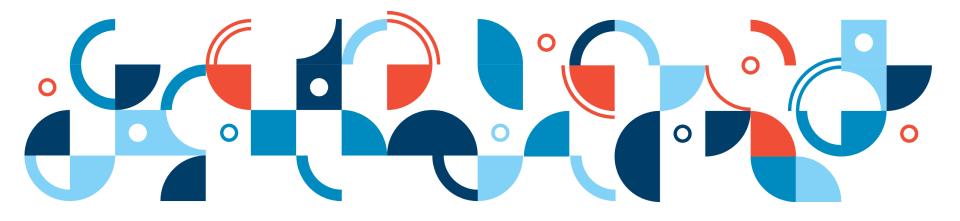






Jonathan Wisler GM EMEA, SoftLayer an IBM Company





Just how disruptive can the cloud be?







A working definition

Cloud (*n*) On-demand compute with consumptive billing

On-demand

Rapidly provisioned services

Compute

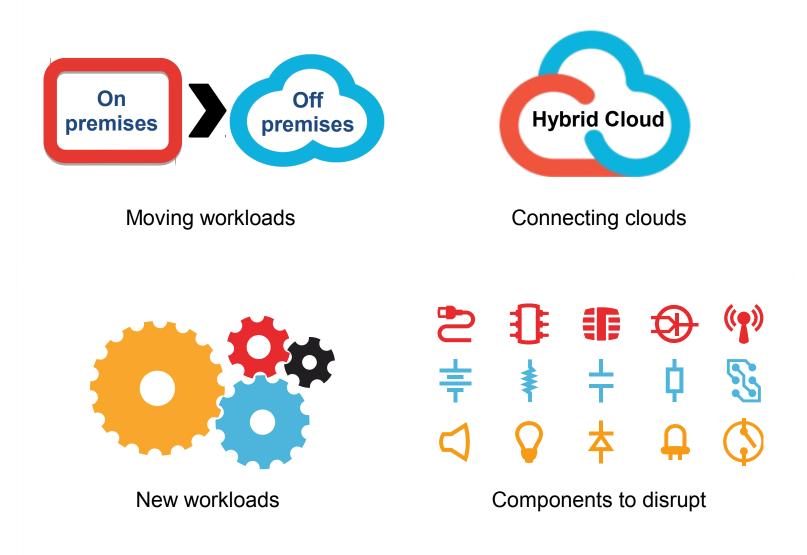
Servers, network, storage, firewalls, ancillary services

Consumptive billing

Turns traditional fixed IT costs into variable – monthly or hourly



Evolving cloud requirements





IBM continues to invest in an Integrated Cloud Portfolio



Cloud is on track to be a **\$7B** IBM business by year-end 2015

2013 Highlights

- \$4.4B in 2013 revenue
- 69% revenue growth
- \$2B run rate delivered "as a service"
- SoftLayer acquisition
- 15,000 cumulative client engagements

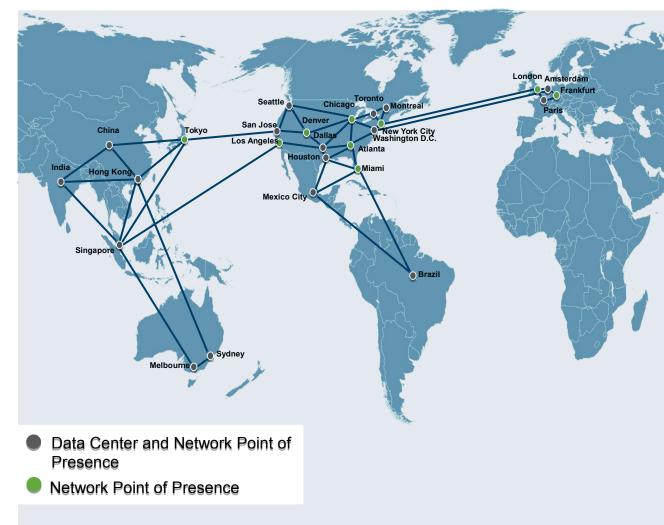
2014 acceleration

- \$1.2B data center expansion
- \$1B Platform as a Service (Bluemix)
- IBM Cloud marketplace
- 13 Cloud Business Solutions
- SoftLayer integrates Power 8
- For cloud delivered as a service, 2Q annual run rate up nearly 100% to \$2.8B YTY

- \$7B in cloud acquisitions
- 100+ SaaS offerings
- 1,500 cloud patents
- 40,000+ cloud experts



IBM is investing in unprecedented global reach enabling a comprehensive platform and delivering high performance



