### **IBM SolutionsConnect 2013**

Turning Opportunity into Outcomes.



## **Building a cloud solution**

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### Agenda

- -Introductie SLTN
- -Waar staan de meeste klanten m.b.t hun ontwikkeling
- -Soorten cloud oplossingen
- -Type workloads
- -Voor welke oplossing heeft SLTN gekozen
- -Toelichting Vmware oplossing
- -Toelichting IBM Smartcloud
- -Vragen en antwoorden





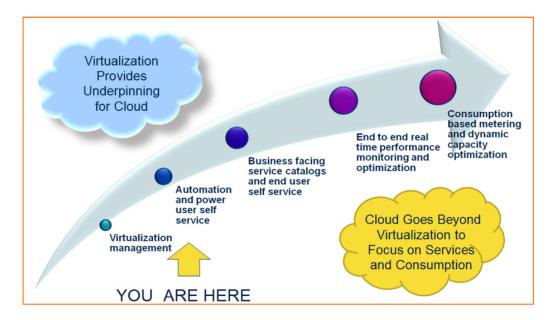
#### About SLTN

- IBM premium business partner, founded in 1997
- Located in Almere, The Netherlands
- Started with AIX, pSeries and IBM storage
- Big focus on virtualization (LPAR/VMware) since 2003
- Added Microsoft, Red Hat, Symantec and Citrix to our portfolio (2005)
- Started with managed services in 2006
- Became a multivendor company in 2008 with a clear focus on virtualization (server & desktop)
- Clear focus on Cloud computing and built our Cloud solution in early 2012

### **SLTN Cloud Services built on:**

- IBM xSeries / IBM BladeCenters
- Cisco Nexus / 3750 switches and ASA firewalls
- IBM XIV storage / DS5000 storage (Fibre-channel)
- VMware vSphere / vCloud directory
  - For legacy applications and typical
     VMware customers requiring a hybrid cloud solution
- Red Hat Enterprise Linux / KVM
- IBM SmartCloud Provisioning
  - For new workloads, revolution business models with a focus on the Linux operation system or Citrix desktop workloads (XENapp / XENdesktop)







