

IBM SECURITY DAY 2011

Innovare con sicurezza per aprire al futuro



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Il Cloud per migliorare la sicurezza



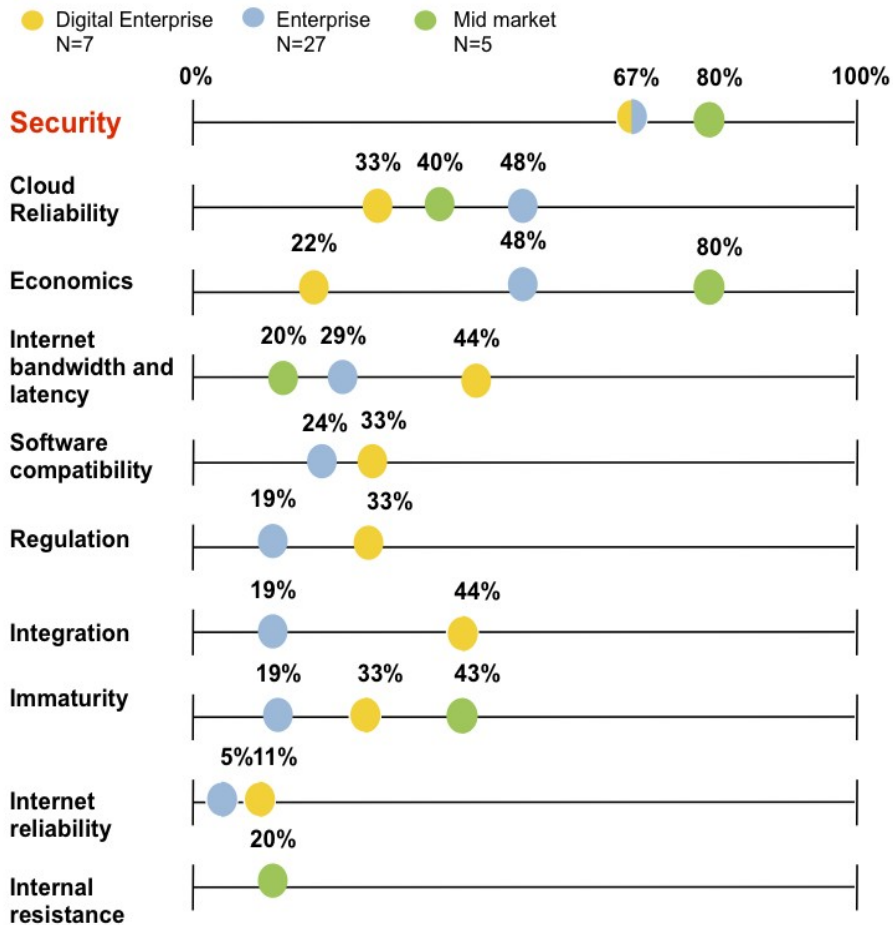
Agenda

- **Cloud Security Concerns**
- **IBM approach for building a secure Cloud infrastructure**
- **Customer experience**



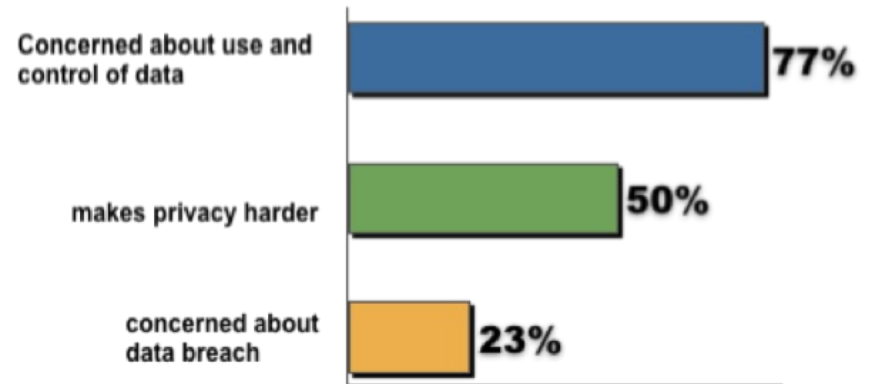
Security Remains a top concern of customers migrating to the cloud ...

