Cloud Computing

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results

Learning Path

Seminar : Cloud as a Business Enabler

Workshop 1 : Implementing a Private Cloud Solution : Hands-on

Workshop 2 :
Securing the Cloud : Hands-on
Best Practices for Secure Cloud Computing

Type	: Seminar with Case Studies (Telecom & Non-Telecom)
Duration	: 2 Days
Level	: Basic (General Awareness)
Style	: Auditorium
Target	: Different Departments
Venue	: All Regions

Type	: Workshops (Hands-on)
Duration	: 3-4 Days each
Level	: Intermediate
Style	: Classroom
Target	: CIT, ICT and TS Departments
Venue	: Etisalat Academy

Cloud as a Business Enabler

Etisalat Academy (ETAC) reserves the right to alter dates, content, venue and consultant within a reasonable notice. All dates are tentative and are subject to a minimum confirmation of 7 delegates. All confirmations are due 2 weeks prior to the starting date.

All prices include coffee breaks and a daily buffet lunch.

Cloud as a Business Enabler

Overview

This 2-day seminar provides participants with a firm grounding on Cloud computing, understanding of what it is and how it relates to their own businesses.

Course Objectives

At the conclusion of this course, you should be able to:
describe how IT should change in today´s evolutionary context

- Describe how the Cloud will change today´s IT
- Explain Public and Private Cloud
- Describe the unprecedented sourcing model introduced by the Cloud
- Explain enabling technologies
- Discuss Cloud and (new) Service Level Management
- Discuss how to approach and evaluate a Cloud business case
- Describe Cloud and Risk Management
- Discuss a telecom related Cloud Case
- Explain how HP approaches the Cloud

Duration

2 days

Venue

Etisalat Academy + Abu Dhabi, Dubai and NE Regions

Language

English

Course Outcomes

- Understand how the Cloud will change today's IT
- Be able to describe the different deployment models
- Understand the sourcing model introduced by the Cloud
- Be able to evaluate a Cloud business case and Risk Management
- Understand how the Cloud may impact your organiza tion and roles that may need to be defined/re-defined
- Presentations and valuable discussions

Target Audience

- Senior IT Managers
- Decision Makers
- Heads of IT Architecture and/or Operation Department
- Anyone with interest in understanding Cloud and Cloud solutions better

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results

Cloud as a Business Enabler

Course Overview

Module 1: About the Cloud

- Business Strategy & IT
  - Business shaping forces
  - IT evolutionary model
  - Business Technology landscape
  - How ICT will serve the business
  - IT Challenges

- The Cloud Role
  - Optimize vs Innovate
  - Cloud Myths and Reality
  - What Cloud actually is
  - Effect of the Cloud on Traditional IT
  - Cloud architectural principles
  - Cloud requirements

- Sourcing Model
  - Cloud Service Delivery
  - (Cloud) User/Provider relationships
  - User/Provider points of view
  - Service Delivery models
  - *aaS definitions and examples

- Cloud Taxonomy
  - Deployment models
  - Public Cloud: definitions and implications
  - Private Cloud: definitions and implications
  - Community Cloud: definitions and implications
  - Hybrid Cloud: definitions and implications
  - The renewed ICT model: risks vs benefits
  - ICT needs: how to try

- Enabling Technologies
  - Cloud principles
  - Automation
  - Transformation of operational processes
  - Cloud example

Module 2: Inside the Cloud

- Service Level Management
  - Requirements met by the Cloud
  - Skill Requirements
  - New Service Governance
  - User vs Provider relationships
  - ITIL and Cloud

- Business Case
  - Business case evaluation criteria
  - Business outcomes examples
  - Business case – exercise
  - Impacts on business
  - Impacts on ICT

- Risk Management
  - Cloud risks vs benefits
  - Cloud specific vulnerabilities

Case Study 1 : SFR French Mobile Operator

SFR is one of the 3 Mobile Operators in France with over 20 million subscribers and supplying 4.6 million subscribers with broadband services.

Case Study 2: HP strategy to the Cloud

Implementing a Private Cloud Solution: Hands-On

Etisalat Academy (ETAC) reserves the right to alter dates, content, venue and consultant within a reasonable notice. All dates are tentative and are subject to a minimum confirmation of 7 delegates. All confirmations are due 2 weeks prior to the starting date.

All prices include coffee breaks and a daily buffet lunch.

