



AUTODESK UNIVERSITY 2014

Expanding Autodesk® AutoCAD® Beyond the Desktop to Empower Your Small Business

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This class covers the use of AutoCAD software and the cloud (the A360 cloud-computing platform), utilizing the AutoCAD 360 cloud-based app (formerly known as the AutoCAD WS app). We will examine how we can use AutoCAD 360 services and products to expand away from the traditional desktop when you use the latest tablet and smartphone technology to collaborate your AutoCAD software designs on the building site and the factory floor, as well as in the field. We will also touch on some effective practices, workarounds, shortcuts, limitations, and advantages. We will show you examples that use AutoCAD 360 services and products, and we'll demonstrate how new technologies are revolutionizing the AutoCAD software workplace.

Learning Objectives

At the end of this class, you will be able to:

- Learn how to use the benefits of AutoCAD 360 software
- Learn how to use the basic AutoCAD 360 software to expand your AutoCAD software desktop
- Share and collaborate on your AutoCAD software projects
- Learn how to bring tablet and smartphone technology to the workplace to enhance and expand your commercial reach

About the Speaker

Shaun Bryant is an Autodesk Approved Instructor with 26 years of total industry experience using AutoCAD software and Revit software. With a skill set gained while working as a consultant, trainer, manager, and user, Shaun has a varied background, comprising of 13 years as a consultant/trainer; 3 years in sales, presales, and business development; and 9 years of industry experience as a CAD manager and user. Shaun also produces bespoke training courses and manuals for clients. He is an associate member of the Learning & Performance Institute, and he is a director on AUGI board. He is also the author of the reputable Not Just CAD! Blog and is currently an author on the Autodesk small business blog, LINE//SHAPE//SPACE.

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Introduction

I come from a traditional drafting background. I started on the drawing board, using acetate drawing sheets and the blue nylon pencils and Rotring inkpens. My, haven't we come a long way! I now come out with the old chestnut (just like my grandfather used to), "Things were different when I were a lad".

Yep, they sure were and I am so pleased that I have kept up with the latest Autodesk software and technologies because they have allowed me to work smarter, faster and more productively. When I show my training classes the new technology, especially in the cloud, I love the look I get back. It's almost that "kid at Christmas" look when they realise that they have an amazing gift in front of them. Did you like my seasonal slant there? Just for you at AU2014.

I come from an architectural, building and construction background, so you will understand my enthusiasm for the new mobile apps from Autodesk, and the way that the cloud can be utilized on site like nothing ever has before. It sure beats holding down a large paper drawing on the bonnet (hood) of my car with house bricks on a windy day.

And, yes, I am English, by the way....(translations are available).

Enjoy the class, enjoy AU and remember TWO things.....

1. Please complete your AU evaluation for my class.
2. Join **AUGI** (www.augi.com).

I'll see you on the other side...

SB.

Use the benefits of AutoCAD 360

AutoCAD 360 is the cloud-based AutoCAD app available (primarily) on both Apple and Android platforms. The basic version is absolutely free and you can upgrade to the Pro or Pro Plus versions at cost:

- **Pro** - \$4.99 per month or \$49.99 per year.
- **Pro Plus** - \$99.99 per year.

So what exactly are the benefits?

That is pretty simple. You get a mobile version of AutoCAD. Period.

Whilst a much more simplified version of AutoCAD, it gives you the ability to make your AutoCAD desktop completely mobile, using a tablet, or even just a smartphone. My personal preference is Apple products, so my iPad and iPhone 5S both have the AutoCAD 360 app installed.

Installing AutoCAD 360 (and A360 Drive)

Installing AutoCAD 360 and A360 Drive on your mobile device could not be easier. Head on over to your respective app store (Apple or Android) and look up “AUTODESK” in the Search page. That’s where you will find them (see Fig.1 below). Install the apps on your device.



Fig.1 – AutoCAD 360 on the Apple app store (note that you need to install A360 Drive tool)

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Once installed on your device, you will need a login. The easiest way to set this up is to your PC and go to the AutoCAD 360 webpage and get the desktop browser version of AutoCAD 360 all set up. Very simple.