Two Studies Tell the Story...



Source: Oliver Wyman Interviews

In a recent IBM study on Cloud Security, IBM found organizations adopting the cloud had a number of concerns about security in the emerging technology.



Source: IBM Study on Cloud Security



... due to many risk categories

Control

Many companies and governments are uncomfortable with the idea of their information being located on systems they do not control.

Providers must offer a high degree of security transparency to help put customers at ease.

Data

Migrating workloads to a shared network and compute infrastructure increases the potential for unauthorized exposure.

Authentication and access as well as protection along the data life-cycle become increasingly important.

Reliability

High availability will be a key concern. IT departments will worry about a loss of service should outages occur.

Mission-critical applications may not run in the cloud without strong availability guarantees.

Compliance

Complying with SOX, Data Privacy and other regulations may prohibit the use of clouds for some

Comprehensive auditing capabilities are essential.

Security Management

Even the simplest of tasks may be behind layers of abstraction or performed by someone else.

Providers must supply easy controls to manage security settings for application and runtime environments.



An Example of Security Challenge: Virtual Images Mobility

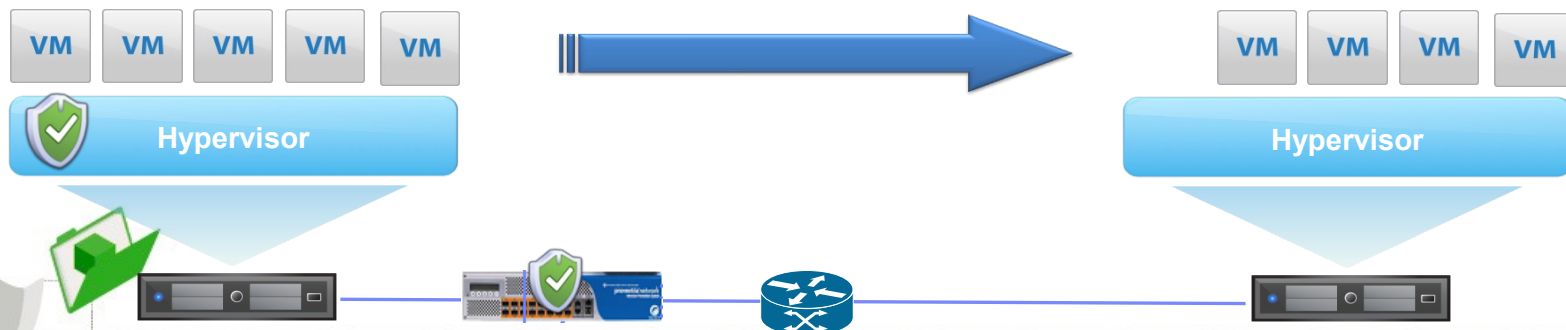
Virtualization is a building block inside the cloud computing paradigm.
Inside cloud is crucial to move running application from one physical server to another to have systems management flexibility and better availability

...but some security issues could wait through the journey from one host to another....

- Today data are transferred without being encrypted;
- This means possible threats against the VM

...as well as on the target physical host

- Does the destination “fulfill” origin security policy and regulation?
- What about the security of the target system?



