**Bentley**<sup>®</sup>

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# SYNCHRO

### **Digital Construction Delivery Solutions**





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### Introduction

As the demand for infrastructure continues to expand, so do industry challenges. Increasing delivery expectations have added multiple degrees of difficulty to projects.

To meet these demands, teams need to leverage the best digital solutions to better manage, connect, and access project data, ensuring that they can make better and faster project decisions.

SYNCHRO was built with those goals in mind - simplifying the everyday challenges of digital construction delivery.



Reduce risk and cost



Enhance decision-making



Focus on sustainability



Ensure seamless handovers



Improve speed, safety, and quality



Get time on your side<sup>™</sup>





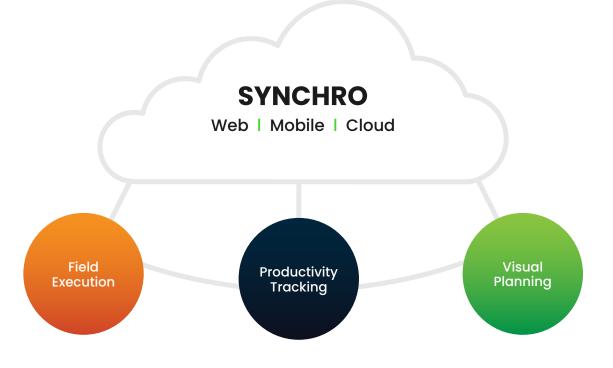


# What is SYNCHRO?

SYNCHRO's digital construction delivery solutions integrate high-value construction data, such as schedules, quantities, and progress data with comprehensive engineering information, empowering teams to achieve better project visibility, program validation, and risk reduction throughout the project lifecycle.

Teams can seamlessly capture, access, and analyze their data in full project context while better managing tasks, people, materials, and equipment.

With SYNCHRO's full cloud collaboration, teams can connect all project teams and stakeholders, from field to office.



# **Driving Integrated Project Delivery**

SYNCHRO's digital construction solutions play a key role in Bentley's infrastructure project delivery—providing an integrated, digital approach to design and build and workflows, offering specific native iTwin-enabled benefits, and ensuring better collaboration across all project phases.

For contractors, traditional project delivery processes present many challenges that affect their work's quality and timely delivery. Communication gaps, data silos, and fragmented workflows lead to inaccurate construction plans, costly project delays, and safety risks.

By leveraging governed, trusted, and integrated design and construction data—accessible both in the office and in the field—teams achieve better coordination and decision-making throughout the entire project delivery lifecycle. The result is an open, collaborative, and data-centric environment that maximizes efficiency, minimizes errors, and ensures teams deliver projects easier, faster, and better.

SYNCHRO's digital construction solutions connect a broad set of workflows and data, enabling construction firms to win projects, deliver them efficiently, and get paid by:

Advancing Infrastructure Construction Digitizing Field and Construction Operations Leading the Industry to 4D Digital Twins







# **SYNCHRO at a High Level**

Discover a few of SYNCHRO's capabilities that drive value for construction teams.

### 10 Key SYNCHRO Capabilities

- 1. Drive winning projects with digital construction delivery solutions that are powered by iTwin<sup>®</sup>.
- Leverage the powerful critical path method (CPM) scheduling engine, equipped with Gantt views and bi-directional connections with P6, Microsoft Project, and other scheduling applications.
- 3. Advanced visual planning and 4D modeling capabilities including slicing and dicing models into constructible components for quantity take-off and scheduling.
- 4. Manage your tasks and data in real time with 2D, 3D and 4D context, using web browsers and mobile applications.
- 5. Expedite operations in the field, including inspections, time tracking, and resource optimization.
- 6. Access all 3D/4D models, PDFs, documents, and heavy civil project capabilities directly in the field on mobile devices.
- 7. Benefit from rich engineering data and construction insights, both in the field and in the office.
- 8. Exploit the power of AI to search and find photos, videos, and other content in seconds.
- 9. Integrate directly with ProjectWise Design Integration to extend design content into construction delivery.
- 10. Geolocate everything, including PDFs, issues, inspections, photos, weather, and workflows.

