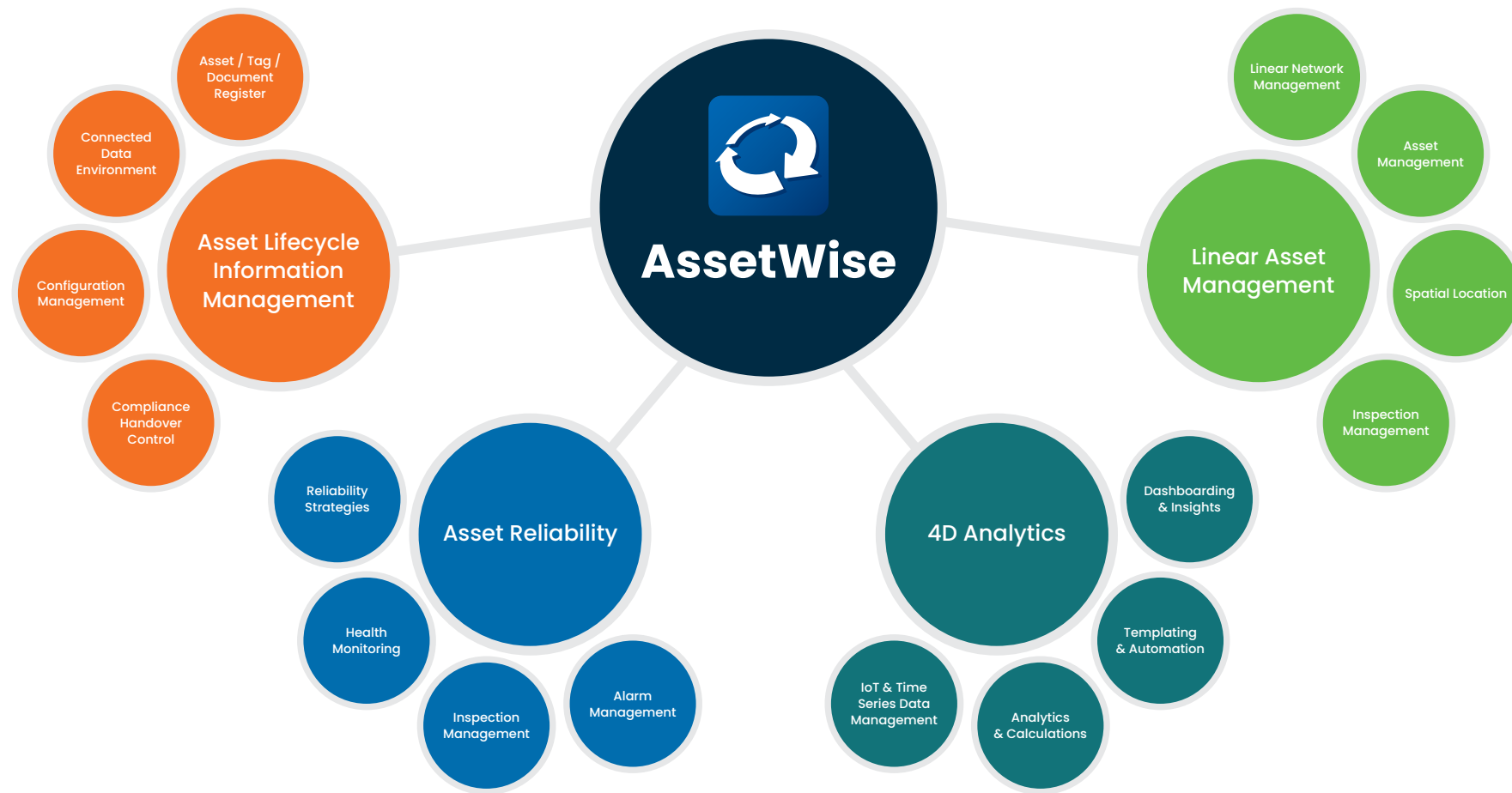


To meet these challenges, asset managers need to leverage the best digital solutions to connect, access, manage, analyze, and act on the best and most up-to-date information they have.

AssetWise was created with these goals in mind, helping those in asset-intensive industries overcome their day-to-day asset performance challenges.

