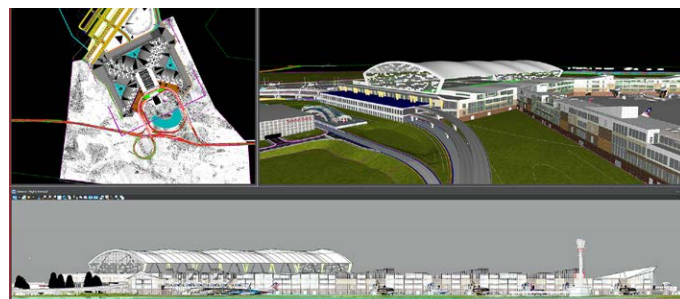# MicroStation®

CAD for Infrastructure

Whether you want to rapidly produce beautiful, precise drawings, create 3D architectural or engineering models, or begin employing information-rich BIM workflows, MicroStation can help you get the job done faster and smarter.

CONNECT ACROSS MULTIDISCIPLINE TEAMS

Many projects involved multidiscipline teams across the asset lifecycle. Establishing a connected environment using MicroStation enables faster decision-making and reduces rework. MicroStation pulls together multidiscipline teams and helps them work as one with a project-centric approach. You can connect to integrated, secure cloud services to share files, monitor project progress, and submit deliverables. You can also leverage flexible referencing, standards management, and checking capabilities, as well as receive personalized in-application recommendations on how to improve your use of MicroStation on any type of work on any project.

CONFIDENTLY INTEGRATE ANY DATA TYPE

Bentley software allows you to open, import, reference, and export the widest available range of data formats and data types. With authentic RealDWG libraries licensed directly from Autodesk, you can reliably work with and produce drawings and models when collaborating with others who use this format. MicroStation can load object enablers, providing extensibility with custom objects in the DWG file format. With the ability to consume and produce multidiscipline design information from 83 raster formats, 37 vector formats, and 17 point cloud formats, as well as common GIS formats like SHP files, you can work with anyone without limitations.

RAPIDLY EXPLORE MORE DESIGN OPTIONS

Unlike traditional CAD software, MicroStation is purpose-built to allow you to work in both CAD and BIM workflows. With support for 2D, 3D, and hybrid 2D/3D workflows, plus the ability to populate and manage an unlimited amount of associated information, MicroStation delivers the simplicity and productivity of CAD with the richness and power of BIM. The application includes rich geometric constraints and a comprehensive set of solid, mesh, surface, and feature modeling capabilities.

DESIGN WITHIN REAL-WORLD CONTEXT

Communicating your design intent or evaluating a design with real-world context has never been easier. MicroStation can integrate geospatial information from thousands of supported coordinate systems into your designs. You can access data from Esri ArcGIS™ REST Feature and Map Services as well as OGC Web Map Servers, or use real-time GPS data and Microsoft Bing maps to create and reference geospatial PDFs. The ability to model within the context of precise existing conditions saves time and eliminates error-prone manual work.

IMPROVE PROJECT DELIVERABLES

You can automate the production of high-quality drawings, including multidiscipline documentation sets, that are consistent across an entire project. Powerful documentation automation capabilities, including MicroStation's unique ability to leverage embedded properties and BIM information, are time savers and a bridge to leveraging BIM models for deliverable production. The advantages span from property-driven annotation, display, and reports to sheet layout and indexing.

MicroStation allows you to manage any kind of infrastructure project's data aligned with real-world context.

Create lifelike visualizations using the built-in VUE rendering engine.

FEATURE SET

◆ Full feature capability   ◇ Limited capability

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
DESIGN IN CONTEXT				
Geospatial				
Integrated Bing Maps content	◆	◆	◆	
Reproject live referenced data using a different coordinate system	◆		◇	
Perform simple AC coordinate transformation for buildings	◆			
Integrate with OGC Web Map Server (WMS) and Web Map Tile Server (WMTS)	◆			
Integrate with Esri ArcMap™ REST Map and Images Services	◆			
Reference Geospatial PDFs	◆			
Link real-time GPS data to models	◆			
Use of 2D and 3D Imagery				
Integrate 83 raster image formats	◆	◇	◇	◆
Integrate thousands of geospatial coordinate systems	◆	◇		
Integrate engineering-ready phototextured reality meshes created from photos	◆	◇		◇
View and manipulate point-cloud data in 17 popular formats without translation	◆	◇	◇	
Incorporate geospatial data into reality meshes to perform visual queries and data visualizations	◆			
Support for point cloud and reality mesh streaming services	◆			
DESIGN WITH TRUE 3D PARAMETRIC MODELING				
Parametric Modeling				
Intuitively push, pull, drag, cut, and extrude 3D geometry	◆	◆	◆	◆
Create parametric solids, surfaces, meshes, and feature models	◆	◇	◇	◆
Publish and share organization and project-specific parametric components using cloud service	◆	◇	◆	◆
Create and apply persistent geometric constraints to 2D and 3D geometry using complex expressions	◆	◇	◆	◆
Build parametric objects with predefined variants to more easily find and manage components	◆	◇	◇	◆
CREATE PROJECT DELIVERABLES				
Printing and Plotting				
Create, manage, and navigate plot sets	◆	◆	◆	◆
Batch print multiple drawings	◆	◆		◆
Control print settings using print styles	◆		◆	◆
Publish intelligent 2D/3D PDFs using genuine Adobe PDF capabilities	◆		◆	◆
Leverage properties and BIM information to automate creation and annotation updates	◆	◇		◆
Create sheet indexes from sheet properties and build rules-based indexes	◆	◆		◆

