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How to Choose the Right Storage Provider for My AutoCAD

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Learning Objectives

- Get an overview about the AutoCAD mobile solutions and their connection to cloud storage providers.
- Learn how to configure AutoCAD applications for cloud storage providers.
- Benefits of cloud storage providers.
- Learn how to discover which cloud storage provider fits best for you.
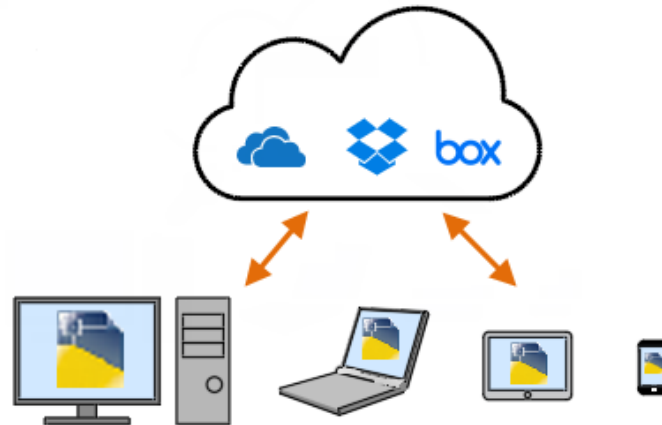

Description

There are few cloud storage providers out there. Come and see how you can use Box, Dropbox, Microsoft OneDrive, Google Drive and BIM 360 for the AutoCAD Desktop App, the AutoCAD Web App and AutoCAD Mobile App.

Speaker(s)

Thomas Stuehle works for Autodesk Technical Support supporting AutoCAD Map 3D, AutoCAD Desktop and the AutoCAD mobile solutions. With studies in Surveying and Geoinformatics, Thomas has a solid education towards Geographic Information Systems and works in this field since 20 years. His experiences working as a Application Developer, Software Trainer and Technical Sales paved the way towards Autodesk 5 years ago. Outside of Autodesk and GIS, Thomas enjoys being active outside, hiking in the mountains and doing all sorts of sports with his young family.
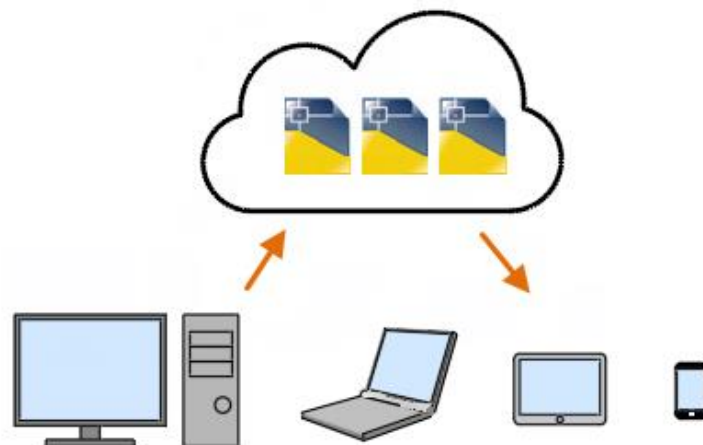
Introduction to digitization and cloud storage providers

