

Pulp - Story #3472

As a plugin writer, I have docs to define endpoints for multiple namespaced content types

03/15/2018 04:48 PM - daviddavis

Status:	MODIFIED	Start date:	
Priority:	Normal	Due date:	
Assignee:	daviddavis	% Done:	100%
Category:		Estimated time:	0:00 hour
Sprint/Milestone:	3.0	QA Contact:	
Platform Release:		Complexity:	
Blocks Release:		Smash Test:	
Backwards Incompatible:	No	Verified:	No
Groomed:	Yes	Verification Required:	No
Sprint Candidate:	Yes	Sprint:	Sprint 42
Tags:	Documentation, Plugin Template		

Description

Any plugin objects can run into this problem, so the documentation should be general to remotes, publishers, exporters, and content types.

Explain that namespacing is optional but encouraged, the long term problems that it can avoid, and how it is done in the viewset.

This change will be a part of a larger plugin-writer change, so please open this PR against that feature branch:

https://github.com/asmacdo/plugin_template/tree/add-plugin-writer-docs

These docs should be put here:

these docs https://github.com/asmacdo/plugin_template/blob/add-plugin-writer-docs/docs/plugin-writer/subclassing/namespacing.rst

Background

Problem:

Working on the Ansible plugin, we have multiple content types (roles, role versions, and more in the future). For role, I was thinking about defining my content viewset to be 'role' which pulpcore automatically sets up as `"/api/v3/content/role/".` See:

https://github.com/pulp/pulp_file/blob/master/pulp_file/app/viewsets.py#L32

That got me thinking: what if another plugin has a role type?

Apparently if I have two viewsets that define type 'role', the application just selects one of the two. I can't make out which it prefers though.

Solution:

By convention (meaning, in the plugin docs), plugins are encouraged to namespace their "Detail" endpoints by plugin name.

This is done in the viewset:

```
class AnsibleRoleViewSet(ContentViewSet):  
  
    # the endpoint becomes v3/content/ansible/roles  
    endpoint_name = 'ansible/roles'  
    queryset = AnsibleRole.objects.all()  
    model = AnsibleRole  
    serializer_class = AnsibleRoleSerializer
```

For some plugins, this is awkward because they only have one type, like the file plugin. Following this convention, the endpoint will

be v3/content/file/files/. If the file plugin chooses, they can keep v3/content/file/, but if they do this, they should be aware that adding other content types later will either create inconsistency or will be backwards incompatible. v3/content/file/newfile/.

Related issues:

Related to Python Support - Issue #3572: Move 'content/python' to 'content/py...

MODIFIED

Related to File Support - Task #3601: Move /content/file/ to /content/file/...

MODIFIED

Associated revisions

Revision d73ec31f - 08/30/2018 11:06 PM - werwty

Update plugin writer docs

closes #3220

closes #3472

closes #3298

closes #3772

<https://pulp.plan.io/issues/3220>

<https://pulp.plan.io/issues/3472>

<https://pulp.plan.io/issues/3298>

<https://pulp.plan.io/issues/3772>

History

#1 - 03/15/2018 04:54 PM - daviddavis

- Tags Pulp 3 MVP added

#2 - 03/15/2018 06:08 PM - daviddavis

- Description updated

#3 - 03/15/2018 06:26 PM - daviddavis

- Description updated

#4 - 03/16/2018 02:51 PM - amacdona@redhat.com

I think the way to do this would be an extension of the master/detail concept we already have, where Content ViewSets are registered under the url:

v3/content/<plugin>/<type>/

This would be awkward for plugins with only 1 type:

v3/content/file/file/

v3/content/python/python/

I think I prefer establishing the convention:

If the type is different than the plugin name, the plugin name should be a part of the type in the url.

/v3/content/python/

v3/content/ansible-role/

#5 - 03/16/2018 03:40 PM - dalley

- *Tracker changed from Issue to Story*
- *% Done set to 0*

#6 - 03/16/2018 03:54 PM - daviddavis

- *Subject changed from Plugin writers can define types which conflict with other plugins to As a plugin writer, I can define types which does not conflict with other plugins*

#7 - 04/04/2018 07:56 PM - daviddavis

I think plugins should either use `/content/<plugin>-<type>/` or `/content/<plugin>/<type>/` regardless of how many content types they have.

