



AUTODESK UNIVERSITY 2013

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

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**Code** AC2482

### Learning Objectives

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

- Use the benefits of AutoCAD 360
- Use the basic AutoCAD 360 to expand your AutoCAD desktop
- Share and collaborate on your AutoCAD projects
- Bring tablet and smartphone technology to the workplace to enhance and expand your commercial reach

### About the Speaker

*Shaun is an Autodesk Approved Instructor (AAI) with twenty-five years total industry experience using AutoCAD and Revit. With a skill-set gained whilst working as a consultant, trainer, manager & user, Shaun has a varied background, comprising of twelve years as a consultant/trainer, three years in sales, pre-sales and business development and nine years industry experience as a CAD manager/user. Shaun also produces bespoke training courses and manuals for clients. He is an Associate member of the Learning & Performance Institute (ALPI) and Director on the Board of AUGI. He is also author of the reputable CAD blog, Not Just CAD! and co-owner of [www.CADucation.com](http://www.CADucation.com). He is also currently an author on the Autodesk small business blog, LINE//SHAPE//SPACE.*

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## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

### 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 AU2013.

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](http://www.augi.com)).

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

**SB.**

## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

### 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 Autodesk 360)

Installing AutoCAD 360 and Autodesk 360 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.

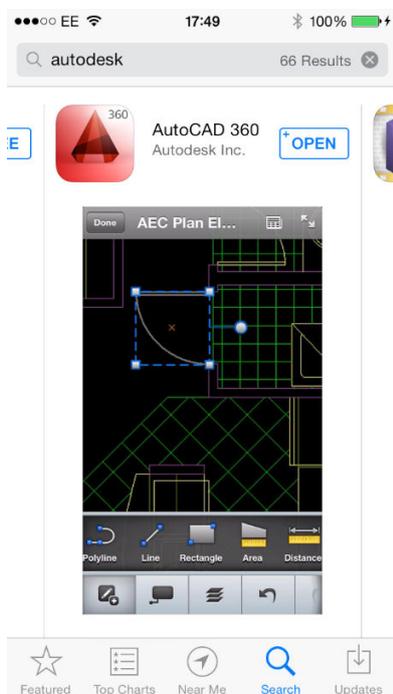


Fig.1 – AutoCAD 360 on the Apple app store (note that you need to install Autodesk 360 too!)

## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

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](http://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).

