

FROM ZERO TO VIRTUALIZATION



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Specialist Solution Architect

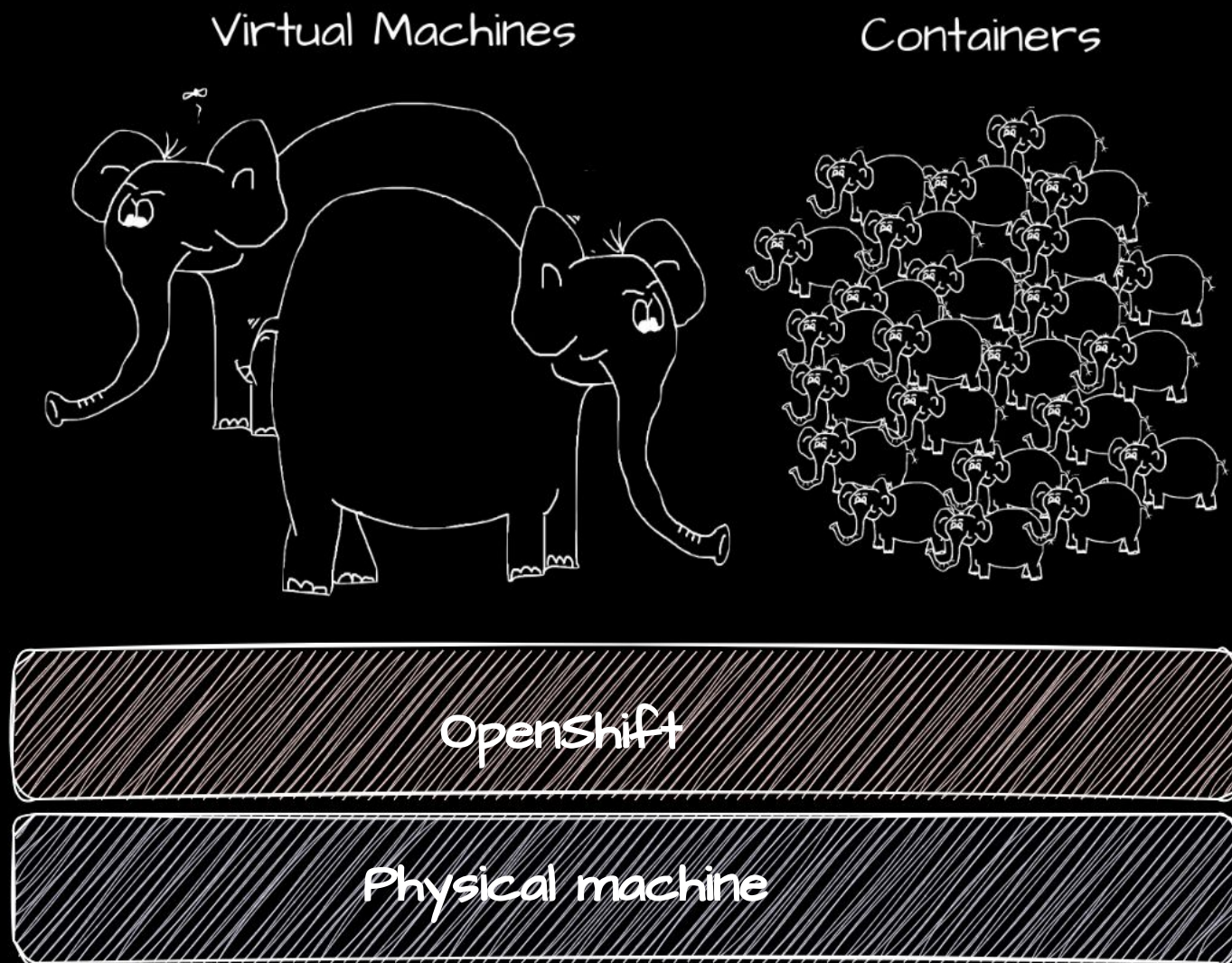


Johan Odell
Solution Architect

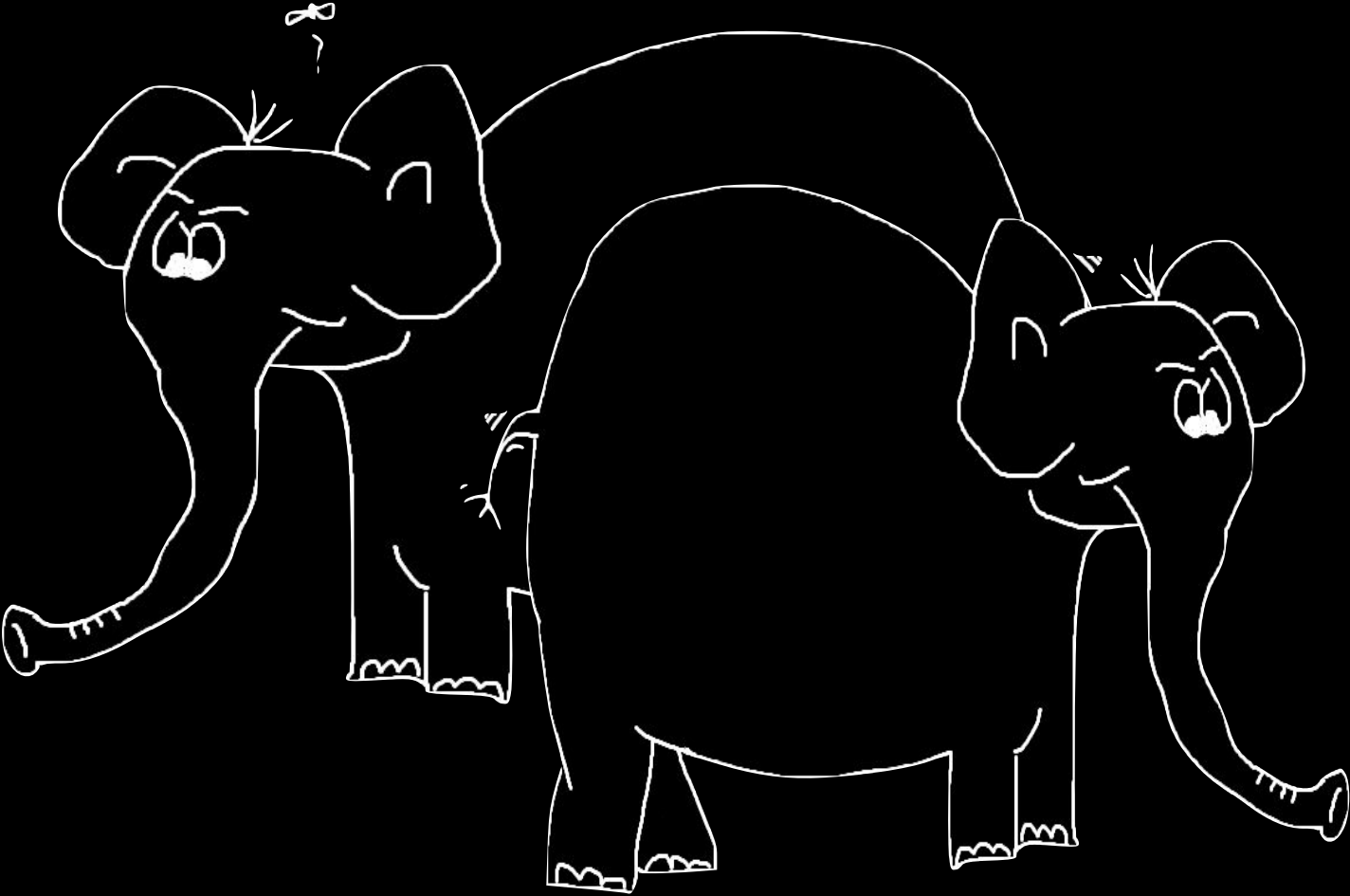