Just go to www.autocad360.com and set it all up there. Click on the top right corner of the page to login or sign up if you already have an ID set up (see Fig.2 below).

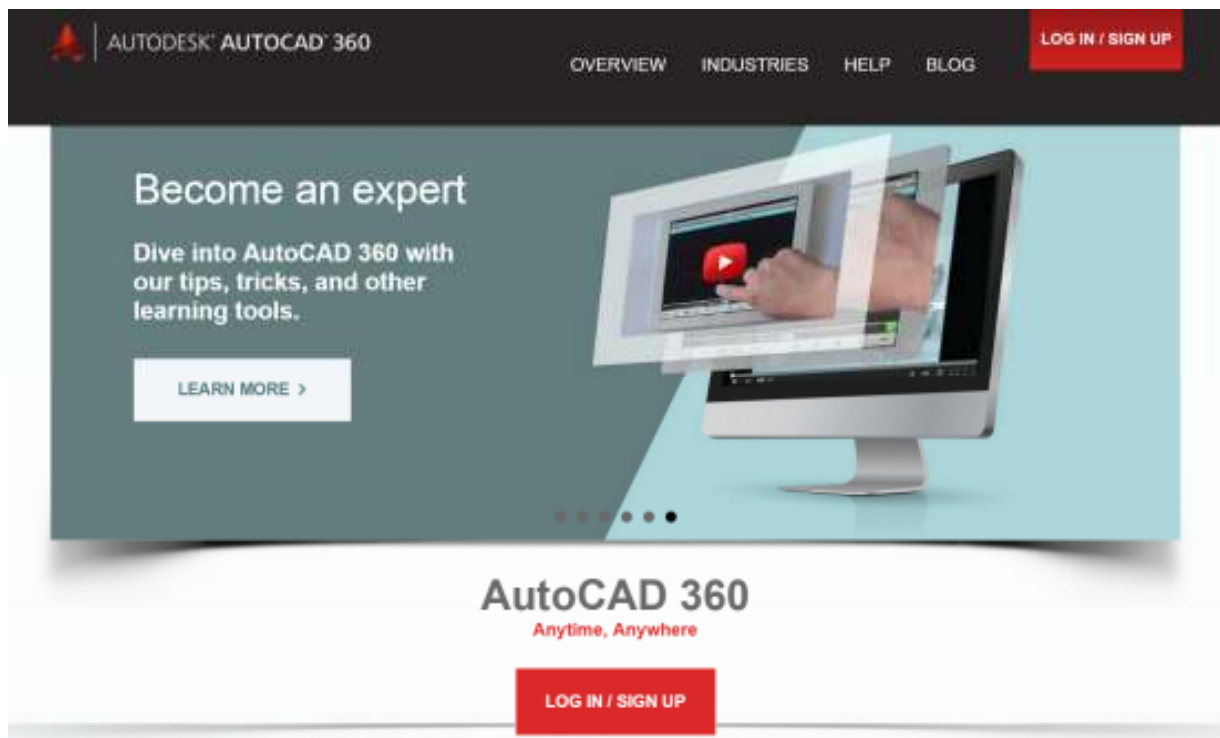


Fig.2 – AutoCAD 360 webpage (using Google Chrome)

Initially, you will be logged in to the new AutoCAD 360. For those of you used to the older AutoCAD WS, you can still use it and the option is on the title bar on the top right of the AutoCAD 360 screen. If you look at Fig.3 below, it shows you where to click for AutoCAD WS.



Fig.3 – AutoCAD 360 screen at first login.

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Fig.4 - The AutoCAD 360 front screen in your browser

So what are the benefits of AutoCAD 360?

The benefits are fundamental and really easy to see. Using AutoCAD 360, you can, quite literally, take your AutoCAD desktop **ANYWHERE**. So what does this give YOU, the user?

- **Mobility** - The ability to take your designs and drawings (electronically) to the building site, the shop floor, the clients office - all on a device such as a tablet which can be connected to a projector or a screen with the appropriate tech. No need for big paper drawings held down on the bonnet (hood) of your car with bricks, for example.
- **Connectivity** - AutoCAD 360 gives you the Design Feed. In the same way you connect with your friends via social media, you can comment on the drawing with text comments, and link photographs from your mobile device to the comments. This allows you to find things visually much more easily. For example, you may be snagging in a new build property.
- **Productivity** - You can work on the drawings there and then in AutoCAD 360, and upload the changes to the cloud-based file in A360 Drive. Then, back at the office (sigh), your changes are in the file and you can then download from A360 Drive to your desktop.

