

Liquid Learning Workshop Series

# Managing Emerging Threats In SCADA Security Workshop 2012

A Proactive Approach for Security Managers and Specialists to Review Tools, Best Practices and Prevention Measures to Safeguard Critical Infrastructure Systems from New SCADA Security Risks

Liquid Learning is delighted to present this TWO-DAY WORKSHOP that provides an in-depth and interactive learning experience. This practical Workshop will provide hands on tools and a step-by-step guide to help you solve day to day challenges. By attending this Workshop you will:

- Recognise threat vectors to analyse and assess vulnerabilities and identify improvements for existing SCADA security architecture
- Conduct research to identify emerging SCADA security threats to all aspects of business - people, technology, process and legal
- Provide governance and control to develop procedures and select tools to monitor SCADA vulnerabilities and security events
- Develop a framework for conducting regular SCADA vulnerability assessments
- Ensure business continuity - designing SCADA network for security
- Design SCADA threat models based on business objectives, qualitative and quantitative metrics and support from business partners
- Publish vulnerability metrics, evaluate existing SCADA devices and proposed technology platforms
- Be proactive - develop alliances and strategies to address future SCADA threats and vulnerabilities

22 & 23 May 2012  
Sydney

**EARLY BIRD DISCOUNTS  
AVAILABLE**

**Book & Pay by 12 February 2012 to  
receive additional Super Saver Discount!**

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**Fax:** +61 2 9437 1093

[www.liquidlearning.com.au](http://www.liquidlearning.com.au)

## WORKSHOP LEADER



**Phil Kernick BEng, BSc(Hons), CISSP**  
Chief Technology Officer  
CQR Consulting



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development opportunities for professionals

# Managing Emerging Threats In SCADA Security Workshop 2012

## WORKSHOP BACKGROUND

SCADA cyber security management enables an organisation to manage emerging risks associated with their SCADA networks. Attacks via the web are becoming common place as hackers become more innovative in their approach.

"Stuxnet is the first worm of its type capable of attacking critical infrastructure like power stations and electricity grids: those in the know have been expecting it for years. On 26 September 2011, Iran's state news agency reported that computers at its Bushehr nuclear power plant had been infected.

The Stuxnet worm is different. It is the first piece of malware so far able to break into the types of computer that control machinery at the heart of industry, allowing an attacker to assume control of critical systems like pumps, motors, alarms and valves in an industrial plant" (Symantec - W32.Stuxnet Dossier).

There is already a new worm DUQU similar to STUXNET but designed to gather intelligence for future attacks on industrial control systems."

To safeguard critical infrastructure, SCADA cyber security managers and specialists need to acknowledge, rethink and take a proactive approach to prevention.

Australian Public and Private sectors require the knowledge, skills, assurance and capabilities to address existing and new SCADA security threats.

This workshop will review joint strategies, agreements and activities to plan manage and respond to future threats. Specific tools, best practices and preventive measures will include ...

- Information sharing and alliances
- Risk analysis
- Infrastructure resilience
- SCADA function qualification
- Intrusion detection systems
- Network audit and survey
- Self assessments and backups
- Disaster recovery

This workshop will review joint strategies, agreements and activities to plan manage and respond to future threats. Specific tools, best practices and preventive measures will include ...

## WORKSHOP DELIVERY

This course is divided into a series of modules over two days. Each module incorporates theory and discussion, and an opportunity for practical application.

The Workshop is supported with a structured set of handouts on the core topics. Workshop participants' specific needs and expectations will be assessed prior to the Workshop to ensure the facilitator can tailor the content accordingly.

## INTRODUCING YOUR EXPERT FACILITATOR



**Phil Kernick BEng, BSc(Hons), CISSP**  
Chief Technology Officer  
CQR Consulting

Phil is the Chief Technology Officer and co-founder of CQR Consulting Pty Ltd, the largest independent information security consultancy in Australia.

Phil has 22 years of experience in information security and technology. He has focussed on information security for the past 14 years. Phil has specialised in the areas of technical information security, critical infrastructure and IT Forensics.

Phil has an extensive knowledge and experience of the financial, utility, and defence market segments where he has conducted numerous security and application reviews, developed security audit programmes, and assisted clients to maximise the value of their information assets through effective security strategy and architecture.

## WHO WILL ATTEND

Delegates from both Public and Private Sectors that manage / control extensive critical SCADA devices and networks in roles spanning:

- SCADA System Security
- Systems / Network Security
- Security Architects
- Infrastructure Protection
- Risk Management
- Cyber Security Operations
- Cyber Security Assurance

## EARLY BIRD DISCOUNTS

Receive \$150 of registration if you register and pay by 20 April 2012

**1. Recognise threat vectors to analyse, assess vulnerabilities and identify improvements for existing SCADA security architecture**

- Determine degrees of variance on SCADA cyber security threats
- Analyse the changing vulnerability paradigm
- Develop vulnerability scenarios / graphs to find possible malicious patterns
- Identify SCADA improvements across industry ... what are your counterparts doing?