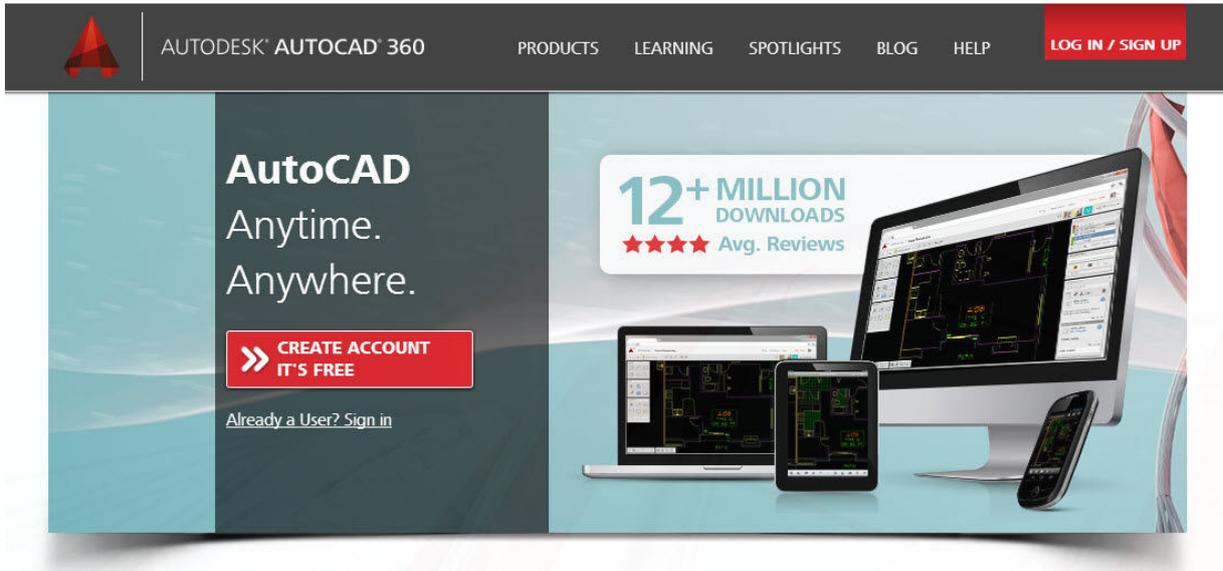


Fig.2 – AutoCAD 360 webpage (using Google Chrome)

Initially, you will be logged in to the older AutoCAD WS. That's because AutoCAD 360 on the desktop in the browser is still in Beta (as of November 2013 – this may have changed by AU2013!). Click on the AutoCAD 360 promo button at the top of the AutoCAD WS screen.

If you look at Fig.3 below, it shows you where to click.



Fig.3 – AutoCAD WS screen at first login.

You will then end up in the AutoCAD 360 browser based application, where there is still an option to go back to AutoCAD WS if you prefer (see Fig.4 overleaf).

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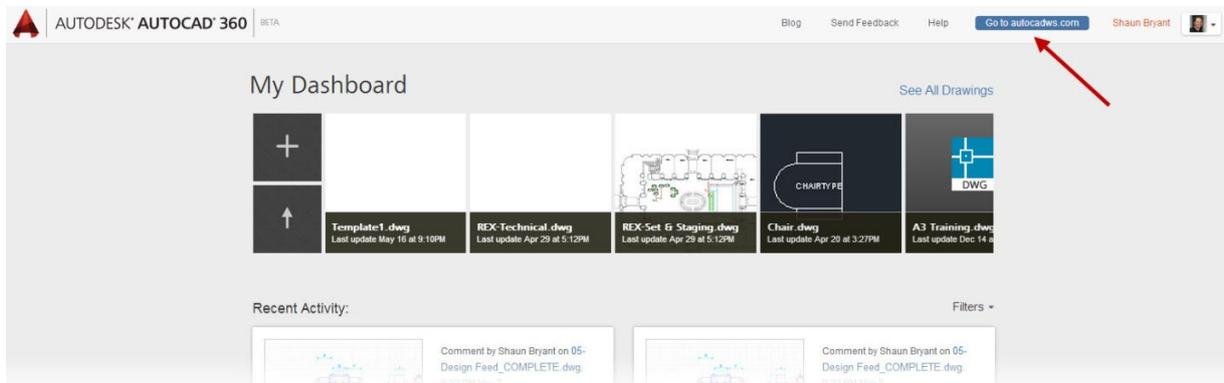


Fig.4 - The AutoCAD 360 front screen in your browser

### 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 Autodesk 360. Then, back at the office (sigh), your changes are in the file and you can then download from Autodesk 360 to your desktop.

## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

### 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 **Autodesk 360** cloud-based account. This is a free utility 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>.

Autodesk 360 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 Autodesk 360 by signing in to your 360 account via AutoCAD.

*(Note that this example assumes that you have already UPLOADED your drawing of the same filename to your Autodesk 360 account).*

Using your Infobar in AutoCAD (top right), sign in to Autodesk 360 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).

