Distributed Version Control

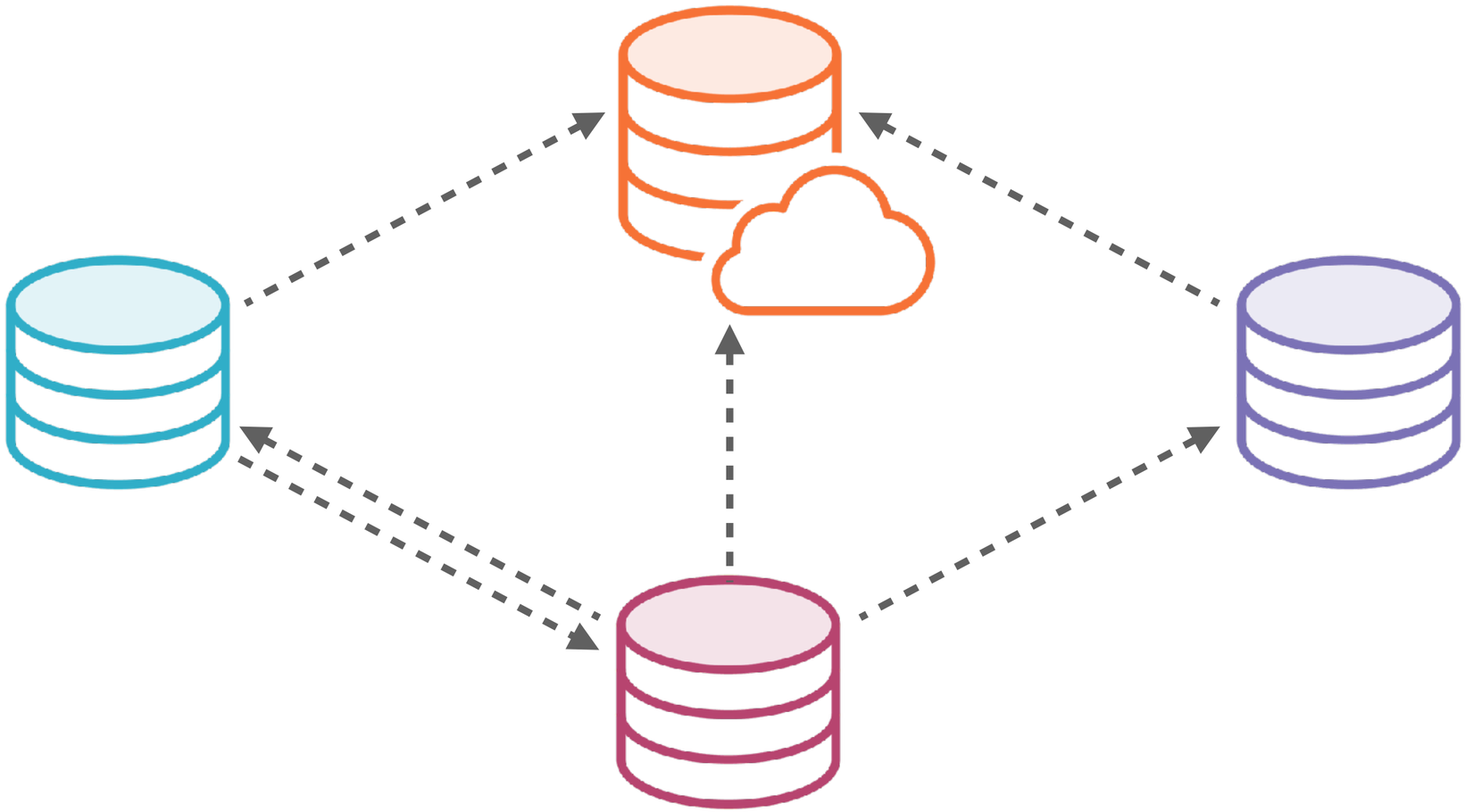
Paolo Perrotta
Freelance Developer

@nusco

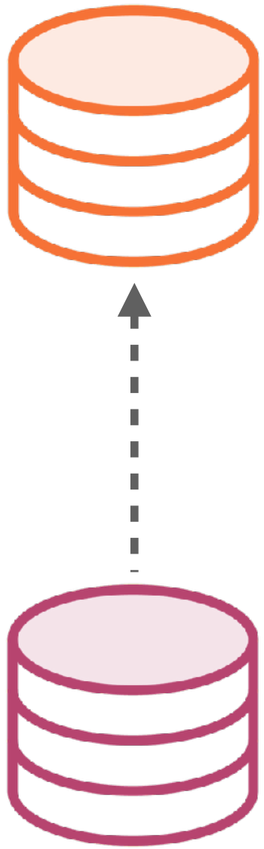
Git Is...

...a Distributed Revision Control System

Multiple Repos

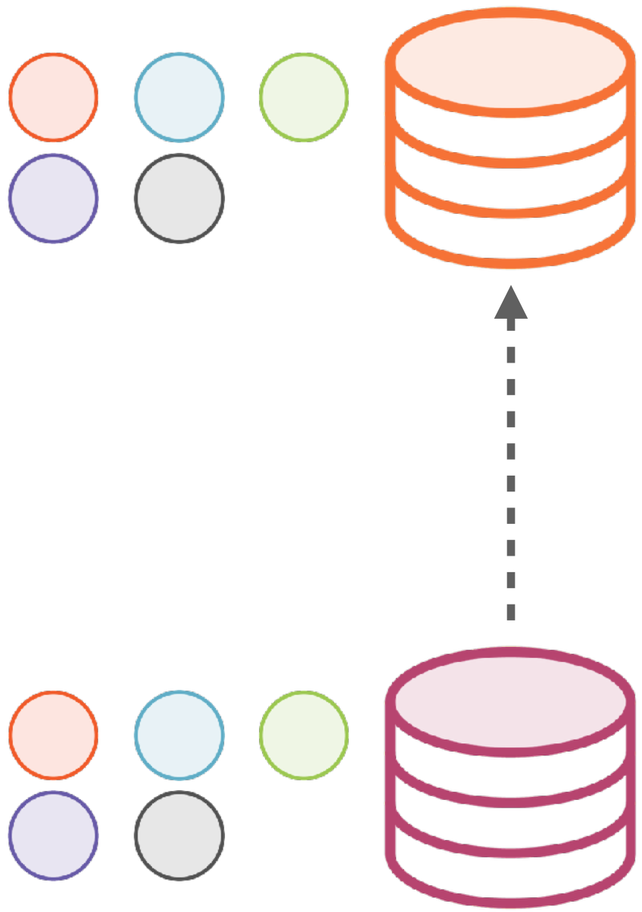


Remotes

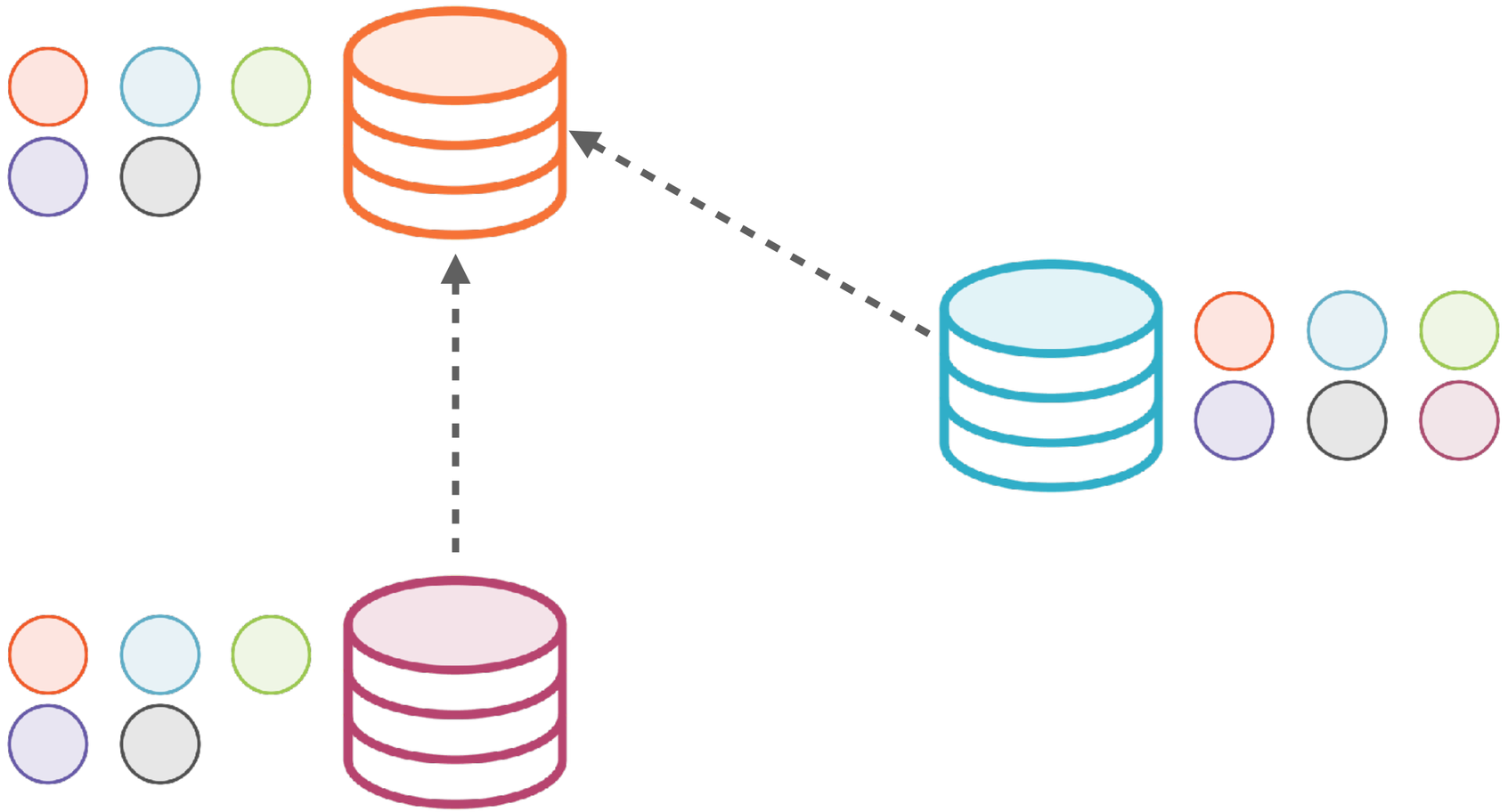


Like a local branch, a remote branch is just a reference to a commit.

