The IBM Platform Computing Cloud Service

Solution Overview

Industry-leading workload management

- 20 years managing distributed scale-out systems with 2000+ customers in many industries

- High performance workload management combined with intelligent resource scheduling engine

- Unmatched scalability (small clusters to global grids) and production-proven reliability

- Heterogeneous – manages System x and Power plus 3rd party systems, virtual and bare metal, accelerators / GPU, cloud, etc.

- Shared services for both compute and data intensive workloads

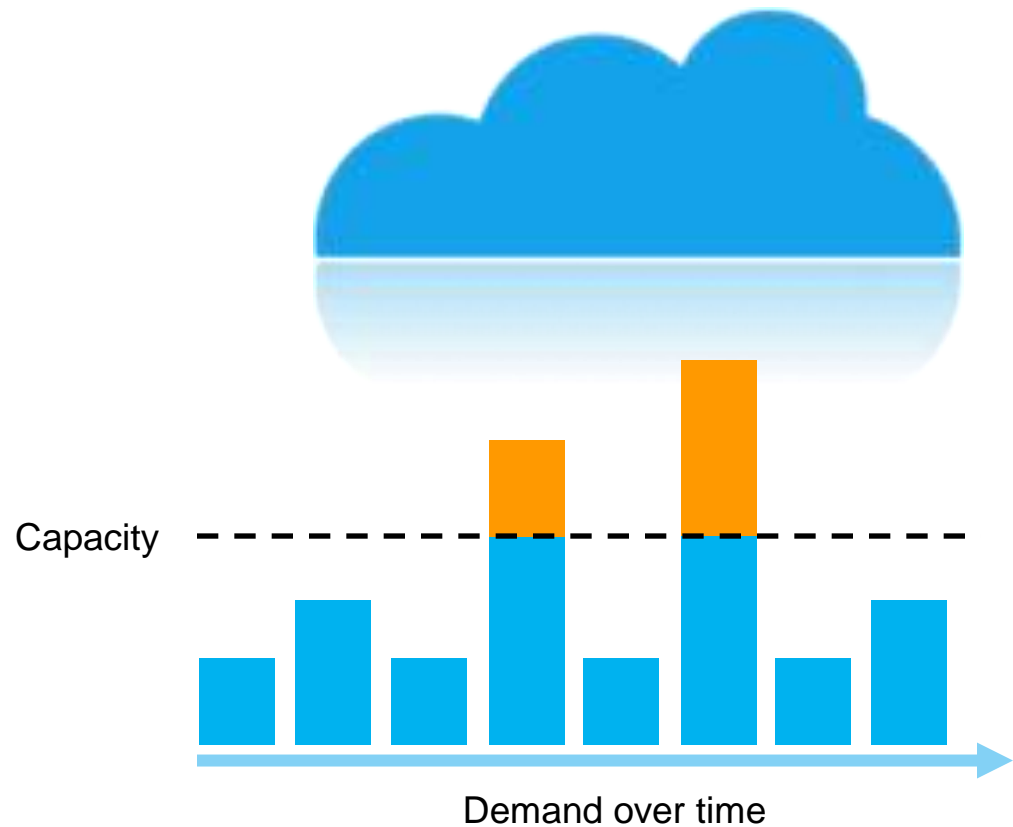- Integrated solutions with vertical reference architectures

23 of 30 largest commercial enterprises

60% of top financial services companies

Over 5M CPUs under management

Customer Challenges

- Spikes in demand

Capacity

Demand over time

Customer Challenges

- Spikes in demand
- Limited staff or CapEx budget

Customer Challenges

- Spikes in demand
- Limited staff or CapEx budget
- Need to focus on priority projects

But …

Deploying high-performance applications in the cloud can be harder than it seems!

