



FORUM CERT-IST 2011

LA SECURITE POUR LES FOURNISSEURS DE CLOUD

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WHAT IS CLOUD COMPUTING?

Cloud computing is a model for enabling convenient, **on-demand** network access to a **shared** pool of **configurable** computing resources that can be **rapidly provisioned** and released with **minimal management effort** or service provider interaction...

Source: Peter Mell and Tim Grance of National Institute of Standards and Technology (NIST), Information Technology Laboratory

SaaS - Software as a Service



PaaS - Platform as a Service



IaaS - Infrastructure as a Service



Private Cloud

Public Cloud

Hybrid Cloud

Community Cloud

SECURITY LEADS CLOUD ADOPTION CONCERNS

EXAMPLE FROM THE HEADLINES:



Sony Network Breach Shows Amazon Cloud's Appeal for Hackers

Bloomberg
16 May 2011

QUICK VIEW

BEST PRACTICES WHEN BUILDING CLOUD SOLUTIONS / SERVICES?

- An overview of Security service offering by the Top 10 Cloud Providers
- The existing Gaps in solutions and services
- Addressing technical and Operational Security challenges for Cloud Providers

THIS TALK is NOT

A Cloud subscription guideline - A list of Cloud threats or solutions - An Alcatel-Lucent sales pitch

The 3-way handshake of Cloud Security

Understanding the gaps and Challenges



TOP 10 Cloud Providers and Security Service Level

List from SearchCloudComputing.com 2011



Security & Compliance Center

Security Consulting / documentation and guidelines ☒

ISO27001 certification ☒

SAS 70 Type II certification ☒

Security products / solutions

Managed Security Services

Cloud IT Services

Security Consulting / documentation and guidelines

ISO27001 certification ☒

SAS 70 Type II certification ☒

Security products / solutions

Managed Security Services

Cloud based Managed Security Services

Security Consulting / documentation and guidelines ☒

ISO27001 certification

SAS 70 Type II certification ☒

Security products / solutions ☒

Managed Security Services ☒



TOP 10 Cloud Providers and Security Service Level

List from SearchCloudComputing.com 2011



Trust.salesforce.com

Security Consulting / documentation and guidelines

ISO27001 certification



SAS 70 Type II certification



Security products / solutions

Managed Security Services



Compliance leadership

Security Consulting / documentation and guidelines

ISO27001 certification



SAS 70 Type II certification

Security products / solutions

Managed Security Services



Well...

Security Consulting / documentation and guidelines

ISO27001 certification

SAS 70 Type II certification

Security products / solutions

Managed Security Services

TOP 10 Cloud Providers and Security Service Level

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1st to receive FISMA accreditation for US Gov Cloud SaaS

SAS 70 type II certification
No additional Security Services



Somewhere probably secured

SAS 70 type II certification
Following best practices
No additional Security services



With Windows GFS

ISO27001, SAS 70 type II, FISMA certifications...
Security is certainly taken seriously by Microsoft
No additional Security services in PaaS or SaaS offers



A concept

No certification
The container concept with integrated security
No additional Security services