Meet **AssetWise**: Bentley Systems' Asset Performance Management Suite

AssetWise is the preferred solution for owner-operators in the utilities, process industries, and transportation industries. It enables them to control information about their assets, optimize asset performance, maximize the value of their investments, and achieve safety and efficiency goals.



The AssetWise **Difference**

AssetWise is composed of innovative solutions that help owner-operators manage information to model and optimize asset performance successfully, enabling them to be **more productive**, **reduce shutdowns**, and improve **overall operational performance** by:

**Digitizing Assets
and Processes**

**Connecting Assets
to Engineering,
Information,
and Operations
Technology (ET/IT/OT)**

**Ensuring a Single
Source of Truth**

**Providing Advanced
Asset Modeling**

**Enhancing
Visualization**

**Enabling Improved
Collaboration**

Get to Know **AssetWise**

10 AssetWise advantages and capabilities that drive value in asset performance:

- 1 You can manage the continuous project handover of engineering data.
- 2 AssetWise is ideal for asset-intensive, asset-centric, and information-intensive operations or projects.
- 3 AssetWise enables an information environment that can manage engineering projects.
- 4 You can manage concurrent change projects to ensure workers have the correct documents at all times.
- 5 AssetWise is tightly integrated with the iTwin Experience to deliver the foundation of operational digital twins.
- 6 AssetWise includes industry specific templates that allow quick roll out of configuration for new assets and/or projects.
- 7 The Reliability Online Content and Copy functions speed the time to value on your asset care programs.
- 8 AssetWise can ingest sensor and Industrial Internet of Things (IIoT) data directly into your system, or you can carry out manual inspections using remote devices.
- 9 AssetWise represents the future of asset information management, a complete information and asset management model for delivering the next generation of digitization for users.
- 10 AssetWise can integrate with the majority of typical business systems, such as SAP, Maximo, and OPC.

AssetWise ALIM

Solution for:

Asset and project information management

Built for:

Digital transformation leaders, heads of asset management, configuration managers, BIM managers, and information/document/records managers.

- ◆ You can manage and control all tags, vendor equipment, documents, and other information connected to your portfolio of assets throughout the lifecycle including design, construction and operations. Capabilities including asset and document register management, attribution, asset relationships, project package management, all organized within location and system hierarchies.
- ◆ AssetWise ALIM ensures the information is accurate, up to date, and reliable for critical business decisions across the whole asset lifecycle.



Key Features

- 1 AssetWise ALIM can be the backbone of any digital twin strategy.
- 2 The application includes an asset and document registry, as well as management of changes and projects.
- 3 You can monitor the progress of change and manage concurrent changes quickly and easily.
- 4 AssetWise ALIM enables you to view and manage of any individual instance of equipment models and any relevant documentation, such as inspection reports, pertaining to that asset.



AssetWise Asset Reliability

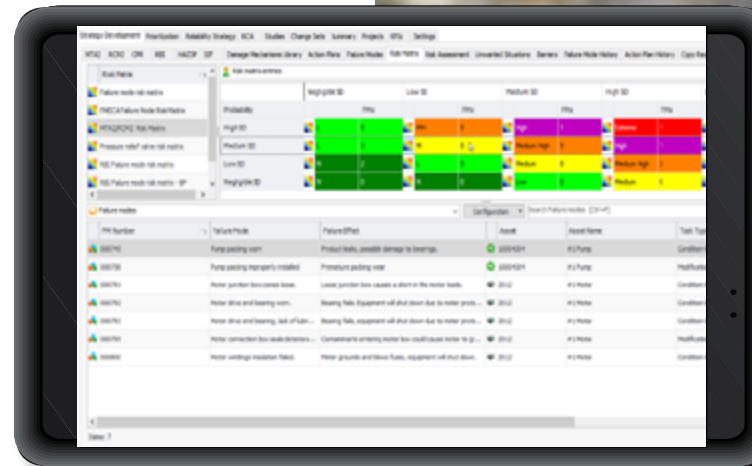
Solution for:

Reliability strategy and asset health monitoring

Built for:

Maintenance and inspection professionals, heads of asset management, and reliability and integrity teams/engineers.

- ◆ AssetWise Asset Reliability helps you understand the performance of the equipment in your asset portfolio, build and plan effective inspections and maintenance strategies, and continuously measure and improve the effectiveness of those strategies.
- ◆ You can confidently deliver increased operational safety, higher reliability, and productive uptime at minimal costs.



