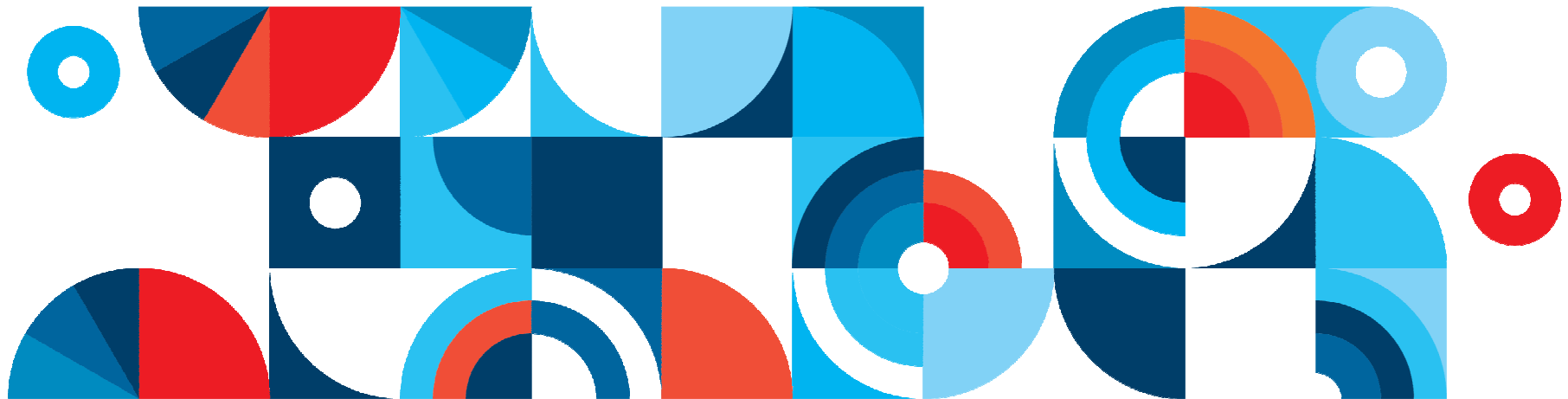
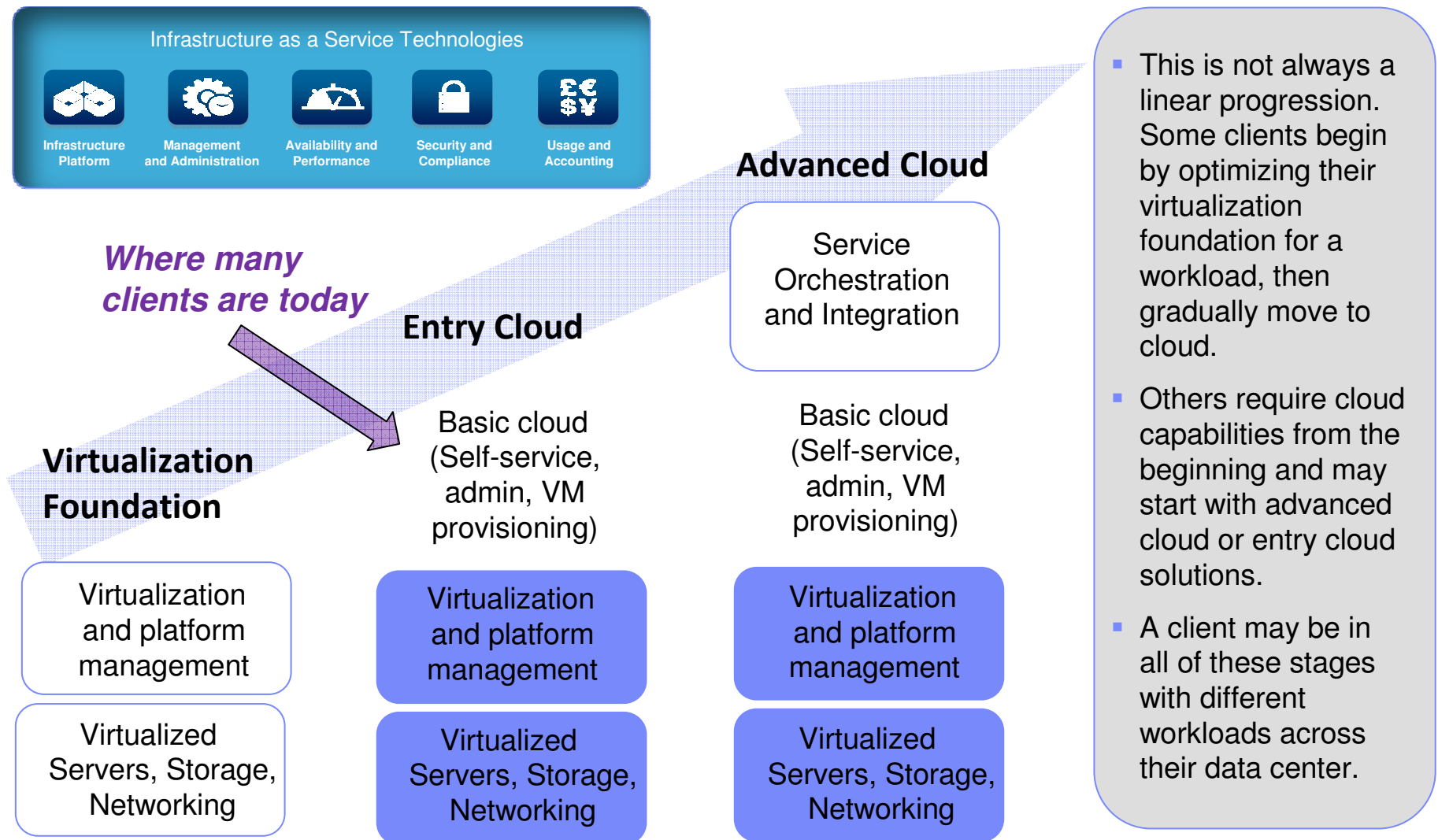