..... Alcatel-Lucent 

The 3-way handshake of Cloud Security

Understanding the gaps and Challenges



Transformation Planning Challenges

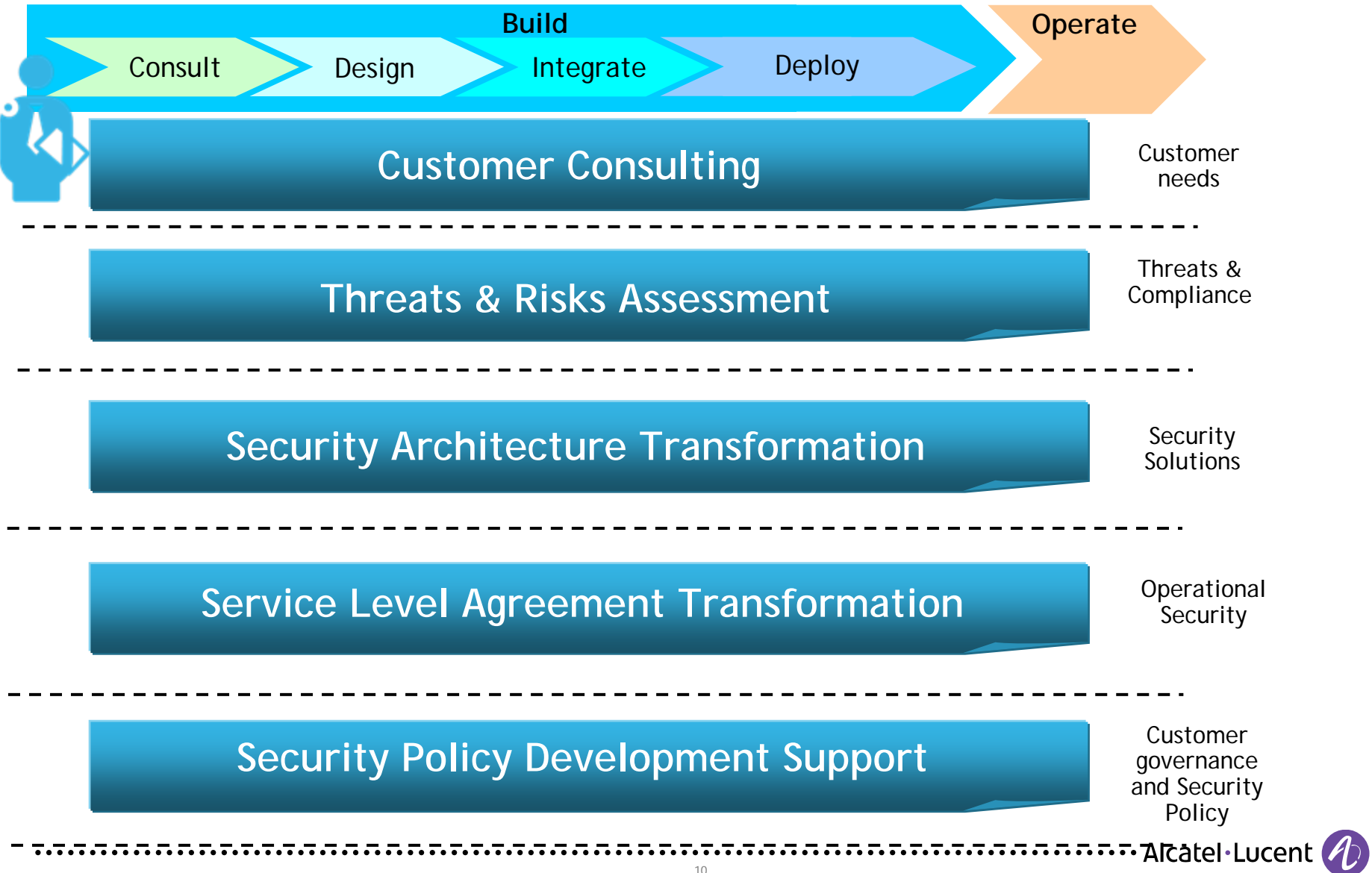
Improve transparency: give customers information about your security measures
Deliver a Cloud solution and service aligned with customers' expectations

- Security as a Consulting activity and as Strong governance support
- Understand the service, the customers, the risk profile
- Consider risks for the customer as well as for the Cloud provider
- Define what Security Service Level will be delivered by default
- Define the compliance targets



