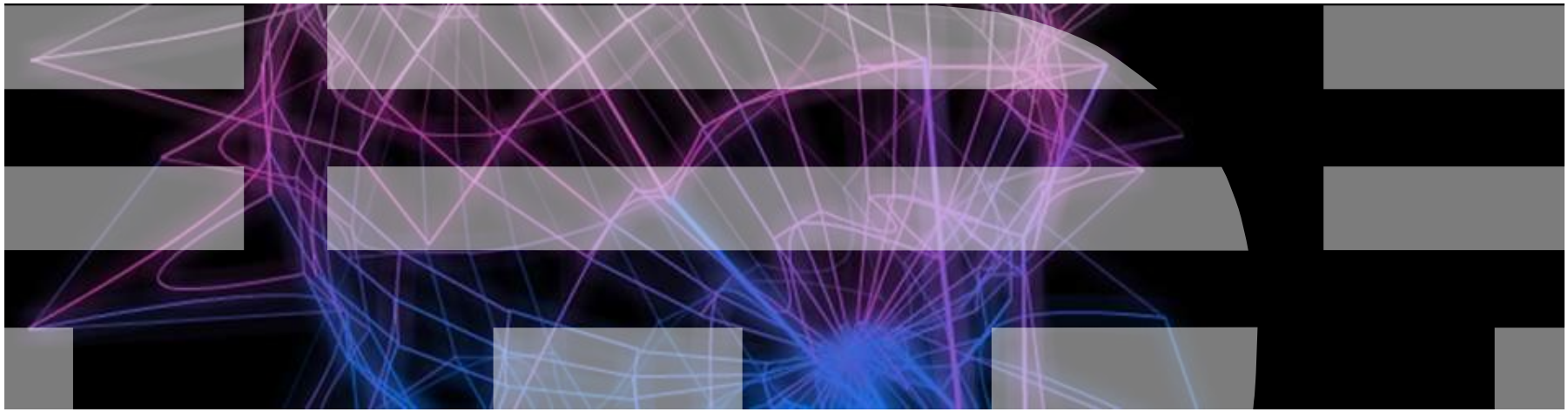
Mariano Ammirabile – GTS Cloud Sales Leader

Venezia, 14 Settembre 2010

Cloud Computing, Tecnologie e Servizi



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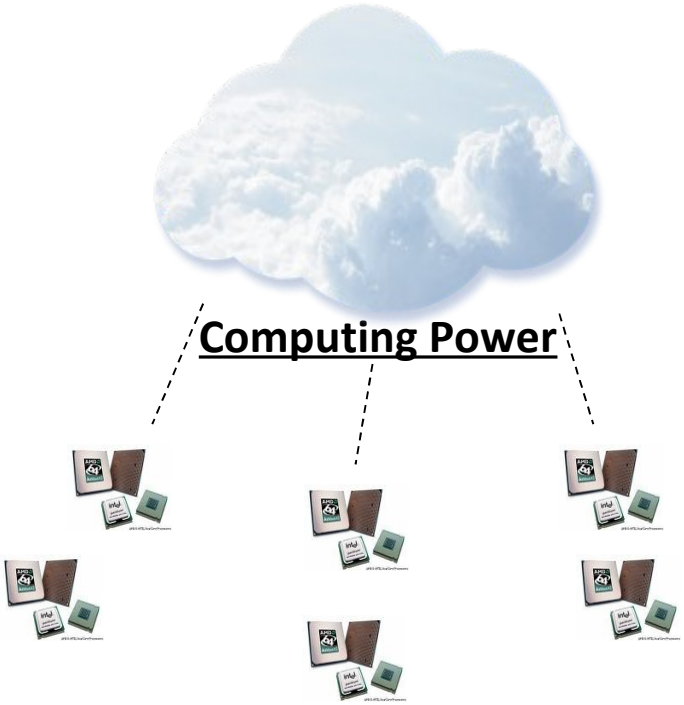
Cloud computing – Una nuova Utility ?

Water

Gas

Electricity

Communication



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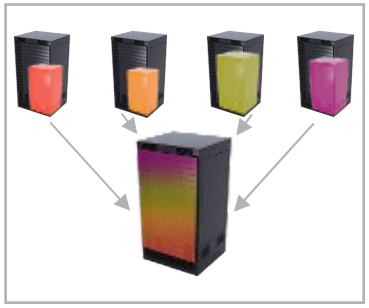
La Virtualizzazione alla base dei modelli di Cloud computing

Physical Consolidation



- Improve utilization
- Reduce costs
- Lower power usage

*Improve **capacity utilization** by as much as 60%, while reducing the power and cooling costs*

Advanced Virtual Resource Pools

- Decouple complexity from scale
- Share resources optimally
- Automate workload management
- Incorporate HA & DR

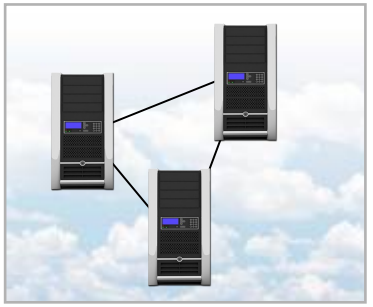
*Hands-free operation, **eliminate** mundane tasks and **manual processes** and deploy workloads in minutes*

Fully virtualized IT with integrated Service Management

- Sense and respond to workload requirements
- Dynamically move workloads to best-fit infrastructures
- Integrated virtualization management with IT processes

*Save time and reduce skill level required for **workload provisioning** through pre-packaged **automation templates***

Cloud Computing



- Low cost through economies of scale
- Always on
- Globally available
- Elastic scaling
- Pay for use
- Self-service with rapid provisioning
- Service catalog

*Give users the flexibility to request and **pay for services they want** without the complexities of establishing an IT infrastructure*

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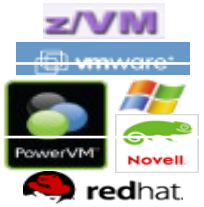
IBM Systems Software: soluzioni per la Virtualizzazione

