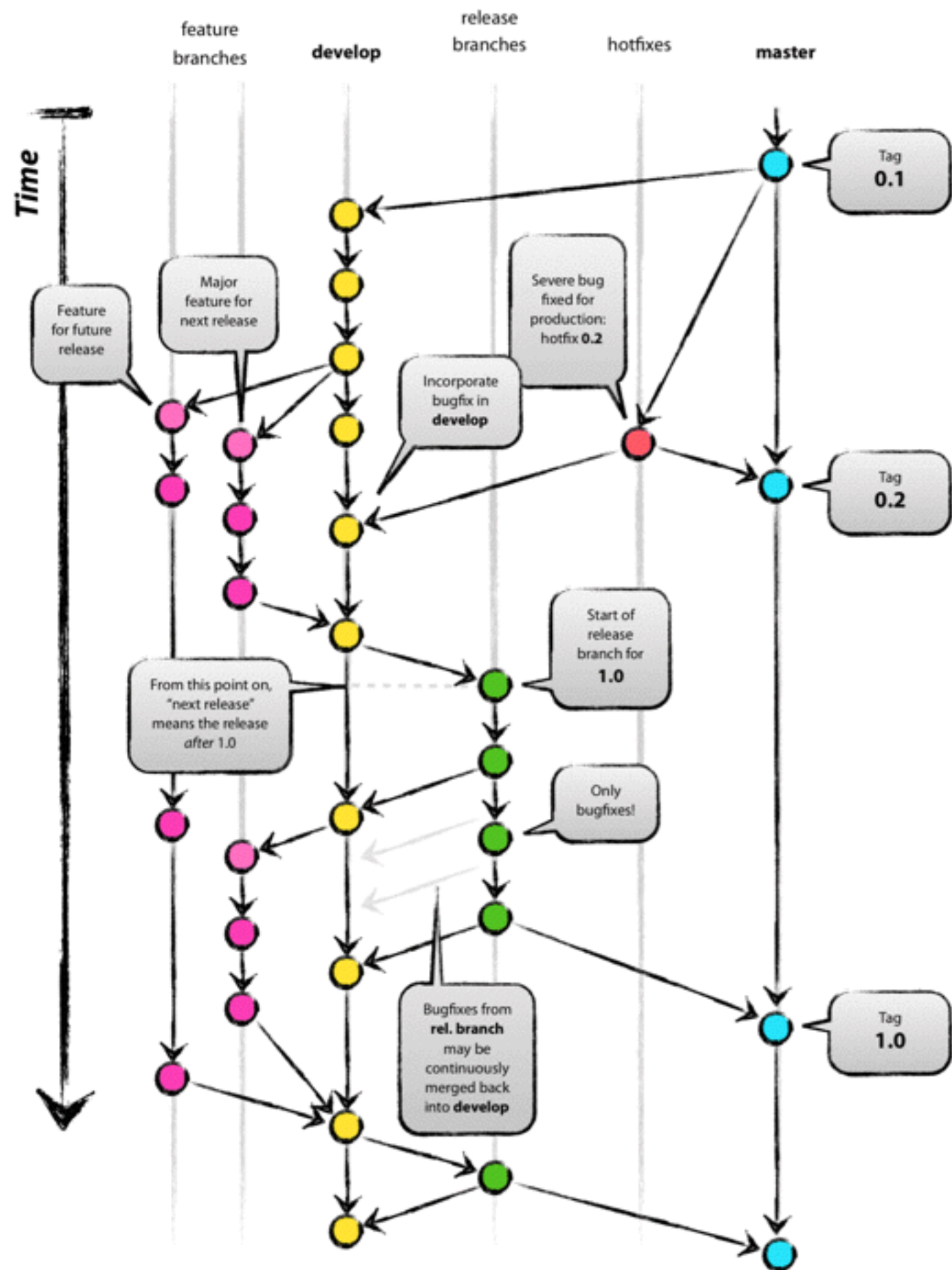


Git Flow 与 GitLab

项目工作流

Git Flow 特点

- master: 主分支，用于对外发布
- develop: 开发分支，用于开发人员开发
- feature 功能分支，用于开发产品功能
- hotfix 修复分支，用于修复线上问题
- release 预发布分支，用于测试和固定版本

