



Connect

Czy MTV dobrze gra?

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Senior Solution Architect

Minuta ciszy...

MTV TURNS 43 THIS YEAR

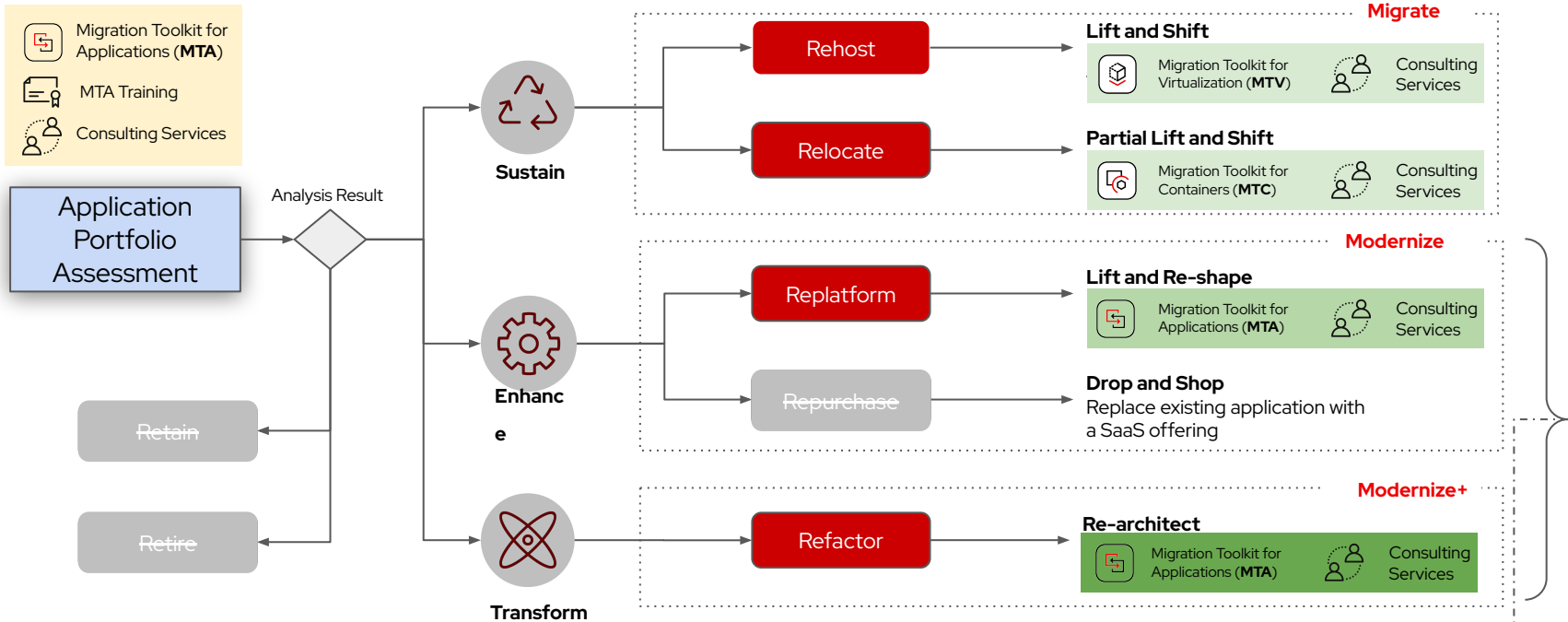


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Migrating to OpenShift

How Red Hat Supports your Modernization Journey

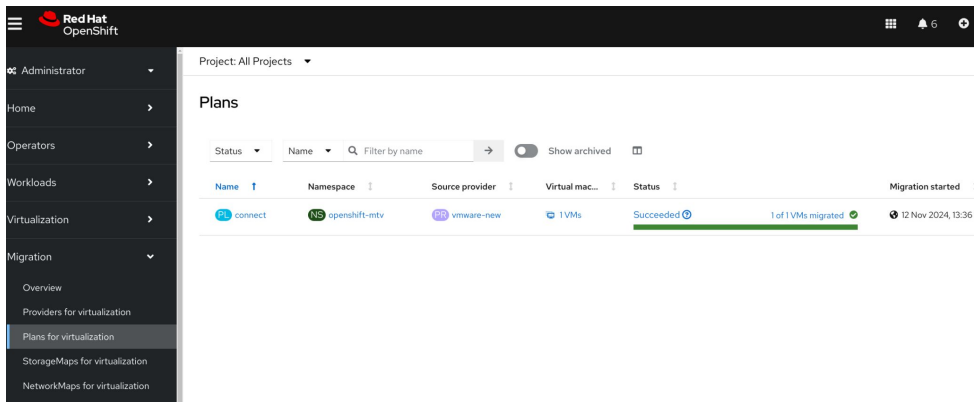


For the **Modernise / Modernise+** AMM Paths, Red Hat brings additional **Openshift tooling** (e.g.Dev Hub, TSSC) and advanced **Consulting** and **Innovation Labs** services related to **DevSecOps, Platform Engineering** and **Cloud Native Development** adoption

Migrating Toolkit for Virtualization

Migration Toolkit for Virtualization

Migration at scale of virtual machines to OpenShift Virtualization



Mass Migration of VMs

Migrate virtual machines at scale to OpenShift Virtualization in a few simple steps. Provide source and destination credentials, map infrastructure, and create migration plans

Migration Toolkit for Virtualization 2

Main Features:

- Easy to use UI
- Mass migration of VMs from VMware and Red Hat Virtualization to OpenShift
- VM data pre-copied before shutdown (Warm Migration) for VMware migrations
- VM validation service
 - Run checks on VM configuration to avoid migration issues
- Parallelized VM conversion
 - Maximize throughput
- Migration Network Selection
 - Avoid impact on other running workloads