Integrated Service Management



Infrastructure-wide Virtualization

Systems Management

- **Simplify management of physical and virtual infrastructure**
- Increase automation - single interface for the entire data center
- Support for IBM and third party extensions
- Increased operational efficiency, reduced administration costs

Platform & Energy Management

- **Monitor and manage energy consumption** of new IBM hybrid systems
- Optimize energy usage through interactions with datacenter infrastructure
- Energy optimization for virtualized solutions

Security

- **End-to-end unified security management** of server, storage, and network
- Reduce security mgmt costs while improving client workloads security
- Deliver security assurances in a virtualized infrastructure

Availability

- **High availability across the infrastructure**
- Avoid the costs of downtime - ensure access to critical applications

Operating Systems

- Best OS for each workload, multiple operating systems on the same server system
- Advanced capabilities of zOS, IBM i OS, and leadership in UNIX with AIX,
- Windows and Linux on System x
- **Linux as Tier 1 operating system on all IBM platforms**

Virtualization

- End-to-end IT infrastructure virtualization – server, storage, network
- Choice of hypervisor – VMware, HyperV, KVM, Xen
- Choice of advanced virtualization platforms: **Power and System z**

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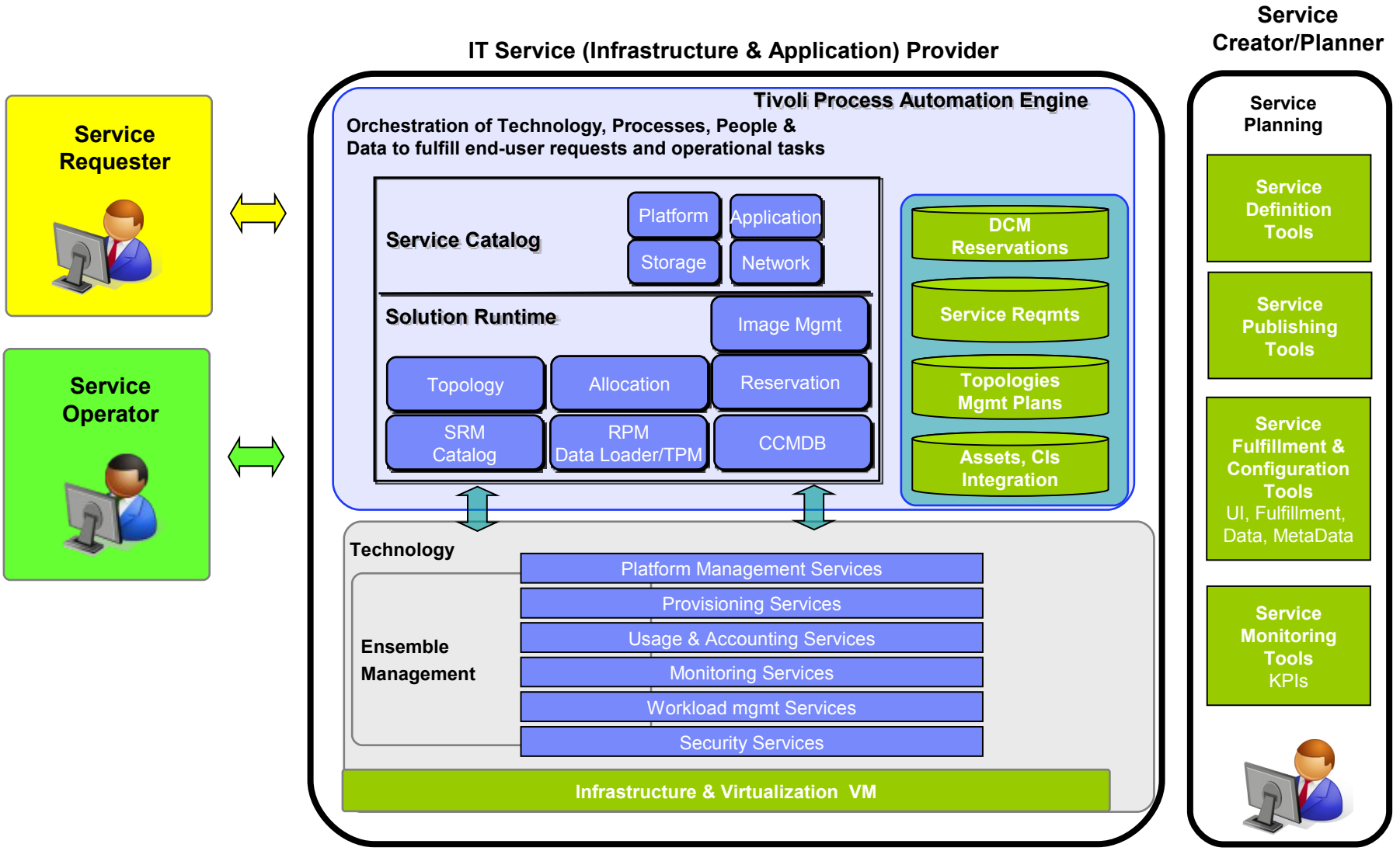
IBM Service Management come piattaforma abilitante



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Un approccio integrato all'IBM Service Management

