

Understanding Cloud Computing

Defining Cloud Computing

Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services, such as computing power, storage, and databases, on an as-needed basis from a cloud provider like Amazon Web Services (AWS).

Cloud Characteristics

1. Cost
2. Global scale
3. Performance
4. Security
5. Reliability
6. Productivity
7. Speed

Understanding Cloud Computing

Types of cloud computing

The three main types of cloud computing include Infrastructure as a Service, Platform as a Service, and Software as a Service. Each type of cloud computing provides different levels of control, flexibility, and management so that you can select the right set of services for your needs.

1. Infrastructure as a Service (IaaS)
2. Platform as a service (PaaS)
3. Software as a Service (SaaS)
4. Serverless computing

Uses of cloud computing

- **Create cloud-native applications**
- **Store, back up, and recover data**
- **Stream audio and video**
- **Deliver software on demand**
- **Test and build applications**
- **Analyze data**
- **Embed intelligence**