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Cloud security **requires a change** of the usual **security mindset**, we need an **interdisciplinary** approach based on the following steps



**Develop
a strategy**



**Based on Business Requirements
Security Best practices**



... think holistically



**Design and
Implement**



Take a risk-based approach to security ▶ **... prioritize workloads**



**Technology
and Services**



Select technologies and services



**... modularity and
standards are keys**



**Monitor &
Audit**



**Proactively inspecting the
infrastructure**



**... address new
threats**



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IBM Strategy: support customers with an unmatched synergy among solutions, products and services for both private and public cloud



Trusted Advisor

Solution Provider

Security Services

Research



Security for the Cloud

Security from the Cloud

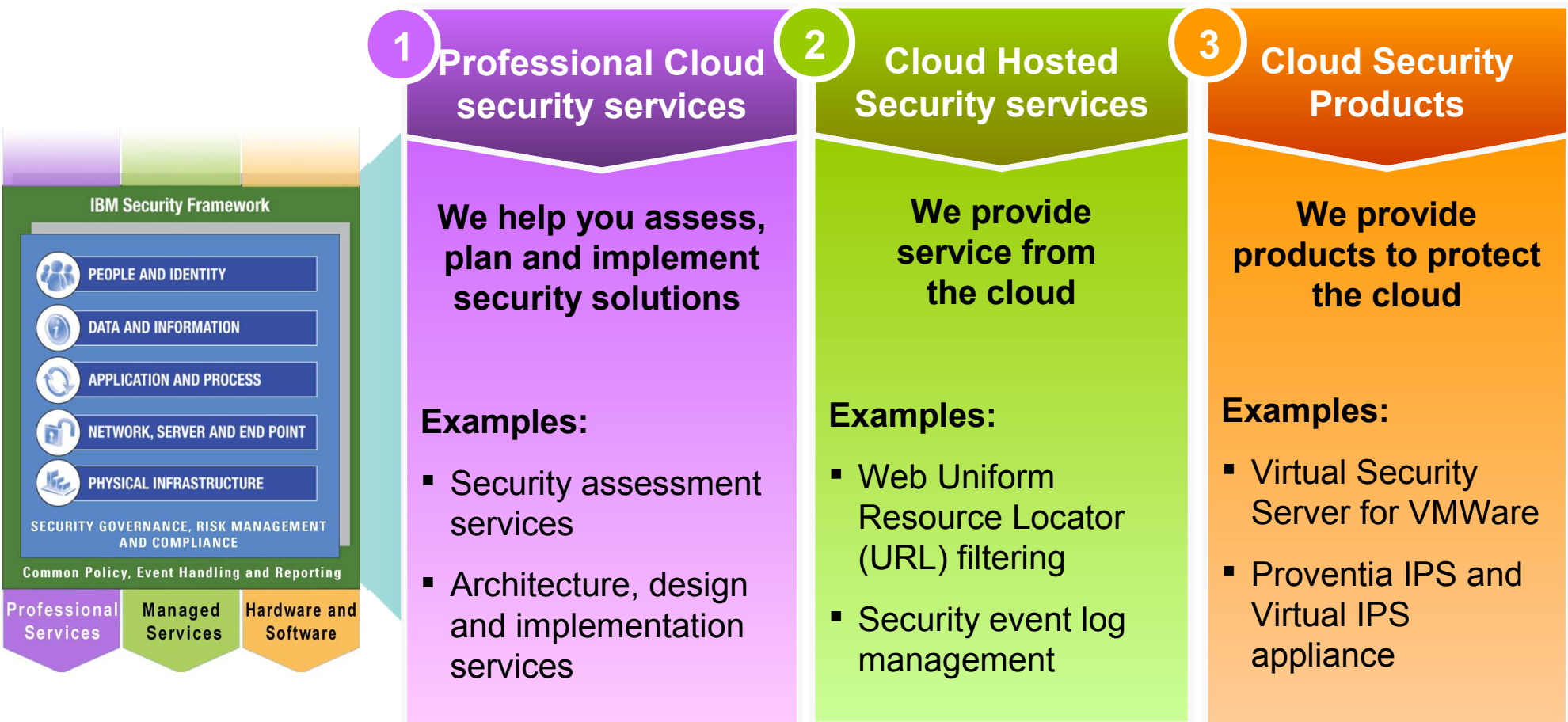


**Security & Privacy
Leadership**



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IBM built security services and solutions aligned with IBM Security Framework to address Client's concerns from any security perspective