Presentation & demo recording



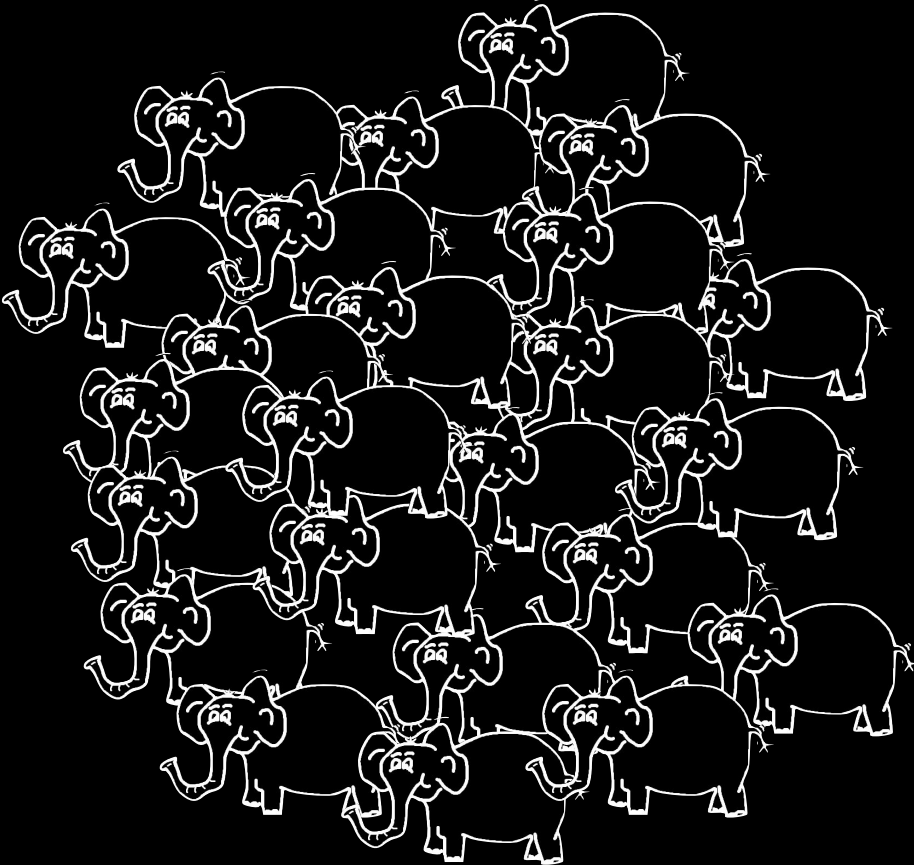
- Included in OpenShift application platform
- Run VMs in OpenShift
- Performance, stability, scalability, and reliability of KVM, the Linux kernel-based hypervisor
- RHEL guest entitlements are included
- Supports Microsoft Windows guests - Microsoft Server Virtualization Validation Program (SVVP)
- Manageability and ecosystem of OpenShift
- Unified platform for running VMs and containers

