

# A MODEL-BASED PROXY FOR UNIFIED IAAS MANAGEMENT

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# INFRASTRUCTURE CAN BE COMPLICATED

- Hardware - servers, networking, storage, security
- Hardware - warranty, insurance, setup, configure, maintain, upgrade
- System software - upgrade, update, secure, patch, manage, operate, backup



photo by DrJohnBullas through Flickr

# CLOUD COMPUTING TO THE RESCUE!

- No more worries about hardware  
(vendor takes care of it)
- No more worries about performance  
(vendor's responsibility)
- No more worries about scaling  
(just buy more)
- No more worries about over or under capacity (pay what is used)
- No more worries about security, system upgrades and patches  
(vendor will upgrade and patch)



# PROVIDERS



Other similar players



# CHALLENGES



# Vendor lock-in

No standard interface, vendors implement their own technologies, no way to get out



# Availability

You fail if your vendor fails



# Data Security

Your security compromised if your provider is  
compromised or is unscrupulous



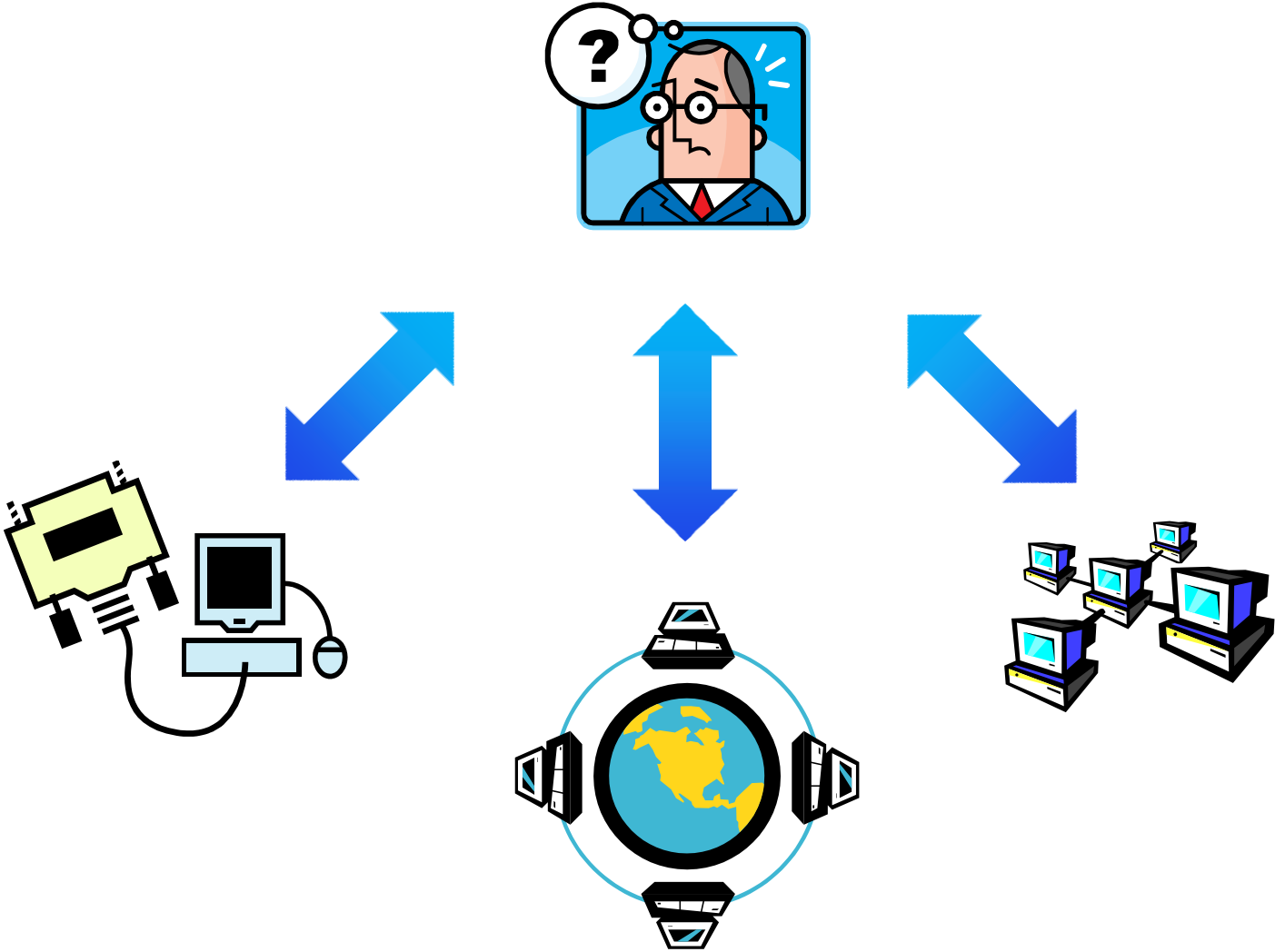


# Regulatory Compliance

Corporate compliance, government regulations,  
data privacy



# MULTI-SOURCING?

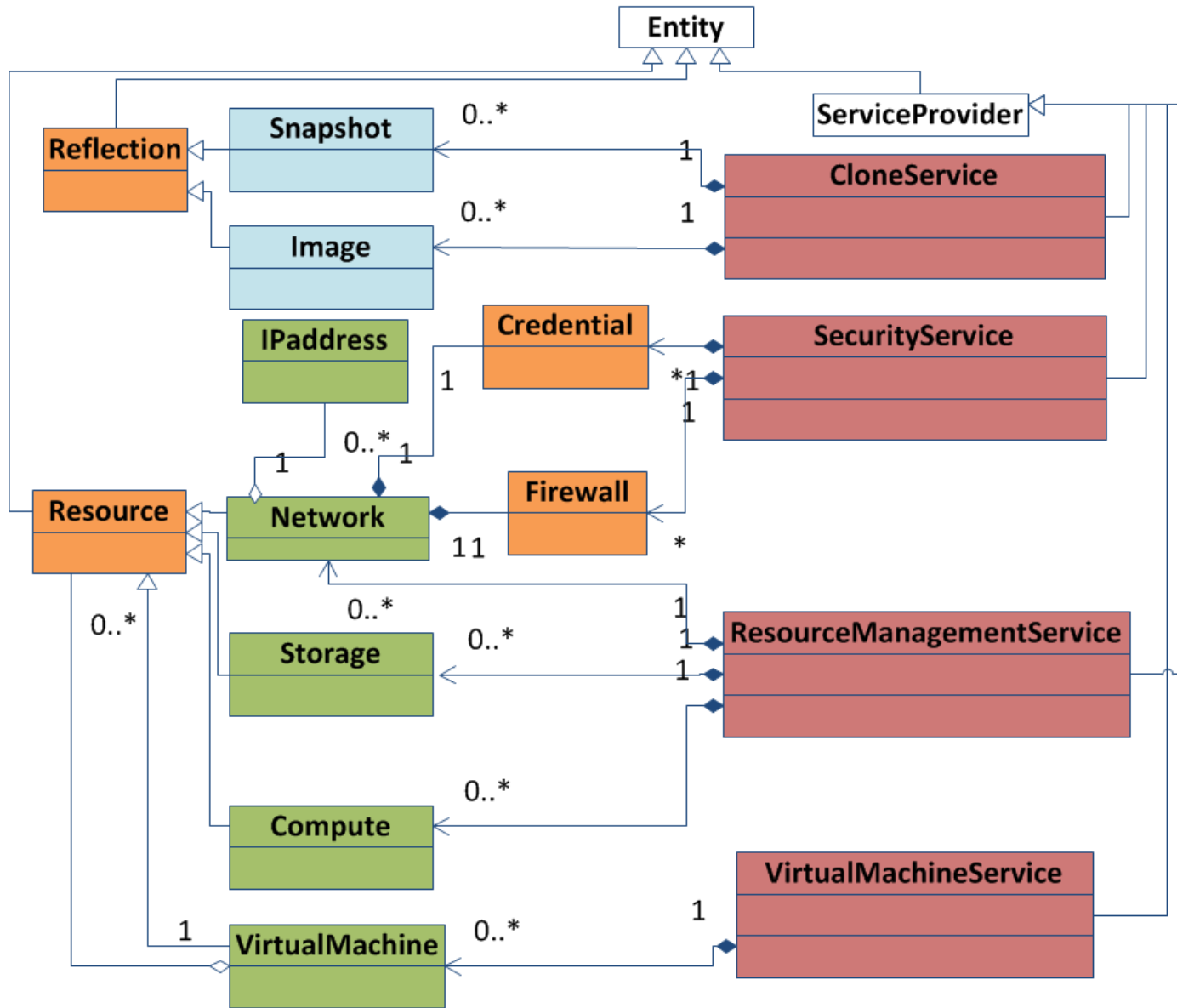


# OUR RESEARCH

- Define a generic model for IaaS
- Develop a unified IaaS proxy
- Provide a common interface for management of IaaS across public and private clouds

