☁️ **What is Cloud?**

The Cloud means using the Internet to access computing services like storage, servers, databases, networking, and software — rather than running them on your personal computer or local server.

☁️ **Cloud Computing**

**Cloud Computing** means storing, accessing, and managing data and applications **over the Internet** instead of using your computer’s local storage or on-premise servers.

**Deployment Models of cloud**

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| --- | --- | --- |
| **Deployment Model** | **Description** | **Example** |
| **Public Cloud Model** | Accessible to general public via the Internet. | Google App Engine, AWS EC2 |
| **Private Cloud Model** | Restricted to a single organization. | VMware, OpenStack |
| **Community Cloud Model** | Shared among several organizations with common goals. | Government Clouds |
| **Hybrid Cloud Model** | Mix of public & private for flexibility and control. | Microsoft Azure Hybrid, AWS Outposts |

**☁️ Cloud Service Models**

Cloud Computing provides different levels of services to users based on their needs and level of control.

There are **three main types** of Cloud Service Models:

1️⃣ Infrastructure as a Service (IaaS)  
2️⃣ Platform as a Service (PaaS)  
3️⃣ Software as a Service (SaaS)

**1. Infrastructure as a Service (IaaS)**

**Infrastructure as a Service (IaaS)** provides **virtualized computing resources** — such as servers, storage, and networking — over the internet.  
It offers users the **base infrastructure** to install their own operating systems, applications, and software.

**💡 Examples:**

* Amazon Web Services (AWS EC2)
* Microsoft Azure
* Google Compute Engine
* Rackspace

**2. Platform as a Service (PaaS)**

**Platform as a Service (PaaS)** provides a **development and deployment platform** over the Internet.  
It allows developers to **build, test, run, and deploy applications** without managing the underlying infrastructure.

**💡 Examples:**

* Force.com (Salesforce Platform)
* Heroku
* Google App Engine
* Microsoft Azure App Services

**🧠 Salesforce Context:**

Salesforce’s **Force.com** is a classic example of **PaaS** — it allows developers to build **custom apps** using **Apex, Visualforce, and Lightning Components** without worrying about infrastructure.

**💻 3. Software as a Service (SaaS)**

**Software as a Service (SaaS)** delivers **ready-to-use software applications** over the internet.  
Users can access the application via a **web browser** without installing or maintaining it locally.

**💡 Examples:**

* Salesforce CRM
* Google Workspace (Docs, Sheets, Gmail)
* Cisco Webex
* Slack
* Zoom

**🧠 Salesforce Context:**

Salesforce CRM is the **best-known example of SaaS** — it provides a complete ready-to-use cloud application for **Sales, Service, and Marketing** that businesses can access online.