I am a bit worried about the idea of allowing plugins with one content type use a different convention for a few reasons:

1. It's inconsistent with plugins that will have multiple content types
2. A plugin could start out with a single content type (`/content/rpm/`) and then add more later (e.g. `erratum`, `srpm`, etc). At this point though, they've painted themselves into a corner and are forced to update existing routes.
3. It's unclear to me whether `file` in `v3/content/file` refers to the content type or the name of the plugin. If it's the former, then what if I have another plugin with a content type of 'file'?

#8 - 04/04/2018 08:28 PM - bmbouter

- +1 to using `/content/<plugin>/<type>/`.

#9 - 04/05/2018 04:53 PM - daviddavis

- *Subject changed from As a plugin writer, I can define types which does not conflict with other plugins to As a plugin writer, I can define endpoints for multiple content types and be assured my endpoints don't conflict with other plugins*

#10 - 04/09/2018 07:11 PM - amacдона@redhat.com

- *Description updated*

This was discussed on the list: <https://www.redhat.com/archives/pulp-dev/2018-April/msg00050.html>

I've updated the issue to match the consensus.

#11 - 04/10/2018 02:11 PM - daviddavis

- *Description updated*

#12 - 04/10/2018 07:44 PM - bmbouter

- *Groomed changed from No to Yes*
- *Tags Documentation added*

This story looks fully groomed with agreement from several other core devs. I also tagged it as a docs story.

#13 - 04/11/2018 03:58 PM - amacдона@redhat.com

- *Sprint Candidate changed from No to Yes*

#14 - 04/11/2018 05:44 PM - amacdona@redhat.com

- Sprint set to Sprint 35

#15 - 04/13/2018 03:42 PM - amacdona@redhat.com

- Subject changed from *As a plugin writer, I can define endpoints for multiple content types and be assured my endpoints don't conflict with other plugins* to *As a plugin writer, I have docs to define endpoints for multiple namespaced content types*

#16 - 04/16/2018 09:22 PM - daviddavis

- Related to Issue #3572: Move 'content/python' to 'content/python/packages' added

#17 - 04/19/2018 05:12 PM - dkliiban@redhat.com

- Sprint/Milestone set to 3.0

#18 - 04/23/2018 04:27 PM - rchan

- Sprint changed from Sprint 35 to Sprint 36

#19 - 04/25/2018 12:19 AM - daviddavis

- Related to Task #3601: Move /content/file/ to /content/file/files/ added

#20 - 05/11/2018 11:01 PM - rchan

- Sprint changed from Sprint 36 to Sprint 37

#21 - 06/01/2018 11:12 PM - rchan

- Sprint changed from Sprint 37 to Sprint 38

#22 - 06/22/2018 01:33 PM - amacdona@redhat.com

- Project changed from Pulp to 27

- Sprint/Milestone deleted (3.0)

#23 - 06/26/2018 03:16 PM - rchan

- Sprint changed from Sprint 38 to Sprint 39

#24 - 07/06/2018 02:50 PM - amacdona@redhat.com

- Description updated

#25 - 07/06/2018 07:59 PM - daviddavis

- Status changed from NEW to ASSIGNED

- Assignee set to daviddavis

#26 - 07/06/2018 08:27 PM - daviddavis

- Status changed from ASSIGNED to POST

https://github.com/asmacdo/plugin_template/pull/3

#27 - 07/16/2018 01:11 AM - dkliiban@redhat.com

- Sprint changed from Sprint 39 to Sprint 40

#28 - 08/06/2018 03:17 PM - rchan

- Sprint changed from Sprint 40 to Sprint 41

#29 - 08/27/2018 03:18 PM - rchan

- Sprint changed from Sprint 41 to Sprint 42

#30 - 09/01/2018 02:06 AM - dalley

- Status changed from POST to MODIFIED

https://github.com/pulp/plugin_template/pull/15/

#31 - 09/26/2018 09:03 AM - werwty

- % Done changed from 0 to 100

Applied in changeset commit:d73ec31f75db6dfdebab8742982ea350cb0475a8.

#32 - 04/26/2019 10:36 PM - bmbouter

- Tags deleted (Pulp 3, Pulp 3 MVP)

#33 - 05/02/2019 07:46 PM - bmbouter

- Tags Plugin Template added

#34 - 05/02/2019 07:51 PM - bmbouter

- Project changed from 27 to Pulp

The plugin template Redmine project is being consolidated into the Pulp Redmine project so all issues are being moved over.

#35 - 05/02/2019 08:06 PM - bmbouter

- Sprint/Milestone set to 3.0