

UNIT 2 : Web Apps and the Cloud

What is the Cloud?



You may have heard people using terms like **the cloud**, **cloud computing**, or **cloud storage**. But what exactly is the cloud? Basically, the cloud is **the internet** - more specifically, it's all of the things that you can **access remotely** over the internet. When something is **in the cloud**, that means it is stored on **servers** on the internet, instead of on your computer. It lets you access your **calendar**, **email**, **files** and **more**, from any computer that has an internet connection.

Watch the video to learn about the cloud.



The Cloud

If you've ever used web-based email, then you've used the cloud - all of the emails in your Inbox are stored on servers. However, there are many other services that use the cloud in different ways. Here are just a few examples:

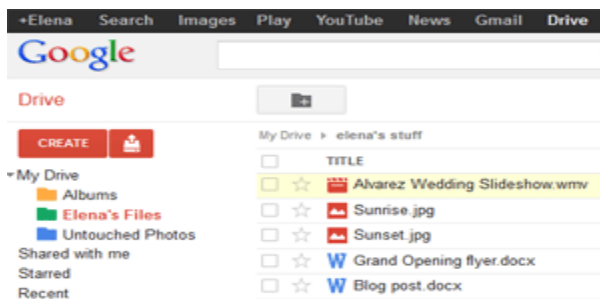
- [Dropbox](#) is a cloud storage service that lets you easily store and share files with other people, and it lets you access your files from a mobile device as well.
- [Evernote](#) lets you type notes, clip web pages, take photos, and organize all of them from your computer or mobile device.
- [Mozy](#) and [Carbonite](#) can automatically back up your data in case your computer is lost, stolen, or damaged.

- **Why Use the Cloud?**



- Using Mozy to back up files
- There are many reasons to use the cloud, but the main reasons are **convenience** and **reliability**. In the past, if you wanted to **bring a file with you**, you would have to save it to a **USB flash drive**, **external hard drive**, or **CD-R disc**. Saving a file to the cloud ensures that you'll be able to access it with any computer that has an internet connection, so you don't have any **physical media** to keep track of. The cloud also makes it much easier to **share** a file with coworkers or friends, making it possible to **collaborate** over the internet.
- With the cloud, you're much less likely to **lose your data**, since it is stored on servers. However, just like anything online, there is always a risk that someone may try to **gain access to your personal data**, so it's important to choose a **strong password** and pay attention to any **privacy settings** for the service you're using.

What is a Web App?



Google Drive

Previously, we talked about how **desktop applications** allow you to perform tasks on your computer. However, there are also **web applications** (or **web apps**), which run **in the cloud** and do not need to be installed on your computer. These are sometimes called **cloud apps**.

Examples of Web Apps

Here are a few examples of web apps:



Facebook

- **Online Email Services:** Services like **Gmail** and **Yahoo! Mail** run within your browser and can do many of the same things that email programs like **Microsoft Outlook** can do. After you sign up for an online email service, you can begin using it immediately - no installation is required. Instead of being stored on your computer, your emails are stored **in the cloud**.
- **Google Docs:** Google Docs is an **office suite** that runs within your browser. Much like **Microsoft Office**, you can use it to create **documents**, **spreadsheets**, **presentations**, and more. Your documents are stored **in the cloud**, which makes it easy to **share** your documents with other people.
- **Facebook:** Facebook lets you create an online **profile** and interact with your **friends**. Profiles and conversations are **constantly evolving**, so Facebook uses web app technologies throughout the site to **keep the information up-to-date**. There are also **games** and other **web apps** that you can add to your Facebook profile.

Web apps are becoming **more and more integrated** with websites, and it may be hard to distinguish between a web application and a "regular" website. In many cases, you may be using a web application without even knowing it!

How Do Web Apps Work?

