Ready for a change?

Connect, create and move your workflow from the desktop to the cloud. Take advantage of a smart change management strategy as you turn to Autodesk 360.

AUTODESK

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Executive Summary

Whatever you do, the cloud can help you do it with fewer limitations. You just have to get there—and take your team, partners, and customers with you. That might not be as easy (or as difficult) as you think. This guide can help. Inside you'll find descriptions of some of the challenges you may encounter with the change in how you do business—such as shifts in where you do your work, store your data, and more—as you move to the cloud. And you can explore approaches that can help you steer your business to the cloud successfully.

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Connect, create, and communicate like never before

You've decided to take your work into the cloud, and Autodesk is ready for you. From product design groups to construction firms to video game designers, businesses that create and rely on design are embracing cloud technologies that help them work better. They're finding the cloud fits with—and transforms—their familiar ways of working.

The cloud can be very flexible and powerful but sometimes descriptions of the cloud can seem a little airy. What does it really do? The cloud allows people and organizations to access computing services, such as software and infrastructure, from anywhere at any time*. Computing capabilities become available on-demand, instead of leashed to desktops and internal networks. What does the cloud deliver? Scalable, mobile, and enhanced communication—that lets you connect, create, and communicate like never before.

Getting to the cloud: Autodesk 360
Autodesk® 360 is an integrated cloud-based platform that connects you to a powerful set of secure tools that help you create and collaborate with everyone involved in your design work. Think of it as a platform that can improve the way you visualize, simulate, and share work.

Autodesk 360 lets you tap into the power of virtually infinite computing—when and where you need it. For you, that could mean coordinating a construction project in real time in the field. Or creating a complex, photorealistic rendering without tying up a computer for hours. Or doing advanced product simulation without licensing traditional expensive simulation software that you would use just a few times a year.

Why should you move to the cloud?

Understanding and communicating the benefits of a workflow change are critical steps in making it happen. You and your team need to know whether or not the cloud will deliver advantages that outweigh any pains associated with getting there.

Let's look more closely at how Autodesk® 360 helps project teams. It's all about connecting people to their projects, data, and tools more seamlessly—to improve the way you create, communicate, collaborate, and access your work.

Connect, communicate, create, and collaborate
Autodesk 360 supports greater productivity and better results with:

Elastic power and accessibility on demand
View, edit, and share files without the need for specialized software or hardware.

Virtually infinite computing power that fuels innovation
Produce visualizations and test performance of multiple designs faster while freeing up resources.

Anywhere, anytime access*
Securely store, view, and edit files wherever you are and whenever it makes the most sense for your projects.

Improved collaboration
Share work with stakeholders and streamline communication across companies and locations.

Secure and scalable online storage
Make file management processes more effective with centralized storage.

* Access to services requires an internet connection and is subject to any geographical restrictions set forth in the Autodesk Terms of Service.

Anticipate and overcome obstacles

With any significant workflow shift, you'll find naysayers ready to question the wisdom of change. Moving to the cloud will be no different. You'll need to address concerns. Keep in mind that for many people, resistance to change may be grounded in risk aversion. They have processes in place that seem to work well, and they are right to question whether working in the cloud will actually help them work better. Help them see the benefits.

Consider this list of common challenges:

Lack of leadership support
Senior executives and leadership teams need to see the short- and long-term benefits of moving to the cloud. They may not get excited about individual features and capabilities. Instead, show them the big picture. Convince them that basing workflows on the flexibility of cloud-based solutions will help your business take advantage of capabilities that will keep you ahead of the pack. Depending on your business, that might mean shorter product development cycles or winning more work.

Hype aversion
The term "cloud" has been the focus of quite a bit of exuberant, and vague, press coverage. Cut through the fluff and make sure people understand how the services they'll find on Autodesk® 360 help support processes critical to your business and industry.

Security and control worries
People will want to know where their data will reside. You can also expect questions about data security. Be ready to address these concerns at a high level, and know how to point your technology team to the details. See the box on this page for more about security and Autodesk 360.

Striking a balance
You want to get to the cloud quickly—while meeting all deadlines and not overlooking any project details. Your change management plan should account for how your team will keep projects moving while transitioning to the cloud. This plan should account for how you'll deal with vendors, clients, and partners during the transition.