Going digital can be a game changer and transform your business. But the journey to a digital transformation can be challenging to navigate, especially fot those just getting started. This class will help you define your first steps in digitization to save your drawings to the cloud account for remote access from different platforms and additional backup security.
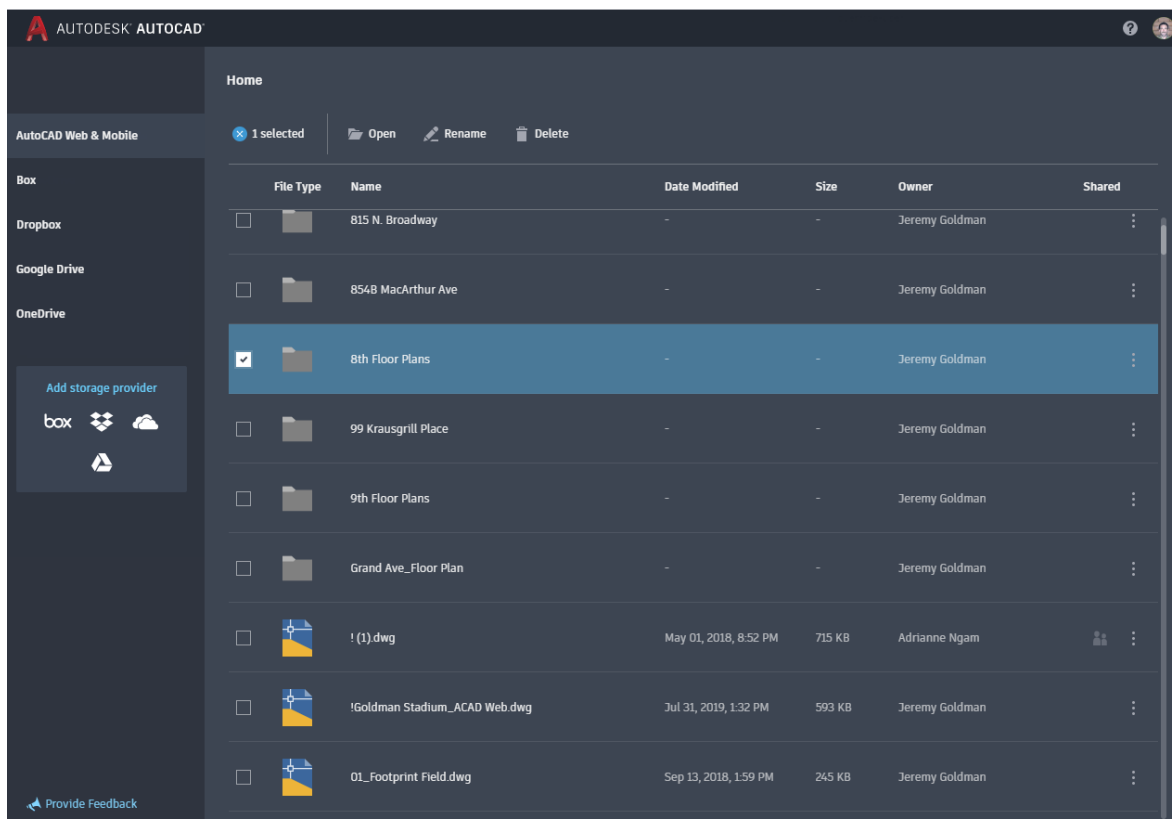

You can easily access your drawings from any location in the world with internet access on any device – desktop, web, or mobile.

When you save drawing files to your Autodesk Account, you get convenient access to your drawings as an alternative to emailing the drawing files to yourself or saving them to a USB flash drive. Your drawing becomes accessible for viewing and editing from any of your internet-connected devices, such as a tablet when you are in the field, or from a web browser on a different desktop computer in a remote location.

AutoCAD Web & Mobile (File Manager) – a cloud storage solution connected to the Autodesk Account

AutoCAD 2019-based and later desktop products support the ability to save files and to open files from AutoCAD Web & Mobile (also known as File Manager). Save to AutoCAD Web & Mobile allows the easy sharing of drawing files through AutoCAD without the use of a third-party storage provider.

The File Manager is the location which is connected with the AutoCAD Desktop Application through its two functions SAVETOWEBMOBILE and OPENFROMWEBMOBILE. It can be accessed when loggin into the AutoCAD Web App. When using these functions you can save or open drawings in AutoCAD Desktop to the File Manager. When you subscribe to an AutoCAD-based product, you can use this functionality from any remote location in the world with internet access, and on any desktop, web, or mobile device. These command is similar to the SAVEAS and OPEN command except that the default save location is set to the AutoCAD Web & Mobile folder of your Autodesk Account and can not be changed.

Saving the drawings to the File Manager, which is connected to your personal Autodesk Account, makes the drawings only reachable for you. If you feel like you would like to make your drawings accessible for other people this might create a need towards cloud storage providers.

The primary benefits of using a cloud storage provider

Over the past few years, cloud storage services and providers have increased in popularity considerably and are now the file storage medium of choice for many businesses everywhere. Cloud storage is merely a platform where data is stored on remote servers that users access through a network (which is usually the Internet). A cloud storage service hosts and provides the servers for users so they can store their files in the cloud and access or share them as needed.

