# INFORMATION SECURITY FOR LAW FIRMS AND THEIR CLIENTS

TIPLA SEMINAR NOVEMBER 11, 2011

# **OUTLINE**

- RISKS ARE INCREASING
- MITIGATION "INSIDE" FIRM
- CLOUD RISKS AND MITIGATION IN CLOUDS
- **CONCLUSIONS**



#### RISKS ARE INCREASING

- INTERNAL/EXTERNAL BREACHES
- ETHICS OPINIONS
- CLIENT AUDITS
- IMPACT OF CLOUD SERVICES
- REGULATIONS
  - HIPAA (BA'S AND SUBCONTRACTORS)
  - 201 CMR 17 (MASSACHUSETTS)



#### IP RISKS INCREASING\*

- OPERATION AURORA (2009)–STATE SPONSORED?
- ▶ SHADY RAT (2011)-STATE SPONSORED?
- ORACLE v. SAP—2010 \$1.3B
- XIANG DONG YU (FORD)—CONVICTED 2011
- SERGEY ALEYNIKOV—GOLDMAN 2011
- GOODYEAR THEFT-TENNESSEE, CONVICTED 2011
- "...US law firms have been penetrated both here and abroad. Firms with offices in China or Russia are particularly vulnerable..."

<sup>\*</sup> JOEL BRENNER, AMERICA THE VULNERABLE, 2011.

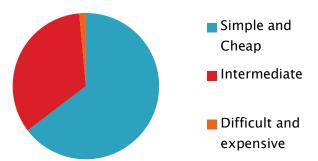
# LEGAL INDUSTRY INCIDENTS

FIRM	DATE	INCIDENT
Wilson Sonsini	2011	Insider access to privileged information
Gipson Hoffman & Pancione	2010	Spear phishing attack
Hunton & Williams	2011	Collateral damage from HB Gary attack
ACS:Law	2010	DDOS attack
Crosby & Higgins	2010	Joe job email attack
Cloud services	2011	RIM Blackberry outages
Four Bay Street Toronto law firms	2011	Spear phishing intrusion
Confidential	2011	Cyber extortion threat
Baxter, Baker, Sidle, Conn & Jones	2011	Hard drive with stent patient data lost on train

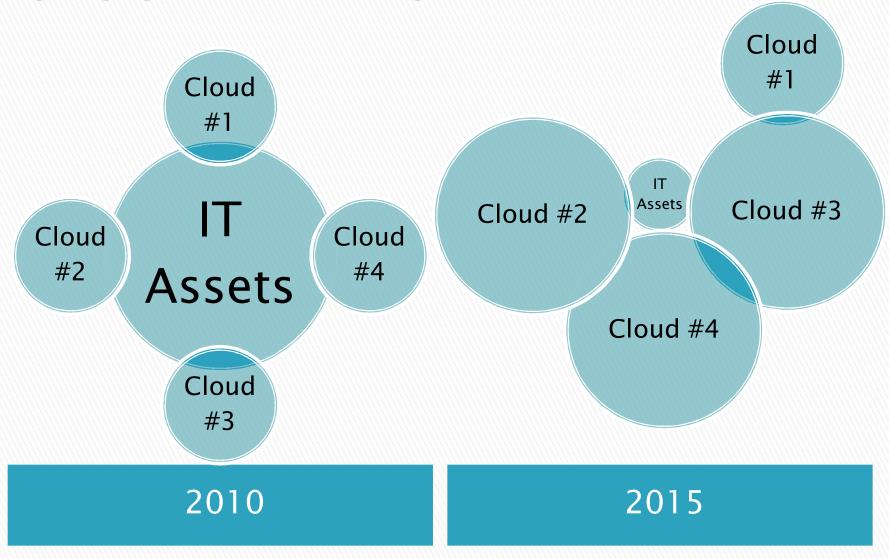
#### INTERNAL RISK MITIGATION

- ▶ ISO 27001/2 (INTERNATIONAL STANDARD)
  - ISO 27002: 133 BEST PRACTICES, CONTINUOUS IMPROVEMENT
  - ISO 27001 CERTIFICATION
    - CLIFFORD CHANCE, ALLEN & OVERY, WHITE & CASE
- VERIZON 2011 DATA BREACH REPORT
  - 57% OF BREACHES AT COMPANIES WITH 11-100 EMPLOYEES

#### Remediation



## **CLOUD TRENDS**



#### **CLOUD RISKS**

- PONEMON 2011 STUDY ON CLOUD SECURITY
  - 69% OF PROVIDERS SAID USERS OWN SECURITY
  - 35% OF USERS SAID THEY OWN SECURITY
- LITIGATION (FEW CASES)
  - US v. KHALID SHAIKH 2011 (YOUSENDIT)
  - BLACKBERRY OUTAGE (2011)
  - T-MOBILE SIDEKICK CASE (2011)
- SECURITY
  - CONFIDENTIALITY
  - INTEGRITY
  - AVAILABILITY



#### **AVAILABILITY**

BlackBerry's Service Hiccups Spread; Five Continents Affected

By JENNA WORTHAM

Published: October 12, 2011



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# **AVAILABILITY**





### **INTEGRITY**



#### DATA CLASSIFICATION

- RISK MANAGEMENT FOR CLOUDS
- CONFIDENTIALITY
  - PUBLIC
  - CONFIDENTIAL
  - SECRET
- INTEGRITY
  - YES/NO
- AVAILABILITY
  - ALLOWED DOWNTIME

#### MITIGATING CLOUD RISKS

- ISO 27001
  - AMAZON AWS, DE NOVO, RENEWDATA, DAEGIS, ETC.
- SSAE 16 (FORMER SAS70)
  - GOOGLE APPS
- CSA (CLOUD SECURITY ALLIANCE) STAR
  - ROLL OUT THIS QUARTER

APPROACH	STANDARD	OUTSIDE AUDIT
ISO 27001	YES	YES
SSAE 16	NO	YES
STAR	YES	NO

#### **CONCLUSIONS**

- HAVE A PLAN B FOR ANY CLOUD SERVICE YOU CHOOSE
- REMEMBER: YOUR CLOUD PROVIDER IS A CLOUD USER
- DON'T PUT CRITICAL DATA INTO THE CLOUD UNLESS YOU HAVE THE ENCRYPTION KEY
- START AN ISO 27002 SECURITY PROGRAM TO PROTECT INTERNAL/EXTERNAL RESOURCES

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