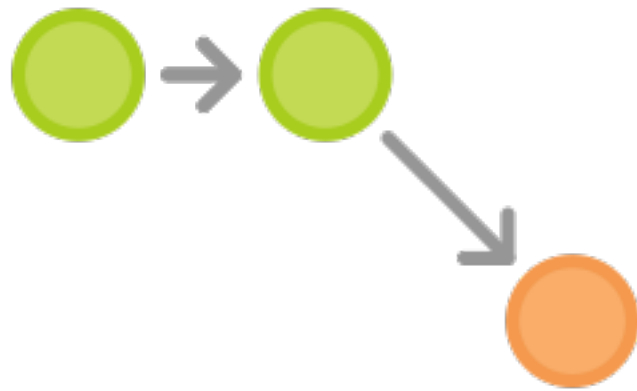


Git Flow 常用命令

- `git flow init` 初始化 git flow
- `git flow feature start` 创建一个功能分支
- `git flow feature finish` 结束一个功能分支, 合并到 `develop` 分支, 并删除功能分支
- `git flow feature publish` 推送一个功能分支
- `git flow feature pull` 拉取一个功能分支
- `git flow feature diff` 和 `develop` 比对修改后的差异
- `git flow feature rename` 重命名功能分支

Git Flow 示例

1. 创建开发分支

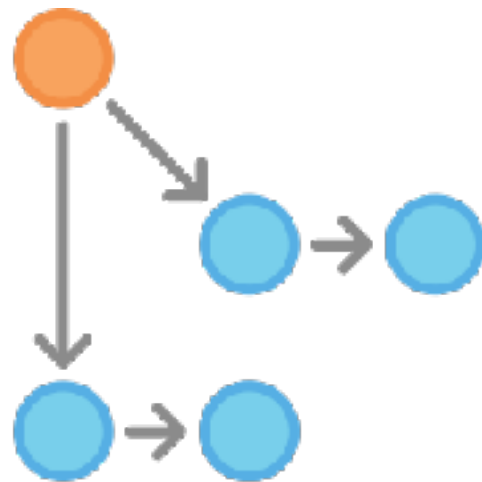


从 master 分支创建一个开发分支 develop, 然后提交到远程仓库

```
git checkout -b develop  
git push -u origin develop
```

开始开发新功能

示例中，小红和小明开始各自的功能开发。他们需要为各自的功能创建相应的分支。新分支不是基于 master 分支，而是应该基于 develop 分支：



创建分支命令

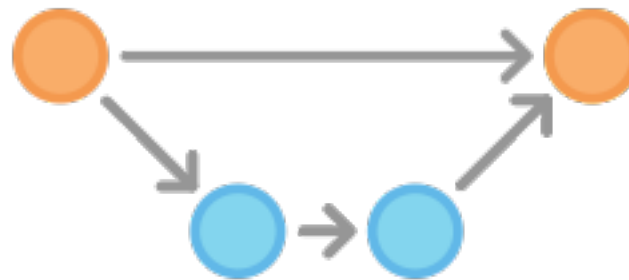
```
git flow feature start some-feature
```

然后编辑、暂存、提交:

```
git status  
git add <some-file>  
git commit -m 'feature info'
```

完成功能开发

添加了提交后，小明觉得他的功能做完了。如果团队使用 Merge Requests，这时候可以发起一个用于合并到develop分支。不然他可以直接合并到本地的 develop 分支后 push 到远程仓库：



git flow 命令：

git flow feature finish some-feature

对于 git 步骤命令：

git checkout develop

git pull origin develop

git merge some-feature

git push origin develop

git branch -d some-feature

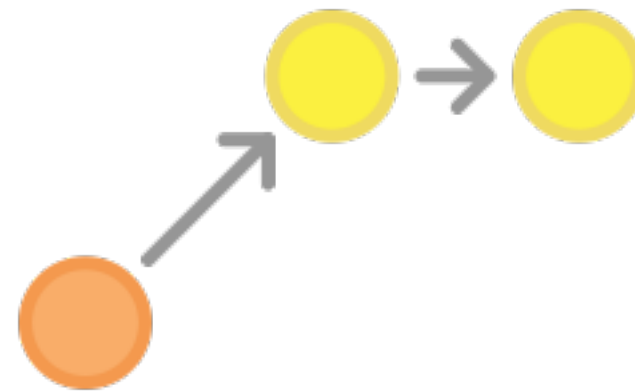
开始准备发布

当我们开始准备发布第一个项目的版本时，像开发功能一样，用一个新的分支来做发布准备，这一步也确定了发布的版本号：

```
git flow release start release-1.0
```

