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Course : Microsoft Azure, implementing virtual networks

Practical course - 4d - 28h00 - Ref. AZV
Price : 3090 CHF E.T.

★★★★★ 5 / 5

The Azure virtual network service enables you to securely connect Azure resources to each other using virtual networks. At the end of this course, you'll learn how to create virtual networks, configure outgoing connections, DNS and the various gateways required.

Teaching objectives

At the end of the training, the participant will be able to:

- Creating and configuring a virtual network on Microsoft Azure
- DNS management
- Setting up a VPN
- Supervising a network

Intended audience

Advanced technicians, system and network administrators and engineers.

Prerequisites

Basic knowledge of enterprise networks, TCP/IP and Microsoft Azure administration, or knowledge equivalent to that acquired in the course "Azure, implementation" (ref. AZM).

Course schedule

1 Virtual network

- Tools (Azure portal, PowerShell and command line).
- The network (design, deploy and configure).
- Network security groups and virtual machines.
- Internet / internal load balancing.
- Outgoing connections, addresses (virtual IP, IPv6).
- Other services (DNS, CDN, Gateway, VPN, Traffic Manager, etc.).

Hands-on work
Create a virtual network. Configure IP addresses. Use Azure Resource Manager.

PARTICIPANTS
Advanced technicians, system and network administrators and engineers.

PREREQUISITES
Basic knowledge of enterprise networks, TCP/IP and Microsoft Azure administration, or knowledge equivalent to that acquired in the course "Azure, implementation" (ref. AZM).

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

2 The bridge

- The Gateway application. Web application firewall.
- Integrity monitoring.
- Routing and Web Socket. Service limits.

Hands-on work
Setting up firewalls, routing and SSL.

3 VPN

- VPN and BGP gateways.
- Highly available connectivity.
- Site-to-site, point-to-site, VPN-to-VPN connection...
- Coexistence of connections, forced tunneling.

Hands-on work
Configure VPN and BGP for Azure VPN gateways using PowerShell. Create self-signed root certificates. Configure multiple site-to-site connections.

4 DNS

- Zone and record management.
- Reverse DNS records.
- Integrate it with other Azure services.
- Protect DNS records and zones.

Hands-on work
Import and export DNS zone files. Automate DNS operations with the .Net Software Development Kit (SDK).

5 Traffic Manager

- Geographical, priority, weighted or performance-based routing.
- End points.
- Traffic Manager features and performance.

Hands-on work
Manage Traffic Manager with PowerShell. Measure performance. Point an Internet domain to Traffic Manager.

6 ExpressRoute

- ExpressRoute features.
- NAT workflow and configuration, QoS.

Hands-on work
Migrate circuits from a conventional deployment to Resource Manager.

7 Network Watcher

- Network supervision. Packet capture.
- Display of network security groups.
- VPN connection and gateway problems.

Hands-on work
Display network topology. Manage packet captures.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

8 CDN

- Integrate and manage CDNs.
- Common problems.