

Bentley Expands BIM Modelling Possibilities for Major Projects



Bentley Systems, a leading global provider of comprehensive software solutions for advancing infrastructure, has announced the availability of AECOsim Building Designer CONNECT Edition. This is Bentley's new building information modelling (BIM) application designed for building projects of significant size and engineering complexity, and which are typically characterised by the challenges

of combining vertical construction and horizontal infrastructure (like roads, railways, utilities, etc.). On such projects, design and project delivery firms often have broad responsibilities for multiple project delivery disciplines and across subcontractors and joint-venture organisations.

Users of AECOsim Building Designer V8i have demonstrated its versatility in a wide range of project types. Among Bentley's 2017 Be Inspired Awards nominations, 63 projects credited AECOsim, including 15 of the 51 finalists, in projects as diverse as bridges, airports, Olympic sports facilities, mining, manufacturing, offshore, municipal, power generation, utility transmission and distribution, and water and wastewater treatment facilities. Nominations also cited GenerativeComponents, a feature within AECOsim Building Designer that provides computational design capabilities to explore iterative design ideas and embed design intent with design constraints and relationships to improve design quality and performance.

Modelling environment

The new AECOsim Building Designer CONNECT Edition shares a comprehensive modelling environment with all of Bentley's CONNECT Edition applications. Without a comprehensive modelling environment, engineers and architects have had to struggle with complex data exchange, resulting in information loss and repeated translations, or even resort to force-fitting a BIM application beyond its intended use to model geometry, which is lacking in BIM intelligence.

AECOsim Building Designer CONNECT Edition integrates the work of architects, structural engineers, and MEP engineers in a single application, and now extends its scalability by leveraging CONNECT Edition's comprehensive modelling environment. The new release provides seamless, translation-free, intra-operability with Bentley's full multi-discipline portfolio of design, analytical, and construction modelling applications.

Documentation centre

All CONNECT Edition applications, including MicroStation CONNECT Edition, benefit from the deliverables production automation inherent in the CONNECT Edition's documentation centre. The documentation centre greatly improves the consistency, quality, and efficiency of drawing set organisation. AECOsim Building Designer also benefits from reality modelling, by which existing conditions are captured through photos and/or scans and converted into engineering-ready reality meshes with Bentley's ContextCapture, bringing the actual geo-coordinated context directly into the AECOsim design environment.

Santanu Das, Bentley Systems' senior vice president, design modelling, said this is an exciting time for Bentley as the company completes the delivery of their CONNECT Edition applications. AECOsim Building Designer CONNECT Edition enables users to improve their productivity and to collaborate across multiple disciplines by sharing content and data in a seamless workflow through a comprehensive modelling environment. As Bentley continues to make advancements in BIM technology, this version of AECOsim Building Designer helps them to collaborate on projects of any scale or multidisciplinary complexity, and automate the creation of deliverables for all stakeholders. And now that CONNECTservices are made available to Bentley application subscribers, Bentley brings the collaborative advantages of ProjectWise to every user of AECOsim Building Designer, he added.

Going digital

Available to all Bentley application subscribers, [CONNECTservices](#) represent Bentley's commitment to address the requirements that its user organisations face in going digital. In a digital world, users learn differently, take their work wherever they go, and collaborate with highly diverse and dispersed teams. Leveraging Microsoft Azure, CONNECTservices are fundamental to the use of any Bentley application.

EiPM, a Barcelona-based engineering and architecture firm, is an early adopter of AECOsim Building Designer CONNECT Edition, and is

using the application to deliver complex projects. Xavier Coll, BIM manager and project manager, research and development for EiPM, said it is a quantum leap. The new interface is totally clean and user-friendly with spectacular improvements in interoperability and usability of the interface in all tools. It now has more intuitive workflows, which contribute to increased productivity and reliability. As far as Coll concerns this new version is the best comprehensive BIM modelling software currently available.

For more information about AECOSim Building Designer CONNECT Edition, visit www.bentley.com/aecosimbuildingdesigner.

<https://www.gim-international.com/content/news/bentley-expands-bim-modelling-possibilities-for-major-projects>