等同 git 命令如下：

```
git checkout -b release-1.0 develop
```

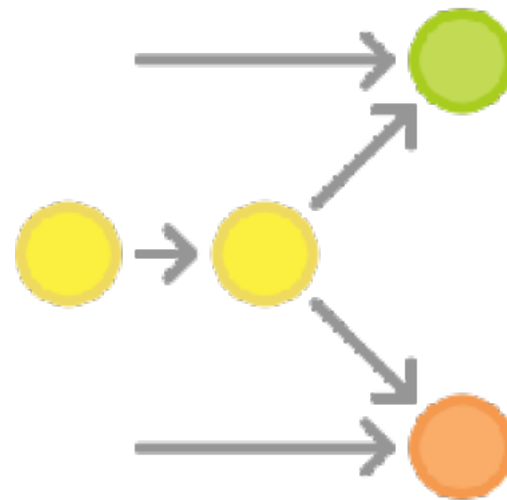


这个分支是整理发布、执行所有测试、更新文档和其它为下面发布做准备操作的地方，像是一个专门用于完善发布的分支。

只要将这个分支并 **push** 到远程仓库，这个发布就是功能冻结的。任何不在 **develop** 分支中的新功能都推到下个发布循环中。

完成发布

一旦准备好了对外发布，将合并修改到master分支和develop分支上，删除发布分支。合并回develop分支很重要，因为在发布分支中已经提交的更新需要在后面的新功能中也要是可用的。另外，如果团队要求Code Review，这是一个发起Merge Request的理想时机。



git flow 命令

```
git flow release finish release-1.0
```

git 命令

```
git checkout master
git merge release-1.0
git push origin master
git checkout develop
git merge release-1.0
git push origin develop
git branch -d release-1.0
```

打 Tag 标记

```
git checkout master
git tag -a v1.0 -m "Initial public release" master
git push --tags
```

修复 Bug

对外发布后，小明和小红一起做下个发布的新功能开发，直到有用户抱怨当前版本存在一个Bug。为了处理Bug，小红（或小明）从 master 分支上拉出了一个修复分支，提交修改以解决问题，然后直接合并回 master 分支：

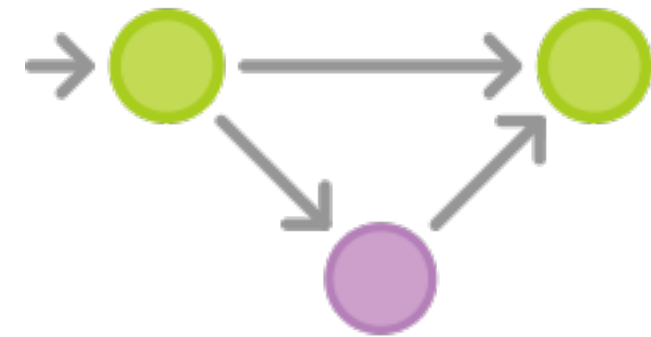
```
git flow hotfix start bug-123
// 修复 Bug 并提交
git flow hotfix finish bug-123
```

对于 git 命令

```
git checkout -b bug-123 master
// 修复 Bug 并提交
git checkout master
git merge bug-123
git push origin master
```

修复分支中新加这些重要修改也需要包含到 develop 分支中，所有是需要执行一个合并操作。然后就可以放心的删除这个修复分支了：

```
git checkout develop
git merge bug-123
git push origin develop
git branch -d bug123
```



Gitlab 介绍

- Merge Requests
- Issues
- Wiki
- CI/CD 自动化测试

Merge Requests流程

- 创建一个功能分支或修复分支
- 提交分支到 Gitlab
- 开发人员在 Gitlab 上发起一个 Merge Request
- 团队成员进行 Code Review
- 项目维护者合并，然后关闭 Merge Request