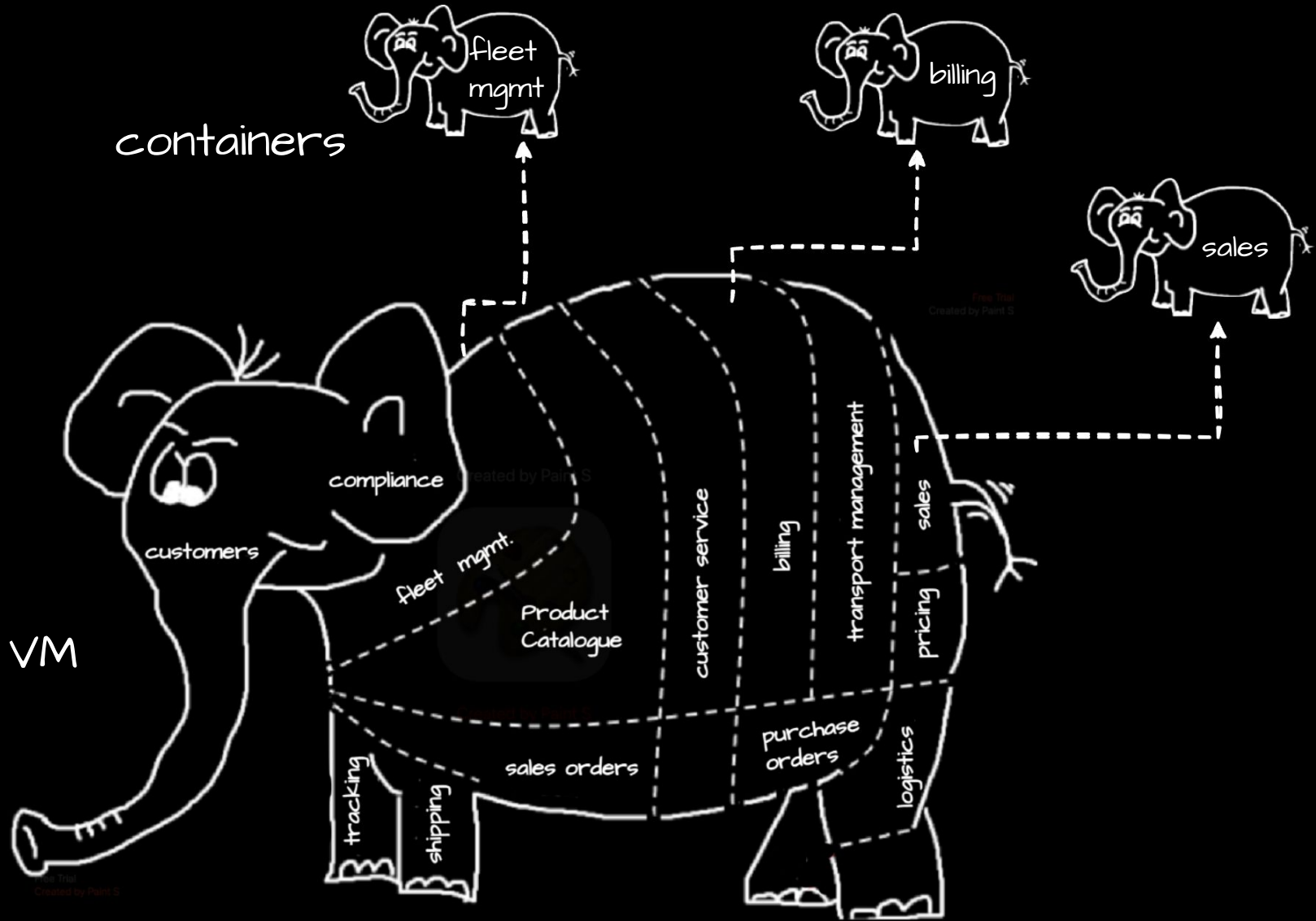


Virtual Machines

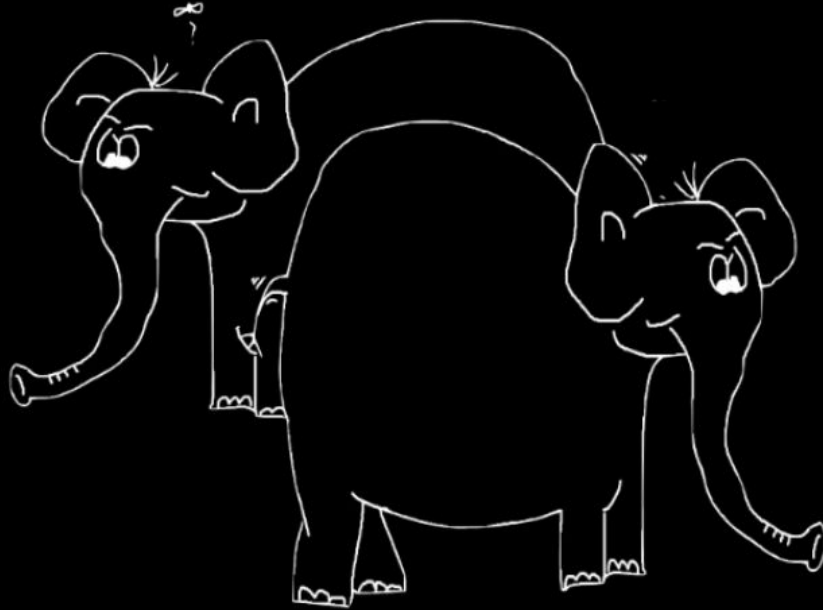


Containers

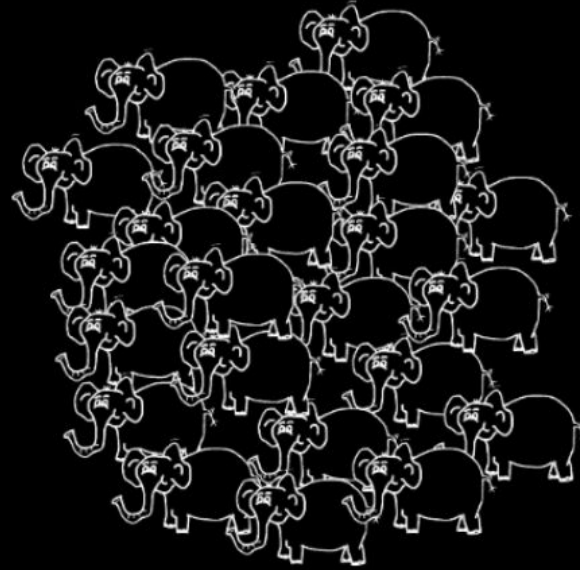




