

What is the cloud?

We hear about the cloud all the time, but what does it do and what are the benefits? Let's find out.

What is the cloud?

Let's start with an overview of what the cloud is, and how it works:

- The **cloud** is a word for computer services that keep data on the internet rather than on local computers or devices. It can also include computer services that process information online.
- The cloud is very common these days – you are probably already using it. Some examples of cloud services include web search, web-based email, the processing behind smart speakers, social media such as Facebook and Twitter, video streaming platforms such as iView and Netflix and, of course, cloud-based data storage.
- Cloud services run on special computers called **servers**. Hundreds of thousands of these are gathered together in **data centres** to provide these services.
- Some common cloud storage services include **Google Drive**, **iCloud**, **OneDrive** and **Dropbox**. You can copy files to these services, and your cloud account will keep them secure with your **username** and **password**.
- Cloud services are designed to keep your data secure and private, whether its stored for lengthy periods, or passing through briefly like recordings of your voice for your voice assistant. Staff of the cloud service can't see your files or photos.
- Cloud storage services usually offer a certain amount of free storage, accessible by a certain number of devices. You can increase the amount of storage to meet your needs by purchasing a higher-level account.
- You can manage your cloud storage using an app on your mobile device, or by logging in to the secure website from your home computer.



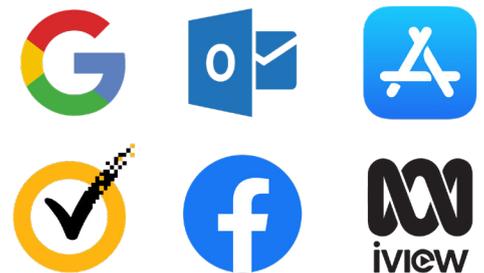
The cloud lets you store files on the internet, instead of on your devices

What is the cloud?

Things you might recognise in the cloud

The cloud is available wherever there's an internet connection, and from any internet-connected device. If you use a mobile device or computer regularly, the cloud is already a bigger part of your everyday life than you might have realised. For example:

- All web-based email services, such as **Gmail** or **Outlook.com**, hold your emails in the cloud, downloading them to your device as you need to read them.
- Likewise, social media services such as Facebook are in the cloud. When you look at a friend's Facebook page, you're looking at photos and messages stored in the cloud, not on their computer.
- Video streaming services such as Netflix or Stan, or catch-up TV services such as ABC iView are all held in the cloud.
- Finally, all the data that makes Google Maps and Apple Maps possible is held in the cloud, with the information you need downloading to your device as required to show you maps of interest.



The cloud is a big part of everyday computing and smart devices

Benefits of the cloud

Let's see why the cloud has become so useful to us in everyday life:

- You can back up your important files and photos to a cloud service. If your computer crashes, you'll still have access to your data.
- You can **back up** your smartphone to the cloud so that you can move easily to a new one. Once you've backed up your phone to the cloud service, you can then copy all its contents back to a new phone with a minimum of fuss.
- You can access all your files and photos that are on the cloud from any device. All you need to do is log in to your account from any computer or mobile device.



Moving your data to a new phone can be easy when you back up to the cloud

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- Some cloud services will hold all the photos from your smartphone, automatically uploading them as you capture them and organising them in various useful ways for you.
- If your smartphone, tablet or computer supports **Find my device**, your device will regularly report its location to the cloud. The cloud will have a record of its last reported location for you, which is handy if it becomes lost or stolen.
- You can choose how much you wish to pay. In many cases a free cloud account will suit your needs, but you can increase the storage space to large amounts for fairly modest monthly fees.



The cloud can help find lost or stolen devices

Using the cloud in everyday life

Let's look at how your day might proceed with the help of the cloud. We'll base this on Google cloud services, but similar features are available on other platforms, such as Amazon and Apple.

- **Google Assistant**, a cloud service, can remind you of your schedule with a simple spoken command to a smart speaker.
- You are visiting some friends and want to show them an interesting photo you took a while back. It's no longer on your phone, but it's on your **Google Photos** account in the cloud. Tap on the thumbnail in Google Photos, and in a few seconds it will be back on your phone.
- You need to refer to a PDF document containing personal information, but the document isn't on the phone. Not a problem, you log onto the **Google Drive**, which has been automatically synchronised with your computer, and open the copy of the document there.
- You're on the bus on the way home and decide to check your **Gmail** email account. You can open this up using the Gmail app on your phone, and read all your emails, which are held in the cloud.



Smart speakers use the cloud to understand what you say and organise your day