Merge Requests

The screenshot shows a web browser window displaying a GitLab Merge Request. The browser's address bar shows `gitlab.com`. The page title is "Job van der Voort / GitLab Community Edition". The navigation bar includes links for Project, Files, Commits, Network, Graphs, Issues (0), Merge Requests (1), and Settings. The Merge Request is titled "Merge Request #1" and is from branch "15-require-a-password-to-change-it" into "master". It has 0 upvotes and 0 downvotes. The request is created by "Job van der Voort" less than a minute ago. The description of the merge request is "Require a password to change it". Below the description, there are fields for "Assignee:" (with a dropdown menu showing "Unassigned", "none", and "Job van der Voort") and "Milestone:" (with a dropdown menu showing "Select milestone"). There is a green button labeled "Accept Merge" and a green button labeled "Automatically merge". Below the buttons, there is a link "If you still want to merge this request manually - use [command line](#)". At the bottom, there is a section for "Commits (1)" showing a commit with hash "fb3e6d073" titled "require a password when trying to change it" by "Job van der Voort" 2 minutes ago. There is a link "Browse Code" next to the commit. At the very bottom, it says "1 participants" with a profile picture.

Job van der Voort / GitLab Community Edition

Search in this project

Project Files Commits Network Graphs Issues 0 Merge Requests 1 Settings

Merge Request #1

Download as Close Edit

← To merge requests From 15-require-a-password-to-change-it into master 0 up 0 down

Open Created by Job van der Voort less than a minute ago

Require a password to change it

Previously, you could just change it.
Now you will need a password.

Assignee: Select assignee Milestone: Select milestone

You can automatically.
You can merge before accepting merge request
Accept Merge Automatically merge source-branch

If you still want to merge this request manually - use [command line](#)

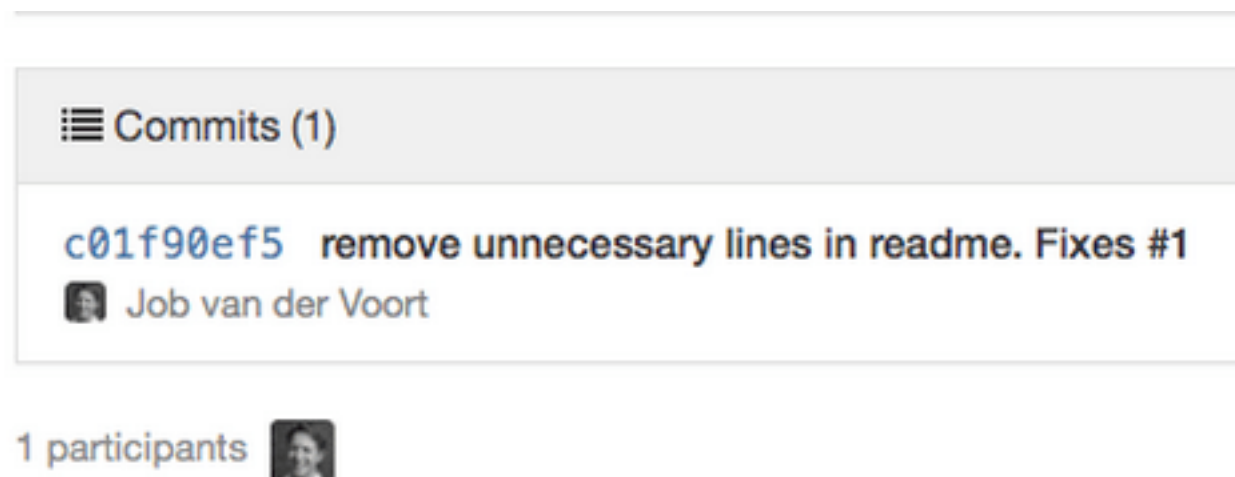
Commits (1)

fb3e6d073 require a password when trying to change it Browse Code
Job van der Voort 2 minutes ago

1 participants

Issue 管理

- Issue 用于 Bug追踪和需求管理。建议先新建 Issue，再新建对应的功能分支。功能分支总是为了解决一个或多个 Issue。
- 功能分支的名称，可以与Issue的名字保持一致，并且以Issue的编号起首，比如"15-require-a-password-to-change-it"。



Issue 页面

包识别: open0 开房, close 关房

1 Related Merge Request

!1 [WIP: Resolve "视翰EK收银系统"](#) Open

When this merge request is accepted, this issue will be closed automatically.



xufei @xufei created branch 1-ek less than a minute ago

xufei @xufei mentioned in merge request [!1](#) less than a minute ago



Write [Preview](#)

B *I*

Write a comment or drag your files here...

谢谢

徐飞