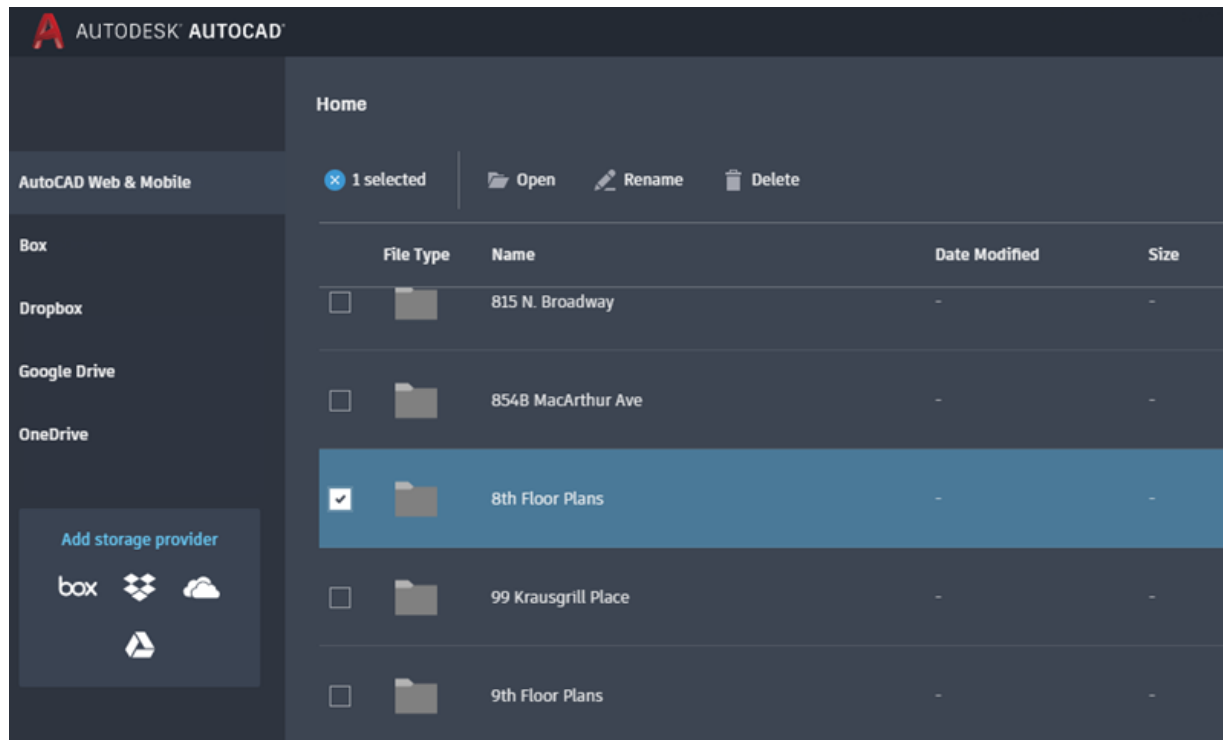The primary benefits of using a cloud storage provider include the following:

- **Accessibility**. By far, the most convenient feature of a cloud storage provider is the ability to access files worldwide with an internet connection. When local servers are inaccessible due to flooding, fires, and other emergency events, you can still access your drawings from a different location.
- **Collaboration**. Not all storage providers offer collaboration features. But, with those services that do, online file sharing can be taken to a whole new level and allows to actually work together with colleagues, teammates or other companies.
- **Reliability**. Cloud storage providers distribute and manage backups on multiple servers in different locations.
- **Security**. Cloud storage providers invest far more resources to guard against file loss and intrusion than most companies and individuals can afford. You can also purchase encryption products to encrypt your files in your cloud accounts. Decommissioned servers typically go through a secure destruction procedure for both the data and the physical hardware.
- **History**. The files stored in your cloud account maintain multiple versions as they're saved. Previous versions of drawings are accessible for comparison from the AutoCAD Version History palette. Check with your cloud storage provider to determine how long previous versions are maintained.

