3 Steps to Running VMware Apps as-is on Oracle Cloud

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ORACLE®
Cloud Infrastructure
Ravello Service

GLOC
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CLEVELAND PUBLIC AUDITORIUM, CLEVELAND, OHIO

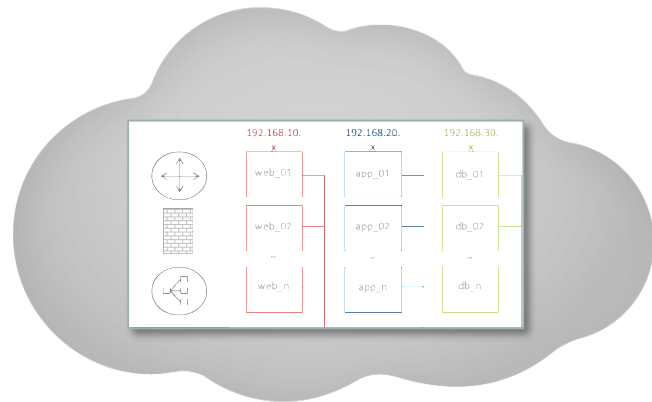**WWW.NEOOUG.ORG/GLOC**

What is Oracle Cloud Infrastructure Ravello?

Enables running **VMware** workloads on public cloud

without **any changes**
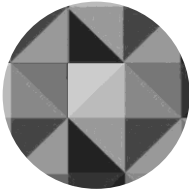
Same VMs, networking & storage

Data *Center*

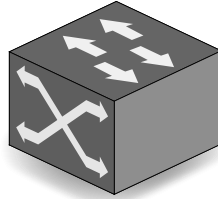No workload changes → Data-center to cloud in **hours** and **Not Months**

Challenges with moving VM workloads to the Cloud

*Public cloud is very **different** from data-center*

*VMware VMs **can't run** on most public cloud*

*Layer 2 networking **not** supported*

*Cloud network & security appliances **different from** data-center*

Re-platforming

Re-networking

Re-configuration

Migration requires application re-writes, re-platforming, re-networking –

expensive & **time consuming**

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# Live-demo – 3 Steps to the Cloud

1. Upload your VMs (VMware or KVM)

2. Ravello auto-discovers the network   {Edit if needed}

3. Deploy to public cloud

Spin up as many isolated copies as you need

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Demo Setup - CRM on VMware ESXi

- Siebel Industry Applications
  - 7 VMs
- Main CRM Components:
  - Gateway Name Server
  - Application Server
  - Web Server
  - Web Client
  - Database

Web client

Siebel Tools

Gateway

App Server

Web Server

File system

Database
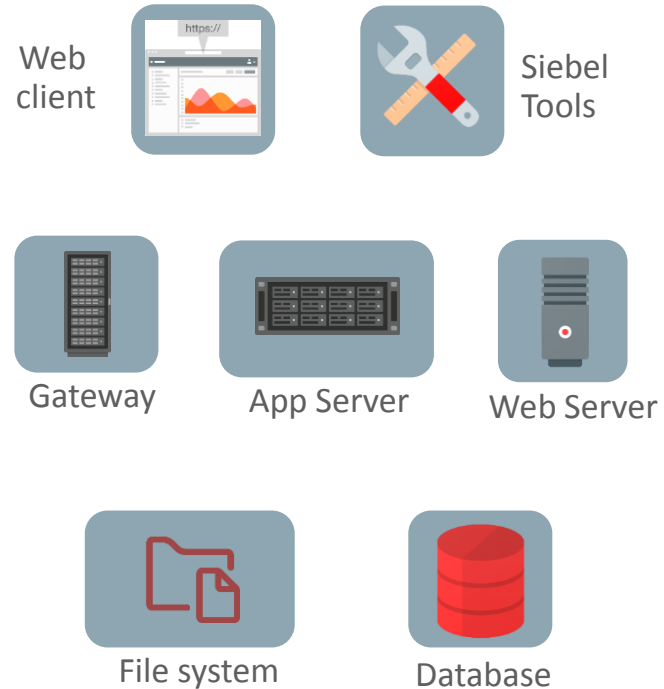
Capabilities that accelerate moving VMware apps to cloud