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

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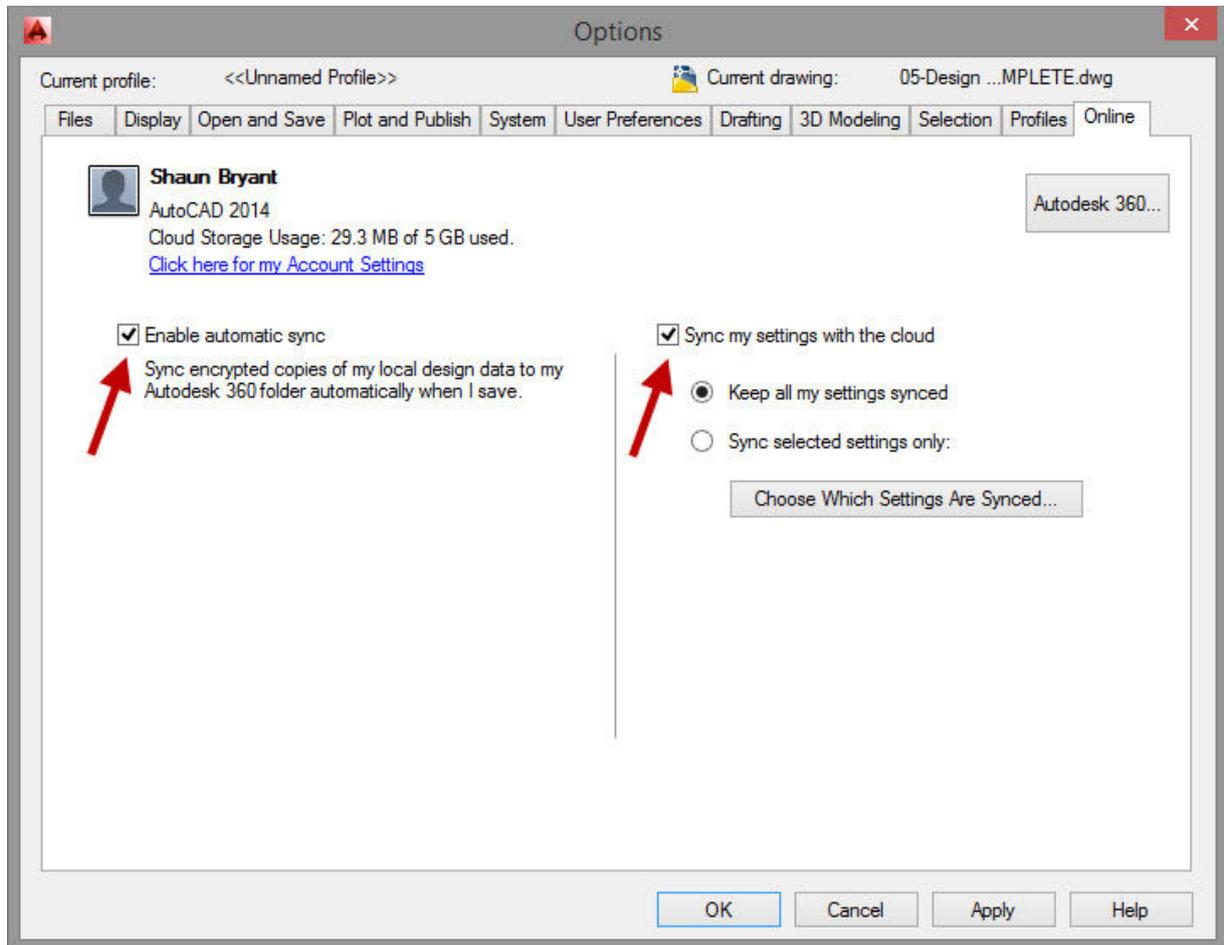


Fig.5 - Autodesk 360 settings in the AutoCAD Option dialog box

### 3. Mobilizing Your Desktop

So now you have your drawing saved on your PC desktop **AND** in your Autodesk 360 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. **Autodesk 360** - open up Autodesk 360 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.

## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

### *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 Autodesk 360 against the drawing and also show on the drawing when opened in AutoCAD 360.

So when you are back in the office, open up Autodesk 360 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.

# Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

## 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 Autodesk 360 help them? What benefits do they get?

Sharing files through Autodesk 360 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 Autodesk 360

Once you are logged in to Autodesk 360, 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.