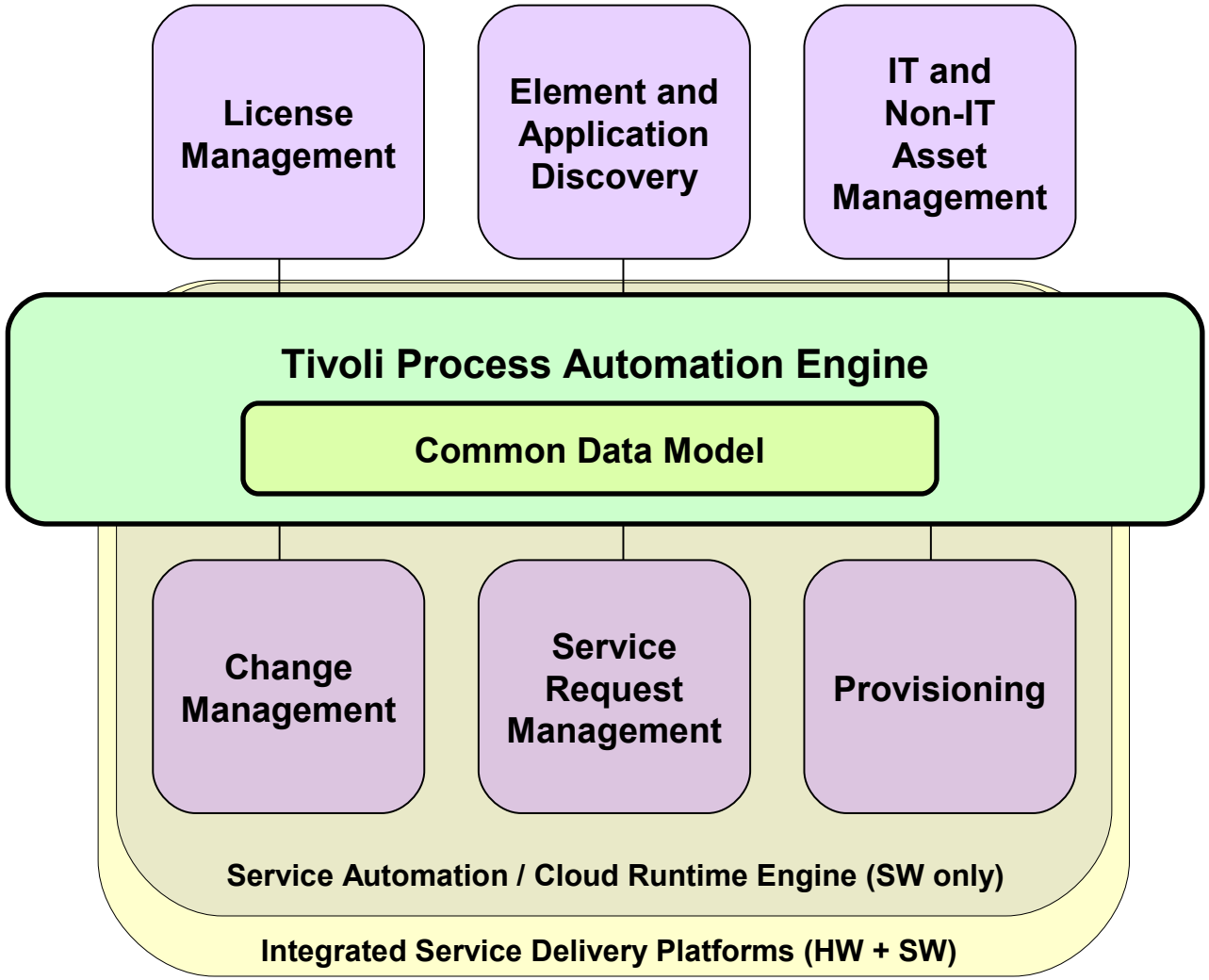
Integrated Solution
An Integrated set of solutions represent the full management of data, processes, tooling and people

Common Data Model
The core solutions share a common data subsystem for simple data sharing

Processes that Work Together
The core solutions share a process workflow automation engine

No Rip and Replace
Leverage existing investments in IBM and 3rd party IT management tools

Lower Cost of Ownership
Lower infrastructure and training costs, simple upgrade model



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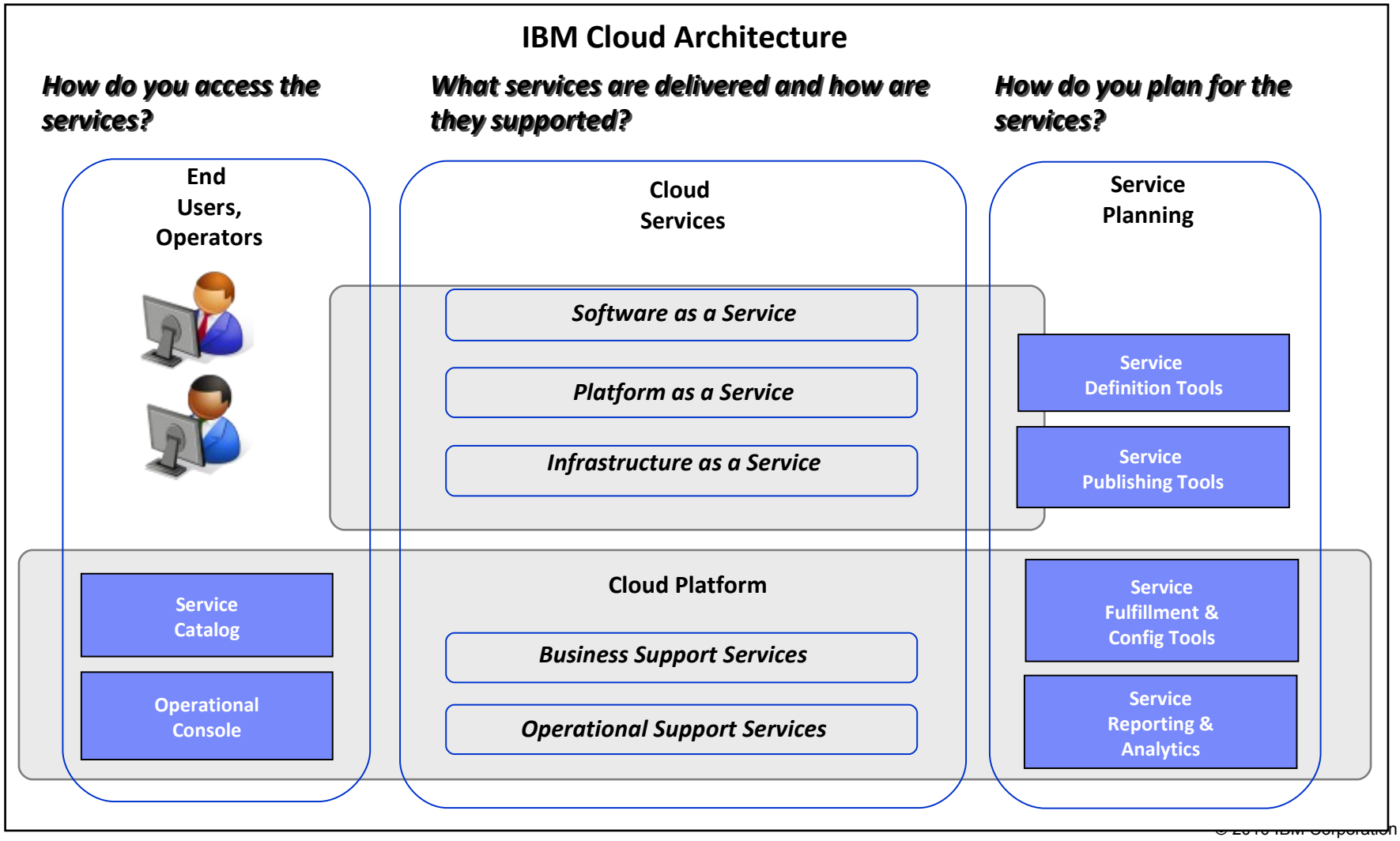
L'Architettura per il Cloud computing

