



AssetWise CONNECT Edition

Enterprise Interoperability

Bringing Data, Resources, and Technology Together

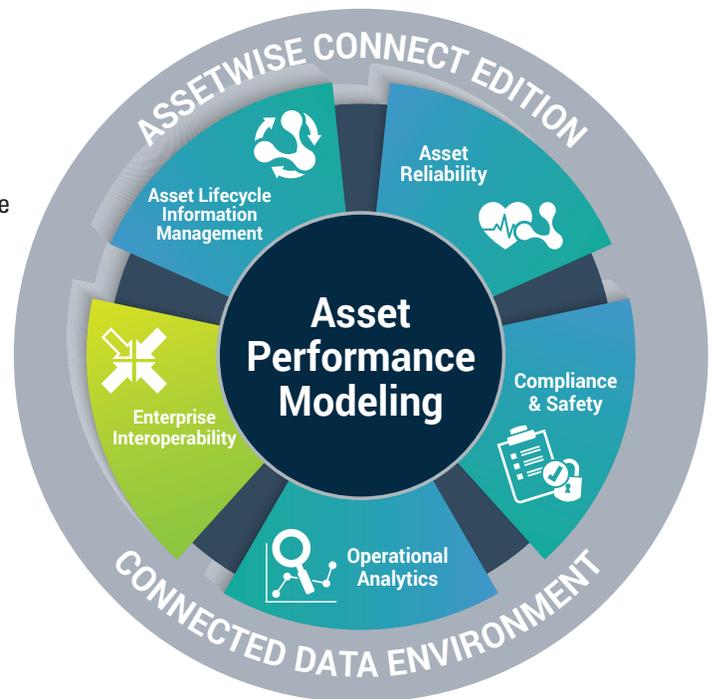
Data is the lifeblood of any operation. Without it, organizations would not know what assets they have, where they are located, how they are performing, and how they are behaving. As data is growing exponentially from more widely available sensor technology and the Internet of Things, it is even more important to bring disparate and third-party applications together where they can be used freely across a common platform. With AssetWise's Enterprise Interoperability service, connection and access to multiple data sources has never been easier. The service allows users easy access to their data and the knowledge that the information is accurate, relevant, and complete. As a result, users are able to carry out their day-to-day tasks and make well-informed decisions.

Connected Data Environment

The connected data environment is the common source of information used to collect, manage, and share information about the digital asset. It facilitates collaboration among project team members and owner-operators and helps them avoid duplication and mistakes by incorporating multiple sources of data into a federated model. The connected data environment can include Bentley and non-Bentley information sources. It manages all information about assets, networks, and projects stored in files, models, and components throughout their entire lifecycle. New levels of transparency, visualization, and analytics are enabled through the connected data environment. AssetWise provides capabilities for information integrity management, change management, and configuration management underpinned by the connected data environment.

AssetWise supports interoperability scenarios:

- *Assets, equipment, assemblies, and functional locations*
- *Asset hierarchy*
- *Standard tasks, task templates, and task lists*
- *Standard jobs and maintenance plans*
- *Work orders, maintenance orders, and notifications*
- *Work requests and notifications*
- *Inspections, history, location, people, analytics, and models*



Sharing Information

Enterprise interoperability (or enterprise application integration) is the sharing of processes and data among different applications in an enterprise. For both small and large organizations alike, connecting disparate applications and leveraging application collaboration across the enterprise has become a mission-critical priority in order to improve overall business efficiency, enhance scalability, and reduce IT costs. Failure to do so can reduce visibility, inhibit the ability to unlock value from your data, and increase safety and reliability risks.

The CONNECT Edition

AssetWise CONNECT Edition enables you to take advantage of all the SELECT® CONNECTservices. Through creating connected assets and leveraging AssetWise's Enterprise Interoperability service, Bentley users can manage their enterprise interoperability with third-party systems as well as sync with the other Bentley services available to them. Some of these additional services include SELECT CONNECT, Personal Mobility Services, and ProjectWise® Connection Services.