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results

Implementing a Private Cloud Solution : Hands-On

You Will Learn How To
- Build dedicated and hosted private cloud solutions to optimize IT service delivery
- Assess private cloud computing options to solve business problems
- Leverage open source and proprietary private cloud products
- Manage and monitor your cloud infrastructure to improve resource utilization
- Secure key components of your private cloud implementation
- Integrate your private cloud with a public cloud to create a hybrid cloud solution

Hands-On Training
Throughout this course, you gain experience by implementing private cloud solutions. Exercises include:
- Identifying network, storage and computing private cloud components
- Deploying an open source private cloud
- Navigating a management console and managing virtual machines
- Configuring an on-premises Microsoft Hyper-V private cloud
- Establishing key private cloud security elements
- Setting up an Amazon off-premises private cloud

Course Content

Introduction to Private Cloud Computing
- Defining private cloud computing models
- Specifying architectural components
- Comparing SaaS, PaaS and IaaS service models
- Leveraging a virtualized infrastructure
- Identifying cloud market players

Solving IT Challenges with Cloud Technologies

Applying the benefits of private cloud computing in your organization
- Identifying the business drivers
- Maximizing resource utilization
- Improving service provisioning time

Duration

4 days

Venue

Etisalat Academy

Language

English

Course Benefits

As organizations evaluate cloud computing technologies, many are unwilling to trust the public cloud with their sensitive data. Creating a private cloud solution can allow your organization to exploit the benefits of cloud technologies within its data centers. In this course, you gain the key knowledge and experience required to leverage both on- and off-premises private cloud computing technologies.

Who Should Attend

System, Storage and Network Administrators, and IT Managers who are considering a private cloud solution for their organization. Basic knowledge of cloud computing is assumed.

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results

Implementing a Private Cloud Solution : Hands-On

Estimating private cloud implementation costs
- Analyzing the cost benefits with a decision matrix
- Comparing pricing models
- Calculating hosted fees vs. on-premises costs

Implementing an On-Premises Private Cloud
Leveraging open source solutions
- Identifying architectural components in OpenStack
- Exploring OpenStack community projects
- Enabling application computing power
- Fabricating facilities for redundant data storage
- Connecting private cloud components through the virtual network

Extending investment in proprietary technologies
- Examining the Microsoft private cloud solution
- Creating a Hyper-V private cloud
- Building a virtual network
- Customizing storage allocation
- Monitoring and reporting on private cloud resource utilization

Automating self-service provisioning with the System Center Virtual Machine Manager portal
- Planning host sizing and consolidation
- Working with templates and clones
- Deploying virtual machine images
- Managing hosts and virtual machines

Deploying an Off-Premises Private Cloud Solution

Building and managing a dedicated infrastructure
- Differentiating between hosting models: physical vs.virtual
- Optimizing the infrastructure based on usage patterns

Commissioning physical hosted servers
- Starting with bare metal configurations
- Automating installation tasks
- Administering servers from a Web-based control panel

Provisioning virtual hosted dedicated servers
- Specifying instance resources appropriately
- Scaling computing and storage based on demand
- Scheduling near-line backups and images

Amazon Web Services (AWS) multitenant servers
- Networking with Virtual Private Cloud to ensure maximum security
- Creating and attaching Elastic Block Storage (EBS) volumes
- Launching Elastic Cloud Computing (EC2) instances

Securing the Private Cloud

Evaluating the layers of cloud security
- Applying certification standards as a security benchmark
- SAS70 Type II
- PCI DSS Level 1
- ISO 27001
- FISMA
- Enhancing account access security features
- Safeguarding physical and logical assets

Virtualizing security components
- Configuring virtual private cloud firewalls
- Establishing Virtual Private Network (VPN) segments
- Authenticating users and authorizing access
- Selecting trusted availability zones

Integrating Disparate Cloud Types

Creating a hybrid cloud
- Interconnecting public, private and community clouds
- Handling excess demand with cloud bursting

Ensuring hybrid cloud security
- Maintaining sensitive data on- and off-premises
- Federating security policies across clouds

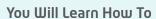### Achieving project delivery success
- Planning your private cloud road map
- Realizing business and capacity objectives

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results
etisalat

Securing the Cloud: Hands-On

Best Practices for Secure Cloud Computing

Etisalat Academy (ETAC) reserves the right to alter dates, content, venue and consultant within a reasonable notice. All dates are tentative and are subject to a minimum confirmation of 7 delegates. All confirmations are due 2 weeks prior to the starting date.

All prices include coffee breaks and a daily buffet lunch.