Challenges deploying applications in the cloud

- Performance

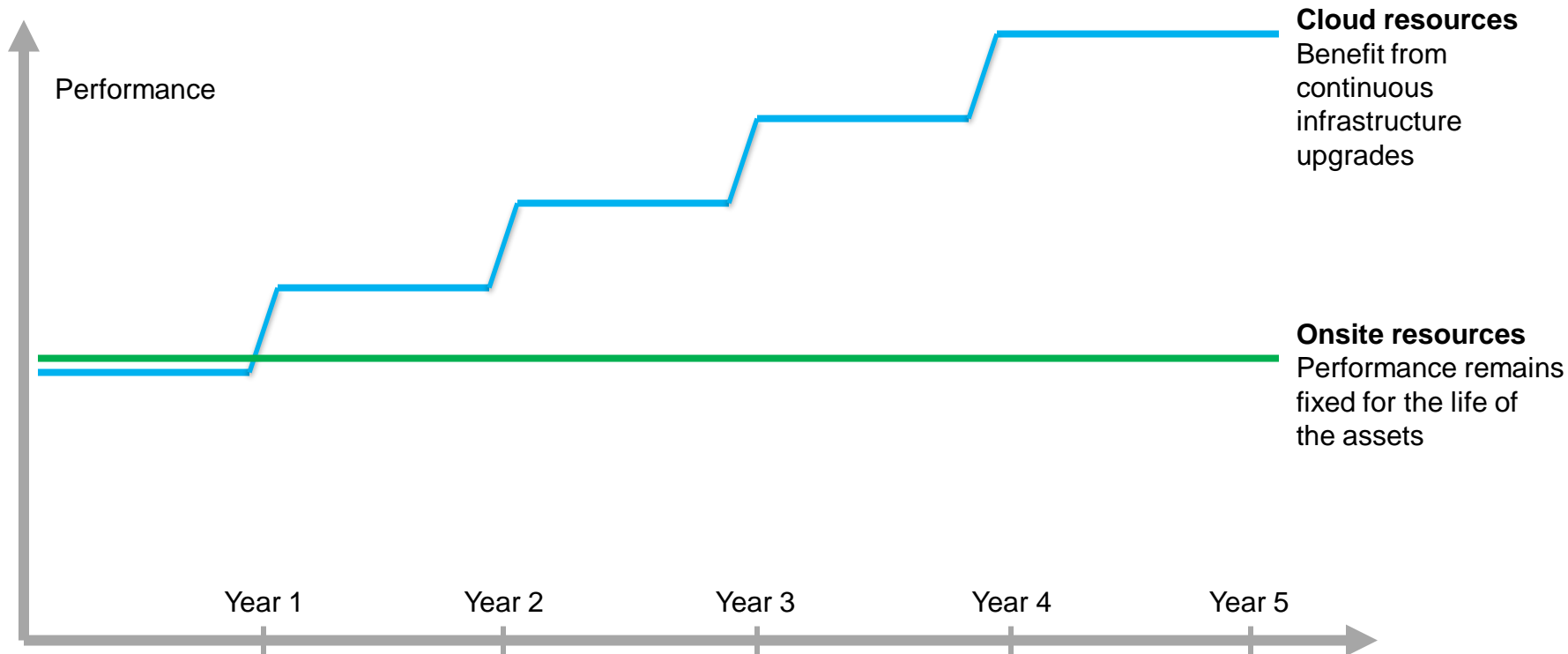Clients may experience poor or unpredictable performance making it impossible to guarantee service levels

Exceptional performance

- Bare-metal, dedicated infrastructure
- Fast networks, specialized hardware
- Advanced data management

Meet performance goals in less time at a lower cost

Exceptional performance

Benefit from continual technology refresh

Cloud resources
Benefit from continuous infrastructure upgrades

Onsite resources
Performance remains fixed for the life of the assets

Performance

Year 1   Year 2   Year 3   Year 4   Year 5

Challenges deploying applications in the cloud

- Performance
- Privacy & security concerns

Concerns about placing sensitive data on a shared infrastructure where it may be visible to others, legal requirements, geographic boundaries etc..

Security and data integrity

- Dedicated, isolated environment

- Each cluster isolated on private VLAN

- Secure, encrypted tunnel

- Secure, reliable file system

- Decomissioned disks scrubbed with DoD approved methods

Challenges deploying applications in the cloud

- Performance
- Privacy & security concerns
- Lack of cost transparency

Concerns about escalating costs and being locked into a "public cloud only" approach without the freedom to run applications locally as needs evolve

Cost transparency & flexibility assured

- Dial resources up and down as needed
- Retain flexibility to deploy on-premise or in the cloud
- Burst to cloud resources based on business policies
- Reporting, usage-based accounting

On-premise   **On-cloud**

Challenges deploying applications in the cloud

- Performance
- Privacy & security concerns
- Lack of cost transparency
- Local points of presence

Local in-country presence for better network performance, or to meet specific legal or regulatory requirements

Massive, global datacenter footprint

Legend:
- New Data centers in 2014
- Data center and Point of Presence
- Network Point of Presence

Massive, global datacenter footprint

- 100,000+ servers

- 21,000 customers

- 20,000,000 active domains

- 40 data centers, 5 continents

- Global DNS, DDOS mitigation

SOFTLAYER®
an IBM Company

{Platform Computing

Challenges deploying applications in the cloud

- Performance
- Privacy & security concerns
- Lack of cost transparency
- Local points of presence
- Unique requirements

Some applications have unique requirements – fast interconnects, parallel file systems, specialized hardware

Challenges deploying applications in the cloud

- Performance
- Privacy & security concerns
- Lack of cost transparency
- Local points of presence
- Unique requirements
- Support

You are an expert in your application, but you don't want to be an expert in cluster and workload management. Also, you may not have budget for additional required infrastructure