Use the basic AutoCAD 360 to expand your AutoCAD desktop

1. Using AutoCAD 360

The best way to use AutoCAD 360 is to combine it with an **A360 Drive** cloud-based account. This is a free utility (originally called Autodesk 360) provided by Autodesk that gives you a free 5GB of cloud-based storage for your designs and documents. All you need is an Autodesk ID (username and password) and you can sign up for all of that at <http://360.autodesk.com>. You can also sign up for paid accounts of A360 and A360 Project.

A360 Drive can then be used as your hub and it lists all changes and variations to the designs and documents stored there, plus you can either download the respective file (in the case of AutoCAD 360, a DWG file) to your PC using full AutoCAD or, more importantly, open it in AutoCAD 360 on your mobile device. These changes are also listed in AutoCAD 360 as shown in Fig.4 above in the dashboard and the Recent Activity panel.

2. Setting Up A Drawing for AutoCAD 360

Expanding your desktop has never been easier. In the full version of AutoCAD on your desktop, you can save changes to the drawing design both locally and in A360 Drive by signing in to your A360 Drive account via AutoCAD.

(Note that this example assumes that you have already UPLOADED your drawing of the same filename to your A360 Drive account).

Using your Infobar in AutoCAD (top right), sign in to A360 Drive with your Autodesk ID, using the **Sign In** pulldown.

Then ensure, in your AutoCAD **Options**, that you are set to sync your changes and settings to Autodesk 360 (see Fig.5 overleaf). Be aware, that A360 Drive is still classed as Autodesk 360 in AutoCAD 2015.

Then, save your drawing in the usual way and it will be synced with the same drawing stored in the cloud.

