



SEGURINFO

VI Congreso Internacional de Seguridad de la Información

“Compartiendo experiencias y visiones en Seguridad de La Información”

12 de Agosto 2009 - Casa Piedra - Santiago de Chile

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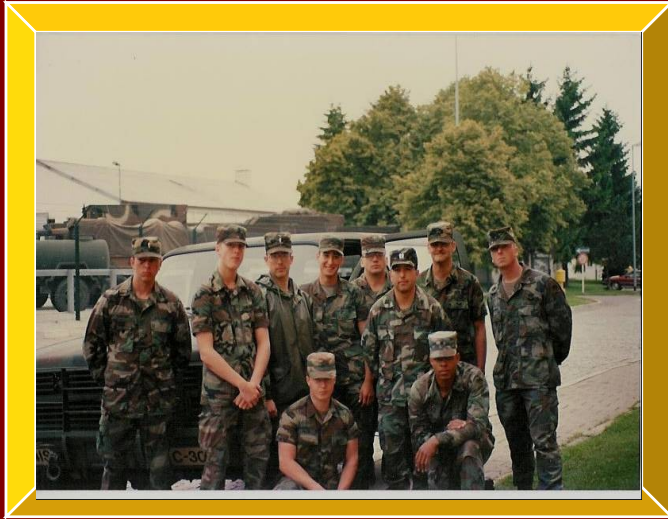
**Security in a
Web 2.0+ World**

A Standards Based Approach

C. Solari
and Contributors

My Trek in IT

A bit of background - some interesting assignments...



- Signal Officer, Airborne, Ranger
- Telecomms engineer - Air Force
- MS Systems Technology - Navy
- Platoon Leader - 71 soldiers
- Company Commander - 221 soldiers



- IT Unit - Criminal Investigative Division
- Counter-drug intelligence system
- New command center
- International attache offices
- PMO - modernize global IT infrastructure



- CIO from 2002 - 2005
- Modernize the IT infrastructure
- Cyber-security capability
- Enable business functions with IT

Two stories: Botnet and Social Engineering



- Story: Deny web presence - international tensions
- What can we learn from this story



- Story: social networking service - a free service
- What can we learn from this story

The future is Web 2.0 – your key assets are in the cloud...

Wireless Broadband + Web 2.0 Applications

Un-Constrained



capacity

Ubiquitous



everywhere

Un-tethered



wireless

...how are we going to do the security?

Opportunity is the only part of the triad that we control...

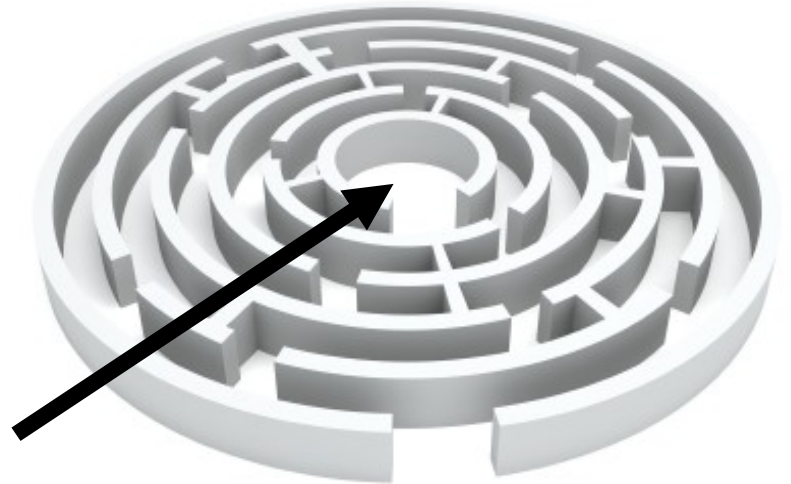
Opportunity



Where is all of this headed?