Vision: Be the trusted partner for professional, managed, and cloud security services for customers around the world

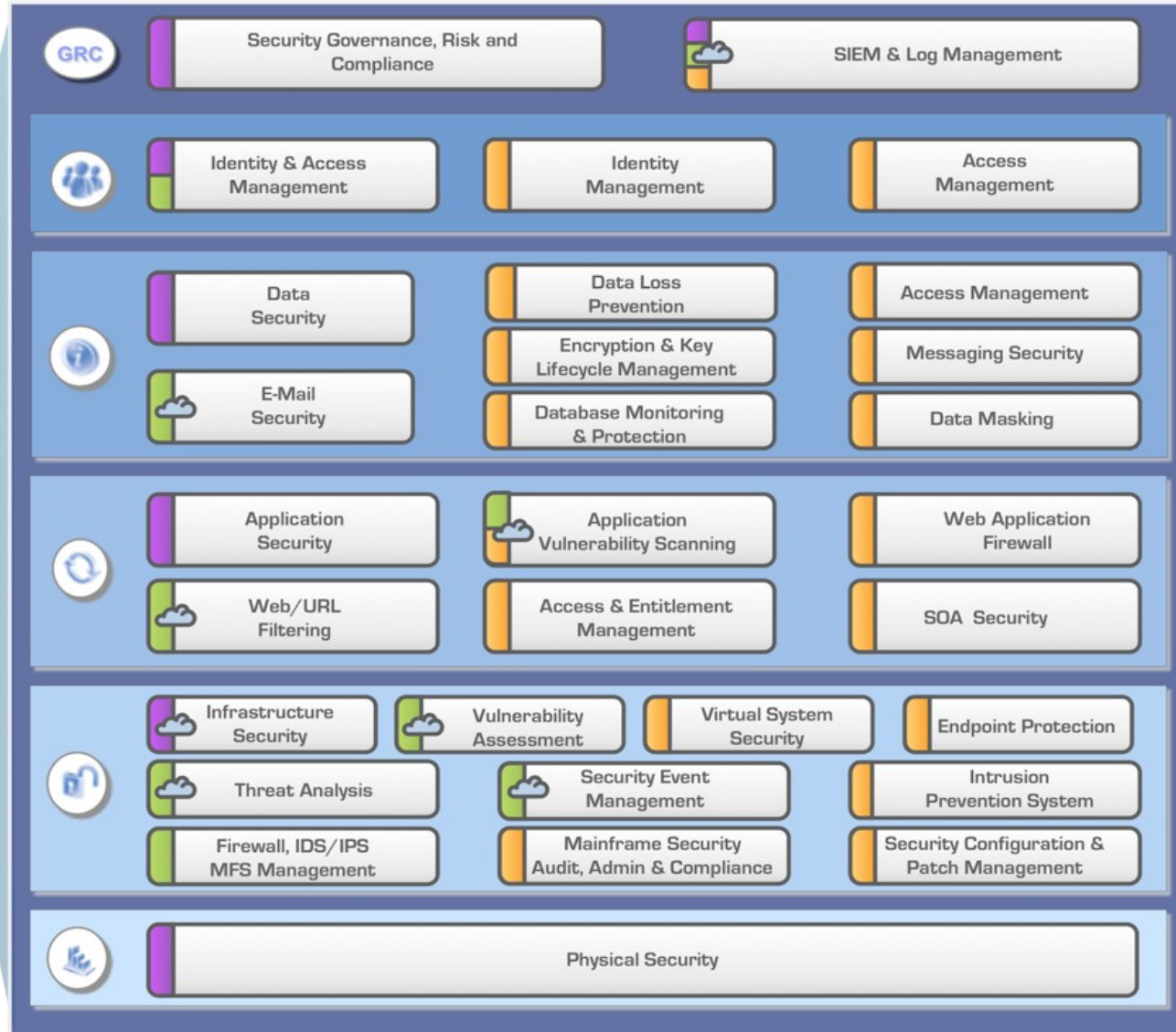
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IBM Security Solutions for the Cloud