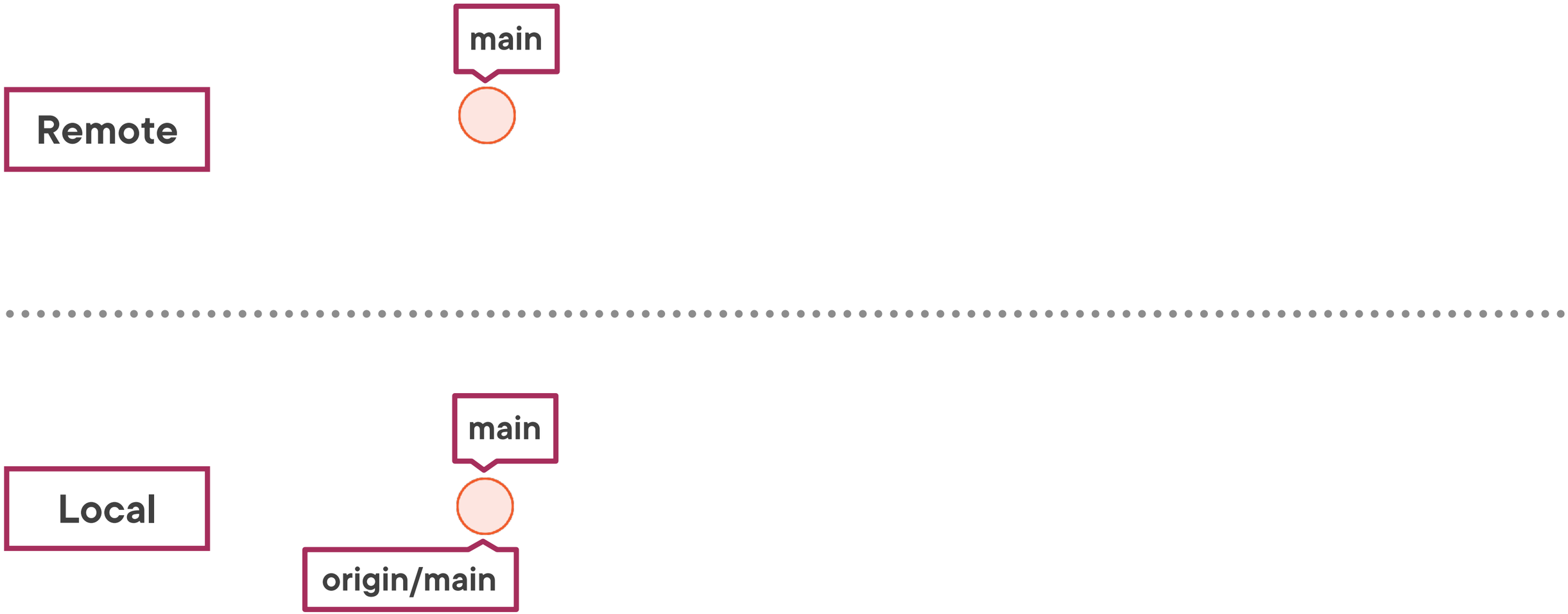
Synchronizing Repos



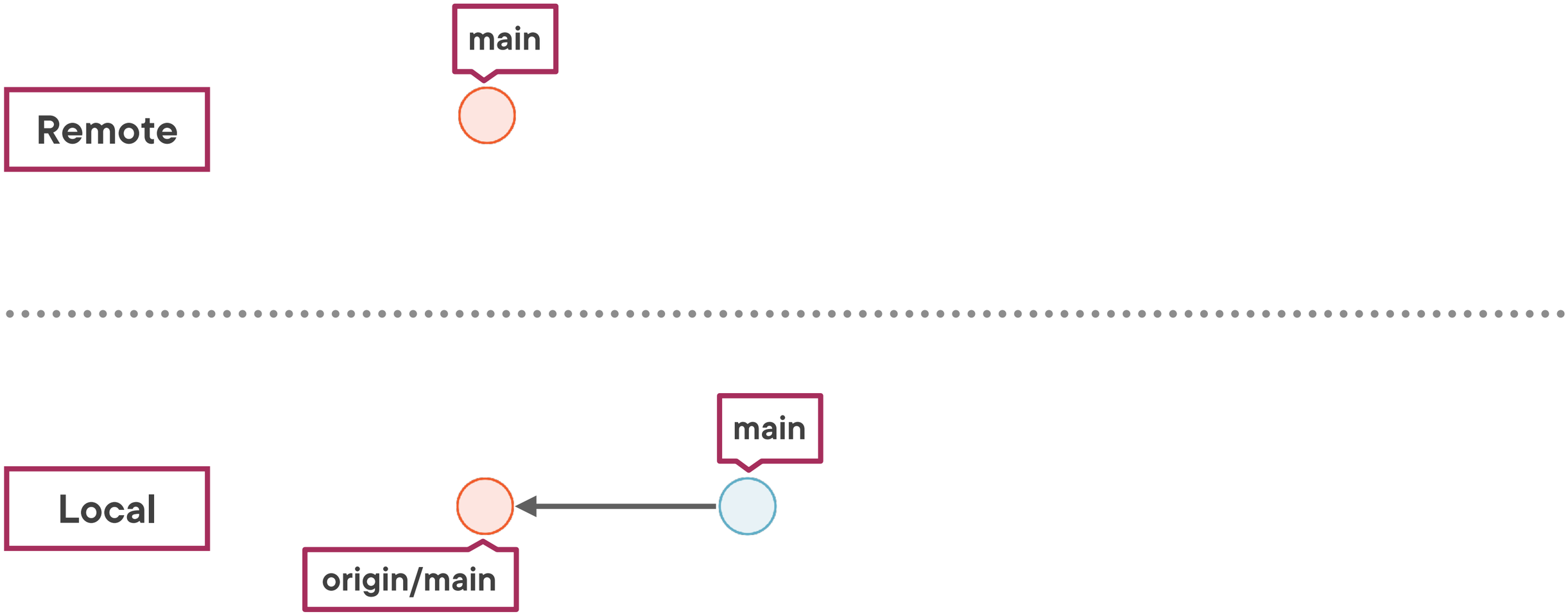
Synchronizing Repos



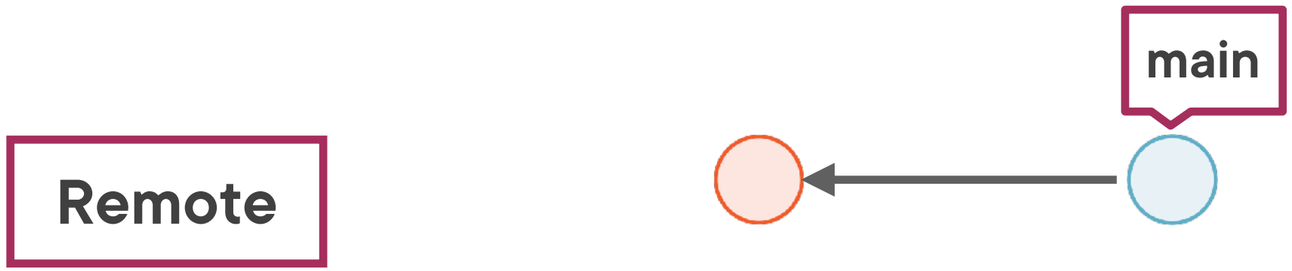
Synchronizing with a Remote

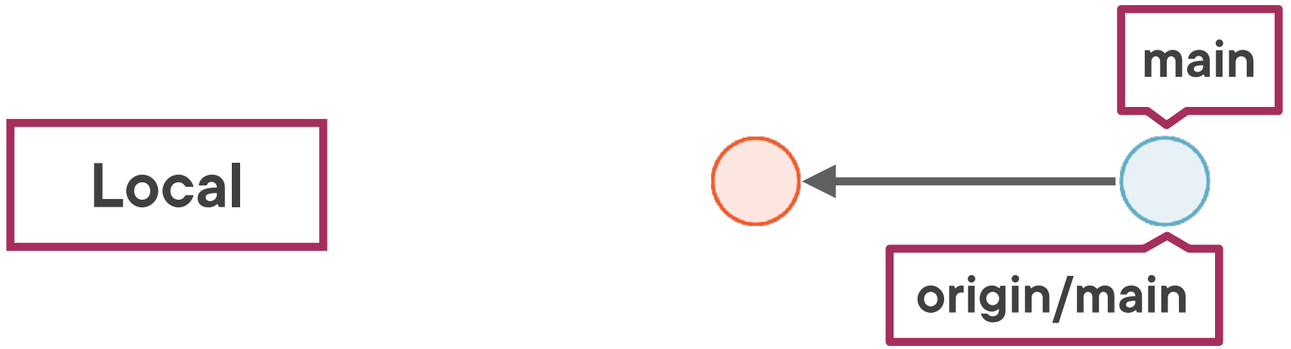


Adding a Commit

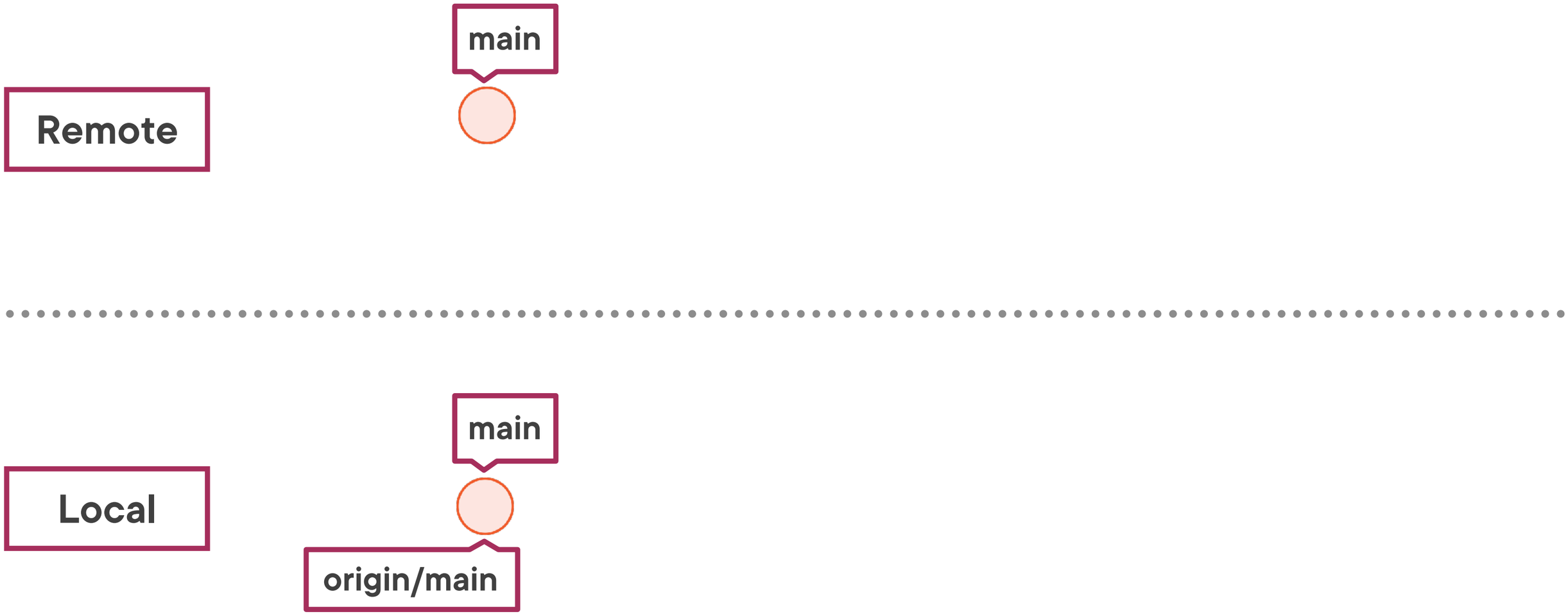


git push

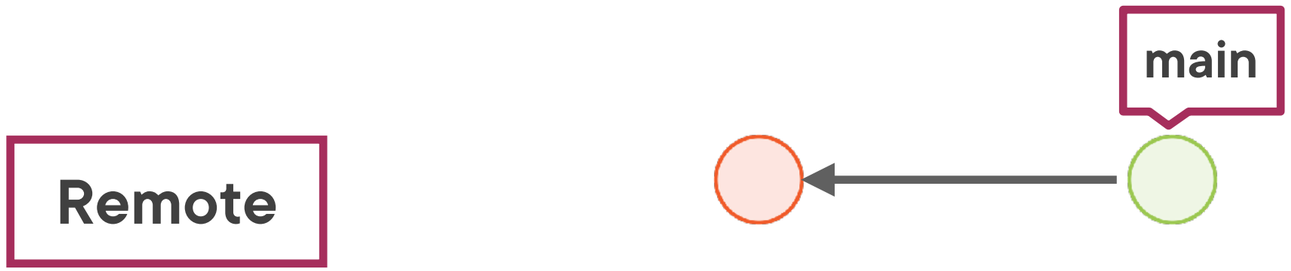


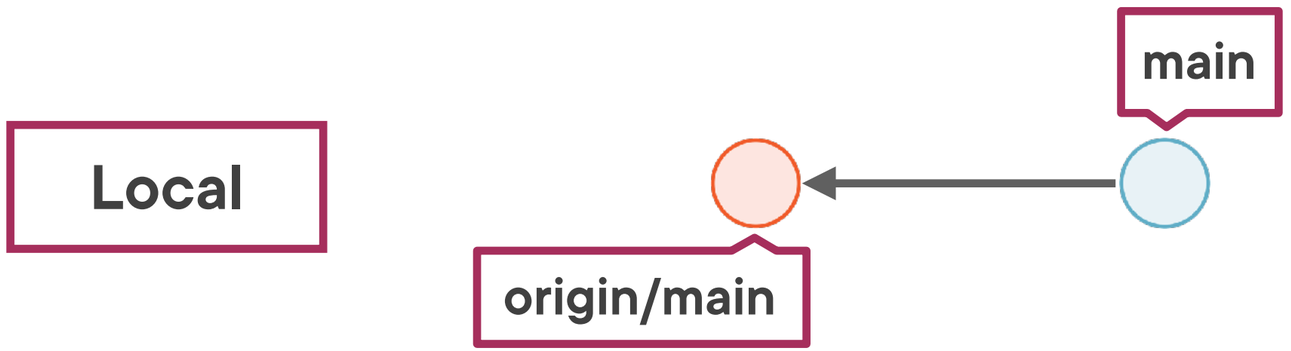


Synchronizing with a Remote

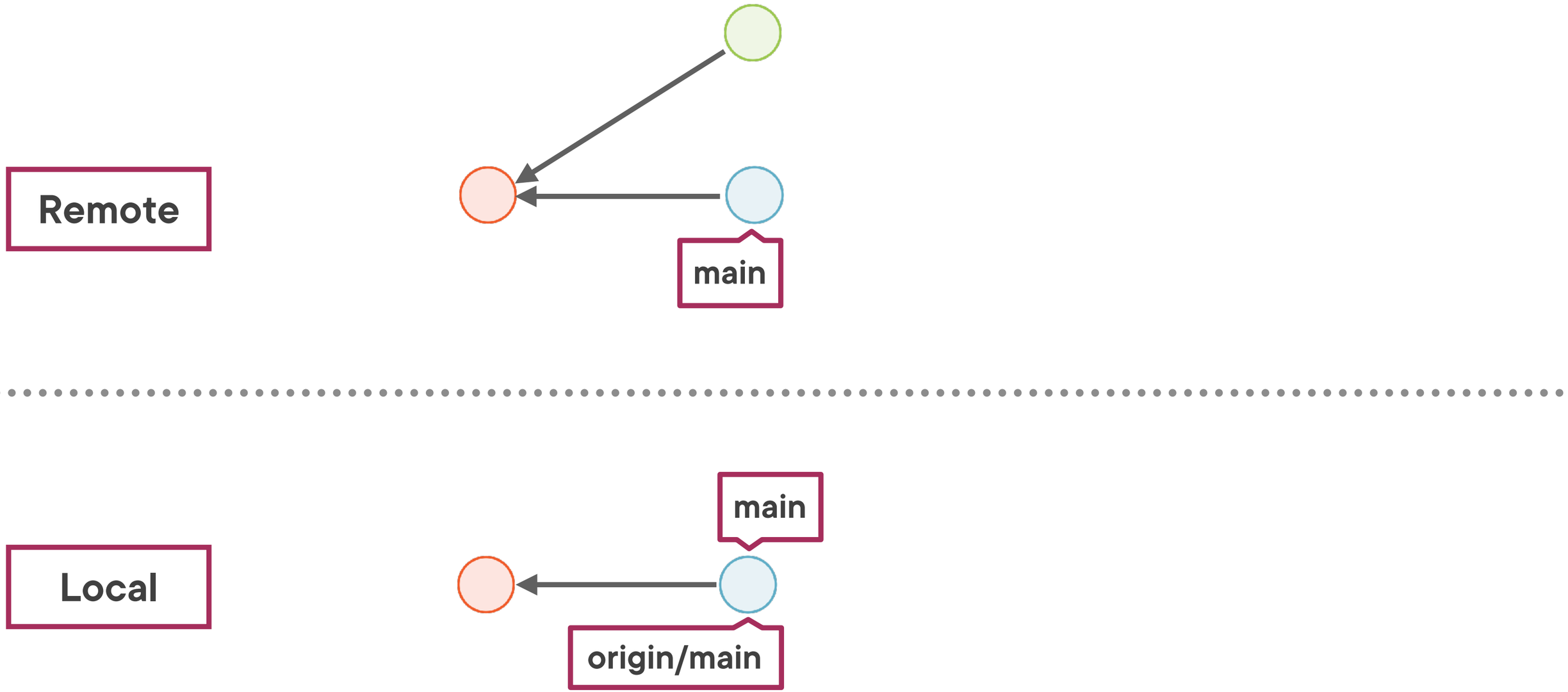


Conflict!





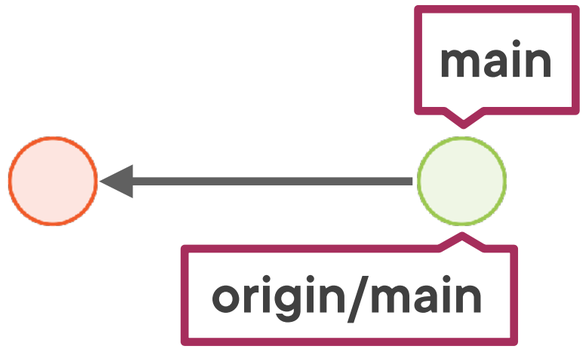
git push -f



Conflict!