Connecting to cloud storage providers

In the AutoCAD Web App File Manager a connection to the cloud storage providers Box, Dropbox, Microsoft OneDrive, Google Drive and BIM 360 can be build up. In the graphical user interface of the AutoCAD Web App all pieces come together and it gives a perfect overview of the available options.
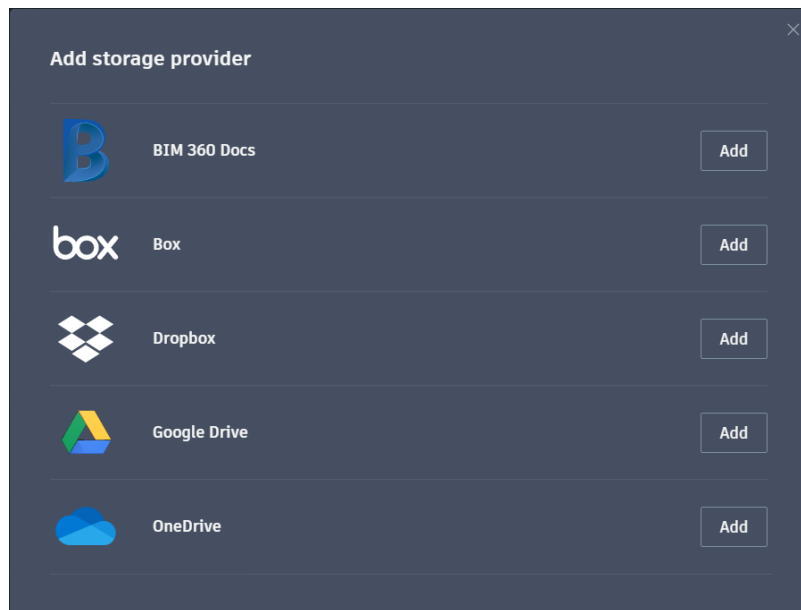
Cloud storage providers are not connected to each other. Based on this - with the functionality to connect to the cloud storage providers, we are not **"eliminating data silos"**, but we are able to bride them and to connect to them in one central application.
Looking at the storage providers and mentioning data silos, BIM 360 can be excluded. BIM 360 docs has itself a special position. Because of its power and flexibility it can eliminate data silos when data from these silos can be migrated into BIM 360.

The connection to the cloud storage providers needs to be done for AutoCAD Desktop, AutoCAD Web App and AutoCAD Mobile separately. Both, the Web App and the Mobile App can directly open from and save to the cloud storage providers.

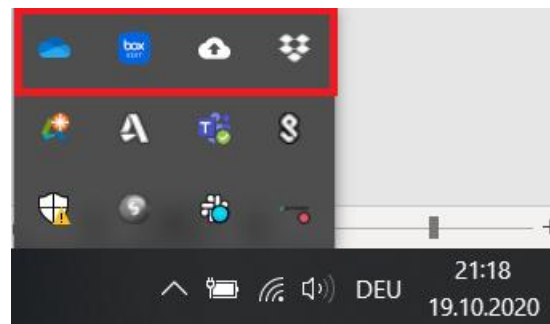Connection via AutoCAD Web App:

Connection via AutoCAD Mobile:

The AutoCAD Desktop App can not directly connect to the cloud storage provider. It works a bit different - with a sync client installed on the same computer.

Working with a Sync Client

To use a cloud storage with your AutoCAD-based application requires installing a sync client application from that cloud storage provider on your computer and then logging into your cloud storage account with that sync client application.

