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One AutoCAD – There can be only ONE?

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Learning Objectives

- Discover the One AutoCAD subscription and its associated toolsets
- Learn how to work with One AutoCAD toolsets and deploy them to your AutoCAD team
- Learn how to develop and implement a workflow around the One AutoCAD toolsets
- Learn how to develop, implement, and enforce a training program around the One AutoCAD toolsets

Description

One AutoCAD became available to AutoCAD subscription customers when AutoCAD 2019 software became available in March 2018. AutoCAD subscription customers can now work faster with specialized AutoCAD toolsets, which include industry-specific features and libraries for architecture, mechanical design, electrical design, and more. A subscription to One AutoCAD enables automation of floor plans, sections, elevations, and other drawings; accurate design of piping, plumbing, and ducting for faster design with mechanical tools; and design of ductwork, electrical conduit, and circuiting for HVAC, plumbing, and electrical with MEP. Shaun Bryant, AutoCAD guru and AutoCAD Influencer, will take you through the benefits of the One AutoCAD subscription, demonstrating how to utilize the toolsets and make them available to your AutoCAD design team, regardless of discipline and industry.

Speaker(s)

Shaun Bryant is an Autodesk Certified Instructor in both AutoCAD and Revit Architecture with sales, support, and technical expertise, CAD managerial skills, with a total of 30 years of industry experience. Shaun has worked as a consultant, trainer, manager, and user, all of which helped him develop a diverse skillset. His career has included 18 years as a CAD, BIM and facilities management consultant and trainer; with the earlier years of his CAD career in sales, pre-sales, and business development; and industry experience as a CAD manager/user. Shaun has been a director on the board of Autodesk User Group International (AUGI) and he is also the author of the reputable CAD blog, Not Just Cad! He is a seasoned Autodesk University (AU) speaker and was the AutoCAD expert at the inaugural Autodesk University London in June 2017. He is also an Autodesk University Speaker Mentor and an AutoCAD Influencer. He is also the author of the recent Wiley

title, 'Tinkercad For Dummies', and is known to dabble in a bit of rock 'n' roll as an established singer/songwriter. Shaun lives in Norwich in the UK and is the owner and director of CADFMconsultants Limited.

Introduction

Some of you may know me as the AutoCAD guy who does all the AutoCAD video learning over at LinkedIn Learning (previously Lynda.com). I often get the “Are you the LinkedIn guy?” or “Are you the Lynda.com guy?” and its normally because they recognize my voice before they recognize me physically, which (sometimes) can feel a bit strange!

I’m also the owner of the blog, **Not Just CAD!**, which you will find here: -

<http://cadfmconsult.wordpress.com>

I often blog about all things CAD and sometimes other stuff, and you will find that I am currently writing a series of One AutoCAD blogs, the first one being all about the One AutoCAD release back in March of this year.

<https://cadfmconsult.wordpress.com/2018/03/22/autocad-2019-there-can-be-only-one/>

So, let’s get going, shall we? And get you up and learning about One AutoCAD!

1. Discover the One AutoCAD subscription and its associated toolsets

My initial blog about One AutoCAD started with the premise about those of you who are old enough to remember the movie Highlander, and when the Quickenings starts there can be only one. Apart from the stunning Queen soundtrack, it was a great movie, and Connor MacLeod (actor Christopher Lambert) of the clan MacLeod was THE one, combined with incredible support from Sean Connery as Juan Sanchez Villa-Lobos Ramirez, who (unfortunately) does lose his head.

As they say in the movie, it's a kind of magic.....



Christopher Lambert as Connor MacLeod of the clan MacLeod

And, I have to say that the Queen soundtrack to the film **IS** most excellent!



19 songs, 1 hour, 29 minutes

Shuffle

A Kind of Magic (Deluxe Edition)

Rock • 1986

✓ DOWNLOADED ...