Eduardo Falcone V.
PureSystems Sales

IBM SmartCloud Entry v3.1 – “What’s New?”



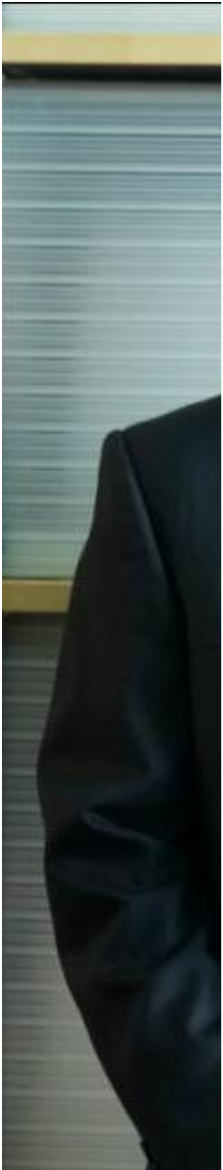
IBM helps clients scale from virtualization to cloud solutions






























Introducing IBM SmartCloud Entry

SmartCloud Entry streamlines and improves datacenter operational efficiency with:

- the ability for end users to perform **self-service provisioning** of IT services with an easy to use interface
- the ability for administrators to capture and manage **standardized IT images** with support for common business processes
- the ability to perform **basic usage metering** for chargeback
- better **management** of the virtual environment



IBM SmartCloud portfolio

	SmartCloud Entry	SmartCloud Provisioning	SmartCloud Orchestrator
Self Service Portal for VM Provisioning			
Cloud Administration			
Multi-tenancy, Isolation			
Basic Single Image Composition, Manipulation			
Rapid , Scalable Provisioning			
Automatic Fault Tolerant HW/SW			
Image Library (Search / Compare, Versioning, and SW Stacks)			
Virtual System Patterns Creation			
Virtual Application Patterns Creation			
Runbook Automation			
Solution Extensibility and Integration			
Hybrid cloud support			

IBM SmartCloud Entry is the first tier in a three-tier family of cloud offerings based on the Common Cloud Stack (CCS) foundation. This standardized architecture facilitates client migrations to the advanced SmartCloud portfolio solutions.