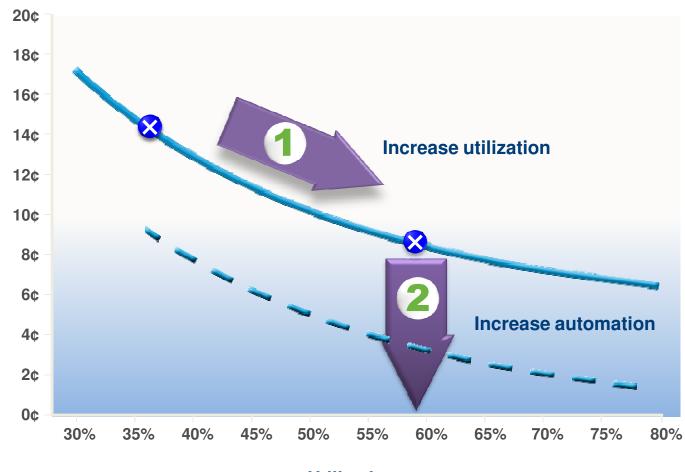








#### **Cost per VM hour**







## Type of cloud solutions

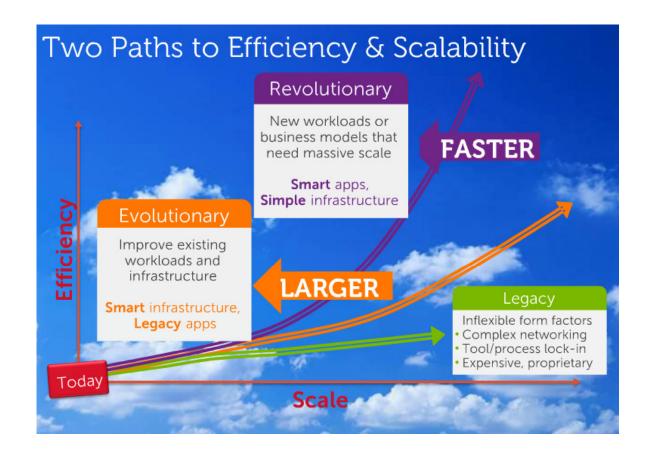






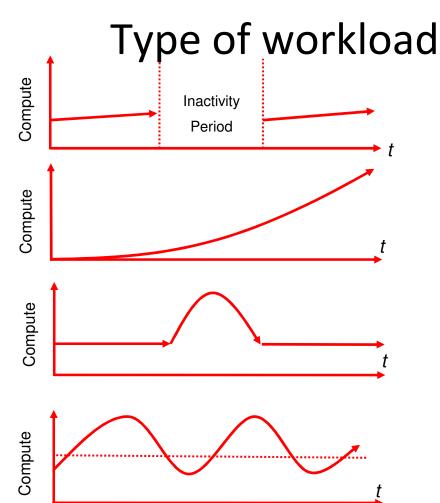






#### On and Off





On & off workloads (e.g. batch job)

Over provisioned capacity is wasted

Time to market can be cumbersome

### **Growing Fast**

Successful services needs to grow/scale
UnDredictable Bursting
Cannot provision hardware fast enough

Unexpected/unplanned peak in demand Sudden spike impacts performance Can't over provision for extreme cases

### Predictable Bursting

Services with micro seasonality trends Peaks due to periodic increased demand IT complexity and wasted capacity



# **Cloud Computing**



Traditional
On-Premises

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking

Infrastructure
As a Service

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking

Platform
As a Service

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking

Software as a service

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking

OPEX saving, faster time for value





## The solutions







#### VMware vCloud



#### **Private Cloud**

#### **Service Consumption**

vCloud Request Manager vCenter Chargeback

#### **Service Delivery**

vCloud Director

#### **Security and Compliance**

vShield Security Family vCenter Configuration Manager

#### **Resource Management**

vSphere vCenter Management Family

### Portability

### Cross-Cloud Standards

vCloud API Open Virtualization Format

## Cross-Cloud Management vCloud Connector

#### **Existing Virtual environments**



**Existing Physical environments** 





## The evolution of cloud strategies

No matter where you are in your cloud journey, IBM has capabilities to help you achieve your business goals

#### Integrate

- · Improve efficiency and utilization of IT resources
- Reduced management complexity and infrastructure costs through standardization
- Leverage integrated server and storage management

#### Automate

- · Security and governance
- System platform optimization and integration
- Single interface to manage servers, storage and networking
- Image management to improve service delivery

#### Get started:

- · Image and Virtual Environment Management
- · Implementing an Entry Cloud Infrastructure

#### **Orchestrate**

- Integrated and secure virtual infrastructure
- · Monitoring, capacity and analytics along with infrastructure provisioning
- Automated billing usage and metering
- · Optimized environment for workload

#### Get started:

· Implementing an Advanced Cloud Infrastructure

#### Get started:

- · Create a Cloud Strategy and Roadmap
- · Consolidate and Virtualize Your Infrastructure
- Access Compute and

Cloud Service Management and Integration

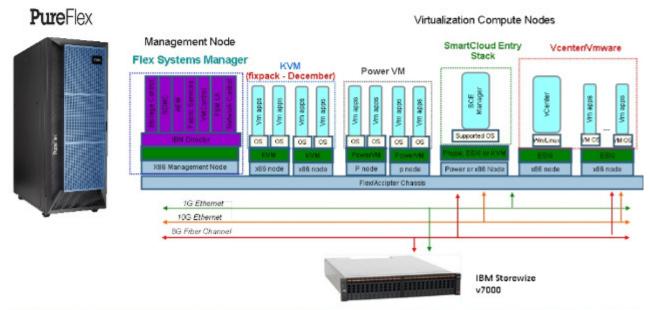
Pulse 2013 Optimizing the World's Infrastructure

