RPM Support - Test #5055

[EPIC] Ursine RPM Copy dependencies on modular RPMS from Default Modules needs to be added

06/27/2019 05:17 PM - bherring

Status:	NEW		
Priority:	High		
Assignee:			
Category:			
Sprint/Milestone:			
Version:		**Sprint:**	
Platform Release:		**Quarter:**	
Tags:	Pulp 2		

Description

History

There is currently a 'policy decision' that modules in the base repo (of rhel) don't rely on modular rpms, but that it's not an engineering limitation, and that fedora and rhel will likely do so at some point in the future. This is already a consideration for fedora and fedora-updates repos.

At least in Fedora, you can expect that there will be content in the updates-testing repo depending on content in updates-modular and/or fedora-modular.

This means Pulp will **eventually** need to support multiple source repos for copy.

Problem

As pulp is delivered today, Ursine RPM deps on modular RPMs are NOT covered by test.

Normal, non-modular (ursine) [0] RPMs can depend on module packages.

As an example, the postgres language RPMs depend on the default stream of the postgresql module.

When this is the case, the default module and all artifacts related to that module and the URSINE RPM are ALL copied to the target repo.

At this time, to account for this scenario, a hybrid repo containing URSINE and MODULAR RPMs with modules will be required.

Example

Recursive

Before

- Copy Ursine RPM "zebra-1.0.rpm" from Repo A to B
- Zebra requires modular RPM bar-1.0.rpm and has no other dependencies

```
default module: module-FOO: [foo-1.0.rpm, bar-1.0.rpm, baz-1.0.rpm]

repo A
  |
  |---- chicken-1.1.rpm
  |---- zebra-1.0.rpm
  |----module-FOO
  |----foo-1.0.rpm
  |----bar-1.0.rpm
  |----baz-1.0.rpm

repo B
  |
```

```
     |----bar-0.7.rpm
```

After Copy

Result of copying ursine RPM zebra-1.0.rpm from repo A to repo B:

```
repo B
 |
 |---- zebra-1.0.rpm
 |----module-FOO
 |----foo-1.0.rpm
 |----bar-1.0.rpm
 |----baz-1.0.rpm
 |----bar-0.7.rpm
```

```
All available artifacts are copied, always. There is no way to copy just module on its own,
if any of its artifacts are present in a source repo (repo A).
```

Solution

- Add Ursine RPM permutations that exercise this case for recursive and non_recursive Ursine RPM copies in mixed repos with modular RPMs where default streams **are** and **are not** defined.

Note:

- the entire module should be treated as a single content unit to the greatest extent possible. it should copy the module that provides both A and B, all if its artifacts, and, the module default
- a module RPM should never be treated as just a normal RPM
- If module has multiple streams, ONLY the artifacts associated with the default module and the default module are copied, correct?
  - only the artifacts associated with the default module stream should ever be considered in the first place. if there is no default stream for a module, then RPMs should not be able to depend on it

References

[0] - https://docs.fedoraproject.org/en-US/modularity/architecture/consuming/dnf-behavior/
[1] - https://docs.pulpproject.org/plugins/pulp_rpm/user-guide/features.html?highlight=modularity

Related issues:

Related to RPM Support - Issue #5063: Module defaults need to be considered a...	**CLOSED - CURRENTRELEASE**

Associated revisions

Revision 6b0530ff - 08/07/2019 09:36 PM - dalley

Take copied modulemd_defaults into consideration for module errata copy

re: #5055 https://pulp.plan.io/issues/5055

History

#1 - 07/01/2019 07:13 PM - bherring

- Related to Issue #5063: Module defaults need to be considered and copied automatically during recursive dependency solving added

#2 - 07/10/2019 08:09 PM - bherring

- Subject changed from Ursine RPM Copy dependencies on modular RPMS from Default Modules needs to be added to [EPIC] Ursine RPM Copy dependencies on modular RPMS from Default Modules needs to be added

Update

- Ensure that there is already a test for module copy that the module default is copied as well.
- If not, write a new test to cover this work with a linked ticket (considering this an EPIC ticket at this point).

```
14:06 <dalley> in this case I'm talking about, no ursine RPMs are involved at all -- if
               you're doing a direct Pulp copy of a module and that module has a default,
               the default should be automatically copied
```

#3 - 08/20/2019 04:40 PM - dalley

- Priority changed from Normal to High

#4 - 08/20/2019 04:41 PM - dalley

- Tags Pulp 2 added

#5 - 09/04/2019 03:43 PM - bherring

- Status changed from NEW to ASSIGNED

- Assignee set to bherring

#6 - 01/20/2020 07:24 PM - bherring

- Status changed from ASSIGNED to NEW

- Assignee deleted (bherring)