



# TRUST IN YOUR CLOUD



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## Proof, not Promises: Creating the Trusted Cloud

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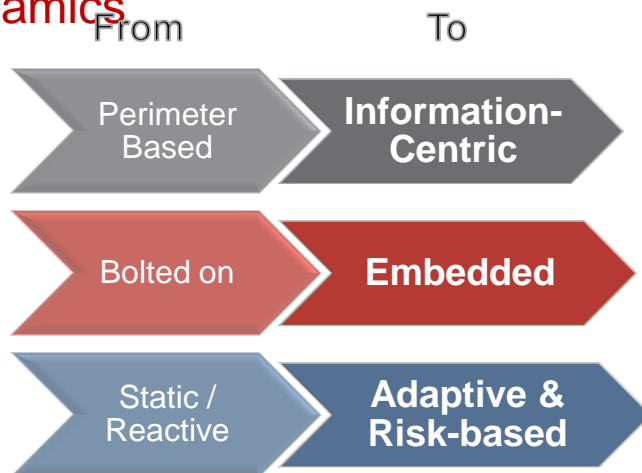
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## Agenda

- How does security change in the Cloud?
- What's needed to build a Trusted Cloud?
- EMC vision for Trust in the Cloud
- Q&A



## Virtualization Changes Security Dynamics



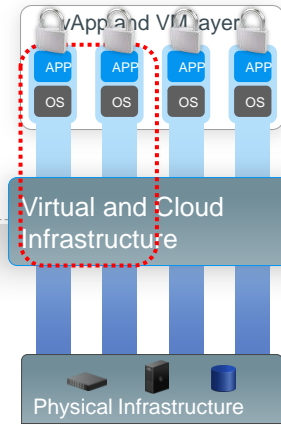
## Opportunity for More Effective Security In Virtualized Environments

Today most security is enforced by the OS and application stack. This is:

- Ineffective
- Inconsistent
- Complex

Building in information security enforcement in the infrastructure layer ensures:

- Consistency
- Simplified security management
- Enables customers to surpass the levels of security possible in today's physical



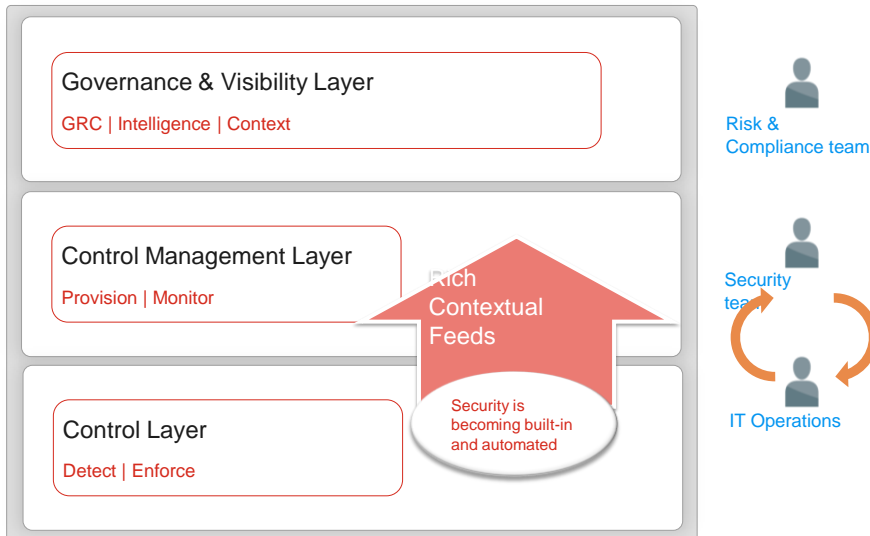
**RSA** infrastructures

**EMC<sup>2</sup>**

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## Rethinking the Security Stack



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# What's needed to build the Trusted Cloud?



## Trust Requirements

GOVERNANCE                      RISK  
MANAGEMENT                      COMPLIANCE

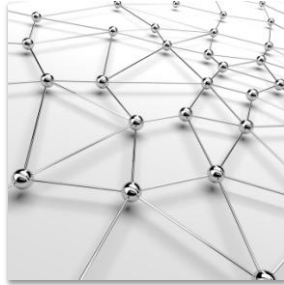


## Achieving Trust

Right Information



Trusted Infrastructure



Right Identities



RSA

EMC<sup>2</sup>

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## The Result ?