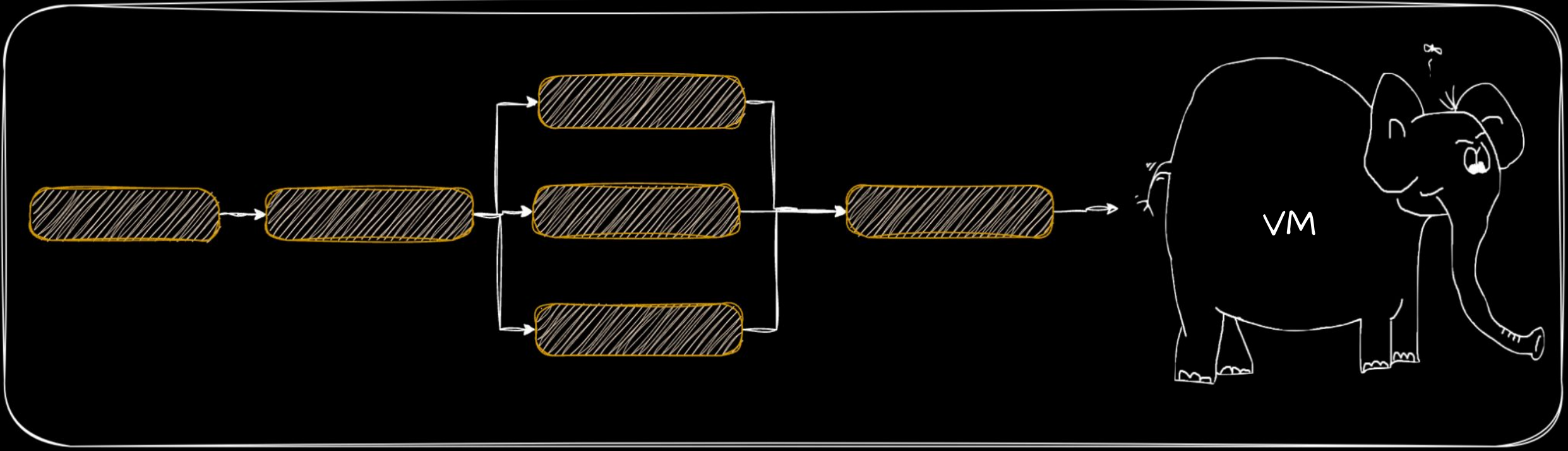
Virtual Machines

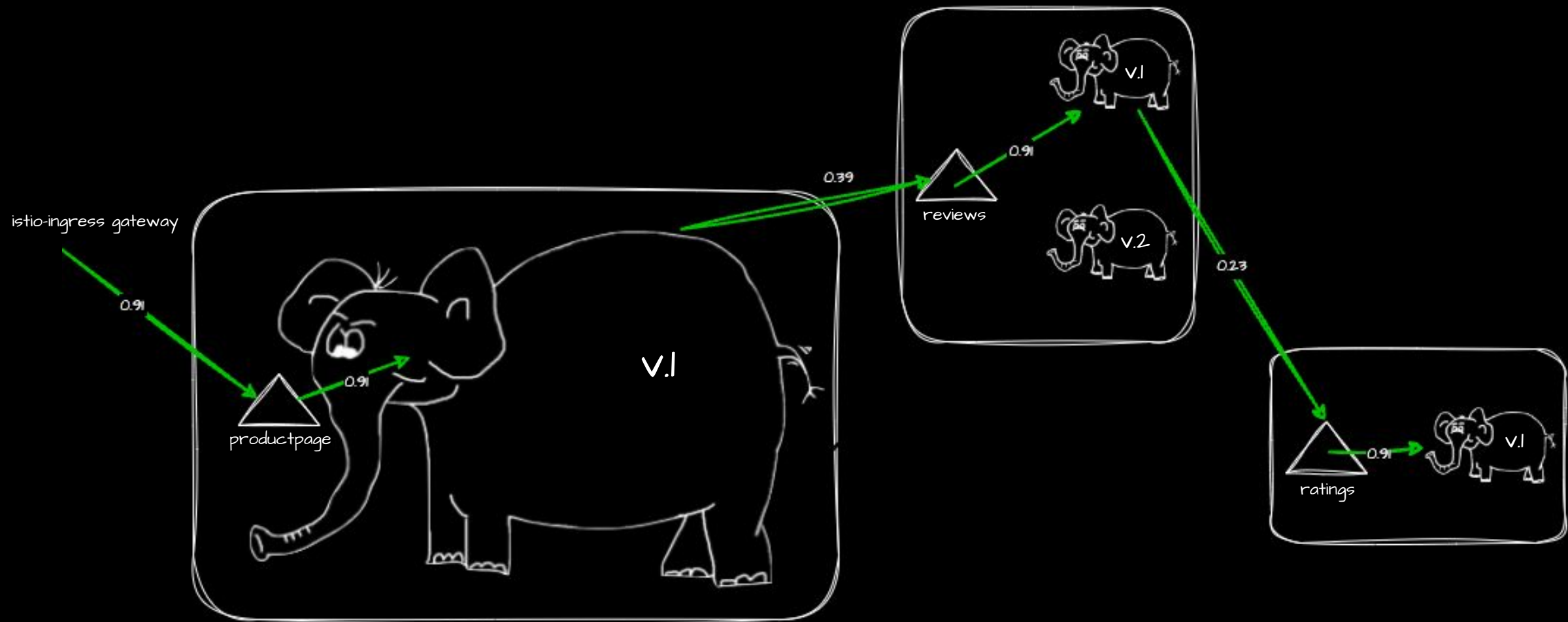