Security Cloud Services

On-demand security support for Cloud projects

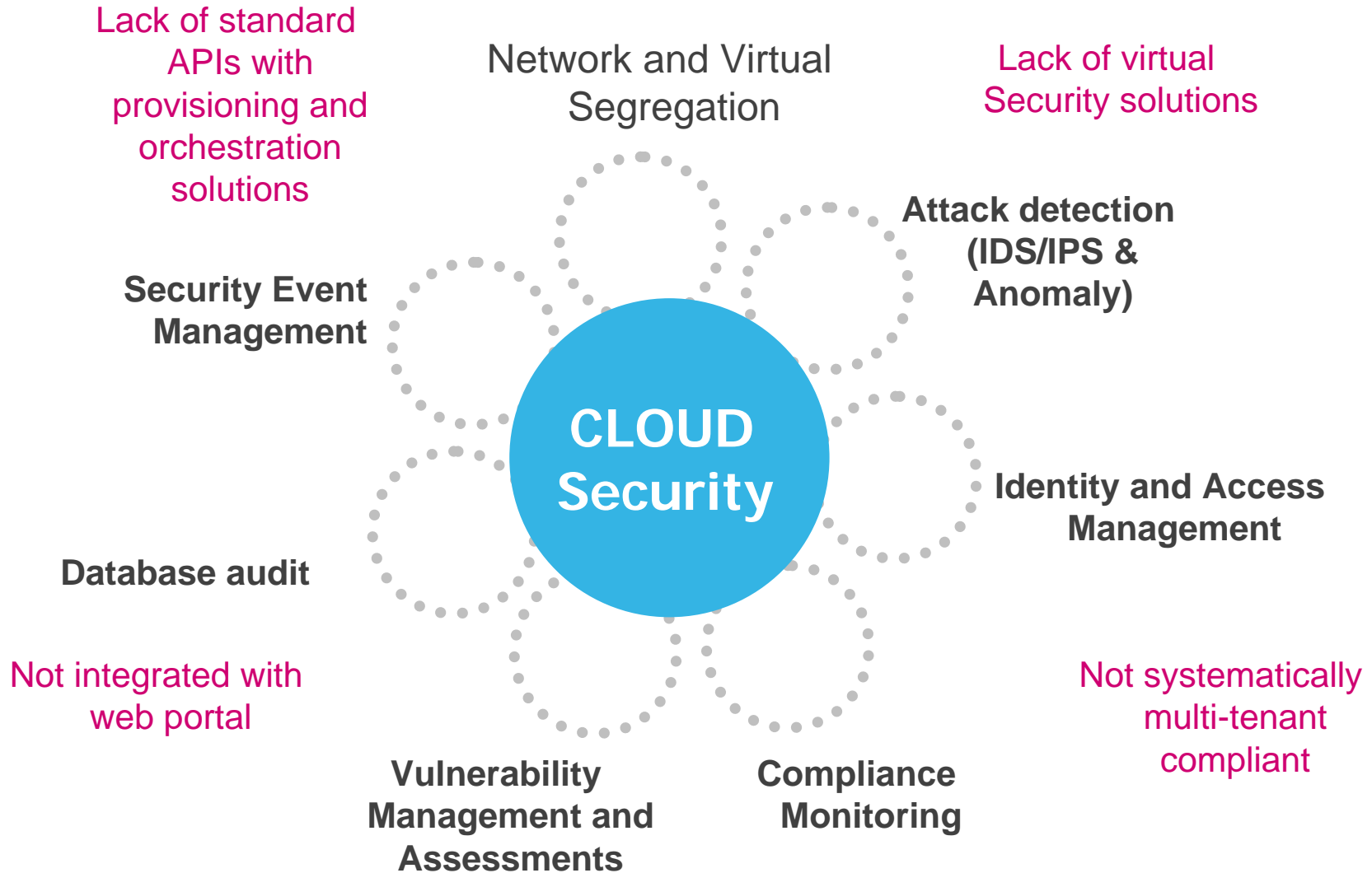


The 3-way handshake of Cloud Security

Understanding the gaps and Challenges



SOLUTION SECURITY GAPS



Source: Top Threats to Cloud Computing, Computer Security Alliance



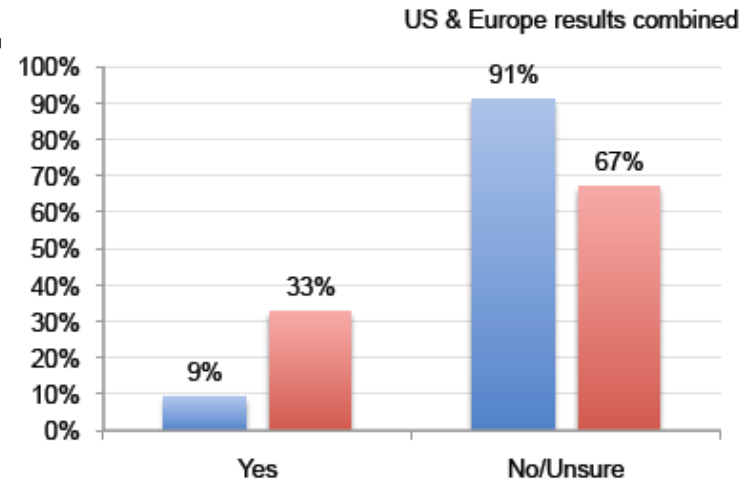
The 3-way handshake of Cloud Security

Understanding the gaps and Challenges



ADDITIONAL OPERATIONAL CONCERNS Towards Security As A Service...

- Same Cloud attributes for Security Solutions as for all the other components of the infrastructure
 - On-demand, rapid provisioning, elastic, shared, minimal management effort
 - Automation and Orchestration challenges
- Security is not only a requirement
 - Security as a Service for customers
 - Integrated with the customer SI



Security as a service from the cloud

Ponemon Institute© Research Report

- Does your organization provide security as a service from the cloud?
- Is your organization considering the provision of security as a service from the cloud (at some point in the next two years)?



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