*A dangerous void of trust has opened up, standing squarely between organizations and their ability to reap the cloud's well documented benefits.*



RSA

EMC<sup>2</sup>

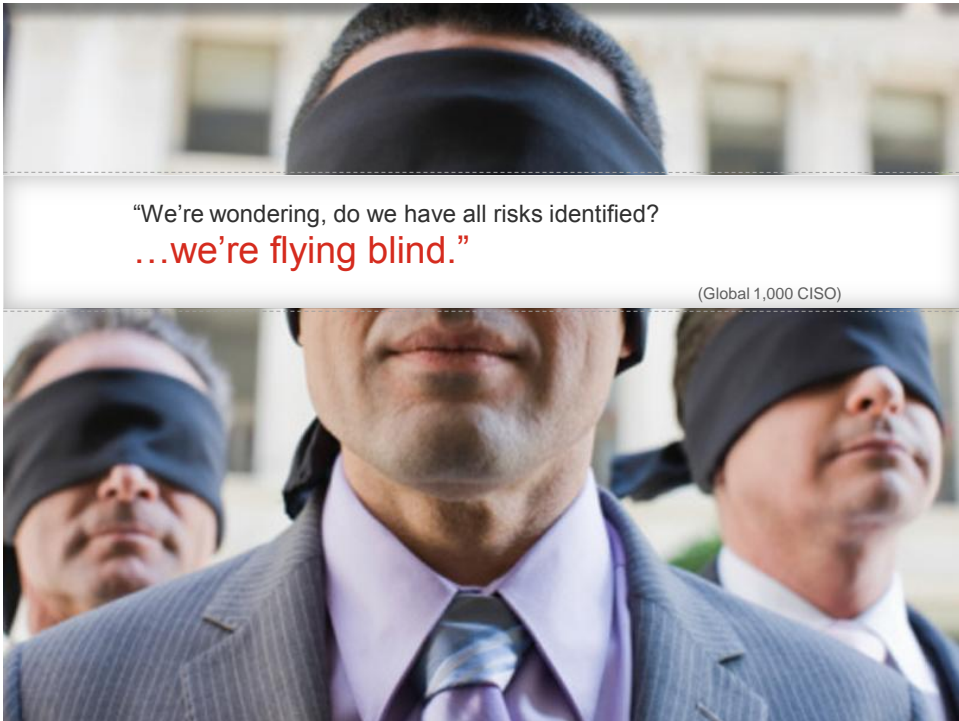
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Trust = Visibility +

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# Proving EMC's Vision for Trust in the Cloud



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## Control and Visibility over *Information*

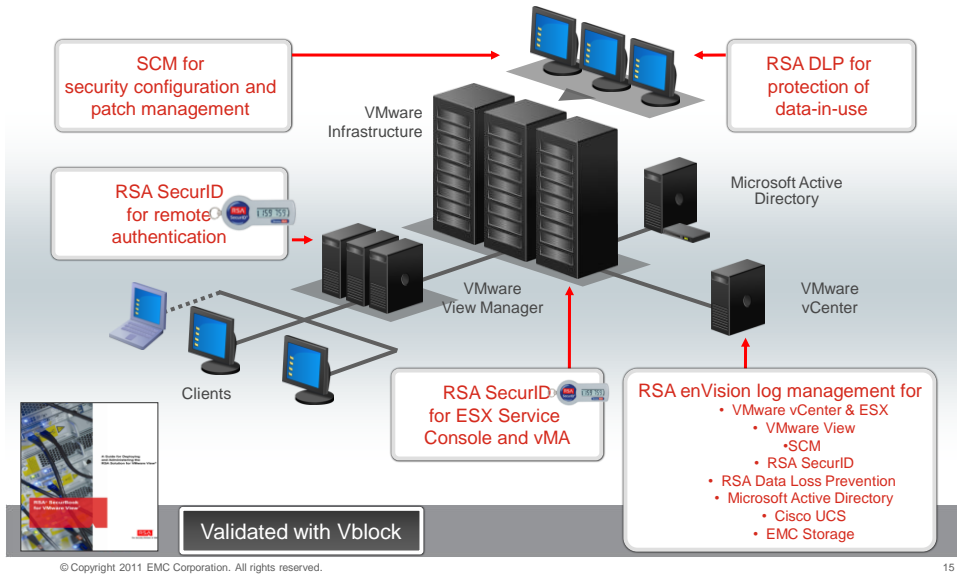
- Information Challenges
  - Cloud is 'information blind'
  - Mobility
  - Geolocation
- Discovering and Controlling Sensitive Information
  - Identify high risk information
  - Automated remediation functions
  - Logical zoning at Hypervisor level
- Cloud storage based on policy