DISC 1

1	One Vision	5:10
2	A Kind of Magic	4:24
3	One Year of Love	4:28
4	Pain Is So Close To Pleasure	4:22
5	Friends Will Be Friends	4:13
6	Who Wants To Live Forever	5:17
7	Gimme the Prize	4:35
8	Don't Lose Your Head	4:38
9	Princes of the Universe	3:32

DISC 2

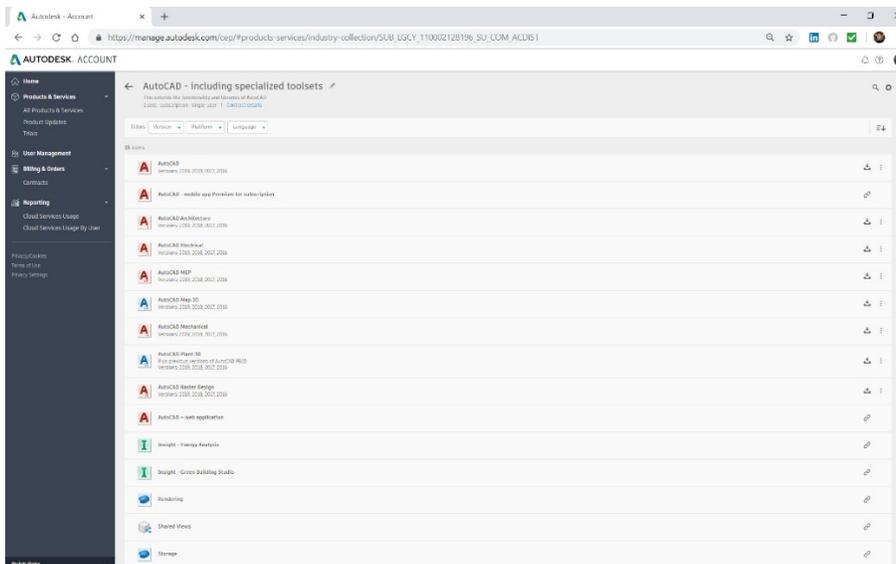
1	A Kind of Magic (Highlander Version)	4:23
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ONE AutoCAD

In the world of AutoCAD 2019, we have only **ONE** too. When you subscribe to AutoCAD, you get **ONE** subscription, but the many faces of AutoCAD; Architecture, Electrical, Mechanical and MEP. This not only gives you a specialized AutoCAD by allowing you to work in various disciplines and verticals, but also gives you various workflow improvements too.



When you log in to your account portal, you will see that it has changed and the view of your subscribed AutoCAD you get now is one (pardon the pun) of many, listing all the products under your main AutoCAD subscription. You will also find that the view of AutoCAD in your Autodesk Desktop App has changed as well.



What's nice here is that you can select all the AutoCAD's to be trialed or you can select individual flavors of AutoCAD to be trialed. This is especially advantageous if you are already a vanilla AutoCAD user and want to test a specific flavor of AutoCAD to see if it fulfills your needs and requirements. For those of you that just want all the flavors, but for one price, it is a great move by Autodesk also.

On your desktop, each flavour of AutoCAD will still have its own individual icon (just to clutter your desktop, I guess...an untidy desktop is a sign of a great mind, right?), plus, there will be no change to the DWG Launcher. You know, that little gizmo in Windows that allows you to open all DWG files using AutoCAD as the preferred application to do so.



My AutoCAD desktop icons in a Fence (Fences is an app by Stardock Software)

So, what does this mean?

Does AutoCAD now install as ONE application with all these flavors available as ribbon tabs perhaps, in the same way Revit now has Architecture, Structure and MEP all under one roof (pardon the pun)?

Simple answer, no. One AutoCAD is not made to be used that way.

One AutoCAD is there so that all AutoCAD users can use their ONE AutoCAD that fulfills their needs; architects can use AutoCAD Architecture, engineers can use AutoCAD Mechanical, electrical and instrumentation techs can use AutoCAD Electrical and so on.