The screenshot displays the web interface of the Migration Toolkit for Virtualization 2. It features a dark sidebar navigation menu with options: Administrator, Home, Operators, Workloads, Virtualization, and Migration. The Migration menu is expanded, showing sub-options: Overview, Providers for virtualization (highlighted), Plans for virtualization, StorageMaps for virtualization, and NetworkMaps for virtualization. The main content area is divided into two sections: 'Providers' and 'StorageMaps'. Both sections have a 'Project: All Projects' dropdown and a 'Create' button. The 'Providers' section includes a table with columns for Name, Namespace, Status, Endpoint, Type, VMs, Network, and Hosts. The 'StorageMaps' section includes a table with columns for Name, Namespace, Status, Source provider, Target, and Owner.

Name	Namespace	Status	Endpoint	Type	VMs	Net...	Hosts
host Host cluster	NS openshift-ft-mtv	Ready		OpenShift	4	4	-
rhv	NS openshift-ft-mtv	Ready	https://rhv.../api	RHV	101	11	5
vmware	NS openshift-ft-mtv	Ready	https://vc.../lab/sdk	VMware	63	11	2
vmware-new	NS openshift-ft-mtv	Ready	https://vc.../lab/sdk	VMware	23	4	2

Name	Namespace	Status	Source provi...	Target ...	Owner
vmware-new-4glfb	NS openshift-mtv	Ready	PR vmware-new	PR host	PL connect

Infrastructure mapping

Infrastructure mapping allows you to answer questions about source and destination of your VMs from a network and storage point of view.

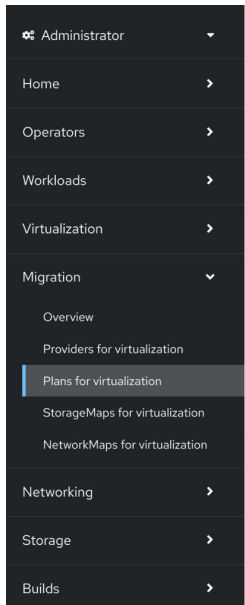
This can be configured once by your network and storage specialist, avoiding redundant questions during the execution of your migrations.