VMware app "as-is" – cloud based app a high fidelity replica of on premise
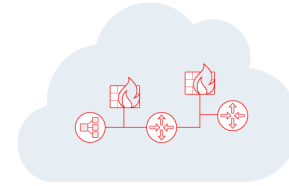
Datacenter-like Layer 2 networking – broadcast / multicast etc. works; same network configuration as on premise app
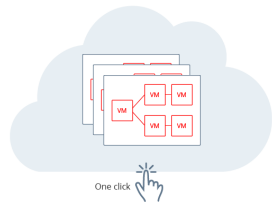
Blueprinting – no setup overhead with one click replica & move between cloud regions

Geographical reach – run workloads across 25 regions around the world

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Technology overview - HVX

| VM | VM | VM | VM | VM |

Nested Virtualization Engine

- -

Software Defined Networking | **Storage Functionality**

| Xen/KVM | Xen/KVM |

| x86 | x86 |

Exposes VMware virtual devices
Requires no changes to VMs

Provides Layer 2 networking that
supports broadcast & multi-cast

Abstracts cloud storage & provides the
local block storage to VMs

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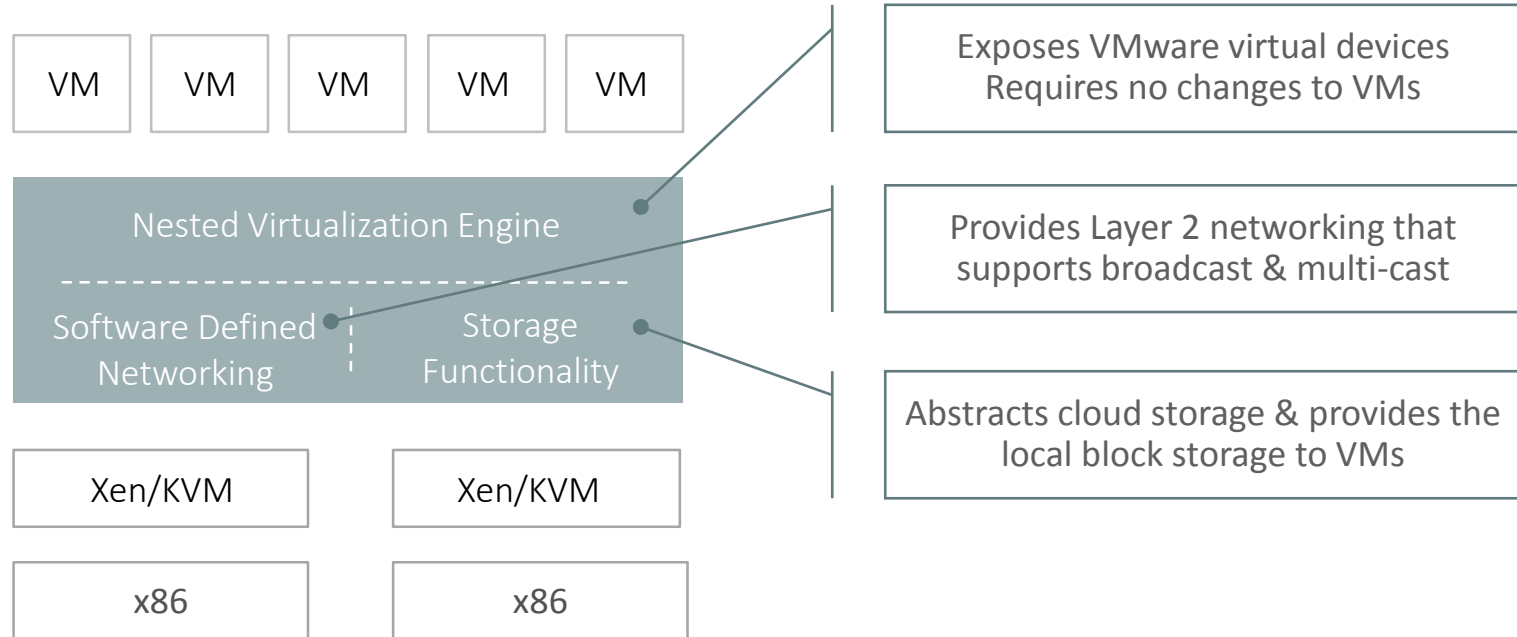
Enables data-center capabilities on public cloud for every stage of enterprise application lifecycle