IBM systems management offerings support multiple user categories

- The transition to cloud has empowered end users to perform tasks previously restricted to admins
- A distinct cloud admin role has emerged (separate from virtual/physical resource management)
- Skilled virtual resource management is required for virtual compute, storage and network infrastructure
- As always, skilled physical resource managers (either offsite or on-premise) are as critical as ever

SmartCloud Entry supports these user types



End user

**Self-service IT requests
via mobile & Web clients**

**Manage cloud workloads
Manage cloud users
Manage cloud
environment**



Cloud manager

Platform manager

**Manage physical
resources (servers,
storage and networking)**

**Manage virtualized
resources (servers,
storage and networking)**

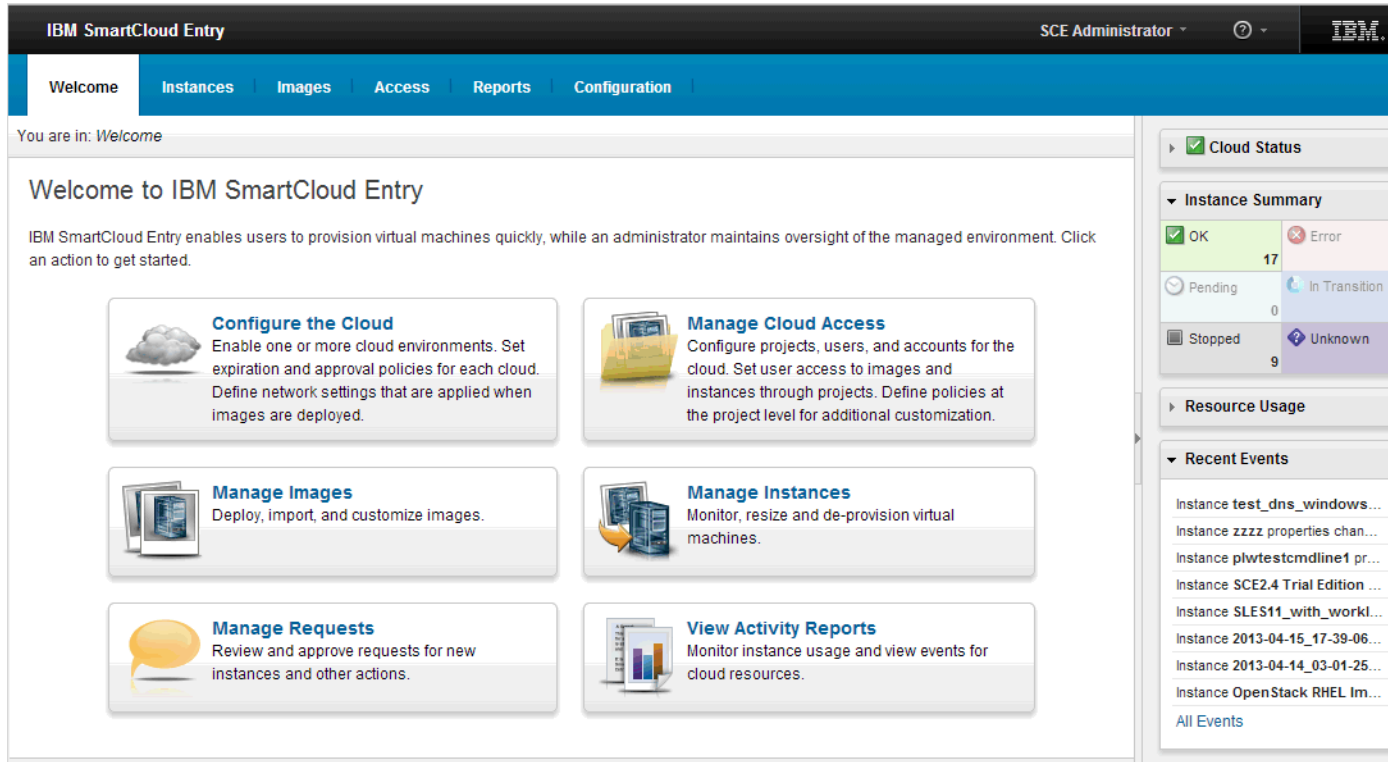
Virtualization manager





- Appliances = Catálogo de Servicios
- Workloads = Máquinas Virtuales
- Workflow de aprobación de peticiones
- Multi-tenancy por proyectos y múltiples clouds
- Independencia del usuario (capturar, aumentar, detener, iniciar, respaldar)
- Soporte multiplataforma (Power, Vmware, KVM)
- Métrica de uso y Cuentas facturables

SmartCloud Entry delivers cloud usage benefits to users



IBM SmartCloud Entry

SCE Administrator

Welcome | Instances | Images | Access | Reports | Configuration

You are in: Welcome

Welcome to IBM SmartCloud Entry

IBM SmartCloud Entry enables users to provision virtual machines quickly, while an administrator maintains oversight of the managed environment. Click an action to get started.