IBM o





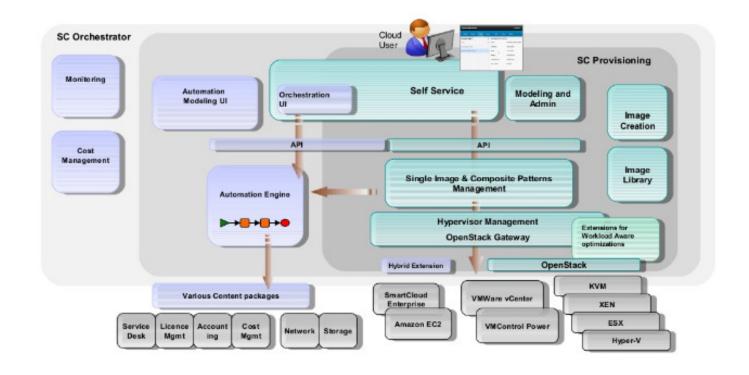




Built-in expertise • Integration by design • Simplified experience

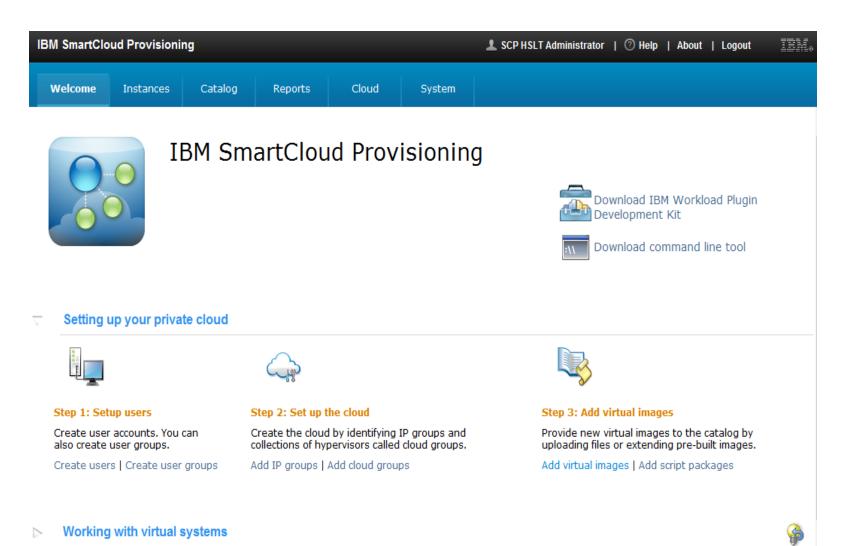


### High level architecture SmartCloud Orchestration and Provisioning



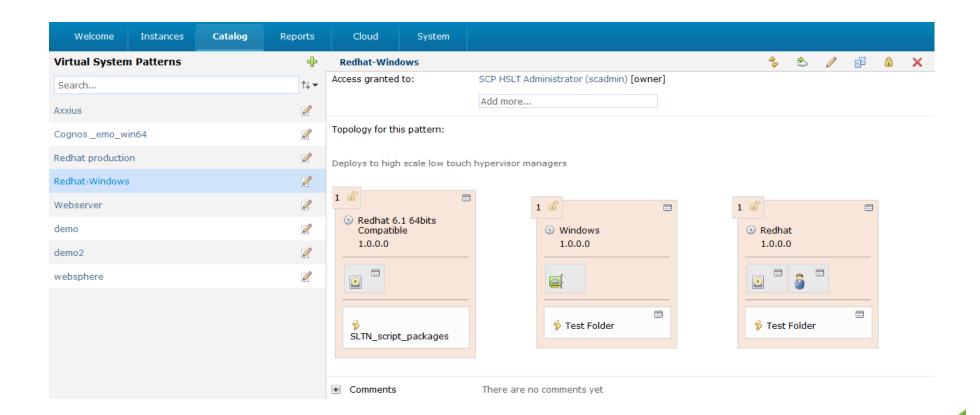






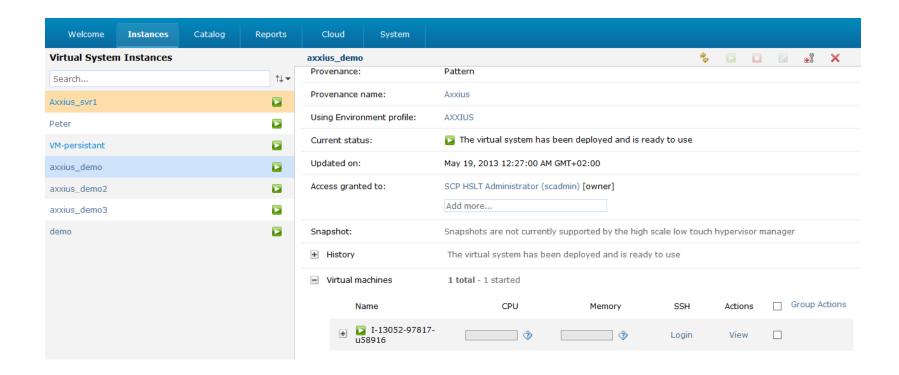
















# SLTN's ICT oplossingen



Beschikbaarheid – Continuïteit - Schaalbaar