- A complete cloud architecture includes not only the blueprint for the physical components (hardware, network, storage, etc.), **but also the software components and the management and operational processes**



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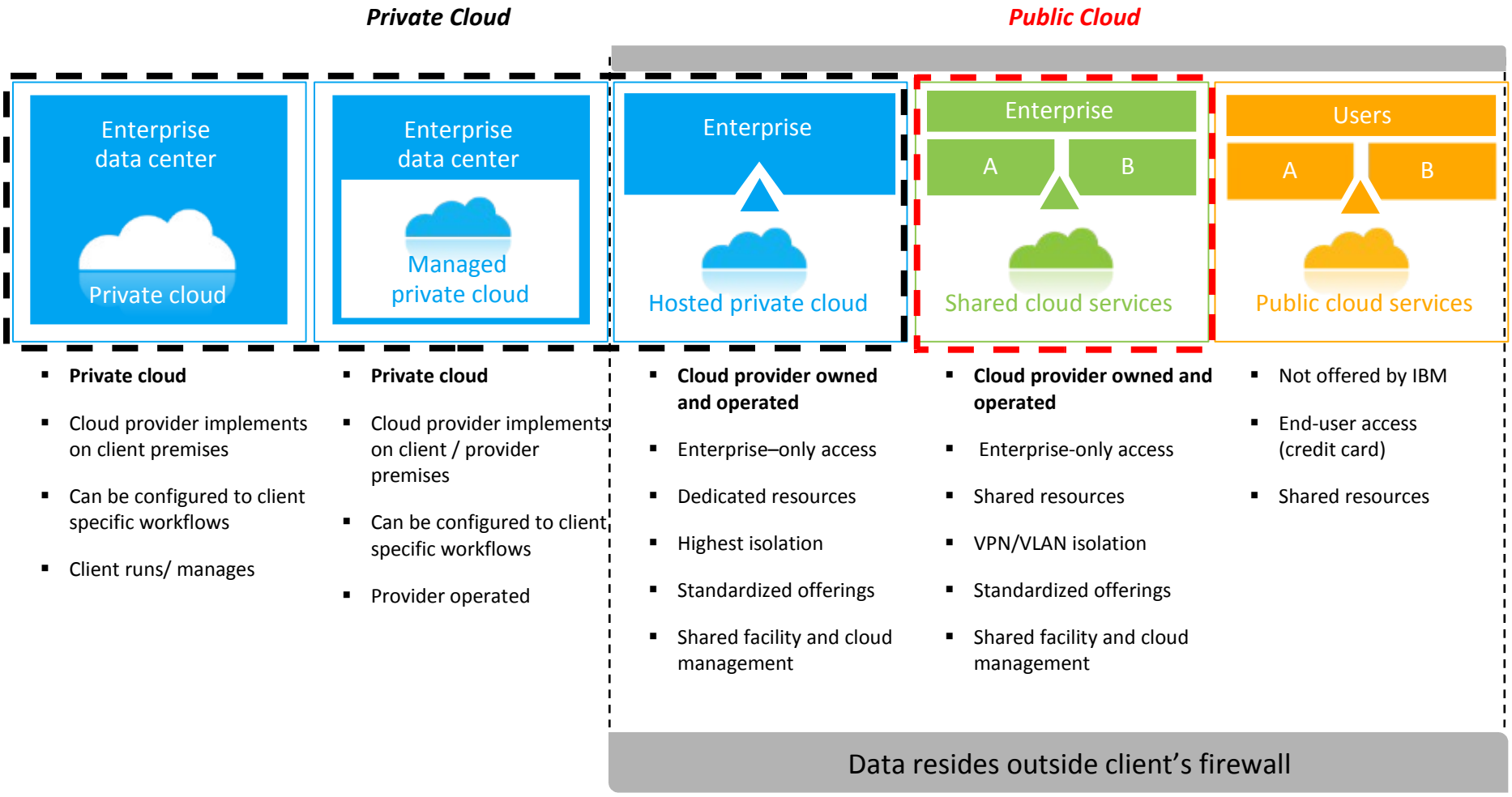
I modelli di delivery per il Cloud computing



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Accellerare l'adozione del Cloud computing con IBM CloudBurst

- IBM CloudBurst is a **pre-packaged, private cloud offering** that brings together the hardware, software and services needed to establish a private cloud.
- The IBM CloudBurst solution provides a breakthrough in service delivery for data center workloads by bringing **together the hardware, software, and services** needed to create a policy-driven, self-service provisioning capability for the end user.
- This IBM offering takes the guess work out of establishing a private cloud by **pre-installing and pre-configuring the necessary hardware and software** for the customer's environment prior to shipping it to them, and making the platform ready for the customer's use through QuickStart services.

