

# Task 1 – Cloud Computing Overview

## Internship: RD INFRO TECHNOLOGY

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### Introduction to Cloud Computing

Cloud computing is the **on-demand delivery** of IT resources such as compute power, storage, databases, and applications via the **internet** with **pay-as-you-go** pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services on an as-needed basis.

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### How Cloud Computing Works

Cloud computing allows users to access computing resources through the internet. These resources are hosted by cloud service providers (like AWS, Google Cloud, or Microsoft Azure) and delivered through **virtual servers**. Users connect using browsers or APIs.

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### Service Models of Cloud Computing

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

- Virtual servers, storage, and networking
- Examples: AWS EC2, Google Compute Engine

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

- Development tools, database management
- Examples: Google App Engine, Microsoft Azure App Services

#### 3. SaaS (Software as a Service)

- Web-based applications
  - Examples: Gmail, Dropbox, Microsoft 365
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### Deployment Models

#### Public Cloud

- Shared infrastructure, lower cost
- Example: AWS, Azure






## Private Cloud

- Hosted in-house or privately by a provider
- High control and security

## Hybrid Cloud

- Combination of public and private
  - Flexible workload management
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## Benefits of Cloud Computing

-  **Scalability:** Easily increase/decrease resources
  -  **Cost-effective:** Pay only for what you use
  -  **Performance:** Fast delivery and global reach
  -  **Reliability:** Data backup and disaster recovery
  -  **Security:** Advanced protections in place
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## Real-Life Applications

- E-commerce (Amazon using AWS)
  - Media streaming (Netflix)
  - Remote education platforms
  - Cloud-based CRM (Salesforce)
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## Summary

Cloud computing is transforming how businesses and individuals use technology. With its flexible service and deployment models, cost benefits, and ease of access, it enables faster innovation and efficient operations.

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## 17 Task Output Files:

- `cloud_overview.pdf` (presentation/document)
  - `README.md` (GitHub summary)
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## 17 Reference:

[AWS: What is Cloud Computing](#)

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## **Internship Details:**

This document is created as part of Task 1 for the Cloud Computing Internship under RD INFRO TECHNOLOGY.