- Configure the Cloud**
Enable one or more cloud environments. Set expiration and approval policies for each cloud. Define network settings that are applied when images are deployed.
- Manage Cloud Access**
Configure projects, users, and accounts for the cloud. Set user access to images and instances through projects. Define policies at the project level for additional customization.
- Manage Images**
Deploy, import, and customize images.
- Manage Instances**
Monitor, resize and de-provision virtual machines.
- Manage Requests**
Review and approve requests for new instances and other actions.
- View Activity Reports**
Monitor instance usage and view events for cloud resources.

Cloud Status

OK	Error
17	0

Instance Summary

Pending	In Transition
0	0

Resource Usage

Recent Events

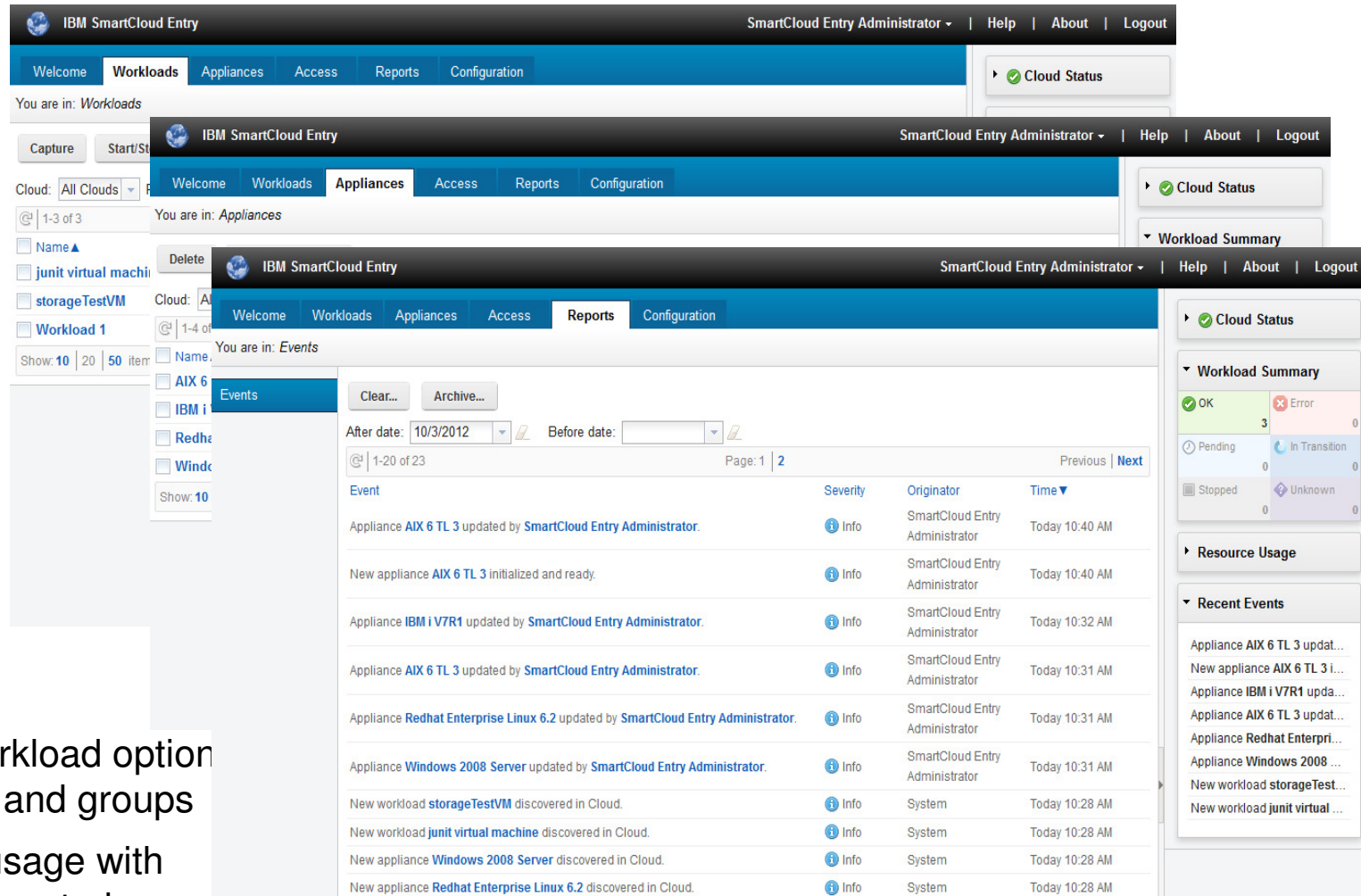
- Instance test_dns_windows...
- Instance zzzz properties chan...
- Instance plvtestcmdline1 pr...
- Instance SCE2.4 Trial Edition ...
- Instance SLES11_with_workl...
- Instance 2013-04-15_17-39-06...
- Instance 2013-04-14_03-01-25...
- Instance OpenStack RHEL Im...