- Professional Services
- Managed Services
- Products
- Cloud Delivered



IBM Security Framework

PEOPLE AND IDENTITY

DATA AND INFORMATION

APPLICATION AND PROCESS

NETWORK, SERVER AND END POINT

PHYSICAL INFRASTRUCTURE

SECURITY GOVERNANCE, RISK MANAGEMENT AND COMPLIANCE

Common Policy, Event Handling and Reporting

Professional Services | Managed Services | Hardware and Software

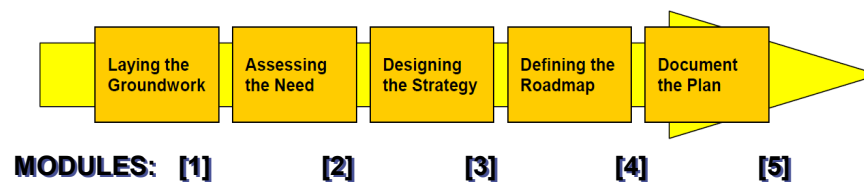
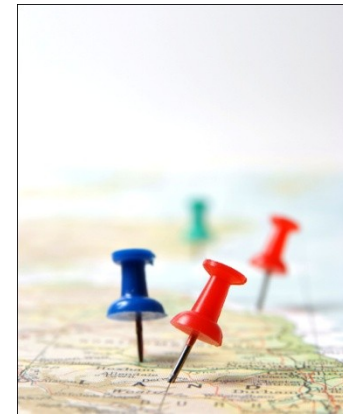
IBM Professional Cloud Security Services