Remote

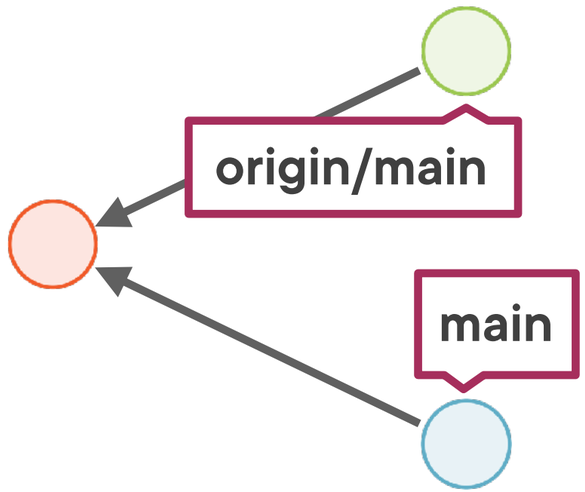
Annie



git fetch

Remote

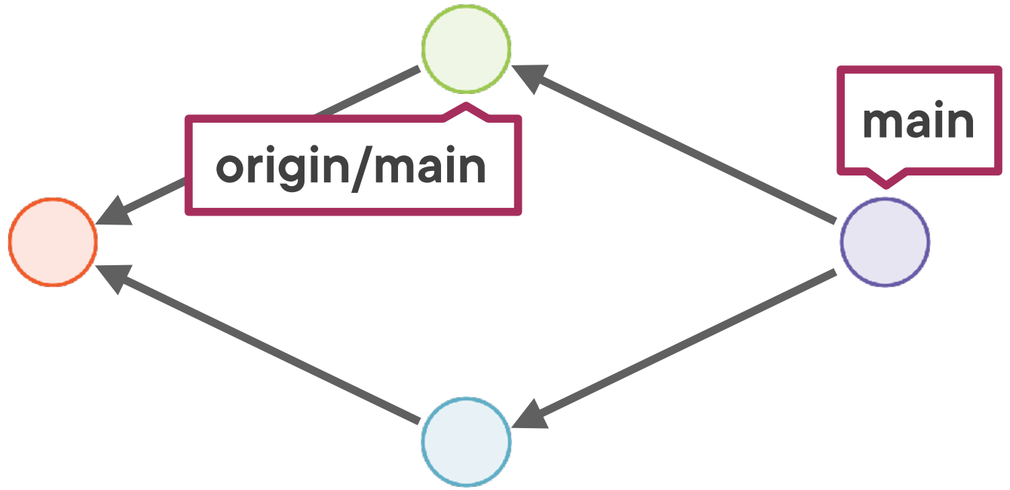
Local



git merge origin/main

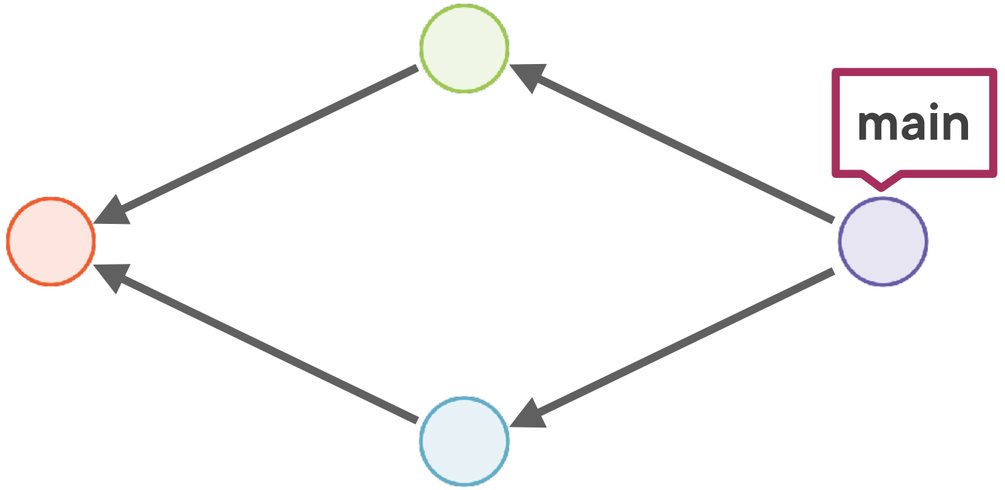
Remote

Local

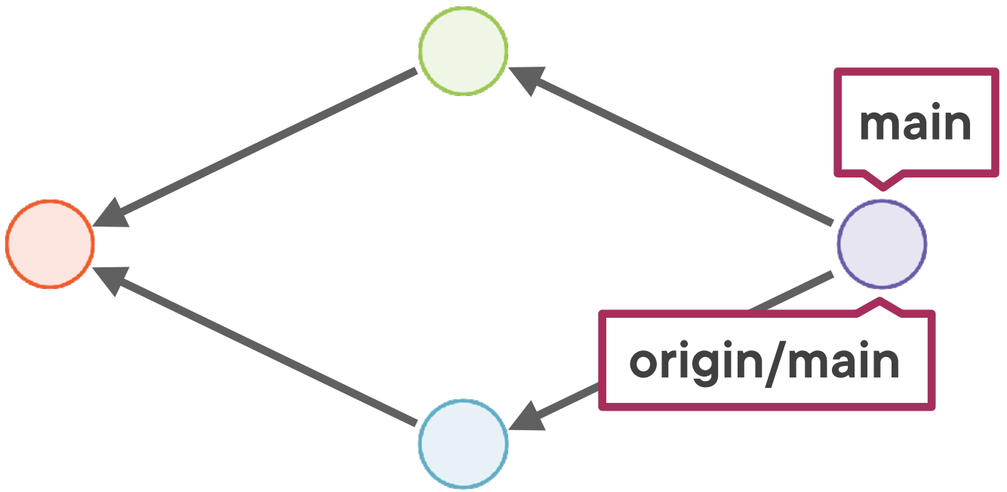


git push

Remote

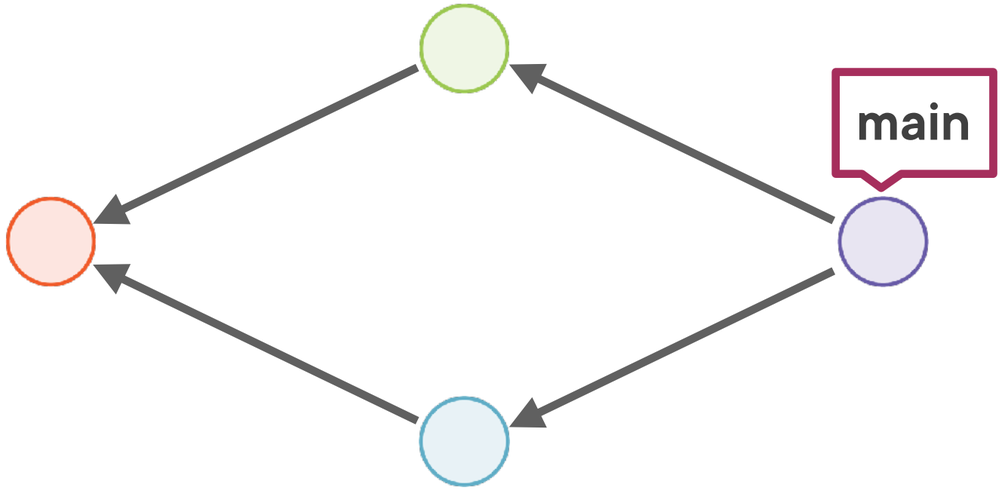


Local

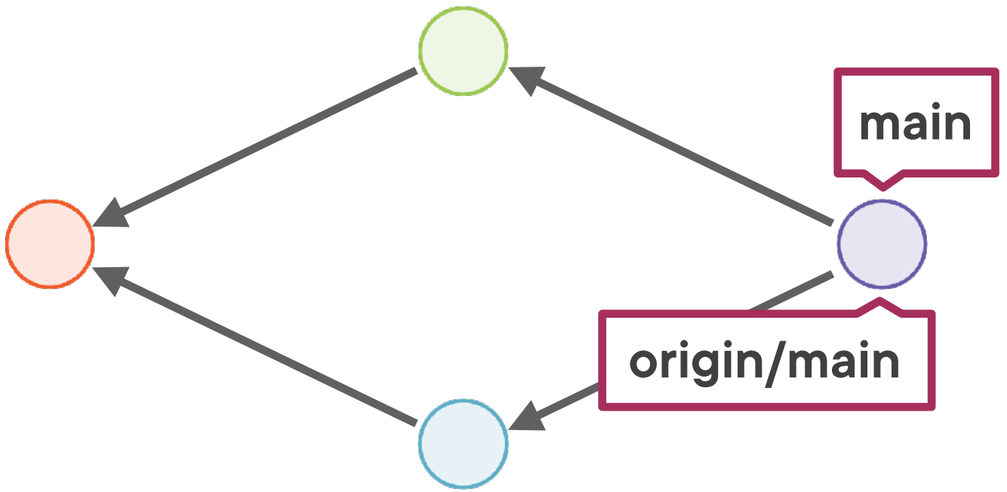


The Result

Remote



Local

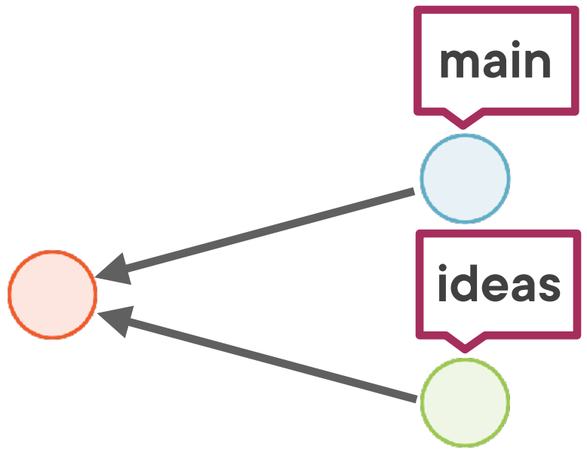


You *fetch* and *merge*, then you *push*.

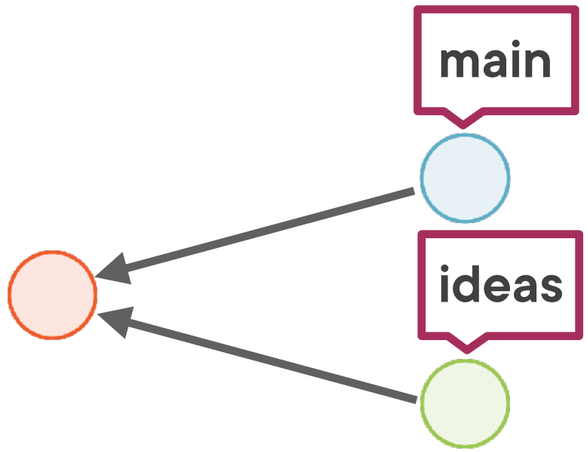
You *pull*, then you *push*.

