

Shared Responsibility Model



Key takeaways

- The shared responsibility model in cloud computing defines the division of security and operational responsibilities between cloud providers and customers. The three primary cloud service models are:

Term	Description	Responsibilities
Software as a service (SaaS)	Provides virtualized computing resources	Provider: Manages hardware and networking Customer: Manages OS, applications, and data
Platform as a service (PaaS)	Offers a platform for application development	Provider: Manages infrastructure and OS Customer: Manages application and data
Infrastructure as a service (IaaS)	Delivers fully managed software over the internet	Provider: Manages infrastructure, platform, and software Customer: Manages data and user access

- When selecting a cloud computing service model, organizations must consider their specific business needs, compliance requirements, and the level of control they wish to maintain. These factors influence security, scalability, and operational flexibility.

Glossary terms

Cloud computing models

Term	Description
Software as a service (SaaS)	A cloud computing model where software applications are provided over the internet, eliminating the need for local installation or maintenance
Platform as a service (PaaS)	A cloud computing model that offers a development environment for building, deploying, and managing applications without dealing with underlying infrastructure
Infrastructure as a service (IaaS)	A cloud computing model providing virtualized computing resources including storage, networking, and processing power

Glossary terms

Cloud computing concepts

Term	Description
Virtual machines (VMs)	Software-based emulation of physical computers used in cloud environments
Middleware	Software that acts as a bridge between an operating system and applications running on it
Scalability	The ability to increase or decrease IT resources as needed
Operational expenditure (OpEx)	A business expense model where costs are incurred on an ongoing basis instead of upfront capital investment

Glossary terms

Security and responsibility

Term	Description
Shared responsibility model	A framework that defines the security and operational roles of the cloud provider and customer
Cloud service provider (CSP)	A company that provides cloud computing services such as Azure
Customer responsibilities	The areas of security, data management, and configuration that a customer is responsible for in a cloud environment

Additional resources



AI shared responsibility model

Provides an overview of the division of responsibility between provider and customer, AI layer, and security lifecycle



Azure security best practices

Contains security best practices to use when you're designing, deploying, and managing your cloud solutions by using Azure



Cloud computing

A beginners' guide to cloud computing concepts and related services

