



# **TNGS Learning Solutions**

## **AWS Solutions Architect**

### **Online Course**

# **Cloud Computing**

## **Models**

# Cloud Computing Models

- Cloud computing models refer to the various service and deployment models that define how cloud computing resources are delivered, managed, and accessed. These models are fundamental in understanding the different approaches to using cloud technology and the roles of both cloud providers and users.
- The two primary dimensions of cloud computing models are:
  - **Service Models**
  - **Deployment Models**

# Cloud Computing Models

## Service Models

**Software as a Service (SaaS)** is a cloud computing service model that provides access to software applications over the internet on a subscription basis. In this model, users can access and use software applications hosted in the cloud without the need to install, maintain, or manage the underlying infrastructure, software, or hardware. SaaS is designed to make software accessible to users from various devices and locations, providing a convenient and cost-effective way to use software applications.

# Software as a Service (SaaS)

**Accessibility:** SaaS applications are typically accessed through a web browser, allowing users to use the software from anywhere with an internet connection and compatible device.

# Software as a Service (SaaS)

**Subscription-Based:** Users pay for SaaS on a subscription or pay-as-you-go basis, often with monthly or annual billing options. This eliminates the need for upfront software licensing fees and allows for predictable costs.

# Software as a Service (SaaS)

**Managed by the Provider:** SaaS providers are responsible for hosting, maintaining, and updating the software, including infrastructure management, security, and software upgrades.

# Software as a Service (SaaS)

**Multi-Tenancy:** SaaS applications are designed to serve multiple customers (tenants) from a shared infrastructure. Each tenant's data and configurations are isolated and secure.

# Software as a Service (SaaS)

**Automatic Updates:** Providers deliver regular updates and enhancements to the software, ensuring that users always have access to the latest features and security patches without manual intervention.



# Software as a Service (SaaS)

**Scalability:** SaaS platforms can easily scale to accommodate the changing needs of users and organizations, making it suitable for businesses of all sizes.

# Common references of SaaS

**User Interface:** SaaS applications provide user-friendly interfaces accessible through web browsers or dedicated applications, making it easy for users to interact with the software.

# Common references of SaaS

**Application Logic:** The core functionality and logic of the software are hosted and managed by the SaaS provider. Users interact with the application's features and services.

# Common references of SaaS

**Data Storage:** SaaS platforms often include storage for user data, configurations, and settings. Data is stored securely and redundantly to ensure reliability.

# Common references of SaaS

**Authentication and Access Control:** SaaS applications implement authentication and access control mechanisms to ensure that only authorized users can access specific features and data.

# Common use-cases of SaaS

**Productivity Tools:** SaaS offers a wide range of productivity applications, including email, office suites, project management, and collaboration tools like Google Workspace (formerly G Suite), Microsoft 365, and Slack.

# Common use-cases of SaaS

## **Customer Relationship Management (CRM):**

Businesses use SaaS-based CRM software, such as Salesforce, to manage customer relationships, sales pipelines, and marketing campaigns.

# Common use-cases of SaaS

**Enterprise Resource Planning (ERP):** SaaS ERP solutions help organizations manage core business processes like finance, human resources, and supply chain management. Examples include SAP Business ByDesign and NetSuite.



# Common use-cases of SaaS

**Content Management:** Content management systems (CMS) like WordPress and Drupal are available as SaaS solutions for website and content management.

# Common use-cases of SaaS

**E-commerce:** SaaS e-commerce platforms, such as Shopify and BigCommerce, enable businesses to set up and manage online stores without extensive technical expertise.

# Common use-cases of SaaS

**Analytics and Business Intelligence:** SaaS platforms like Tableau, IBM Cognos and Google Analytics provide data analysis and visualization tools accessible from the cloud.

# Conclusion

SaaS is known for its ease of adoption, cost-efficiency, and the ability to quickly deploy and access software applications without the complexities of traditional software installations. Organizations can benefit from SaaS by reducing IT infrastructure and maintenance costs while enjoying continuous software updates and improvements.