knowledge17

http://clabs.link/lab131990

WORK at LIGHTSPEED

Extend Your CMP

Vijayan Sampath
Sr. Staff Engineer
ITOM BU

Shaun Millin
Sr. Solution Architect
ITOM Practice

© 2017 ServiceNow All Rights Reserved

servicenow

Agenda

- Understand Cloud Management Platform Extension Points
- Extending the Cloud Management Platform
  - Add new Cloud Provider for Google Compute
  - Use Google Compute Provider as a choice for a Multicloud VM blueprint
  - Launch an instance of VM on Google Datacenter

© 2017 ServiceNow All Rights Reserved

Speaker Introduction



Name: Vijayan Sampath

Title: Sr. Staff Engineer

Function: ITOM BU Development

Company: ServiceNow

Experience: 17 years in product development

Expertise: Cloud Management, Virtualization, DevOps

Achievements: Founding Engineer at ITapp (acquired by ServiceNow), Member of team that won 2010 VMworld Gold Award for Private Computing

Current Projects: Architecting CMP, Managing integrations, Creating reference architectures for cloud labs.

© 2017 ServiceNow All Rights Reserved

Speaker Introduction



Name: Shaun Millin

Title: Sr. Solution Architect

Function: ITOM Practice

Company: ServiceNow

Experience: 1.5 Years working at ServiceNow as a Cloud Management and automation specialist. 5 + Years working for VMware Integrations and Automation team

Expertise: Cloud, DevOps, and Custom integrations

Achievements: Built custom VMware appliances, and developed and wrote integrations from ServiceNow into several 3rd party products

Current Projects: Working on a Solution/Product that captures information out of the CI/CD pipeline in real time

© 2017 ServiceNow All Rights Reserved

Building the right abstractions for enterprise grade cloud workloads

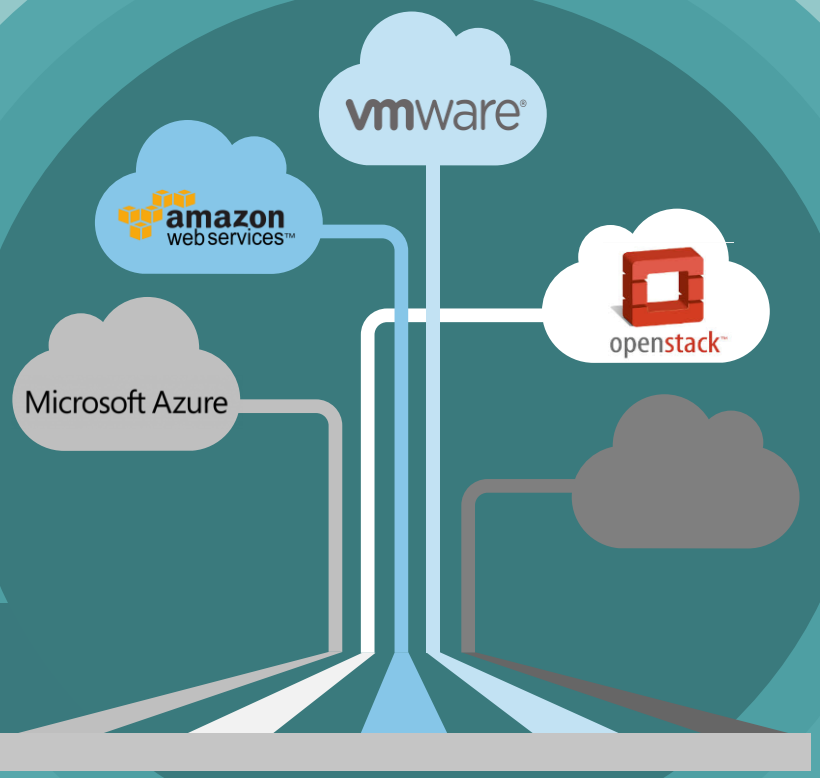
POLICY

CLOUD CATALOG

BLUEPRINTS

RESOURCE BLOCKS

CLOUD API



© 2017 ServiceNow All Rights Reserved

Objectives and What You Will Learn

Objectives

- Extending the Cloud Management Platform

What you will learn

- What is Cloud Management Platform ?
- How do you extend the cloud management platform ?
- What are the different extension points ?
- Defining your own cloud provider endpoints

© 2017 ServiceNow All Rights Reserved

Glossary

- ServiceNow **Cloud Management Platform** (CMP) is the plugin through which enterprises can manage their clouds. The clouds could be internal or public or hybrid. ServiceNow CMP has governance as a first class member so that enterprises can build their own hybrid clouds.
- At a high level CMP has the following high level components.
- **Cloud API** – This is the connector layer to any cloud. It is polyglot and can talk to any cloud. The Cloud API executes on the MID server. Cloud APIs can be extended in field.
- **Resource Blocks** – Resource Blocks abstract the functionality of a cloud element (like Virtual Server, Load Balancer) and provide a mechanism to delegate provider specific functionality to Cloud API's. Resource blocks write data back into the CI it is defined against. Resource blocks can be extended in field.
- **Blueprints** – Blueprint is a template for deployment and management of workloads. They get assembled using the resource blocks. Deployment and management gets delegated to the resource blocks. Most of the work is done via auto generation and designers can customize it as needed. Blueprints can be described in a YAML format and the system can create blueprints based on that. Blueprint can be specific to a cloud or can be agnostic. Blueprints obviously is field extendable.
- **Catalog Item** – Catalog items are created out of a blueprint so that the end user can consume it.
- **Stacks** – Stack is a realized instance of a blueprint in the cloud. It has information about the resource instances that it contains. Stacks can be managed via the life cycle operations.