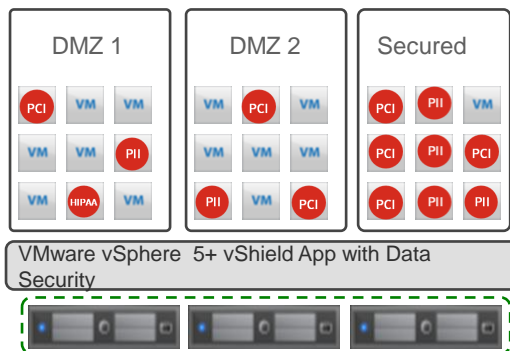
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## Securing Critical Apps Example: Secure Virtual Desktops



## VMware vShield App: Built-in Data Classification Through RSA DLP

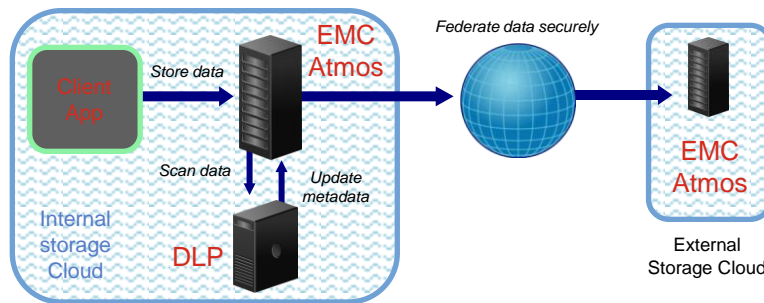


### Content Aware Infrastructure

- Classify files within VMs
- RSA DLP classification technology embedded into VMware vShield App with Data Security
- No agents or 3<sup>rd</sup> party software
- Includes 80+ expert RSA policies out of the box
- Consistent classification across both physical and virtual environments

## Building a Content-aware Cloud with RSA DLP and EMC Atmos:

- Atmos metadata update based on DLP policy
- Sensitive data never leaves customer sites or is only sent to trusted external cloud sites
- Build content-aware private storage clouds



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## Control and Visibility over *Infrastructure*

- Inspecting the Clouds foundations
- Setting the roots for Secure Multi-tenancy
- Accelerating deployment of Trusted Clouds



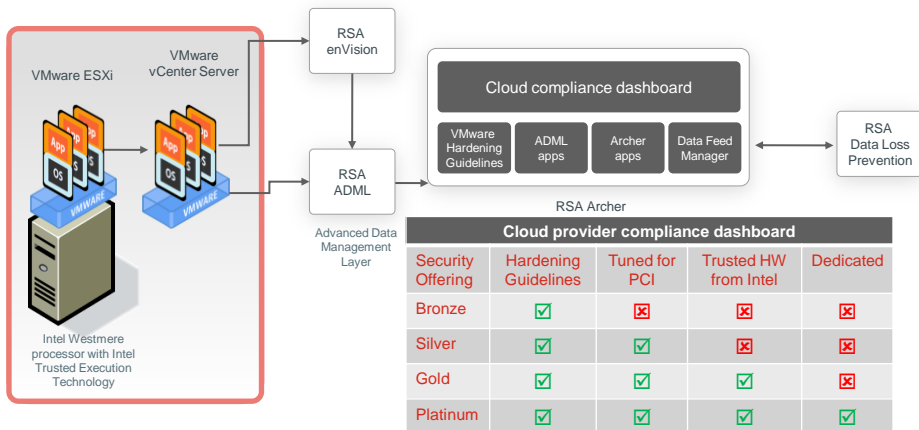
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# RSA/VMware/Intel Vision: Verifying the Chain of Trust to control VM in the Cloud

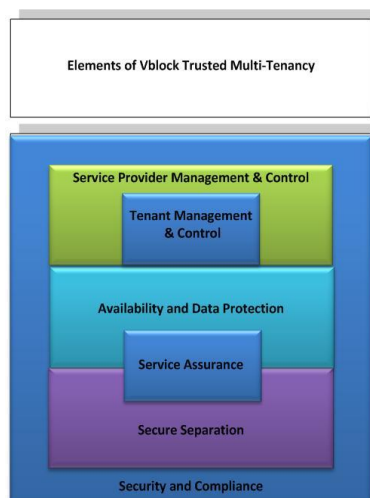
Proof of Concept for Measuring and Monitoring Cloud Infrastructure Security at RSA Conference



