RPM Support - Issue #4215

When uploading an invalid rpm such as a non utf8 RPM, users should get a friendly error message

11/29/2018 08:13 PM - kersom

Status:	NEW		**Start date:**	
Priority:	Normal		**Due date:**	
Assignee:			**Estimated time:**	0:00 hour
Category:				
Sprint/Milestone:				
Severity:	2. Medium		**Groomed:**	No
Version:			**Sprint Candidate:**	No
Platform Release:			**Tags:**	
OS:			**Sprint:**	
Triaged:	Yes		**Quarter:**	

Description

When users upload an invalid RPM such as one that has non-utf8 characters in their headers, they should get a 4xx response and a user friendly error message. Currently they receive a 500.

Steps to reproduce.

```
http POST http://localhost:8000/pulp/api/v3/repositories/ name=foo

export REPO_HREF=$(http :8000/pulp/api/v3/repositories/ | jq -r '.results[] | select(.name == "foo") | ._href')

wget https://repos.fedorapeople.org/pulp/pulp/fixtures/rpm-with-non-utf-8/rpm-with-non-utf-8-1-1.fc25.noarch.rpm

http --form POST http://localhost:8000/pulp/api/v3/artifacts/ file@./rpm-with-non-utf-8-1-1.fc25.noarch.rpm

http POST http://localhost:8000/pulp/api/v3/content/rpm/packages/ relative_path=rpm-with-non-utf-8-1-1.fc25.noarch.rpm artifact="/pulp/api/v3/artifacts/1/" filename=rpm-with-non-utf8.rpm
```

Traceback

```
HTTP/1.1 500 Internal Server Error
Content-Length: 20215
Content-Type: text/plain; charset=utf-8
Date: Thu, 29 Nov 2018 15:41:48 GMT
Server: WSGIServer/0.2 CPython/3.7.1
Vary: Cookie
X-Frame-Options: SAMEORIGIN

UnicodeDecodeError at /pulp/api/v3/content/rpm/packages/
'utf-8' codec can't decode byte 0x80 in position 168: invalid start byte

Request Method: POST
Request URL: http://localhost:8000/pulp/api/v3/content/rpm/packages/
Django Version: 2.1.3
Python Executable: /home/vagrant/.virtualenvs/pulp/bin/python3
Python Version: 3.7.1
Python Path: ['/home/vagrant/.virtualenvs/pulp/bin', '/usr/lib64/python37.zip', '/usr/lib64/python3.7', '/usr/lib64/python3.7/lib-dynload', '/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages', '/home/vagrant/devel/pulp/pulpcore', '/home/vagrant/devel/pulp/plugin', '/home/vagrant/pulp_rpm', '/home/vagrant/.virtualenvs/pulp/lib/python3.7/site-packages']
```

```
Server time: Thu, 29 Nov 2018 15:41:48 +0000
Installed Applications:
['django.contrib.admin',
 'django.contrib.auth',
 'django.contrib.contenttypes',
 'django.contrib.sessions',
 'django.contrib.messages',
 'django.contrib.staticfiles',
 'django_filters',
 'drf_yasg',
 'rest_framework',
 'pulpcore.app',
 'pulp_file.app.PulpFilePluginAppConfig',
 'pulp_rpm.app.PulpRpmPluginAppConfig',
 'crispy_forms',
 'django_extensions']
Installed Middleware:
['django.middleware.security.SecurityMiddleware',
 'django.contrib.sessions.middleware.SessionMiddleware',
 'django.middleware.common.CommonMiddleware',
 'django.middleware.csrf.CsrfViewMiddleware',
 'django.contrib.auth.middleware.AuthenticationMiddleware',
 'django.contrib.messages.middleware.MessageMiddleware',
 'django.middleware.clickjacking.XFrameOptionsMiddleware']


Traceback:

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/django/core/handlers/exception
.py" in inner
  34.                response = get_response(request)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/django/core/handlers/base.py"
in _get_response
  126.                response = self.process_exception_by_middleware(e, request)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/django/core/handlers/base.py"
in _get_response
  124.                response = wrapped_callback(request, *callback_args, **callback_kwargs)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/django/views/decorators/csrf.p
y" in wrapped_view
  54.          return view_func(*args, **kwargs)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/rest_framework/viewsets.py" in
 view
  116.              return self.dispatch(request, *args, **kwargs)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/rest_framework/views.py" in di
spatch
  495.                response = self.handle_exception(exc)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/rest_framework/views.py" in ha
ndle_exception
  455.                self.raise_uncaught_exception(exc)

File "/home/vagrant/.virtualenvs/pulp/lib64/python3.7/site-packages/rest_framework/views.py" in di
spatch
  492.                response = handler(request, *args, **kwargs)

File "/usr/lib64/python3.7/contextlib.py" in inner
  74.                  return func(*args, **kwds)

File "/home/vagrant/pulp_rpm/pulp_rpm/app/viewsets.py" in create
  96.             package = Package.createrepo_to_dict(cr_pkginfo)

File "/home/vagrant/pulp_rpm/pulp_rpm/app/models.py" in createrepo_to_dict
  243.             'description': getattr(package, CREATEREPO_PACKAGE_ATTRS.DESCRIPTION) or '',
```

```
Exception Type: UnicodeDecodeError at /pulp/api/v3/content/rpm/packages/
Exception Value: 'utf-8' codec can't decode byte 0x80 in position 168: invalid start byte
Request information:
USER: admin

GET: No GET data

POST: No POST data

FILES: No FILES data

COOKIES: No cookie data

META:
CONTENT_LENGTH = '137'
CONTENT_TYPE = 'application/json'



[vagrant@p3 ~]$ cat /etc/redhat-release
Fedora release 29 (Twenty Nine)
```