Let's go back in time to 2012. I was at the Autodesk Media Summit held in the Autodesk HQ in San Francisco. I can always remember the now ex-CEO of Autodesk, Carl Bass, stating back then that he wanted Autodesk products to be a 'toolset', like tools in a toolbox, or like a Swiss army knife, where you chose the appropriate tool or blade to perform the required function. That's what One AutoCAD does. With ONE subscription, you get all the AutoCAD 'toolsets' or blades, should you prefer my Swiss army knife analogy.

Toolsets

If you look at the screengrabs below of the One AutoCAD on the licence management screen, followed by the numbered list of each toolset, you will see that I have numbered the AutoCAD toolsets available under the One AutoCAD licence: -



AutoCAD - including specialized toolsets (15) 

1 seat · subscription · single-user

New

	AutoCAD Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	1
	AutoCAD - mobile app Premium for subscription	2
	AutoCAD Architecture Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	3
	AutoCAD Electrical Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	4
	AutoCAD MEP Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	5
	AutoCAD Map 3D Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	6
	AutoCAD Mechanical Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	7
	AutoCAD Plant 3D Plus previous versions of AutoCAD P&ID Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	8
	AutoCAD Raster Design Versions and availability: 2019 (all devices), 2018 (all devices), 2017 (all devices), 2016 (all devices)	9
	AutoCAD – web application	10

The toolsets are as follows: -

- AutoCAD 2019
- AutoCAD – Mobile app (Premium)
- AutoCAD Architecture
- AutoCAD Electrical
- AutoCAD MEP
- AutoCAD Map 3D
- AutoCAD Mechanical
- AutoCAD Plant 3D
- AutoCAD Raster Design
- AutoCAD – Web application

So, there you go. There can be only **TEN**, not just one like in Highlander.

Ten AutoCAD's. All available as **ONE** subscription = **One** AutoCAD.

2. Learn how to work with One AutoCAD toolsets and deploy them to your AutoCAD team

So, let's look now at some of the toolsets and how we can work with them and talk about some tips that will give you a quicker deployment to your team.

Web and Mobile

There have been some great improvements in AutoCAD 2019.

One of these is the ability to save your desktop AutoCAD designs directly to the AutoCAD web app and the AutoCAD mobile app. If you go to the Quick Access Toolbar (top left of the desktop AutoCAD application window), you will see the new icons there that not only provide you with the facility to save to the Web & Mobile cloud folders but also go directly to those saved cloud-based designs and open them directly in the AutoCAD desktop again as well.

What's new with the AutoCAD web app and the AutoCAD mobile app?

The AutoCAD web app is much enhanced to give a highly sophisticated browser-based AutoCAD interface that is quicker and faster. I won't bore you with the techie stuff, but suffice to say, you will be using the equivalent AutoCAD executable (EXE) in your browser, the same as you would be on your desktop. This makes for a much-needed boost to what was (sometimes) quite a jerky, laggy web-based application in the past.

You will find the AutoCAD web app at web.autocad.com and if you are using the subscription version (it comes with full AutoCAD and One AutoCAD), you get a great new command panel incorporating some of the more familiar AutoCAD drafting icons, just like the AutoCAD desktop app.

What's also new is the referencing capability of the AutoCAD web app. You can add reference drawings (XREFs) at your leisure, and if they are saved in the cloud in the same location as the host drawing, using the save to Web & Mobile options in the AutoCAD desktop app and they will operate in the same way as relative XREFs that you might use locally.

Something I love (yes, love, not just like) is that you now have the native AutoCAD window and crossing selection tools in the AutoCAD web app. They work in the same way as your AutoCAD desktop app and provide a rounder user experience. We have grown used to these methods of selection, and it is great to see Autodesk taking the desktop user experience tools in to the web-based version. It is by no way perfect yet, but I can see the AutoCAD web app getting to a point where you're the AutoCAD desktop app will become fully mobile. The hardware is there now; such as the Apple iPad Pro and the Microsoft Surface Pro, that have the grunt under the hood to run the AutoCAD web app and the AutoCAD mobile app well.

