A CAD Manager's Guide to a Smooth CAD Transition

Table of Contents

Page

If you are contemplating new CAD software, start here

Implementing a new CAD platform requires a significant investment of time, money, and effort. We all know that transitioning to a new platform is not on anyone's bucket list. Most of the burden typically falls squarely to the CAD manager, from software implementation and customization to user training and support. It can be daunting.

But you would not be reading this guide if you were not already thinking about making a change.

- How do you know when it is time?
- Is a competitor's software truly better than what you currently have?
- Do the pros outweigh the cons?

This guide will address your questions on whether a transition is right for you, how to create a realistic plan, the resources and support available to ease the process, and how MicroStation® can make your job easier in the long run. All it takes is three easy steps.
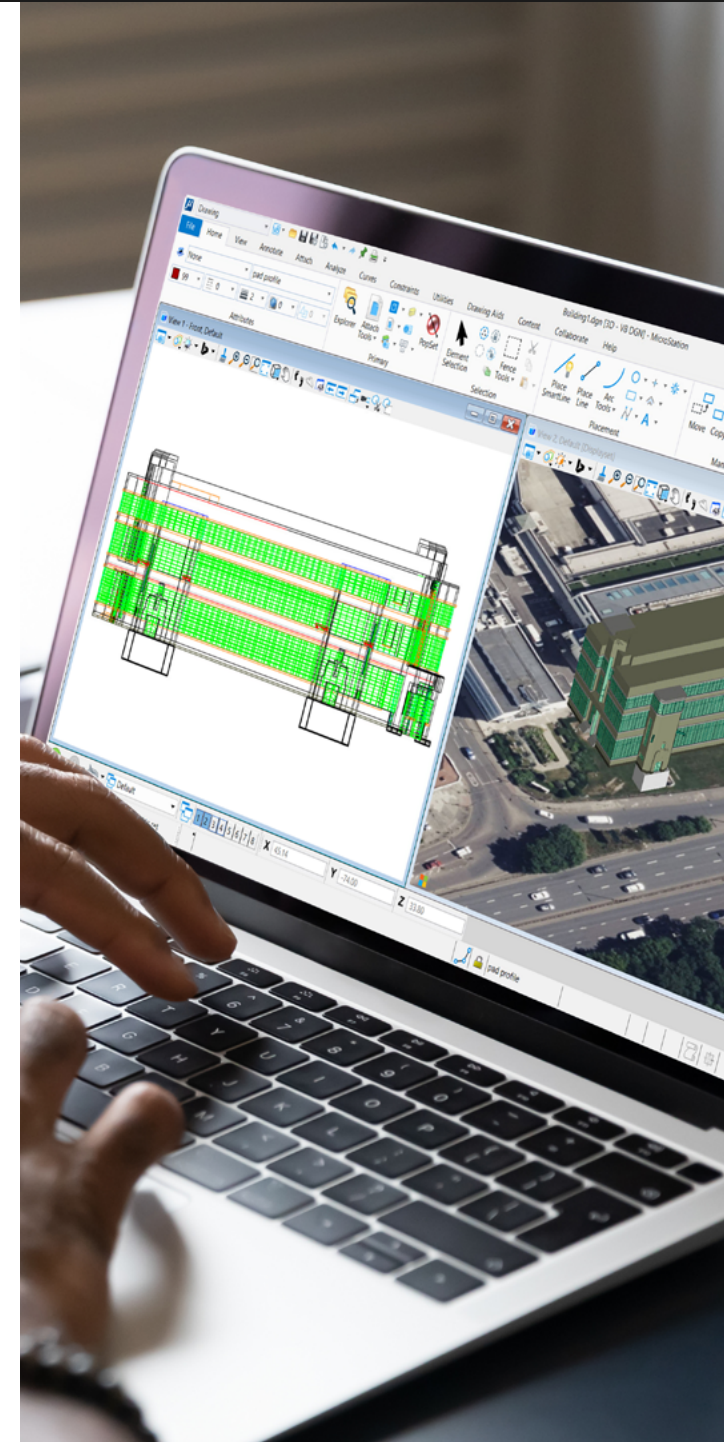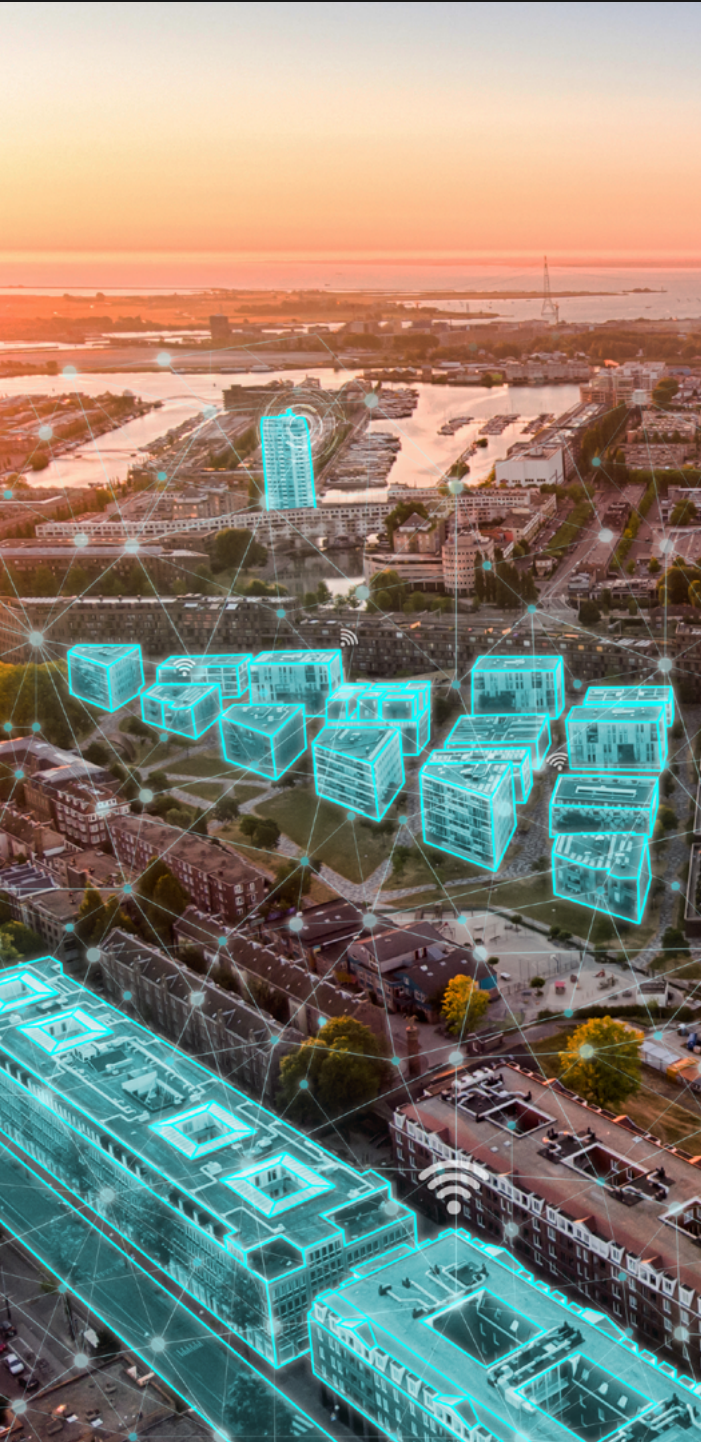
STEP 1