Related issues:

Related to RPM Support - Test #4210: Test upload of RPM with invalid byte seq...	**CLOSED - COMPLETE**

Associated revisions

Revision 2b13963a - 02/14/2019 04:33 PM - kersom

Verify HTTP exception when uploading nonutf8 rpm

Add test to assert that HTTP exception is raised when uploading a non-utf8 RPM.

https://pulp.plan.io/issues/4210 closes: #4210

https://pulp.plan.io/issues/4215 ref: #4215

History

#1 - 11/29/2018 08:15 PM - kersom

- Description updated

#2 - 11/29/2018 08:22 PM - kersom

- Subject changed from Pulp does not support upload of non ascii RPM to Pulp does not support upload of non utf8 RPM

- Description updated

#3 - 11/29/2018 08:47 PM - amacdona@redhat.com

- Project changed from Pulp to RPM Support

#4 - 11/29/2018 09:09 PM - kersom

- Related to Test #4210: Test upload of RPM with invalid byte sequences embedded in their headers added

#5 - 11/30/2018 04:54 PM - bmbouter

The Pulp2 behavior for a RPM to Pulp2 with non utf-8 chars in certain fields would have those invalid chars removed. That's good for being able to
sync repositories with invalidly formed RPMs. It's not good because Pulp is mutating the data in unexpected ways. For example now the checksum of
that field won't validate correctly after passing through Pulp which is a problem. The real fix is for those RPMs to have their metadata correctly utf-8

encoded.

Note that [per the spec in section 2.3.1. RPMs expect utf-8 encoding](#) for various fields, so Pulp3 is correct in rejecting an encoding it can't interpret. Since we aren't getting active bug reports from users, I think we should close this for now. I'm leaving open to go back through triage.

Other ideas and thoughts/concerns are welcome.

#6 - 12/04/2018 04:51 PM - daviddavis

- Subject changed from Pulp does not support upload of non utf8 RPM to When uploading an invalid rpm such as a non utf8 RPM, users should get a friendly error message

- Description updated

- Triaged changed from No to Yes

Updating issue to better handle invalid RPMs.

#7 - 04/26/2019 10:33 PM - bmbouter

- Tags deleted (Pulp 3)