OpenShift PoC for MitziCom

Scoping and Engagement Plan

Sebastian Hetze Solution Architect, Red Hat June 17th 2018



Disclaimer

The purpose of this document is to build a common understanding of a business need or problem MitziCom currently has and to describe a intended solution, using Red Hat products and technology.

The information provided in this document is non-binding.

This document is neither a contract nor an offer that could be accepted by the other party. If the parties decide to enter into a business relationship, they will memorialize the terms of that relationship in a separate agreement between them or their respective business partners.



Problem Statement

MitziCom provides hosting and cloud services to a variety of clients, from medium size companies to enterprise giants.

Business Owners and Customers demand MitziCom to provide a Container PaaS for internal and client workloads.



Problem Description

MitziCom needs to deploy and operate a Container PaaS in a highly automated and HA fashion.

CI/CD workflows have to be eanabled in a secure multitenant aware setup.

Resources have to be managed using self service capabilities and quotas.



Solution Architecture

Red Hat will perform a PoC with the customer to demonstrate strengths and limitations of Red Hat OpenShift Container Platform in order to determine the feasibility of using Red Hat OpenShift Container Platform as target for internal and client workloads.



Scope

This section provides a high-level description of the features and functions that characterize the product, service, or result that the engagement is meant to deliver

- High Level Requirements
- Major Outcomes
- Boundaries
- Define what is explicitly out of scope



PoC Use Cases

- PoC Automation
- Basic HA Setup
- NetworkPolicy based Infrastructure
- CICD Workflow
- Multitenancy



Work Breakdown Structure

- Automation
- Basic HA Setup
- Environment Configuration
- CICD Workflow
- Multitenancy
- Documentation and Organization
 - Meetings
 - Documentation



Work Package Automation

- Create automation script for Inventory and Setup
- Create additional Documentation
- Publish on Github

estimated effort: 2 hours

Red Hat resources required: Consultant, Architect, PM

Customer resources required: Engagement Manger, Engagement Team



PoC Use Case: Basic HA Setup

- Three master/etcd, two infra env=infra, router, loadbalancer, integrated Registry
- NFS PV backend with different PV types
- Smoke-test with nodejs-mongo-persistent

estimated effort: 2 hours

Red Hat resources required: Consultant

Customer resources required: PoC Team, additional hardware node

success criteria: smoke test succeeds with persistent storage



PoC Use Case: OpenShift Infrastructure

- Aggregated Logging, Metrics, Service Catalog and Service Broker
- Services running on Infra Nodes
- NetworkPolicy defaults to isolated projects

estimated effort: 2 hours

Red Hat resources required: Consultant

Customer resources required: PoC Team, additional hardware node

success criteria: new project is logged, monitored and isolated



PoC Use Case: CICD Workflow

- Jenkins managed deployment of openshift-tasks
- Horizontal Pod Autoscaler manages prod workload
- Jenkins backed by PV

estimated effort: 2 hours

Red Hat resources required: Consultant

Customer resources required: PoC Team, additional hardware node success criteria: new version of openshift-tasks app is deployed and scaled

automatically



PoC Use Case: Multitenancy

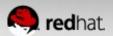
- Multiple Clients Alpha Corp and Beta Corp running on dedicated nodes
- New projects have LimitRanges by default
- User created objects carry org label

estimated effort: 2 hours

Red Hat resources required: Consultant

Customer resources required: PoC Team, additional hardware node

success criteria: tenants have their projects isolated

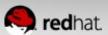


WP Documentation and Organization

- Prep Call
- Meetings
- Daily Engagement Reporting
- Final Engagement Documentation
- Review and Lessons Learned Call

estimated effort: 2 hours

Red Hat resources required: Consultant, Architect, Project Manager / Coordinator Customer resources required: Engagement Manager, Stakeholders, meeting room



Effort Estimation

- Effort Estimation:
 - Architect: 0 Mandays
 - Consultant: 1.5 Mandays
- The estimated effort for this engagement in total is 1.5 days.
- Red Hat offers all it's engagement up to 20 days as a Packed Price (Fixprice).