The screenshot shows the 'NetworkMaps' page in a management console. The left sidebar is open, showing navigation options: Administrator, Home, Operators, Workloads, Virtualization, and Migration. Under Migration, there are sub-options: Overview, Providers for virtualization, Plans for virtualization, StorageMaps for virtualization, and NetworkMaps for virtualization. The main content area shows 'Project: All Projects' and a 'Create NetworkMap' button. Below is a search bar with 'Status' and 'Name' dropdowns and a 'Filter by name' input. A table lists NetworkMaps with columns: Name, Namespace, Status, Source provi..., Target..., and Owner. One entry is visible: 'vmware-new-v9sfb' in namespace 'openshift-mtv', status 'Ready', source 'vmware-new', target 'host', and owner 'connect'.

The screenshot shows the 'StorageMaps' page in a management console. The left sidebar is open, showing navigation options: Administrator, Home, Operators, Workloads, Virtualization, and Migration. Under Migration, there are sub-options: Overview, Providers for virtualization, Plans for virtualization, StorageMaps for virtualization, and NetworkMaps for virtualization. The main content area shows 'Project: All Projects' and a 'Create StorageMap' button. Below is a search bar with 'Status' and 'Name' dropdowns and a 'Filter by name' input. A table lists StorageMaps with columns: Name, Namespace, Status, Source provi..., Target..., and Owner. One entry is visible: 'vmware-new-4glfb' in namespace 'openshift-mtv', status 'Ready', source 'vmware-new', target 'host', and owner 'connect'.

Migration plan

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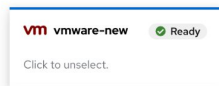


Create migration plan

- 1 Select source provider
- 2 Create migration plan

Select source provider

Type Filter provider



Select virtual machines

Concerns Host Name Filter by name 1-2 of 2 1 of 1

Name zp Clear all filters

Name	Concerns	Templa...	Host	Folder	Pow...
zp-rhel9	1 2	false	esx2.dcc.lab	RedHat	Off
zp-win2019	1 3	false	esx1.dcc.lab	RedHat	On

MTV will introduce new on-premise migration analytic capabilities, helping you find potential migration issues before executing a migration.

When selecting your virtual machines, MTV will automatically inform you of any known potential issue and provide information on how to solve this issue when possible.

Virtual machines can be filtered down by names, folders or other parameters to review all VMs related to a specific applications.

