**THE CLOUD**

The cloud is the term used to describe the internet when it is used to provide software or space for storing information, rather than relying on local storage.

When you use software stored of your hard drive to work with files, you are using local hardware. You use your computer’s resources and this still provides the best performance because there is no network connectivity showing the data transfer of data.

**Learning objectives**

**Understanding the impact of cloud-based services: hosted application, storage**

**Understand the features and characteristics of hosted applications software and locally installed software.**

**HOSTED APPLICATIONS SOFTWARE**

Web applications (apps) are stored on online servers. The application runs on an online server and the user interface for the application is displayed in the web browser. Web apps also known as hosted applications because the software is hosted on a server.

Hosted applications are only available with an internet connection and can be affected by latency and bandwidth, which can create poor user experience. For example, they can lead to slow application loading times or a delay between user input and activity in the browser, which makes the application seem unresponsive.

To reduce latency and the need for bandwidth, hosted applications usually do not offer as many features as some locally installed software, though they may still have some advanced features. Hosted applications often use online data storage.

The benefits and drawbacks of hosted applications

|  |  |
| --- | --- |
| **Benefits** | **Drawbacks** |
| Accessible from many types of connected devices | Only accessible using an internet connection |
| Can include the use of online data storage to save files online | User experience can be affected by high latency or low bandwidth |
| Features that enable collaboration | Not as many features as locally installed software |

**ONLINE DATA STORAGE**

Just like hosted applications, online data storage can be accessed from anywhere from any device with an internet connection, it also has benefits and drawbacks as shown below.

|  |  |
| --- | --- |
| **Benefits** | **Drawbacks** |
| Files are often backed up automatically | Possible data protection issues if stored on servers in a different country |
| The storage is scalable | Dependent on online storage provider for security |
| Sharing data is easier | File transfer speeds are much slower than local storage |
| Many providers offer unlimited storage package, so less need to buy additional local storage | Only accessible using an internet connection |
| Enables collaboration | Some software not available as hosted applications so files cannot be opened without being downloaded |
| More local storage made available for locally installed apps and local files | Often have to pay for additional storage space if more space is needed. |

Scalable – something that is able to grow or shrink in order to meet demand such as at busy times of the day.

Data protection issues-problems with maintaining security of data and information

Cloud – a term used to describe the internet when its used to provide software or space for storing information, rather than relying on local storage.

**THE IMPACT OF THE CLOUD**

Cloud-based services include hosted applications and online data storage. Many different hosted applications and online data storage solutions are available. This means that developers of locally installed software are operating in a very competitive marketplace.

Cloud -based services can provide individuals with access to a variety of online services including: -

* Shopping and auction sites
* Booking systems for travel, leisure and entertainment
* Banking
* VLEs and massive online open course (MOOCs)
* Gaming
* News and other information
* Entertainment services such as on-demand television and radio

Cloud -based services can also provide access to online communities, including

* Social networking sites
* Online work spaces
* User generated reference sites such as wikis and forums
* User generated content sites such as video-sharing sites, blogs and websites
* Social bookmarking

Topical Questions for revision

1. Which one of these is used to store hosted applications? 1 mark
2. Laptop
3. Smartwatch
4. Server
5. Tablet
6. State three benefits of using online data storage
7. State three online services provided by cloud-based services.
8. State what is meant by the term “Cloud”

END