[All Events](#)

- Easy to access, easy to use Service Request Catalog
- Hides underlying infrastructure from user and shifts focus to services delivered
- Enables the ability to provide standardized and lower cost services
- Facilitates a granular level of services metering and billing
- Workload standardization eases complexity

[Watch a video on the simplicity of provisioning VMs with SmartCloud Entry](#)


SmartCloud Entry delivers cloud admin benefits to managers




The screenshot displays the IBM SmartCloud Entry Administrator web interface. The top navigation bar includes 'Welcome', 'Workloads', 'Appliances', 'Access', 'Reports', and 'Configuration'. The 'Workloads' section is active, showing a list of workloads: 'junit virtual machine', 'storageTestVM', and 'Workload 1'. The 'Appliances' section is also visible, showing a list of appliances: 'AIX 6', 'IBM i', 'Redhat', and 'Windows'. The 'Reports' section is selected, displaying a table of events with columns for 'Event', 'Severity', 'Originator', and 'Time'. The table lists various updates and discoveries, such as 'Appliance AIX 6 TL 3 updated by SmartCloud Entry Administrator' and 'New workload storageTestVM discovered in Cloud'. The right sidebar contains a 'Cloud Status' indicator (green checkmark), a 'Workload Summary' section with a table of status counts (OK, Error, Pending, In Transition, Stopped, Unknown), and a 'Recent Events' section listing the latest events.

Event	Severity	Originator	Time
Appliance AIX 6 TL 3 updated by SmartCloud Entry Administrator.	Info	SmartCloud Entry Administrator	Today 10:40 AM
New appliance AIX 6 TL 3 initialized and ready.	Info	SmartCloud Entry Administrator	Today 10:40 AM
Appliance IBM i V7R1 updated by SmartCloud Entry Administrator.	Info	SmartCloud Entry Administrator	Today 10:32 AM
Appliance AIX 6 TL 3 updated by SmartCloud Entry Administrator.	Info	SmartCloud Entry Administrator	Today 10:31 AM
Appliance Redhat Enterprise Linux 6.2 updated by SmartCloud Entry Administrator.	Info	SmartCloud Entry Administrator	Today 10:31 AM
Appliance Windows 2008 Server updated by SmartCloud Entry Administrator.	Info	SmartCloud Entry Administrator	Today 10:31 AM
New workload storageTestVM discovered in Cloud.	Info	System	Today 10:28 AM
New workload junit virtual machine discovered in Cloud.	Info	System	Today 10:28 AM
New appliance Windows 2008 Server discovered in Cloud.	Info	System	Today 10:28 AM
New appliance Redhat Enterprise Linux 6.2 discovered in Cloud.	Info	System	Today 10:28 AM


- Tailor workload options for users and groups
- Monitor usage with workload metering
- Provides project level customization

 IBM Starter Kit for Cloud CFS Admin

[Welcome](#) [Workloads](#) [Appliances](#) **[Projects](#)** [Requests](#) [Accounts](#) [Users](#) [Network](#) [Events](#) Project:  **Public**

You are in: *Projects*

New Project

 IBM Starter Kit for Cloud

[1-3 of 3](#)
[Name](#)
[Project for AI](#)
[Project for AI](#)
[Public](#)

[New Configuration](#)

Show: **10** | 20

1-2 of 2

Configuration Name ▲	Description	Available IP Addresses	Allocated IP Addresses	
Public network 1	Public network for Cloud provider	33	0	Edit IP Addresses
VLAN1	Networks on VLAN1 Eth0-1	83	3	Edit IP Addresses

Show: **10** | 20 | **50** | **All** items

Account	Account Number	Status	Balance
Sample Account 1	551	✓ OK	(\$9,999.92)
Sample Account 2	552	✓ OK	(\$557.00)

