

Preamble for IT

The rapid, on-going developments related to Cloud Computing, and the use of Web Applications in the implementation of dynamic Websites, are covered comprehensively by four (4) CEL courses in February 2012.

Cloud Computing:

- **Cloud Computing for Business and IT Professionals** is a foundational training course for those who need to acquire the technical knowledge as well as experience practical implementation issues of Cloud Computing systems.

- **Cloud Computing Systems - Analysis & Testing** is an in-depth training course dealing with significant aspects of Cloud Computing Systems Threats, Risks, Security and Performance issues in an integrated fashion, enabling assessment of Cloud based system implementations.

Web Applications:

- **Web Application Security: Hacker Attacks & Defense** is a training course that enables attendees to learn how Web application attacks occur, identifies various Web application attack categories, demonstrates Web application security tools and techniques to test as well as defend websites from application vulnerabilities exploitation.

- **Web Application Testing: Principles & Practice** is a training course that addresses fully the issues related to Web application testing providing the knowledge and practical skills to identify, plan and carry out different forms of Web application testing, including significant functional, security and performance tests.

Cloud Computing Systems – Analysis and Testing

DATE : 27-28, Feb 2012
DURATION : 2 Days

CODE : CCS
FEE : HK\$6,380

INSTRUCTOR : Dr Adib Zaray
EARLY BIRD : HK\$5,880

Cloud computing represents a fundamental shift in the acquisition and implementation of remote computing operations involving networks, operating systems, software applications, databases, data storage, etc. It provides on-demand, real-time network access to scalable shared computing resources that can be physically located anywhere.

Cloud Computing creates new opportunities as well as new risks. The challenge is to meet the expectation of fast delivery of new computing system functionality, while maintaining full control of system availability, optimum security and high performance.

This is an in-depth training course dealing with significant aspects of Cloud Computing Systems analysis and testing, empowering course attendees to comprehensively assess all Cloud Computing based system implementations.

Attendees Will Learn About

Cloud Computing Systems:

- Salient Features
- Significant Threats and Risks
- Important Security Characteristics
- Essential Performance Assessment
- Analysis and Testing - Latest Tools + Techniques

Who Should Attend

This course is suitable for IT professionals who need to acquire the technical knowledge as well as experience the practical issues related to Cloud Computing Systems analysis and testing.

COURSE OUTLINE

1. Cloud Computing Systems

- Characteristics
- Service Models - SaaS, PaaS, IaaS
- Deployment Models - Public, Private, Hybrid
- Multi-Tenancy Operations
- Adoption Concerns

2. Cloud Computing System Threats

- Abusive Usage
- Insecure Interfaces
- Evil Insiders
- Shared Technology Vulnerabilities
- Data Loss and Leakage
- Account, Service and Traffic Hijacking
- Threat Analysis - Tools + Techniques

3. Cloud Computing System Risks

- Governance Loss
- Network Hacking
- Portability and Interoperability
- Shared Resource Provisioning and Failures
- Data Management and Protection
- Management Interface Manipulation
- Risk Analysis - Tools + Techniques

4. Cloud Computing System Security

- What is Security for Cloud Computing?
- Data Centre Operations
- Enterprise Continuity and Disaster Recovery
- Application Security
- Encryption and Key Management
- Identity and Access Management
- Virtualization
- Network & System Hardening
- Security Testing - Tools + Techniques

5. Cloud Computing System Performance

- Performance Challenges in the Cloud
- Network Analysis
- Application Flow Mapping
- Measuring Response Times
- Server Load Testing
- Server Load Balancer Testing
- Performance Testing - Tools + Techniques

Web Application Security :

Hacker Attacks & Defense

DATE : 23-24 Feb, 2012

CODE : WAS

INSTRUCTOR : Dr. Adib Zaray

DURATION : 2 Days

FEE : HK\$6,380

EARLY BIRD : HK\$5,880

Web-based applications are being routinely incorporated in Websites to facilitate an extensive and growing range of online usage. Currently, hackers are aggressively targeting Web application vulnerabilities to break into computers and networks, steal confidential information, destroy existing data resources, install malicious software, etc., hence compromising an organization's security integrity. Whether a Website is concerned with sensitive e-commerce transactions, database manipulations, or any other information processing activity, Web applications that are involved can expose threats to an organization that may have never been considered. As a consequence, organizations must integrate robust security measures into their Web-based applications.

The in-depth training course:

- Enables attendees to learn how Web application attacks occur
- Identifies various Web application attack categories
- Demonstrates Web application security tools and techniques to test as well as defend websites from application vulnerabilities exploitation.

Attendees Will Learn About

- Web Server & Website security analysis
- Web application threats and vulnerabilities analysis
- Web application hacker attack types and preventions
- Secure Web application implementation
- Effective Web application security strategies

Who Should Attend

This training course is suitable for web application developers, analysts, infrastructure security professionals, managers and consultants from all types of organizations, who are interested in securing their Web applications, Websites and server operations.