Another Look at *git rebase*

Remote

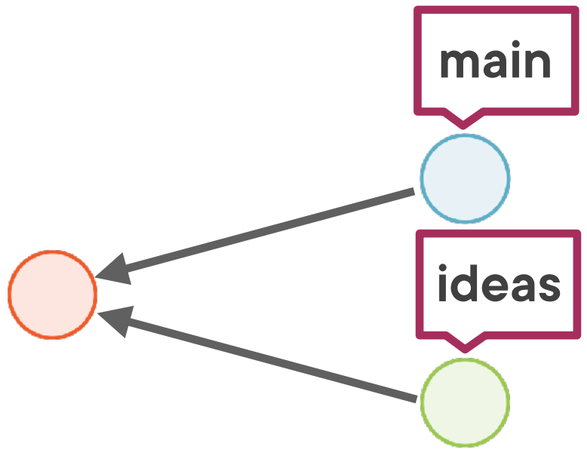


Local

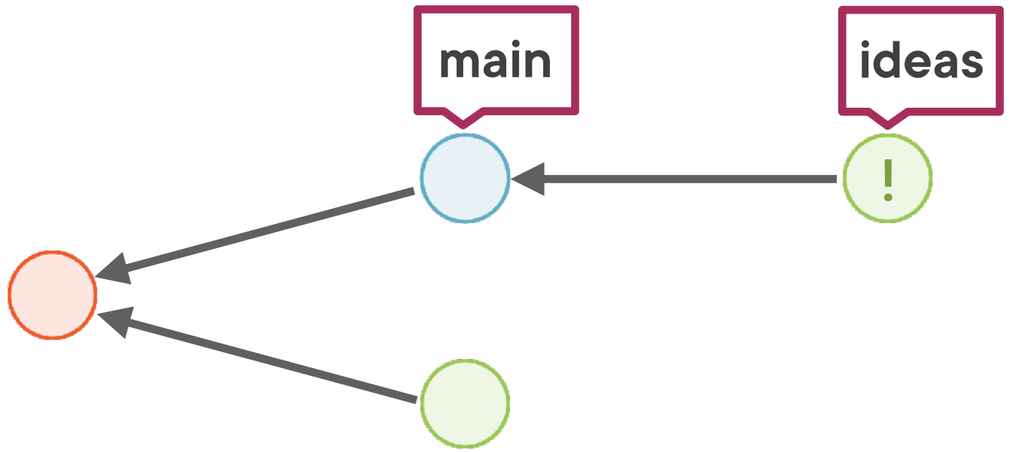


git rebase main

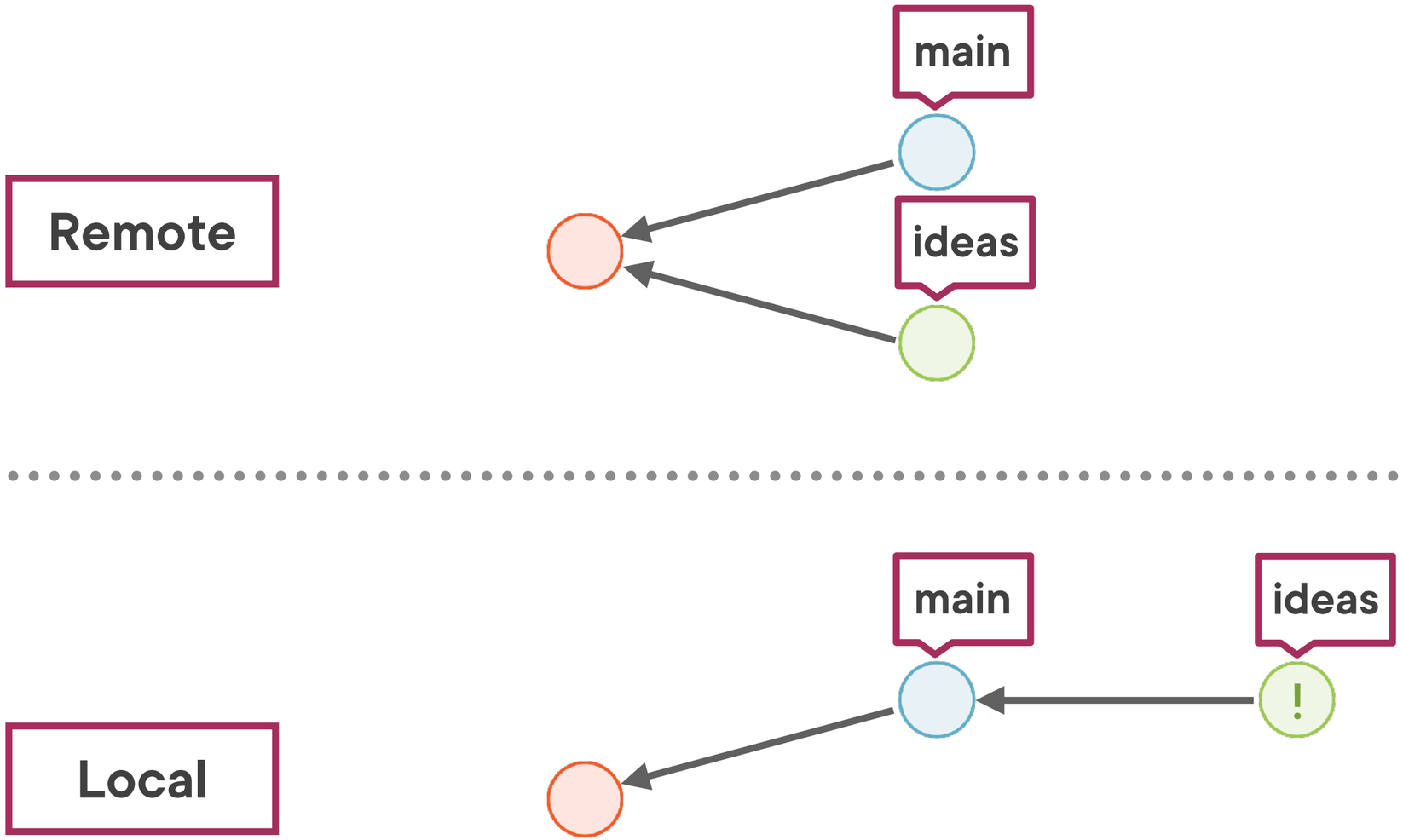
Remote



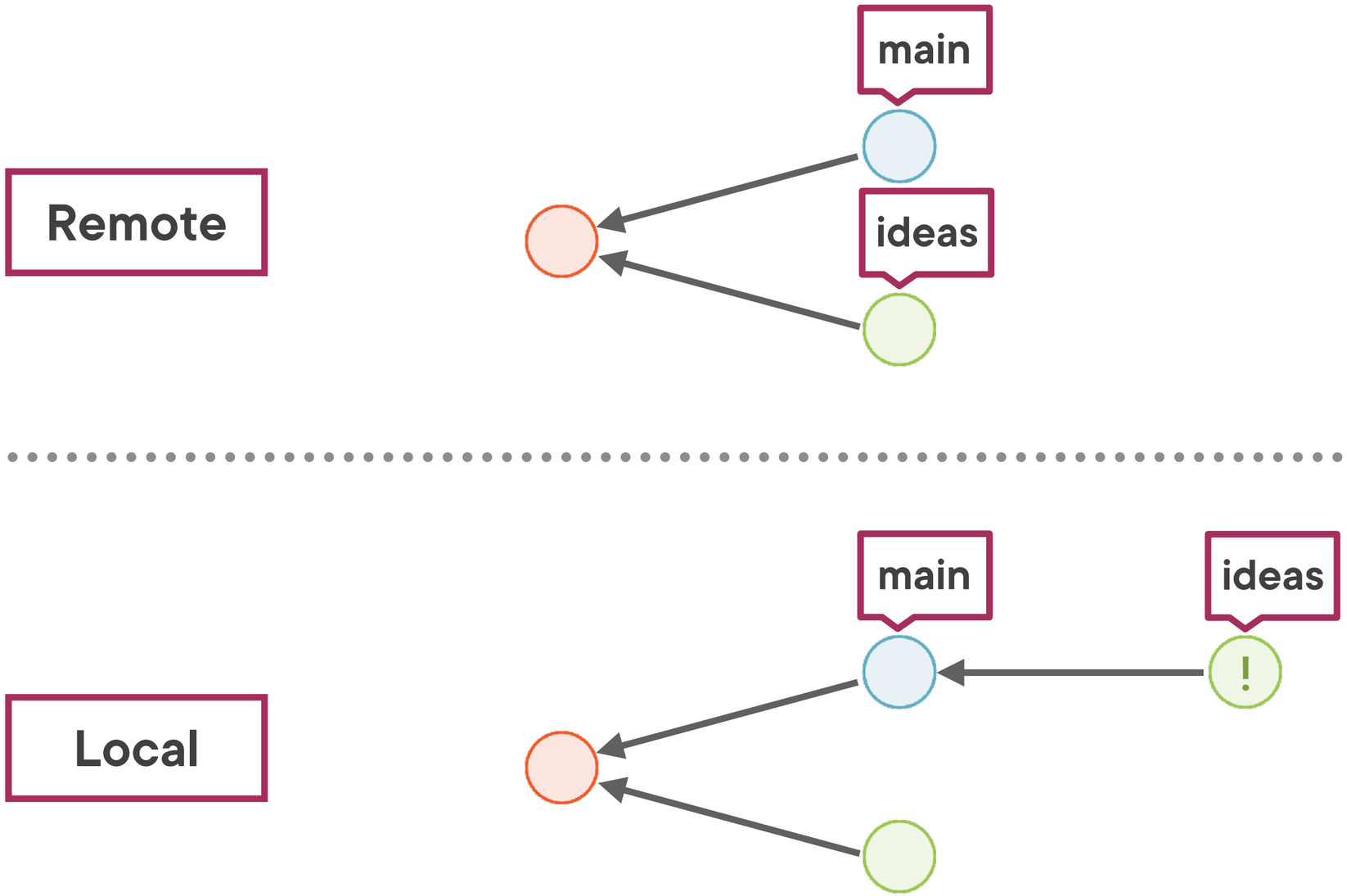
Local