Global expansion

- 40 WW data centers in 15 countries
- <u>Live</u>: Hong Kong, London, US Federal, Toronto
- <u>Next Up</u>: Paris, Melbourne, Mexico City, Frankfurt, Sydney, Tokyo

Key design elements

- Control and transparency
- High performance
- Data sovereignty
- Security

Localized capabilities

- IPv4/IPv6 dual stack
- Global DNS
- Global DDOS mitigation
- Global internet exchanges and peerings



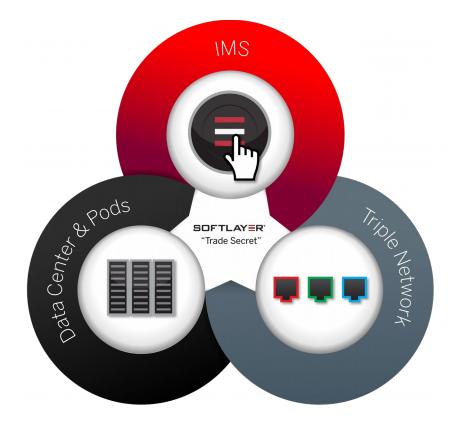
Global cloud platform

- Only infrastructure solution with a common management interface and API across a unified architecture
- Mix and match bare metal servers, virtual server instances, and turnkey private clouds, and manage them from a single control pane or API
- All deployed on-demand and provisioned automatically in real-time

Bare Metal Servers	Virtual Server Instances	Private Clouds
6 Data Center Pod	x86 Data Center Pod	x86 Data Center Pod
No.		
nique Triple Network Architecture allows	s seamless communication across distribute	d environments



How it all fits together



SoftLayer Infrastructure Management System

- Bare metal and virtual server provisioning
- Integrated BSS/OSS
- Comprehensive network management

Data Center & Pods

- Standardized, modular hardware configs
 - Lower inventory carrying costs
 - Maximize asset utilization and profitability
 - Increase provisioning flexibility
 - Simplify capacity management
- Globally consistent service portfolio

Triple Network

- Proprietary network architecture
- Pod design allows customers grow across multiple racks or rows in the same layer 2/3 domain as needed.



Security & Compliance

- SoftLayer cannot access customer data
 - Customers have complete and sole control over their data and its movement / location
- SoftLayer offers comprehensive security services, across the IT infrastructure
- Dedicated and private, physical and virtual, clouds are well suited for regulated workloads
- Strict physical and operational security controls are in place in data centers
- SoftLayer is compliant with major industry and regulatory standards



Bousorama Banque

Europe based online brokerage and financial information firm uses SoftLayer for a hybrid cloud solution to support growth strategy to move from 500,000 clients to 1.5 million by 2020.

The Client:

Created in 1995, Boursorama, subsidiary of Societe Generale retail bank, is pioneer and leader in its three businesses: online banking, online brokerage and financial information on the Internet **The Need:**

- Boursorama has currently two traditional hosting contracts for its front-office and back-office IT which end in 2015 and 2016.
- They need a dynamic Cloud infrastructure managed by one single service provider to support their growth strategy
- Also, the new managed solution needed to be flexible, industrialized and secure, and be up and running 24x7.

The Solution:

- IBM proposed one hybrid managed Cloud solution:
- <u>Back-office</u> Hosting and IaaS solution for 300 servers and storage hosted in a BCRS dual site
- It also addressed issues of business continuity; back up and managed operations
- <u>Front-Office</u> SoftLayer hybrid solution covers multiple bare metal servers, multiple virtual machines on public and private cloud
- Web traffic load-balanced between two SoftLayer PODs based out of Paris and Amsterdam.
- IBM BP, NBS System, will manage the open source components for the front-office

Benefits:

- <u>Flexibility</u>: Cloud solution to support its growth strategy and fast daily VM provisioning to support variable activity on the Internet
- <u>Accountability</u>: one single Service Provider offering hybrid managed cloud solution
- <u>Security & Compliance</u>: Adherence to the banking rites and regulations
- <u>Resiliency</u>: High availability with the Cloud for front office solution and dual site fast recovery for back office





10



Case Study: LAN Airlines S.A. (South American Airlines)

The Client: LAN is the flag carrier of Chile, the predominant airline in Chile, Perú and Ecuador, and the second largest carrier in Argentina and Colombia through its local subsidiaries. LAN is currently positioned amongst the largest airlines in Latin America, serving Latin America, North America, the Caribbean, Oceania, and Europe. LAN Airlines is the 10th oldest airline in operation today.

The Need:

Reliable and scalable compute and data storage services for the airline's product reservations system.