PoC

Application / Virtual Appliance PoCs

Development/ Integration Testing

UAT/Staging/Upgrade Testing

Training

Production Enterprise Application
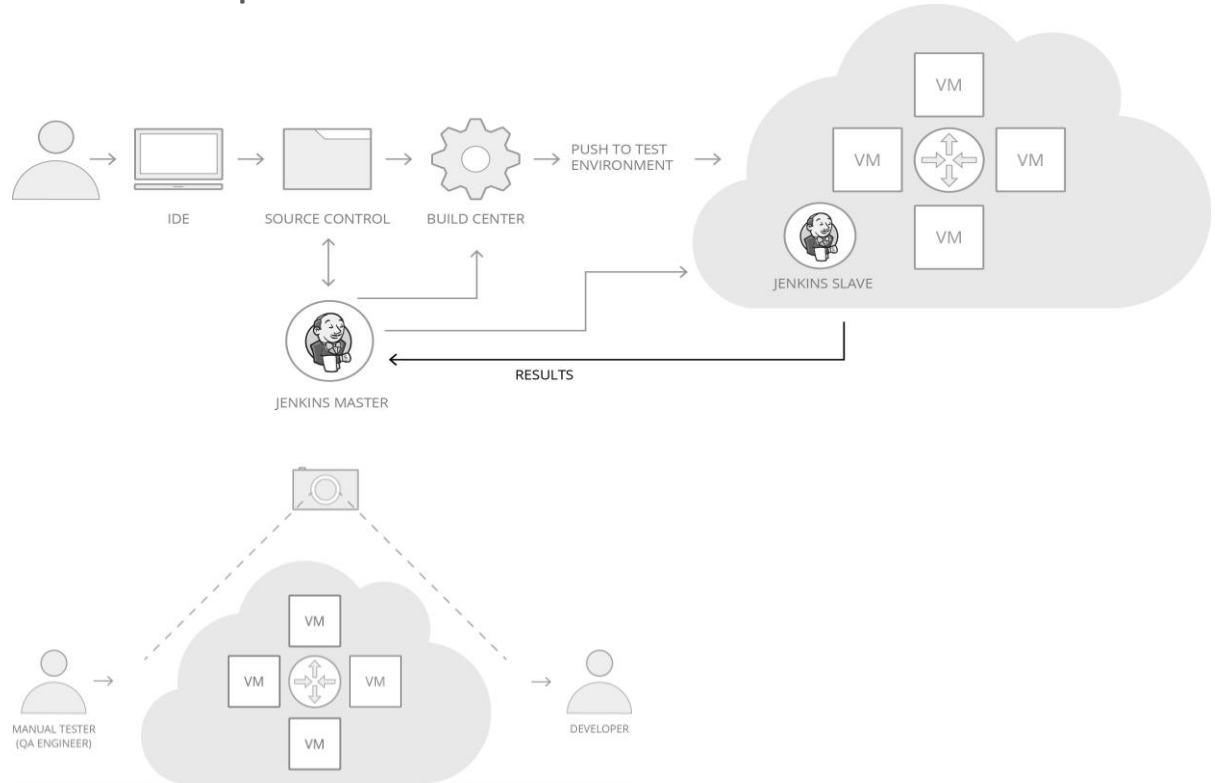
Security Testing