Cloud Security Strategy Roadmap

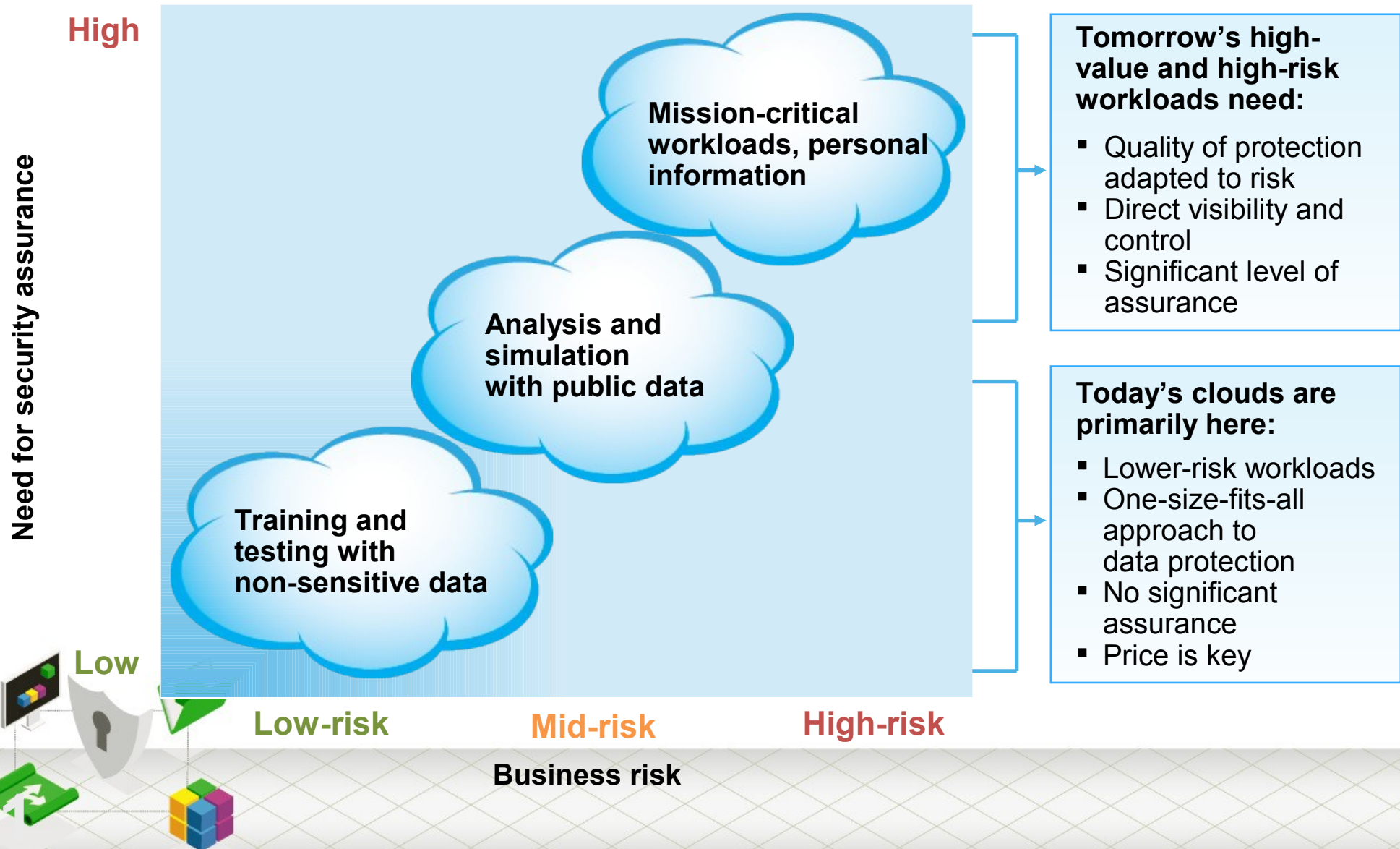
Guides customers through their unique security and privacy concerns related to cloud computing and helps them to build a security roadmap for risk mitigation while still pursuing a cloud initiative

Key Features

- Education and guidance from knowledgeable IBM consultants on cloud security and privacy concerns during an interactive onsite working session
- Development of a cloud security strategy for risk mitigation including security measures and compensating controls
- Provides recommendations for cloud provider evaluation



One-size does not fit-all:
Different cloud workloads have unique risk profiles.



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Professional Cloud security services

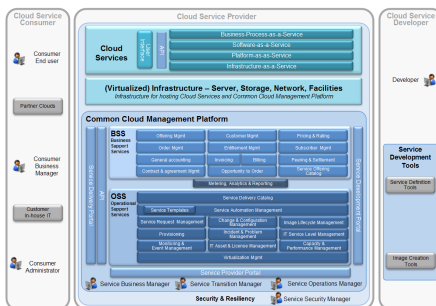


Cloud Security Assessment

Assist clients in evaluating the strength of the security architecture, policies and practices associated with their cloud solution against best practices for secure cloud computing in consideration of their security objectives

Key Features

- Evaluates client's existing or proposed cloud security infrastructure against industry best practices
- Develops maturity ranking of existing security posture in consideration of cloud security goals and gap assessment
- Provides specific recommendations on action items or considerations for addressing identified issues



