

# About me



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# Welcome to a new session about

## Building a basic network

Video type: Nugget

Video category: Level-100



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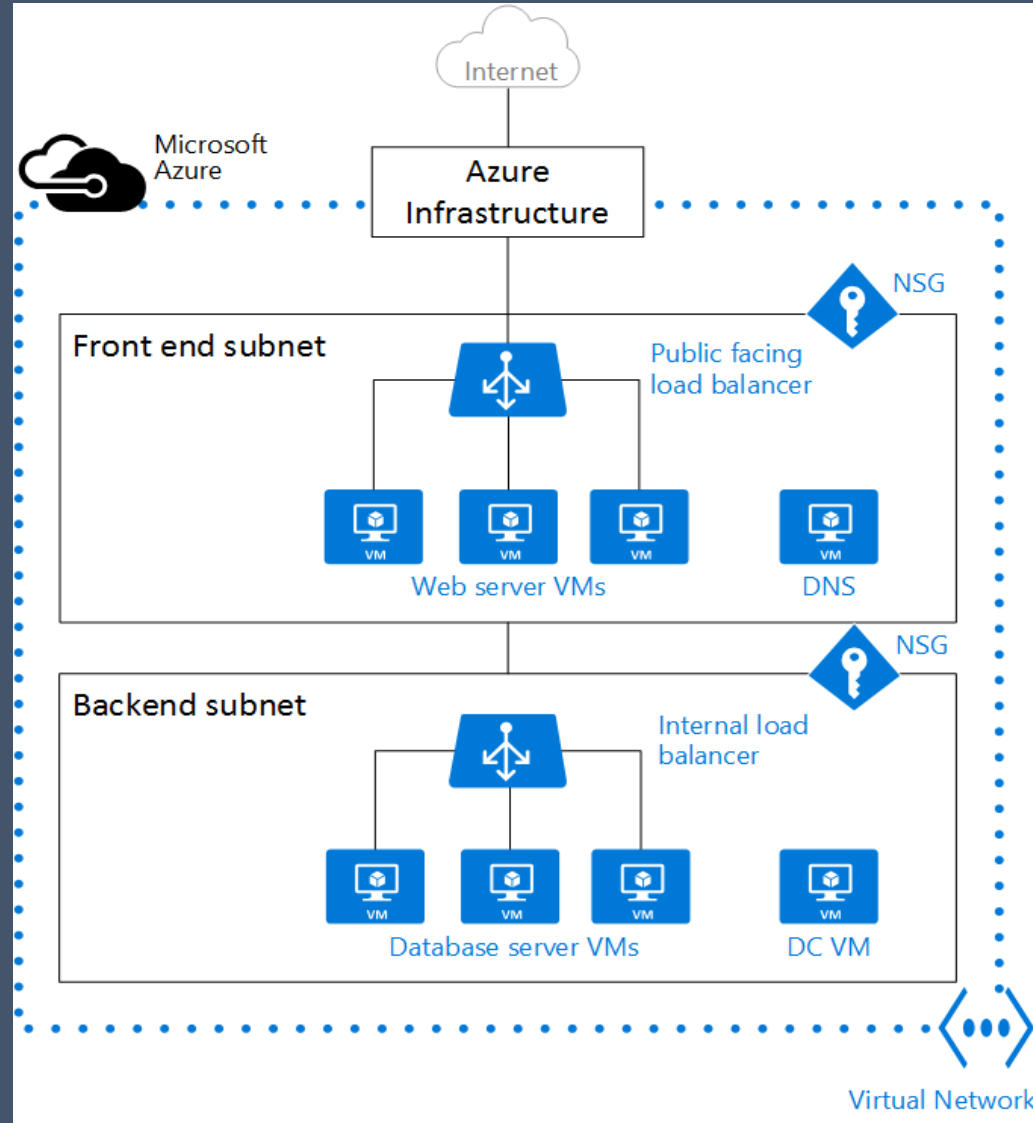
# Session Agenda

- Azure network?
- The core network components
- Live Demo



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# Azure virtual network?



- Fundamental building block
- Isolated network
- Required for IaaS
- Ability for PaaS too

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# The core network components

- Azure virtual network
- Azure VNet peering
- Azure network security groups
- Azure application security groups
- Azure public IPs
- Azure Routing tables



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# Azure virtual network

- Create a dedicated private cloud
- Securely extend a data center
- Deploy hybrid cloud scenarios
- Full layer 3 network
- DHCP server per default in place
- Define Address space and then one or more subnet



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# Azure virtual network peering

- Ability to create a global network
- A low-latency, high-bandwidth connection
- Communicate with resources in a different virtual network
- Traffic routed directly through the Microsoft backbone infrastructure



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# Azure network security groups

- 5 tuple ACL list
- Source-IP, Destination IP, Source Port, Destination Port, Protocol
- Define action: deny/allow
- Inbound and Outbound rules
- Priority based
- Stateful, no return route needed
- Could be bound on subnet or interface level

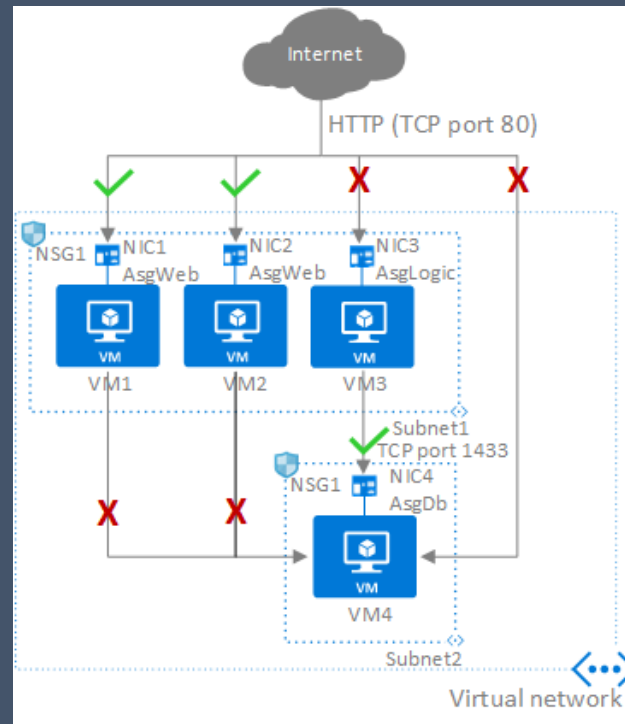


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# Azure application security groups

- Grouping from Azure resources and allow/deny traffic



Source: <https://docs.microsoft.com>

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# Public IP's

- Allow to communicate with Azure resources from the internet
- IPv4 and IPv6 version
- Different SKU
  - Standard
  - Basic
- Different allocation methods
  - Static
  - Dynamic



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# Routing Tables

- Ability to create custom routing in Azure
- Different route types:
  - System routes (Default) created by Azure Prio 3
  - BGP Prio 2
  - User defined Routing Prio 1



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# Switch to the Live Demo!

APPLAUSE

- Create a Virtual network in WE and EUS
- Create a Vnet Peering
- Define a Frontend and Backend Subnet
- Assign NSGs with Rules (Allow and Deny)
- Assign Application Security Groups
- Deploy a VM with a PIP
- Create a custom Routing Table (Azure Firewall)

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