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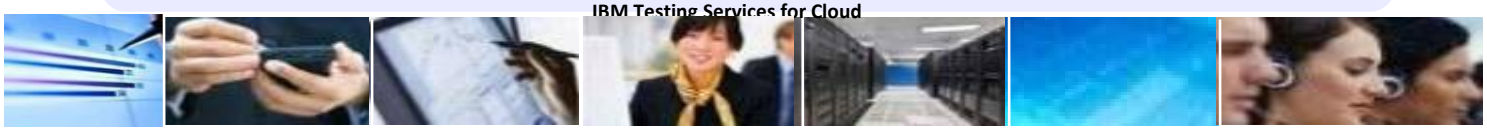
Il portafoglio di offerta Cloud Computing di IBM

Consulting Services supporting Cloud Computing

- IBM Infrastructure Strategy and Planning for Cloud Computing
- IBM Networking Strategy and Optimization for Cloud computing
- IBM Strategy & Change Services for Cloud Adoption
- IBM Strategy & Change Services for Cloud Providers
- IBM Testing Services for Cloud



	Analytics	Collaboration	Development and Test	Desktop and Devices	Infrastructure Compute	Infrastructure Storage	Business Services
Smart Business on the IBM Cloud (IBM Cloud)		IBM Lotus Live	IBM Smart Business Dev and Test on the IBM Cloud	IBM Smart Business Desktop Cloud on the IBM Cloud IBM Smart Business End User Support – Service Assist	IBM Smart Business Compute Cloud on the IBM Cloud Managed Security Services	IBM Information Protection Services IBM Smart Business Storage on the IBM Cloud	BPM BlueWorks (design tools) Smart Business Expense Reporting on the IBM Cloud
Smart Business Cloud (Enterprise Data Center / Private Cloud)	IBM Smart Analytics Cloud		IBM Smart Business Dev & Test Cloud	IBM Smart Business Desktop Cloud	Managed Security Services	IBM Smart Business Storage Cloud IBM Information Protection Services	
Smart Business Systems (Hardware / Software / Services)	IBM Smart Analytics System		IBM CloudBurst family		IBM WebSphere CloudBurst Appliance	Information Archive	

Infrastructure services enabling cloud computing

- IBM Security Consulting and Vulnerability Services
- IBM Data Center Family Services
- BM Server Consolidation Efficiency Study Services and Tivoli Live Monitoring
- BM Solution Edition for Cloud Computing
- IBM SW Life Cycle Management / Service Management / Business Process Flexibility

Available

2H2010 in SW IOT

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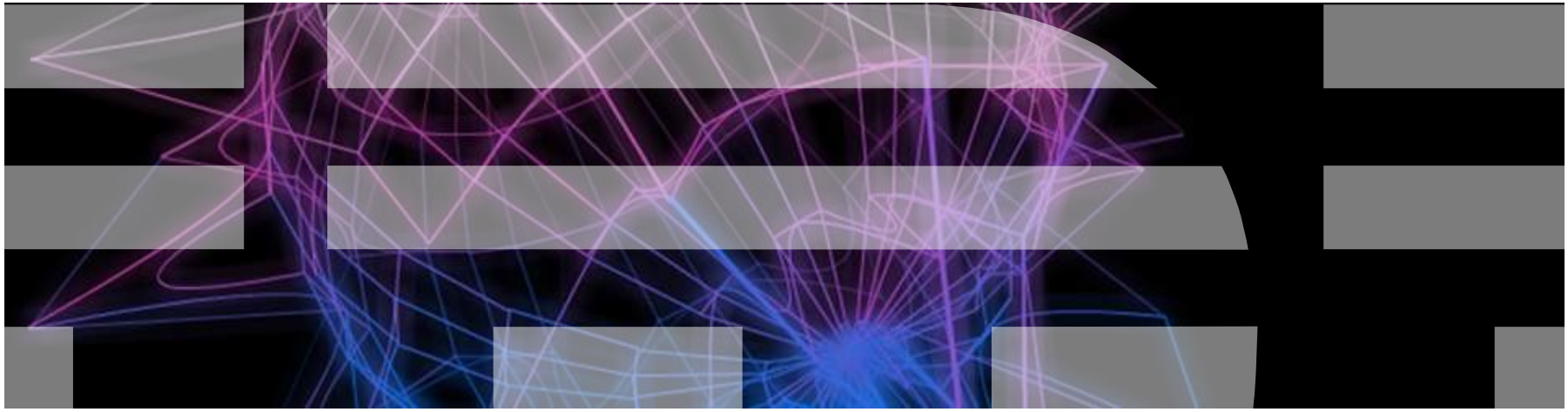
Venezia, 14 Settembre 2010

Cloud Computing, sicurezza ed evoluzione



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Le categorie di rischio per i modelli di Cloud computing

Less Control

Many companies and governments are uncomfortable with the idea of their information located on systems they do not control. Providers must offer a high degree of security transparency to help put customers at ease.

Data Security

Migrating workloads to a shared network and compute infrastructure increases the potential for unauthorized exposure. Authentication and access technologies 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, HIPAA and other regulations may prohibit the use of clouds for some applications. Comprehensive auditing capabilities are essential.

Security Management

Providers must supply easy controls to manage firewall and security settings for applications and runtime environments in the cloud.

