IBM SmartCloud Entry

Robust cloud software improves data center efficiency with self-service, automation, metering and reporting

Highlights

- Improves data center efficiency and time to value

- Manages System x®, IBM® BladeCenter®, IBM PureFlex™ System and IBM Flex System™

- Multi-hypervisor support gives implementation choices

- Simple-to-deploy, easy-to-use, works with new or existing infrastructure

- Optimized with automation, security and resource sharing, and built-in metering and reporting

IBM SmartCloud™ Entry is robust software that simplifies management of your virtualized environment. Users can request and provision an environment quickly through an easy-to-use web-based interface. IT managers can monitor and manage this environment for improved efficiency and utilization of the data center. IBM SmartCloud Entry v2.4 release includes heterogeneous server architecture support from a single SmartCloud Entry user interface. This enables greater flexibility as customers can manage across System x, BladeCenter, IBM Flex System and PureFlex platforms with a single, consolidated image of SmartCloud Entry software. IBM intends to update the IBM SmartCloud Entry offerings to support Hyper-V and KVM virtualized workloads to provide more options and greater flexibility for cloud infrastructures.[1] The welcome screen is shown below.

SmartCloud Entry capabilities

Powerful new features include multi-cloud support e.g. across geographies and groups of tiered hardware and project level customization, with new automation e.g. that can give one team's project sandbox test hardware, whereas another team project is getting full production ready hardware; with expirations and approvals at the project level. In addition:

Create images: Simplify storage of thousands of images

- Create 'golden master' images and software appliances using corporate standard operating systems
- Convert images from physical systems or between various x86 hypervisors
- Reliably track images to ensure compliance and minimize security risks
- Optimize resources, reducing the number of virtualized images and the storage required for them
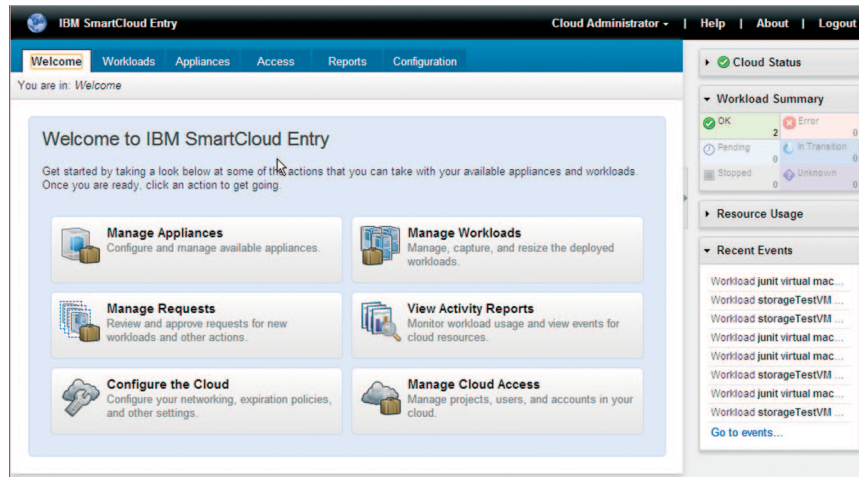
SmartCloud Entry Welcome Screen

Deploy VMs: Slash time to value for new workloads from months to a few days

- Deploy application images across compute and storage resources
- End user self-service for improved responsiveness
- Enable security through VM isolation, project-level user access controls
- Easy to use—no need to know all the details of the infrastructure
- Investment protection from full support of existing virtualized environments
- Optimize performance on IBM systems with dynamic scaling, expansive capacity and continuous operation

Operate a private cloud: Cut costs with efficient operations

- Delegate provisioning to authorized users to improve productivity
- Maintain full oversight to ensure an optimally running and safe Cloud through automated approval/rejection
- Built-in workload metering delivers the foundation for pay-per-use model
- Standardize deployment to improve compliance and reduce errors with policies and templates
- Use the intuitive interface to manage projects, billing, approvals and metering
- Integrated platform management with physical/virtual resource views facilitates diagnosis and maintenance

IBM SmartCloud Entry 2.4 adds support for KVM

IBM Smart Cloud Entry
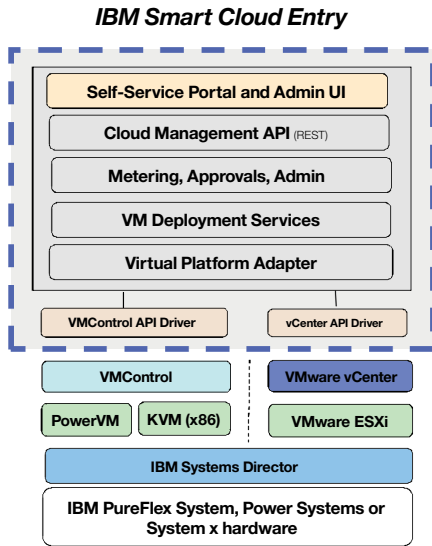
IBM SmartCloud Entry Architecture

Detailed List of Functions

Request access to a project
Request access from login panel
Request workload creation – appliance deploy
Set user instance parameters (CPU, memory)
Resize Running Workloads
Delete a Workload
Add/remove additional disks
Clone a workload
Start/Stop a workload
Review workload properties
Add additional disk
Set disk size

Table 1: Departmental User Functions

Configure workload to host
Configure workload targets to system pool
Configure Virtual Appliance Parameters
Register Virtual Appliance for User Selection
Approve/Reject New Workload Requests
Approve/Reject Workload Resize Requests
Configure Billing
Charging accounts, account assignment
Configure approvals
Configure Metering
Configure to generate metering records
Create & Manage Projects
Add users as admin, deployer, viewer
Create Users
Configure Network Pools
Configure LDAP environment
Cloud Configuration to VMControl (Power)
Manual Intervention
Review event logs & failures
Workload movement

Table 2: IT Administrator Functions

Subscriber Level – End User Self Service Interface
Cloud Admin User Interface
Isolation of resources and users through projects/workspace
Approval Policies for workload deployment & resize
Basic Billing, metering and audit
Supports underlying virtualization management features
Support enterprise features of virtual system management
Storage pools, system pools, network config, placement optimization
Includes Systems Director and VMControl for platform management
Expiry date options for cloud VMs
Northbound REST APIs for customization
Easy installation of management stack
Integrate Customer LDAP Server

VM Power on/off
Upgrade export to TSAM
Supported on AIX (Power) and on Linux (x86)
Dynamic Disk management
Add v-disk (VMControl)
Resize disk at deploy (vCenter)
Supports multiple VMware Clusters & resource pools
Support multiple VMware data stores
Support appliances with multiple V-nics
Admin initiated migration
Provision via vCenter
Provision from VS Templates
Provision to vCenter hosts, and clusters
Isolate projects via data stores/data center
User initiated root disk resize
Allow/tolerate vSphere initiated migration
Retrieve deployment properties
Back-up and Restore via Self-Service (vCenter)
Provides capability to capture Physical to Virtual images for deployment in SmartCloud Entry environment
Better manage image sprawl – Move a VM from one hypervisor type to another from a single image source

Table 3: SmartCloud Entry Features and Functions

Why IBM?

IBM has demonstrated a track record of innovation and industry-leading products. Choosing IBM means you can trust its industry innovation and world-class experience to take your business to the next generation of IT.

For more information

To learn more about IBM SmartCloud Entry visit:
ibm.com/systems/x/solutions/cloud or contact your IBM marketing representative or IBM Business Partner.