RSA Conference2016
San Francisco | February 29 – March 4 | Moscone Center

Connect to Protect

SESSION ID: BAS-M01

Introduction and A Look at Security Trends

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WELCOME TO THE PADANGTEGAL
MANDALA WISATA WANARA WANA
SACRED MONKEY FOREST SANCTUARY
DEAR VISITORS,
ON BEHALF OF THE VILLAGE OF PADANGTEGAL AND THE WANARA WANA FOUNDATION WE WISH YOU AN ENJOYABLE AND EDUCATION VISIT TO OUR FOREST SANCTUARY AND TEMPLE COMPLEX. TO ENSURE A TRULY PLEASURABLE VISIT PLEASE OBSERVE THE FOLLOWING:
1. THIS IS A SACRED AREA. PLEASE COMFORT YOURSELF WITH RESPECT FOR THE PEOPLE WHO WORSHIP HERE, THE TEMPLES AND THE MONKEYS AND OTHER PLANTS AND ANIMALS THAT RESIDE IN THE FOREST
2. THE MONKEYS OF THIS FOREST ("KERA" OR "MACAQUES") ARE FREE LIVING WILD ANIMALS PLEASE REFRAIN FROM TOUCHING OR PLAYING WITH THEM AS THEY MAY REACT IN AN UNPREDICTABLE MANNERS. DO NOT PROVIDE PEANUTS FOR THE MONKEYS AS THEY ARE A POTENTIAL HEALTH RISK. SEEK OUT A STAFF MEMBER (GREEN SARONGS) FOR ANY ASSISTANCE REGARDING THE MONKEYS
3. PLEASE READ THE BROCHURE PROVIDED WITH THE ENTRANCE TICKET FOR FURTHER INFORMATION ABOUT THIS SANCTUARY
WE THANK YOU FOR FOLLOWING THESE REGULATIONS AND WE TRUST THAT YOUR VISIT WILL BE A MEMORABLE ONE
SINCERELY,
WANARA WANA FOUNDATION

Agenda

- Intro to Information Security
- Economics of Information Security
- Security Trends

The Shifting IT Environment

(…or why security has become so important)

Shift: Compliance and Consequences

- The business has to adhere to regulations, guidelines, standards,…
  - SAS 112 and SOX (U.S.) – upped the ante on financial audits (and supporting IT systems)
  - PCI DSS – requirements on companies that process payment cards
  - HIPAA, GLBA, BASEL II, …, many more
- Audits have changed the economics of risk and create an “impending event”

Hackers *may* attack you but auditors *will* show up

- Disclosure laws mean that the consequences of failure have increased
  - Waves of disclosure legislation

Shift: Technology

- Many applications/transactions now operate over the web
- Cloud is changing our notion of a perimeter
- Worker mobility is redefining the IT landscape
- Shadow IT is becoming enterprise IT
- Majority of web transactions are now encrypted (SSL)
- The security model has changed from good people vs. bad people to enabling partial trust
  - There are more “levels” of access: Extranets, partner access, customer access, identity management, …

Shift: Attackers

- Cyber criminals are becoming organized and profit-driven
  - An entire underground economy exists to support cybercrime
- Attackers are shifting their methods to exploit both technical and human weaknesses
- Attackers after much more than traditional monetizable data (PII, etc.)
  - Hacktivism
  - State-sponsored attacks
  - IP attacks/breaches

Shift: Customer expectations

- Customers, especially businesses, are using security as a discriminator
- In many ways security has become a non-negotiable expectation of businesses
- Security being woven into service level agreements (SLAs)
- The “average person” is now familiar with security

Big Questions

- How do you communicate the value of security to the enterprise (and management)?
- How do you measure security?
- How do you rank risks?
- How do you reconcile security and compliance?
- How can you be proactive and not reactive? What is “security intelligence” and how would you actually consume, act on or share it?
- What changes are likely in privacy laws, data sovereignty, trust?
- What about big issues in the news like breaches of very personal data that cannot be reset or revoked? How should/can we adapt what we do based on them?
- How do you adapt to new paradigms like IoT?