Conflict!

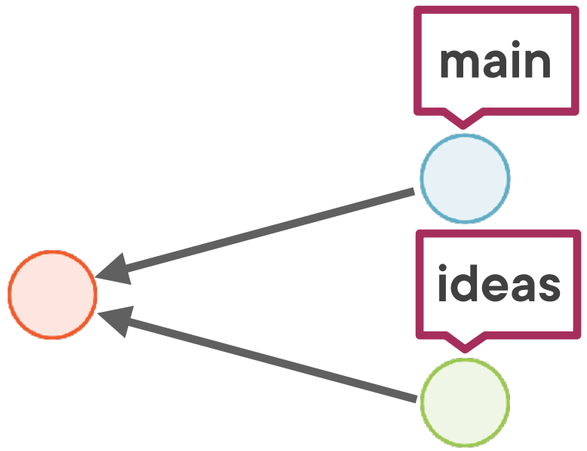


git fetch

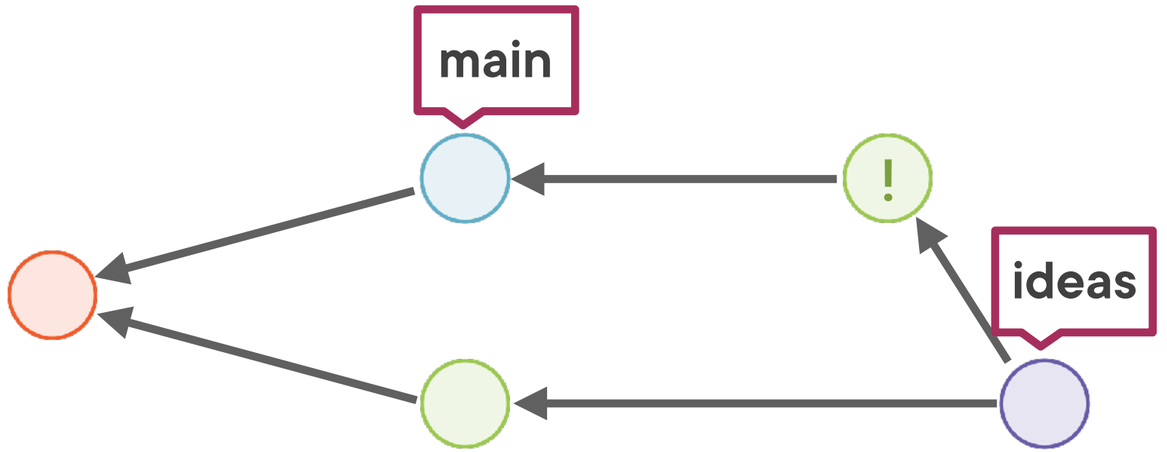


git merge

Remote

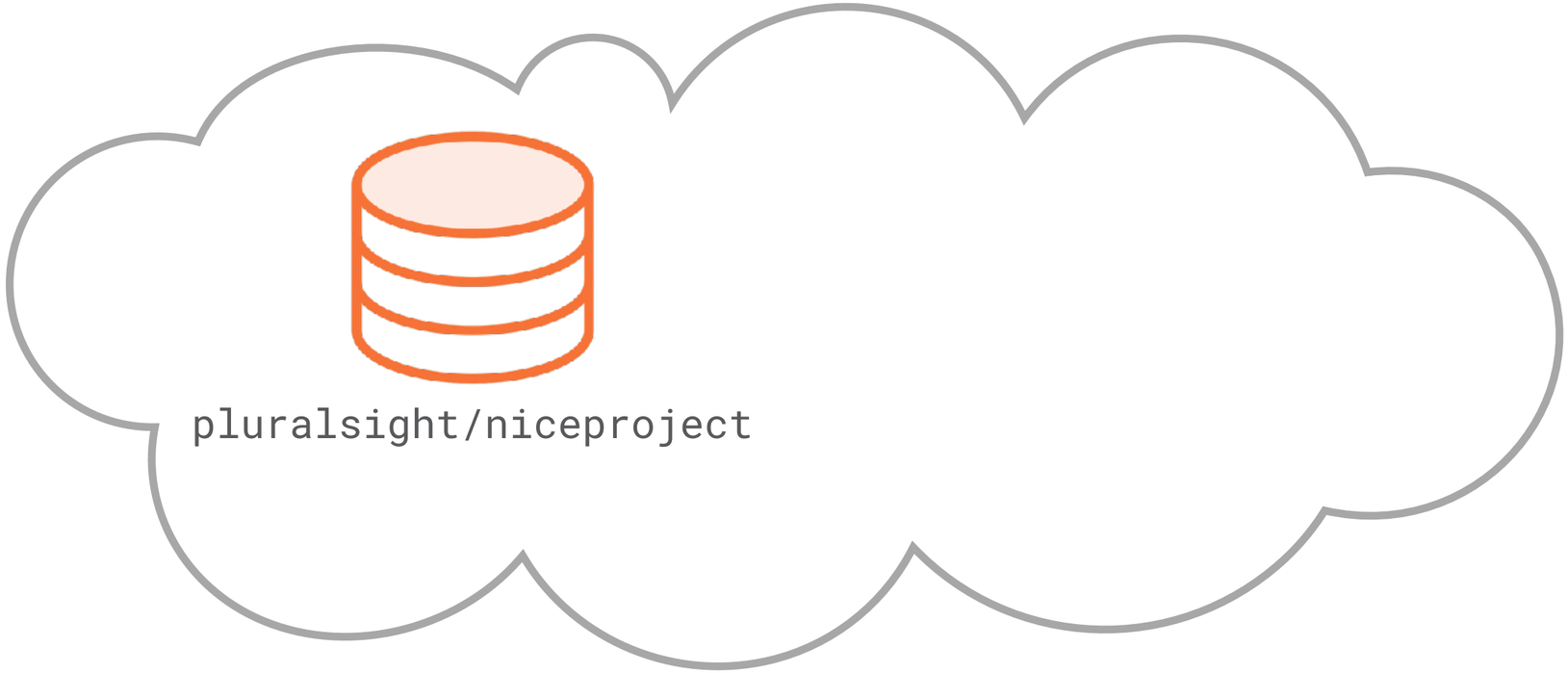


Local

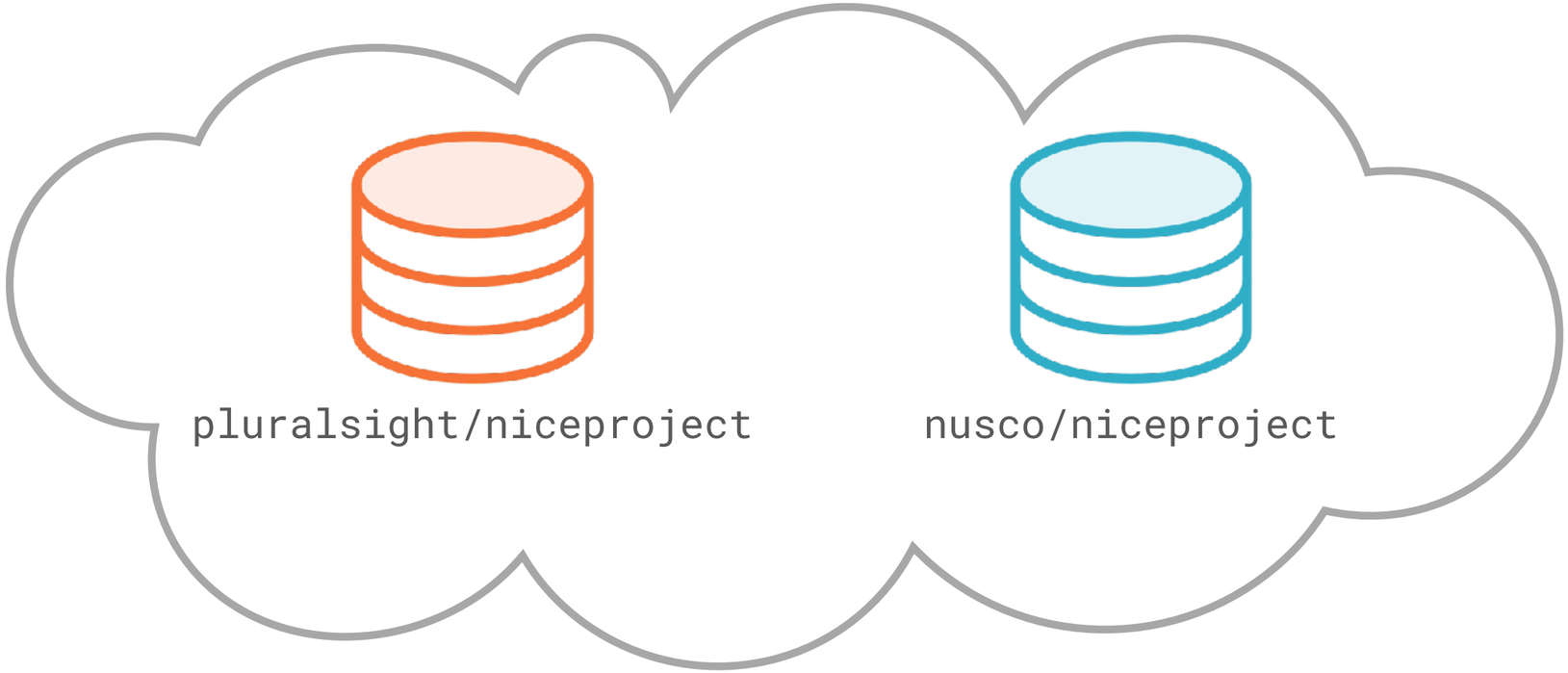


Never rebase shared commits.

