Remote Working

For CAD users it is not simply a case of being granted access to storage data or documents etc. We have therefore put together some guidance below for the use of Autodesk software which has a few more factors to consider, namely:

Home use license rights, or license usage on machines other than your office machine.

Depending on your license type and contract plan, you will have different rights to using the software on other machines i.e. on a home machine or laptop. In most cases installing and activating via sign in or serial number is easy enough to get you access, and think nothing of it at the time, especially when you need to get up and running outside of the office.

However, it is important for contract managers, and company directors to be aware of staying within license compliancy of the software – to find out more about the home use rights for each license type read our blog post here *(link to Home Rights Blog).*

Remote machine performance and hardware spec.

Softwares such as Revit, 3DS Max, Navisworks etc have a greater need for more powerful machines and graphics cards, to keep up with their computational and graphical demands, especially when dealing with large datasets and models. If you need to use these programs, you need to be aware if the machines you will be using away from the office are suitably equipped for them.

Generally, most office members have desktops the laptops made for high performance tend to be quite thick and heavy to house the necessary hardware to run optimally, and more expensive than laptops available to run graphic lite programs such as Office or AutoCAD etc.

These days there are now many methods of being able to work from home and having access to your office networks and machines – you do not need to have high end spec laptops/desktop either, Solutions like Remote desktop can be run on lower end machines too.

The few we would consider as options require some thought to implement and use successfully:

VPN – Virtual Private Networks can be used to link you directly into your office LAN network, a straight connection to your data. This is seen as secure, since there is no other party accessing through that connection. You may have firewalls in place that allow this connection through and only certain devices access to it, authorised by the company. It works well if you have a laptop you work both in the office and take home.

Using Remote Desktop solutions such as Windows Remote Desktop Service, Teamviewer for example allows you to utilise the VPN secure connection and access your office machine and Windows profile – you can view your desktop in the office through your home machine, through the Remote Desktop Client software window. This eliminates the need to install or activate CAD softwares on your own machines. For many is the least inconvenient way to carry on working.

Users will be advised they can do this using their personal devices, so no need for extra cost on hardwares, but this can open security vulnerabilities, as not each device can be controlled by the company firewall. You may need to potentially install extra VPN hardware that the connection goes through on each end, that utilise antiviruses and other prevention systems to ensure you are accessing safely. The setup of VPN or RDC method is best done by your IT department or services provider.

Cadpoint Limited, 34 Wellington Business Park, Dukes Ride, Crowthorne, Berkshire RG45 6LS
Tel: 01344 751300 **Email:** sales@cadpoint.co.uk
Web: www.cadpoint.co.uk

While Autodesk do not consider this as breach of compliance, they don't provide support for this method of access, because of the performance related issues you may face. Factors like internet connection, and bandwidth at your home will play a big part in maintaining the connection a at good level to continue working. AutoCAD (LT) can work ok, but the usability depends on the drawing and model sizes in question. On top of this you may find that lower end spec machines will experience lagging or delay with the screen, especially for graphics power hungry 3D softwares like Revit, 3ds Max and Navisworks etc.

If you are trying to access and sync to a workshared project in Revit, the added issues of connection and intermittency can cause corruption in your central model, making it inaccessible to other users, having an adverse effect on productivity.

Cloud based solutions

The main issues around working from home can be getting stable access to project or model files and folders. If you are continually travelling, or do not have VPN in place, you can use the Autodesk Cloud storage options available to subscription customers.

Autodesk Drive is the successor of A360, a cloud storage solution that allows individuals and small teams to organize, preview, and share any type of design or model data. Included in every subscription license, it offers 25GB of storage

space for you to upload and share your project information. Using the Desktop Connector app you can view and browse through the drive as you would in File explorer, and save, open the models and drawings directly within Autodesk products.

Simply go to drive.autodesk.com and sign in to get started.

Revit Cloud Worksharing using BIM360 Docs and Design

This is an optimal way to get secure and collaborative workflows up in the cloud. You have the features of a workshared project and much more, including being able to co-author and collaborate in real time.

Cadpoint Limited, 34 Wellington Business Park, Dukes Ride, Crowthorne, Berkshire RG45 6LS
Tel: 01344 751300 **Email:** sales@cadpoint.co.uk
Web: www.cadpoint.co.uk

BIM360 Docs platform acts your single source of truth, which manages and maintains a clear audit trail of all documents and data in the system, with easy to access version control.

BIM360 Design opens the possibilities of working simultaneously and together on a model, with comments, markups, real time editing tools, boosting productivity compared to working in traditional central files. The access to the model is quick and easy, for the designers and architects it doesn't change, they can open and edit from within Revit as normal. But the added access for non Revit users through the web portal allows for better communication between teams and disciplines, accelerating the project workflows.

Each user does require their own BIM360 Design or Docs license to work on a Cloud Worksharing project, but with that can work anywhere anytime on the model, and on as many projects as they can.

Check out our BIM360 page for more details.

There are many other cloud solutions that claim to work well with Autodesk products and CAD files, Dropbox, OneDrive etc.

A lot of users already use online storage boxes to store their documents and drawings in the cloud, and are able to use this to share these with customers and colleagues. Setting permissions can control project access, and you can store open many different file formats directly from it.

Autodesk have some thoughts on using Sharepoint as the cloud based document control solution - please see the article here.

You will find firms using external apps such as CADtoWIN to make the connection smoother, but this is a separate paid for subscription.

All these topics discussed can help towards getting you and your colleagues up and running away from the office with minimal disruption to your work and business.

 If you require any additional support please contact info@cadpoint.co.uk

Cadpoint Limited, 34 Wellington Business Park, Dukes Ride, Crowthorne, Berkshire RG45 6LS
Tel: 01344 751300 **Email:** sales@cadpoint.co.uk
Web: www.cadpoint.co.uk