



IT201: Advanced Cloud Network

Training Description:

This intensive 5-day course dives deep into advanced cloud network design, implementation, and management. You'll gain hands-on experience with leading cloud providers' services like AWS, Azure, or GCP (choose one based on your target audience) and explore complex networking concepts critical for building secure, scalable, and high-performance cloud environments.

By attending this comprehensive training course, you'll gain the necessary skills and knowledge to design, implement, and manage robust and secure cloud network infrastructures, propelling your career in the ever-evolving cloud computing landscape.

Training Objective:

By the end of the training, participants will be able to:

- ✓ Define cloud computing and explain its key benefits and challenges.
- ✓ Design and implement secure, scalable, and fault-tolerant cloud network architectures.
- ✓ Configure advanced routing, traffic management, and security services within your cloud environment.
- ✓ Understand and leverage cloud-native networking technologies like Direct Connect, VPN gateways, and peering.
- ✓ Troubleshoot and optimize cloud network performance for optimal application delivery.
- ✓ Prepare for relevant cloud networking certifications (optional, depending on chosen provider).

Training Designed for:

This course is intended for Network architects, Cloud architects, DevOps engineers, System administrators & Security professionals looking to specialize in cloud security.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

This training course is available upon request in English or Arabic, virtual online live or face to face public/inhouse. Content, location and duration can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

❖ Cloud Network Fundamentals

- Review of core networking concepts (TCP/IP, routing, switching, etc.)
- Introduction to cloud networking models (IaaS, PaaS, SaaS)
- Comparison of leading cloud provider networking services (AWS VPC, Azure VNet, GCP VPC)
- Cloud network design principles (scalability, security, performance)

DAY TWO:

❖ Advanced Routing and Traffic Management

- Deep dive into cloud routing protocols (BGP, OSPF)
- Configuring and managing high availability routing configurations
- Traffic shaping, load balancing, and content delivery networks (CDNs)
- Network Address Translation (NAT) and security groups

DAY THREE:

❖ Advanced Security Services

- Cloud firewall architecture and configuration
- Identity and Access Management (IAM) for network security
- Securing communication between cloud and on-premises environments (VPNs, Direct Connect)
- Intrusion detection and prevention systems (IDS/IPS) in the cloud

DAY FOUR:

❖ Advanced Network Optimization and Monitoring

- Network performance troubleshooting techniques
- Cloud-based network monitoring tools and metrics
- Optimizing network traffic flow for latency and bandwidth efficiency
- Automating network tasks with cloud APIs and scripting

DAY FIVE:

❖ Cloud Network Design and Case Studies

- Design real-world cloud network architectures for specific use cases (e.g., multi-tier applications, disaster recovery)
- Hands-on lab exercises implementing advanced cloud network configurations
- Exam preparation tips for relevant cloud networking certifications (optional)

❖ Course Conclusion

❖ POST-TEST and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Assessment

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

USD\$ - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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