Key Features

- 1 AssetWise Asset Reliability contains a full suite of APM strategies, such as reliability centered maintenance, risk-based analysis, and condition monitoring.
- 2 The application includes risk mitigation strategies and multiple risk matrices.
- 3 You can rank assets by failure consequence and probability of failure, then calculate relative risk.
- 4 The application provides visibility of asset performance and alarms within a 3D model created by other applications, such as PlantSight.
- 5 The asset health dashboard provides one central view of asset health with alarm information.

AssetWise 4D Analytics

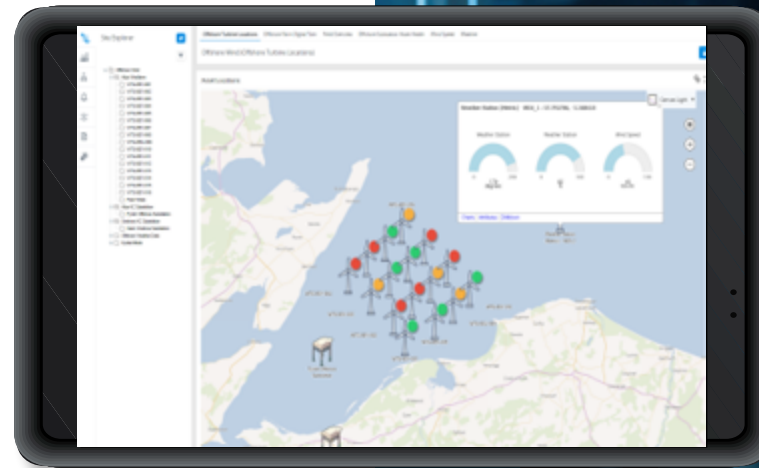
Solution for:

Analytics and operational insights

Built for:

Asset/operations managers, heads of asset management, asset/process engineers, and asset integrity managers.

- ◆ You can use data from across your organization to perform complex calculations and gain insights into the overall performance and effectiveness of your complete asset portfolio.
- ◆ AssetWise 4D Analytics supports appropriate decision-making to maximize efficiency, recognize opportunity, drive profitability, and minimize business risks.



Key Features

- 1 AssetWise 4D Analytics captures data from any source, including times-series, Internet of Things (IoT), third-party historians, and manual data entry.
- 2 You can use templates and automation to bring on new assets faster.
- 3 Data can be viewed within a digital twin, including those created by PlantSight, or view 3D models within dashboards.
- 4 The Calculation and Analytics Engine generates hidden insights into existing and new data.
- 5 The application provides full access to alarm management and notifications.



AssetWise Linear Asset Management

Solution for:

Linear assets and transportation networks

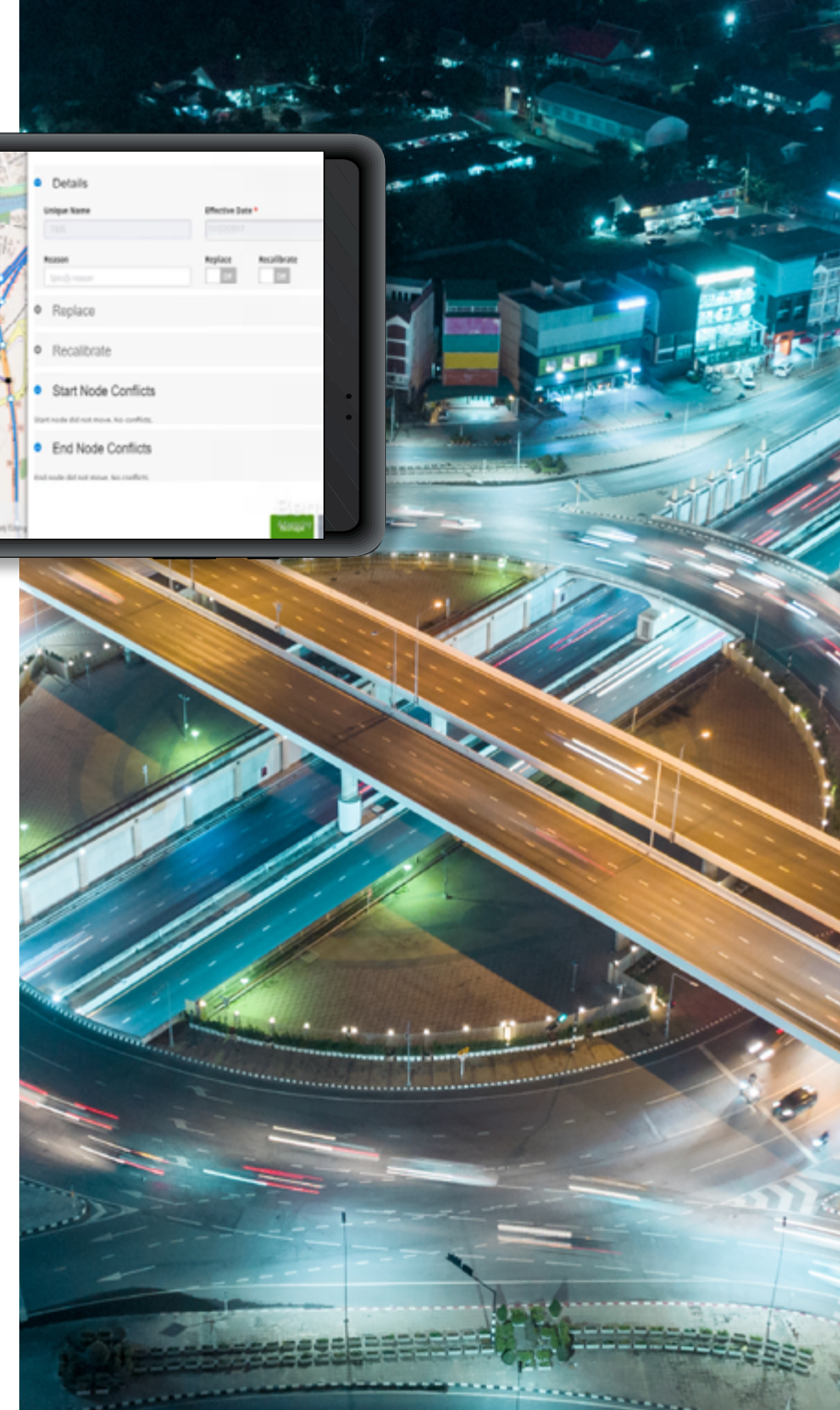
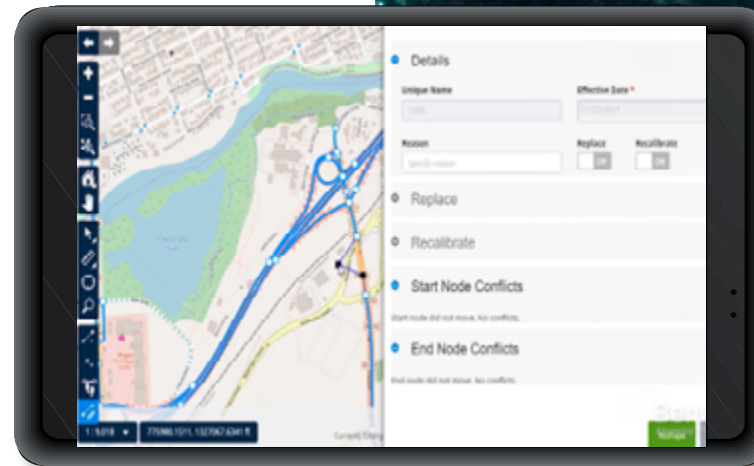
Built for:

Asset/operations managers, heads of asset management, asset, traffic, and signaling engineers.

- ◆ AssetWise Linear Asset Management can manage multiple linear networks and associated assets with a spatial and/or linear location to help meet regulatory compliance through inspection, incident management, and powerful analytic reporting using a map-based User Interface. The process facilitates a risk-based approach to asset management.
- ◆ You can justify funding allocations, optimize data quality, and enable better decision-making through interoperability with strategic asset management.