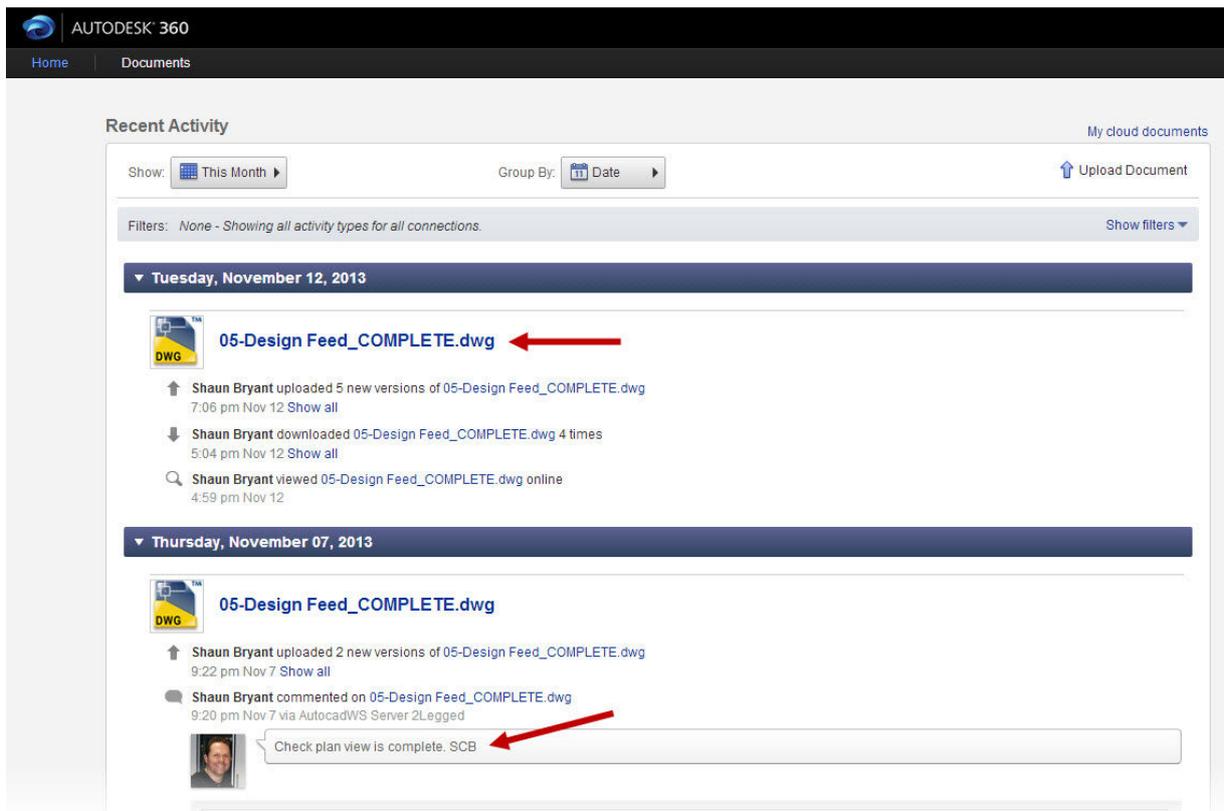


Fig.6 - Autodesk 360 document list, showing the most recently uploaded drawing and a comment made using the Design Feed

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## Using The Design Feed To Collaborate

Design Feed is everywhere! By default, when you open AutoCAD 2014, it is there. When you open up AutoCAD 360 on any device, it is there. And any Design Feed comments show up in Autodesk 360 in the Documents list too (see Fig.6 on the previous page).