- Species jumping: data - voice- video
- Black market cyber crime on-demand
- Politics - Terror
- Identity and Privacy lost - by degrees
- Virtuality and Reality co-mingle...
- Not zero day - zero second
- Insider - External... no difference
- Stealthier and stealthier

The Brand
The Information
The System

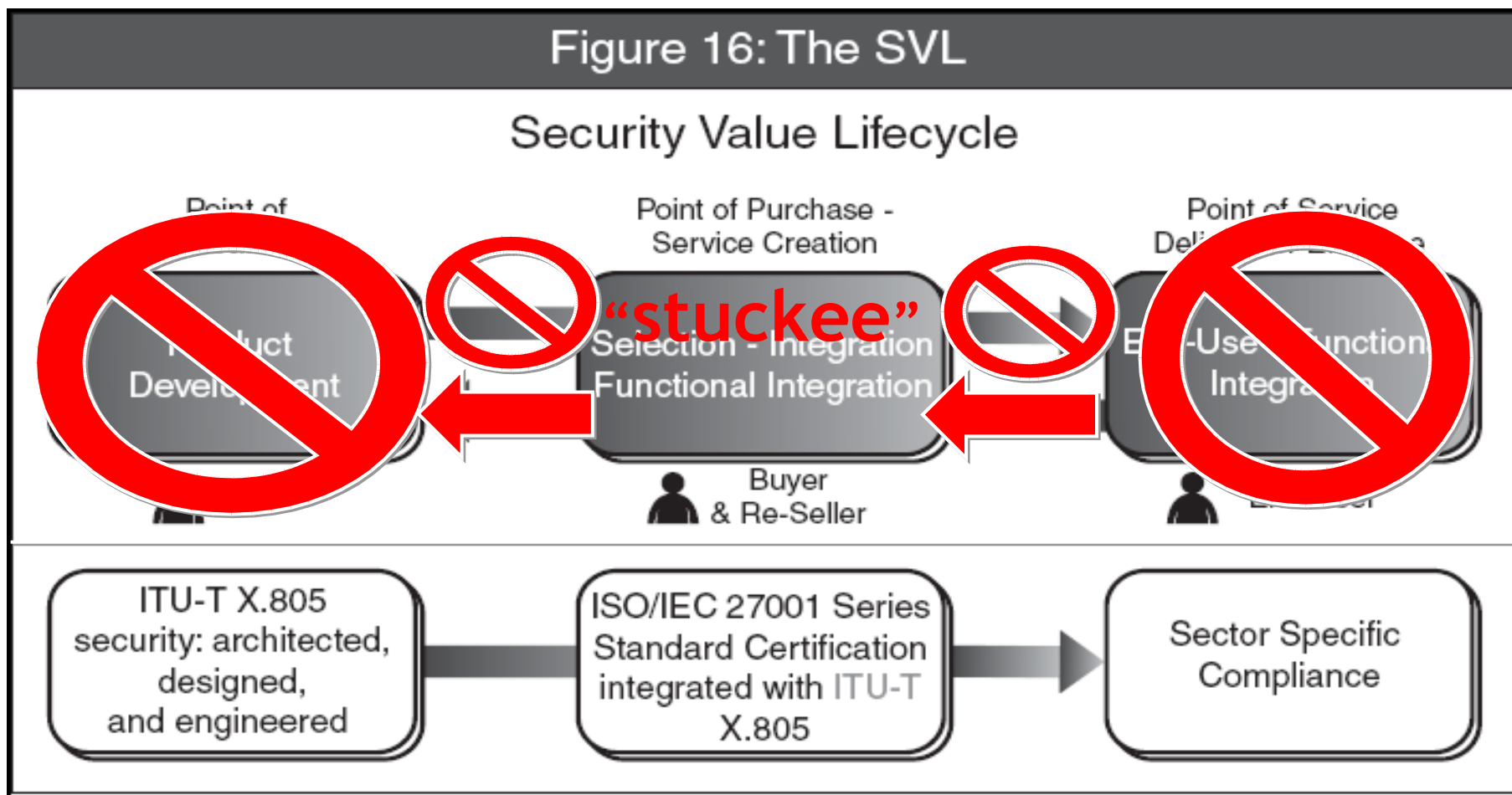


Point 1: Security is at a crossroads



- ▶ Today it is security applied “after-market”
- ▶ It really needs to be “designed-in”, but...
- ▶ We keep doing it “after-market” - why so?
- ▶ And we are going completely to the cloud...
- ▶ And the “enemy” has the advantage

A market problem...so change the way the market works.