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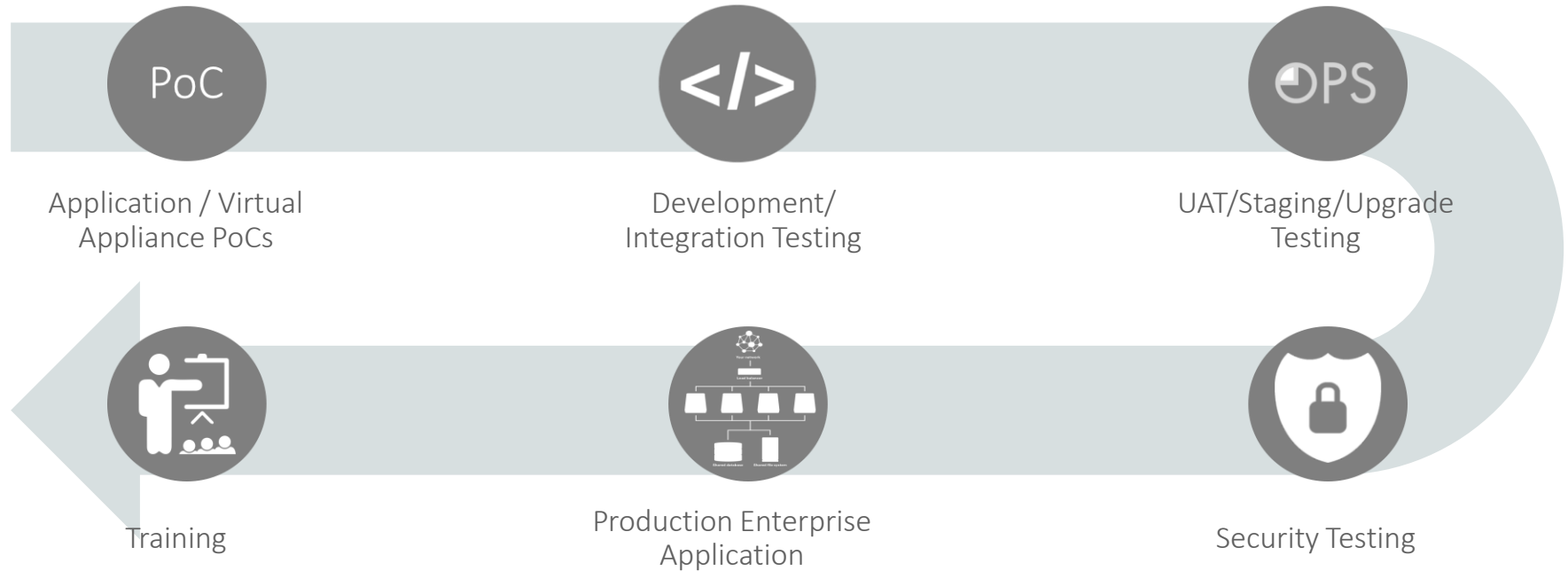
Accelerated product development with Ravello

Improve quality by running manual, automated, CI/CD tests on **customer representative** environments

Shorten QA through parallelized testing with **infinite 'data-center-like'** environments on cloud

Easily collaborate between Dev & QA through environment **snapshots** & state sharing

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ironSource

World's leading platform for software discovery, distribution and delivery uses Oracle Ravello for automated testing and Windows client testing

Challenge

ironSource scaled its offerings across multiple Windows client versions.

To ensure extended test coverage, ironSource needed a scalable, automated solution to replace the old and very static test infrastructure.

Solution

With Ravello, ironSource created over 600 replicas of customer environments.
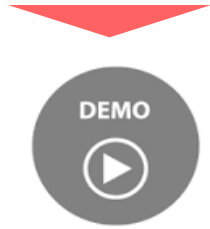
ironSource engineers check in code, use Jenkins to automatically create environments through the Ravello API for each OS version, run automated tests, report back to the QA reporting dashboard and shutdown environments once complete – saving costs

Result

✓ Compressed development-test cycles

✓ Quick scaling of QA automation infrastructure. <20 mins to automatically build environments

✓ Cost savings

✓ Improved software quality

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Ravello as demo/PoC platform

Same VMware VMs & networking	'Reference architecture' as blueprint	Scalable unlimited capacity of cloud	Deployment regions around the world	Reduced setup overhead with blueprint as starting point

*Realistic **repeatable** demos*

Showcase 'reference architecture' with one click
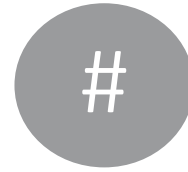
*Demo for every sales opportunity **without resource contention***

*Provide **'local user experience'** for demos around the globe*

***Springboard** PoCs from demos*

Arista Networks

The world's leading switching company uses Oracle Ravello for sales demos and customer PoCs

Challenge

Arista's vEOS virtual appliance typically needs to run in a private data center – due to strong Layer 2 network needs.

Strong sales demand meant resource contention in DC for product demos. Further, customers had to VPN to this environment for their PoCs which was delayed due to unreliable network connectivity.

Solution

Arista created on-demand customer pre-production hands on labs for POCs through Ravello blueprint sharing features.