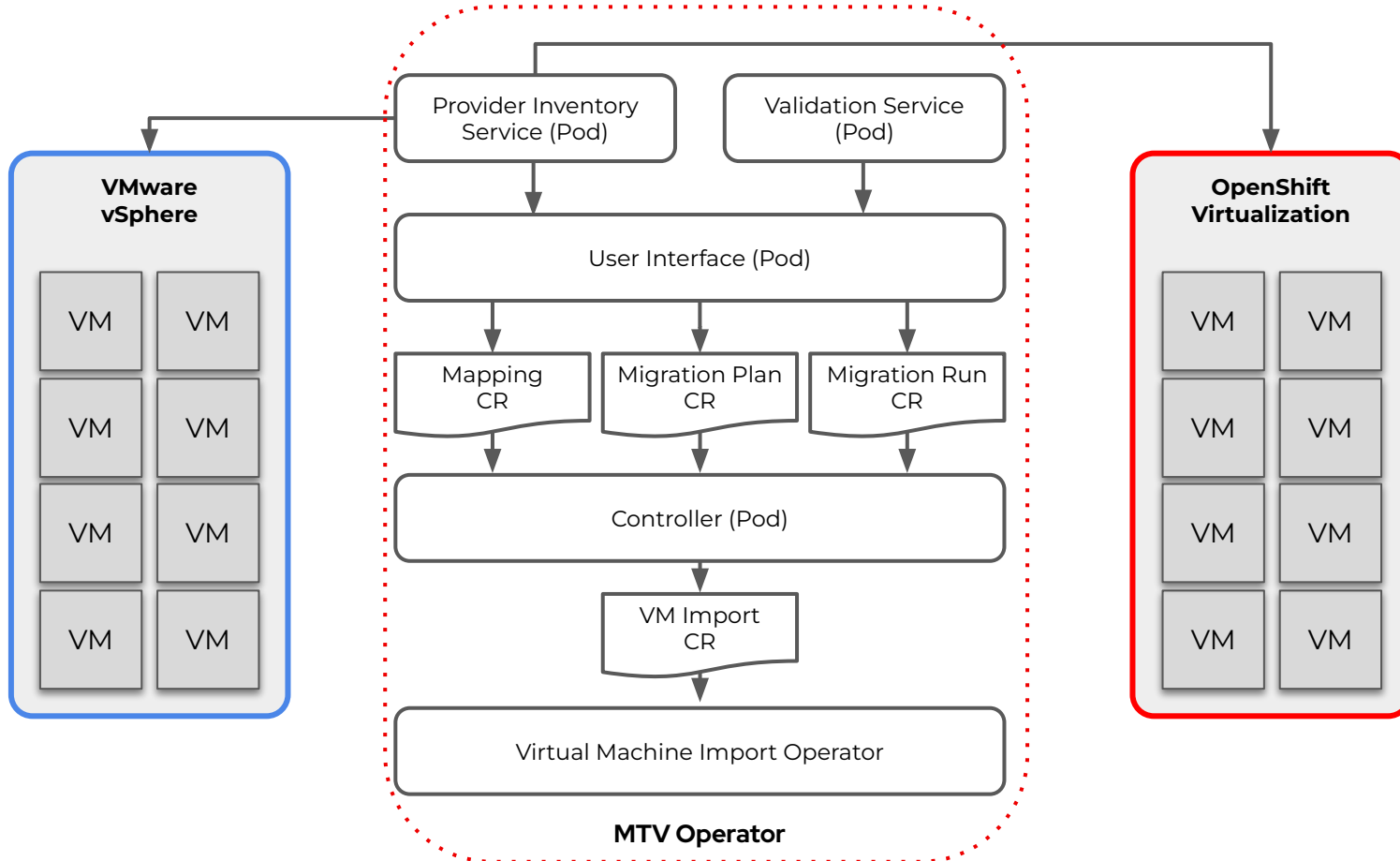
Migration progress

The screenshot displays the OpenShift Migration console interface. On the left is a dark sidebar with navigation options: Administrator, Home, Operators, Workloads, Virtualization, and Migration. The Migration menu is expanded, showing sub-options: Overview, Providers for virtualization, Plans for virtualization (highlighted), StorageMaps for virtualization, and NetworkMaps for virtualization. The main content area shows the 'Plans' page for 'Project: openshift-mtv'. It includes a 'Create Plan' button, a search bar for filtering by name, and a 'Show archived' toggle. A table lists migration plans with columns for Name, Source provider, Virtualization, Status, and Migration started. One plan is shown: 'connect' (PIL) migrating '1 VMs' (PVR) from 'vmware-new' to '1 VMs', with a status of 'Succeeded' and a progress bar. The migration started on '12 Nov 2024, 13:36'.

