Federal Azure Networking: 10-Week Workshop Offering
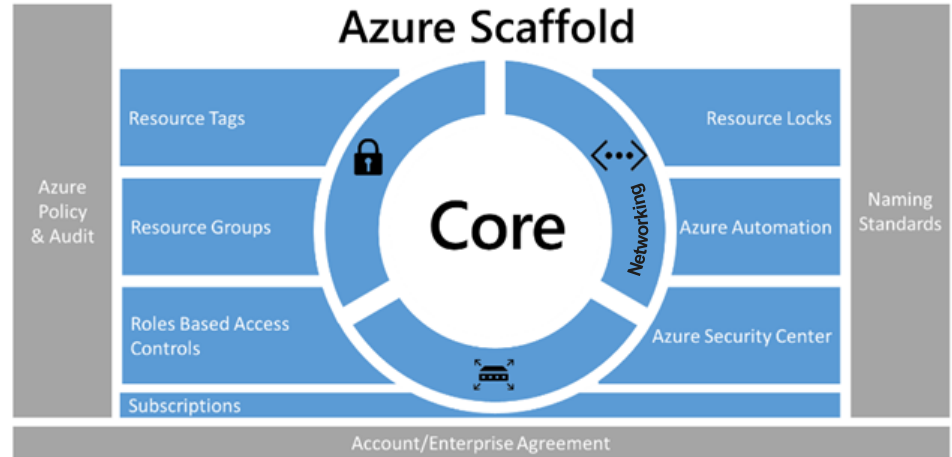
The approach, price, and plan required for your purpose-built modern Data Center

ais APPLIED INFORMATION SCIENCES

Key Considerations

- It is key to recognize that, in order to move workloads to the cloud – whether you are extending your data center or building a native cloud environment – you are building a Modern Data Center. Networking is core to the Modern Data Center which must be resilient, predictable, scalable, and secure.

- The Modern Data Center Scaffolding cannot be designed in a bubble; it relies on bringing together subject matter experts across the company to create a successful design approach. The formulation of these workstreams is the beginning of enabling DevSecOps practices and culture. The involvement of these key groups from day one ensures that decisions are made quickly, and blockers are identified up front.

Networking is core to all of aspects of the Modern Data Center.

https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/ready/enterprise-scale/architecture#landing-zone-expanded-definition

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Faster Networks, Less Downtime, Better Scaling

- Tap into Azure's global infrastructure to improve network performance and resilience of your applications.

- With the connectivity of the global Azure network, customers realize high availability, low latency, scalability, and the latest advancements in cloud infrastructure.

Our Approach

Education & Discovery
WEEK ONE - TWO

With the purpose of collecting use case requirements, Phase One will focus on an overview of the design sessions (Phase Two), their purpose / scoping, and collection of the proposed customer subject matter experts / decision makers required for each type of session.

DELIVERABLES
Network use case requirements and design session scope, audience, & decision makers

Stakeholder / SME Design
WEEK THREE - EIGHT

The information uncovered and artifacts or documentation produced in these sessions will provide the informed proposed approach, as well as the specifications to help you build your modern data center. Topics covered include hybrid networking, IP address planning, network governance, security, and compliance.

DELIVERABLES
Design decision, diagrams, and specifications

Design Review
WEEK NINE - TEN

Following the design sessions with security, networking SMEs, engineers, application teams, and decision makers. AIS will provide an approach, pricing, and an implementation plan ready for executive stakeholder sign off – all the necessary info you need to move forward.

DELIVERABLES
Approach, pricing, and implementation plan ready for executive stakeholder sign off

*By the end of this engagement, you'll have the specifications required to build out a hybrid cloud network topology.

Topics Covered

- Azure Use Cases
  - Connectivity Requirements
- Connectivity Types
  - Site to Site VPN
  - ExpressRoute
  - ExpressRoute Direct
- Connectivity Providers
  - Cloud Exchange (Data Center Providers)
  - Point to Point Providers (ExpressRoute Direct)
  - IPVPN Providers (Network Service Providers (MPLS)
- Environment Types
  - Core Services
  - Workloads
- Isolation / Segmentation
  - External
  - Internal

- Workload Zoning
  - Core Services – Fabric/Infrastructure
  - Workloads – User Facing, Business, Data
  - Microsoft Data Center – PaaS Services
- IP Addressing
  - IP Address Design / Capacity Planning
  - Management
- Patterns / Scaling
  - Building a scalable subscription model
  - Hub and Spoke – VNet Transit Hub (Traditional), Virtual WAN (Secure Hub)
  - Flat (All workloads ER Linked)
  - Dedicated Subnets

- Network Traffic Governance
  - North / South
  - East / West
- Network Traffic Monitoring – Native Monitoring
  - Network Watcher
  - Azure Monitor Metrics – ExpressRoute Metrics, Virtual Network Gateways
  - Azure Monitor Logs – Network Performance Monitor, Service Map
- Awareness
  - Security Center
  - Sentinel

- Routing
  - Global Reach
  - Cross Connected VNets
  - Virtual WAN
  - Transit VNet
  - Hybrid – BGP, User Defined Routes
  - Azure Cross Region Traffic
  - Microsoft Data Center – Virtual Network NAT, VNet Service Endpoints, Private Link
- DNS
  - Azure DNS
  - Traditional DC DNS
  - Hybrid Approach forwarders
- Load Balancing
  - GTM
  - LTM

Get Started

Ready to start your cloud journey?

- Contact AIS today at **sales@appliedis.com**

- We'll follow up to help you determine the next steps

- This will help define the project scope and next steps