Key Features

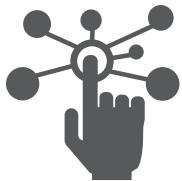
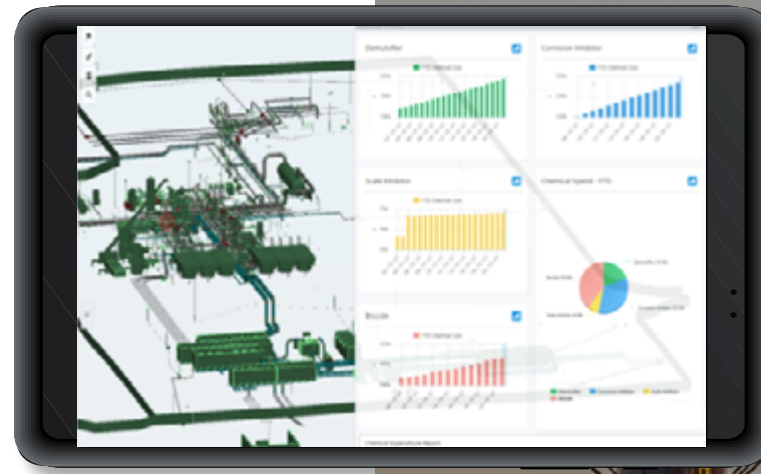
- 1 Manage complex linear road network information, including structural assets and events.
- 2 You can perform analysis and data trend forecasting to make more informed decisions.
- 3 By leveraging data visualization and reporting, you can deliver enhanced decision support.
- 4 Model and manage asset information with spatially enabled network editing and dynamic segmentation capabilities.



Take Your Assets Further with iTwin Experience

Many of AssetWise's features can be displayed and managed in a digital twin immersive environment leveraging Bentley's iTwin Experience. This means AssetWise information can be displayed within a digital twin, delivering a complete digital line of sight.

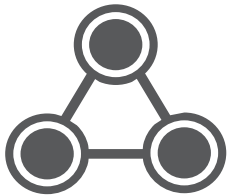
iTwin Experience brings all your plant data and information together, then contextualizes it, validates it, and visualizes it across the lifecycle, from design review and approval to handover and into operations and maintenance. iTwin Experience transforms raw data into one complete and evergreen digital twin, available anywhere, anytime.



Digital Enablement



Visual Asset Performance Management



Engineering Collaboration



Operational Intelligence



AssetWise User Success

- ◆ Shell's QGC business **complied** to License to Operate
- ◆ BP minimized **time to first oil** and achieved operational readiness with central information store
- ◆ ArcelorMittal **increased production while reducing** costs with world-class reliability program
- ◆ On one site, OQ Upstream **saved 14.8%** in total maintenance costs and **reduced functional failures by 50%**
- ◆ West Virginia DOT **increased productivity from 25% to 83%**
- ◆ Suncor **saved CAD\$ 12 million in five years**
- ◆ Tenaga Nasional Berhad **reduced unplanned outages and maintenance costs**
- ◆ Severn Trent Water **reduced project costs by 50%** and avoided penalties of GBP 6 million
- ◆ Network Rail **saved up to GBP 125 million** with track reliability
- ◆ Vedanta Cairn improved flow assurance management, **saving around USD 1.2 million per year**
- ◆ Epcor **improved reliability by 15%** in electric distribution network

10-20% ↓ reduction in maintenance costs

2-10% ↑ increase in asset availability

10-30% ↓ reduction in spare parts inventory

Up to 10% ↓ reduction in insurance costs



AssetWise – The Digital Strategy for Optimal Asset Performance

With AssetWise, you can improve your safety, security, and compliance programs, intelligently plan asset performance and reliability strategies, and provide informed decision support from capital planning through proactive asset maintenance.

If you want to learn more, speak to one of our experts to discover how AssetWise can turn your operation into a more reliable, more productive, and safer environment.

About Bentley Systems

Bentley Systems (Nasdaq: BSY) is the *infrastructure engineering software company*. We provide innovative software to advance the world's infrastructure – sustaining both the global economy and environment. Our industry-leading software solutions are used by professionals, and organizations of every size, for the design, construction, and operations of roads and bridges, rail and transit, water and wastewater, public works and utilities, buildings and campuses, mining, and industrial facilities. Our offerings, powered by the *iTwin Platform* for infrastructure digital twins, include *MicroStation* and *Bentley Open* applications for modeling and simulation, *Seequent's* software for geoprofessionals, and *Bentley Infrastructure Cloud* encompassing *ProjectWise* for project delivery, *SYNCHRO* for construction management, and *AssetWise* for asset operations. Bentley Systems' 5,000 colleagues generate annual revenues of more than \$1 billion in 194 countries. www.bentley.com