Determine if your current CAD software is holding you back

For some CAD users, the benefits of switching to a new application will justify the costs of making a change. But the question becomes whether you should switch or just add a solution, such as MicroStation, to diversify your CAD software investment. Some of the burdens associated with any software—such as the financial costs—are easy to calculate. Others require closer inspection.

- **Ownership costs.** When comparing the fees for software applications, keep in mind that the option to choose between perpetual (purchase) and subscription (rental) licenses gives you more flexibility with costs. MicroStation is offered through several license types to meet your organization's needs.

- **File interoperability issues.** Find out if you are facing the hidden costs of interoperability obstacles. Does moving data between versions or products that use different file formats necessitate time-consuming and error-prone workarounds and data translation? MicroStation and Bentley's design and analytical modeling applications are developed on a common platform so they "speak the same language" and include authentic RealDWG and Revit RFA support to eliminate interoperability barriers. Any work completed in one can be moved to another—and back—without a hitch.

- **Upgrade burdens.** New software features can boost productivity, but implementing upgrades can be time and labor intensive. As a result, organizations often stick with older versions to minimize disruption, or suffer through downtime and training burdens when forced to upgrade to a newer version. Bentley supports the best of both worlds by allowing users to utilize multiple versions of MicroStation at the same time. Take advantage of the newest productivity enhancements in the latest version while continuing to access a previous version for ongoing projects.

- **Falling behind.** There is a trend of advancing into BIM workflows across a wide spectrum of disciplines. If your current CAD solution does not support BIM workflows, do you run the risk of losing out on new work because you cannot meet client requirements? Will you miss out on the opportunity to improve your team's productivity? If you are losing money, wasting time, or missing out on opportunities because of your CAD's limitations, now is the time to explore making a change— because your competition already is.

Take the next step »

STEP 2

Determine whether MicroStation is right for you

If it is time for your company to look beyond your current CAD platform, the next step is to understand whether you and MicroStation will make a good match. How many of these factors apply to your situation?

- **Do you juggle multiple projects, coordinating input from a variety of contractors, clients, and outside collaborators?** MicroStation makes it easy to keep track of project-specific files and consistently apply standards with a project-centric environment, standards management capabilities, and support for a range of file formats and data types that you can open, reference, import, save, and export. MicroStation helps you manage design changes and cloud-based transmission management ensures that you always deliver the right files to the right people.

- **Do you require the ability to extensively customize your software workflows?** MicroStation features advanced handling of extended attribute data, universal database connection support, a customizable user interface, and support for VBA, .NET, C++, and C#. If you do not work out-of-the-box, you have options to make the software support your unique workflows.

- **Have you struggled with sharing files or outdated file formats?** CAD managers often find themselves addressing software interoperability problems with a bandage, or a body cast. Over time, you can lose track of how much you have invested in making things work. MicroStation and all Bentley applications are built on the same comprehensive modeling platform. Users can easily share files bidirectionally and work in similar user interfaces across applications, which makes your job easier, in addition to reducing costs, complexity, and the learning curve when adopting new capabilities and advancing to full BIM workflows.

Image courtesy of JMC2 Civil Engineering

- **Are your projects demanding due to their large size or complexity?** MicroStation can handle large data sets and is equipped to conquer the interoperability challenges that inevitably arise in large projects by easily integrating multiple file formats from CAD, BIM, geographic information systems (GIS), and more. In addition, MicroStation's mesh, solid, and surface capabilities enable users to create geometry of any complexity.

- **Do you already work frequently in, or need to transition to, 3D workflows?** Do you need BIM-ready models? MicroStation's 3D modeling capabilities are more extensive and easier to use than other CAD platforms. MicroStation's range of BIM functionality and workflows, and its ability to deliver data-driven, BIM-ready models, mean that your deliverables can extend beyond geometry and drawings.

- **Can you produce your own project visualizations?** MicroStation comes with its built-in rendering and animation capabilities, and includes a license for LumenRT™ Designer, a real-time visualization product that is easy for any architect, engineer, or drafter to master in minutes. It also provides support for Autodesk's 3DS and OBJ formats.

- **Do you frequently work with geospatial data like federal, state, or local maps, Esri Map Service, SHP data, KMZ, or GeoTIFFs?** MicroStation allows you to automatically snap geospatial data in any one of thousands of coordinate systems into its precise position automatically without the risk of errors. MicroStation also supports Esri ArcGIS™ REST Feature Service, as well as background maps from several sources: Esri ArcGIS™ REST Map Service, Microsoft Bing Maps, the Web Map Service (WMS) from OGC (WMS), and the Web Map Tiled Service (WMTS) from OGC.

- **Are you tired of inefficient software license management?** If you are responsible for administering software for your organization, Bentley provides ways to manage license access, download software, set user permissions, analyze license use, and manage notifications.