Recommended System Requirements for BECS Platform Server

Software

Windows Server 2012/2016

Internet Information Services 6.0 or higher with ASP.NET 4.0

Microsoft SQL Server 2014 or 2016 Standard

Hardware

Intel Xeon E5-2680 v5 or higher

64 GB RAM

Disk Space

500 MB software installation

250 GB application data

External Applications

SAP, Oracle, Maximo

Recommended System Requirements for BECS Visual Architect Machine

Software

Windows Server 2012/2016

Windows 8.1/10

Microsoft .NET Framework 4.52

Microsoft Visual Studio 2010 Integrated Shell

Microsoft Visual Studio Visualization & Modeling SDK package

Hardware

Intel Core i7-7700K or higher

8 GB RAM

Disk Space

1 GB software installation

External Applications

SAP, Oracle, Maximo

Find out about Bentley at: www.bentley.com

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Data Integration for Improved Decision Making

Data integration involves applications sharing or understanding data from other applications, which in turn avoids data inconsistencies and supports efficient business processes.

Data integration is achieved by either writing code that enables each application to understand data from other applications in the enterprise or by making use of an intermediate data format that can be interpreted by both sender and receiver applications. AssetWise Enterprise Interoperability handles both approaches, complexity and scalability, as enterprise systems grow. This service ability allows seamless access, interpretation, and data transformation for the successful integration of data.

AssetWise Enterprise Interoperability Service

AssetWise Enterprise Interoperability service enables you to communicate with integrated systems through a set of native connectors, data flow providers, and transformation agents. Connectors include direct access to connected systems via their API, a database connection, or a web service. This is supported by Bentley Enterprise Connection Services, the single gateway between external software and data sources (SAP, Maximo, GIS) and AssetWise.

AssetWise Enterprise Interoperability Features

Operational Data Collection

Easily collect and analyze historical and real-time data from operational systems like SCADA, data historians, predictive technologies, and more. AssetWise Enterprise Interoperability consolidates and analyzes the data to better detect and predict asset failures.

Leverage Spatial Maps

Through integration with your existing GIS systems, asset managers, reliability, and integrity engineers leverage spatial maps, with a 2D or 3D view of their assets, with the ability to understand geospatially what and where assets are and respond to alarms directly from the map or 3D model. AssetWise also has native spatial capabilities.

Align with Enterprise Asset Management Systems

Add asset reliability, performance, and information integrity to your existing systems including GIS, ERP, or enterprise asset management. Make AssetWise your single source of truth for engineering information and asset performance across the entire asset lifecycle. AssetWise has certified integrations with SAP and IBM Maximo.

Data Integration and Security

Each connector offers seamless integration so you can achieve maximum value from your enterprise information and operational systems. Ensure data quality, security, and integrity are maintained to deliver a complete view of actionable information. AssetWise is compliant with MIMOSA and OPC.

AssetWise Enterprise Interoperability Benefits:

- Connect enterprise information with operational and engineering disciplines
- Increase visibility of information across the whole organization
- Reduce isolated data silos
- Handle reliable and trusted data
- Improve speed and accuracy of decision making
- Connected data environment ensures asset and data connectivity enterprise-wide
- Interoperability means increased safety and reliability
- Accelerate integrated projects faster with quicker returns on investment

Standard Interoperability use cases:

- Information handover from EPC to owner-operators
- Recurring engineering updates to O&M
- Field changes to plant/facility engineering
- Online product data library management
- Asset installation/removal updates
- Preventive maintenance triggering
- Condition-based maintenance triggering
- Early warning notifications
- Incident management/accountability
- Information provisioning of O&M systems
- Enterprise reference data library management

Interoperability Connectors

- Asset/work management including Infor, IBM Maximo, EMPRV, AssetSuite, SAP, Oracle
- Document management including SharePoint, Documentum, Curator, FileNet, LiveLink
- Operational data including OsiSoft
- Middleware including Tibco, BizTalk
- 2D and 3D design capabilities including OpenPlant, AutoPlant®, AVEVA and Intergraph through Bentley iModel services
- Esri
- ISBM - standards based interoperability (valid for ISBM compliant integrations, SAP, Maximo)
- IOT platforms including MindSphere
- AssetWise has been certified by SAP and IBM Maximo