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### **SYNCHRO Field**

Solution for: Field execution

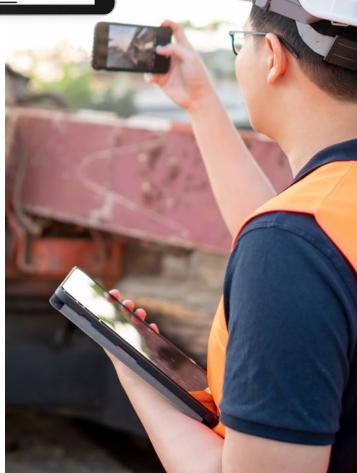
**Built for:** Superintendents, foremen, inspectors, field engineers, and project managers

- SYNCHRO Field is a mobile solution built to solve field execution challenges.
- The application makes it easy to access and capture data in context through maps, geo-PDFs, 2D CAD, and 3D/4D models. Teams can easily capture project updates, handle inspections and RFIs, create custom forms, flag issues, and view model progress. This real-time project visibility drives quicker decisions, improving overall productivity, quality, and safety.

### **Key Features**

- 1. Know where you are on large construction projects with geo-location services.
- 2. Simplify your day-to-day tasks, RFIs, inspections, and daily logs to quickly resolve issues.
- 3. Track project models in the field, even when offline.
- 4. Capture real-time data at any moment.
- 5. Access all project documents and media.







## **ProjectWise**

SYNCHRO Control is now part of ProjectWise\*

Solution for: Project delivery

**Built for:** Project managers, project directors, safety managers, and operations managers

- Comprehensive capabilities for document, data, model, and task management.
- Teams stay connected around a central source of project information. With intuitive project tracking and analysis, teams can ensure real-time control and access of all project progress, as well as full stakeholder visibility and collaboration at every project phase.

#### **Key Features**

- 1. View PDFs on a map.
- 2. Filter photos and videos by geolocation, date/time, context, and content.
- 3. Set guest access permissions to help decide who on the project can view what information.
- 4. Integrate with 4D models for schedule and sequencing views.
- 5. Configure forms to your team's needs and export them to your own PDF for archiving.

**\*SYNCHRO Control** capabilities have been incorporated into ProjectWise Manage, Engineer, and Validate in the Bentley Infrastructure Cloud<sup>™</sup> portal (infrastructurecloud.bentley.com) to provide integrated design and build workflows. Please visit <u>Bentley.com</u> for more details.



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### **SYNCHRO Perform**

#### Solution for: Productivity tracking

**Built for:** 

Superintendents, foremen, project managers, safety managers, and quality managers

- SYNCHRO Perform is a web and mobile solution that provides deep, real-time insights into project performance.
- Operations teams can more effectively manage time tracking, monitor daily costs, and optimize resources. With rich project insights, teams make better and quicker decisions to minimize project errors and maximize team productivity.

### **Key Features**

- 1. Optimize resource management.
- 2. Monitor and perform action on daily cost reporting and analytics.
- 3. Understand the impacts of events on schedule and budget.
- 4. Capture project progress in the field on your mobile device for true project health.
- 5. Create site records, such as daily diaries, unplanned events, and progress for a true record.



### **SYNCHRO 4D**

#### Solution for:

**Visual planning** 

#### **Built for:**

Planners, schedulers, estimators, virtual designers and construction engineers, and BIM managers

- SYNCHRO 4D is the industry-leading modeling solution that enables teams to turn design models into construction models with cutting-edge model-based QTO, scheduling, and construction simulations.
- Teams can plan, optimize, and track projects in a single visual, as well as identify issues and "what-if" scenarios early. The immersive 4D environment enables teams to reduce project risks and delays, and avoid costly rework.

### **Key Features**

- 1. Take control of time by adding project schedules to your models.
- 2. Leverage model-based QTO and create visual representations of your estimates.
- 3. Optimize construction tasks by reviewing with stakeholders in an immersive environment.
- 4. Plan and collaborate virtually to anticipate what-if scenarios and avoid mistakes in the field.
- 5. Tackle the spatial challenges of linear projects and share real-time progress updates on the fly.







### **SYNCHRO**

To deliver successful projects, you need to empower your teams, both in the office and the field, with the right digital tools to simplify tasks and meet deadlines and budgets—all while keeping everyone connected and on the same page.

SYNCHRO gets you there, so your teams can work faster, better, and safer.

Curious to learn more? Speak to one of our SYNCHRO experts to discover how we can help you meet your project needs.

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