# CSA Israel and the Challenges of Cloud Security

Guy Alfassi

**CSA Israel** 

### About CSA



The Cloud Security Alliance was formed in 2008 as a non-profit organization.

#### Objectives:

- Promote a common level of understanding between the consumers and providers of cloud computing regarding the necessary security requirements and attestation of assurance.
- Promote independent research into best practices for cloud computing security.
- Launch awareness campaigns and educational programs on the appropriate uses of cloud computing and cloud security solutions.
- Create consensus lists of issues and guidance for cloud security assurance.

### **CSA Members**



#### **CSA** Research

- Cloud Control Matrix
- Top threats to Cloud Computing
- Guidance for Identity and Access Management
- Application Security Whitepaper

CCSK – Certificate of Cloud Security Knowledge

# How to get there

http://cloudsecurityalliance.org/

Managed through a LinkedIn group:

**Cloud Security Alliance** 

http://www.linkedin.com/groups?mostPopular=&gid=1864210

### **CSA** Israel

- An Israeli chapter of the CSA, formalized in June 2010.
- Our focus:
  - Cloud Security technology innovations
  - localization of Cloud Security best practices
  - LinkedIn group: <a href="http://www.linkedin.com/groups?mostPopular=&gid=3050440">http://www.linkedin.com/groups?mostPopular=&gid=3050440</a>

Join CSA at <a href="http://cloudsecurityalliance.org/Membership.html">http://cloudsecurityalliance.org/Membership.html</a>, And then request to join our chapter.

### What's planned for CSA Israel?

- Group events, presenting new technologies and research
- Cloud Security technology repository
- CSA Israel Wiki
- Collaboration with CSA global, OWASP and more

# Why is Cloud Security so interesting?

- Enterprises are looking forward to Cloud Computing for:
  - Flexibility
  - Cost saving
- Security is a major obstacle
  - How can you ensure the uniform security policy compliance,
    when part of your data center is somewhere up there?
  - Did my regulatory compliance certification just fly out of the server room's window?

# Why is Cloud Security so challenging?

- Security Appliances become irrelevant
- Security technologies need to adapt to a new environment
- Security knowledge and methodology changes / becomes obsolete.

Let's look at some examples of unique Cloud Security challenges.

# Privacy

- How do I ensure that private data remains confidential, when I don't control the storage or network environment?
- How do I comply with EU privacy regulations (private information cannot leave the EU), when I don't know where my server is?
- How do I use encryption, when my encrypted data travels through various countries, each with its encryption laws?

# Provisioning and Management

- How do I make sure only authorized personnel can provision a new server? (cost issues)
- How do I make sure only authorized personnel can take a server down?
- Where is my server running (now)?
- How is my server protected from my competitor's servers?

# Hardening

- I can't use out-of-the-box virtual server images, because they're not compatible with my hardening standards.
- Oops, my hardening standards don't work in the cloud, because:
  - Conventional hardening wizards and best practices just lead to unresponsive servers.
  - Remote management and privileged access is a must (and a big hardening no-no)
  - Which compromises must I make, and how can I justify / mitigate them?

### So what shall we do?

- Research the new threats relevant to Cloud computing.
- Adapt existing methodology and knowledge to the Cloud.
- Develop new technologies for the new environment.

CSA Israel focuses on technologies aiming to achieve these goals.

Come join us, and share the knowledge!

### Thank You!

Cloud Security Alliance, Israeli Chapter

LinkedIn: CSA Israel

See you there!