Show: **10** | 20 | **50** | **All** items

Workflow

Operations That Require Approval

Workload initiation

Workload expiration extend

Workload resize

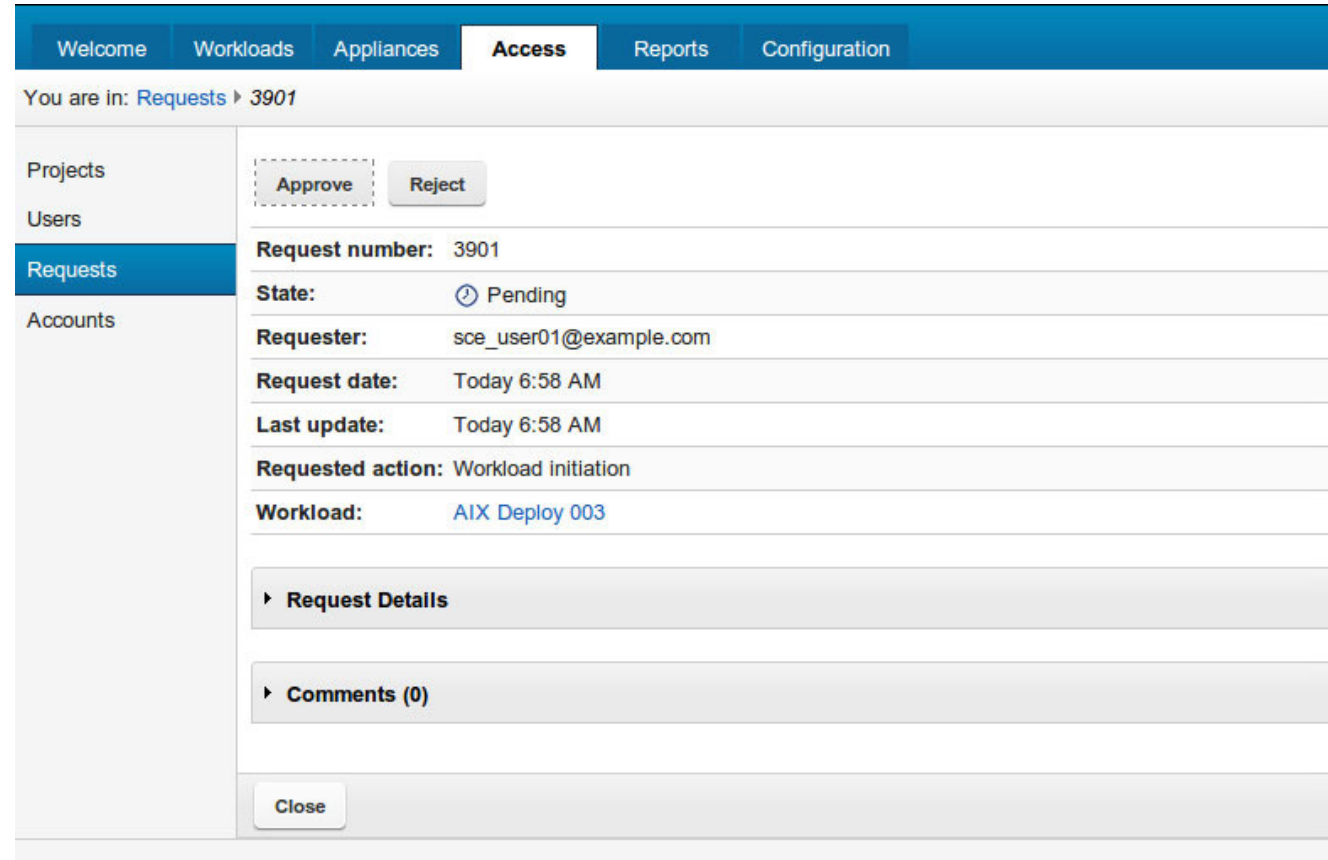
Workload capture

Virtual server attach storage request

Virtual server detach storage request

Virtual server save image

Virtual server restore



The screenshot displays the IBM SmartCloud Access console interface. At the top, a navigation bar includes links for Welcome, Workloads, Appliances, Access (selected), Reports, and Configuration. Below the navigation bar, a breadcrumb trail indicates the user is in 'Requests' > '3901'. On the left side, a sidebar menu lists 'Projects', 'Users', 'Requests' (highlighted), and 'Accounts'. The main content area shows a request card for request number 3901. At the top of the card are 'Approve' and 'Reject' buttons. The card details include: State (Pending, indicated by a clock icon), Requester (sce_user01@example.com), Request date (Today 6:58 AM), Last update (Today 6:58 AM), Requested action (Workload initiation), and Workload (AIX Deploy 003). Below the card, there are expandable sections for 'Request Details' and 'Comments (0)'. A 'Close' button is located at the bottom of the interface.

