



# Automation and self-service

with System Center 2012 R2



Microsoft System Center 2012 R2 helps you realize the benefits of the [Microsoft Cloud OS](#) by delivering unified management across your datacenters, service provider datacenters, and Windows Azure.

The automation and self-service capability supports the Cloud OS by providing application owners and IT teams the required agility and control to do the following:

- utilize self-service access to provision application services
- gain a unified view across on-premises, service provider, and Windows Azure infrastructures
- deploy automated workflows that trigger additional capacity provisioning

**With the growth of cloud computing, datacenter administrators must balance new demands with their existing remit to deliver operational efficiency. The consumers of their Information Technology (IT) services — application owners — must address the speed and agility demands of their business stakeholders. Microsoft System Center 2012 R2 gives application owners self-service access to provision their own applications and IT the tools to drive automation and control.**

## Application agility and IT control

The popularity of public cloud computing has led enterprise application owners to expect IT to become faster and more agile. Anything less often results in their trying to work around IT. For IT teams, such expectations and results create a major roadblock towards maintaining a trusted advisor relationship with their application and business counterparts. System Center 2012 R2 puts IT firmly in control with visibility across on-premises, service provider, and Windows Azure resources and applications while giving application owners the agility they want with a self-service application management experience.

## Simplified application provisioning

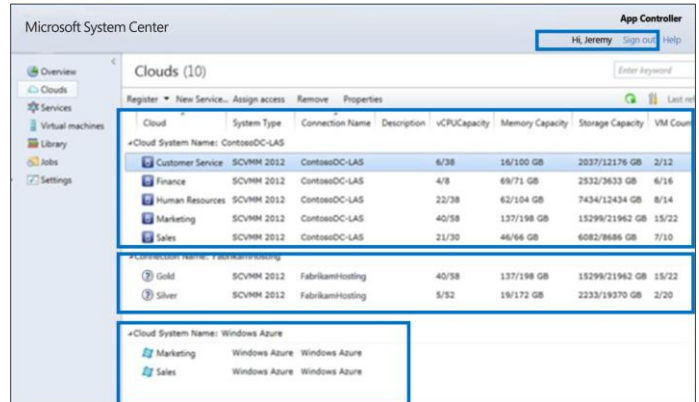
With the growing popularity of cloud services, enterprise application owners expect simple and fast dealings with IT. System Center 2012 R2 provides application owners self-service access to provision their application services. Service templates, accessible from System Center Virtual Machine Manager (VMM), help define application requirements, providing a blueprint for specifications such as hardware, operating systems, and application packages that makes service provisioning faster and less error-prone. Application owners can then deploy first-party Microsoft workloads (such as SharePoint farms) as well as line-of-business (LOB) applications using the agreed-upon service templates. For multi-tenant environments, a Windows Azure-consistent user experience enables tenant end users to provision multi-virtual machine services based on defined parameters set by the infrastructure administrator for each tenant.

## Unified management views and artifacts between Windows Server and Windows Azure

IT teams today want one set of tools for managing the datacenter infrastructure used to host applications, irrespective of where they might be hosted. The System Center App Controller provides a unified view across on-premises, service provider, and Windows Azure infrastructures, delivering the visibility and control that IT needs to work around capacity issues. IT can easily extend datacenter capacity by uploading on-premises Virtual Hard Disk (VHD) images into Windows Azure, which application owners can then utilize for LOB apps or Microsoft workloads (such as SharePoint). Application owners can migrate core applications such as SQL Server and SharePoint Server from on-premises environments to Windows Azure with just a few clicks. App Controller also enables easy virtual machine and workload portability between Windows Server and Windows Azure without the need to convert formats.

## Scale application tiers with automation and integration

Sometimes, datacenter capacity bottlenecks can compromise application service level agreements (SLAs). System Center 2012 R2 enables application owners to work with their infrastructure administrator counterparts to deploy automated workflows that trigger additional capacity provisioning. This functionality comes from the rich automation toolsets that Microsoft provides and supports, such as Orchestrator and Windows PowerShell. For example, you could provision additional capacity in Windows Azure by using the Windows Azure Integration Pack to trigger an automated workflow within Orchestrator. The trigger threshold can be defined within Operations Manager, which would then generate an alert that kicks off the workflow to provision capacity on-demand. You can also extend Orchestrator to develop your own integration packs that implement datacenter workflows and processes specific to your business.



Cloud	System Type	Connection Name	Description	vCPU Capacity	Memory Capacity	Storage Capacity	VM Count
+Cloud System Name: ContosoDC-LAS							
Customer Service	SCVMM 2012	ContosoDC-LAS		6/38	16/100 GB	2037/12176 GB	2/12
Finance	SCVMM 2012	ContosoDC-LAS		4/8	68/71 GB	2532/3633 GB	6/14
Human Resources	SCVMM 2012	ContosoDC-LAS		22/38	62/104 GB	7434/12434 GB	8/14
Marketing	SCVMM 2012	ContosoDC-LAS		40/58	137/198 GB	15299/21962 GB	15/22
Sales	SCVMM 2012	ContosoDC-LAS		21/30	46/66 GB	6082/8686 GB	7/10
+Connector Name: FabricHost1							
Gold	SCVMM 2012	FabricHost1		40/58	137/198 GB	15299/21962 GB	15/22
Silver	SCVMM 2012	FabricHost1		5/92	19/172 GB	2233/19370 GB	2/20
+Cloud System Name: Windows Azure							
Marketing	Windows Azure	Windows Azure					
Sales	Windows Azure	Windows Azure					

System Center 2012 R2 App Controller provides a unified view across your extended datacenter, delivering visibility and control to manage capacity issues.

## Next steps

- See additional System Center 2012 R2 resources <http://www.microsoft.com/en-us/server-cloud/products/system-center-2012-r2>
- Read about System Center 2012 R2 on TechNet <http://www.microsoft.com/technet>
- Download and evaluate System Center 2012 R2 <http://msft.it/trycloudos>
- Visit the System Center marketplace: <http://systemcenter.pinpoint.microsoft.com>
- Check out our blogs <http://blogs.technet.com/server-cloud>