Total BS Security: Business-based Systems Security

The good news: *We have a lot of security solutions today.*

The bad news: *We have a lot of security solutions today.*

Selecting your systems security solutions can be two of the most frustrating problem for security professionals and management. Jim will provide the audience with a different way to approach the problem of selecting the appropriate security solution. He will show how to base your security solutions on your business requirements first and security requirements second. Using real-world case studies and life-lesson concepts (i.e., “PROFIT&loss”, “Secure Brick Theory”, “Sailor-Proof”, and “SNAP”), he will demonstrate ways to determine what the most practical security solution is and sell them to management and customers. Jim’s examples include solutions for financial, presidential, military, gaming and electronic commerce operations. This presentation is for those frustrated systems security professionals and managers.

**Jim Litchko’s Bio**

Mr. Litchko is a senior information systems security specialist with over twenty-five years experience assessing and developing information system security (INFOSEC) solutions for computer and network systems. Currently, he is General Manager for Integrated Management Services, Inc. (IMSI). He has been a senior executive for special projects and business development at the two largest commercial INFOSEC companies, Secure Computing Corporation and Trusted Information Systems, and the enterprise integrator, Telos, all internationally known for advance INFOSEC R&D, consulting, and network security products. During his twenty-year career as a Navy cryptologist, he spent his first six years supporting operations on naval combatants and air reconnaissance platforms in the Atlantic, Pacific, and European theaters. Mr. Litchko’s last five years in the Navy were in staff and technical positions in the National Security Agencies (NSA) INFOSEC Directorate and the National Computer Security center (NCSC). He retired in 1990 as the Staff Chief for the Director of the NCSC. In 1997, he conducted the first security review of an Internet gaming site. Since 1988, he has been an instructor for systems and network security for Johns Hopkins University, MIS Training Institute and the National Cryptologic School. He also provided INFOSEC presentations for Congressional staffs, Gartner Group, Conference Board, Price
Waterhouse, Exxon, Freddie Mac, National Industrial Security Association, Computer Security Institute (CSI), National Computer Security Association (NCSA), Defense Intelligence University, and Armed Forces Communications and Electronic Association (AFCEA). Mr. Litchko has chaired panels and provided INFOSEC presentations at national and international conferences and executive conferences. He holds a Masters degree in Information Systems from John Hopkins University and a Bachelors degree in Industrial Technology from Ohio University.

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Jim Litchko
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Presentation

• An Approach
  – Business and Holistic

• Attitudes
  – Ours and Theirs

• Solutions
  – Case Studies

• Opinions
  – Mine

• Questions
  – Anytime
"Secure Brick" Theory

Operations

Manager

Security

Profit

Loss

Demand

Supply
Audience Survey:

• Loses due to Outsider?

• Loses due to Insiders?

• Loses due to CS?
Typical Evolving Network

Internet or other

Clients

Partners

Corporate System
Approach . . . talk about their business

- What is your business?
  - Services and products

- How do you operate?
  - Processes for selling and providing

- Who does what?
  - Responsibilities and information flow

- How do you measure success?
  - Customer satisfaction, profit, market share, etc.

- What is your system’s architecture?
  - Components, connections, capabilities, and cultures
Business/Security Requirements

Promotional Web Server

Transaction System

Availabilty
Confidentiality
Integrity
Authentication

Internet or other

Clients

Availability
Browser
Impatient

Partners

Confidentiality
Visibility

Service System

82% required no additional security products

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Attitudes and Perceptions:

• Sailor-on-liberty Philosophy
  – I want it fast, free and friendly

• Security only costs money
  – True, but . . . .

• The most secure solution has
  – best GUI
  – largest market share
  – relationship and trust

• Transparent to the user
  – Accept when . . .
## Security and Business Math

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th>Better Idea?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit:</td>
<td>$ 50B</td>
<td>$ 50B</td>
<td>$</td>
</tr>
<tr>
<td>Loss:</td>
<td>$ 4.5B</td>
<td>$ 1.0B</td>
<td>$</td>
</tr>
<tr>
<td>Net:</td>
<td>$ 46.5B</td>
<td>$ 49.0B</td>
<td>$</td>
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</tbody>
</table>
A firewall is just a door…..Right?

- 50+ complex firewalls for deployment
  - Cost: $50,000 \times 50+ = $2.5M

- 3 large government contractors

- How are they to be configured?
  - “Configured? It is a firewall.”

- Policy?
  - What do you think the Commanding Officer wants?
  - Policy developed by contractors in 20 minutes.

- Results?
Chain-of-Command Security

• One for all firewall policy

Operations
Personnel
Logistics
Research
Chain-of-Command Security

• One for all firewall policy

• Everyone for themselves policy
Internet or WAN

Promotional Web Server

Firewall

Transaction System

Clients

Firms

Support Operations
Which Authentication is best?

- Password?
- Token-based?
- SSL?
- Firewall with VPN?
- Biometrics?
- Public Key?
- Packet Encryptor?
What are the requirements?

- What/who authenticates to what/who?
  - It to it
  - them to them
  - it to them
- Is surfing required?
- Perception of security needed?
- What is acceptable?
Internet or WAN

Promotional Web Server

Transaction System

Firms

Support Operations

IP Encryption

Firewall

Clients
Biometrics

- Retinal
- Iris
- fingerprint
- facial
- voice
- DNA
“In God we trust. Everyone else we monitor.”

Promotional Web Server

Intrusion Detection Systems and Assurance Testing
Summary

- Based security on business first
- Practical solutions, not just technical
- Security is a business risk
Total BS Security: Business Systems Security

Selecting and selling your systems security solutions can be two of the most difficult problems for security professionals and management. Jim goal is to provide the audience with a different way to approach these two problems. Basically, he will show how to base your security solutions on your business requirements first and security requirements second. Using real case studies and life-lesson concepts (i.e., “PROFIT&loss”, “Secure Brick Theory”, “Sailor-Proof”, and “SNAP”), he will demonstrate ways to determine what the most practical security solution is and sell them to management and customers. This presentation is for those frustrated systems security professionals and equally frustrated managers.