

# IBM WebSphere CloudBurst Appliance

## VMware VirtualCenter Server integration



This presentation covers VMware VirtualCenter Server 2.5 and vCenter 4 integration with the WebSphere® CloudBurst™ Appliance.

## Agenda

- VMware VirtualCenter (vCenter) Server overview
- Integration with WebSphere CloudBurst
- Configuring VMware VirtualCenter (vCenter) Server in WebSphere CloudBurst

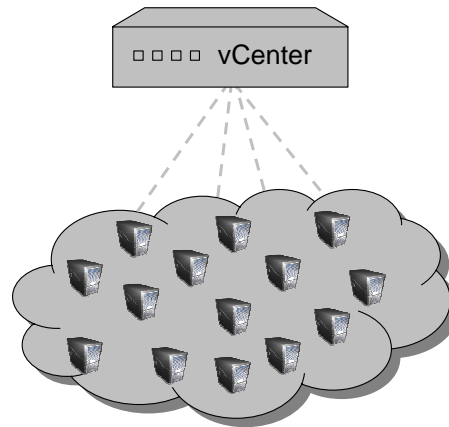
This presentation covers the integration of WebSphere CloudBurst Appliance and VMware VirtualCenter 2.5 and VMware vCenter 4.

## ***vCenter overview***

This section will give a brief overview of VMware vCenter Server, previously known as VirtualCenter Server.

## VMware vCenter Server overview

- Centralized management of ESX Servers



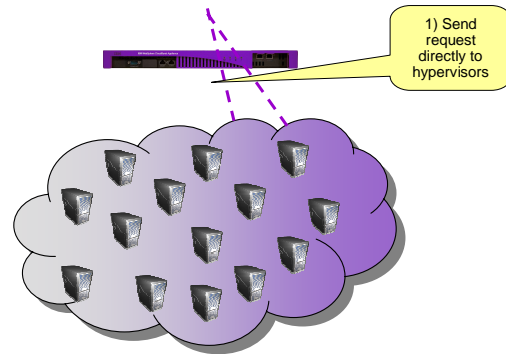
vCenter is a management piece of software that allows you to centrally manage your entire VMware-based virtualized IT infrastructure. Instead of managing each hypervisor directly administrators manage all of the hypervisors in one central location. vCenter goes above and beyond just giving you the capability to centrally manage your environment. vCenter is the foundation of a suite of add-on products and features that give capabilities such as failover, high availability and live migration.

## ***Integration with WebSphere CloudBurst***

This section covers how VirtualCenter integrates with WebSphere CloudBurst.

## VMware ESX integration

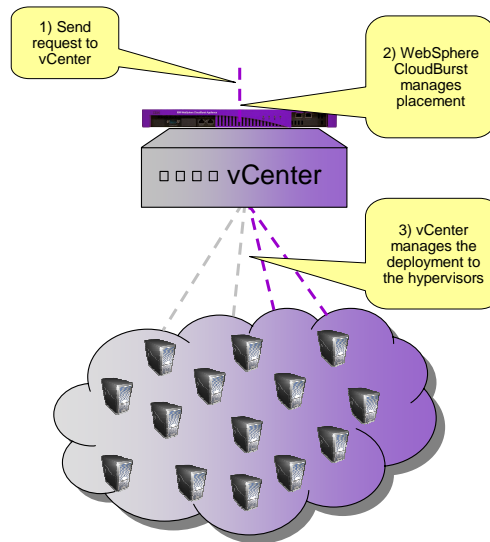
- Each hypervisor individually managed by WebSphere CloudBurst
- WebSphere CloudBurst takes care of placement and deployment



There are two ways in which WebSphere CloudBurst can manage your hypervisors. They can be managed directly by WebSphere CloudBurst, as shown in this slide, or they can be managed through vCenter which is covered in the remaining slides. When WebSphere CloudBurst is configured to directly manage the hypervisors, it will manage placement and deploy directly to the hypervisor using the hypervisor's API.

## VMware vCenter integration

- WebSphere CloudBurst interfaces with vCenter, which in turn manages the hypervisors
- vCenter manages the deployment
- WebSphere CloudBurst manages placement
- Does not support
  - VMotion/Storage VMotion
  - DRS




When WebSphere CloudBurst is configured with vCenter it manages the hypervisors by way of vCenter. WebSphere CloudBurst uses vCenter APIs to specify placement and initiate deployments. VMotion, Storage VMotion and Distributed Resource Scheduling (DRS) are not supported. If you are going to configure WebSphere CloudBurst to work with vCenter you will need to make sure that you disable those features.

## ***Configuring WebSphere CloudBurst***


This section covers adding vCenter and performing a simple deployment using vCenter as your target.



## Create cloud group (basic information)

- Navigate to **Cloud > Cloud Groups**, click the plus icon 
- Fill in the required fields
  - Name – Any unique name
  - Hypervisor type – Choose **ESX and ESXi**

Describe the cloud you want to create.