The Economics of Security

Hackernomics (*noun*)

A social science concerned chiefly with description and analysis of attacker motivations, economics, and business risk. Characterized by

5 fundamental immutable laws and 4 corollaries

Law 1

Most attackers aren't evil or insane; they just want something

Corollary 1.a.:

We don't have the budget to protect against evil people but we *can* protect against people that will look for weaker targets

Law 2

Security isn't about security. It's about mitigating risk at some cost.

Corollary 2.a.:

In the absence of metrics, we tend to over focus on risks that are either familiar or recent.

Law 3

Most costly breaches come from simple failures, not from attacker ingenuity

Corollary 3.a.:

Bad guys can, however, be VERY creative if properly incentivized.

The CAPTCHA Dilemma

Completely

Automated

Public

Turing test to tell

Computers and

Humans

Apart

Law 4

In the absence of security education or experience, people (employees, users, customers, …) naturally make poor security decisions with technology

Corollary 4.a.:

Systems needs to be **easy to use securely and difficult to use insecurely**


Messana
GRATED
PARMESAN
CHEESE
Comet
MULTI-ROOM

Law 5

Attackers usually don’t get in by cracking some impenetrable security control, they look for weak points like trusting employees

A Visual Journey of Security Trends

2008

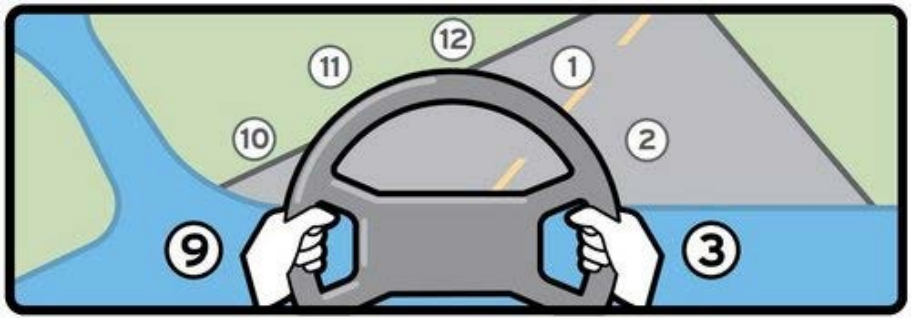
Cyber
Development
Integration
Using
Technology
Case
Defense
Intelligent
Breaking
Time
Solving
Strategies
Software
Control
Implementing
Generation
Privacy
Information
Consumer
Legal
Access
Electronic
World
Identity
Protection
Law
Experience
Digital
Challenges
Risk
Lessons
Mobile
Contracts
Architecture
Biometrics
Signatures
Best
Business
deploys
Vulnerabilities
Authentication
Management
Data
Analysis
Based
Threat
New
Enterprise
Services
Online
Federated
Panel
Environment
Standards
Attacks
SOA
Network
Compliance
Web
Approach
Practices
Application
Government
Key
Internet
Policy
Deployment
Real
Bank
Infrastructure
Systems
Assessment
Solutions
Techniques
Initiatives
Global
Study
Trust
Debate
Phishing
Perspective
Vendors
Criminal
Legislative
Homeland
Hacked
Anatomy
Operations
Model
Getting
Forensics
Microsoft
Coming
Engines
Money
Update
Industry
Prevention

2015 Submission Titles + Quick Abstract

2016 Submission Titles + Quick Abstract

Some hot areas…

- Hot topics:
  - Internet of Things (IoT) security
  - Data sovereignty and legislative volatility
  - Cyber Insurance
  - Privacy vs. Security
- Of particular intrigue
  - Breaches – implications of the theft of persistent PII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Enjoy the rest of the conference!!