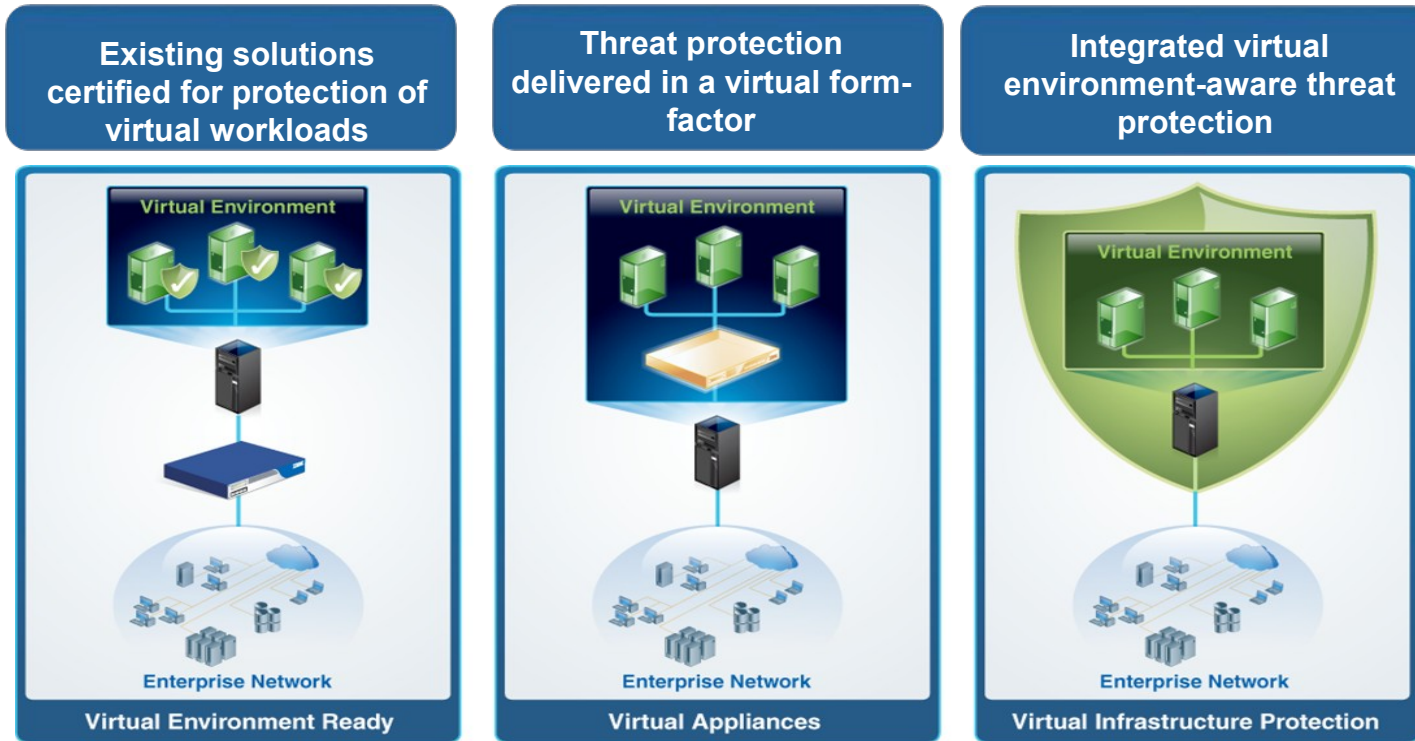
THE *Open* GROUP
Making standards work[®]

cloud security alliance
CSA



IBM Cloud Security Products

IBM Virtualization Security Solutions deliver products and services, optimized for virtualization. These solutions will enable customers to realize the benefits of virtualization while maintaining their security posture.



IBM Virtual Server Security for VMware®

•An Integrated security partition able to protect all the VMs inside physical hosts



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Cloud Hosted
Security services



IBM Cloud Hosted Managed Security Services

Cloud-based Security Services that help reduce costs and complexity, improve security posture, and meet regulatory compliance