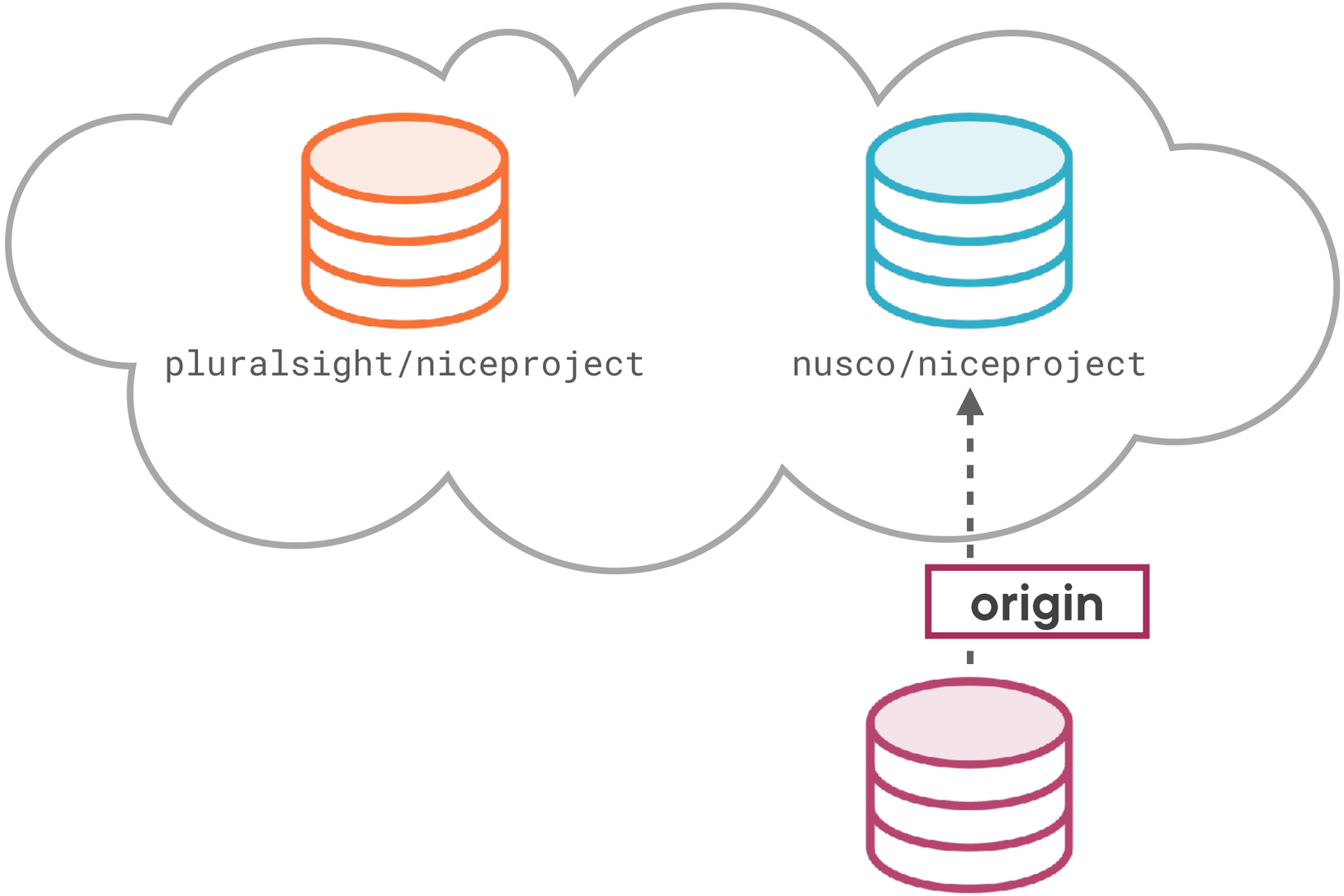
Two GitHub Features



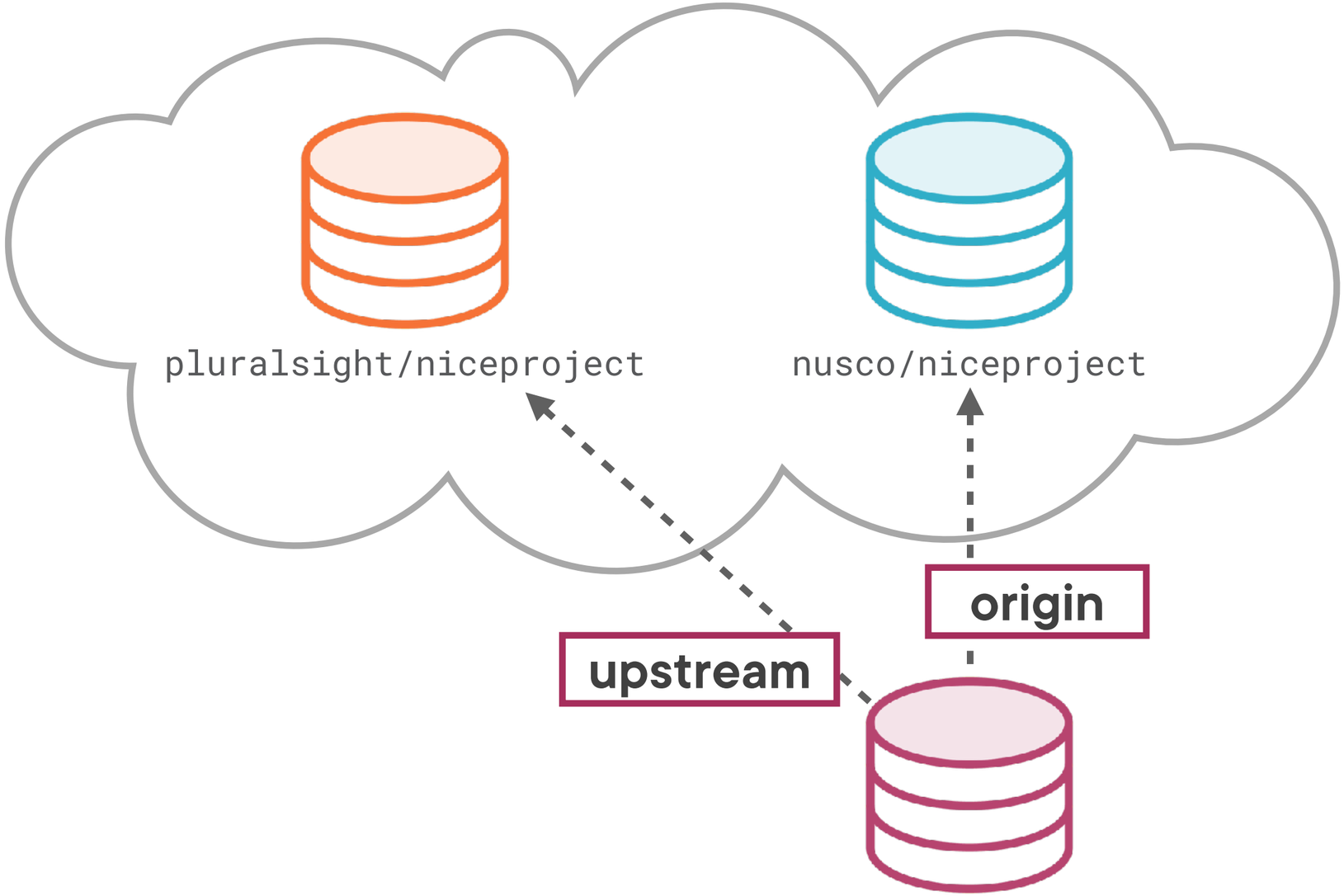
Fork



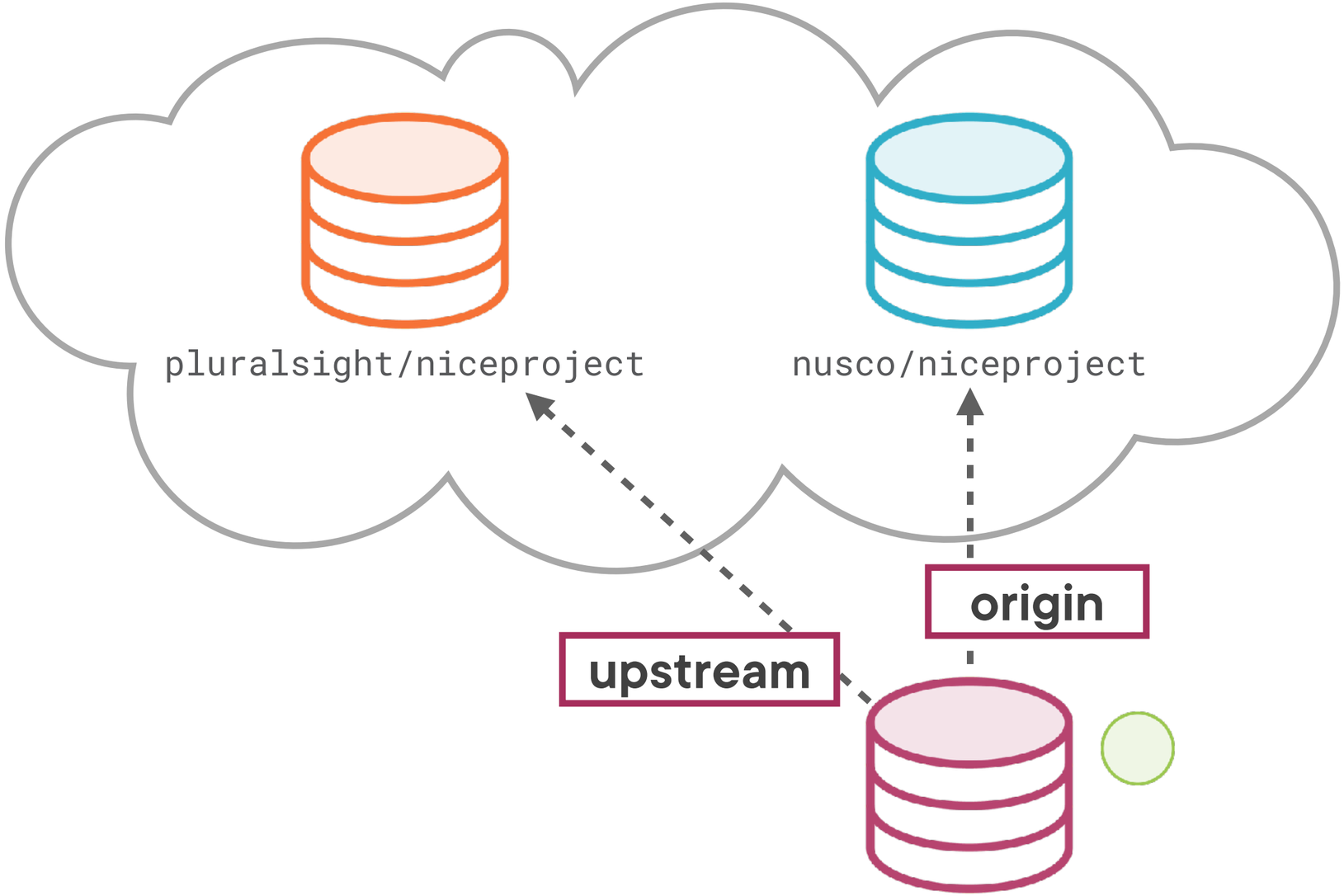
Clone



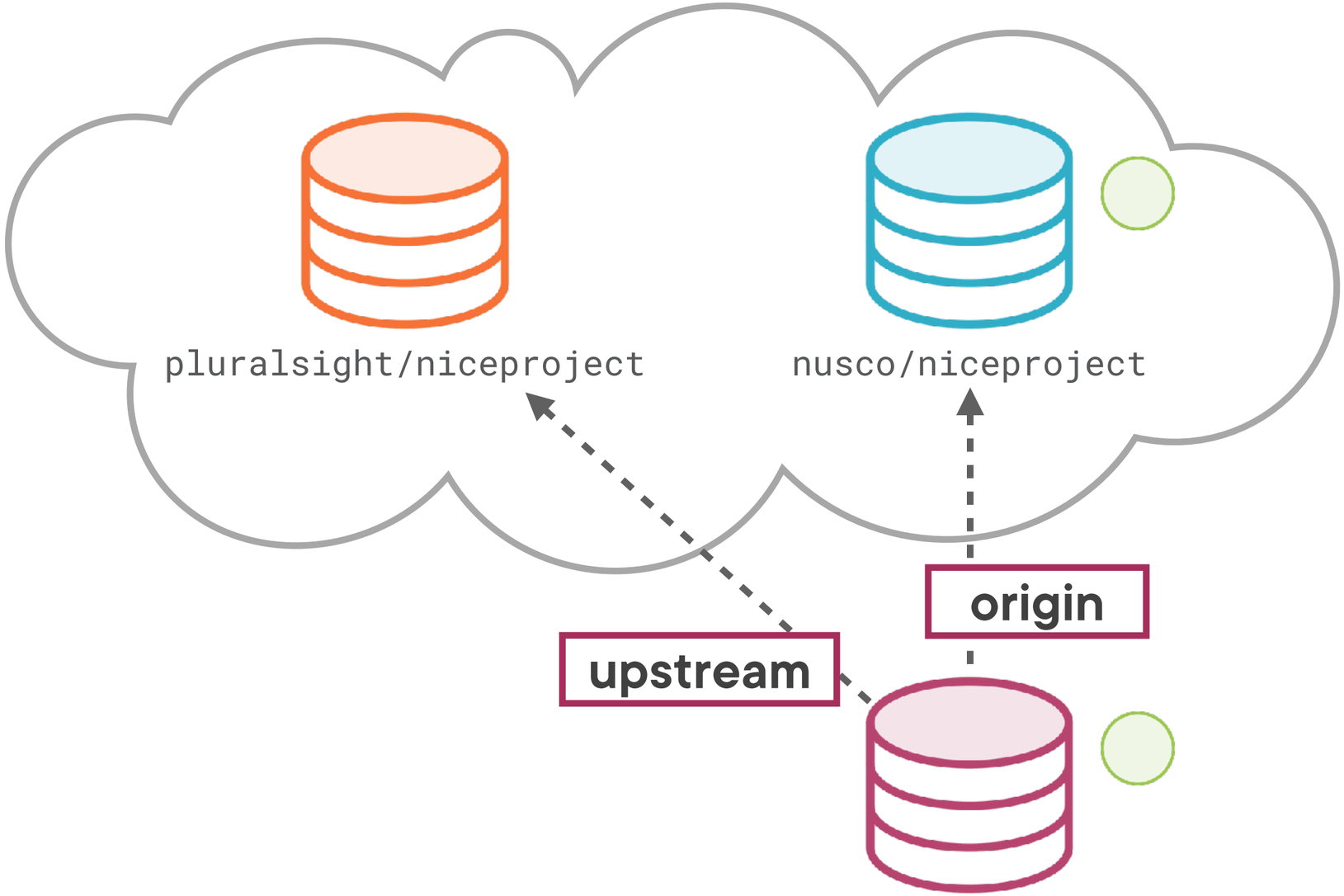
Two Remotes