What makes the AutoCAD web app even more like the AutoCAD desktop app is that there are even some keyboard shortcuts included as well. I mean, come on, who doesn't love a keyboard shortcut or two? Trust me, as a seasoned AutoCAD user (thirty years this year), I am a big fan of keyboard shortcuts!

Using other AutoCAD toolsets

Whilst you might have a One AutoCAD subscription, you do not need to be running all the AutoCAD toolsets all the time. The whole idea of One AutoCAD is that you have a 'toolbox' of AutoCAD's, all of which perform different functions as per your needs and requirements. For example, if you need to do some architectural work, you would run the AutoCAD Architecture toolset. If it was mechanical work, the AutoCAD Mechanical toolset and so on.

One AutoCAD brings all the AutoCAD flavors together in the one place. This is a huge benefit, as you now only need **ONE** subscription for all of them. Deployment becomes easier that way, and should the need arise for one of your CAD team to use another AutoCAD flavor, the toolsets are readily available.

Installation

How do you install your One AutoCAD? Well, it's simple. You install it just like you used to, in fact. You install vanilla AutoCAD if you need it. You install AutoCAD Raster Design if you need it. The only two exceptions to this are the AutoCAD web app and the AutoCAD mobile app (for obvious reasons).

You simply download the specific toolset of AutoCAD that you need. Run the install. Put in your serial number and product key and off you go. Situation normal.

Yes, there is a little bit of crossover in the AutoCAD universe. You will find that AutoCAD Raster Design will sit nicely in your vanilla AutoCAD installation with the usual Raster Tools tab on the AutoCAD ribbon.

You can utilize blocks and move them between drawings using DesignCenter or Tool Palettes. You can use the Windows clipboard to copy and paste, but there's no **BIG** AutoCAD interface in a single AutoCAD application that covers all the toolsets. However, there's nothing to stop you running a session of vanilla AutoCAD and AutoCAD Electrical and moving blocks between the two. That's how One AutoCAD works. So, I hope now you get what I am saying about the toolbox/Swiss army knife idea when you install what you need.

Before you do install your One AutoCAD though, there is a fantastic time saver on the official AutoCAD blog from Marcus O'Brien from the Autodesk team. If you use the **Install Now** option from your product management page, the AutoCAD installer will check if you already have vanilla AutoCAD installed and will only install the parts of the toolset that you need, thus saving download time and disk space!

And by the way, there is no need to install **EVERY** toolkit either. That is just AutoCAD desktop icon overkill. Yep, it looks pretty, but ask yourself, do you really need **EVERY SINGLE** AutoCAD toolkit installed? :-)

3. Learn how to develop and implement a workflow around the One AutoCAD toolsets

After the deployment of the toolsets you require from the One AutoCAD toolsets, you now need to consider a new workflow. If you are a multi-disciplinary practice, for example, you can now consider moving architectural work to the Architecture toolset, electrical work to the Electrical toolset and so on.

To do that, you need to think about several elements: -

The conversion of DWG files to the appropriate toolset

Various toolsets work with DWG files in different ways. For example, the Electrical toolset requires that all drawings be added to a project using prescribed template (DWT) files to ensure that all electrical data from the drawings can be extracted in to specific reports to known electrical standards.

This will require a change in the way you work that, initially, will require your team to make changes in their day-to-day workflows which will, over time, allow you to become more productive in your desired discipline; whether that be architecture, electrical, mechanical etc.

Setting up of recognized CAD standards for each toolset

Each toolset has built-in industry specific standards. These standards must be set up and adhered to, to get the required output that meets those standards. This will require a change in workflow standards too, to ensure that each project meets those standards required to achieve that output.

Again, this will require a workflow change. A typical example is the Architecture toolset. When moving from the standard AutoCAD desktop app, you can make the move to full 3D architectural modeling with the Architecture toolset, which will require a change in working methodologies. These will take time to transition and fall in to place, but the advantages will become apparent if your workflow changes are managed effectively.