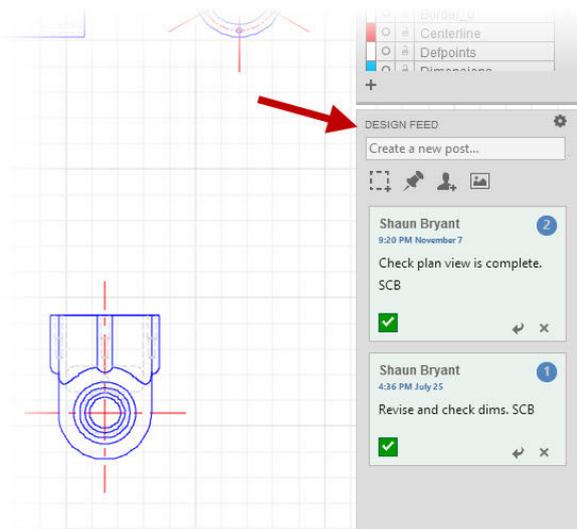


Fig.7 - Design Feed (arrowed) in the desktop browser version of AutoCAD 360

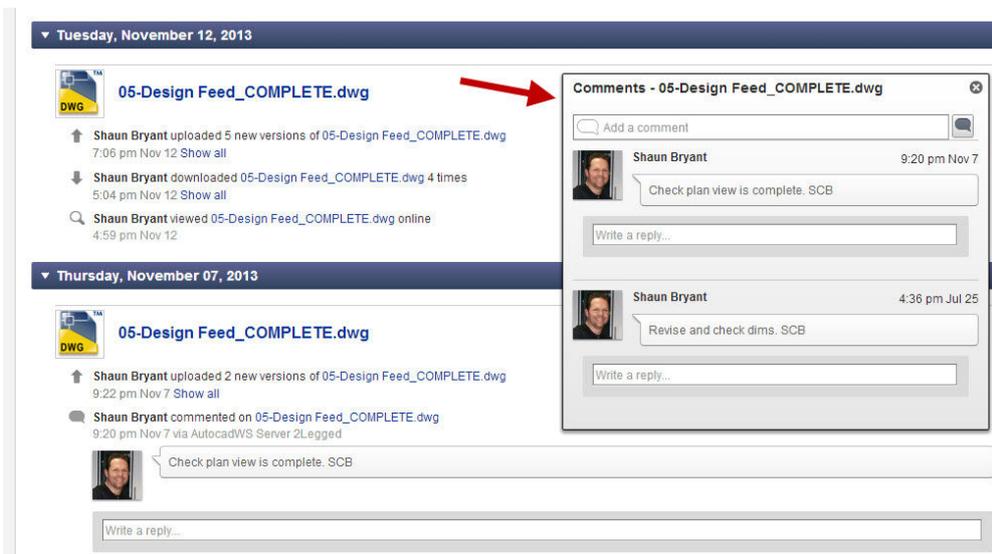


Fig.8 - Design Feed (arrowed) in the desktop browser version of Autodesk 360

# Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

## Sharing Drawings With Your Design Team

Sharing designs with your team is also very easy. Using the Share facility via Autodesk 360, 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 Autodesk 360 viewer, or via AutoCAD 360.