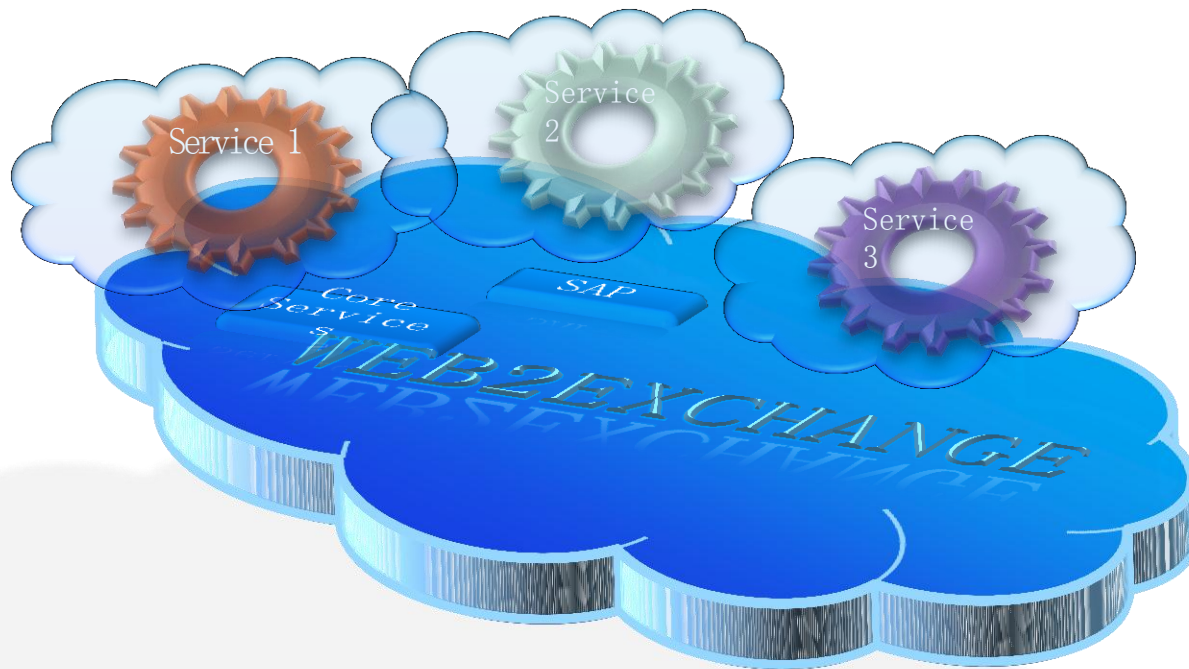


# SERVICES MODELS OF IAAS

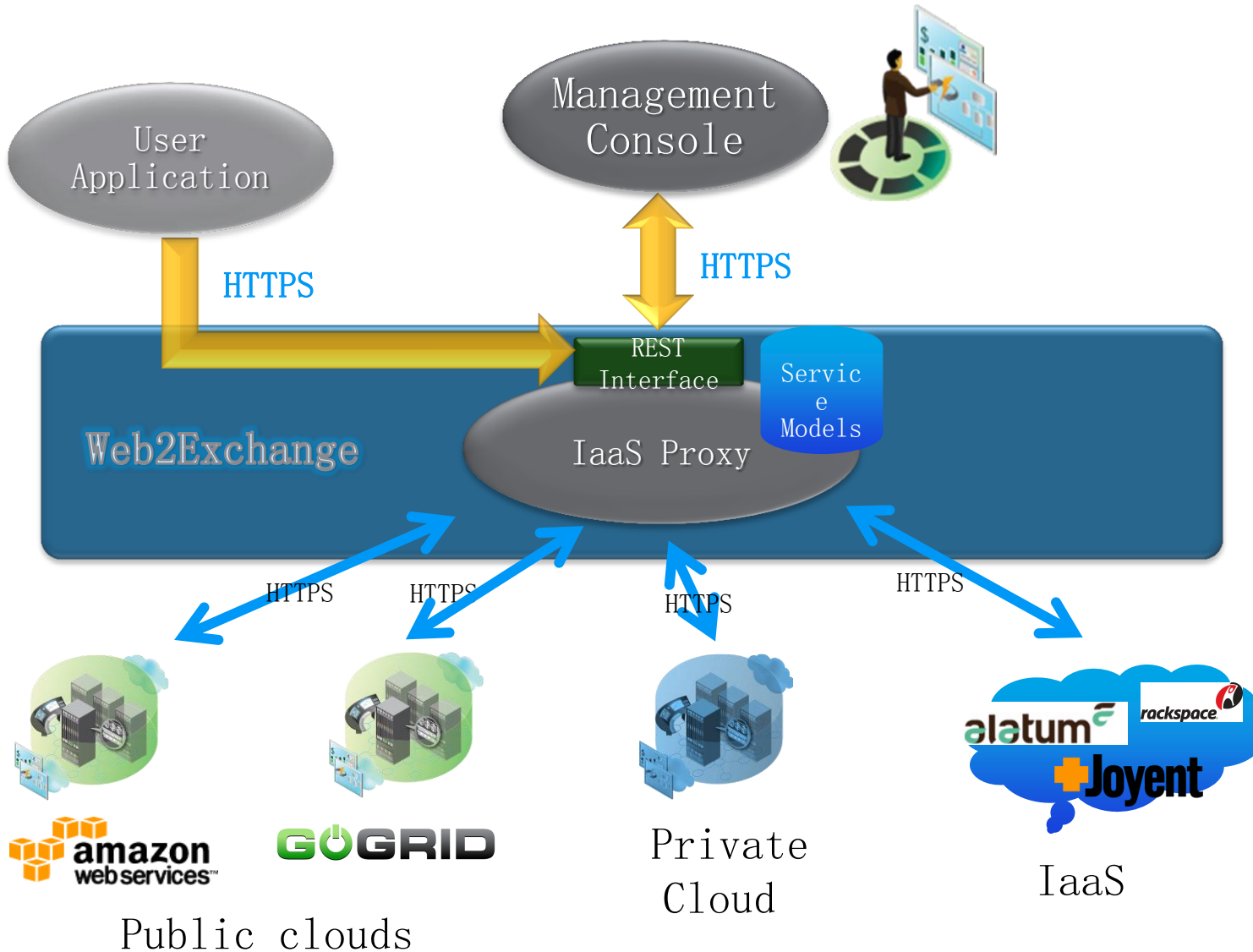


# WEB2EXCHANGE

A Model-Based Service Integration Environment modeled by an extension of the DMTF Common Information Model (CIM) meta-model and described by Managed Object Format (MOF)



# SYSTEM ARCHITECTURE OF IAAS PROXY



# MANAGEMENT CONSOLE

subscribe resources from different IaaS providers and provides a common interface to manage the resources

**Cloud Resources**

Actions

<input type="checkbox"/>	Cloud Provider	Resource Type	Status	Resource Id	Platform	Comment	Group
<input type="checkbox"/>	EC2	VM	stopped	i-21d6264b			WebApp1
<input type="checkbox"/>	EC2	VM	running	i-83fbe5e9	windows	employee portal win2008	WebApp5
<input type="checkbox"/>	EC2	VM	stopping	i-5de9b937	windows		
<input type="checkbox"/>	GoGrid	VM	running	12764	RHEL 5.4 (32-bit)	CRM System Linux web server	WebApp1
<input type="checkbox"/>	EC2	VM	stopped	i-d1ffe1bb			



# LIVE DEMO





THANK YOU