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La proposta IBM per la Sicurezza nel Cloud computing

IBM Security Framework

Describes the **business landscape** of security

IBM Cloud Security Guidance

Describes the **technology landscape**

IBM Capabilities & Offerings to Help

Catalogues of **products, services and solutions**

Coarse grained ***Fine grained***

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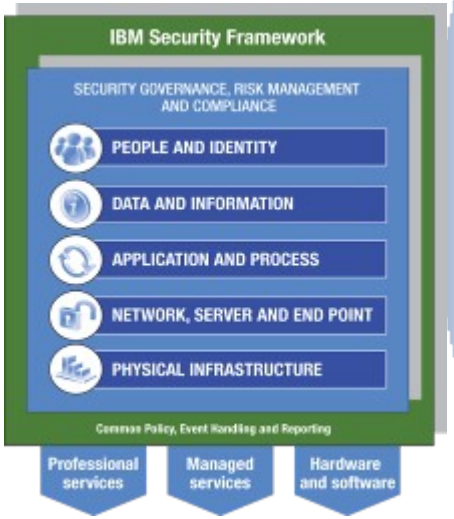
Prodotti e Servizi IBM per la Sicurezza nel Cloud computing

= Professional Services

= **Cloud-based & Managed Services**

= Products



GRC

Security Governance, Risk and Compliance

SIEM and Log Management

Identity and Access Management

Identity Management

Access Management

Data Security

Data Loss Prevention

Encryption and Key Lifecycle Management

Messaging Security

E-mail Security

Database Monitoring and Protection

Data Masking

Application Security

App Vulnerability Scanning

Web Application Firewall

App Source Code Scanning

Web / URL Filtering

Access and Entitlement Management

SOA Security

Infrastructure Security

Vulnerability Assessment

Mainframe Security

Threat Assessment

Web/URL Filtering

Intrusion Prevention System

Firewall, IDS/IPS, MFS Mgmt.

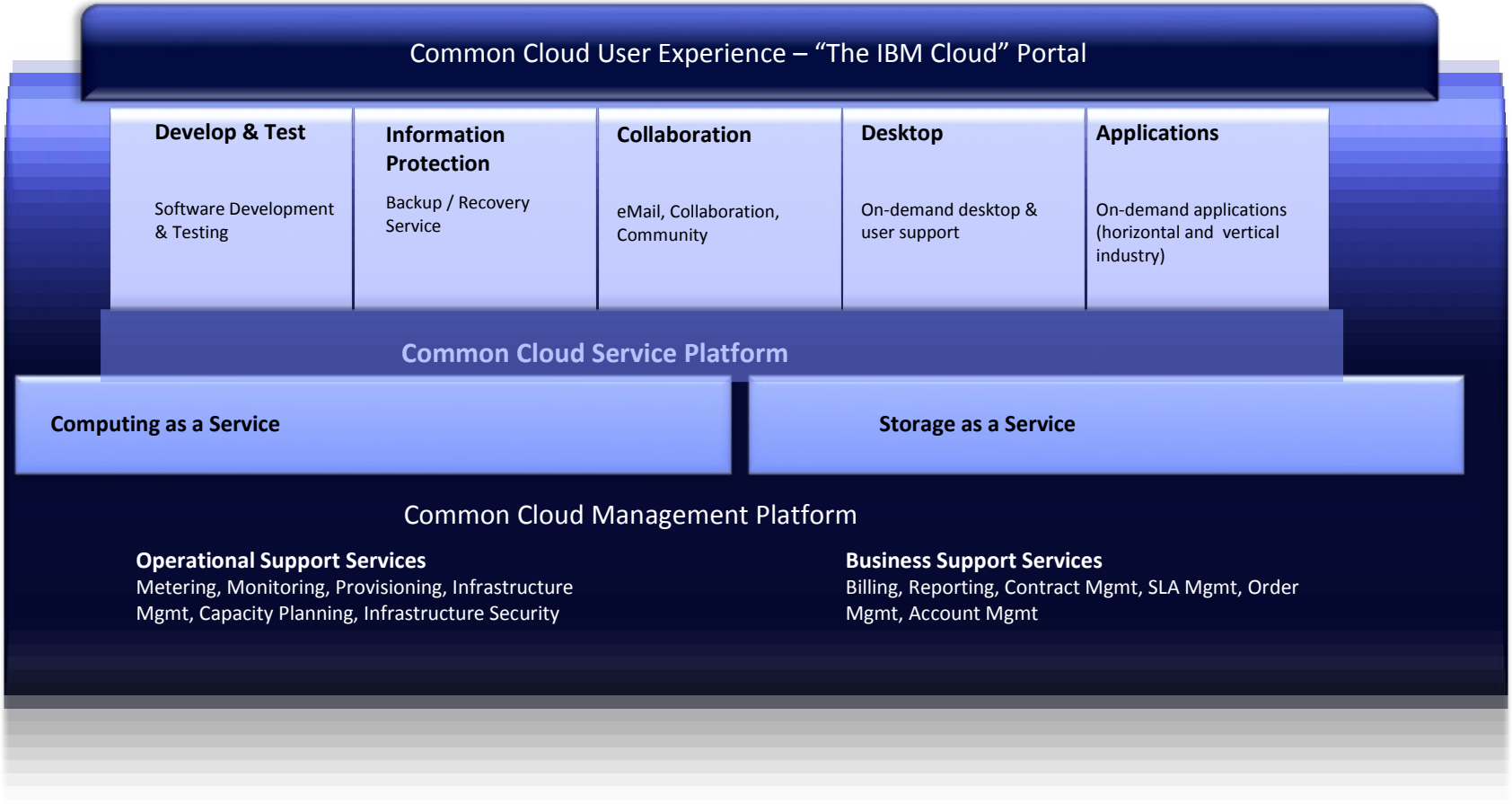
Security Event Management

Virtual System Security

Physical Security

L'evoluzione strategica dell'offerta IBM di Cloud computing

- **Public Cloud with multiple service** "on-ramps" for clients, hosted in key centers worldwide
- **Common infrastructure** to provide computing and storage resources
- Range of **IBM and partner services**