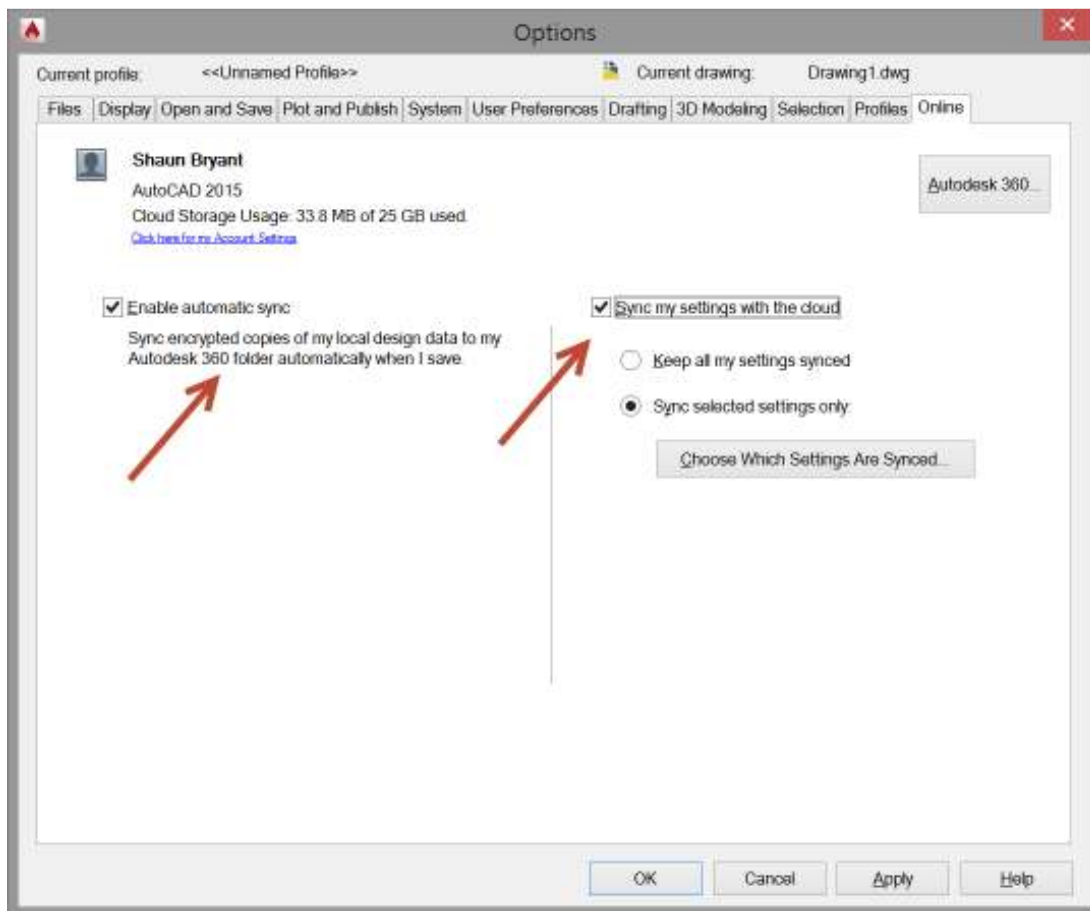


Fig.5 - Autodesk 360 (A360 Drive) settings in the AutoCAD Option dialog box

3. Mobilizing Your Desktop

So now you have your drawing saved on your PC desktop **AND** in your A360 Drive account in the cloud. So now, you can leave your office! Go on, get out and enjoy the sun, but make sure you have a decent mobile connection! The cloud IS wonderful, but not much use if you can't get to it, right?

You can then open up your "mobilized" drawing in one of TWO ways: -

1. **A360 Drive** - open up A360 Drive on your mobile device, sign in, find your drawing, and then open it using your installed version of AutoCAD 360.
2. **AutoCAD 360** - go straight to AutoCAD 360 on your mobile device, find your drawing in your document list and open it.

4. Using The Cloud

The cloud is your friend and gives you the flexibility to work where you **NEED** to be. Make the edits in AutoCAD 360 using the drafting tools. Make comments in the Design Feed and link photographs (taken on your mobile device) to the comments and use the GPS built in to your mobile device to track EXACTLY where you are making the changes and the comments - great when working on a large construction site or in a big factory complex on the shop floor.

Once you have made those changes, they are noted in A360 Drive against the drawing and also show on the drawing when opened in AutoCAD 360.

So when you are back in the office, open up A360 Drive or AutoCAD 360 on your desktop, via your browser, and download the updated drawing. All the mobile changes you made will be there.

So there you have it.

Desktop. Mobilized. Expanded.

Share and collaborate on your AutoCAD projects

So you have mobilized and expanded your desktop. Great for you, but what about your design/project team?

How does AutoCAD 360 in conjunction with A360 Drive help them? What benefits do they get?

Sharing files through A360 Drive is really easy, plus it provides a great way of structuring your filing and audit trail for your drawings, because with the right file naming philosophy, any member of your team can gain access to the shared drawings, and then using valuable tools like the Design Feed, can comment on a drawing and keep the design cycle current.

Sharing Drawings in A360 Drive

Once you are logged in to A360 Drive, you will see the latest files that have been uploaded to the cloud, regardless of whether they have been uploaded from site or in the office. There is a date and time marker and, as mentioned above, with the appropriate naming philosophy, the system just works.

