![Fedora logo]

FEDORA RAWHIDE PACKAGES GATING,

FOR REAL!

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AGENDA

- Glossary

- Why gating rawhide?

- The challenges

- State of the art

- Debugging

- Roadmap

- Surprise

GLOSSARY

- Rawhide
  - The, rolling, development version of Fedora

- Dist-git
  - A collection of git repositories (spec + patches)
  - the lookaside cache (sources)

- Koji
  - Fedora's build system
  - Builds are managed in tags
  - Side-tags
    - Tag based on another one and isolated from other tags

GLOSSARY (2)

- Bodhi
  - Fedora's update management system

- Fedora-messaging
  - A amqp based message-bus

- Robotsignatory
  - Message-bus-based application signing builds

WHY GATING RAWHIDE?

- More stable rawhide

- Working composes
    - Quicker turn-around for beta-releases

- Faster update release

- **you break it, you fix it**

THE CHALLENGE

- Make it happen

- Fit in in the existing tooling

- Interrupt as little as possible the packager's workflow

- False negatives

THE PLAN

- Phased roll out
    - Single build update gating
    - Multi build updates gating

- Early user feedback
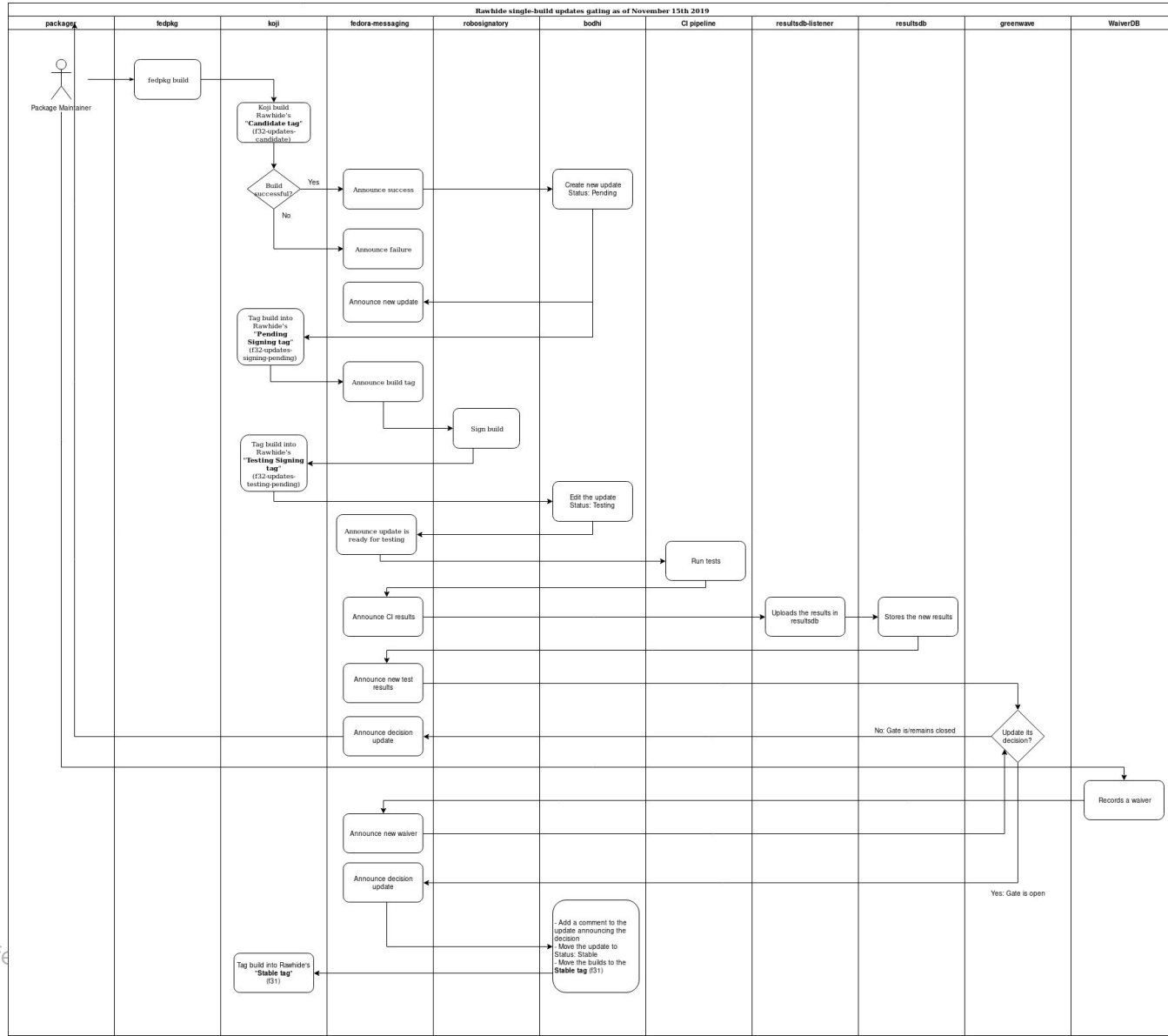

- Polished UX

THE STATE OF THINGS

- Single build updates are gated in rawhide
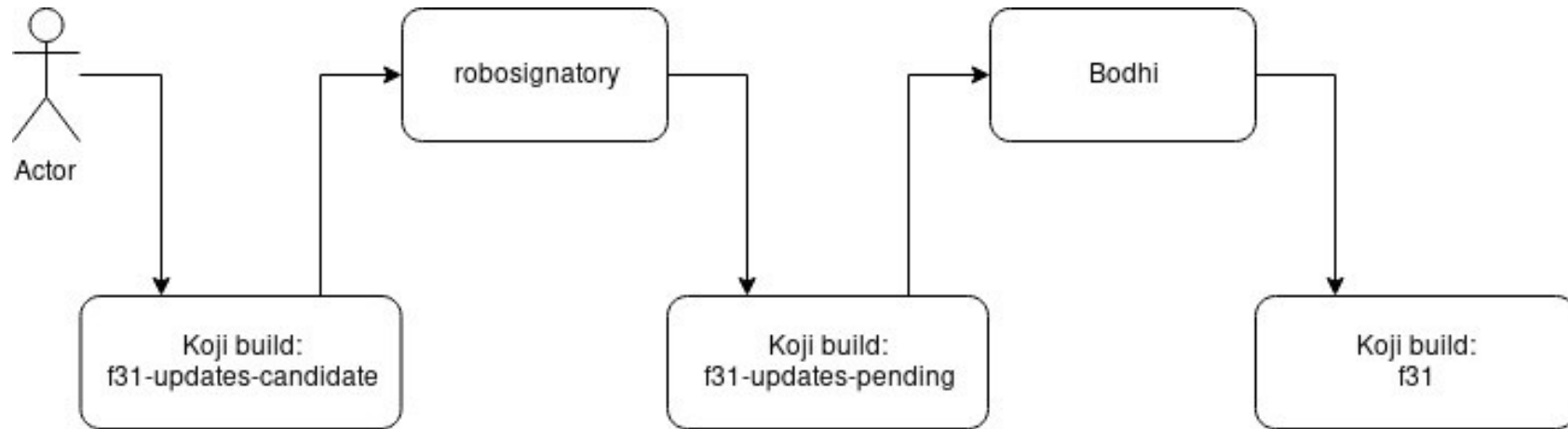
- Multi builds updates are gated in rawhide
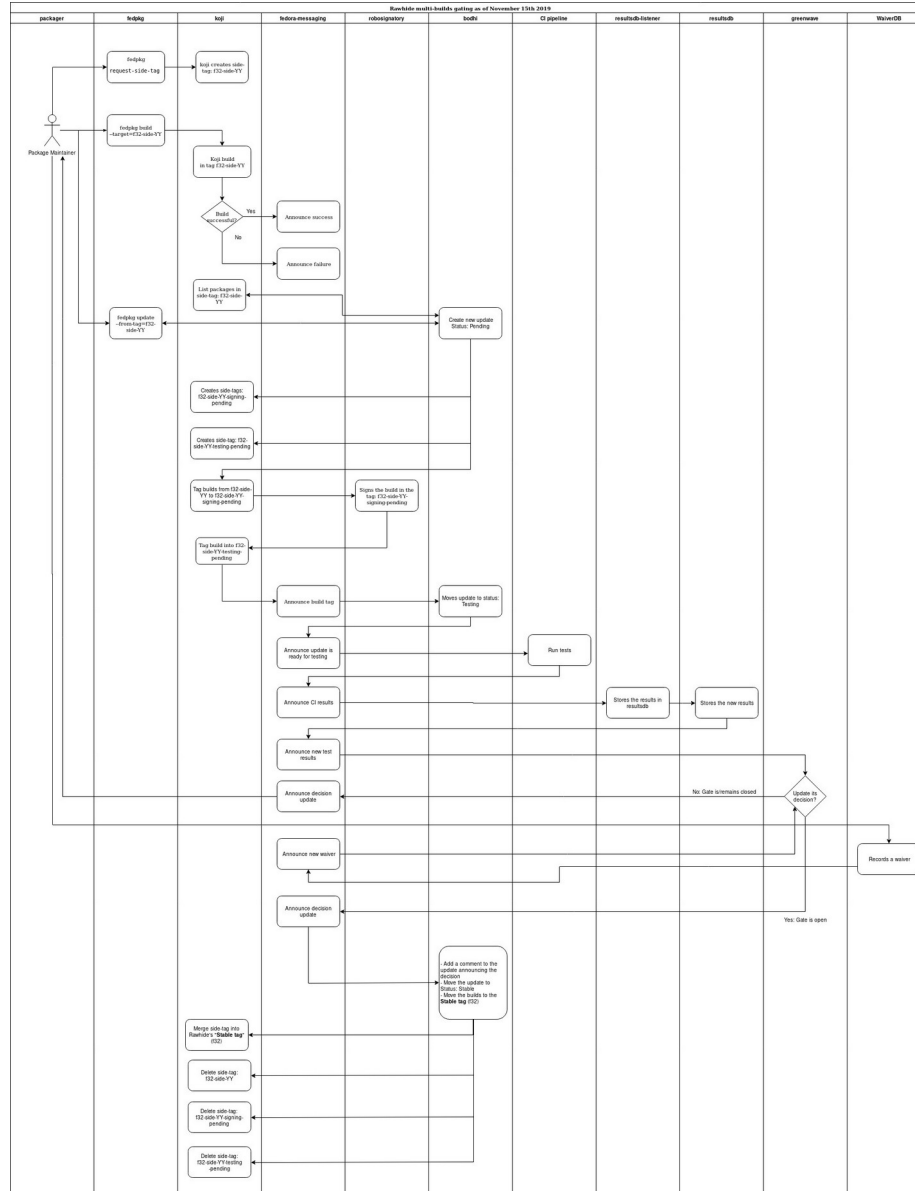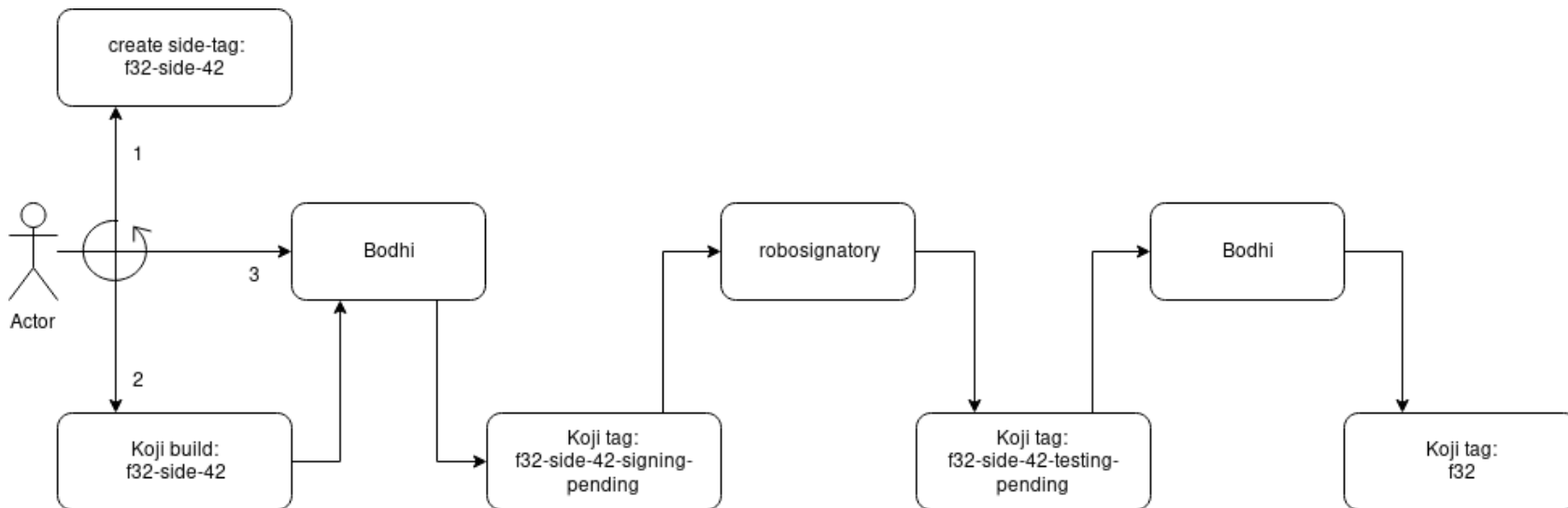
Single build gating