ENFORCE STANDARDS

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Standards Management				
Manage CAD standards with configurable checking capabilities	◆	◆	◆	◆
Easily manage all styles for dimensions, text, lines, detail symbols, and display	◆		◇	◆
Automate standards-driven drawing composition	◆		◆	◆
Integrate CAD standards using templates	◆		◇	◆
Automate standards enforcement with cloud-based project standards sharing	◆			◆
Change Management				
Confirm status and approvals using digital signatures	◆	◆	◆	
Record all design changes for rich revision control	◆			
Roll back any design file changes from any work session	◆			
Compare and plot design file changes	◆		◇	
Control digital rights to view, edit, print, and copy file content	◆			
Establish predefined expiration dates for design files				

LAY OUT AND ANNOTATE DRAWINGS

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Drawing Production				
Update all annotation dynamically	◆	◆	◆	◆
Manage drawing views across an entire project	◆	◆	◆	◆
Drag and drop plans, elevations, and sections to create documentation	◆	◇	◆	◆
Slice and filter 3D models to improve interactive visualization	◆	◇	◆	◆
Update drawings automatically when 3D models change	◆		◇	
Coordinate 3D models and 2D drawings automatically	◆		◇	
Production Drafting				
Employ a comprehensive set of drafting and detailing capabilities	◆	◆	◆	◆
Speed production with intelligent and interactive snapping	◆	◆	◆	◆
Use dynamic input with heads-up display	◆	◆	◆	◆
Navigate intuitively with element transparency, display priority, and gradient fills	◆			

PRODUCE ANIMATIONS AND RENDERINGS

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Integrated Visualization Capabilities				
Render in near real time with photorealistic rendering	◆	◇	◆	◇
Use point-and-shoot to physically correct materials and lighting libraries	◆			
Access rich online photorealistic content (RPC)	◆			
Employ distributed/networked rendering	◆		◇	

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Produce realistic animations quickly	◆		◆	
Use keyframe and time-based animation	◆		◇	
Preview live on-screen animations	◆		◆	
Manipulate animations through timeline and velocity graphs	◆		◆	
Simulate traffic with built-in workflows	◆			
Direct integration with real-time visualization and a rich, delivered library of environmental content	◆			
Stereoscoping virtual reality rendering	◆		◇	

VISUALIZE AND ANALYZE DESIGNS

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Perform real-time visual analysis based on object properties (height, slope, aspect angle)	◆		◇	
Access and analyze model data via ODBC driver	◆			
Perform solar exposure/shading analysis	◆		◇	

WORK COLLABORATIVELY ON DESIGNS

Design Review

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Create rich, multidiscipline models for design review	◆	◇	◇	◆
Consume and coordinate electronic design reviews	◆	◇		◆
Review and mark up designs with redline comments using cloud services	◆		◇	◆
Manage markups and review workflows with a cloud-based markup dashboard	◆			◆
Resolve issues across the entire project team with cloud-based issue resolution services	◆		◇	◆

File Referencing

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Attach PDF files natively as a reference	◆	◆	◆	◆
Reference live 2D/3D DGN, DWG, and large image files, refreshable on demand	◆	◇	◇	◇
Attach versioned files including design history	◆			
Navigate through file history	◆			

Format Interoperability

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Use and produce trusted DWGs with Autodesk® RealDWG™	◆	◆	◆	◆
Access geometry requiring object enablers	◆	◆	◆	◆
Integrate data in many formats: DGN, DWG, DXF, PDF/U3D, IFC, Rhino 3DM, STL, VRML World, SketchUp SKP	◆	◇	◇	◇
Import mechanical CAD formats including JT, IGES, Parasolid, ACIS SAT, CGM, STEP AP203/AP214	◆	◆	◆	◇
Import, open, and reference IFC files	◆	◆		
Access visualization file formats like 3DS, OBJ, and FBX	◆	◇	◇	
Incorporate geospatial file formats like Google Earth KML, Esri SHP files, and geospatial PDF	◆		◇	
Import Revit RFA content	◆			
Batch convert multiple formats	◆		◇	◇

	MicroStation	AutoCAD	BricsCAD PRO	Draftsight Premium
Project Collaboration				
Integrated cloud file sharing service	◆	◆	◆	◆
Manage and distribute deliverables packages via cloud-based service	◆	◇	◆	◆
Build cloud-based project dashboards for tracking projectwide progress	◆	◇	◇	◆
Integration with collaboration service for global worksharing and streamlining the design process	◆	◇	◆	◆
Cloud-based project standards sharing	◆		◆	◆
WORK IN A PERSONALIZED ENVIRONMENT				
Group capabilities and tasks to customize interface	◆	◇	◆	◆
Employ universal database connection	◆	◆	◇	
Create user-defined macros	◆	◆	◆	◆
Develop applications with Microsoft (VBA) .NET, C++, C#, and the application's own development language	◆	◆	◆	◆
Create customizable cursor menus	◆	◇	◆	◆
Personalized in-application learning and feature recommendations	◆		◇	
ECONOMICS				
Licensing and Pricing				
Perpetual licenses	◆		◆	◆
Annual subscription licensing	◆	◆	◆	◆
Quarterly subscription licensing billed in arrears based on actual usage	◆			
Monthly subscription licensing		◆		
Network licensing included	◆		◆	◆
New file formats roughly every three versions		◆	◇	◆
Option to exchange perpetual licenses for entirely different products of equal value each year	◆			
Online, live chat, and phone support 24 hours a day, 365 days a year directly from vendor and authorized partners	◆	◇	◇	◆
In-application access to hundreds of hours of continually updated learning	◆			

SHOP MICROSTATION ONLINE ›

CHAT WITH A MEMBER OF OUR TEAM ›

Bentley
Advancing Infrastructure

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