From the Cloud – IBM Security Operations Centers



Security Event and Log Management



Vulnerability Management Service



Managed Web and Email Security Service

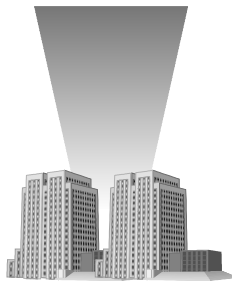


X-Force Threat Analysis Service

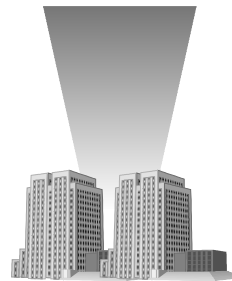
Subscription service

Cloud based

Monitoring and management

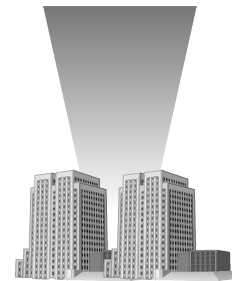


Offsite management of logs and events from IPS's, Firewalls and OSs
Customers can access secure log/event archival of all aggregated security events for up to 7 years.

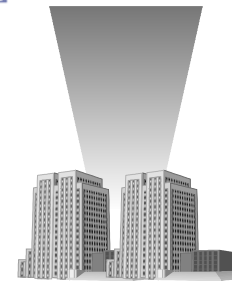


Proactive discovery and remediation of vulnerabilities, including temporal risk reporting for PCI DSS compliance

PCI - Approved Scanning Vendor



Clean pipe information- Protection against spam, worms, viruses, spyware, adware, and offensive content



Customized security intelligence based on threat information from X-Force research and development team

To the Customer – Offloading Security Tasks on the Ground



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Cloud Hosted
Security services



IBM Security Operations Centers

IBM has unmatched global network of Security Operations Centers (SOC) and Research facilities to extensively monitor real-time threats



- 16 Acquisitions in security space
- 3,700+ MSS clients worldwide
- 13 Billion+ events managed daily
- World class security research

Security remains a top customer concern in shifting to Cloud infrastructures, thus presenting IBM an opportunity to demonstrate thought leadership

Security for the Cloud

Helping clients begin their journey to the cloud with relevant security expertise

- Cloud Security Strategy Roadmap
- Cloud Security Assessment
- Penetration Testing
- Application Security Assessment
- Identity and Access Management

Security from the Cloud

Cloud-based Security Services that help clients reduce costs and complexity, improve security posture, and meet regulatory compliance

- Security Event and Log Management
- Vulnerability Management Services
- Managed Email / Web Security Services
- X-Force Threat Analysis Service

IBM Security Services are already providing support and delivery services to several of IBM's strategic cloud offering initiatives. . .

Dev/Test Cloud

- Intrusion Prevention device under management
- Internal and External VMS (Vulnerability Mgmt Service) deployed
- Penetration testing

Compute Cloud

- Intrusion Prevention devices under management

Storage Cloud

- On going deployment

Security & Compliance Leadership

An end to end approach from IBM Security Services addressed the need for stronger protection

The client

In 2008 suffered a significant attack against their systems. They didn't realize the full extent of the attacks until the FBI alerted them that year and in early 2009. We came to our Client as a company that shared the same concerns/challenges. A high profile global company with a large population of employee and IT spread around the world.

■ The challenge

- Client needed a solution able to analyze, correlates and store security events coming from the IT to recognize and stop attacks against his systems
- Client wanted to minimize the threat of viruses and other security threats that increase when employees boost the use of the Internet.
- The solution had to be “global”, it would have been costly and complex to have specialized security analysts and specific solution appliances at each of its physical premises.

■ The solution

- IBM Security Services responded with an end-to-end security solution that included at its core IBM's cloud-delivered Security and Event Log Management (SELM 2.0)
- Solution also provided provisioning and management of a secure web gateway solution to all Client properties worldwide.

■ The value

- The solution provided highly scalable Internet protection at a fixed cost per employee.
- The managed services helped to ensure a smooth deployment worldwide
- The overall Opex of the managed solution was lower than having the same solution on premise
- Client selected IBM as their partner of choice, since IBM provides a global perspective and in-depth insight into the challenges that face



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A landscape photograph of rolling green hills under a bright blue sky with large, white, fluffy clouds. A large white circle is overlaid on the right side of the image, containing the text "Thank you!".

Thank you!

