Red Hat Developer Workshop

Replacing MuleSoft with Red Hat 3scale

Stone Door Group
October 27th, 2020

Red Hat

About Stone Door Group

Red Hat APEX Partner
Assist organizations with implementing DevOps best practices using Red Hat solutions

Red Hat 3scale Accelerator℠
Delivers a ready-to-go full lifecycle API management solution

Provides the subscriptions and services needed to build the right API gateway

Complimentary Trial of 3scale
For lab participants who schedule a complimentary consultation, we will extend today's lab environment for 5 days

Please reach out to us within 2 hours of this session – https://asktheexpert.stonedoor.io

https://www.stonedoorgroup.com/red-hat-3scale-accelerator

Housekeeping

- Trouble with your connection?
  - You may dial in via phone - 888.788.0099 Webinar ID: 925 9496 9972 Passcode: 530590
  - Email us at webinar@stonedoorgroup.com for assistance

- Questions?
  - Please enter any questions via Q&A feature
  - Our instructors will address your questions as soon as they are able

- Today's Format
  - Presentation
  - Lab Demonstration
    - Hands On Session - Email from IBM Cloud - Invitation to Register and Activate the account
    - Demo Session

- Webinar Recording & Follow Up
  - Following today's session, we will distribute a link to the webinar recording as well as a link to today's presentation

Connect with us at letsdothis@stonedoorgroup.com

Instructors

David Ford

David Ford is a Senior Consultant with 30+ years experience in software development. David serves as a mentor, coach and architect to mature enterprises who need to transition to a DevOps culture.

Mike McDonough

Mike is a Senior Consultant with Stone Door Group with 20+ years experience in systems engineering, solution architecture, and technical services roles. He consults on advance infrastructure and information security topics with a focus on cloud and emerging technology.

Bryan Croft

Senior RHCE Certified Linux consultant with 20+ years of Red Hat Enterprise Linux experience. Core competencies include OpenShift 3.x/4.x, OpenStack, Ansible, Terraform, Docker, Kubernetes, Jenkins. Deep understanding of designing and implementing enterprise systems architecture, and keeping it running.

About this Workshop

The purpose of this workshop is to demonstrate how to move an application running on MuleSoft to Red Hat 3scale.

About this Demo

The following are the key topics we will cover:

- Review of MuleSoft vs Red Hat 3scale Features
- How to install and configure 3scale
- How to install an application in ServiceMesh/OpenShift
- How to configure an application in 3scale
- How to observe API traffic using Kiali on OpenShift
- Demonstrate how an external developer registers and tests an API

Customer Scenario

The following are the customer scenario for the hands on workshop:

- Customer runs an app called "WeNote" in MuleSoft
- Customer needs to migrate "WeNote" to 3scale
- Customer wants to offer a developer portal to 3rd party apps:
  - Developer registers and selects an API plan
  - Developer acquires a self-service API key
  - Developer can access API documentation
- Customer IT staff want to observe, via OpenShift and Service Mesh, API consumption

Drivers for Switching to 3scale

The open demo takeout assumes that the customer is running an application in MuleSoft. The customer has the following drivers to move from MuleSoft to 3scale:
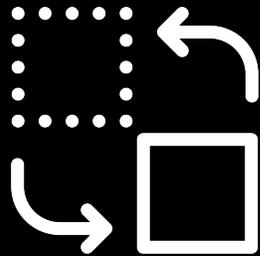
- Proprietary nature of MuleSoft APIs and SDKs
- MuleSoft 3 to 4 replatforming
- Refactoring applications from MEL to DataWeave
- Lack of integration in Red Hat investment

3scale vs MuleSoft
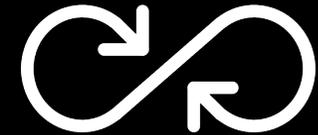
Key issues when choosing 3scale over MuleSoft
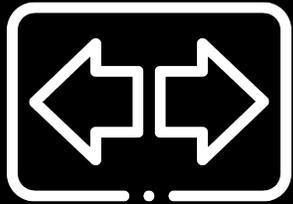
Vendor Lock-In
on Applications

Backwards
Compatibility

Red Hat
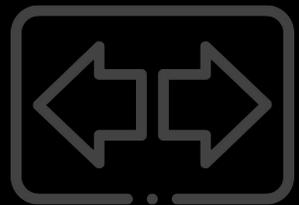Software ROI

Application
Observability

3scale vs MuleSoft – Vendor Lock-In

MuleSoft

- MuleSoft requires proprietary libraries, runtime engines, and scripting language
- Applications must be written "to work" on Mule runtime

3scale

- 3scale requires no proprietary development artifacts
- Applications can work in any runtime environment

3scale vs MuleSoft - Backwards Compatibility

MuleSoft

- Requires significant replatforming from v3 to v4
- Requires rewrite from Mule Expression Language to DataWeave
- Requires refactoring brownfield apps with Mule libraries

3scale

- Requires no replatforming
- Does not require any rewrite of code
- Brownfield apps can stay "as is" and/or lift and shift to OpenShift
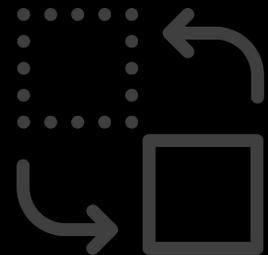
3scale vs MuleSoft - Red Hat Software ROI

MuleSoft

- Proprietary hosted platform
- Different featuresets between hosted (limited) and on prem
- Hosts only MuleSoft specific applications
- Requires extensive interactive manual command line installation and configuration
- Requires standalone flavors of Docker/K8s

3scale

- Runs on OpenShift anywhere - bare metal, public cloud, hosted via (openshift.com or IBM Cloud)
- Same features across hosting solution
- Can host any application via OpenShift in any runtime either with 3scale or without
- Fully integrated with RHEL, OpenShift, OpenStack, JBoss, and Process Automation Manager
- Streamlined UI installation via OpenShift operators, fully integrated
- Uses the same container/orchestration platform as other applications

3scale vs MuleSoft - Observability

MuleSoft

- Separate feature
- Requires manual installation
- Not fully integrated with specific container/orchestration environments

3scale

- Included in OpenShift
- Installed and configured via an OpenShift Operator
- Fully integrated with OpenShift's container runtime environment out of the box

Lab Systems

- We will integrate with ServiceMesh (Istio) in OpenShift
- OpenShift provides operators to install and configure service mesh
- There are a few prerequisites for installing service mesh
- Service Mesh provides communication for microservices installed

Red Hat System	Version
Orchestration Platform	OpenShift 4.4.20
ServiceMesh	1.1.10
3scale	0.6.1
3scale APICast	0.3.1

Let's Do This!

- **Red Hat 3scale Accelerator℠**
  - Install the 3scale API platform as a gateway to your digital business
  - Integrate 3scale API into your existing applications
  - Establish an API architecture that enables 3rd parties to consume your APIs
  - Implement authorization, metering, chargeback, and lifecycle management
  - Establish observability into API consumption and performance with Service Mesh
- **Complimentary Trial of 3 Scale**
  - https://asktheexpert.stonedoor.io
- **Brief Survey Poll**

Contact Us: letsdothis@stonedoorgroup.com

Lab Instructions

- **Hands-On Option**
  - Remain in the current Zoom session
  - Email from IBM Cloud – Invitation to Register and Activate the account
  - Led by David Ford
  - Tech Support by Mike McDonough

- **Demo-only Option**
  - New Zoom session in Chat
  - Led by Bryan Croft

Questions or Support – Please use Zoom's Q&A feature