Resistance to change
Not everyone embraces change—even if they can see the benefit. Learning new ways of creating and collaborating may be seen as a hassle. You should be ready to explain why moving to cloud-based services are worth it and necessary for the business over the long term.

Getting stakeholders to understand how the cloud will benefit them will help you overcome much of your change management challenge.

Security savvy

Expect to hear about security concerns related to the cloud. For Autodesk cloud-based services, stringent data security targets guide operational performance measures. Autodesk developed the managed services at the core of Autodesk 360 using advanced data security technology. The Autodesk team of cloud operations and security professionals is constantly improving Autodesk 360 services to maintain cloud security.

Learn more by visiting the Autodesk Trust Center or reading a datasheet about security and Autodesk 360.

A cloud pioneer

You probably know Autodesk software products have played a central role in design workflows across industries for more than 20 years. But did you know that Autodesk has more than 10 years of experience providing cloud-based solutions? In Autodesk 360, we've used our experience to develop a set of cloud services that connect people to projects, data, and the tools they need. It's a place for those who create and use designs to collaborate and share ideas—anywhere, anytime*.

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Plan or dive in? The importance of a change management strategy

You could start using cloud services with little expertise, budget or hardware that was traditionally required to run complicated jobs not based in the cloud. And for a very small business, that might make some sense. Say you're an owner at a two-person product design firm. Today you're using a third-party vendor for product simulation. Tomorrow you explore the basics of using Autodesk® Sim 360™ cloud-based service, and with little budget or hardware, you can start using it for simulation.

Easy, right? Yes, but even in that simple scenario, having a strategy makes sense. For instance, you're adding value by bringing the service in-house. You may need to think about how you will charge clients for this new service. You also need to consider how you'll accommodate the increased speed of the simulation process into your workflow.

Your change management strategy should help you:
- Choose the right cloud services for your business
- Communicate the change to stakeholders
- Map the new process as compared to the old process
- Adjust to the faster pace of workflows
- Ensure that the way you price services or develop budgets reflects the on-demand nature of the cloud

The right approach for your business

Will every step in your design workflow move to the cloud? Probably not. Determine what aspects of your workflow need to move to the cloud, and what is best served by staying on the desktop for now.

Bring together the people who can help you decide where the speed and power of the cloud will deliver the most benefits for your business. Consider including people outside of your executive and design teams. For instance, project managers and field teams can make valuable contributions. Talk to clients, partners, and vendors. Ask them how they'd like to connect more closely to your workflow.

What aspects of your workflow should move to the cloud? And when?

Capabilities currently available with Autodesk® 360 cloud services:

Rendering	Energy analysis
Simulation	Sustainability
Structural analysis	Clash detection
Product lifecycle management	Field management
	Documentation
Collaboration	

Where to start?

What processes should you consider moving to the cloud first? Find the places where current approaches limit your team. Start by gaining familiarity with cloud-based processes in areas that are not critical. Then think about the best way to incorporate cloud-based processes into your business. Do that by talking to your team about pain points that the cloud may help address:

Limited CPU cycles
Compute-intensive tasks like simulation and rendering tie up desktop resources and force ongoing investments in expensive hardware. The limitless compute power available in the cloud delivers the capacity you need.

Mobility
Workflows need to extend to today's mobile devices—not chain people to their workstations and on-premise network. Many cloud services are designed to work seamlessly with today's popular mobile devices.

Collaboration
Coordinating changes and modifications to designs involving dispersed teams is difficult with desktop approaches. The anytime, anywhere availability of cloud services make it easy to keep extended team connected to projects.

Scalability
infrastructure and software limitations make managing growth a constant planning headache. Just as many cloud services offer virtually infinite compute power, they also deliver rapid scalability.

Agility
Time and resource constraints prevent many businesses from testing design performance and producing visualizations as often as needed. You can see results quickly when using cloud services—without tying up in-house resources.

Version control
Keeping on top of versions slows everyone down and introduces risk with extended project teams that lack centralized file management capabilities. Many cloud-based services, like those you'll find on Autodesk 360, make version control easier and more automated.

Cost of hardware and IT staff
Costs can keep your company from expanding capabilities. The cloud lets you try services and see if they can benefit your workflow.

Connecting the whole team

Improving your design workflow in the cloud means much more than just having your design team share ideas or perform a few tasks in the cloud. The cloud brings everyone together. Maximum benefit comes from maximum involvement.