Point 2: We don't have much time left

- ▶ Convergence is now - and it is complex.
- ▶ Web 2.0 is now - more in the cloud
- ▶ Wireless (3G/4G) is now - vulnerable
- ▶ Doomed to patching ad nauseum
- ▶ Is it secure?
 - Is security designed to a standard?
 - Is it being certified?
 - Is there transparency in the process?
 - Is policy right for governance?
 - Is business incentivized to change?
 - Is it going to happen by chance?
- ▶ Not a tough question: No x 6 = **NO**



Doomed to patching ad nauseum

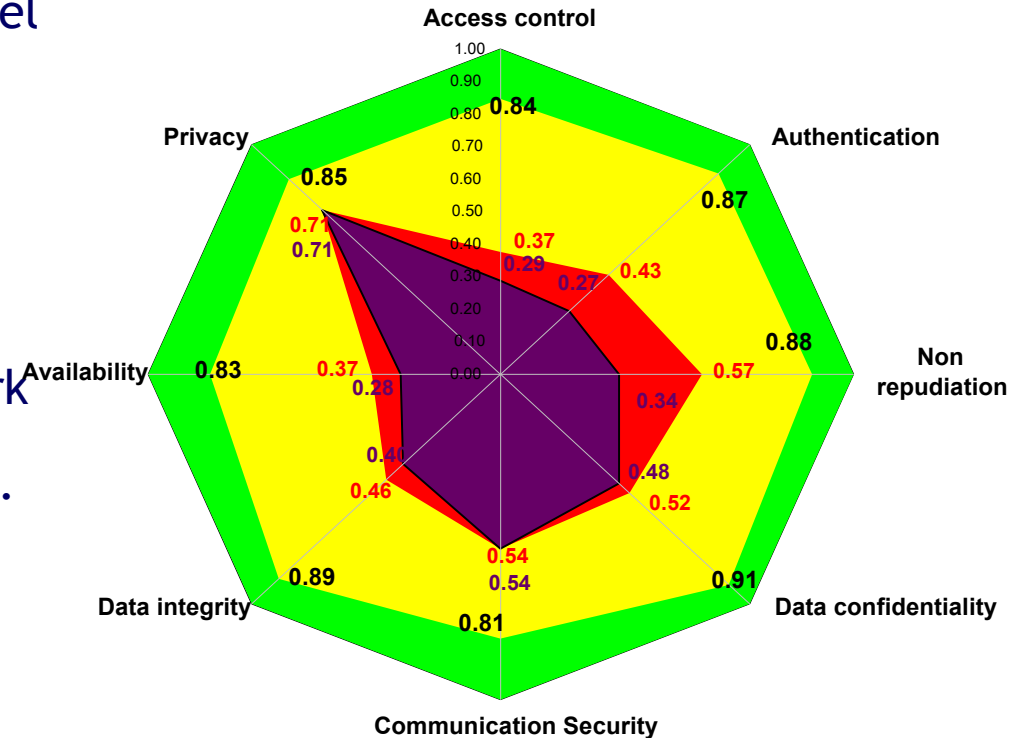
Point 3: Securing Web 2.0+ is far more risky & challenging