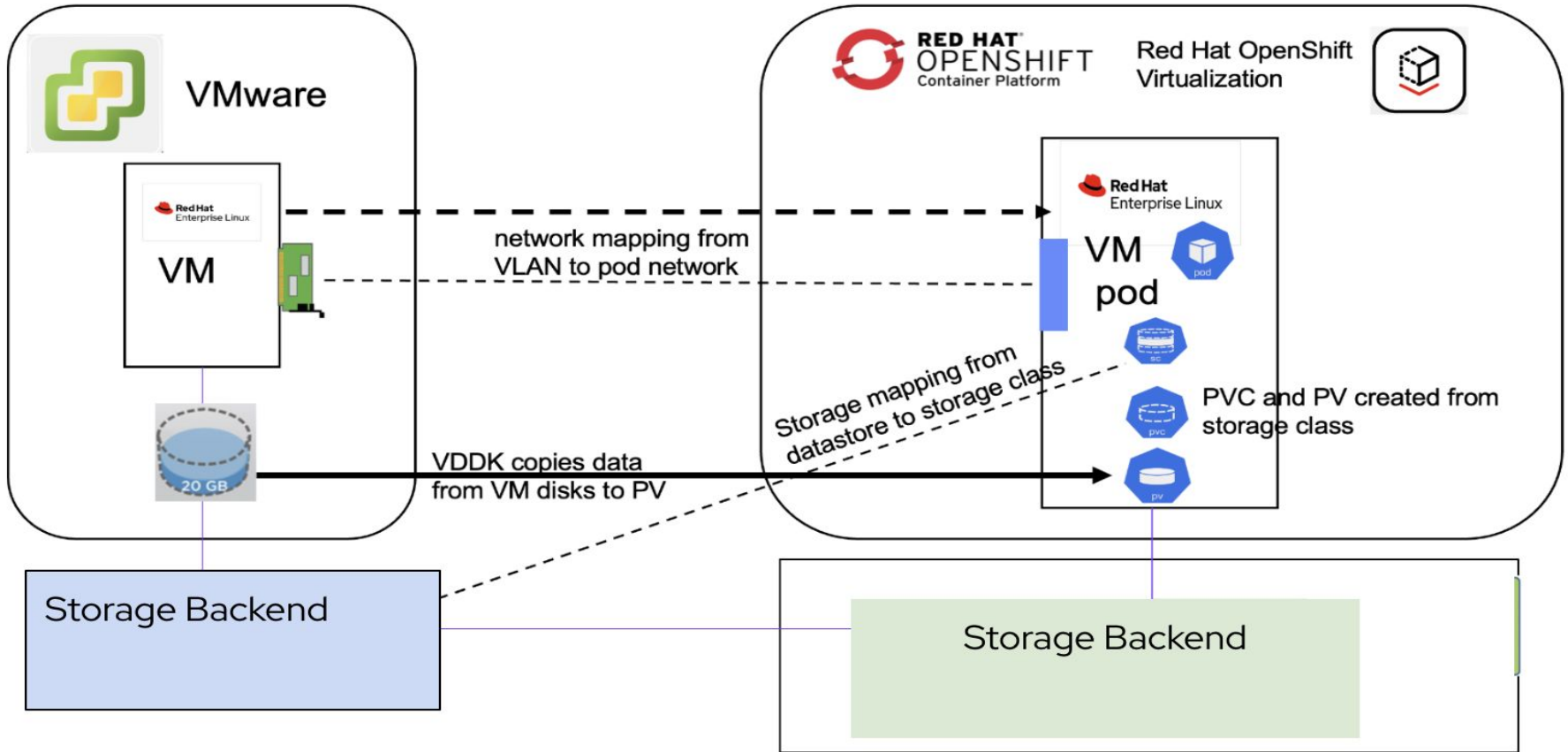
Name	Source prov...	Virtual...	Status	Migration started
connect	vmware-new	1 VMs	Succeeded	12 Nov 2024, 13:36

Launch your migration, sit back and relax. We will keep you informed on our progress during the migration.

MTV 2.6 architecture



Migration of VM from vSphere to OpenShift Virtualization



Demo
→ MTV

Migration Toolkit for Virtualization 2.6 - network configuration

- ▶ MachineNetwork needs to access to vCenter/RHV Manager
- ▶ Migration can be done with machineNetwork or direct network
- ▶ Open ports:
 - VMware:
 - 443/tpc - vCenter and ESXi
 - 902/tcp - ESXi
 - RHV
 - 443/tpc - Manager and nodes
 - 54322/tcp - Nodes

