Gaudi Development Workflow

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Introduction

Enabling Collaboration

Workflow





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- So far only one person holding the keys to Gaudi repository
- We are moving toward a shared management model
- · I wanted to share a proposal for the development workflow





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Past Model

- Workflow
 - Patch ticket in Savannah (or JIRA)
 - Try to apply the patch
 - Check Gaudi tests
 - Review
 - Fix problems or reject
- Problems
 - No automation
 - · Only one manager





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- We should not work in isolation
 - let the others know what we are doing
 - respect the requirements of others
 - · merging is better than forking
- We cannot enforce collaboration
- But we can help it
 - issue tracking
 - common repository
 - team of managers





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A New Toolbox

New tools are available:

- · Gitlab: project hosting and management
- JIRA: issue tracking and more
- · Jenkins: continuous integration

Let's make use of them.





Introduction

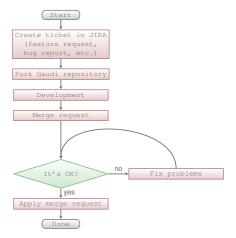
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Proposed Workflow







Definition of Done (DoD)

Minimal requirements before creating a merge request:

- Tests
 - · bug: test to expose it
 - · feature: test that it works
- Documentation
 - bug: describe problem and fix
 - feature: say what, why and how
- Validation
 - · ensure that nothing is broken
- . . .





Review

Multi-tier approval

The merge request must be reviewed by a manager belonging to a collaboration different form the origin of the request.

A manager should:

- · Verify the DoD
- Check conventions (automated)
- Allow fixes and not work-arounds





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Use case

Of course, some times, we need an extremely urgent fix otherwise the world will fall apart.

We can allow exceptions

- bypass workflow steps
- reduced DoD

But

It must be clear that the skipped bits must be established with the highest priority.

Do not forget that we could also have private releases from forks, if needed.





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- · More collaboration is possible...
- ... but it requires some effort

What Next

We need to prepare a document describing in details the development workflow for Gaudi.





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