



CentOS Stream CI Update

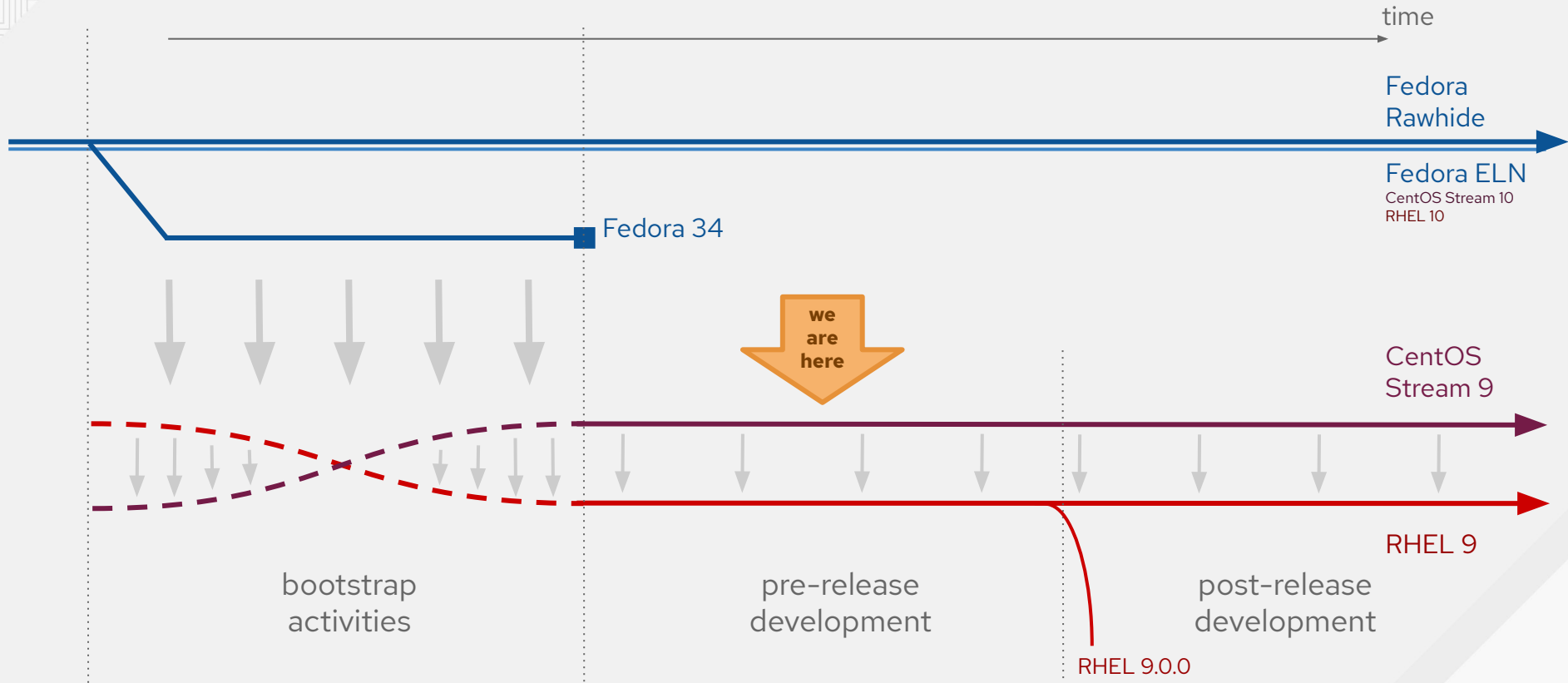
Aleksandra Fedorova

Principal Software Engineer at Red Hat

Fedora, RHEL and CentOS Stream CI

bookwar on IRC

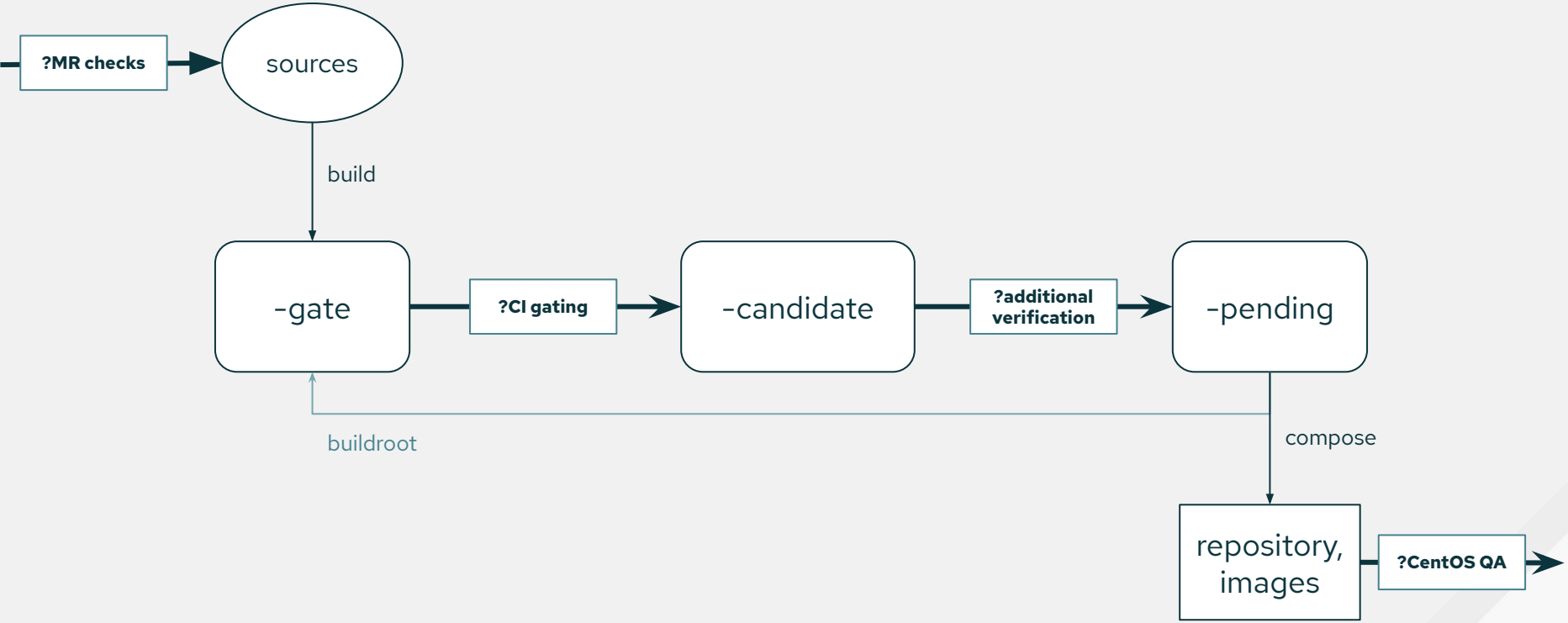
Fedora, CentOS Stream and RHEL



Contribution by package



Pipeline



