ProjectWise® Construction Work Package Server

Enjoy More Predictable and Consistent Construction by Implementing Industry-standard Processes
“ProjectWise Construction Work Package Server will assist the project team to meet its scheduled dates, and provide timely project status that will increase Construction Management staff efficiency, reduce man-hours, both in the home office and at the site, and assist in improving overall field productivity.”

- Terry Erhart, Global Construction Processes & Technology Director, Hatch
Are you struggling with construction profits, safety, and schedule?

More predictable, visible, consistent, and efficient construction is now within reach.

ProjectWise Construction Work Package Server

The Industry's Only Technology for Enabling Industry-standard Work Packaging Methodology to Deliver Extraordinary Outcomes

ProjectWise Construction Work Package Server is the first off-the-shelf, purpose-built solution that makes it possible to construct using work packaging industry standards. These best practices have been developed and advocated by the Construction Industry Institute (CII) and the Construction Owners Association of Alberta (CDAOA).

By using this valuable new technology, both constructors and owners will benefit by:

- **Lowering total install cost** by decreasing down time, reducing craft labor hours, and better aligning engineering and construction
- **Enabling predictability** by better anticipating project changes and removing constraints
- **Reducing risk** by gaining understanding into the precise state of the project through improved visibility
- **Increasing profitability** by streamlining information management and reducing management staff
- **Improving stakeholder satisfaction** by providing unprecedented insight into real-time project performance
- **Expanding safety** by better organizing resources and more effectively communicating with and informing supervisors and crews
Meeting the Challenge of Increasingly Complex Construction Environments Where Safety, Schedule, Performance, and Profits Have Been Elusive

The reason behind the need for new industry-standard approaches like work packaging is simple.

Positive outcomes are challenging to achieve as construction projects are becoming increasingly more complicated causing construction managers to struggle with:

- Disconnected engineering and construction technology and processes;
- A lack of insight into the current status and progress of the project;
- Excessive downtime and labor inefficiencies, and more.

Because of these challenges, a large number of projects experience significant cost and schedule overruns.

As Projects Increase in Size and Scope, So Does the Risk and Likelihood That the Outcome Will Be Negative.

In breakthrough research, Edward Merrow of the consulting firm Independent Project Analysis (IPA) studied over 300 projects with an average project cost of $3.25 billion. The findings were startling. Merrow and IPA found that for projects over $2 billion, 65 percent experienced:

- Cost overruns of more than 25 percent;
- Schedule delays of more than 25 percent;
- Project performance well below initial projections.

(Data from COAA)
The Goal: Predictability, Visibility, and More Consistent, Repeatable Construction

Making Work Packaging Work for You

Work packaging isn’t new. In its simplest form, it’s about breaking down construction into manageable tasks on all projects, even if it’s not specifically referred to in such a manner. The problem is that the process is done differently by each company and on each project. It’s not repeatable and it’s that very inconsistency from project to project that breeds inefficiency.

Standardizing Construction Workflows

To assist in enabling more consistent construction, CII and COAA started by better defining work packaging as “a planned executable process that encompasses the work on an engineering, procurement, and construction (EPC) project, beginning and continuing through detailed design and construction execution.” From there, they established industry-standard best practices for applying the concept in the field.

Far from abstract ideals, however, this standardized methodology was thoroughly tested on actual industrial oil and gas construction projects and the results were remarkable. Projects where the work packaging methodology was employed resulted in improved constructability, a cleaner jobsite, material loss reduction, reduced site paperwork, and quick identification and mitigation of installation issues.

Even more impressively, one $400 million project that implemented work packaging:

- Completed over 1 million construction hours with ZERO safety incidents (versus a pre-work packaging trend of one recordable safety incident per month).
- Decreased total install cost by 10 percent.
The Tools to Make You More Successful
ProjectWise Construction Work Package Server Allows You To:

Work More Effectively with Comprehensive Construction Information Management

Since one of the major contributors to risk in a construction project is the sheer volume of data and the complexity of accessing, sharing, and leveraging that data. This innovative system’s core is the consolidation of the models, drawings, and construction information necessary for installation — regardless of type — into a concise location and manageable format. Featuring integration with every major 3D CAD system, materials management solution, scheduling software, and project control system, Work Package Server provides instant on-demand access to all of the information you need. It does this through a convenient web-based portal, that allows you to eliminate information overload, organize and update information more efficiently before and during the project, and make better decisions by identifying the impact of change as it occurs.

Construct More Consistently and More Safely with Automated Work Packaging

With this information available on demand, constructors can take advantage of this data to easily and proficiently create new construction management deliverables. A convenient web-based interface is available to effortlessly generate, manage, edit, and distribute construction, installation, and testing work packages that leverage the most up-to-date and interrelated information and facilitate the implementation of repeatable, industry standards-based work processes.

Operate More Confidently with Holistic Project Reporting and Awareness

Studies show that only a third of project time is spent by crews directly on task, which means deploying resources more efficiently can result in huge improvements in productivity and profitability. Work Package Server makes this possible by highlighting key performance indicators (KPIs) via a succinct project dashboard that lets constructors know the precise status of a task or project at any given time, identify constraints before they hold up work, and generate informative reports.
Leverage Unprecedented Visibility into Construction

Additional Insight via Immersive Planning
Also included with ProjectWise Construction Work Package Server is ConstructSim V8i SELECTseries 5, a powerful, proven application that has been successfully used on more than 150 industrial projects and has been demonstrated to deliver extraordinary gains in productivity and efficiency by allowing project teams to:
- Envision and interact with a virtual construction model (VCM) to create work packages directly from the visual model.
- See real-time status updates in a color-coded graphic manner that provides even deeper and more intuitive project awareness.

Relationship and Change Awareness – Benefiting EPCs, General Contractors, and Owners
For constructors, ProjectWise Construction Work Package Server also facilitates improved understanding of the impact of change on interrelated aspects of the project, helping them to proactively make adjustments before issues occur. Owners can better measure CAPEX performance and manage their contractors by gaining insight into real-time project performance.

“ConstructSim has helped to ensure that only executable work is released to the field; resulting in substantial field productivity improvements that will be fully quantified at the completion of the project but are currently estimated to be in the range of 10-15%.”
- Mike Miketon, Corporate Project Controls Manager, JV Driver Projects / Alberta Oilsands

Construct More Consistently – Online or Offline
Often, construction projects are undertaken in isolated areas where bandwidth is scarce or non-existent. With ConstructSim and our associated mobility apps, you can extend productivity and information into the field, update project information locally, and synch your changes with the server the moment you are online.

Deployment Options That Match Your Needs and the Way You Want To Do Business
ProjectWise Construction Work Package Server can support multiple projects and can be deployed under a number of scenarios that support the needs, policies, and preferences of your enterprise, including:
- **Onsite**: Hosted on your servers, if required by your corporate IT standards, and offering you the comfort of maintaining a key asset within your datacenter.
- **Bentley MANAGEservices**: Combining Bentley hosting with professional services to allow you to truly maximize your advantages and outcomes by leveraging subject matter experts to augment your own team and allow you to focus on your core construction competencies.
If you’re ready to improve the safety, predictability, productivity and profitability of your construction project, contact your Bentley sales professional or visit us online at www.bentley.com/WorkPackageServer

“Bentley is undoubtedly a powerhouse in the construction software space, offering products used on large projects across the globe. However, the company’s outlook for the future is what makes it truly stand out.”

Construction Computing Awards
“Company of the Year”
2012 & 2013