7x24 Platform Computing Cloud Operations Team

7x24 proactive support, automated alerting / notification

HW usage accounting, flexible reporting & billing

Extensive pre-delivery testing – flex up / flex down

Secure VPN tunnel, hybrid cloud configuration

IBM® Platform LSF ® or IBM Platform™ Symphony deployment

Optional parallel file system for data management
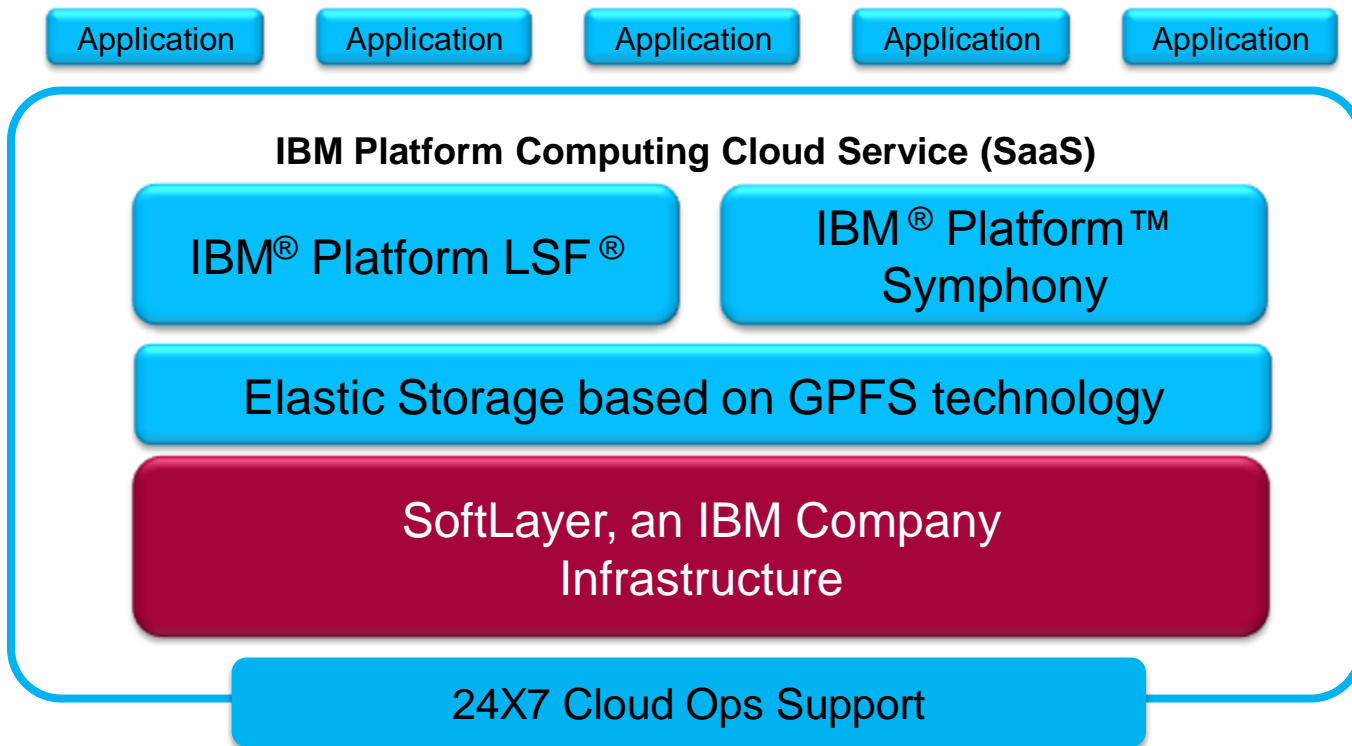
OS Installation & configuration

Physical provisioning of bare-metal infrastructure

Introducing …

The **IBM Platform Computing Cloud Service** – Delivering a versatile, application ready cluster in the cloud for organizations that need to quickly and economically add computing capacity.

{ **Platform Computing**

SOFTLAYER®
an IBM Company

IBM Platform Computing Cloud Service

| Application | Application | Application | Application | Application |

IBM Platform Computing Cloud Service (SaaS)

IBM® Platform LSF®

IBM® Platform™ Symphony

Elastic Storage based on GPFS technology

SoftLayer, an IBM Company Infrastructure

24X7 Cloud Ops Support

Private, public or hybrid clouds

On-premise infrastructure

IBM Platform Computing on-premise clusters, grids or clouds – IBM Platform LSF (technical computing), IBM Platform Symphony (analytics)

On-cloud infrastructure

Deploy on-cloud or burst as needed to consume unlimited high-performance bare-metal resources in the IBM Softlayer cloud

SOFTLAYER®
an IBM Company

The IBM Platform Computing Cloud Service

- Purpose-built for high-performance applications
- Deployed and managed by the experts
- Best-in-class cluster and workload management
- Dedicated infrastructure for outstanding performance
- Hybrid cloud for cost transparency and flexibility
- Multiple points of presence and additional security
- Proactive, top quality support

Thank You