Explaining the benefits of the AutoCAD toolsets to the powers that be

If you already have an established AutoCAD workflow, it may be that the higher powers in your organisation look at your suggestion of moving to a specific toolset as something that will cause problems and, more importantly, cost money.

It is imperative that you explain the benefits of the appropriate toolset and demonstrate measured studies for that toolset that show the time savings and benefits available. Autodesk provide case studies for this exact reason, so that you can highlight the time saved using an AutoCAD toolset against using your existing vanilla AutoCAD workflow.

4. Learn how to develop, implement and enforce a training program around the One AutoCAD toolsets

Full training in AutoCAD is essential, regardless of whether it is for your vanilla AutoCAD or for one or more of the AutoCAD toolsets. Training is a fundamental requirement and must be maintained to ensure a competent CAD team.

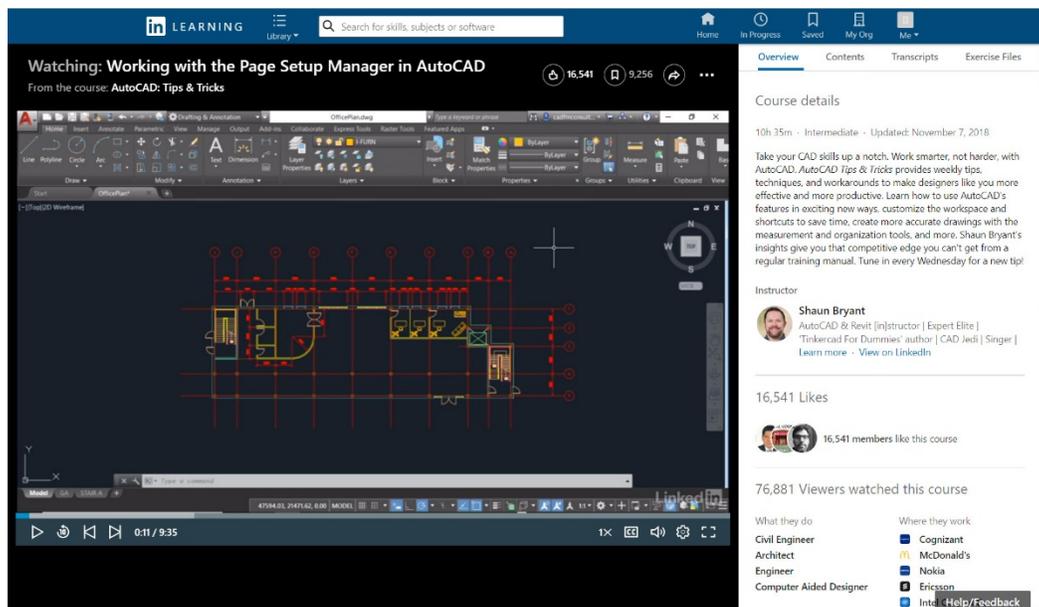
There's a quote I always use when I get countered by higher management about how training costs money and wastes operational time on chargeable work and I get asked,

"What happens if we train them and they leave?"

My reply is,

*"What happens if we **DON'T** train them and they **STAY**?"*

As an ex-CAD manager, I have heard pretty much every counter argument against training and learning. My biggest argument back nowadays is that training can be done without leaving your desk. As some of you already know, I am the AutoCAD [in]structor for LinkedIn Learning providing a full library of AutoCAD learning titles, ranging from beginner level upwards.



Online learning can be done at the speed and convenience of the learner. There are no expenses to cover apart from the subscription to the learning provider and the investment of the learner's time. No classroom to get to, no hotel and travel to cover.

This type of online training can allow you to manage, maintain and monitor your CAD team's training and learning progress and suitable training and learning methodologies can be put in place to benchmark their progress; including using the online training to get staff through their Autodesk Certification examinations.

