# Architecting Secure Cloud

# Presented by Dr Malcolm Shore

This course has been designed to provide participants with a thorough coverage of the Knowledge required for understanding and architecting secure cloud technologies in a way which drives business success.

Based on SABSA<sup>®</sup>, the world-leading framework for security architecture, the course provides participants with a comprehensive understanding of how to deliver secure cloud computing. Through a series of innovative presentations, case studies, and workshops, you will develop the knowledge and skills to use the most proven security architecture, design and service management processes in a way which ensures comprehensive end-to-end security of cloud driven systems is achieved.

This is a standalone course with no pre-requisite knowledge.

Refer to our website for the latest dates



Register online www.alctraining.com.au

# **Architecting Secure Cloud**

This course covers the various forms of cloud service (infrastructure as a service, platform as a service, and software as a service) and explores some of the more popular global cloud services. It covers the different deployment models for Cloud and their strengths and weaknesses, and looks at some new security attributes which have emerged from Cloud such as rapid elasticity and service on demand, and addresses the standards that can be applied to these attributes.

The advent of Cloud computing services has the capability of redefining the IT landscape as individuals, small to medium enterprises, and large enterprises all consider how the cloud service models can be leveraged to achieve more cost-effective computing.

As with any other major advance in technology, security opportunities and risks need to be addressed before the benefits of cloud computing can be safely achieved.

There are many issues to consider:

- compliance and risk management
- identity and access management
- service availability and integrity
- endpoint integrit, and
- information accessibility and protection

All these issues should all be explored when architecting systems around cloud computing.

# Presented by Dr Malcolm Shore

ALC is pleased to present this course with Dr Malcolm Shore, who has been invited from industry to share his expertise with the information security community. Born in England, Dr Shore started his IT career with International Computers Ltd. He emigrated to New Zealand and served in the RNZAF as an IT specialist, following which he moved to the NZ Government Communications Security Bureau and held the position of Director INFOSEC. During this time he was responsible for the introduction of ISO 27000 and the Common Criteria into New Zealand.

Afterheading the design and development of commercial landline, satellite, and radio encryption products in an electronics startup, Dr Shore took the position of Head of Security at Telecom NZ where he introduced ISO 27011 and the SABSA frameworks, and was responsible for achieving security compliance with Sarbanes Oxley and PCI. Dr Shore relocated to Australia in 2011 and for three years was the Principal Security Officer at the Australian National Broadband Network Company (NBN Co), responsible for implementing Australia's state-of-the-art fibre-to-the-home broadband network. Dr Shore is now the Technical Director (Australia) for BAE Systems Applied Intelligence.

Dr Shore has a formidable background in SABSA. As well as the mandatory Foundation Certificate, he holds the Advanced SABSA Certificate in Architectural Design and the Advanced SABSA Certificate in Risk, Assurance & Governance and holds a Masters Certificate in SABSA. In addition, Dr Shore has initiated and managed two SABSA programs at Telecom NZ and NBN Co. Dr Shore is a Trustee Director of The SABSA Institute and the Director of Education and Community relations for the Australian Information Security Association. Dr Shore has held an adjunct position as Senior Fellow at Canterbury University, Christchurch and is currently an adjunct Professor at Deakin University, Melbourne.



Register online www.alctraining.com.au/secure-cloud

# **Architecting Secure Cloud**



## Learning Outcomes

The top ten competencies developed on this course are:

- 1. Describe the types of Cloud service and deployment models
- 2. Understand how to architect Cloud infrastructures
- 3. Understand how to use the SABSA framework to architect Cloud
- 4. Describe the standard Cloud security models
- 5. Understand how to use attributes to profile Cloud services
- 6. Know the types of threats affecting IaaS, PaaS, and SaaS Clouds
- 7. Understand how to assess risk to security/ performance in the Cloud
- 8. Demonstrate how to assess Cloud relevance to Business Needs
- 9. Identify how externally regulated security can be delivered with Cloud
- 10. Analyse enterprise value from Cloud application deployments

### Who Should Attend

This course is of particular significance for anyone planning to migrate to a Cloud infrastructure, to develop Cloud service applications, or to integrate a Cloud service into their business. The Class provides an excellent foundation in Cloud Computing. Typical attendance would include:

- CIO / CISO / CRO / CIRO
- IT Strategists and Planners
- IT Architects
- IT Development Managers and Project Leaders
- Software Managers and Architects
- Computer / Information Security Managers, Advisors, Consultants & Practitioners
- IT Line Managers
- IT Service Delivery Managers
- Risk Managers
- Internal and External Auditors

# Course Contents

#### 1. SABSA In Brief

- Understand the key concepts of SABSA
- SABSA Views
- SABSA Matrix
- Attributes that link business to security

#### 2. Defining Cloud

- NIST, CSA, ENISA etc
- How cloud works
- Cloud models
- Cloud characteristics
- Forms of cloud offerings

#### 3. Current Clouds

• Cloud vendor offerings described

#### 4. Using Clouds

- Architecting laaS
- Developing using PaaS
- Profiling SaaS
- 5. Cloud Trust & Availability
  - CAIQ, CCM, STAR
  - Survivability in Clouds

#### 6. Integration and Cloud

- Cloud & IAM
- Cloud Integration Platforms

#### 7. SABSA Cloud Attributes

- Cloud definition of SABSA attributes
- Prioritising attributes for Cloud
- Delivering the Secure Cloud Architecture

#### 8. Summation

This is a standalone course with no pre-requisite Knowledge.

## Register online www.alctraining.com.au/secure-cloud