pluralsight/niceproject
nusco/niceproject
origin
upstream

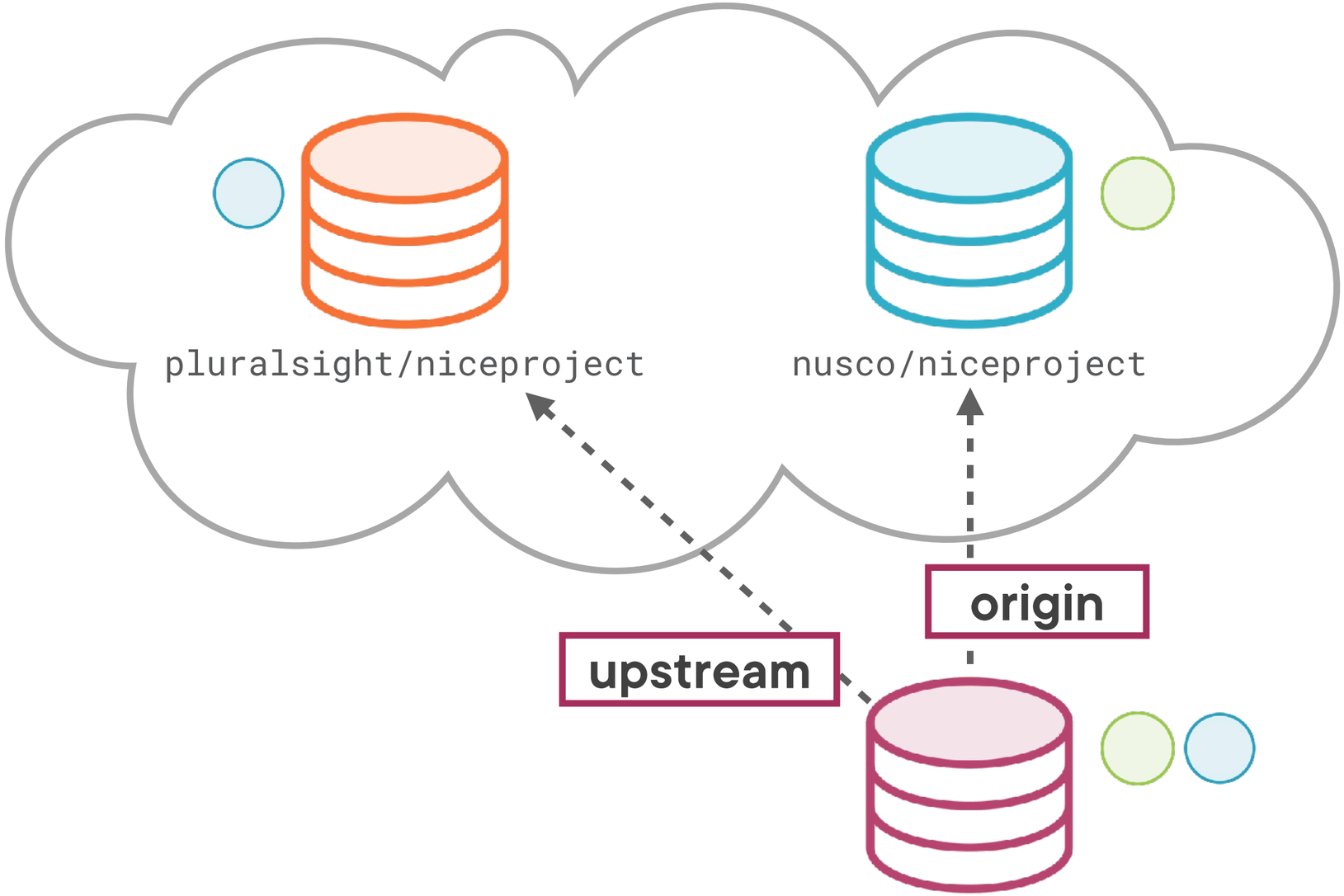
Commit


pluralsight/niceproject
nusco/niceproject
origin
upstream

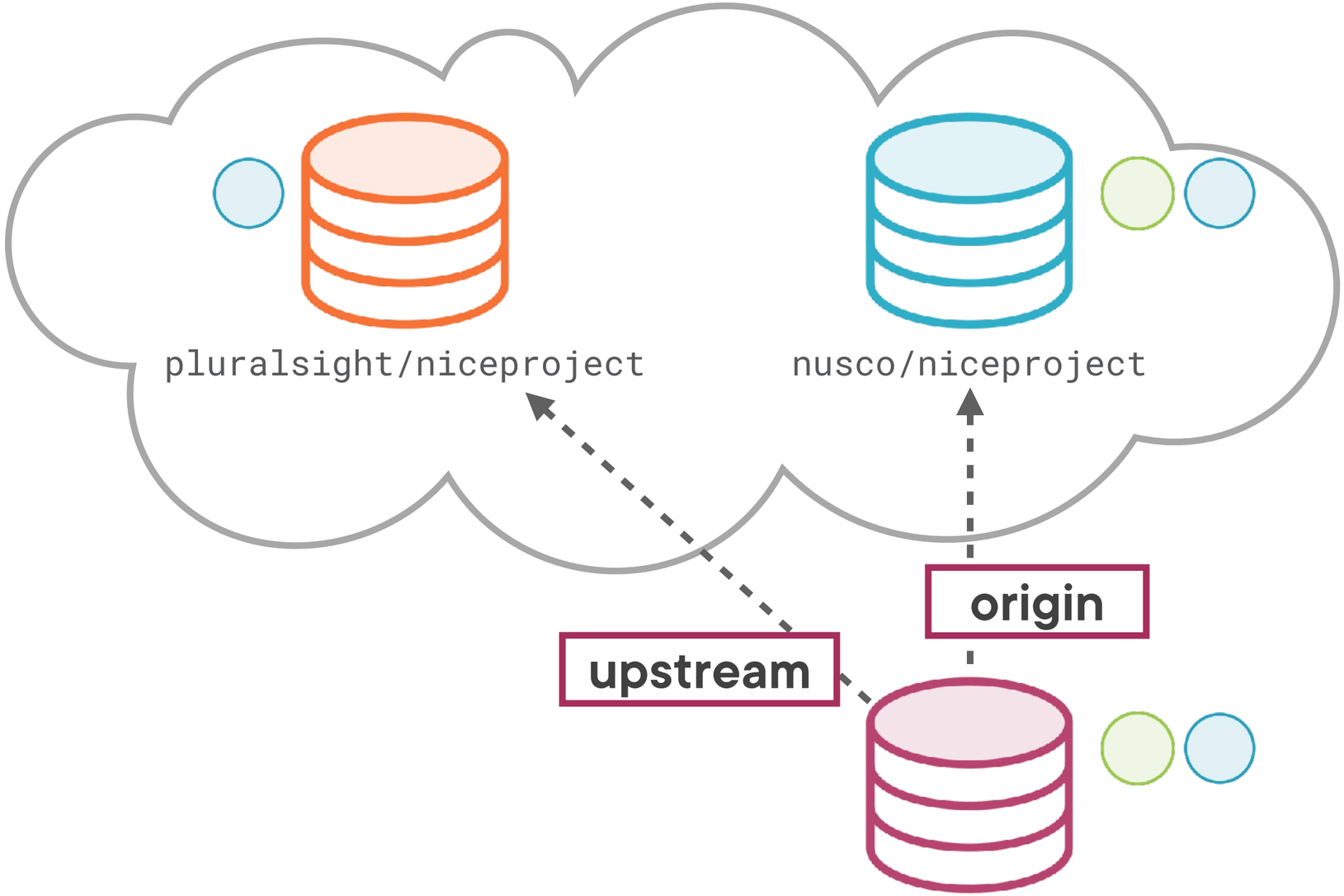