I will, however, stress that online training should **NOT** replace classroom training! Look at where you are, right now at this moment. You are in a classroom at Autodesk University! People always learn from people, whether that be instructor led training, from your peers at work, or even just from talking to others at (say) a User Group meeting. Learning is a blended process, where **ALL** aspects of learning combine to make you a more rounded CAD user. Consider checking out my other AU class this year: -

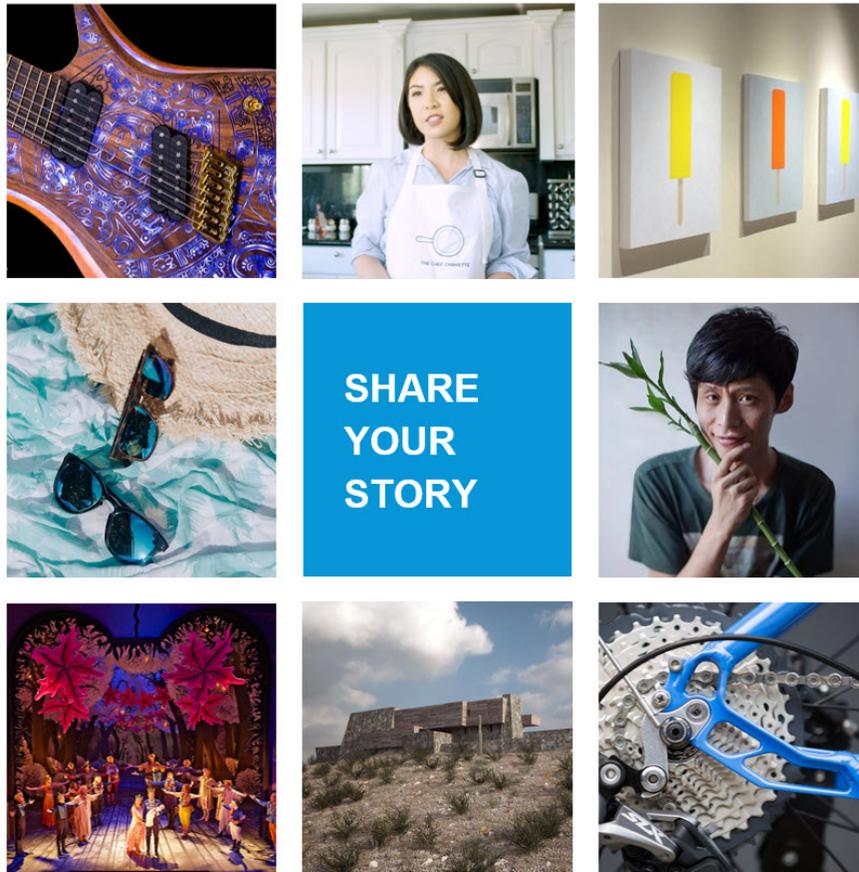
AS196992 - How Do YOU Learn?

This class takes you through the many aspects of learning and how **YOU** are the learning **INTERFACE**.

Learning allows you to become a fully-rounded user of AutoCAD and all its associated toolsets, and, providing you have an Autodesk account and internet access, you can utilize your One AutoCAD subscription to make sure you have your AutoCAD 'toolbox' available at any time for you and your AutoCAD team.

One AutoCAD gives you, as a designer, an incredible amount of flexibility and, more importantly, the ability (and mobility) to, quite literally **MAKE ANYTHING, anywhere**.

AutoCAD needs YOU!



Want to be featured by AutoCAD?

We want to hear your story!

Go to: autode.sk/autocadstory

The AutoCAD team is looking for more stories from customers like you to share on the website, blog, and in marketing materials. I'm sure all of you here can think of a cool project you've worked on using AutoCAD that could be featured. Get out your phone and put in this link: autode.sk/autocadstory to submit your project. AutoCAD is looking for a variety of stories from all different parts of the world, so I encourage you to fill out the link and get your work featured.

Thank you for attending my class!

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