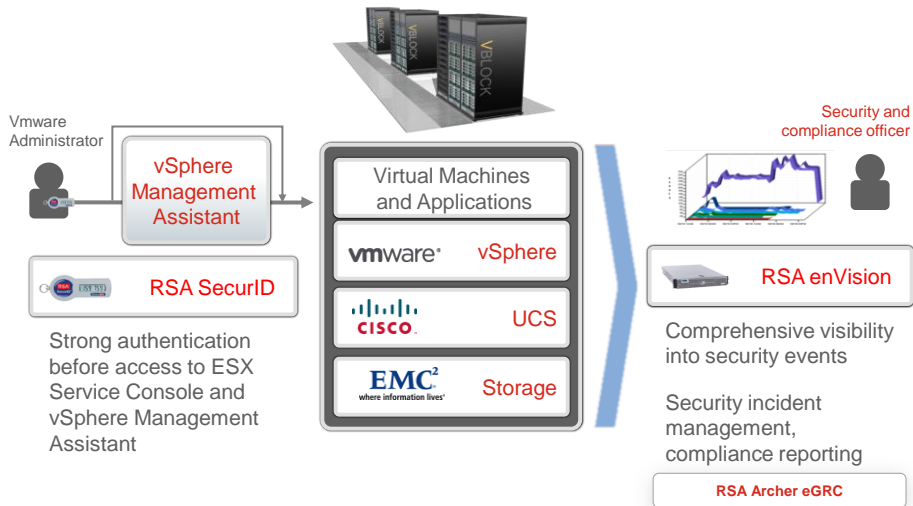
## Secure Multi-tenancy

Trusted Multi-tenancy model is built on the following six foundational elements:

- Secure separation
- Service assurance
- Security and compliance
- Availability and data protection
- Tenant management and control
- Service provider management and control



## Accelerating Deployment - VCE



## Control and Visibility over *Identity*

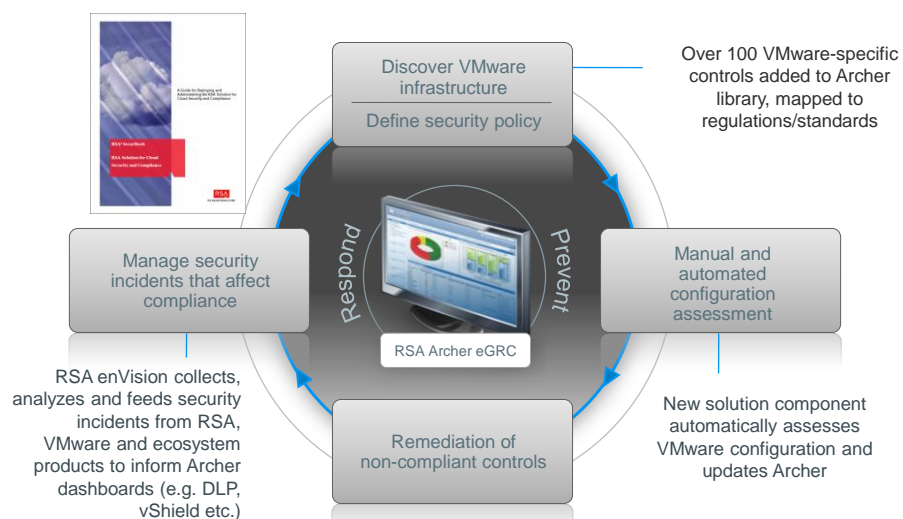
- Increased potential points of exposure
  - Identities (individuals and machines)
  - Mobile devices
  - Social media platforms
- Verifying users in high-risk transactions
  - Instantaneous risk assessments
  - RSA Adaptive Authentication
- Detecting Fraudulent users inside clouds
  - RSA Transaction Monitoring

## Value of Unified **Control and Visibility**

- Conventional Security Management
  - Too slow and rigid
  - Relies on manual process or human intervention
  - Unreliable and unscalable
- Automating Security and Compliance
  - Efficiency, control and scalability
  - VMware Virtualisation and Cloud Management Solutions
  - RSA Archer eGRC Platform



## RSA Solution for Cloud Security and Compliance



# Cloud Security Alliance



- Cloud Architecture
- Governance and Enterprise Risk Management
- Legal and Electronic Discovery
- Compliance and Audit
- Information Lifecycle Management
- Portability and Interoperability
- Security, Bus. Cont., and Disaster Recovery
- Data Center Operations
- Incident Response, Notification, Remediation
- Application Security
- Encryption and Key Management
- Virtualization
- Identity and Access Management

## Assessing Service Provider Compliance

RSA Solution for Cloud Security and Compliance aligns with CSA Consensus Assessment Questions by automating 195 questions that customers can issue to assess cloud service providers.

Cloud Security Alliance's 13 domains of focus for cloud computing

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# Cloud Trust Authority



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THANK YOU