Migration Toolkit for Virtualization 2.6 - VDDK

- ▶ `tar -xzf VMware-vix-disklib-<version>.x86_64.tar.gz`
- ▶ `cat > Dockerfile <<EOF`
`FROM registry.access.redhat.com/ubi8/ubi-minimal`
`USER 1001`
`COPY vmware-vix-disklib-distrib /vmware-vix-disklib-distrib`
`RUN mkdir -p /opt`
`ENTRYPOINT ["cp", "-r", "/vmware-vix-disklib-distrib", "/opt"]`
`EOF`
- ▶ `podman build . -t quay.io/zibi/vddk:8.0.2`
- ▶ `podman pull quay.io/zibi/vddk:8.0.2`

OpenShift Learning Path

Red Hat Certified OpenShift Administrator

[Containers, Kubernetes, and Red Hat OpenShift Technical Overview \(DO080\)](#)[Red Hat OpenShift Administration I: Operating a Production Cluster \(DO180\)](#)[Preliminary Exam in Red Hat OpenShift Administration \(PE180\)](#)[Red Hat OpenShift Administration II: Configuring a Production Cluster \(DO280\)](#)[Red Hat Certified OpenShift Administrator exam \(EX280\)](#)[Red Hat OpenShift Administration III: Scaling Deployments in the Enterprise \(DO380\)](#)[Red Hat Certified Specialist in OpenShift Automation and Integration Exam \(EX380\)](#)

Red Hat OpenShift cloud services

[Introduction to Red Hat OpenShift Service on AWS \(ROSA\) \(DO120\)](#)[Creating and Configuring Production ROSA Clusters \(CS220\)](#)[Integrating ROSA Applications with AWS Services \(CS221\)](#)[Introduction to Microsoft Azure Red Hat OpenShift \(DO121\)](#)

Red Hat OpenShift Administrator Specializations

[Multicluster Management with Red Hat OpenShift Platform Plus \(DO480\)](#)[Red Hat Certified Specialist in MultiCluster Management Exam \(EX480\)](#)[Enterprise Kubernetes Storage with Red Hat OpenShift Data Foundation \(DO370\)](#)[Red Hat Certified Specialist in OpenShift Data Foundation Exam \(EX370\)](#)[Managing Virtual Machines with Red Hat OpenShift Virtualization \(DO316\)](#)[Red Hat Certified Specialist in OpenShift Virtualization Exam \(EX316\)](#)[Red Hat OpenShift Installation Lab \(DO322\)](#)

Red Hat Certified OpenShift Application Developer

[Red Hat OpenShift Development I: Introduction to Containers with Podman \(DO188\)](#)[Red Hat Certified Specialist in Containers exam \(EX188\)](#)[Red Hat OpenShift Development II: Containerizing Applications \(DO288\)](#)[Red Hat Certified OpenShift Application Developer exam \(EX288\)](#)

Red Hat OpenShift Artificial Intelligence and Machine Learning (AI/ML) skills path

[Python Programming with Red Hat \(AD141\)](#)[Red Hat OpenShift Developer II: Building and Deploying Cloud-native Applications \(DO288\)](#)[Developing and Deploying AI/ML Applications on Red Hat OpenShift AI \(AI267\)](#)

Red Hat OpenShift Application Developer Specializations

[Red Hat Cloud-Native Microservices Development with Quarkus \(DO378\)](#)[Red Hat Certified Cloud-Native Developer exam \(EX378\)](#)[Building Resilient Microservices with Istio and Red Hat OpenShift Service Mesh \(DO328\)](#)[Red Hat Certified Specialist in Building Resilient Microservices exam \(EX328\)](#)[Developing Event-Driven Applications with Apache Kafka and Red Hat AMQ Streams \(AD482\)](#)[Red Hat Certified Specialist in Event-Driven Application Development exam \(EX482\)](#)[Red Hat JBoss Application Administration I \(AD248\)](#)[Red Hat Certified Specialist in Enterprise Application Server Administration exam \(EX248\)](#)[Red Hat Single Sign-On Administration \(DO313\)](#)[Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test Driven Development \(DO400\)](#)

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Summit

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