Take a minute to determine all the people your business works with. Consider how they could move from the desktop to the cloud and collaborate with you anytime, anywhere*. Use your PDF markup tools to check all the role players in your process—and write in the ones we missed. They can all join you in the cloud.

Who touches—and is touched by—your design workflow?

Engineers	People living near projects
Product designers	Manufacturers
Architects	Planners
Marketers	Interior designers
Sales people	Technical writers
Contractors	Chemists
Regulators	Simulation specialists
Customer support	Subcontractors
BIM specialists	Facility managers
End users	Suppliers
Inspectors	Geographic information system
Quality assurance (QA)	(GIS) specialists
specialists	Film production companies
Customers	Specialty designers
Third-party fabricators	Product managers
Animators	Estimators

Manage your move

When the time comes to shift key processes to the cloud, execute your implementation strategy. Check the plan against what's actually happening. Pinpoint issues, find solutions, and communicate them to the team.

Here are some questions to consider:

Have you communicated what's happening and gained buy-in from all stakeholders?

Are stakeholders clear on their roles in the move and the impact to their teams?

Are there dependencies that could prevent or delay implementation?

Is everyone following the plan and schedule?

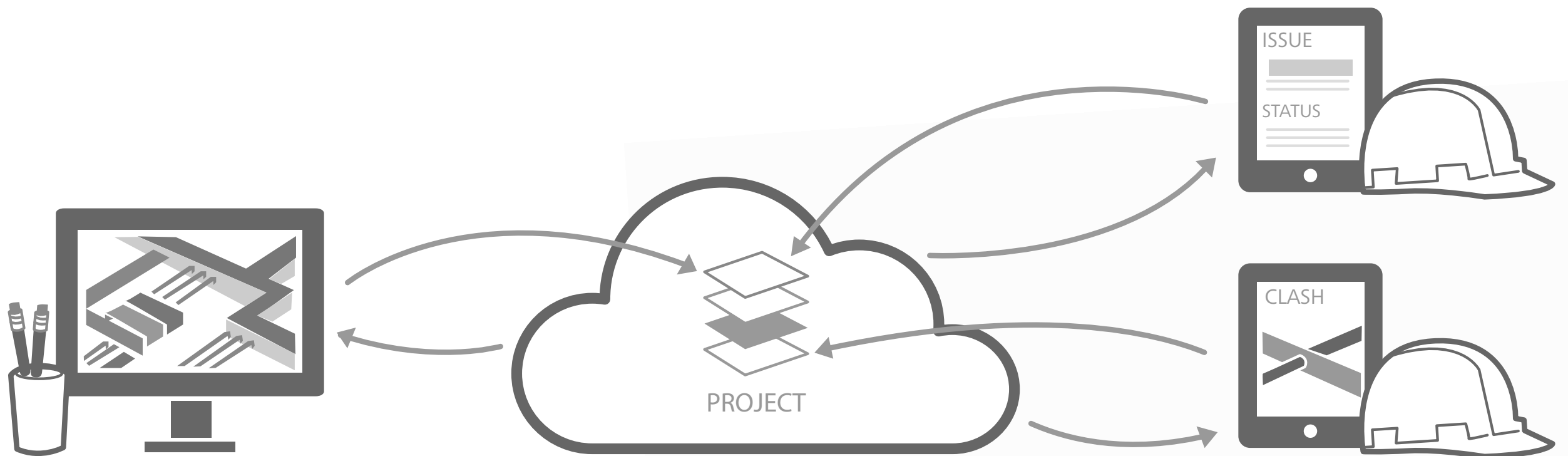Are people having any difficulties navigating the change?

Do you need to reiterate the importance of the shift to the cloud to stakeholders outside your business, such as suppliers and subcontractors?

Have you assigned enough information technology (IT) resources to help move data or manage unforeseen downtime?

Are you ready to address questions about data security and privacy?

How are people adjusting to the increased speed of cloud-based processes?

The cloud can connect a project team on a building design and construction project

ISSUE

STATUS

CLASH

PROJECT

Architect
The architect uses desktop tools to create the initial building model.

Cloud services
Energy analysis, structural analysis, and rendering tools in the cloud inform the design process. Centralized file storage in the cloud allows engineers to tap into the latest project data to coordinate designs.

Project manager and engineer
Construction teams use cloud services to take project design information right to the point of construction on mobile devices.

