CSA Israel and the Challenges of Cloud Security

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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: http://www.linkedin.com/groups?mostPopular=&gid=3050440

Join CSA at http://cloudsecurityalliance.org/Membership.html, 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!