Complex full featured instances are deployed by Arista SEs streamlining the POC process. Customers can fully test the design of their network environments prior to rolling out Arista appliances to the production

Result

✓ Faster PoCs and shortened sales cycles

✓ Repeatable demos that showcase the rich vEOS feature-set

✓ Product demos without resource contention

✓ Local user-experience for customers around the globe during demos & PoCs

Training agility with local user-experience

Deploy & scale VMware based lab clones 'as-is' in different cloud regions on-demand

①

Import VMs on Ravello. Save setup as an infrastructure blueprint

Data-center training lab

②

Deploy clones of the blueprint on cloud regions of choice with one click or API call

Infrastructure 'blueprint'

Americas

Trainee in Americas

APAC

Trainee in APAC
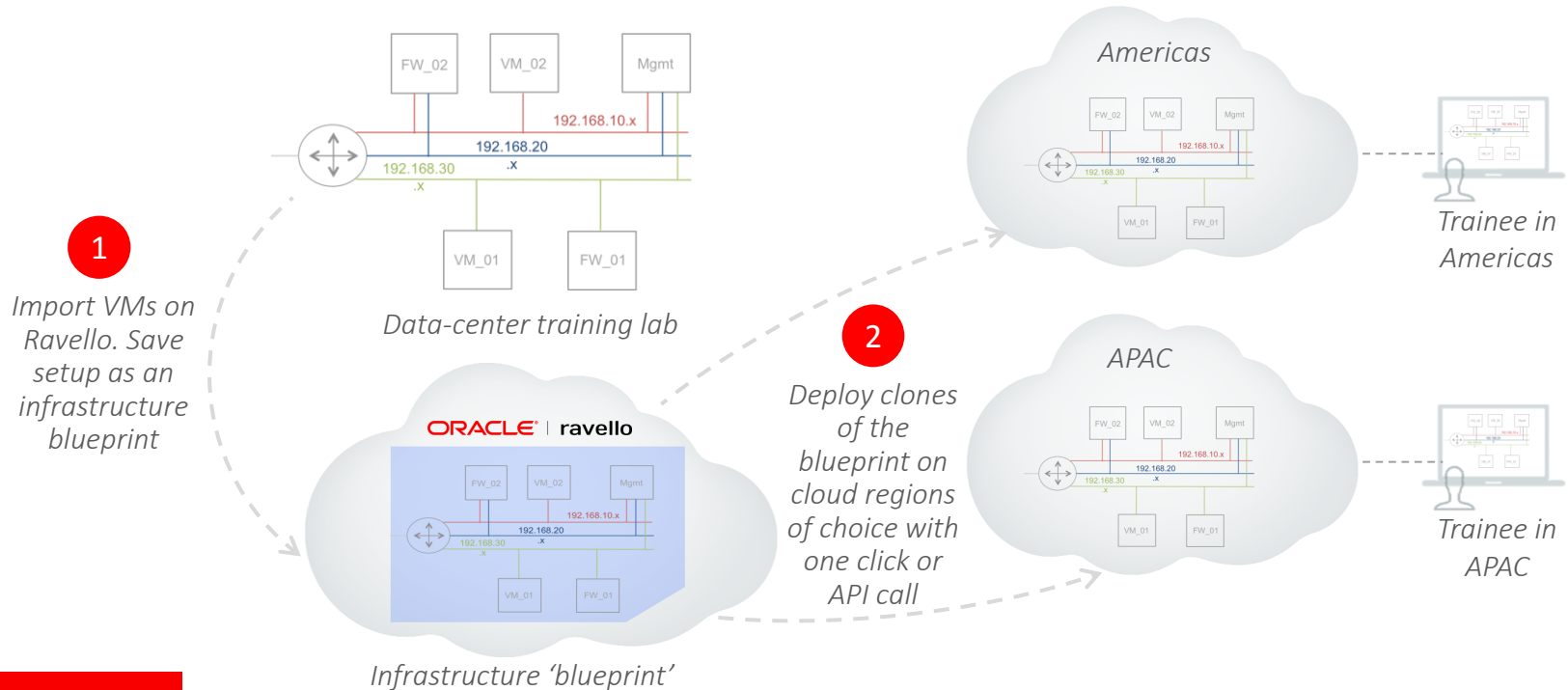
Red Hat

The world's leading open source software provider, Red Hat maintained a physical data center for delivering partner and end-user training.