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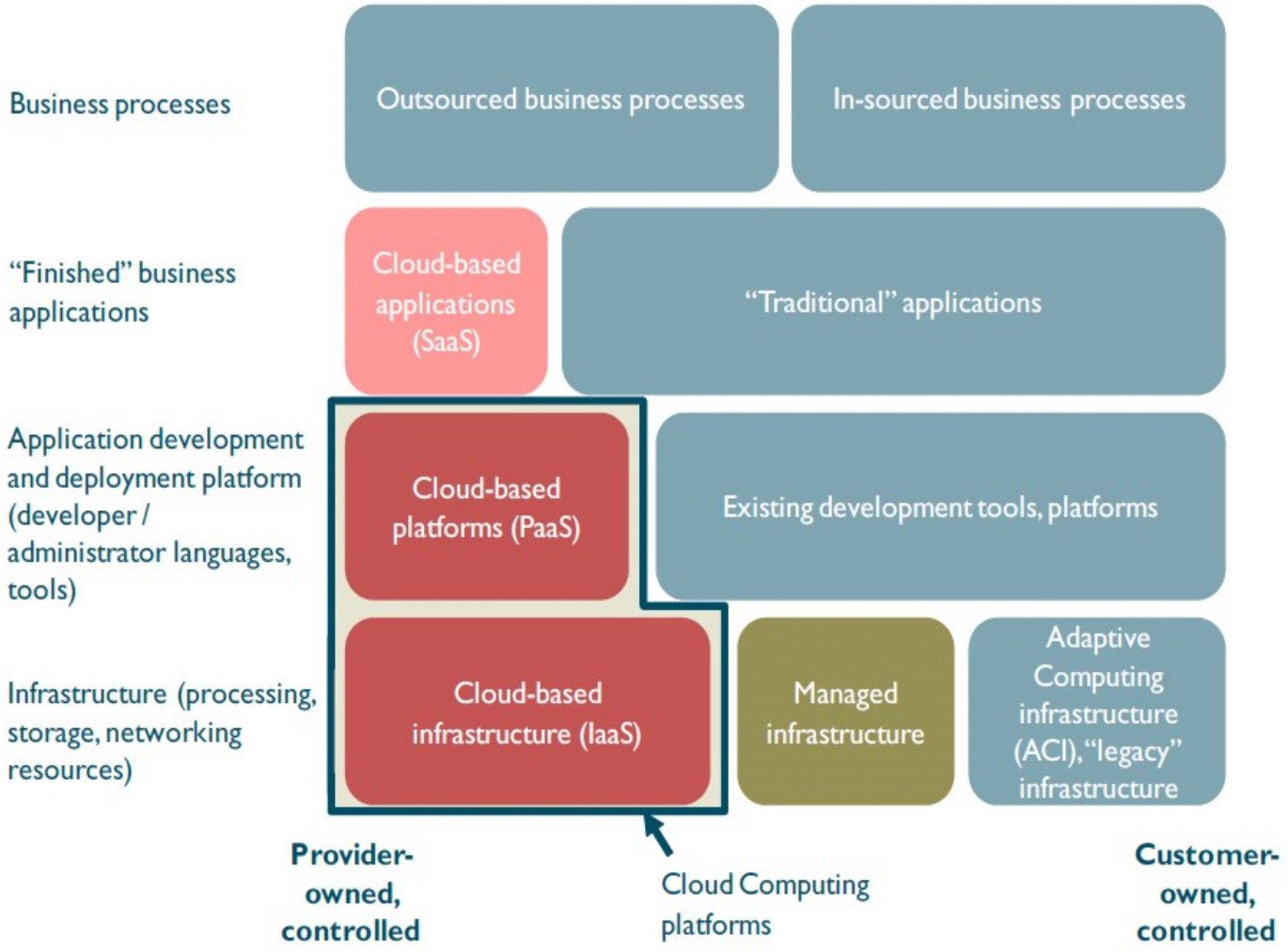
Coesitenza di modelli di Cloud computing con l'IT tradizionale



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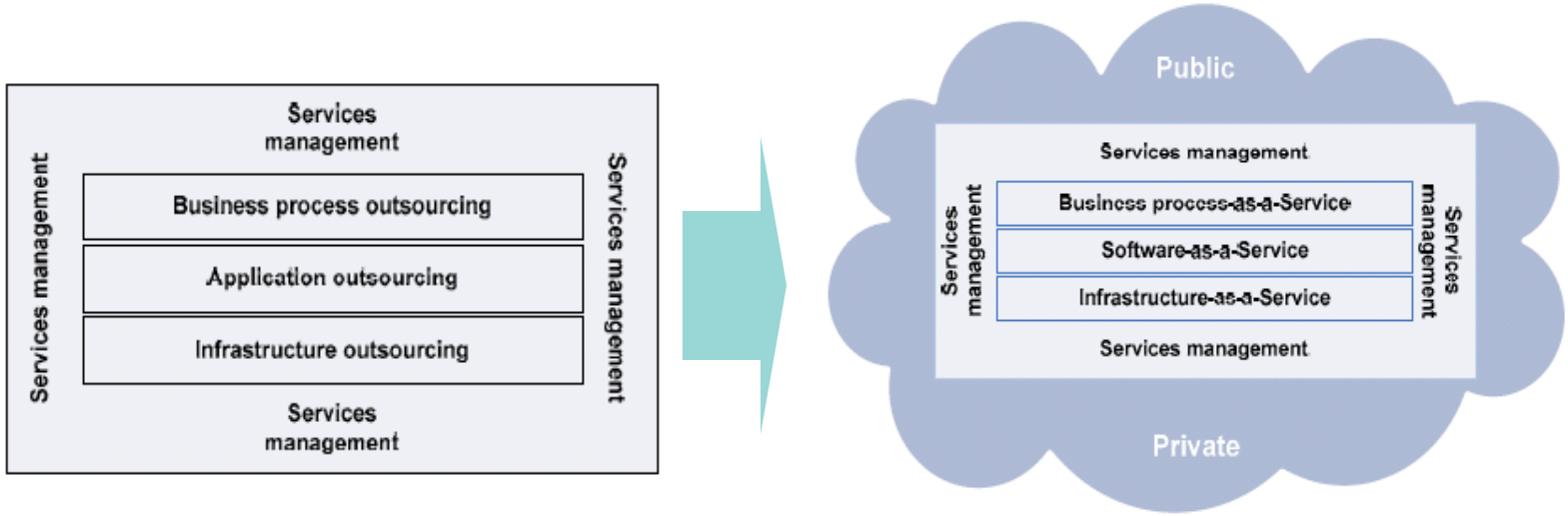
Modelli di Outsourcing e Cloud computing