Rawhide single-build updates gating as of November 15th 2019

package	fedpkg	koji	fedora-messaging	robosignatory	bodhi	CI pipeline	resultsdb-listener	resultsdb	greenwave	WaiverDB

Package Maintainer

fedpkg build

Koji build Rawhide's **"Candidate tag"** (f32-updates-candidate)

Build successful? — Yes → Announce success → Create new update Status: Pending

No → Announce failure

Announce new update

Tag build into Rawhide's **"Pending Signing tag"** (f32-updates-signing-pending)

Announce build tag → Sign build

Tag build into Rawhide's **"Testing Signing tag"** (f32-updates-testing-pending)

Edit the update Status: Testing

Announce update is ready for testing → Run tests

Announce CI results → Uploads the results in resultsdb → Stores the new results

Announce new test results

Announce decision update ← No: Gate is/remains closed ← Update its decision?

Records a waiver

Announce new waiver

Announce decision update

- Add a comment to the update announcing the decision
- Move the update to Status: Stable
- Move the builds to the **Stable tag** (f31)

Yes: Gate is open

Tag build into Rawhide's **"Stable tag"** (f31)

SINGLE BUILD GATING (SIMPLIFIED)

Multi-builds gating

Rawhide multi-builds gating as of November 15th 2019

packager	fedpkg	koji	fedora-messaging	robosignatory	bodhi	CI pipeline	resultsdb-listener	resultsdb	greenwave	WaiverDB

MULTI-BUILDS GATING (SIMPLIFIED)