* Name:	<input type="text" value="Cloud Group (vCenter)"/>
Description:	<input type="text" value="Cloud group to manage vCenter"/>
* Hypervisor type:	<input type="text" value="ESX and ESXi"/>
Group type:	<input type="checkbox"/>  Managed using a Virtual Center

You configure vCenter differently than you configure an individual hypervisor. First you navigate to Cloud>Cloud Group and click the green plus icon. This will bring up the cloud group creation panel. Enter a unique name and choose “ESX and ESXi” as your hypervisor type.

## Create cloud group (vCenter information)


- Choose **Managed using VirtualCenter**
- Enter connection information of the VirtualCenter (vCenter) server
- Click the **Create** button

Describe the cloud you want to create.

\* Name:

Description:

\* Hypervisor type:  ▼

Group type:   Managed by a Virtual Center

Provide the credentials for Virtual Center

\* Host name:

\* User name:

\* Password:

\* Verify password:

Choose the “Managed using a VirtualCenter” check box and fill in the host name, user name and password of vCenter. This user needs to have administrative privileges. Once all information has been entered, click the “Create” button to complete the cloud group setup.

## Verify your vCenter cloud group

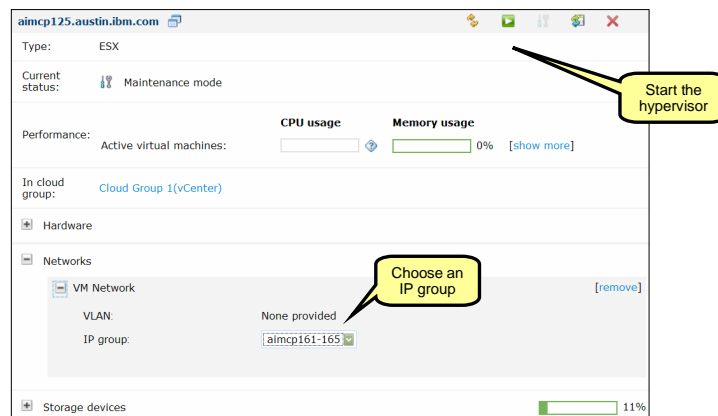
- Remove any hypervisors that you do not want managed by WebSphere CloudBurst
- WebSphere CloudBurst requires **exclusive** use of the hypervisor

Cloud Group 1(vCenter)	
Description:	Cloud group to manage vCenter
Hypervisor type:	ESX or ESXi
Type:	Managed using a Virtual Center
Status:	Connected
URL:	https://9.76.25.126/sdk
Security certificate:	Accepted [remove]
Hypervisors:	<a href="#">aimcp125.austin.ibm.com [remove]</a> <a href="#">aimcp127.austin.ibm.com [remove]</a>
<b>Login Information</b>	
Virtual Center:	
User name:	vcenter
Password:	..... [edit]
Access granted to:	Administrator [owner]
	<input type="text" value="Add more..."/>

After the cloud group has been created, it will have a list of all hypervisors managed by vCenter. Remove any hypervisors that you do not want managed by WebSphere CloudBurst by way of vCenter. Any hypervisors that remain can be used as a target during pattern deployment. Remember that WebSphere CloudBurst requires exclusive use of the hypervisor.

## Configure hypervisors

- Navigate to **Cloud > Hypervisors > your\_hv**
- Expand **Networks > VM Network** and choose an IP group
- Start the hypervisor






Next you need to complete the hypervisor configuration. Navigate to Cloud > Hypervisors. For each vCenter hypervisor that you added, you need to specify an IP group and start the hypervisor.


## Deployment


- Navigate to **Patterns > your\_pattern** and click the deploy icon
- Choose the cloud group that represents vCenter
- WebSphere CloudBurst will supply placement information
- All communications (file transfers) go through vCenter

Describe the virtual system you want to deploy.

 Virtual System 1

 Cloud Group 1(vCenter) 

 [Schedule deployment](#)

 [Configure virtual parts](#)

You have successfully configured your vCenter cloud group. The final step is to verify that it is working as expected. You can do this by performing a simple stand-alone server deployment, making sure to specify the vCenter cloud group. Once the deployment completes, verify that a virtual machine was created on one of the hypervisors associated with your vCenter cloud group.

## ***Summary***

This section provides a summary of this presentation.

## Summary

- You are now able to manage your hypervisors using vCenter with a few stipulations:
  - WebSphere CloudBurst **still** manages placement of deployments
  - WebSphere CloudBurst **still** requires dedicated access to the hypervisors

This presentation covered the WebSphere CloudBurst to VMware vCenter Server integration. This integration comes with a few existing stipulations. One, WebSphere CloudBurst still manages placement of deployments. Two, WebSphere CloudBurst still requires dedicated access to the hypervisors.

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