About the Instructor

Dr. Adib Zaray

He graduated with the degrees of MSc and PhD in Computer Science. He has extensive publications, teaching, research and development experience involving the design and implementation high-performance parallel computers.

In 1996 he established Zaray Internet Consultants to provide specialist consulting and training services. Since 1996, he has been heavily involved in research and development related to the application of the Internet and Information Technology, providing consulting and training services to public and private sector organisations in the United Kingdom, Republic of Ireland, The Netherlands and Hong Kong. He specialises in the field of Network, World Wide Web and Information Technology Security as well as exploitation of Webbased technologies.

His consulting services includes developing network, Web and information technology security audits, developing security strategies and conducting Internet marketing for diverse organizations. His training services include worldwide delivery of specialist courses developed on strategic issues related to Internet / Intranet, Web and information technology security.

Adib has delivered many successful hands-on workshops and seminars in Hong Kong since 1999.

COURSE OUTLINE

1. Web Application Security Fundamentals

- Website, Web Server & HTTP Protocol
- Website Analysis
- Web Server Analysis
- Web Application Operations
- Web Application Threats & Vulnerabilities
- Web Application Analysis

2. Web Application Host Attacks

- Denial-Of-Service (DOS) Attacks
- HTTP & HTML Based Attacks
- Authentication Attacks
- Authorization Attacks
- Man-In-The-Middle Attacks
- Path Traversal Attacks

3. Web Application Cross-Site Scripting Attacks

- What Is Cross-Site Scripting Attack?
- How To Deal With Cross-Site Scripting
- Preventing Cross-Site Scripting Attacks

4. Web Application Buffer Overflow Attacks

- What Is Buffer Overflow Attack?
- How Buffer-Overflow Vulnerabilities Occur
- Preventing Buffer Overflow Attacks

5. Web Application Database Attacks

- What Is Web Database SQL Injection Attack?
- Automated SQL Injections
- Preventing SQL Injections
- SQL Injection Testing
- Defence Tactics For SQL Injection Attacks

6. Web Application Security Strategies

- Application Development - Secure Practices
- HTTP Attacks - Prevention Strategies
- Web Server Hardening
- Critical Files Fingerprinting
- Digital Certificates & SSL Encryption Usage
- Firewall Approaches
- Penetration Testing
- Event Logging & Audit Trail Analysis

Cloud Computing

for Business and IT Professionals

DATE : 22 Feb, 2012 CODE : CCP INSTRUCTOR : Dr. Adib Zaray
 DURATION : 1 Day FEE : HK\$3,680 EARLY BIRD : HK\$3,380

This is a foundational course, for business and IT professionals, on the important topic of “Cloud Computing”. The training course provides a practical, hands-on overview of this fast moving technology across three layers - software, platforms and infrastructure - benefiting those organizations who are considering adoption of the Cloud Computing approach to their IT operations. On completion, course attendees will be able to evaluate as well as effectively deploy Cloud based computing environments and applications.

Attendees Will Learn About

Essentials of Cloud Computing encompassing:

- Service Models
- Application Scope
- Opportunities & Risks
- Infrastructure Deployment
- Virtualization Techniques
- Reliability & Resilience
- Security & Privacy
- Usability & Performance
- Vendor Offerings

Who Should Attend

This course is suitable for all business and IT professionals who need to acquire the technical knowledge, and experience practical implementation issues related to Cloud Computing.

COURSE OUTLINE

1. Cloud Computing Fundamentals

- Evolution
- Objectives
- Characteristics
- Components
- Delivery Models
- Service Layers
- Opportunities
- Risks
- Benefits
- Vendor Survey

2. Cloud Computing Services

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)
- System Architectures & Operational Models
- Vendor Selection Challenges

3. Cloud Computing Deployment

- Infrastructure & Connectivity
- Virtualization Types & Techniques
- Security & Privacy
- Reliability & Resilience
- Usability & Performance
- Real World Case Studies

Web Application Testing :

Principles & Practice

DATE : 29 Feb - 1 Mar, 2012 CODE : WAT INSTRUCTOR : Dr. Adib Zaray
 DURATION : 2 Days FEE : HK\$6,380 EARLY BIRD : HK\$5,880

Web applications have a different risk profile compared to other computing environments. Typically, Web application developers have to deal with shorter project release timescales, changing technologies, disparate hardware as well as software platforms, and an uncontrolled user base that could run into millions. The combination of these factors ultimately affects the functionality, security and performance of a dynamic, application driven Website.

Web application testing is therefore a complex, high-risk process since it requires a thorough understanding of the operating strengths and weaknesses of multiple, interacting hardware and software systems, the collective use of appropriate test cases, and the deployment of specialist Web application testing tools.

The training course addresses fully the issues related to Web application testing. It provides attendees with the knowledge as well as practical skills to identify, plan and carry out different forms of Web application testing, including significant functional, security and performance tests.