A sync client is a small background program that synchronizes the data you create on your computer with the data you store in your cloud account. The program is visible as an icon in the Windows Task bar, which is in the lower right corner of your screen.
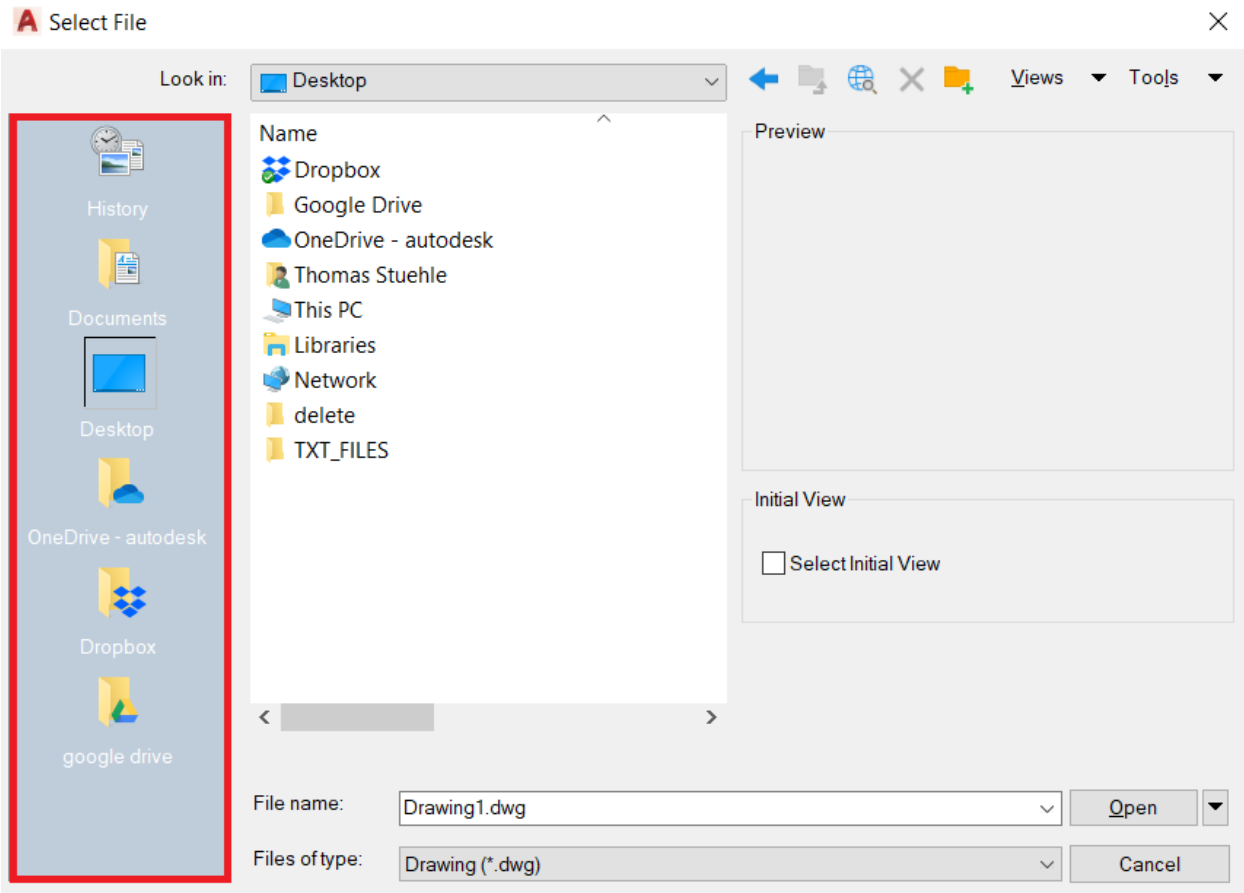

When you subscribe they will post instructions for downloading and installing their sync client on your computer. The Microsoft OneDrive sync client is installed by default on Windows 10, but other providers typically have a Download, Install, or Drive page.

File Handling and Syncing

There's an interrelationship between what AutoCAD-based products control and what cloud providers control.

When you use cloud storage on a desktop computer, Dropbox, Box, Microsoft OneDrive and Google Drive all interact with a local "cache" of your drawing files on your computer.

This arrangement optimizes the speed of file operations. When you open or save a file, AutoCAD-based products operate the same as opening and saving your files to your local hard drive. Then, at some point after you save your changes to your desktop computer, the third-party sync client will save back ro "sync" your changes to your cloud account. When and how the file sync occurs is implemented by the third-party sync client and is not under the control of your AutoCAD-based product.

Benefits of cloud storage providers

The top advantage of cloud storage providers is easy collaboration and seamless workflows on any device.

Collaboration

Picture this: there's a group of people working on a major presentation a general idea of what the presentation is about, so team members decide to tackle their sections separately and plan to get together to combine their work.

But problems arise when the team meets to put together their chapters. While ach person did well with their respective assignments, the finished presentation lacks cohesiveness. And because some members were unaware of certain changes and updates, the presentation was filled with inaccurate information.

It is quite obvious where the team went wrong. Each member was assigned their own "thing" and they ran off to execute without collaborating with each other.
Instead of this approach, the group should have synced and communicated more frequently with each other. They should have connected their workflows and established a single source of truth so that everyone was working with the same information.

Saving your data in the cloud and working with the data in the cloud allows all team members to access the same files also when you work on different locations.