When you use a web app, you are working from your computer or mobile device, but much of the actual processing is done by a network of **servers**. These servers can **pool all of their processing power** in order to handle requests from all over the world. They also use specialized servers to **store the data** that you're working with, as well as the data from all of the other users. All of this happens very **seamlessly**, so it looks almost like the application is running on your computer.

For example, if you open a document with **Google Docs**, your web browser will communicate with the network of **servers** to display your document. As you edit the document, your browser will work closely with the servers to make sure everything is kept up-to-date.



Google Docs

Challenge!

- Do you already use the **cloud** for things like web-based email?
- What are some **other ways** you could use the cloud?
- How is a **web app** different from a **desktop application**?

GRAMMAR FOCUS 2

What are Verbs?

<http://www.englishclub.com/grammar/verbs-what.htm>



The verb is king in English. The shortest sentence contains a verb. You can make a one-word sentence with a verb, for example: "**Stop!**" You cannot make a one-word sentence with any other type of word.

Verbs are sometimes described as "action words". This is partly true. Many verbs give the idea of action, of "doing" something. For example, words like *run*, *fight*, *do* and *work* all convey action.

But some verbs do not give the idea of action; they give the idea of existence, of state, of "being". For example, verbs like *be*, *exist*, *seem* and *belong* all convey state.

A verb always has a subject. (In the sentence "John speaks English", *John* is the subject and *speaks* is the verb.) In simple terms, therefore, we can say that verbs are words that tell us what a subject **does** or **is**; they describe:

- **action** (Ram plays football.)
- **state** (Anthony seems kind.)

There is something very special about verbs in English. Most other words (adjectives, adverbs, prepositions etc) do not change in form (although nouns can have singular and plural forms). But almost all verbs change in form. For example, the verb *to work* has five forms:

- *to work*, *work*, *works*, *worked*, *working*

Of course, this is still very few forms compared to some languages which may have thirty or more forms for a single verb.

Verb Classification

We divide verbs into two broad classifications:

1. Helping Verbs

Imagine that a stranger walks into your room and says:

- I **can**.
- People **must**.
- The Earth **will**.

Do you understand anything? Has this person communicated anything to you? Probably not! That's because these verbs are **helping verbs** and have no meaning on their own. They are necessary for the grammatical structure of the sentence, but they do not tell us very much alone. We usually use helping verbs with main verbs. They "help" the main verb. (The sentences in the above examples are therefore incomplete. They need at least a main verb to complete them.) There are only about 15 helping verbs.

2. Main Verbs

Now imagine that the same stranger walks into your room and says:

- I **teach**.
- People **eat**.
- The Earth **rotates**.

Do you understand something? Has this person communicated something to you? Probably yes! Not a lot, but something. That's because these verbs are **main verbs** and have meaning on their own. They tell us something. Of course, there are thousands of main verbs.

In the following table we see example sentences with helping verbs and main verbs. Notice that all of these sentences have a main verb. Only some of them have a helping verb.

	helping verb		main verb	
John			likes	coffee.
You			lied	to me.
They			are	happy.
The children	are		playing.	
We	must		go	now.
I	do	not	want	any.

Helping verbs and main verbs can be further sub-divided, as we shall see on the following pages.

Exercise 1 Draw two lines under each action verb. Write *physical* or *mental* in the blank to indicate whether the verb expresses physical action or mental action.

physical Many athletes successfully represented the United States in the modern Olympics.

1. African American Jesse Owens broke world records in track and field events.
2. Owens attended The Ohio State University.
3. At a 1935 event in Ann Arbor, Michigan, Owens broke three world records.
4. Many people consider Owens the greatest track-and-field athlete ever.
5. Owens won four gold medals at the 1936 Summer Olympics in Berlin, Germany.
6. Owens's strong performance angered Adolf Hitler.
7. Owens wore the victor's oak leaf crown during the presentation ceremony.
8. Owens later gave many speeches about values and moral principles.
9. Another African American athlete captured the world's attention in the 1960 Italy games.
10. Cassius Clay boxed his way to the light heavyweight gold medal.

