William Prado
05/20/2025

Powerpoint Video

YTB | Cloud Computing Explained.
      AWS
    * google
      Microsoft Azure
      IBM

IAAS | Infrastructure as a Service
PAAS | Platform as a Service
SAAS | Software as a service   Ex: google docs.

Software architecture Academy YTB | Introduction to cloud

Lots of servers in a large room
At different location across the world
On premises vs Cloud.

- Why Cloud? Elasticity, On-Demand, Self-service, Pay for usage, multi Tenancy.

- What's taken care? Computer, storage, Network, Software.

- Optimal workload periodic, one time, unpredictable

- Issues r Risks. 3rd party control, Vendor lock-in, Data security, privacy, Malicious attack.

- Delivery Models: Iaas, Paas, Saas, Daas, DBaas, Faas.

YTB Cloud Deployment models - Public cloud, Private cloud, Hybrid Cloud + community Cloud.

simplilearn YTB Cloud computing in 6 Minutes | What is cloud Computing?

sunny YTB RAI

sunny YTB IAAS, Paas, Saas: 3 cloud computing service models

Amazon - compute, Storage, network, software.

• Cloud Customers Manage
• Cloud Providers Manage

Traditional on-premises
- Application   • Middleware   • servers   ○ Networking
- Data   • O/S   • Storage

IAAS
- Application   • Middleware   • servers   • Networking
- Data   • O/S.   • Storages

PAAS:
- Application   • middleware   • servers   • Networking
- Data   • O/S   • Storages

SAAS:
- Application   • middleware   • servers   • Networking
- Data   • O/S   • Storages

microsoft
Adam YTB • AZ-900 Episode 5
Mark

Applications Data	Data	Apps
Runtime	ISS	Docker
Middleware	Software	
O/S	Windows	Linux
Virtualization	VM	
Servers	Memory Motherboard CPU	
Networking	Routing switches internet	
Storage	HDD SSD	

Powercert videos

14.3 Cloud Networking
14.4 Modern Network Environment
YTB CDN - Content Delivery Network - Explained

Responsibility.
  Security of the Cloud   CSP.
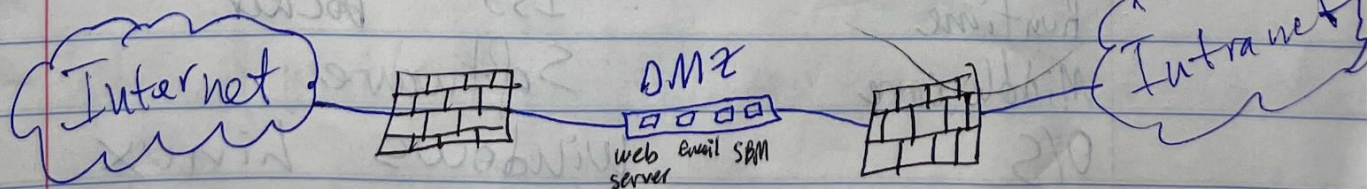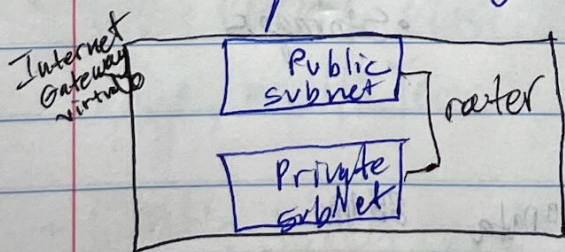 Security in the cloud   Client.

NFV- Network Funktion virtualization - introduction.

YTB Network Virtualization infrastructure - introduction.

What is an instance? Virtual Machine
server that runs a workload in the cloud.

VPC- virtual private cloud

Private cloud - single-tenant model, provides computing, networking, & storage resources to organization.

Nat gateway - allows instances to connect out to Internet but not connections initiated from Internet.

Infrastructure as code (IaC) 14.4

- Provisioning through standard scripts
- automation • code
- orchestration • sequence of automation scripts.

Source Control

- || code.
- Version Control • system tracks changes to source code over time

Software Defined Networking (SDN).

Traditional Networking

SDN - software-based controllers or API

Applications Layer
Control Layer
Infrastructure Layer

SDN controller - Brain of the Network

Overlay networks - abstracts physical topology.
Uses encapsulation to provision virtual tunnels &
networks w/out requiring reconfiguration of the
underlying transport network.

Data Center Network Design.

Encapsulation/Encryption/Protocols
Zero Trust - assumes no entity.

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Cloud Strategy evaluate cloud apps + services; choose deployment model (public, private, hybrid) + service type (IaaS, SaaS, PaaS, DaaS) for optimal scalability + elasticity.

Cloud App Development - leverage IaC for automation + leverage SDN benefits.

Private Cloud/Datacenter - virtualization + SAN for enhanced elasticity + scalability. Integrate w/ SDN + NFV.

Public cloud Security - define cloud responsibility Matrix + conduct regular risk assessments + security audits.

Review the quizzes, write the question, prep for exam.

	/25	/26	/27	/28	/29	/30	/31	/32
	128	192	224	240	248	252	254	255
host	128	64	32	16	8	4	2	1
Net	2	4	8	16	32	64	128	✗

10.10.10.200 /25
10.10.10.0
10.10.10.127
: 128
: 255