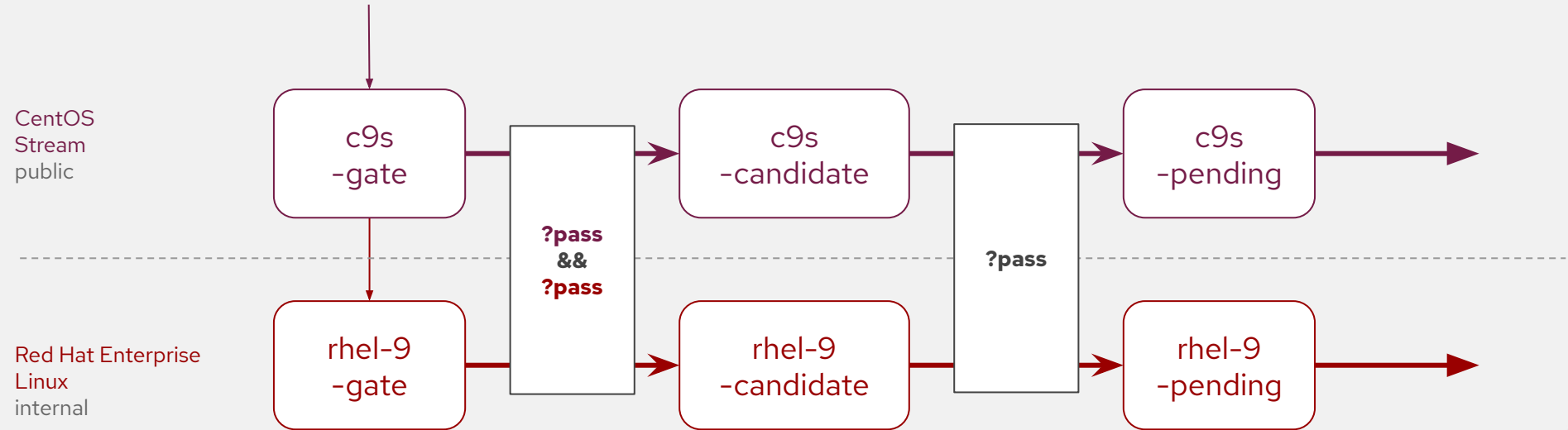
Merge Request (MR) checks

- Every CentOS Stream 9 update is a Merge Request on GitLab
- Anyone can create Merge Request to the CentOS Stream
- Only RHEL Developers can accept it

- **WIP** Zuul CI for CentOS Stream
 - Example merge request in the demo repository
