**Microsoft Azure IaaS Deep Dive Jump Start (February 14, 2014):**

**https://mva.microsoft.com/en-US/training-courses/microsoft-azure-iaas-deep-dive-jump-start-8287?l=S1oXqFXy\_2804984382**

Know AD, Windows Server, Hyper-V knowledge. SaaS (Consume), PaaS(Build), IaaS (Host)

SaaS is hosted on something. We are just not worried about it.

Cloud service – container or management grouping, virtual machine contained within a cloud service

Azure Virtual Network – networking overlay that allows you to create and manage virtual networks in Windows Azure and securely connect them to your own on-premises network.

Preview is kind of a like a beta.

**Virtual Machines:**

Azure runs thousands of physical hyper-v servers

VHD-file(disk) – provided by azure (image) and can be uploaded by the customer (uploaded by VHD-file). IaaS VM can be RDP would be your VM. (responsibility).

RDP inbound is enabled by default. Don’t use port 3389. Unlimited outbound network access.

Different sizes of VM’s by memory and processors. VM’s can be changed to bigger sizes. What’s a reasonable size. Wizard or Quick Create option for VM creation.

Sysprep VHD-file doesn’t have a name yet. RDP port “Auto” is something for not being 3389. Hyper-V integration components are in the system. VM’s have to go offline to make a size of the VM. Azure supports 76 markets worldwide.

DNS stays the same and even when the VM will be deleted it stays the same. Cloud service has one external IP address. Create more than 1 cloud service if more than 1 IP is needed. VM’s can be controlled by Powershell. Endpoints are ingress. Can’t ping the VM’s. LB’s use a probe to test if the VM’s are up or not. Endpoints have to be in the same region

**Fault domain** is a rack that can fail. (to close- single point of failure)

Update domain – updates can be done automatically and move the machine off something else and at different ttimes.

Availability sets to have them on different racks to avoid a fault domain.

Affinity groups – place near each other.

Stop VM – on same physical server but still counts “usage”

Stopped Deallocated means that you shut down a VM and deallocate the IP address and you don’t pay for it again.