**2. Conduct research to identify emerging SCADA security threats to all aspects of business ... people, technology, process and legal**

- Conducting / retrieving relevant and credible research at the industry level
- Review organisation business metrics and objectives
- Align with global Computer Security Incident Response Teams
- Using boundary scanning to identify leaks

**3. Provide governance and control to develop procedures and select tools to monitor SCADA vulnerabilities and security events**

- Identify improvements for the SCADA information security architecture
- Set up governance, risk, control and audit processes
- Seek guidance and advice from Government (TISN) Trusted Information Sharing Network for Critical Infrastructure Protection
- How risk management and governance work best together

**4. Develop a framework for conducting regular SCADA vulnerability assessments**

- Appropriate security settings to for a SCADA network
- What should an effective SCADA network review checklist look like?
- Managing risk through committees or line management
- Case study: "Assessing SCADA security risk in XYZ organisation"
- Action plan: EOD take-aways and priority action

**5. Design SCADA networks for security**

- Where is "best in class" SCADA protection?
- SCADA security by design, default and deployment
- Review security features provided by device and system vendors
- Demonstrating risks and impact on business as leverage for good management

**6. Design SCADA threat models based on business objectives, qualitative and quantitative metrics and support from business partners**

- Differentiate Business Impact Analysis and Risk (severity, occurrence and detection)
- SCADA Business Continuity and Disaster Recovery
- What happens when SCADA and information management is "lost" ... backup and recovery!
- Understand how Public and Private sectors collaborate on business threats and metrics?

**7. Publish vulnerability metrics, evaluate existing SCADA devices and proposed technology platforms**

- Review benefits for SCADA Security involvement in Smart Grids
- Determine consequences of keeping the SCADA network completely separate
- What questions should you ask your CIO to ensure that your SCADA security is robust?
- Realising governance is not an end in itself

**8. Develop alliances and strategies to address future SCADA threats and vulnerabilities**

- Reference Australian Government (CERT) Computer Emergency Readiness Team
- Performance and conformance - What balance?
- Working effectively across organisational boundaries
- Case study: "Testing SCADA security risk scenarios in XYZ organisation"
- Action plan: SCADA Audit and Process initiatives

**WORKSHOP SCHEDULE**

- |                 |              |                 |         |               |                   |
|-----------------|--------------|-----------------|---------|---------------|-------------------|
| • 8.30 - 9.00   | Registration | • 11.00 - 12.30 | Session | • 3.00 - 3.20 | Afternoon Tea     |
| • 9.00 - 10.40  | Session      | • 12.30 - 1.30  | Lunch   | • 3.20 - 5.00 | Session           |
| • 10.40 - 11.00 | Morning Tea  | • 1.30 - 3.00   | Session | • 5.00        | Close of Workshop |



**Managing Emerging Threats In SCADA Security Workshop 2012**

# Booking Form

22 & 23 May 2012  
Sydney

**SUPER SAVER DISCOUNTS**  
Receive \$300 off registration if you book and pay by 12 February 2012

**EARLY BIRD DISCOUNTS**  
Receive \$150 off registration if you book and pay by 20 April 2012

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Registration Information	Organisation Name											
	Address				Suburb		State		Postcode			
	Title		Full Name or TBA			Title		Full Name or TBA				
	Position				Position				Position			
	Phone		Fax		Phone		Fax		Phone		Fax	
	Email				Email				Email			

\* Please photocopy this form if more than three will attend

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Please confirm my registration for **Managing Emerging Threats In SCADA Security Workshop 2012**

No. #	Options (per person)	Standard Rate	Early Bird Rate*	Super Saver Rate**
<input type="checkbox"/>	Workshop	\$2595 + GST = (\$2854.50)	\$2445 + GST = (\$2689.50)	\$2295 + GST = (\$2524.50)

\* Receive \$150 off registration if you register and pay by 20 April 2012  
\*\* Receive \$300 off registration if you register and pay by 12 February 2012  
Note: Course materials, refreshments & lunches are included. Travel and accommodation are NOT included.

**Group Discounts Available:**  
4+ people 10% off Standard Rate  
**Conditions:**  
Group Discounts apply for bookings made simultaneously and on one invoice only. Only one discount applies. Group discounts apply to standard rates only. Group discounts are not applicable to Super Saver and Early Bird rates.

TOTAL incl GST

All Prices listed in Australian Dollars

**SCAD0512 - I**

**Fax this form to: +61 2 9437 1093 Please call us if you require any assistance on: +61 2 9437 1311**

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Payment Details	<input type="checkbox"/> Credit Card	<b>Credit Card Details - Please charge my credit card for this registration:</b>		Electronic Funds Transfer (EFT) Please transfer funds directly to: Westpac Account Name: Liquid Learning Group Pty Ltd BSB: 032 002 Account No: 407 273 SWIFT Code: WPACAU2S  Amount <input type="text"/>  Please quote ref SCAD0512 and registrant name
	<input type="checkbox"/> Cheque (payable to Liquid Learning Group Pty Ltd)	Card Type <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> Diners Club <input type="checkbox"/> American Express		
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	<input type="checkbox"/> Please invoice me: Purchase Order No. # <input type="text"/>	Card Number <input type="text"/> Expiry <input type="text"/>		
		Full Name as on card <input type="text"/>		
	Cardholder's Contact Number <input type="text"/>	Signature <input checked="" type="checkbox"/>		

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Authorising Manager's Details: This registration is invalid without a signature.

Name <input type="text"/>	Position <input type="text"/>	Signature <input checked="" type="checkbox"/>	Date <input type="text"/>
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