https://gitlab.com/redhat/centos-stream/ci-cd/zuul/rpms/python-mimeparse/-/merge_requests/1
 - Docs in Fedora: <https://fedoraproject.org/wiki/Zuul-based-ci>

- **WIP** Test via additional CI systems

Going through tags together



Current state

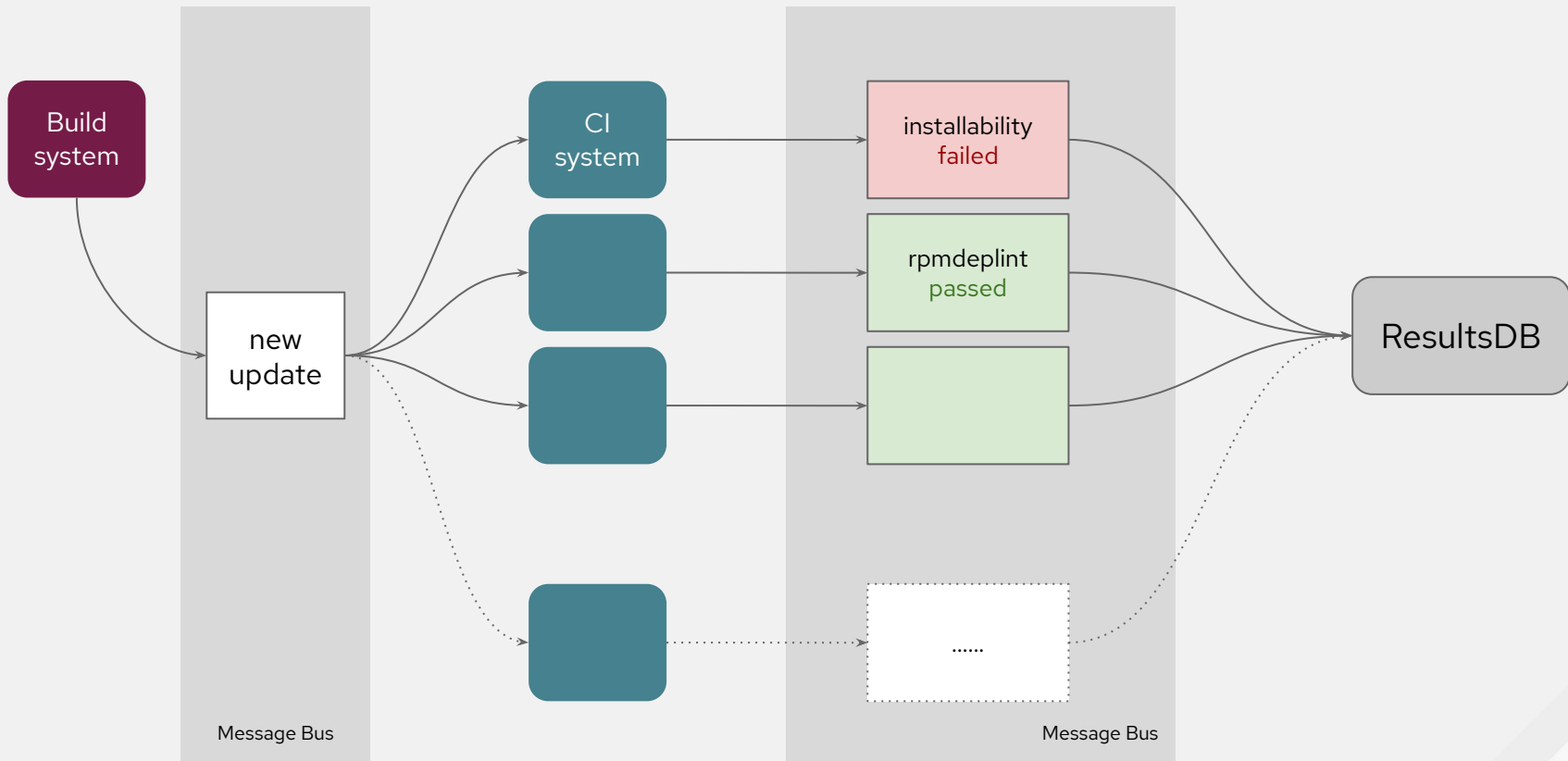
What works:

- RHEL 9 tests are enabled
- CentOS Stream 9 packages **are already gated** on RHEL 9 test results

What is planned:

- generic CentOS Stream tests, as in Fedora
https://docs.fedoraproject.org/en-US/ci/generic_tests/
 - installability
 - rpminspect
 - rpmdeplint
- Additional CI systems, as in Fedora
<https://docs.fedoraproject.org/en-US/ci/onboarding-of-a-ci-system/>

Event-driven CI



Test triggers and test results

- Build system sends a **New update is coming** message
- CI systems subscribe to Message Bus and listen to such messages
- Each CI system decides on its own how to handle the new update event
 - One CI system may react to updates of one particular package
 - Another may test all updates with a generic test
- When CI system processes the event, CI system sends the **test completed** message back to the Message Bus
- All **test completed** messages are aggregated in the ResultsDB(WIP)

All Fedora and CentOS Stream messages are public.

https://apps.fedoraproject.org/datagrepper/raw?rows_per_page=1&delta=127800

<https://fedora-messaging.readthedocs.io/en/latest/#user-guide>

How do **you** test the CentOS Stream?

- Grab a message about package being tagged into c9s-gate tag in Koji:
 - https://apps.fedoraproject.org/datagrepper/id?id=2021-ec865ea3-9252-4659-8629-75985a8b1b42&is_raw=true&size=extra-large
- Trigger test for that package wherever you want, for ex. your custom hardware lab
- Send message with the result back to the message bus
- Talk to a package maintainer to make your test blocking for that package

You can test Fedora the same way too!

[How to test Fedora updates with your custom CI](#)

What's next

- Article on blog.centos.org
- Documentation and code to appear at <https://gitlab.com/redhat/centos-stream/ci-cd>
- CentOS Stream CI SIG?



Thank you!

Aleksandra Fedorova

afedorova@redhat.com

bookwar@fedoraproject.org

bookwar on IRC

@**bookwar** on Fosstodon.org (ActivityPub)

@**bookwar_info** on Twitter
