

## Pulp - Story #2872

As an authenticated user, I can create a Content unit from one or more artifacts

07/06/2017 11:59 PM - dkliban@redhat.com

<b>Status:</b>	MODIFIED	<b>Start date:</b>	
<b>Priority:</b>	High	<b>Due date:</b>	
<b>Assignee:</b>	dkliban@redhat.com	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0:00 hour
<b>Sprint/Milestone:</b>	3.0	<b>QA Contact:</b>	
<b>Platform Release:</b>		<b>Complexity:</b>	
<b>Blocks Release:</b>		<b>Smash Test:</b>	870
<b>Backwards Incompatible:</b>	No	<b>Verified:</b>	No
<b>Groomed:</b>	Yes	<b>Verification Required:</b>	No
<b>Sprint Candidate:</b>	No	<b>Sprint:</b>	Sprint 23
<b>Tags:</b>			

### Description

For an API user to create a Content unit, Pulp 3 needs to have the following:

- the ContentArtifact "through" model<sup>0</sup> for Content and Artifact. It contains a ForeignKey field pointing to Artifact and another one pointing to Content. It also contains a relative path char field. All three are required and can not be null. The combination of 3 is a uniqueness constraint.
- the Content model with an artifacts ManyToManyField pointing to Artifact through ContentArtifact.
- viewset that can handle CRD operations for Content.
- serializer for the viewset which will return all serialized fields of the Content model including the artifacts.
- API endpoint at /api/v3/content/units/
- POST request to the /api/v3/content/units/ endpoint creates Content. The body of the request contains a dictionary that looks like the following:

```
{
  "artifacts": [{
    "< artifact >": "< relative_path >"
  }, {
    "< artifact2 >": "< relative_path2 >"
  }],
  "notes": {}
}
```

First a new Content instance is created with notes from the payload. Then the 'artifacts' from the payload are used to create ContentArtifact instances that reference the new Content.

- GET request to the /api/v3/content/units/<content unit id> returns serialized Content
- DELETE request to the /api/v3/content/units/<content unit id>/ raises an exception if the Artifact is still associated with any Repository. The exception should provide a list of Repositories still associated with the Artifact. If an exception is not raised, Artifact is removed from the database.
- PUT/PATCH requests to the /api/v3/content/units/<content unit id>/ raises an exception (409 unsupported method)

[0] <https://docs.djangoproject.com/en/1.9/topics/db/models/#intermediary-manytomany>

### Related issues:

Blocks Pulp - Task #2893: Add Publication and Distribution models.

MODIFIED

Blocks Pulp - Task #2942: Refit ChangeSet to work with content model changes.

MODIFIED

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## Associated revisions

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### Revision 2ad1c414 - 08/07/2017 09:50 PM - dkliban@redhat.com

Problem: Content can not be created using REST API

Solution: Add viewset and serializers to serve Content creation API

This patch also introduces a DeferredArtifact that will be used by importers that want to support deferred download policies. This model replaces the DownloadCatalog model. However, DownloadCatalog was not removed as part of this patch because it is referenced by the changesets. The changesets will be updated in a separate commit and the DownloadCatalog will be removed then.

This patch also includes a fix for the artifact\_pre\_delete signal which should have been updated when the Artifact model changed.

This patch also introduces additional base viewsets for models that don't need update() implemented. REST API for both Artifact and Content resources does not support updates.

closes #2872

<https://pulp.plan.io/issues/2872>

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## History

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**#1 - 07/07/2017 12:04 AM - dkliban@redhat.com**

- Description updated

**#2 - 07/10/2017 07:46 PM - bizhang**

- Tags Pulp 3 Plugin Writer Alpha added

**#3 - 07/12/2017 05:54 PM - dkliban@redhat.com**

- Status changed from NEW to ASSIGNED

- Assignee set to dkliban@redhat.com

**#4 - 07/17/2017 05:46 PM - jortel@redhat.com**

- Related to Task #2893: Add Publication and Distribution models. added

**#5 - 07/17/2017 06:20 PM - mhrivnak**

- the ContentArtifact "through" model for Content and Artifact. It contains a ForeignKey field pointing to Artifact and another one pointing to Content. It also contains a relative path char field. All three are required and can not be null. The combination of 3 is a uniqueness constraint.