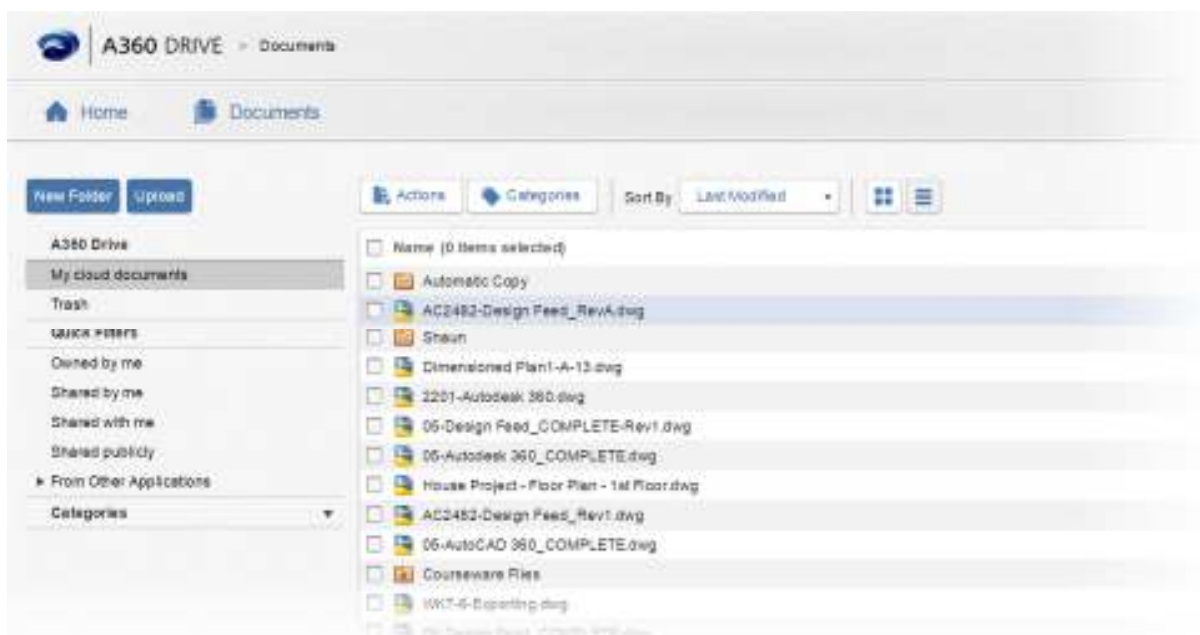


Fig.6 - A360 Drive document list, showing the uploaded drawing list and the various filters available on the left hand side.

Using The Design Feed To Collaborate

Design Feed is everywhere! By default, when you open AutoCAD 2015, it is there. When you open up AutoCAD 360 on any device, it is there. And any Design Feed comments also show up in A360 Drive too in the Recent Activity column on the right hand side of the screen.

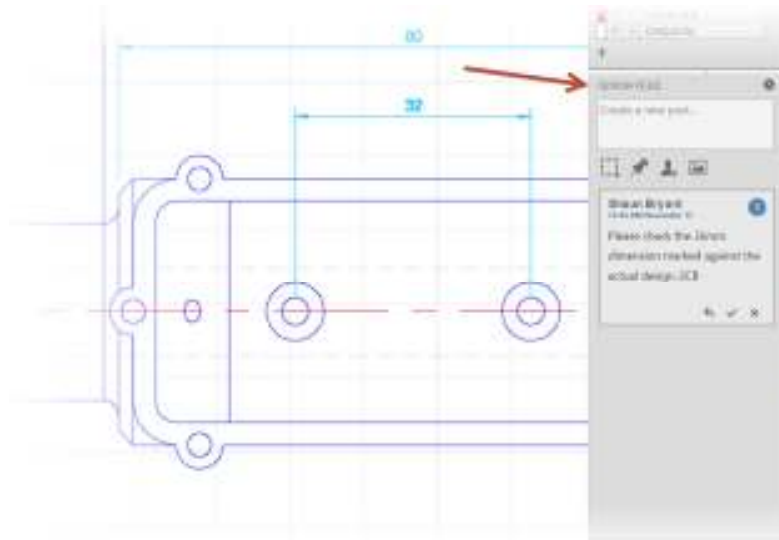


Fig.7 - Design Feed (arrowed) in the desktop browser version of AutoCAD 360



Fig.8 - Design Feed (arrowed) in the desktop browser version of A360 Drive

Sharing Drawings With Your Design Team

Sharing designs with your team is also very easy. Using the Share facility via A360 Drive, you can share drawings via email publicly or privately. The email recipient will receive a link to the drawing which can be viewed via the A360 Drive viewer, or via AutoCAD 360.