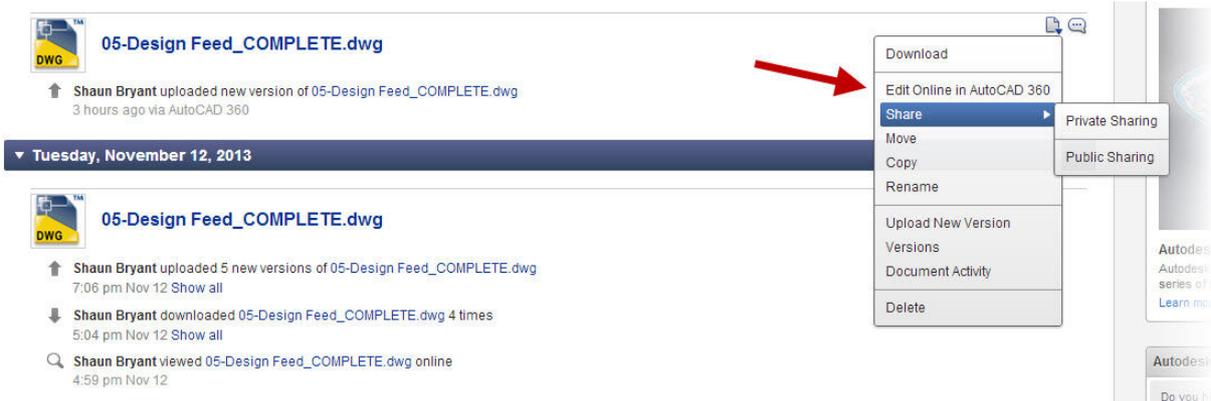


Fig.9 - Sharing drawings (and documents) via the Share facility in Autodesk 360

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 Autodesk 360 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.10 below).

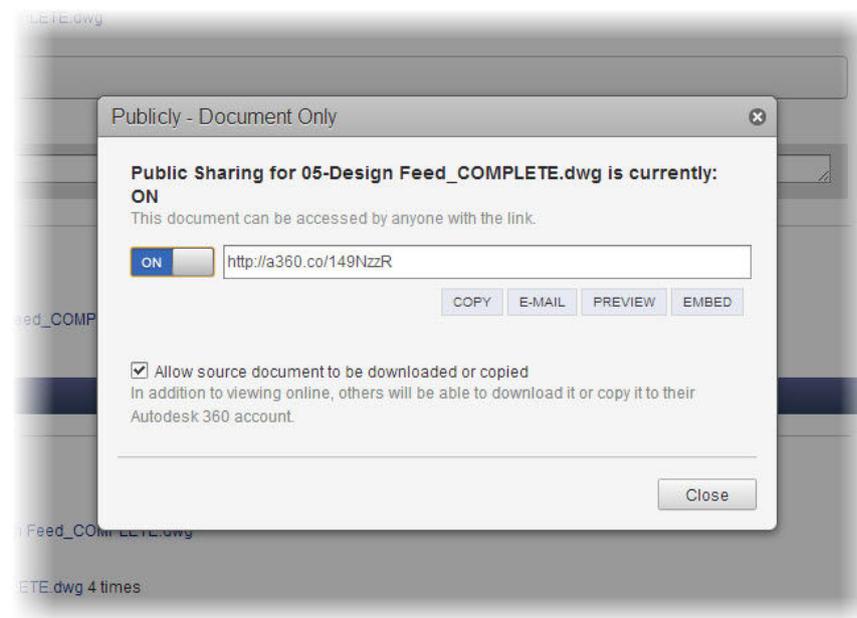


Fig.10 - Sharing a file publicly via Autodesk 360

## **Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business**

So, as you can see, not only do Autodesk 360 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.

## Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business

### 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? Autodesk 360 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.

Consider this.

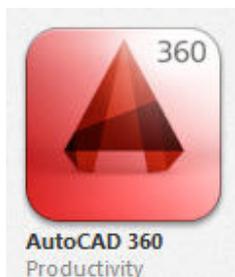
One tablet device with mobile and Wi-Fi built in would save you having to carry ANY drawings with you whatsoever. No more redlining with a red pen on a drawing held down on your car bonnet (hood) with bricks. It can all be done electronically there and then. Think about the cost saving here. Surely that 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; Autodesk 360 and AutoCAD 360.



**Autodesk 360 in the Apple App Store**



**AutoCAD 360 in the Apple App Store**

## **Expanding Autodesk AutoCAD Beyond The Desktop To Empower Your Small Business**

### **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

Autodesk 360 provides the following: -

- Cloud-based drawing and document storage up to 5GB (25GB+ with Subscription)
- A design hub for your AutoCAD 360 users
- Sharing of design ideas
- Collaboration
- Tools similar to social media to allow for quick easy discussions and comments on designs and drawings

Mobilize your AutoCAD desktop with Autodesk 360 and AutoCAD 360.....NOW.

### **Contact**

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