Welcome Workloads Appliances **Access** Reports Configuration

You are in: [Requests](#) > 3901

Projects
Users
Requests
Accounts

Approve **Reject**

Request number: 3901

State: ⌚ Pending

Requester: sce_user01@example.com

Request date: Today 6:58 AM

Last update: Today 6:58 AM

Requested action: Workload initiation

Workload: [AIX Deploy 003](#)

▸ Request Details

▸ Comments (0)

Close

Custom Approvals by Project

Projects

Users

Requests

Accounts

SCE_Project_001

Description: [Example Project](#)

▼ Project Members

Add...

Set Role to...

Remove

1-1 of 1

Name	User ID	Project Role ▲
SmartCloud Entry Administrator	admin	Owner

Show: 10 | 20 | 50 | All items

► Expiration Policies: (Use cloud default)

▼ Approval Policies: Enabled(Customize settings)

Approval Policies set the events that require administrator approval.
If changed, this policy will override the cloud policy.

☐ Use cloud default

☒ Customize settings

Require approval for the following events:

☒ Workload initiation

☒ Workload expiration extend

☒ Workload resize

☒ Workload capture

☒ Virtual server attach storage request

☒ Virtual server detach storage request

☒ Virtual server save image

☒ Virtual server restore

☒ Select all / Deselect all

Save

Cancel

Metering

Elapsed time the workload has been available for in hours.
Amount of processors (CPUs) consumed
Amount of memory (in GB) consumed
Amount of storage (in GB) consumed





[Welcome](#) [Workloads](#) [Appliances](#) [Access](#) **[Reports](#)** [Configuration](#)

You are in: *Usage Metering*

[Events](#)
[Usage Metering](#)

Virtual Server Filter
Cloud: Project:
Architecture: Hypervisor:
User name:
Date Range
After date: Before date:

1-16 of 16

Name	Cloud	Project	State
129-40-21-197	Power PureFlex	SCE_Project_001	 Stopped
129-40-21-198	Power PureFlex	SCE_Project_001	 Stopped
129-40-21-196	Power PureFlex	Public	 Stopped
129-40-21-195	Intel PureFlex	Public	 Running

Appliance Configuration

[Welcome](#) [Workloads](#) [Appliances](#) [Access](#) [Reports](#) [Configuration](#)

You are in: [Appliances](#) > [AIX71_appliance](#) > [Configure](#)

Configuring appliance *AIX71_appliance*

Choose which settings to expose to users when they deploy appliances using the Basic Deploy form. Any fields required for deployment should have default values set or be configured at deploy time.

Use the *Show in basic deploy settings* checkbox to individually select which values to show or hide in the Basic Deploy panel form. Click *Select All* to show all of the settings and *Clear All* to show none of them.

[Select All](#) [Clear All](#)

Processor Settings

Indicates whether the virtual server will use physical or virtual processors (dedicated or shared mode).:

Shared

☐ *Show in basic deploy settings*

Shared virtual processors:

1 ≤ 1 ≤ 11

☐ *Show in basic deploy settings*

Shared processing units:

0.1 ≤ 0.1 ≤ 11

☐ *Show in basic deploy settings*

The processing units sharing mode of the virtual server.:

Uncapped

☐ *Show in basic deploy settings*

The priority of the virtual server to available processing units in the shared processor pool.:

Image Target

Workloads based on this appliance will go to the selected target:

Server-7895-22X-SN102736B

13

Appliance Network Configuration

Network

System

Network configuration: PureFlex Customer Network ▼ [Edit *PureFlex Customer Network*](#)

[Hide settings](#)

DNS domain name for the system.:

Value comes from *PureFlex Customer Network*

☐ [Show in basic deploy settings](#)

Default IPv4 gateway.:

Value comes from *PureFlex Customer Network*

☐ [Show in basic deploy settings](#)

Short host name for the system.:

Value comes from *PureFlex Customer Network*

☐ [Show in basic deploy settings](#)

IP addresses of DNS servers for system.:


Value comes from *PureFlex Customer Network*

☐ [Show in basic deploy settings](#)

Workload Deployment

[Welcome](#) [Workloads](#) **[Appliances](#)** [Access](#) [Reports](#) [Configuration](#)

You are in: [Appliances](#) ▶ [AIX71_appliance](#) ▶ [Deploy](#)

Deploying *AIX71_appliance* 



***Name:**



Description:

Project:
 [New Project](#)


Expiration Period
☐ Set an expiration date

Basic Settings

CPU:
  

RAM:
  

Workload Capture

 Capture requests for workload have been sent.