Traditional outsourcing service offerings are being forced to evolve…

…to the Cloud, where "as-a-Service" replaces the traditional outsourcing model. Emphasis is on utility and subscription-based pricing



"…the evolution to Cloud Computing appears to have perhaps the **most potential for disruption of IT services delivery models**…[and these] will need to evolve away from **long-term TCV mentality to more dynamic pricing structures, which focus on usage**, and related service level agreements"

Goldman Sachs

Management of IT, the core concept and traditional value of ITO, will — slowly at first but then accelerating in 2013 and beyond — be subsumed into a fee-based cloud-computing model

Gartner

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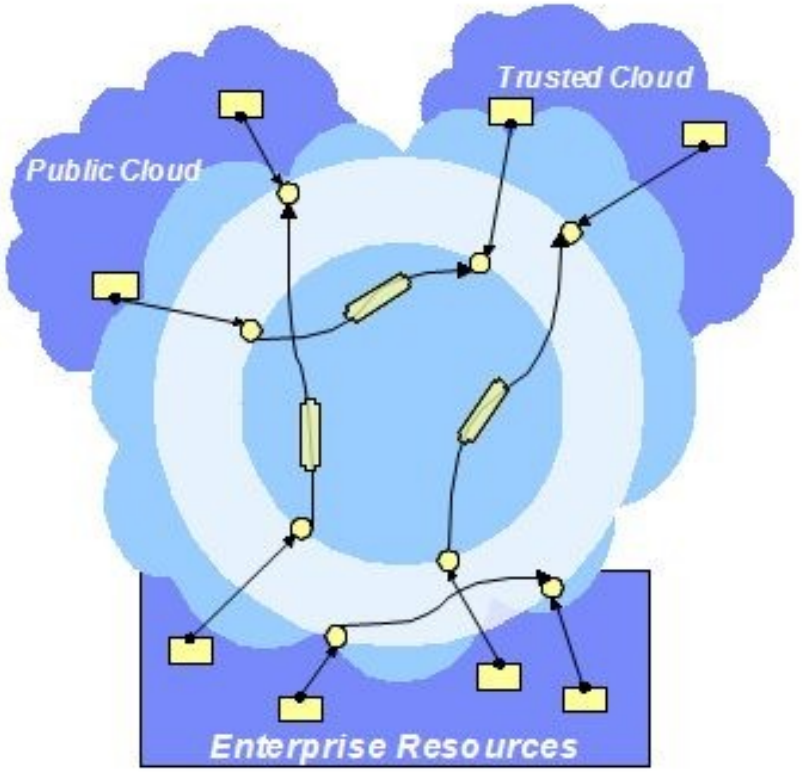
Modelli Cloud ibridi, Sicurezza ed Integrazione

- From the Enterprise Client's perspective:
- ***Management of workloads running off-premise on clouds***
  - *Management of software applications and services (monitoring, events, availability, performance)*
  - *Service Request Management (governance of service provisioning)*
  - *Dashboard for service visibility*
- ***Security for Hybrids***
  - *Control security and resilience of services (identity management, compliance, isolation)*
- ***Integration of applications & data***
  - *On-premise to off-premise business application connectivity & governance*
  - *Information exchange and data integration across the enterprise and clouds*
- ***Application and Workload migration workbench***
  - *Tools to support the migration of workloads to the cloud*



Initial focus for 'Hybrid Cloud':
'Provide clients the ability to manage and integrate workloads and resources on a cloud with their existing processes, management and business systems.'

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Come possiamo lavorare insieme con Voi !

Introduzione

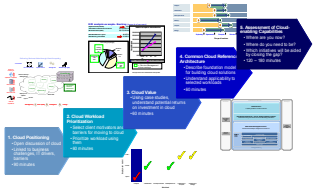
15-30 min — Cloud Rapid Assessment

(click here to access)

- Answer 25-30 questions to assess a client's interest and progress with Cloud
- Receive recommendations of areas for action, including IBM Cloud offerings
- View placement of client in IBM Cloud Adoption Framework (CAF)
- Available June 30 for IBM sellers; Mid-August for all

½ - 1 day — Cloud Exploration Workshop

(click here to access)



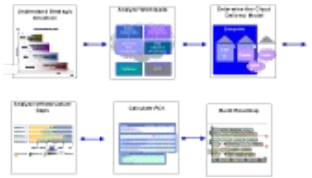
- Modular 5-step on-site, pre-sales, client-facing workshop, including:

1. *Discuss IBM Cloud PoV & positioning, including client drivers*
2. *Perform basic workload prioritization via client motivators & barriers*
3. *Discuss cloud Value / ROI: typical observed per workload; Client references, etc.*
4. *Cloud Reference Architecture discussion*
5. *Perform Cloud-enablement Capability Assessment*

Progetto

3 – 4 wks — Infrastructure Strategy & Design Services for Cloud

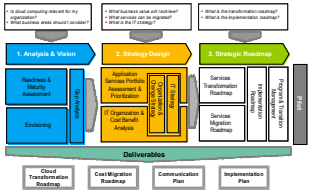
(click here to access)



- 2-day structured workshop (plus off-site work/analysis) to identify where/how cloud can drive business value
- Develops value proposition for cloud in the enterprise
- Using research tool, identifies priority of workloads to migrate to cloud; Optionally create ROI for selected workload
- Assess environment to determine readiness, strengths & gaps
- Builds strategy, plan, and cloud adoption roadmap

4 - 16 wks — Strategy & Change Services for Cloud Adopters / Providers

(click here to access)



- For providers, defines business and operational strategy for being a cloud provider, including relevant business model, operating strategies, & implementation roadmap
- For adoption, helps clients understand which applications / business processes they may cloud-consume
- Recommends pilots and roadmap to align with business strategy

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Grazie

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