What is 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).

Who is using cloud computing?

Organizations of every type, size, and industry are using the cloud for a wide variety of use cases, such as data backup, disaster recovery, email, virtual desktops, software development and testing, big data analytics, and customer-facing web applications. For example, healthcare companies are using the cloud to develop more personalized treatments for patients. Financial services companies are using the cloud to power real-time fraud detection and prevention. And video game makers are

Benefits of cloud computing

Agility

The cloud gives you easy access to a broad range of technologies so that you can innovate faster and build nearly anything that you can imagine. You can quickly spin up resources as you need them–from infrastructure services, such as compute, storage, and databases, to Internet of Things, machine learning, data lakes and analytics, and much more.

Elasticity

With cloud computing, you don’t have to over-provision resources up front to handle peak levels of business activity in the future. Instead, you provision the amount of resources that you actually need. You can scale these resources up or down to instantly grow and s capacity as your business needs change.

You can deploy technology services in a matter of minutes, and get from idea to implementation several orders of magnitude faster than before. This gives you the freedom to experiment, test new ideas to differentiate customer experiences, and transform your business.

Cost savings

The cloud allows you to trade fixed expenses (such as data centers and physical servers) for variable expenses, and only pay for IT as you consume it. Plus, the variable expenses are much lower than what you would pay to do it yourself because of the economies of scale.

Deploy globally in minutes

With the cloud, you can expand to new geographic regions and deploy globally in minutes. For example, AWS has infrastructure all over the world, so you can deploy your application in multiple physical locations with just a few clicks. Putting applications in closer proximity to end users reduces latency and improves their experience.

Types of cloud computing

The three main types of cloud computing include Infrastructure as a Service,

Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

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.

Software as a Service (SaaS)

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FAQs

What are cloud services?

Cloud services are IT resources managed by AWS and delivered on demand over the internet. Traditionally, organizations had to purchase and configure everything from server hardware and storage systems to networking and security technologies before launching any digital system. Provisioning and managing IT infrastructure is expensive, complicated; and takes time away from innovation.

What are cloud managed services?

Cloud services are also called cloud managed services because the underlying infrastructure is fully managed by AWS. All required hardware, operating systems, and other infrastructure layers are stored and managed in highly secure AWS data centers distributed around the globe. We purchase and maintain all types of IT resources, making them available as services you can access in your application code.

Example uses of cloud services

Resizable compute capacity

Access and configure compute capacity as a ful
cloud service for any type of workload. From In
and Arm processors to Amazon EC2 Mac Instanc

Cloud services can be used for everything—from provisioning servers and storage to data analytics, artificial intelligence, and end-to-end security for every application. Below are a few examples.

Gbps Ethernet networking, AWS provides cutting-edge computer offerings for flexible use. Choose from hundreds of cloud instance types with the latest processors, operating systems, and purchase models to best match your workload needs. AWS cloud services allow you to quickly scale capacity up or down and pay only for what you use while maintaining complete control of your computing resources.
Learn more about compute on AWS

Databases and data storage

AWS cloud services include an array of secure, reliable, and highly scalable database options and data storage solutions. You can use cloud services for file, block, and object storage systems. AWS also has cloud services for both SQL and NoSQL databases. Use fully managed relational and non-relational databases to simplify database management, scaling, and backup for operational efficiency.

Learn more about cloud storage on AWS

Learn more about cloud databases on AWS

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Learn more about cloud computing on AWS

Pricing

AWS offers a pay-as-you-go approach for pricing. Pricing for each service is unique.

→

Products

AWS has over 200 fully featured services for a wide range of technologies, industries, and use cases.

→

Global infrastructure

AWS has the most extensive, reliable, and secure global cloud infrastructure.

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Get started

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