SINGLE BUILD GATING (SIMPLIFIED - UPDATED)
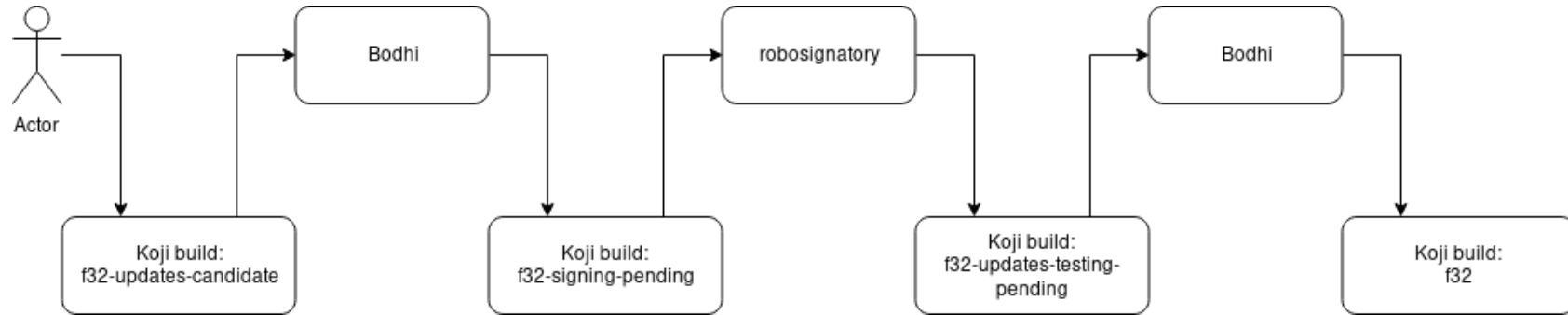
THE GATING DECISION FLOW
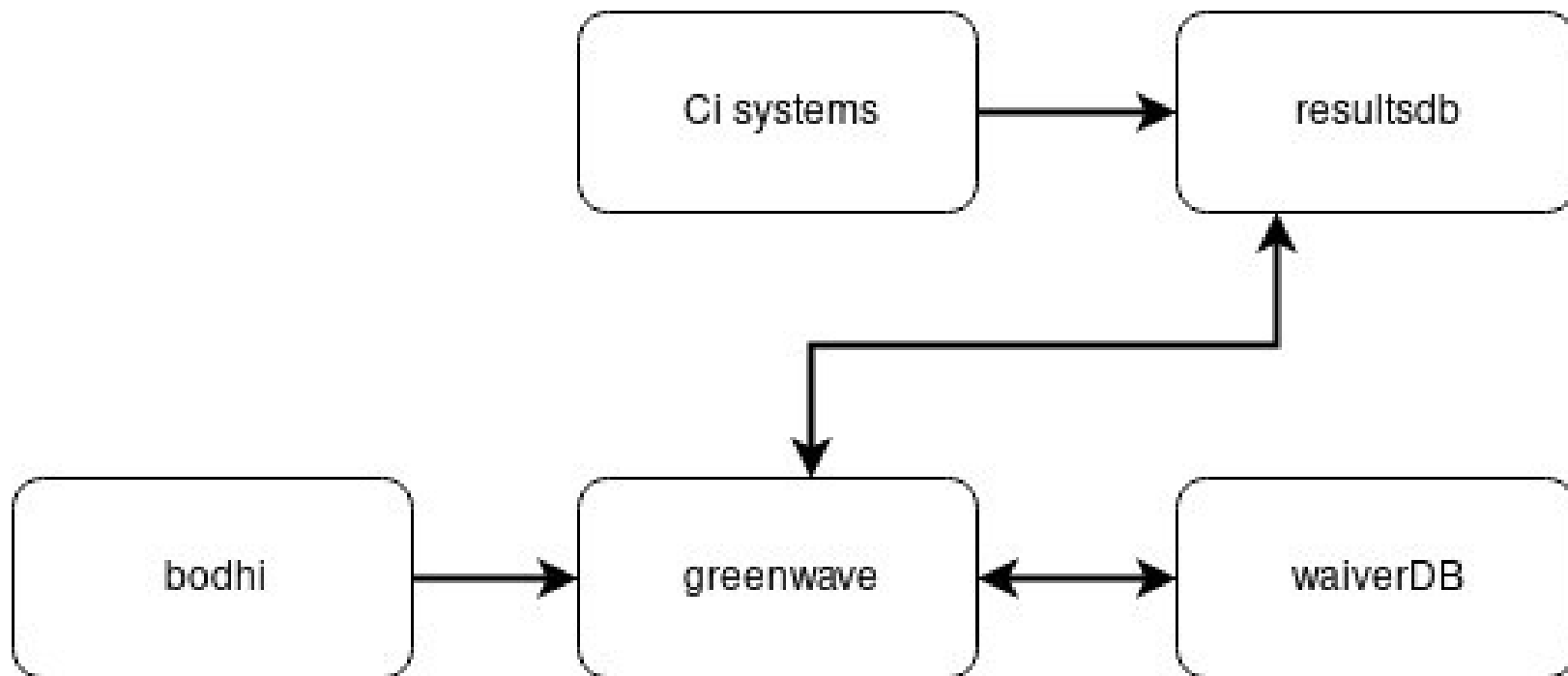
DEBUGGING

- Check the koji tags
  - ``koji buildinfo <nvera>``
  - -updates-candidate   / side-tag
    - Single build only / Multi builds only
  - -signing-pending
    - Waiting on robosignatory
  - -testing-pending
    - Waiting on the CI system / Gated

DEBUGGING (2)

- Check the state of the update in bodhi

    - Pending == Not signed

    - Testing == Tests are running/Gated

    - Stable

USER FEEDBACK

- # of emails from bodhi
  - 5 to 3 for single-build rawhide updates

- New UI in bodhi 5.0
  - Copy/paste build(s)
    - Builds list should be space delimited
  - Still some performance issues when querying koji for builds

- Disable comments on stable updates
  - Reverted

ROADMAP

- Optimize testing and reporting test results for groups (multi-builds updates)

- Better test suite

  - rpminspect

  - Reverse-dependency testing

  - Install/Upgrade/Downgrade...

  - Impact on composes

- Distro-level testing

ROADMAP (2)

- Regular canary testing
  - Single build update
  - Multi-build update

- Mass-rebuilds
  - Signing builds

SURPRISE!

- On-demand side-tag

SURPRISE!

- On-demand side-tag
  - For rawhide but not only!
    - fedpkg chain-build works for stable releases!

THANK YOU

ANY QUESTIONS?

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