The solution:

IBM SoftLayer Cloud Services

The benefit:

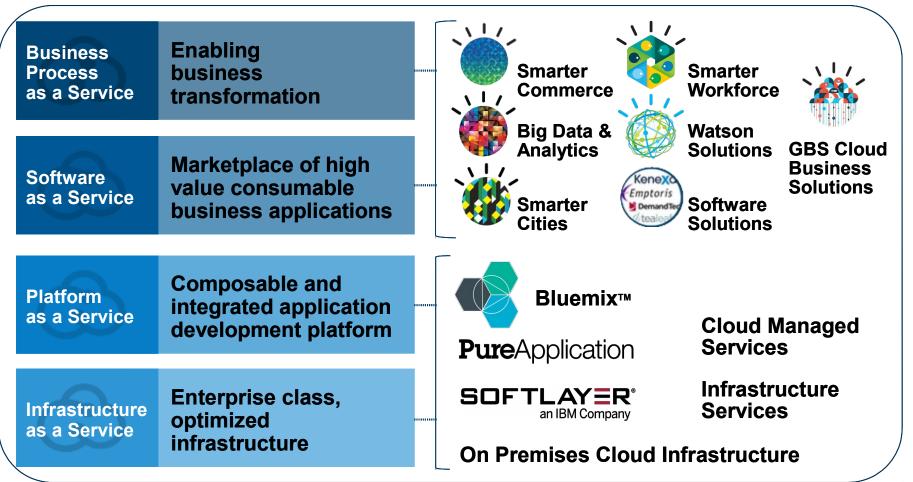
- Horizontally and vertically scalable to meet seasonal fluctuations as well as annual growth demands.
- Highly reliable infrastructure to provide 24x7x365 business operations support.
- Global Presence to maximize interactive experience

Benefits:

- Streamlined, standardized operations with optimized business processes
- Better Service to clients through accurate, timely and accessible information
- Enhanced functionality and sustainability
- Cost effective, world class operations and maintenance

IBM is addressing cloud needs across the enterprise

Think it. Build it. Tap into it.



Public. Private. Hybrid.

#ibmcloud

SoftLayer forging stronger linkages with IBM Cloud Managed Services

High performance, reliability, and compliance on a global scale

Managed Services

- Infrastructure
- Change management
- Configuration management
- Monitoring
- Security patching
- Asset management
- Workload migration

Deployment Choices

- Shared or private
- IBM or on-premises

Managed Platforms

- SAP applications
- SAP HANA
- Oracle applications
- Oracle database
- Oracle OVM Cloud

Availability

- SLAs (up to app level)
- Disaster recovery

Managed Compliance

- HIPAA
- PCI



No other global vendor provides a managed IBM AIX[®] option. SLAs for VMs, HA options and standardized DR provide reliability beyond just the infrastructure level.

BlueMix on SoftLayer

Delivering a Composable Services **development** Environment Run Your Apps DevOps APIs and Services Cloud Integration

Extend SaaS Apps



Fueled by Open Source PaaS



The Cloud Foundry Foundation

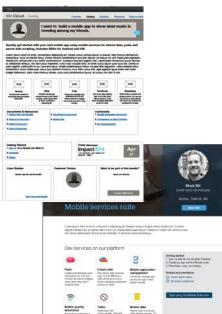




Let customers find, buy, and manage your cloud services within our marketplace.

IBM Cloud Marketplace

Solution Pages



Service Pages

Compel more conversation



Merchandise catalog to other sites

IBM Cloud / Partner pro

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IBM is delivering new cloud offerings and innovations on SoftLayer

Innovation

Watson

Pay-as-you-go model for large amounts of data, compute and storage; high security

Elastic storage on cloud

Software-defined storage as a service on SoftLayer; optimized for analytics, technical computing, Hadoop; public or hybrid cloud

Infiniband

Performance

Aspera

Secure, high-speed file transfer; option to install on physical or virtual infrastructure

Bare metal pricing

Servers on line in 30 minutes or less; choice of hardware configurations, data center and OS; never pay for excess capacity

SOFTLAY ER[®] an IBM Company

Integration

PROJECT: Jumpgate

Leverage APIs and hybrid cloud — Heat for orchestration, Savanna for Hadoop as a service and Trove for database as a service

PROJECT: Zenith

Agile and fast OpenStack-based cloud management platform on private cloud with dedicated services; available as monthly subscription

Modular managed services

Offering customers option to manage cloud environment themselves with curated tools or leverage IBM experts; supported by best-of-breed management bundles

Disaster recovery and backup

eVault for secure, encrypted backups, Idera for diskto-disk server backup

Enterprise