Attendees Will Learn About

Web application testing encompassing:

- Threats & Risks
- Test Components
- Testing Strategies
- Test Planning
- Test Cases, Scripts & Suites
- Functional Testing
- Security Testing
- Performance Testing
- Specialist Testing Tools

Who Should Attend

This course is suitable for System Testers, Software Engineers, Security Analysts, Web Auditors and Quality Assurance Managers.

COURSE OUTLINE

1. Web Application Testing: Fundamentals

- Threats & Risks
- Testing Range
- Testing Strategies
- Test Planning
- Test Cases, Scripts, Suites & Scenarios
- Selecting Test Loads
- Manual Testing
- Automated Testing

2. Web Application Testing: Scope

- Data Validation Testing
- Unit Testing
- Integration Testing
- Functional Testing
- System Testing

3. Web Application Testing: Security

- Gateway Programs
- Buffer Overflow Handling
- URL Manipulation
- SQL Injection
- Cross-Site Scripting
- Cookie Poisoning
- (In-)Secure Cookies
- AJAX
- User Account Controls
- Application Logging
- Vulnerability Analysis

4. Web Application Testing: Performance

- Load Testing
- Stress Testing
- Volume Testing
- Endurance Testing
- Failover Testing

COURSE ARRANGEMENTS

Course Date	Course Title		Course Code	Duration (Days)	Fees (HK\$)	Enroll before these dates to Enjoy our Early Bird Rates		Cancellation Deadline
February 22, 2012	Cloud Computing For Business & IT Professionals (hands-on)	New	CCP	1	HK\$3,680	HK\$3,380	Jan 27, 2012	Feb 1, 2012
February 23-24, 2012	Web Application Security : Hacker Attacks & Defense (hands-on)		WAS	2	HK\$6,380	HK\$5,880	Jan 27, 2012	Feb 1, 2012
February 27-28, 2012	Cloud Computing Systems Analysis & Testing (hands-on)	New	CCS	2	HK\$6,380	HK\$5,880	Feb 3, 2012	Feb 8, 2012
February 29-March 1, 2012	Web Application Testing : Principles & Practice (hands-on)		WAT	2	HK\$6,380	HK\$5,880	Feb 3, 2012	Feb 8, 2012

TIME: 9:00 am - 5:00 pm daily
VENUE: Regal Hong Kong Hotel, Causeway Bay, HK.

PAYMENT AND CONFIRMATION:

- Seminar fees cover full set of course materials, lunches and refreshments. Seminar fees are payable in advance.
- For enrolment by email, please provide all information per the standard Enrolment Form on this page.
- For enrolment by fax, mail or email, CEL will issue an acknowledgement fax or email to the Authorized Person the next day from receipt of the enrolment.
- Enrolments received by fax, mail or email on or before early bird deadline will be entitled to the early bird rate.
- Joining instructions for confirmed registrations will be sent to the Authorized Person about 2 weeks before the seminar.

CANCELLATION AND SUBSTITUTION POLICY:

- There is no cancellation charge for cancellations made on or before the cancellation Deadline.
- Registrant(s) who fail to attend, or who cancel(s) after the cancellation deadline(s) are liable for the entire fee.
- All cancellations should be notified in writing.
- Enrolments received AFTER the cancellation deadline are subject to the same cancellation deadline.
- Registrants may send substitutions in their place anytime. However, substitutions are not allowed once a seminar has commenced.

ATTENDANCE CERTIFICATE:

A Certificate of Completion will be given to each delegate who have attended more than 70% of the enrolled course(s).

THE ON-SITE OPTION:

If there are 10 or more people in your organization interested in taking any of these CEL courses, why not consider the On-Site option? We can readily tailor courses to your specific needs, send an expert instructor to your workplace, and help cut costs. For more information about this service, please contact Miss Mak at CEL at Hong Kong telephone number 2838 1182.

CORPORATE DISCOUNT SCHEME & QUANTITY DISCOUNTS:

Please visit our Website at www.celhk.com or telephone Ms Mak at 2838 1182 to inquire the above.

Communications Engineering Ltd. reserves the right to vary the course programmes or arrangement if this proves necessary.

ENROLMENT FORM

Name	Job Title	Tel No	Mobile No	Course Code
(Mr/Ms) _____	_____	_____	_____	_____
(Mr/Ms) _____	_____	_____	_____	_____
(Mr/Ms) _____	_____	_____	_____	_____
(Mr/Ms) _____	_____	_____	_____	_____

Company Name: _____

Address: _____

Tel: _____ Fax: _____ Email Address: _____

Contact Person: (Mr/Ms) _____ **Job Title:** _____ **Tel No:** _____ **Fax No:** _____

Authorized Person: (Mr/Ms) _____ **Job Title:** _____

Signature: _____ **Date:** _____

Cheque enclosed for HK\$

Please note seminar fees are payable in advance

Made payable to **Communications Engineering Ltd.**

Please tick (✓) if you require a receipt



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