[Welcome](#)**Workloads**[Appliances](#)[Access](#)[Reports](#)[Configuration](#)

You are in: *Workloads*

[Capture](#)[Start/Stop](#)[Hide/Show](#)[Delete](#)[Move To Project](#) ▼

Cloud: [All Clouds](#) ▼ Project: [All Projects](#) ▼ Architecture: [All Architectures](#) ▼ ☒ Include hidden workloads

 1-5 of 5

<input type="checkbox"/> Name ▲	Status	Cloud	Architecture	Description
<input type="checkbox"/> IBM SmartCloud Entry	✓ OK	Intel PureFlex	x86	Red Hat Enterprise Linux 6 (64-bit)
<input type="checkbox"/> SL112	■ Stopped	Intel PureFlex	x86	SUSE Linux Enterprise 11 (64-bit)
<input type="checkbox"/> TURNKEY OPENLDAP	✓ OK (Hidden)	Intel PureFlex	x86	http://www.turnkeylinux.org/openldap
<input type="checkbox"/> VMware vCenter Server Appliance	✓ OK	Intel PureFlex	x86	VMware vCenter Server Appliance Version 5.1 of VC running on SLES 11
<input type="checkbox"/> win2k8template	■ Stopped	Intel PureFlex	x86	Microsoft Windows Server 2008 R2 (64-bit)

Show: [10](#) | [20](#) | [50](#) items

Value Proposition: IBM SmartCloud Entry v3.1



Convert virtualized hardware to a private cloud with a quick & easy software solution

Key Features

- **Expanded hypervisor options** to choose from, including Hyper-V. Easy to deploy and use private cloud 'stack' delivers improved service levels and fastest time to value.

New

- Enabling **multiple server architecture** support from single SmartCloud Entry user interface. **Adopting a common technology base** w/OpenStack, open standards.

New

- **Enhanced end-user Web portal** for rapid self-service workload provisioning. Improved filtering, enabling the user to quickly locate and manage virtualized resources.

New

- Now with **pre-configured VM 'Appliance' images** - includes Multi-Image Definition, Configuration and Multi-Image Deployment support.

New

- Manage automated approvals, metering, billing, users and projects through a single pane of glass

- Create gold master VMs (images), convert images from physical systems or between hypervisors and conserve image storage**

Customer Benefits

- IBM SmartCloud Entry transforms virtualized systems into a ready-made, highly-scalable cloud infrastructure that empowers end users with new services on demand. **Greater range of hypervisors to choose from** – now **Hyper-V** joins VMware ESX, PowerVM, and KVM for greater flexibility and adaptability.

- IBM SmartCloud Entry enables greater flexibility as customers can manage across System x, Power Systems, and PureFlex platforms with a single, consolidated image of SmartCloud Entry software. **System z on roadmap** via Statement of Direction. Community development **speeds innovation/reduces costs**.

- *IBM SmartCloud Entry* provides a Web-based interface that makes selecting and provisioning new workloads as simple as browsing the Internet. **Expanded use of GUI tools further reduces set-up and configuration time, speeds service delivery**. Updated 'Look and Feel' improves ease of use.

- *IBM SmartCloud Entry* provides enhances project customization to allow customers to further **adapt their Cloud assets to their business needs**, and rapidly **accelerate their deployments**. Images distributed across projects or within a single project.

- *IBM SmartCloud Entry* empowers infrastructure teams with a rich set of administrative capabilities allowing easy delegation of provisioning to authorized users while maintaining full oversight (metering/usage tracking) to ensure safe & efficient operation.

- IBM SmartCloud Entry allows easier customization of images, reducing errors and labor costs

Simplified cross-platform, multi-hypervisor management

Improve performance and increase utilization of IBM hardware platforms

Improve end-user and operations productivity, accelerates time to market

Provide more granular financial management

Simplify Cloud Administration

Standardize virtual machines to reduce cost

Announce – 14 May 2013
GA – 14 June 2013

Source: IBM Market Intelligence Team, based on publically available competitive data.

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