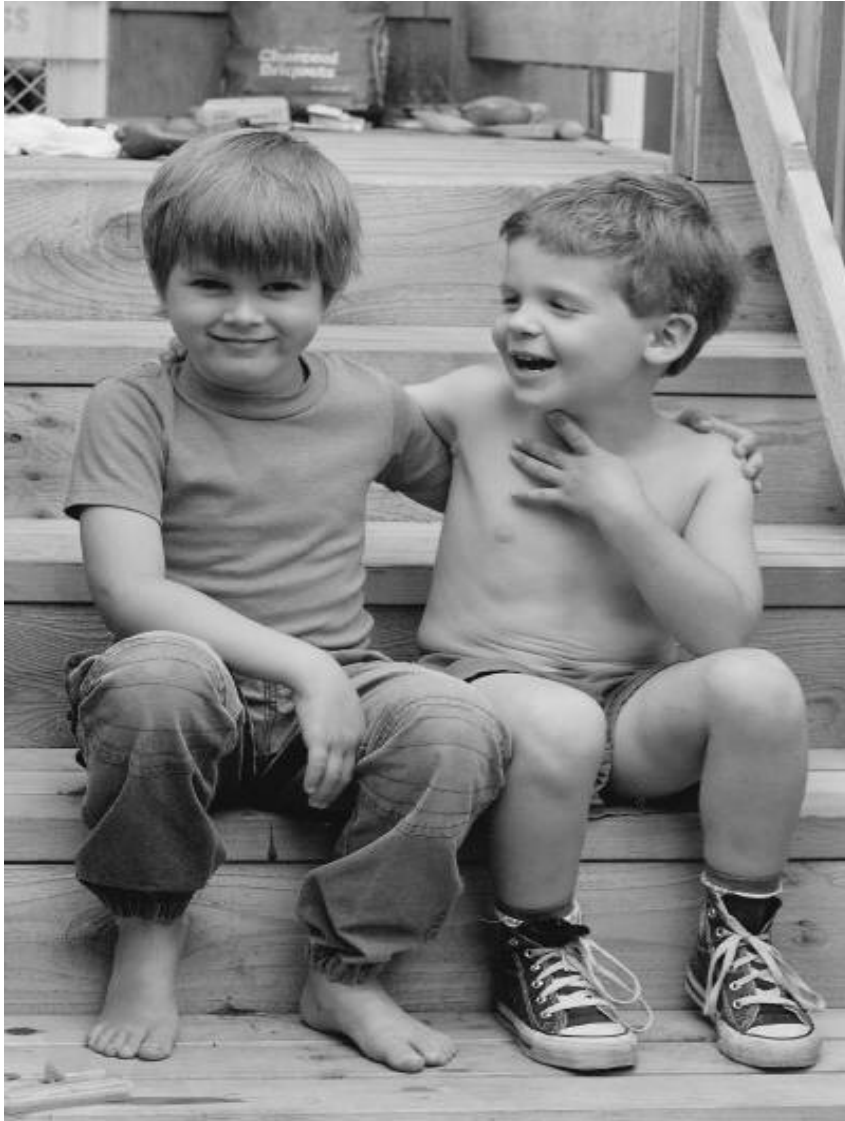
- ▶ Critical assets in the cloud
- ▶ Assured only by some contract agreement
- ▶ Privacy lost is unrecoverable
- ▶ Becoming a cyber-society
- ▶ All paradigms get changed - all of them
- ▶ The plain truth:
 - ▶ Web 2.0+ business model is about garnering intel about you & me—our spending habits, etc.- and sharing/re-sharing it
 - ▶ Problem is that information is easily compromised in the present day - even easier in the cloud

Point 4: Back to the basics - security by design (SbD)

- ▶ Harden at the box and at the system level
- ▶ Measure the security to a standard
- ▶ Creating a “security-value-lifecycle”
- ▶ SbD: a value-chain, measure & reported
- ▶ ITU-T X.805 - is a suitable SbD framework
- ▶ Business & government must still certify.
- ▶ ITU-T X.805 + ISO-27001 is a complementary marriage of standards



Point 5: Government - business - academia must work together



- ▶ Not a technology issue - a market motivation
- ▶ Threat is real - it has severe consequences
- ▶ Will not change unless forced by you
- ▶ Businesses government, legislators, & academics must unite & collaborate
- ▶ Establish SbD guidelines, clear, definitive, measurable security effectiveness yardsticks:
- ▶ Logic is not enough - aftermarket approach is ingrained in how we do business



“we are all...
...security companies”

“I TCP/IP - but mostly IP”





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Gracias

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Preguntas?