This would allow the same artifact to be associated to a Content unit more than once at different paths. I think that makes sense, and may in some cases even be a requirement. It's just worth pointing out.

- POST request to the /api/v3/content/units/ endpoint creates Content. The body of the request contains a dictionary that looks like the following:

What would be at just the /api/v3/content/ endpoint? Can we just drop the "units" segment, or is there something different we have in mind for the content/ collection?

Based on how the master/detail stuff works, I'd expect that the easiest option will be to have a client POST to a detail endpoint, which could likely handle the creation transparently with DRF glue. For example, /api/v3/content/units/file/ It's possible we could make an endpoint at units/ that knows how to grab the corresponding detail classes and use them, but the above would probably work out-of-the-box.

- DELETE request to the /api/v3/content/units/<content unit id>/ raises an exception if the Artifact is still associated with any Repository. The exception should provide a list of Repositories still associated with the Artifact. If an exception is not raised, Artifact is removed from the database.

This could be its own story.

**#6 - 07/17/2017 06:23 PM - jortel@redhat.com**

*grooming for alpha.*

**#7 - 07/17/2017 06:39 PM - jortel@redhat.com**

*- Groomed changed from No to Yes*

**#8 - 07/20/2017 04:24 PM - mhrivnak**

*- Priority changed from Normal to High*

**#9 - 07/20/2017 04:50 PM - mhrivnak**

*- Sprint/Milestone set to 41*

**#10 - 07/20/2017 04:56 PM - jortel@redhat.com**

*- Related to deleted (Task #2893: Add Publication and Distribution models.)*

**#11 - 07/20/2017 04:56 PM - jortel@redhat.com**

*- Blocks Task #2893: Add Publication and Distribution models. added*

**#12 - 07/23/2017 11:41 PM - mhrivnak**

*- Sprint/Milestone changed from 41 to 42*

**#13 - 07/25/2017 10:57 PM - jortel@redhat.com**

*- Blocks Task #2942: Refit ChangeSet to work with content model changes. added*

**#14 - 07/29/2017 04:58 AM - dkiiban@redhat.com**

*- Status changed from ASSIGNED to POST*

Content REST API changes: <https://github.com/pulp/pulp/pull/3104>  
BasicFileImporter that uses the updated models: [https://github.com/pulp/pulp\\_file/pull/8](https://github.com/pulp/pulp_file/pull/8)

**#15 - 08/07/2017 10:03 PM - dkliban@redhat.com**

- Status changed from POST to MODIFIED
- % Done changed from 0 to 100

Applied in changeset [pulp/2ad1c4141bbd4bec3ce1a0641168edcc010b4656](https://github.com/pulp/pulp/pull/2ad1c4141bbd4bec3ce1a0641168edcc010b4656).

**#16 - 12/19/2017 04:23 PM - bmbouter**

- Tags deleted (Pulp 3 Plugin Writer Alpha)

Cleaning up Redmine tags

**#17 - 02/22/2018 04:28 PM - pthomas@redhat.com**

- Smash Test set to 2872

**#18 - 02/28/2018 08:18 PM - kersom**

- Smash Test changed from 2872 to 870

**#19 - 03/09/2018 12:21 AM - bmbouter**

- Sprint set to Sprint 23

**#20 - 03/09/2018 12:21 AM - bmbouter**

- Sprint/Milestone deleted (42)

**#21 - 04/25/2019 06:46 PM - daviddavis**

- Sprint/Milestone set to 3.0

**#22 - 04/26/2019 10:38 PM - bmbouter**

- Tags deleted (Pulp 3)