Celebrate your success—and get ready to go further

Congratulations, you're connecting, creating, communicating, and collaborating in the cloud. Depending on how much of your workflow moved, getting there might have taken almost no time at all. Or you may be transitioning to the cloud one new project at a time, leaving older projects to wrap up using desktop-based workflows. Either way, it's time to reinforce the value of the cloud and look for new opportunities.

Showcase your wins
No matter your approach, take the time to monitor performance. Are you seeing the improvements you expected? Document gains now—it may be more difficult to quantify successes the further you move away from old processes. Talk to people in the organization who have taken to the cloud with the most zeal. As they share their enthusiasm with colleagues and partners, they'll help doubters see the value of working with fewer limits.

Expand your cloud footprint
Now that you're a cloud change management veteran, you're ready to transition other aspects of your workflow to the cloud. Visit the library of Autodesk cloud services and review what's available again. Which service makes sense as a next step for your business? Where in your workflow do you need smoother collaboration, increased agility, or more compute power? And if you're on Autodesk® Subscription, stay on top of the cloud benefits available. You may already be entitled to services that are a perfect fit for your organization.

Success is contagious

Balfour Beatty Construction uses the Autodesk® BIM 360™ Field cloud-based service to make its project teams more mobile and agile. What are its teams saying about it?

Nathan Ducote, a project manager, says: "A big advantage of BIM 360 Field is that it helped us shave time from the overall project schedule. This can lead directly to more savings through a reduction of general conditions and overhead. In addition, BIM 360 Field helped us cut people hours almost in half on key field management processes."

Division President Sean DeMartino says: "With support from BIM 360 Field, we can get real-time access to the quality and safety aspects of our performance across projects and subcontractors."

Autodesk 360 cloud services

Tools for everyone

Autodesk® 360
View, edit, share files, and get the mobile app plus 5GB of storage.

AutoCAD® 360
View, edit, and share Autodesk® AutoCAD® files using your smartphone or tablet.

Rendering in Autodesk 360
Produce photorealistic images and panoramas.

Building design and construction

BIM 360™ Glue®
Collaborate in the cloud in real time on modeling and clash detection from your office or mobile device.

BIM 360™ Field
Perform on-site field management for timely collaboration and reporting on your mobile device.

Buzzsaw®
Manage documents, models, and data in the cloud.

Energy Analysis for Revit®
Quickly determine energy consumption and lifecycle costs of building designs.

Green Building Studio®
Perform whole building energy analysis to design toward carbon neutrality.

Structural Analysis for Revit®
Design and analyze structural models as part of the BIM process.

Manufacturing and product design

Autodesk® PLM 360
Manage product lifecycle with lower upfront costs, no capital expenditures or install

Configurator 360
Customize products for quoting and access model design.

Fusion 360™
Accelerate industrial and mechanical design and collaboration.

Mockup 360™
Create and collaborate on mechanical design mockups in real time.

Optimization for Inventor®
Test the performance of multiple product design options.

Sim 360™
Run mechanical simulations anywhere, anytime at a fraction of the cost of traditional simulation software.

Infrastructure

InfraWorks™ 360
Quickly and easily create 3D models to perform civil infrastructure design and planning.

InfraWorks™ 360 Pro
Aggregate data, develop proposals, and manage large models in the cloud.

Want to learn more about individual services? Click the service name to visit a web page describing the service.

Working beyond limits—that's a great change

Change can be thrilling or scary. When moving aspects of your design workflow to the cloud, a smart change management strategy makes all the difference. You'll find that it helps you win buy-in—while soothing the fear of change.

Having followed the steps in this ebook, you know that a little extra effort in the beginning speeds transitioning to the cloud. Each time you shift a part of your workflow to the cloud, you know the change management strategy to follow:

- Review the cloud services available
- Understand the challenges of moving to the cloud
- Pick cloud-based services that can deliver productivity and competitive benefits to your business
- Develop a plan for transitioning to the cloud that supports clear communication with all stakeholders
- Execute the plan and fine tune it as needed
- Document and reinforce the benefits of the cloud—and look for other cloud-based opportunities

As you learn more about the cloud, you'll find that because Autodesk® 360 connects you to your projects, data, and tools, it will be easier for you to design, visualize, simulate, and share work with anyone—anytime, anywhere.