Red Hat Cloud Suite Building an Open Hybrid MultiCloud using Red Hat Cloud Suite

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More than 1000 Red Hat OpenShift customers **CATHAY PACIFIC** Celo amadeus LOCKHEED MARTIN ARIME **OPTUM**[®] **BBVA KOHĽS** unicef **Schiphol Deutsche Bank** 📥 DELTA 👹 MACQUARIE **CLOUD NATIVE DEV MODERNIZE APPS** WEB APPS MULTI-CLOUD bp Sîîart30U HCA Healthcare **E**xonMobil **BMW** Hilton GROUP **Emirates NBD T**··Systems··· BIG DATA ANALYTICS AI ML MOBILE IOT





We got the idea to have all these tests we do with hardware on virtual test environments, and that's why we've come to OpenShift and containers.

Michael Denecke Head of Test Technology Volkswagen AG

VOLKSWAGEN Autonomous Vehicle Testing



PaaS

Pizza as a Service









DIY CONTAINER STACK CHALLENGES

Bring your own middleware, data & other services. Build out a service catalog / interface to enable self-service deployment.

Pull Kubernetes or other orchestration (Mesos, Swarm) from rapidly moving upstream & support / maintain yourself. Do all the work required to integrate it into your enterprise IT environment (networking, storage, registry, security, logging, metrics, etc.)



Take existing application build/Cl & deployment tools and evolve to add container image build & mgt., continuous deployment, etc.

Pull Docker container runtime from rapidly moving upstream and support, secure and maintain it yourself.

Support and manage your own Linux community distro or build on existing RHEL or 3rd party commercial Linux offerings.





Kubernetes done right is hard

INSTALL	DEPLOY	HARDEN	OPERATE
 Templating Validation OS setup 75% of enterprise users i 	 Identity & security access App monitoring & alerts Storage & persistence Egress, ingress, & integration Host container images Build/Deploy methodology 	 Platform monitoring & alerts Metering & chargeback Platform security hardening Image hardening Security certifications Network policy Disaster recovery Resource segmentation 	 OS upgrade & patch Platform upgrade & patch Image upgrade & patch App upgrade & patch Security patches Continuous security scanning Multi-environment rollout Enterprise container registry Cluster & app elasticity Monitor, alert, remediate
operations as the to	mentation and p blocker to adoptic	on	Log aggregation

Source: The New Stack. The State of the Kubernetes Ecosystem, August 2017.



OpenShift Simplifies Container Operations

FULLY AUTOMATED DAY-1 AND DAY-2 OPERATIONS

	INSTALL	DEPLOY	HARDEN	OPERATE		
AUTOMATED OPERATIONS						
	Infra provisioning	Full-stack deployment	Secure defaults	Multicluster aware		
	Embedded OS	On-premises and cloud	Network isolation	Monitoring and alerts		
		Unified experience	Audit and logs	Full-stack patch & upgrade		
			Signing and policies	Zero-downtime upgrades		
				Vulnerability scanning		



THE FORRESTER NEW WAVE™

Enterprise Container Platform Software Suites Q4 2018



Red Hat named a Leader in The Forrester New Wave[™] Enterprise Container Platform Software Suites, Q4 2018 report

- Leads the pack with excellent user experience and integration capabilities
- Popular with Red Hat customers who prefer strong ecosystem synergy

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What options are there to deploy OpenShift





Red Hat Cloud Suite

What does suite mean? Suite is a noun. It refers to a set of rooms, or a set of musical pieces designed to be played together in sequence. It is pronounced the same way as the word sweet, although that word has its own set of separate meanings which do not overlap with suite.



Suite	British pronunciation \bullet	
sweet 📣		
Slow		



















Red Hat Cloud Suite Includes

RED HAT' CLOUDFORMS'

An laaS cloud management platform. RED HAT OPENSTACK PLATFORM

A platform for building public and private clouds.



An open, hybrid PaaS for containerbased applications. RED HAT VIRTUALIZATION

Enterprise virtualization for servers and desktops. RED HAT SATELLITE

A tool for managing your OS across your enterprise.

Everything needed to build a hybrid cloud

Red Hat® Cloud Suite is a combination of tightly integrated Red Hat technologies you can use to build a cloud infrastructure, develop cloudnative apps, and orchestrate deployments across hybrid IT environments. It's everything you could possibly need to create—and be productive in—a hybrid cloud.



Red Hat Cloud Suite Architecture







Red Hat Cloud Suite Architecture - Minimal (PoC)









Red Hat Cloud Suite Architecture - Minimal Production





Red Hat Cloud Suite Architecture - with Persistent Storage



OCP = OpenShift Container Platform RHV = Red Hat Virtualization



Red Hat Cloud Suite Architecture - RHV + OpenStack



OCP = OpenShift Container Platform OSP = OpenStack Platform



Red Hat Services for OpenShift adoption

RED HAT OPEN INNOVATION LABS





EXPERIMENT Rapidly build prototypes, do DevOps, and be agile.

CATALYZE INNOVATION Bring modern application development back to your team.



IMMERSE YOUR TEAM Work side by side with experts in a residency-style engagement.

TO SHOW YOUR TEAMS HOW OPENSHIFT AND MODERN DEVELOPMENT PRACTICES CAN DRIVE INNOVATION: START WITH A 4- TO 12-WEEK LABS RESIDENCY

RED HAT CONTAINER ADOPTION PROGRAM



FRAMEWORK FOR SUCCESSFUL CONTAINER ADOPTION AND I.T. TRANSFORMATION:

Mentoring, training, and side-by-side collaboration to:

- Create a production platform and team to run it
- Create end-to-end container-driven deployment automation
- Scale application onboarding expertise
- Guide new Kubernetes-native development
- Align business with IT through included Red Hat Open Innovation Labs

TO BEGIN A COMPREHENSIVE PROGRAM (INCLUDING OPEN INNOVATION LABS): START WITH THE 12-WEEK <u>RED HAT</u> <u>CONSULTING CONTAINER PLATFORM PILOT</u>



Learn.openshift.com



Interactive Learning Scenarios provide you with a pre-configured OpenShift instance, accessible from your browser without any downloads or configuration.

Red Hat Cloud Suite

Thank you!

25



https://www.redhat.com/en/technologies/cloud-computing/cloud-suite