© 2017 ServiceNow All Rights Reserved

Lab Instances

- Student Instance Reservation URL – http://clabs.link/lab131990
- Student Instance admin password – 131990W300#K17

© 2017 ServiceNow All Rights Reserved

Labs

- Lab 1 • Create a new Datacenter CI Class
- Lab 2 • Setup a Cloud Provider
- Lab 3 • Create a Cloud API
- Lab 4 • Create a Resource Block
- Lab 5 • Add Google Datacenter as a host to Virtual Server
- Lab 6 • Setup Google Cloud Account
- Lab 7 • Launch a Stack
- • Lab Errata - http://bit.ly/2pC3ehL

© 2017 ServiceNow All Rights Reserved

Top Takeaways

1

Cloud Management Platform is field extensible

2

Extension points are Blueprints, Resource Blocks and Cloud API

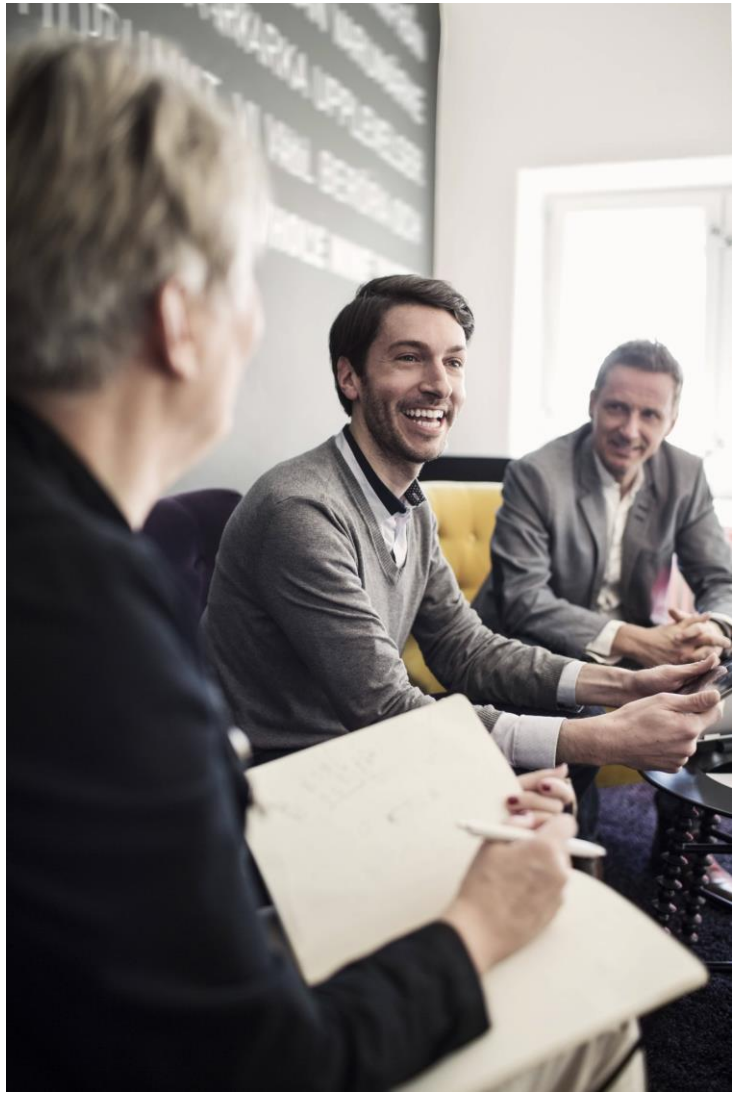
3

New cloud connectors can be added easily

© 2017 ServiceNow All Rights Reserved

Next Steps

- Visit us in the Pavilion for a live demo today!
- Register for Cloud Management Labs
  - LAB131988 - Zero to Cloud in an hour with ServiceNow CloudManagement
  - LAB131991 - Cloud Operating Model: Do it your way
  - LAB131989 - Designing Cloud agnostic workloads
  - LAB131990 - Extend your CMP : Build a new connector to a cloudprovider
- Attend Cloud Management Breakout Sessions
  - BRE4116 - What's New in the ServiceNow Cloud Management Platform
  - BRE4111 - Self-Service Access to Enterprise-Grade Cloud Workloads
  - BRE132916 - Cloud Success with ServiceNow and Microsoft Azure
  - BRE4102 - Designing Cloud Portable Workloads
  - BRE4104 - Enterprise Cloud Governance: Achieving Agility With Guardrails
- For early access, please email your presenter
  - vijayan.sampath@servicenow.com
- As an attendee of this session you will be receiving an invitation to our upcoming **June 8, 2017** and **June 15, 2017** Webinars



© 2017 ServiceNow All Rights Reserved

Thank You

Vijayan Sampath
Sr. Staff Engineer
ITOM BU

Shaun Millin
Sr. Solutions Architect
ITOM Practice

© 2017 ServiceNow All Rights Reserved