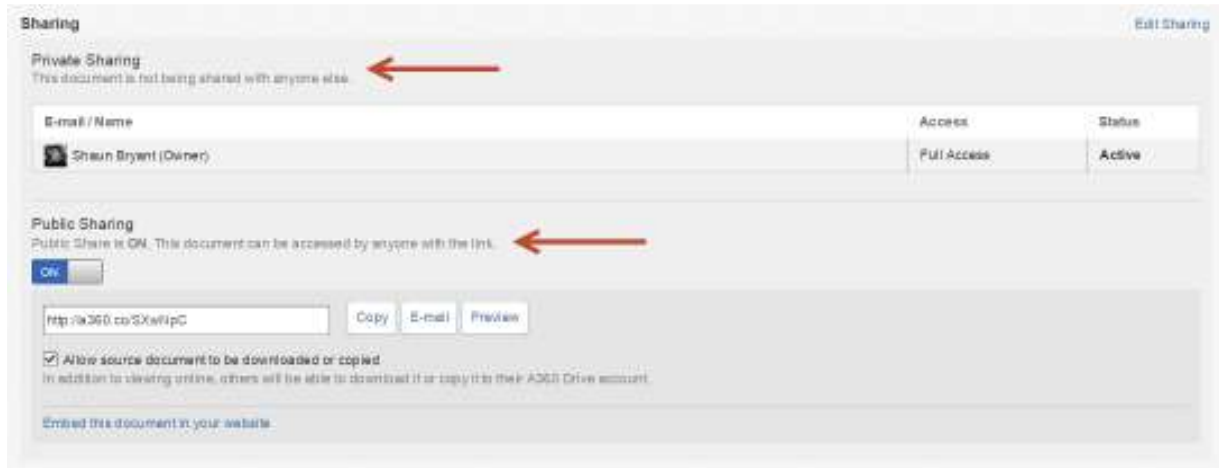


Fig.9 - Sharing drawings (and documents) via the Share facility in A360 Drive

You will note in Fig.9 above, files can be shared privately or publicly (and as mentioned above).

A privately shared file will be just that and no reference will be made to it in the A360 Drive document list. A publicly shared file will be given a unique URL that can be accessed by anyone with the link, with an option to allow the file to be downloaded or copied (see the tick box in Fig. 9 above).

So, as you can see, not only do A360 Drive and AutoCAD 360 mobilize your desktop, they enable fast, efficient sharing and collaboration of your project data as well.

The major benefit here is that data can be updated "on the fly" on location by one member of the design team and those updates can be received immediately by the design team back at base, thus speeding up the design process tremendously.

Bring tablet and smartphone technology to the workplace to enhance and expand your commercial reach

Technology is moving fast. Smartphones and tablets are the norm. So why not build them in to your business strategy? A360 Drive is free and so is the basic version of AutoCAD 360. Even the Pro Plus version of AutoCAD 360 is only \$99 per year. So the capital expenditure on software is minimal. You can also sign up to paid subscriptions of A360 and A360 Project for full project-based collaboration as well.

Consider this.

One tablet device with mobile and Wi-Fi built in would save you having to carry ANY drawings with you whatsoever. No more redlining with a red pen on a drawing held down on your car bonnet (hood) with bricks. It can all be done electronically there and then. Think about the cost saving here. Surely that justifies bringing smartphone and tablet technology in to your office?

Your design workflow would become much more efficient and productive, saving you on the bottom line in the long term.

What is needed is a look towards the bigger picture here. The tablet market is expanding and eventually touchscreen will be the norm. Look at the new "tablet" hybrid laptops out there, as well as all the current tablet models. Anything that runs an Apple or Android OS will run the FREE Autodesk apps; A360 Drive and AutoCAD 360.



Autodesk® A360
Autodesk Inc.

A360 Drive in the Apple App Store



AutoCAD 360 4+
Autodesk Inc. >
Offers In-App Purchases

AutoCAD 360 in the Apple App Store

Conclusions

AutoCAD 360 provides the following: -

- Mobility
- Sharing of design ideas
- Collaboration
- Tools similar to social media to allow for quick easy discussions and comments on designs and drawings

A360 Drive provides the following: -

- Cloud-based drawing and document storage up to 5GB
- Project-based collaboration via A360 and A360 Project (paid subscription)
- A design hub for your AutoCAD 360 users
- Sharing of design ideas
- Tools similar to social media to allow for quick easy discussions and comments on designs and drawings

Mobilize your AutoCAD desktop with A360 Drive and AutoCAD 360.....NOW.

Contact

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