

## Pulp - Story #5137

Story # 5132 (NEW): [Epic] As a user, I can consume Pulp 3 from OperatorHub.io

### As a pulp-operator user, I can configure & expand the storage volume size

07/15/2019 10:59 PM - mdepaulo@redhat.com

<b>Status:</b>	NEW	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	80%
<b>Category:</b>	Operator	<b>Estimated time:</b>	0:00 hour
<b>Sprint/Milestone:</b>		<b>Tags:</b>	
<b>Platform Release:</b>		<b>Sprint:</b>	
<b>Groomed:</b>	No	<b>Quarter:</b>	
<b>Sprint Candidate:</b>	No		
<b>Description</b>			
pulp-operator currently uses static sized Persistent Volume Claims for both the PostgreSQL database and for /var/lib/pulp .			
This is unacceptable because by adding/syncing more content, users can exceed the capacity. Also, the current values may be too large.			

#### Associated revisions

##### Revision 7d222c37 - 07/23/2019 05:17 PM - Mike DePaulo

Use pulp-file-storage settings from a ConfigMap

Add different ConfigMaps for known use cases like Travis

Partially implements: ref #5137 <https://pulp.plan.io/issues/5137>

#### History

##### #1 - 07/15/2019 11:00 PM - mdepaulo@redhat.com

Research suggests that the best way to do this is a ConfigMap that the operator references. Other operators do this, such as mongodb and another.

##### #2 - 07/19/2019 04:33 PM - mdepaulo@redhat.com

- % Done changed from 0 to 50

As part of implementing this task on the k3s-travis branch, I started on this.

<https://pulp.plan.io/issues/5061>

We currently have configurable storage via a ConfigMap. But I do not know if it can expanded afterwards.

##### #3 - 07/19/2019 09:23 PM - mdepaulo@redhat.com

The storage can be expanded by uploading a new version of the ConfigMap. It takes seconds for the change to start being applied by the pulp-operator (ansible operator) pod.

However, the StorageClass / provisioner must support it.

The minikube-hostpath provisioner does not, even if you modify its storage class ("Standard"). (This may be due to the lack of the Online File System Expansion feature "ExpandInUsePersistentVolumes").

However, other provisioners do, such as AWS-EBS, GCE-PD, Azure Disk, Azure File, Glusterfs, Cinder, Portworx, and Ceph RBD.

<https://kubernetes.io/blog/2018/07/12/resizing-persistent-volumes-using-kubernetes/>

##### #4 - 08/02/2019 12:55 AM - mdepaulo@redhat.com

I have discovered that the better way to solve this is to use our operator's custom resource.

This is what we already do for the pulp image tag. And it is what the ansible operator framework is designed around.

I plan to rework the existing configmap into the custom resource.

**#5 - 10/23/2019 09:57 AM - mdepaulo@redhat.com**

- % Done changed from 50 to 80

This is now being done for Pulp itself via a custom resource.

Still needs to be done for postgres.

**#6 - 12/12/2019 06:37 PM - fao89**

- Tags CI/CD added

**#7 - 07/09/2020 04:35 PM - fao89**

- Category set to Operator

**#8 - 02/12/2021 07:47 PM - mdepaulo@redhat.com**

- Subject changed from *pulp-operator needs configurable and expandable storage size* to *As a pulp-operator user, I can configure & expand the storage volume size*

**#9 - 02/12/2021 07:51 PM - mdepaulo@redhat.com**

- Tags deleted (CI/CD)

**#10 - 02/12/2021 07:53 PM - mdepaulo@redhat.com**

- Assignee deleted (mdepaulo@redhat.com)