If you answered "yes" to most of these questions, then MicroStation might be the right solution for you.

Almost there »

Image courtesy of Immograph GmbH

STEP 3
Determine if you are ready for a change

Changing to CAD is a big step, but it is also entirely within reach and worth the effort. When you boil down the process into specific steps, it is not as daunting as you might imagine.

- **Plan.** Determine what you need and how you will install it. How many seats do you want, and what combination of perpetual and subscription licenses will best meet your short- and long-term requirements? Will the software installation fall to you or the IT department? Will you do an out-of-the box installation, or will you require a customized deployment? Set clear expectations and boundaries from the start.

- **Install.** Most companies do not need new hardware when moving from another CAD platform to MicroStation, so once you have the software, you are ready to go. Installation typically takes five minutes per machine, and deployment images can be used for remote installation on machines across a network. Bentley provides implementation guides and checklists to walk you through deployment, software customization, and other stages of implementation. We will make sure that nothing is missing.

- **Educate.** Up-front learning will pay off in spades down the line—for you and your users. Resources and options are plentiful for all stages and types of learning.

- **Jump right in or take it slow.** In this age, who has time to configure software and achieve proficiency before moving the new applications to production?

- **Utilize support.** We are here when you need us. Technical support is available 24/7/365. Plus, Bentley Communities members are a great resource any time you need the advice or expertise of peers. Take a tour of the MicroStation User Success site for a look at just some of the resources at your disposal.

Still have questions? »

A smooth CAD transition is easier than you think

The truth is that you will find yourself in familiar territory when you move to MicroStation, especially if you are currently using AutoCAD.

MicroStation users are up and running in no time.

Expert AutoCAD users are automatically more than halfway to being MicroStation experts. MicroStation's General Workflow banner, Dark Mode, and Key-in Commands help create a familiar environment. Once training is complete, most users are comfortable with MicroStation after just a week of use. As with any sophisticated software, users will achieve proficiency and mastery with continued use over time.
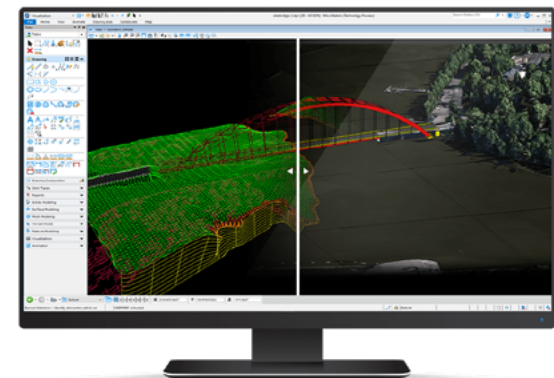
Workflows are familiar and flexible.

Once you become familiar with MicroStation, you will find that its benefits can improve your workflow in many significant ways. Some companies today, especially smaller ones, find success in launching new software and a new project simultaneously to learn and fine-tune in real time. MicroStation is completely flexible and customizable to your needs, so you can certainly set up permissions, workspaces, and other features before going live. But MicroStation also works right out of the box without a single modification. You can dive in, start learning and being productive right away, and customize as you go. It is entirely your call.

No need to change all your seats, or switch all at once.

As you plan your CAD transition, keep in mind that a full switchover of all CAD seats in your company to MicroStation is not required. Many companies prefer to ramp up slowly by replacing a few seats at a time, and some choose to keep their AutoCAD seats and simply add new Bentley software seats as their business grows. This diversified approach mitigates the risk of changing applications, does not interrupt project delivery, and enables companies to provide a wider range of CAD and BIM services. It is also a way for companies who are less certain about their need for a change to test the waters before committing to a full-scale move.

We can help »

Ready to get started?

As you consider the payoffs of a move to MicroStation, look at the software not only as the cure for many current CAD headaches, but also as a strategy that will support the growth of your CAD team and position your company to respond to ever-changing competitive challenges and opportunities.

MicroStation is the CAD of choice for infrastructure worldwide. Learn more about why it is trusted by industry-leading architects and engineers like you.

View the CAD comparison chart   **Chat with an expert**