Post PoC Use Case: CNS Storage Backend

- Add nodes to existing Cluster
- Deploy Container Native Storage
- Migrate integrated registry to CNS

estimated effort: 2 hours

Red Hat resources required: none

Customer resources required: Admin, privileged access to hardware / Vms

Success of this use case is not relevant for the buying decision.



Constraints and Assumptions

The customer is responsible to provide certified hardware and sufficient Red Hat subscriptions for all software components related to this engagement.

If provided with an preparation document in advance of the engagement, the customer will make sure the appropriate steps are taken to ensure a seamless start.



Project Coordination & Management Plan

- Red Hat will designate a skilled Project Manager (PM) or Project Coordinator (PC) who will be responsible for attunement of all Red Hat activities under this engagement.
- The customer will designate one Engagement Manager (EM) who is is authorized to make decisions regarding activities under this engagement.
- Primary contact for all communication with the Consultant on site is the Engagement Manger.
- EM and PM/PC will agree upon a series of calls and/or meetings in a preparation call that will take place in advance of the engagement.



Scope Management Plan

The Work Breakdown Structure (WBS) and WBS Dictionary define the scope for this engagement.

Any member of the engagement team may initiate proposed scope changes. All change requests will be submitted to the Engagement Manager (EM) who will then evaluate and then accept or deny the requested scope change.

The EM is responsible for the acceptance of the final engagement documentation and engagement scope.

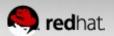


Schedule Management Plan

The delivery of work packages for this engagement will be scheduled by Red Hat GPS only after a purchase order has been signed. Details of the delivery schedule will be fixed usually within two working days after Red Hat has received the order.

A lag of 4 to 6 weeks between this scheduling and the availability of the Consultant should be expected.

Red Hat will perform Professional Services generally in cohered blocks of five days. The Consultant will be on site Monday to Thursday and the 5th day of the week (Friday) will be generally performed from remote and will be used for documentation, organization and successive preparation work.



Engagement Staff Assignment

After finalizing this Proposal (Engagement Mangement Plan), Red Hat GPS will identify personnel with appropriate skills to deliver the Work Packages and best fit for the time constraints.

It is **not** possible that the work will be delivered by Red Hat partners.

It is not possible that the work will be delivered by an English speaking Consultant.

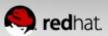


Change Management Plan

The Change Management Board consists of the Engagement Sponsor, the Security Officer and the Engagement Manager.

The Red Hat Consultant and/or the Project Manager will provide information regarding modification of schedule, cost, risk and quality related with the requested change.

The Red Hat Consultant will continue to work following the existing Engagement Plan until the Change Management Board has formally accepted a change.



Risk Management Plan

Configuration changes on productive systems incur risks of data loss and loss of service availability.

To mitigate these risks the Customer will keep current backup data and allow for sufficient downtime to restore data in a fallback scenario.

No further risks are identified so far.



Quality Management Plan

The work provided by the Red Hat Consultant will be comprehensible documented.

To ensure highest Customer satisfaction, Red Hat will send out a survey after every engagement to the Engagement Sponsor via email. Red Hat would appreciate if the survey is filled out and returned after the engagement is fully delivered.



Supportability

For the avoidance of doubt, the results of the engagement described above are not part of Red Hat's products and therefore will not become subject to Red Hat's support or other elements of Red Hat's Software Subscriptions.

The same shall apply for any additional software components, which have been recommended by Red Hat Consulting and which are not part of Red Hat's products and support.



Timeline and Milestones

- The engagement should start in calendar week <xx>
- Go life is scheduled for <xx>
- Stakeholders or required resources are unavailable
 - <role> and <date>

These dates are provided by the customer purely for informational purpose and in no way agreed part of the engagement.



Stakeholders and Points of Contact

RH Project Coordinator / Manager

John Doe, PMP Red Hat, jdoe redhat.com +49 123 4567890

RH Solution Architect

John Doe, Solution Architect Red Hat, jdoe redhat.com +49 123 4567890

Engagement Manager

C. Customer, Head of IT ACME, ccustomer acme.com +49 123 4567890

Engagement Team

• A. Admin, UNIX Operations ACME, aadmin acme.com +49 123 4567890



Location of Delivery

The engagement is delivered on the customer site

1313 Webfoot Walk, 98751 Duckburg

The consultant does **not** need a current ID card or passport for authentication.

Remote access is not possible.