Challenge

Red Hat always ran out of training capacity during new product announcements and rollouts.

Because they didn't have a global footprint, it meant a poor end-user experience for partners in international geographies.

The result of this was many untrained, or poorly trained, partners, which in turn resulted in lost revenue.
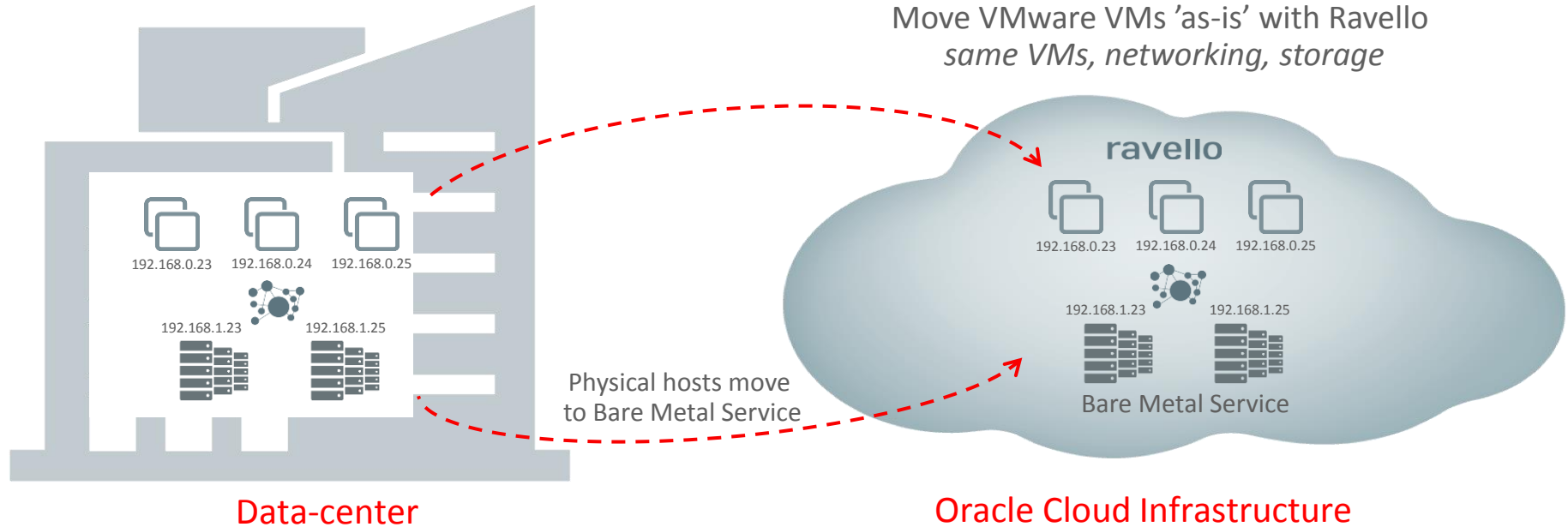
Solution

The Red Hat GPE team creates complex environments in Ravello once, and then saves a blueprint. Now every channel partner can spin up an environment anywhere in the world with the click of a button. This is used for channel partner training as well as customer demos

Result

✓ Achieved infinite elasticity to meet demand during training peaks

✓ Deployed workloads all around the world improving end user experience

✓ Substantial cost savings considering a 3 year TCO

✓ Ability to train more partners faster on new product releases

redhat

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Easily move apps on VMware & physical hosts to cloud

Move VMware VMs 'as-is' with Ravello
same VMs, networking, storage

ravello

192.168.0.23   192.168.0.24   192.168.0.25

192.168.1.23   192.168.1.25

Bare Metal Service

192.168.0.23   192.168.0.24   192.168.0.25

192.168.1.23   192.168.1.25

Physical hosts move
to Bare Metal Service

Data-center

Oracle Cloud Infrastructure

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Ravello brings agility and delivers savings

No 'migration' costs

Move to cloud "as-is" saving **time** & **costs**

Business agility

No setup overhead
Rapid deployment through infrastructure cloning

Cost savings

40-60% savings compared to running on premise

cloud.oracle.com/Ravello