Exercise 2. Draw two lines under each action verb. Draw one line under each direct object. In the blank, write *T* if the verb is transitive or *I* if the verb is intransitive.
T Aaron painted his house white.

1. Hiroko plays softball and tennis every summer.
2. The pigeon drank water from the muddy puddle.
3. The eagle soared higher and higher in the sky.
4. The stern judge gave a harsh sentence to the defendant.
5. The happy baby wore a toothless grin.
6. New Zealand lies about 1,000 miles (1,600 kilometers) southeast of Australia.
7. City council meets once a week.
8. Maria prepares dinner for the family.
9. The artist paints colorful, geometric designs.
10. The news reporter lifted her eyebrows in disbelief.

Exercise 3. Write in the blank whether the word in *italics* is a *DO* (direct object) or an *IO* (indirect object).
IO Mrs. Cruz made her *children* lunch.

1. The electrician installed the light *fixture*.
2. The eager student showed the *teacher* her latest poem.
3. The game show host asked the contestants difficult *questions*.
4. Alice explained the movie *plot* to Troy.
5. The young girl could not describe her *feelings*.
6. Fluffy white clouds covered the *sky*.
7. Alex sent his *teacher* a get-well card.
8. The roller coaster gave *me* an upset stomach.
9. The voters elected a *newcomer* to office.
10. The seamstress carefully stitched the *hem* of the dress.

Exercise 4. Draw two lines under each verb. Write its tense, *present*, *past*, or *future*, in the blank.
present Winter officially starts in December.

1. John Steinbeck earned the 1962 Nobel Prize in literature.
2. Squirrels gather nuts every autumn in preparation for winter.
3. Carlos will play second base in tomorrow's game.
4. Wilma fielded the ball very well in yesterday's game.
5. Polar bears often wander into populated areas in Canada.
6. Great brown bears weigh up to 1,540 pounds (700 kilograms).
7. Canada contains one third of the world's supply of fresh water.
8. Mai visited her relatives in Vietnam two years ago.
9. Na and his uncle will travel to the United States next year.
10. During the holidays, people enjoy family traditions.

Exercise 5. Write in the blank the tense of the verb as indicated in parentheses.

Kurt **[will absorb]** himself in each new project. (*absorb*, future)

1. The student council communication between teachers and students.
(*help*, present)
2. Who in your home in ten years? (*live*, future)
3. The president to Europe in one month. (*travel*, future)
4. The continent of Europe Asia. (*border*, present)
5. Mrs. Samuels a Book Club meeting every Tuesday. (*attend*, present)
6. Bruno his brother with his homework. (*help*, future)
7. The frisky puppy the ball when I threw it. (*chase*, past)
8. The sick baby a lot at night. (*cough*, present)
9. The school newspaper always the students on the honor roll. (*list*, present)
10. When she was a child, Mrs. Nguyen to go to college. (*want*, past)
11. The letter fond memories of last summer. (*trigger*, past)
12. The garden in Grandpa's capable hands. (*flourish*, future)
13. Every day after school, Lindsay down a glass of milk. (*gulp*, present)
14. Barney sticks only for his master. (*fetch*, present)
15. We the lock, but it still would not work. (*jiggle*, past)
16. The leaves busily in the fall breeze. (*swirl*, present)
17. Bryce various politicians in the variety show. (*imitate*, future)
18. The old cloth quickly the child's spilled milk. (*absorb*, past)
19. They the door open with this piece of wood. (*wedge*, present)
20. The tiny spring merrily. (*trickle*, present)
21. The crowd in surprise. (*gasp*, past)
22. On Sunday they the new organ. (*dedicate*, future)
23. The committee the evening's music. (*vary*, future)
24. Anna most of her work in the morning. (*accomplish*, present)
25. The young pianist as he began his performance. (*tremble*, past)

Write a paragraph sharing something about your past, your present, and your hopes for the future. Use the past, present, and future tenses of verbs.

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