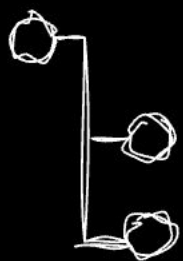
Containers



openshift







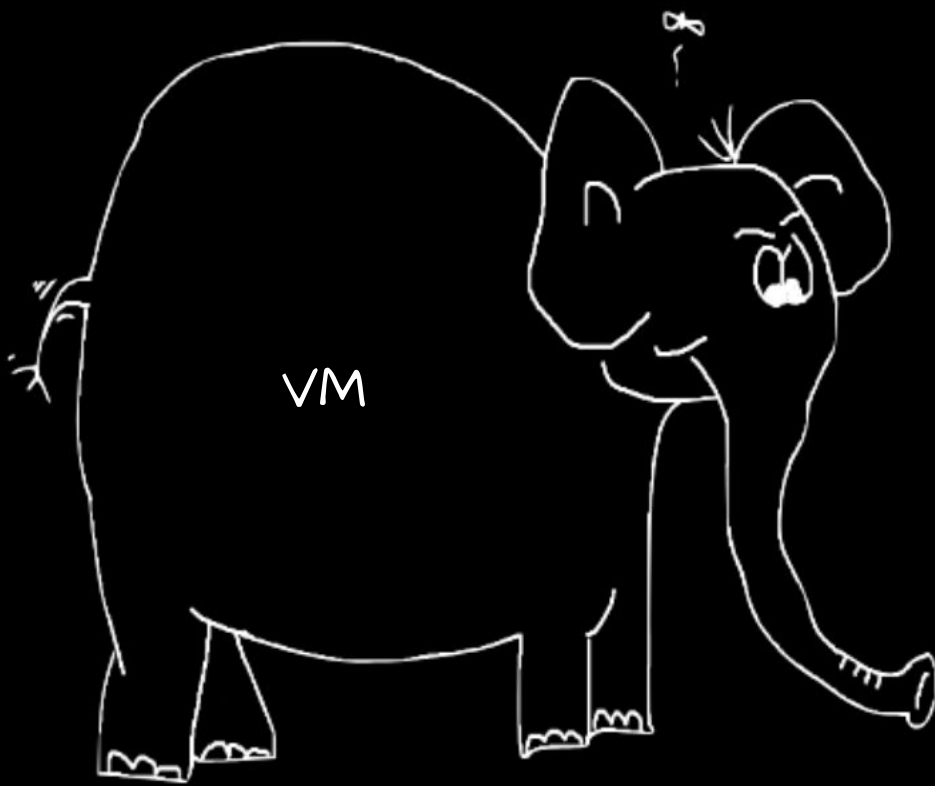
Git

webhook

poll

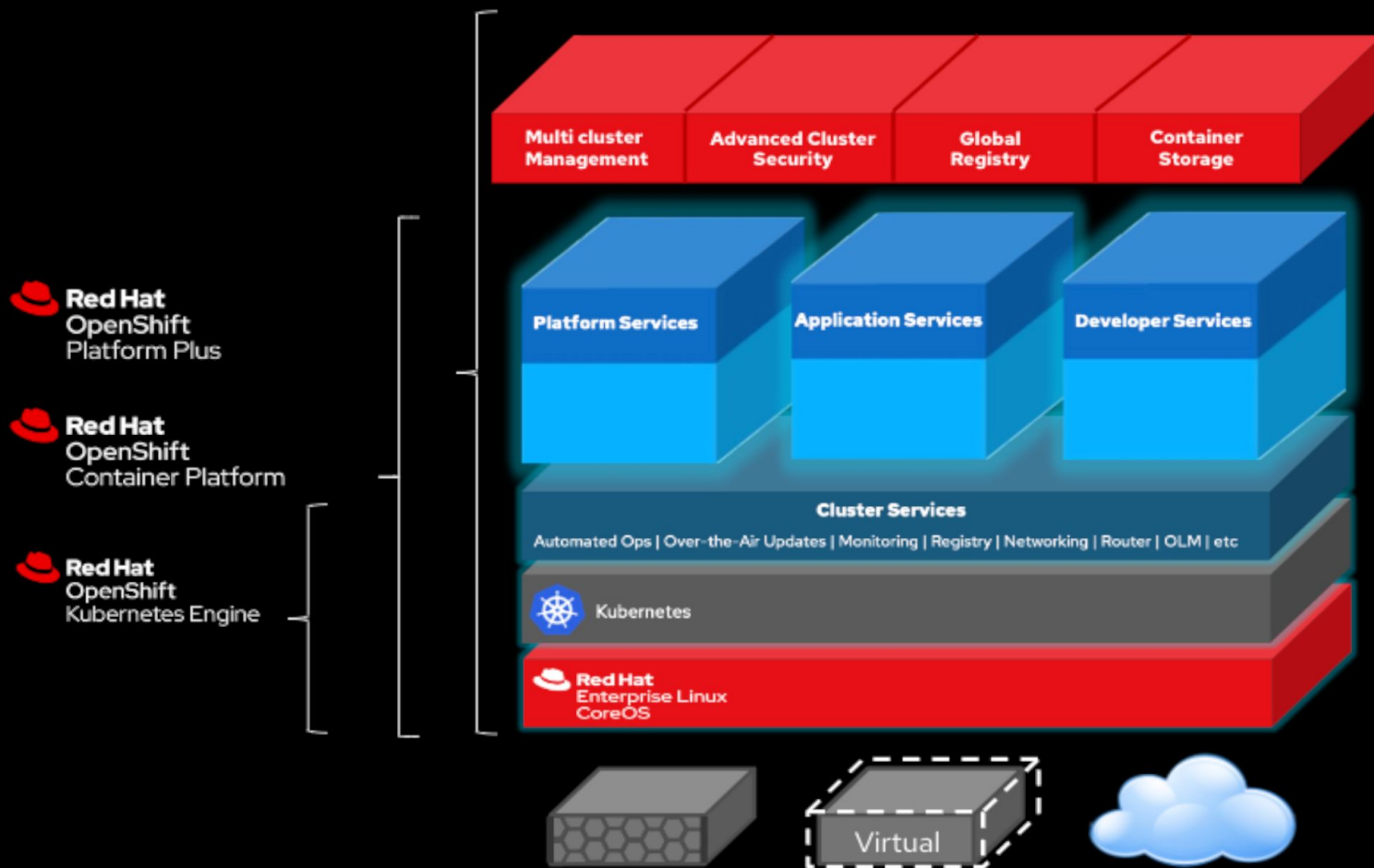


sync



openshift project

OpenShift Virtualization is included in all OpenShift versions



So lets talk about the demos!



