

## RPM Support - Story #3202

### As a user, I can sync RPM/SRPM/Erratum from a remote Yum/DNF repository

12/14/2017 08:07 PM - ttereshc

<b>Status:</b>	CLOSED - CURRENTRELEASE	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	ttereshc	<b>% Done:</b>	67%
<b>Category:</b>		<b>Estimated time:</b>	0:00 hour
<b>Sprint/Milestone:</b>	Pulp 3 RPM MVP	<b>Tags:</b>	
<b>Platform Release:</b>		<b>Sprint:</b>	Sprint 42
<b>Groomed:</b>	No	<b>Quarter:</b>	
<b>Sprint Candidate:</b>	No		

#### Description

As a user, I can sync RPM/SRPM/Erratum from a remote Yum/DNF repository.

Other unknown types of a content should be ignored during sync.

This story is complete when:

- I can initiate a sync from remote Yum/DNF repo
- The sync completes without error
- I can see that the expected content was added to the repo

#### Pseudo Code First Stage Example

The sync will create a Stages API first stage and then pass all of them to DeclarativeVersion. Here is some pseudocode that can run inside of the `__call__()` of the first stage.

```
with ProgressBar(message='Downloading Metadata') as pb:
    repomd_url = url = self.remote.url + '/reodata/repomd.xml'
    downloader = self.remote.get_downloader(repomd_url) # get the downloader
    result = await downloader.run() # downloading happens here
    pb.increment() # tell the user we downloading something

    other_metadata_files = get_other_metadata_files_as_list(result) # gives urls of comps
, updateinfo, etc.
    downloaders = []
    for url in other_metadata_files:
        downloader = self.remote.get_downloader(repomd_url) # get the downloader
        downloaders.append(downloader.run()) # This only creates the coroutine, it
doesn't run it

        while downloaders:
            done, downloaders = await asyncio.wait(pending, return_when=asyncio.FIRST_C
OMPLETED)
            for finished_downloader in done:
                pb.increment() # tell the user we downloading something
                in_memory_parsed_metadata = createrepo_c.load_xml(finished_do
wnloader.path)

                for package in in_memory_parsed_metadata:
                    if is_updaterecord(package):
                        content = UpdateRecord(content_data_
from_package)
                        artifact = Artifact(digest_data_from
_package)
                        da = DeclarativeArtifact(artifact, u
rl, entry.relative_path, self.remote)
                        dc = DeclarativeContent(content=file
, d_artifacts=[da])
                        await out_q.put(dc)
```

```

        if is_packagerecord(package):
            # Similar to what we did only usin
g RpmContent / SrpmContent

```

The `call` function will become long, so consider breaking it up into additional coroutine methods on the object. For example if we made a `build_da_dc_and_emit()` coroutine it would be defined like:

```

async def build_da_dc_and_emit(self, content, artifact):
    da = DeclarativeArtifact(artifact, url, entry.relative_path, self.remote)
    dc = DeclarativeContent(content=file, d_artifacts=[da])
    await out_q.put(dc)

# Then in your code call it with:
await self.build_da_dc_and_emit(content, artifact)

```

#### Subtasks:

Task # 3933: Save UpdateCollection and UpdateCollectionPackage in bulk	<b>CLOSED - CURRENT</b>
Story # 3934: As a plugin writer, I can have a stage that removes duplicates	<b>CLOSED - CURRENT</b>
Task # 3942: Store a digest of the fields for an UpdateRecord	<b>NEW</b>

#### Related issues:

Related to RPM Support - Test #4108: Test syncing RPM/DRPM/SRPM/Erratum	<b>ASSIGNED</b>
Blocked by RPM Support - Task #3199: Create model(s) for a Package content type	<b>CLOSED - CURRENTRELEASE</b>

#### Associated revisions

##### Revision d9f95bd8 - 08/23/2018 10:49 PM - daviddavis

Initial pass at syncing rpm and erratum content

This handles creating packages and update records from an RPM remote. UpdateCollections and their packages are not included.

ref #3202 <https://pulp.plan.io/issues/3202>

##### Revision fcd156b3 - 08/24/2018 07:11 PM - daviddavis

Parsing erratum relationships and storing them on the model

ref #3202 <https://pulp.plan.io/issues/3202>

#### History

##### #1 - 12/14/2017 08:17 PM - ttereshc

- Sprint/Milestone set to Pulp 3 RPM MVP

##### #2 - 12/14/2017 08:19 PM - ttereshc

- Blocked by Task #3199: Create model(s) for a Package content type added

##### #4 - 02/20/2018 07:18 PM - ttereshc

- Subject changed from *As a user, I can sync RPM/SRPM from a remote Yum/DNF repository* to *As a user, I can sync RPM/SRPM/Erratum from a remote Yum/DNF repository*

##### #5 - 02/20/2018 07:19 PM - ttereshc

- Description updated

**#6 - 05/25/2018 02:00 PM - ttereshc**

- Sprint set to Sprint 37

**#7 - 06/01/2018 11:11 PM - rchan**

- Sprint changed from Sprint 37 to Sprint 38

**#8 - 06/26/2018 03:16 PM - rchan**

- Sprint changed from Sprint 38 to Sprint 39

**#9 - 07/16/2018 01:07 AM - dkliban@redhat.com**

- Sprint deleted (Sprint 39)

**#10 - 08/09/2018 03:16 PM - ttereshc**

- Sprint set to Sprint 41

**#11 - 08/09/2018 04:48 PM - bmbouter**

- Description updated

Posting some sync pseudocode

**#12 - 08/09/2018 05:15 PM - bmbouter**

- Description updated

Adding an example about breaking the code up into smaller coroutines.

**#13 - 08/10/2018 10:40 AM - milan**

- Status changed from NEW to ASSIGNED

- Assignee set to milan

**#14 - 08/13/2018 10:17 AM - milan**

- Status changed from ASSIGNED to NEW

- Assignee deleted (milan)

**#15 - 08/13/2018 06:03 PM - ttereshc**

- Status changed from NEW to ASSIGNED

- Assignee set to ttereshc

**#16 - 08/19/2018 06:20 PM - ttereshc**

WIP PR [https://github.com/pulp/pulp\\_rpm/pull/1160](https://github.com/pulp/pulp_rpm/pull/1160)

**#17 - 08/27/2018 03:03 PM - rchan**

- Sprint changed from Sprint 41 to Sprint 42

**#18 - 09/13/2018 03:35 PM - daviddavis**

- Status changed from ASSIGNED to MODIFIED

**#19 - 10/31/2018 02:17 PM - kersom**

- Related to Test #4108: Test syncing RPM/DRPM/SRPM/Erratum added

**#20 - 04/26/2019 10:37 PM - bmbouter**

- Tags deleted (Pulp 3)

**#21 - 12/13/2019 08:54 AM - ttereshc**

- Status changed from MODIFIED to CLOSED - CURRENTRELEASE