



#### Governance, Risk Management, Compliance, & Audit

An Overview of Cloud Security Alliance's Security Guidance for Critical Areas of Focus in Cloud Computing

July 23, 2009

#### Agenda

- About the Presenter
- About the Cloud Security Alliance
  - **Guidance 1.0**
  - **Getting Involved**
- Call to Action





### About the Presenter

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- (Certified Associate Business Continuity Professional) [DRII]. ABCP
- CFE (Certified Fraud Examiner) [ACFE].
- CIA (Certified Internal Auditor) [IIA].
- **CIPP/C** (Certified Information Privacy Professional / Canada [IAPP].
- **CGEIT** (Certified in Governance of Enterprise IT) [ISACA].
- (Certified Information Systems Auditor) [ISACA]. CISA
- (Certified Information Security Manager) [ISACA]. CISM
- (Certified Information Systems Security Professional) [ISC<sup>2</sup>]. CISSP
- ISSAP (Certified Information System Security Architecture Professional) [ISC<sup>2</sup>].
- **ISSMP** (Certified Information Systems Security Management Professional) [ISC<sup>2</sup>].
- **PMP** (Project Management Professional) [PMI].
- Founding Member of Cloud Security Alliance
- Principle Author of Audit & Compliance Section of Guidance 1.0

























#### About the Cloud Security Alliance

"To promote the use of best practices for providing security assurance within Cloud Computing, and provide education on the uses of Cloud Computing to help secure all other forms of computing."









### Governing the Cloud

Download at: www.cloudsecurityalliance.org/guidance

## **Overview of Guidance**

#### **1. Architecture & Framework**

#### **Governing in the Cloud**

- 2. Governance & Risk Management
- 3. Legal
- 4. Electronic Discovery
- 5. Compliance & Audit
- 6. Information Lifecycle Management
- 7. Portability & Interoperability

**Operating in the Cloud** 8. Traditional, BCM, DR **Data Center** Operations **10. Incident Response 11. Application Security 12. Encryption & Key Mgt** 13. Identity & Access Mgt 14. Storage

#### 15. Virtualization





### Assumptions & Objectives

- Cloud Adopters vs. Security Practitioners
- Broad "Security Program" Perspective
- Strategic and Tactical Approach
- Cloud Models Difference Driven





#### Governance & ERM

Cost Shifting Third Party Transparency Financial Viability KPI Alignment PII Concerns Risk Assessments







**Provider Laws vs. Customer Laws** 

**Plan for Termination** 

**Response to Legal Requests** 

**Secondary Uses of Data** 

**Cross-border Data Transfers** 





#### **Electronic Discovery**

**Impact on Records Information Management** 

**Roles and Responsibilities** 

**Control Data** 

**Preserve Data** 







### Compliance & Audit

Classify Data and Systems Data Locations, Copies Minimum Periodic Audits Understand Scopes Right to Audit





## Information Lifecycle Mgt

Segregation of Data from Protective Controls Segregation of Duties Privacy Restrictions Data Retention Assurance Data Destruction Recovering True Cost of a Breach





## Portability & Interoperability

Layers of Abstraction

Regular Data Extractions and Backups (SaaS) Applications Abstracted from the Image (IaaS). "Loose Coupling" (PaaS)

**Migration to Competitor Capability** 

Advocate Open Standards.





#### Summary

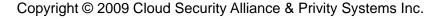
Cloud Computing is real and transformational

- Cloud Computing can and will be secured
- Broad governance approach needed
- Tactical fixes needed

Combination of updating existing best practices and creating completely new best practices

Common sense not optional







### Version 2.0

- Group 1: Architecture & Framework
- Group 2: Governance, Risk Management, Compliance, Audit, Physical, BCM, DR
- Group 3: Legal & eDiscovery
- Group 4: Portability & Interoperability & Application Security
- Group 5: Identity & Access Management, Encryption & Key Management
- Group 6: Data Center Operations and Incident Response
- Group 7: Information Lifecycle Management & Storage
- Group 8 Virtualization & Technology Compartmentalization





#### Call to Action

#### Join Us

**LinkedIn Discussion & Announcements** 

#### **Version 2.0 of Guidance Development Underway**

Other research initiatives and events





# Getting Involved

- Individual Membership (free)
  - Subject Matter Experts for Research
  - Interested in Learning
  - Admin & Org Help
- Corporate Sponsorship
  - Help Fund Outreach
- Affiliated Organizations
  - Joint Projects in the Community Interest
- Contact Information on Website





#### Contact

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#### Questions?