Seamless workflows

Have you ever wanted to work in AutoCAD on any computer without having the software installed? Have you ever wanted to pull up a drawing during a design review meeting or while on a job site, but didn't have your work computer? The AutoCAD Desktop App, the AutoCAD web app and the AutoCAD Mobile App let you work with the same drawings saved in the cloud anywhere at any time.

You no longer need to be tethered to a specific computer. There is no software installation required since solutions run online in a web browser like Chrome or Firefox or on a mobile device. The user interfaces share similar design to that of the AutoCAD desktop with properties panels, a ribbon-like tool, and a command line.

As a reminder - the top advantages of embracing cloud technologies are as mentioned above:

- **Acessibility**: Providing access to data from anywhere at any time.
- **Collaboration**: Enabling collaboration across your enterprise.
- **Reliability**: Reduced internal infrastructure costs.
- **Security**: Extremely high invest in file loss and intrusion.
- **Costs:** Reduce admin overhead.
- **History:** Access to previously stored file versions.

Which cloud storage provider fits best for you

These days, when so many of us are working from home, having reliable cloud storage is more important than ever. It allows you and your teammates to work together on the same project even though your team is currently distributed.

There are some cloud storage providers out there – some are more common than others, but mostly they offer the same functionality: storage space in the cloud. But beyond giving you storage – they offer different functionality. How do you choose which one is right for you? You could just pick by how much free storage space you get. That is simple, but it is only part of the story and I would not recommend that.
You should pick the storage provider that fits to your current situation and the issue you would like to get solved. The real value from a cloud storage service comes from how well it works for you and your business. Ask yourself, what's the best cloud storage for you and your needs?

Here are some important questions that you should ask and answer before starting to search which storage provider fits to your needs.

1. *Why do you want to use cloud storage providers?*
2. *Which issue do you want to fix with the cloud storage providers?*
3. *Is it theoretically possible to solve this issue with cloud storage providers?*
4. *Until when do you need a solution?*
5. *Which consequences has it when you move on with "business as usual"?*
6. *How much time do you loose every time the issue appears, when you do business as usual?*
7. *Are you the only person affected by the issue or do your colleagues have the same problem?*
8. *How many of your colleagues have the same problem?*

Asking yourself these questions, helps you to find out the hard facts about the issue you are facing. It also gives you an idea of how much money your company looses, every time the issue appears. Summarizing this on a monthly or yearly basis could help to make long term decisions to solve frequent problems.

When you try to separate the storage providers from each other, some points to focus on are more important than others. Are aware of the fact that some of the details you find about certain cloud storage providers are standard. Looking at them does not help you to find the right storage provider for you. Some of them are listed below, so that you already know at which points you do not have to focus on when finding the right provider for you.

What does every cloud storage provider offer?
- Public file sharing
- Public folder sharing
- Online file preview
- Deleted file recovery
- PC sync application
- 2 step verification
- Automatic camera uploads mobile

Points that are more important to focus on, are topic where the answers are different depending on the provider. Here are some topics that are important to compare when checking the value of cloud storage providers for your needs:

- How much costs will you have?
- How much storage space do you get?
- Which operating system or mobile devices are supported?
- Where are the servers of the cloud storage provider located?
- Which file formats can be uploaded?
- Which formats do you want to edit in the cloud?
- Which apps do you need?
- Is there a file size limit?
- Do you have restrictions regarding server locations?
- Password restricted sharing links
- How long are files saved in the cloud?

Use these questions to find out which storage provider fits best for you. On the way, to separate cloud storage provider from each other and to compare them, I recommend online compare tools which compare the current state and functions of the cloud storage providers. Listing all details now would only be a screenshot of the situation at that certain time. Due to this, please take this presentation as a starting point for your research. One more reason is that the functions, contracts and technology constantly devlopes. Listing all current functions here today, could be outdated already tomorrow.

On your next step, please check online comparison websites like the following. It is just an example, so do not hesitate and search for other comparison tools online.

Compare tools

Researching all different topics and finding the provider which fits to your needs can be very difficult, time consuming and confusing. Due to this some people just pick some of the big names – which is in general not a bad thing to do.

A more reliable way is an online comparison tool like the following:
https://www.cloudwards.net/comparison/