

RPM Support - Test #4995

Test # 4942 (CLOSED - COMPLETE): [EPIC] - Pulp2 - 2.20

Modules are incorrectly copied when their artifacts shadow the names of non-modular RPM dependencies

06/19/2019 09:14 PM - bherring

Status: CLOSED - COMPLETE	
Priority: Normal	
Assignee: bherring	
Category:	
Sprint/Milestone: 2.20.0	
Version:	Sprint:
Platform Release: 2.20.0	Quarter:
Tags: Pulp 2	
Description	
<p>When Pulp tries to copy a module like openmpi or mariadb from the Fedora modular repository (https://dl.fedoraproject.org/pub/fedora/linux/updates/30/Modular/x86_64/), using either the recursive or recursive-conservative depsolving strategies, it will additionally (and incorrectly) copy modules like perl, perl-bootstrap, and setools.</p> <p>This happens because one of the artifacts in these modules (modules: openmpi and mariadb) depends on the perl package, which is meant to be provided by the normal Fedora repositories. However in this case there also exists a "perl" module, and libsolv tries to use artifacts from the "perl" module to satisfy the dependency. This should not happen because the openmpi and mariadb modules do not declare a modular dependency in the "dependencies" section of their modulemd documents.</p> <p>Dependency solving uses a libsolv "pool" that contains the entire contents of the source repository, and in conservative mode, also the entire contents of the target repository. We need to change the behavior of the depsolver such that all non-modular RPMs in the pool are "considered" during depsolving, but only the modular RPMs that are part of the module being copied or an explicitly listed modular dependency are "considered", and all others are excluded from depsolving.</p> <p>I'm unsure if a mechanism to do hide certain units from the depsolver is exposed to us, see: https://github.com/openSUSE/libsolv/issues/258.</p> <p>If not, it may be necessary to hack around the problem by being more selective about what module / modular artifact solvables we load into the pool to begin with.</p> <pre>--- document: modulemd version: 2 data: name: openmpi stream: 4.0 version: 3020190331170644 context: a5b0195c arch: x86_64 summary: Open Message Passing Interface description: >- Open MPI is an open source, freely available implementation of both the MPI-1 and MPI-2 standards, combining technologies and resources from several other projects (FT-MPI, LA-MPI, LAM/MPI, and PACX-MPI) in order to build the best MPI library available. A completely new MPI-2 compliant implementation, Open MPI offers advantages for system and software vendors, application developers, and computer science researchers. For more information, see http://www.open-mpi.org/ . license: module: - MIT content: - BSD and MIT and Romio dependencies: - buildrequires:</pre>	

```
platform: [f30]
requires:
  platform: [f30]
references:
  community: https://www.open-mpi.org/
  documentation: https://www.open-mpi.org/doc/v4.0/
  tracker: https://github.com/open-mpi/ompi/issues
profiles:
  buildroot:
    rpms:
      - openmpi-devel
  default:
    rpms:
      - openmpi
api:
  rpms:
    - openmpi
components:
  rpms:
    openmpi:
      rationale: The core package
      ref: 4.0
      buildorder: 10
      arches: [aarch64, armv7hl, i686, ppc64le, s390x, x86_64]
artifacts:
  rpms:
    - openmpi-0:4.0.1-1.module_f30+3806+d6645847.src
    - openmpi-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-debuginfo-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-debugsource-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-devel-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-devel-debuginfo-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-java-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - openmpi-java-devel-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - python2-openmpi-0:4.0.1-1.module_f30+3806+d6645847.x86_64
    - python3-openmpi-0:4.0.1-1.module_f30+3806+d6645847.x86_64
...

```

See: no "dependencies" listed beyond the standard "platform"

The openmpi-devel package is the one that has a requires on /usr/bin/perl

Related issues:

Copied from RPM Support - Issue #4962: Modules are incorrectly copied when th...

NEW

Associated revisions

Revision 44c9f1ae - 07/03/2019 10:06 PM - bherring

Adding additional modular copy permutations for libsolv regression

With the updated libsolv, the dependency solving on complex repositories was resulting in too many modules, modular RPMs, and ursine RPMs being copied.

This commit will do the following:

- Refactor the modular copy to allow for more modules
- Add a new module to check

closes #4995

History

#1 - 06/19/2019 09:14 PM - bherring

- Copied from Issue #4962: Modules are incorrectly copied when their artifacts shadow the names of non-modular RPM dependencies added

#2 - 06/19/2019 09:14 PM - bherring

- Assignee set to bherring

#3 - 06/24/2019 07:23 PM - bherring

- Status changed from NEW to ASSIGNED

#4 - 06/24/2019 07:27 PM - bherring

- Status changed from ASSIGNED to POST

#5 - 06/24/2019 07:28 PM - bherring

- Status changed from POST to MODIFIED

#6 - 06/25/2019 01:18 PM - ttereshc

- Sprint/Milestone set to 2.20.0

#7 - 07/06/2019 11:38 PM - bherring

Applied in changeset [pulp:pulp-2-tests|44c9f1ae60547053b132e2fe5bb3309a124d5263](https://pulp.plan.io/revisions/44c9f1ae60547053b132e2fe5bb3309a124d5263).

#8 - 08/20/2019 04:51 PM - bherring

- Status changed from MODIFIED to CLOSED - COMPLETE