Securing the Cloud: Hands-On
Best Practices for Secure Cloud Computing

You Will Learn How To
- Analyze, manage and implement security for public and private clouds
- Establish data integrity and privacy in the cloud to manage risk
- Maintain platform security and protect data confidentiality
- Protect networks, operating systems and applications within various cloud deployments
- Achieve organizational cyber security compliance with effective cloud governance
- Exploit the cloud for efficient disaster recovery and business continuity

Hands-On Training
Hands-on exercises provide you with the experience to implement security measures in the cloud. Exercises include:
- Analyzing cloud-based security concerns
- Assessing the vulnerabilities of a cloud server
- Evaluating methods for data encryption
- Attaching encrypted storage to a cloud server
- Verifying identity using a certificate chain
- Blocking access with security groups
- Detecting inappropriate modifications of data and system configuration

Course Content

Cloud Computing Essentials
Cloud computing service models: Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS)
Public
Private
Virtual Private
Hybrid
Establishing cyber security fundamentals
Determining when security goals require a private cloud

Duration

3 days

Venue

Etisalat Academy

Language

English

Course Benefits

As organizations transition to cloud computing technology, security issues are a vital concern. In order to protect your sensitive data and maintain regulatory compliance, you must address the unique cyber security challenges faced when moving to a cloud environment. This course provides in-depth, hands-on experience identifying and resolving the security issues specific to public and private clouds.

Who Should Attend

Anyone involved in security aspects of cloud computing. Cloud computing knowledge is assumed.

Risk Management and Division of Responsibility

Managing risks in the cloud
- Centralizing information with SaaS to increase data security
- Implementing and managing user authentication and authorization
- Permission and password protection

Negotiating security requirements with vendors
Identifying needed security measures
Establishing a service level agreement (SLA)

أكاديمية اتصالات **etisalat academy**
Skills | Solutions | Results

Securing the Cloud: Hands-On
Best Practices for Secure Cloud Computing

Ensuring SLAs meet organizational security requirements

Securing the Cloud Infrastructure

Securing the platform
Restricting network access through security groups
Configuring platform-specific user access control
Integrating with cloud authentication and authorization systems

Compartmentalizing access to protect data confidentiality
Securing data in motion and data at rest
Identifying your security perimeter
Techniques for recovering critical data

Operating System and Network Security

Locking down cloud servers
Ensuring the cloud is configured according to best practices
Confirming safeguards have been implemented
Networking
Operating Systems
Applications
Scanning for and patching vulnerabilities
Controlling and verifying configuration management

Leveraging provider-specific security options
Defining security groups to control access
Filtering traffic by port number
Discovering and benefiting from the provider's built-in security
Protecting archived data

Achieving Security in a Private Cloud

Taking full responsibility for cyber security
Managing the risks of public clouds
Identifying and assigning security tasks in each SPI service model: SaaS, PaaS, IaaS

Selecting the appropriate product
Comparing product-specific security features
Considering organizational implementation requirements

Virtual Private Cloud (VPC)
Simulating a private cloud in a public environment
Google Secure Data Connector
Amazon VPC
Industry-standard, VPN-encrypted connections

The hybrid cloud alternative
Connecting on-premises data with cloud applications
Securely bridging with VPC
Dynamically expanding capacity to meet business surges

Meeting Compliance Requirements
Managing cloud governance
Retaining responsibility for the accuracy of the data
Verifying integrity in stored and transmitted data
Demonstrating due care and due diligence
Supporting electronic discovery
Preserving a chain of evidence

Assuring compliance with government certification and accreditation regulations
HIPAA
Sarbanes-Oxley
Data Protection Act
PCI DSS
Limiting the geographic location of data
Following standards for auditing information systems
Negotiating third-party provider audits

Preparing for Disaster Recovery

Implementing a plan to sustain availability
Reliably connecting to the cloud across the public internet
Anticipating a sudden provider change or loss
Archiving SaaS data locally
Addressing data portability and interoperability in preparation for a change in cloud providers
Exploiting the cloud for efficient disaster recovery options
Achieving cost-effective recovery time objectives
Employing a strategy of redundancy to better resist DoS

Why choose Etisalat Academy?

While many telecom training organisations bring PowerPoint slides to a skills-oriented programme, our training facility features the purpose-built labs and workshops that will get your team to "walk the talk". We have partnered with major telecom manufacturers and built industry alliances across the globe to bring you the latest and the greatest in telecom strategy, technology and equipment. Whether you're looking for a vendor-neutral course on a cutting-edge technology, or a bespoke training programme that equips your team with product-specific competencies and skills, here at Etisalat Academy we've got the expertise that will bring the desired outcome.

About Etisalat Academy

Etisalat Academy is the largest single-source provider of training and development solutions in the Middle East. For 30 years we have been providing consultancy and human capital development services to telecoms, government agencies, oil & gas companies, financial institutions and organizations across all industries and business sectors. Our solutions range from training and development programs in business, technology and leadership, to consultancy services in the areas of recruitment, team building, performance management, assessment centers and career development. Based in the United Arab Emirates and operating a 1,200,000 square feet training facility in Dubai, our partner network spans five continents and delivers world class training solutions to customers in Afghanistan, Bahrain, Egypt, India, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia and Sudan.

Training & Development	Seminars & Events	Corporate Facilities	Accommodation on Campus	Sports & Leisure Club

أكاديمية اتصالات
etisalat academy
Skills | Solutions | Results