

Thank you for reaching out to the CPE Team to log your request. Please fill out the fields below. To ensure your request can be reviewed please ensure all fields are populated where you see a \*. Thank you

### Project details:

Name of Project:	CI Infrastructure Refresh
Submitted by:	Brian Stinson
Date:	3/26/20
Dependency dates : (if known)	
Project timeline (approx high level est):	5/27/20

### Summary overview:

CentOS CI hosts test infrastructure for Fedora-CI, CentOS Stream, CentOS SIGS, some upstream projects, and CPE applications. We have 3 different delivery scenarios:

- A central Jenkins Master, primarily for consuming bare-metal resources: ci.centos.org
- A number of project-specific jenkins masters hosted in openshift with containerized workloads: jenkins-continuous-infra.apps.ci.centos.org
- A number of project-specific jenkins masters hosted in openshift with static-slave workloads: jenkins-fedora-infra.apps.ci.centos.org

We want to simplify these delivery scenarios down to a single way of operating that enables more self-service and relies less on administrator 'approval'. To support a large-scale migration to Openshift, we need an updated underlying infrastructure that supports self-service.

What platform does this project relate to: [Please insert ]\*

<input checked="" type="checkbox"/>	Fedora	<input checked="" type="checkbox"/>	CentOS
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Is this idea... [Please insert ]\*

<input type="checkbox"/>	New	<input checked="" type="checkbox"/>	Enhancement	<input checked="" type="checkbox"/>	Replacement
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Is there a workaround in place? Y/N

*If yes, please provide details:*

No Workarounds

What area does it relate to: [Please insert ✓]\*

✓	Initiatives	✓	Infrastructure		Releng
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Why is this important?	What is the benefit of doing this?	What happens if it doesn't happen?
<p><i>What problem or opportunity are we addressing:</i></p> <p>OKD 3.6 is deprecated and doesn't have the features that folks with containerized workloads expect.</p> <p>This infrastructure is identified to support the <b>RHEL 9 bootstrap</b>, and for ongoing support of the Fedora-CI, CentOS Stream CI, and ELN CI projects</p> <p>Tenants need to be able to get CI work done without pinging bstinson or siddharthvipul, or other members of the team at every stage of onboarding</p>	<p>Upgraded features make folks happy with what we deliver</p> <p>Using OCP 4 is both dogfooding for Red Hat, and reduces admin overhead relative to OKD 3.x</p> <p>Building strong openshift ops experience in the team is important as more CPE applications transform to Openshift natives</p> <p>This infra can share some of the workloads that might otherwise go into communishift</p> <p>Gives a potential home for some Mboxes</p>	<p>We remain unable to keep up with authentication/service requests</p> <p>Risk that the infrastructure could just stop working</p> <p>Unable to be an infra provider for CI workloads any more</p>

## Objectives/Goals \*

<p><i>Please insert as bullet points</i></p> <p>-- Phase 1: A targeted effort --</p> <ul style="list-style-type: none"> <li>Bring up a new general-purpose OCP 4.x cluster that can host self-service namespaces for CI purposes</li> <li>Develop an ongoing maintenance program for the OCP cluster</li> </ul>
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## What does success look like to you? \*

<ul style="list-style-type: none"> <li>cross-CPE participation in joint Fedora/CentOS operations of a cluster</li> <li>Shiny OCP 4</li> <li>Fedora-CI is happy</li> </ul>
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Note: You do not need to fill out fields below. Our PO will work with you and the assigned Tech Lead to scope these further

Please submit this request to [cpe-requests@redhat.com](mailto:cpe-requests@redhat.com) & cc [amoloney@redhat.com](mailto:amoloney@redhat.com)

Thank you, we will be in contact soon.

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## Requirements: (Prioritized epics + deliverables)

Requirements for OCP Cluster Bring-Up	
1.	Networking and DNS to the nodes
2.	CI Gateway deployed in production
3.	Spike on what we did for the installer on communishift
4.	Hardware resources: 3 masters, 3 infra, 5 workers
5.	Handle ACO logins

Acceptance Criteria:	
1.0	Node clusters are hosted across the three main chassis
2.0	Http traffic is directed into the cluster and acts as proxy
3.0	We spoke with Kevin :)
3.1	Identified and tried to replicate how CommuniShift brought up their OpenShift cluster
3.2	OpenShift cluster is up and running
3.3	Openshift uses the above proxys and the URL can be reached through the gateway
4.0	We have the above hardware documented in the CentOS inventory
5.0	A user can login through ACO and can see the console

Requirements for Cluster self-service hosting for namespaces	
1.	Create namespaces
2.	Add Resource limits and communicate the “levels” of resourcing available
3.	Method of how to request a namespace

4.	Investigate if users can manage their own openshift groups without elevated permissions
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	Acceptance Criteria:
1.0	Namespaces are created and can be viewed
2.0	Resource limits are disclosed and published
3.0	Console URL is widely available and people can log in using ACO
3.1	Users can see clearly where they can navigate from to request a namespace
3.2	Users can click a redirect to request a namespace by filing a ticket direct

	<b>Requirements for the ongoing maintenance program (knowledge share)</b>
1.	Shared SOP (hostnames documented, troubleshooting, access howto)
2.	Alerts/reporting/notifications
3.	Shared access group
4.	Demo/wrapup blog post for the whole bringup process

	Acceptance Criteria:
1.0	SOP is written and includes a how-to guide, pictures and shared for feedback
1.1	Troubleshooting section is tested and can be followed - and works!
1.2	SOP doc is published and accessible to the public
3.0	Account holders can login using their ACO accounts
3.1	Namespaces in the OpenShift cluster is updated with account permission information for account holders to direct their access
3.2	CentOS CI admins have access to and have accounts in both infras for a complete shared access group

**Dependencies (users, other teams & app's affected)** *(If known)*

Internal	External

**Risk** *(If known)*

Risk title	Type of risk	Risk description	Level of risk	Actions to mitigate risk

### Skill Set/Resources required to deliver

Phase 1			
Title	Skillset	Length of time	Potential Team Member
Phase 2			

### Project timeline:

- Phase 1: 4 - 8 weeks
  - 6th April - 20th April
    - Networking & DNS proxies
  - 20th April - 15th May:
    - OCP Cluster Bring up
    - Self-Service namespace hosting + Group access
  - 18th May - 22nd May
    - SOP documentation & testing
  - 25th May - 30th May:
    - Demo
- Phase 2: TBD

### Any other information:

Any open questions, unknown's, other insights you would like to flag, add them here:

# On completion, what did we achieve?

- **Brief description on what was done**

*Brief overview of initiative highlighting the request (link to project brief for more detail)*

- **Goals:**

*Confirm if goal(s) were met, if not why? If yes, some high level details.*

- **Possibility for further improvement**

*List or make a note on potential areas for improvement and if possible the impact of that improvement*

- **Valuable Impact**

*What value did we create/ how has this helped others? A user can now.....*

- **Retrospective:**

*What can we improve on going forward? What did we learn?*

- **Handover**

<b>Support Team:</b>	
<b>Date:</b>	

