# Merge requests in GitLab

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## Intro

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- Allow to exchange changes made to source code
- Collaborate with other people on the same project
- Request to merge one brach into another

## Benefits of using GitLab Merge requests

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- Comparison between changes in two branches
- Reviews and discussions proposed modifications inline
- Live preview of the changes when Review Apps configured for the project
- Builds, tests and deployment in a per-branch basis with built-in GitLab  $\mathrm{CI}/\mathrm{CD}$
- Prevent the MR from being merged before it's ready with Work In Progress MRs

### Benefits of using GitLab Merge requests

- Visible deployment process through Pipeline Graphs
- Automatically closure of issues that originated the implementation proposed in the  ${\rm MR}$
- Convenience by reassigning the assignee
- Convenience by assigning a milestone and keeping track of the development
- Easier organization of issues and MRs with labels

## Benefits of using GitLab Merge requests

- Time Estimation & Time Spent with Time Tracking
- Resolve merge conflicts from the UI
- Possible Fast-Forward MRs

• Semi-Linear history MRs – another security layer for pipeline passing

## Benefits of using GitLab Merge requests

- Creation of new MRs by email
- Possible edit of the MR from maintainers

# Merge requests per project

### Merge requests per project

- Project > Merge Requests
- Open/Merged/Closed Requests

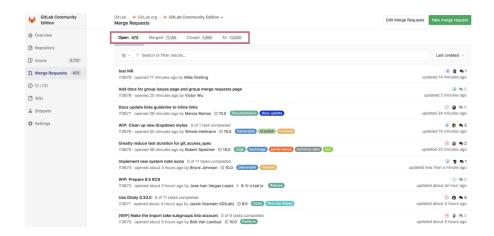


Figure 1: An example of Project MRs

# Merge requests per group

#### Merge requests per group

• Group > Merge Requests

# Removing the source branch

### Removing the source branch

- "Remove source branch when merge request accepted" option on creation of a MR
- Also visible in an existing one



Figure 2: An example of Group MRs

• Visible only to master users



Figure 3: An example of removing source branch

## **Discussions**

#### **Discussions**

- Comments at issues, MRs, snippets, commits, commit diffs
- Resolvable discussions

#### **Discussions**

• Commit discussions in the context of a MR

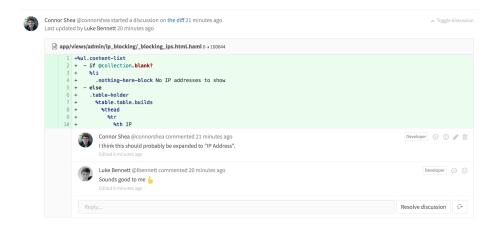
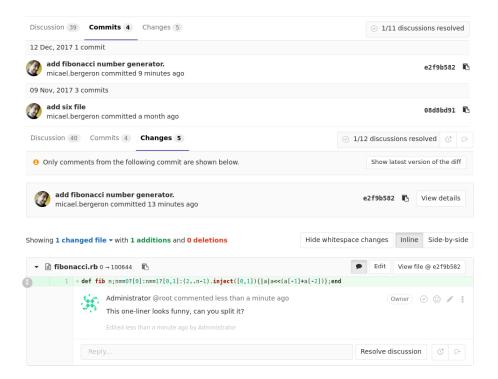


Figure 4: An example of resolvable discussion



## Discussions

- Jumping between unresolved discussions
- Marking a comment or discussion as resolved
- Move all unresolved discussions in a merge request to an issue

• Moving a single discussion to a new issue

## Discussions

- Only allow merge requests to be merged if all discussions are resolved
- $\bullet\,$  Automatically resolve merge request diff discussions when they become outdated
- Threaded discussions
- Image discussions
- Lock discussions

## Automatically close an issue

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• Via Merge Request

Closes #333, #444, and https://gitlab.com/<username>/<projectname>/issues/<xxx>

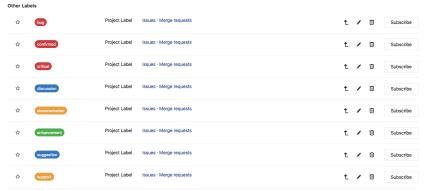
Figure 5: Closing an issue

• From the Issue Board

## Labels

#### Labels

- Allow categorization of issues and MRs using discriptive titles
- Project and group labels



• Issues > Labels

# Fast-Forward Merge requests

## Fast-Forward Merge requests

- Linear Git history
- No merge commits
- $Settings \rightarrow 'Merge\ method' \rightarrow Fast-forward\ merge$

# Semi-Linear history merge requests

### Semi-Linear history merge requests

- Merge commit for every merge
- Merged only if FF possible
- Ensures success by pipeline passing
- Merge Requests: Merge method  $\rightarrow$  Merge commit with semi-linear history

## Creation of new merge requests by email

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- By clicking on "Email a new merge request to this project" button
- The subject the source branch name



• The message body – the MR description