Red Hat OpenShift local-cluster admin

Create new VirtualMachine

Select an option to create a VirtualMachine from.

InstanceTypes | **Template catalog**

Template project: All projects

Default templates

Filter by keyword...

13 items

- Boot source available
- Operating system
 - CentOS
 - Fedora
 - Other
 - RHEL
 - Windows
- Workload
 - Desktop
 - High performance
 - Server

OS	Workload	Source	VM Name	Spec
CentOS	Server	Source available	CentOS Stream 8 VM	centos-stream8-server-small
CentOS	Server	Source available	CentOS Stream 9 VM	centos-stream9-server-small
CentOS	Server	Source available	CentOS 7 VM	centos7-server-small
Fedora	Server	Source available	Fedora VM	fedora-server-small
Red Hat Enterprise Linux	Server	Source available	Red Hat Enterprise Linux 7 VM	rhel7-server-small
Red Hat Enterprise Linux	Server	Source available	Red Hat Enterprise Linux 8 VM	rhel8-server-small
Red Hat Enterprise Linux	Server	Source available	Red Hat Enterprise Linux 9 VM	rhel9-server-small
Microsoft Windows	Desktop	Source available	Microsoft Windows 10 VM	windows10-desktop-medium
Microsoft Windows	Desktop	Source available	Microsoft Windows 11 VM	windows11-desktop-medium
Microsoft Windows	Server	Source available	Microsoft Windows Server 2012 R2 VM	windows2k12r2-server-medium
Microsoft Windows	Server	Source available	Microsoft Windows Server 2016 VM	windows2k16-server-medium
Microsoft Windows	Server	Source available	Microsoft Windows Server 2019 VM	windows2k19-server-medium
Microsoft Windows	Server	Source available	Microsoft Windows Server 2022 VM	windows2k22-server-medium

Two demos



Start from scratch

- build VM images (bootc) with Tekton
- deploy VM & AI application
- use prometheus & grafana for VM observability



Start from scratch

- build VM security hardened images AAP & Image Builder
- VM provisioning workflow
- Using RHEL included functionality to monitor compliance

DEMO 1

DEMO 2

In this demo

- advantages of running AAP in OpenShift
- RHEL image builder + AAP
- provisioning VMs in OCP Virt with AAP

Summary

- The two demos used different technologies but achieved the same results.
 - You can use OpenShift tooling to automate image and VM creation in a modern way.
 - You can use Ansible Automation Platform to automate image and VM creation as well as day 2 operations.

Want to know more?

OpenShift Virtualization info site

The screenshot shows the Red Hat OpenShift Virtualization information page. The navigation bar includes 'Red Hat', 'Products', 'Solutions', 'Training & services', 'Resources', 'Partners', and 'About'. The main content area features the title 'Red Hat OpenShift Virtualization' and two buttons: 'Start learning' and 'Try it'. Below this is an 'Overview' section with a video player titled 'What is Red Hat OpenShift Virtualization. Video duration: 2:08'.

Test yourself in developer sandbox

The screenshot shows the Red Hat Developer Sandbox page. The navigation bar includes 'Red Hat Developer', 'Products', 'Technologies', 'Learn', 'Events', 'Developer Sandbox', 'Blog', and 'Videos'. The main content area features the title 'Start exploring in the Developer Sandbox for free' and a red button 'Start your sandbox for free'. Below this is a section titled 'What is the Developer Sandbox?' with a video player titled 'Developer Sandbox for Red Hat OpenS...'.

Training ->



Training discount available

Learn the skills you need to create and manage virtual machines with 70% off the Red Hat OpenShift Virtualization Training and Certification bundle through December 31, 2024.

[Sign up now ->](#)

OpenShift dadjoke-alert





Red Hat