Push to *origin*



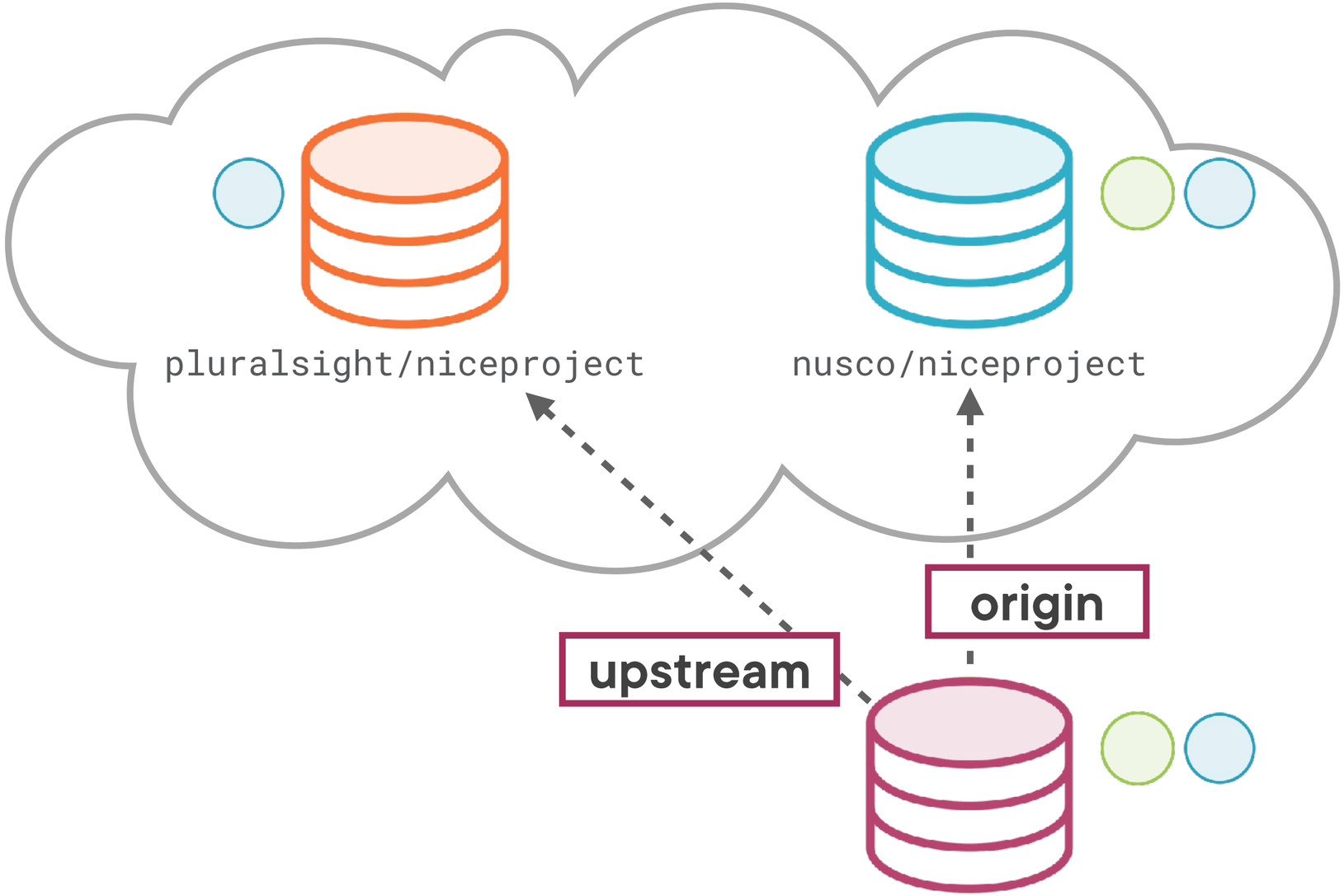
Pull from *upstream*



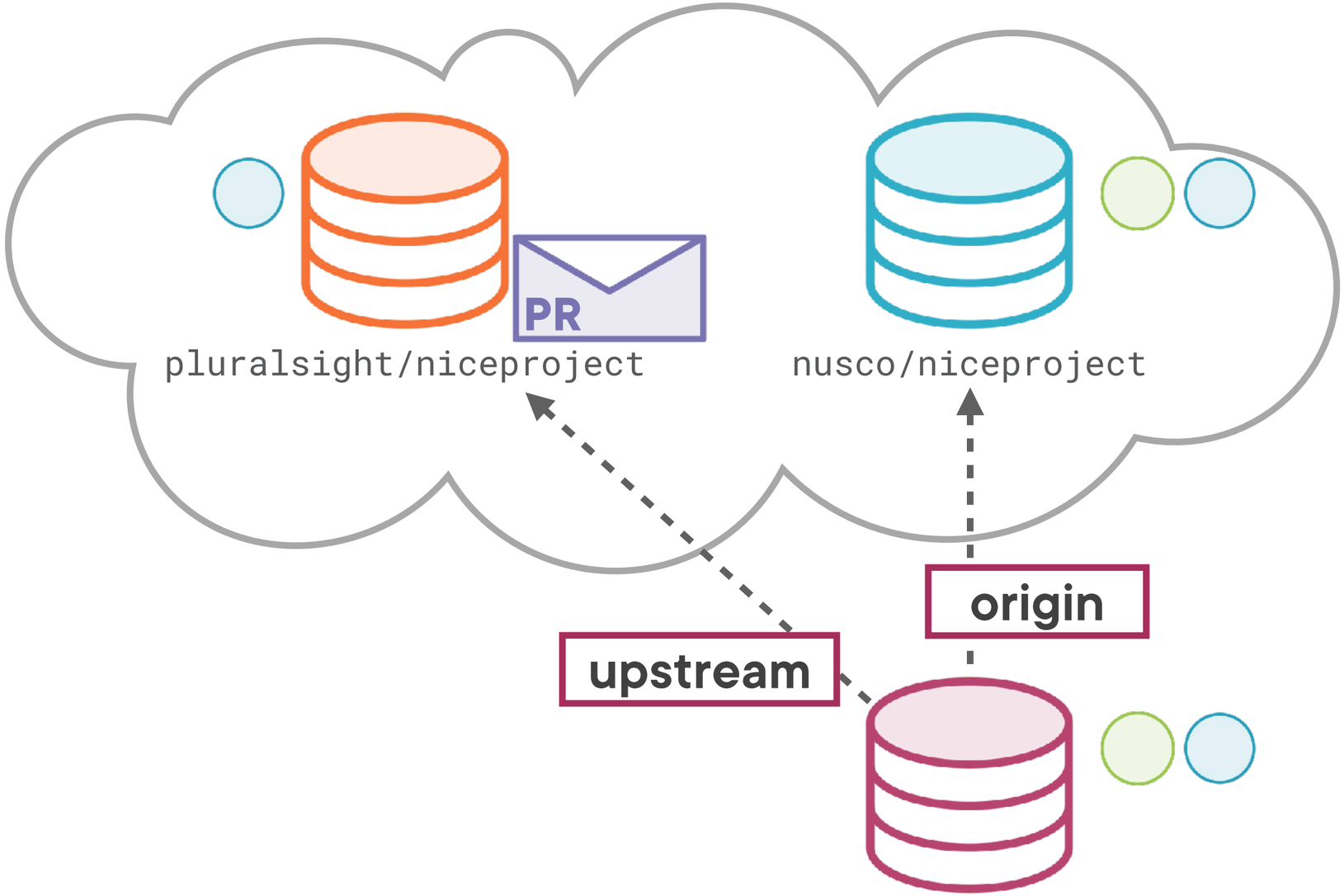
Push to *origin*



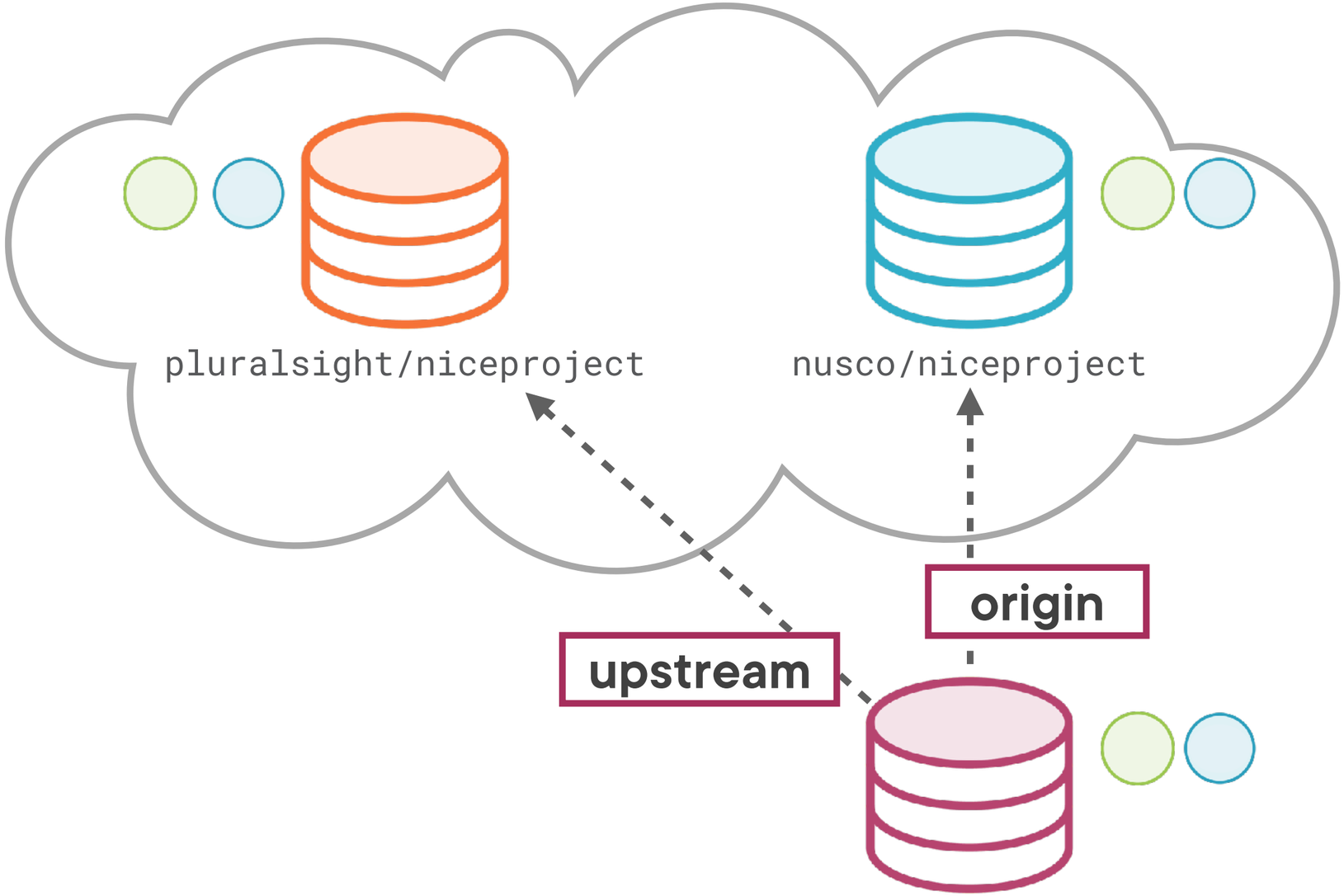
Push to *upstream...?*



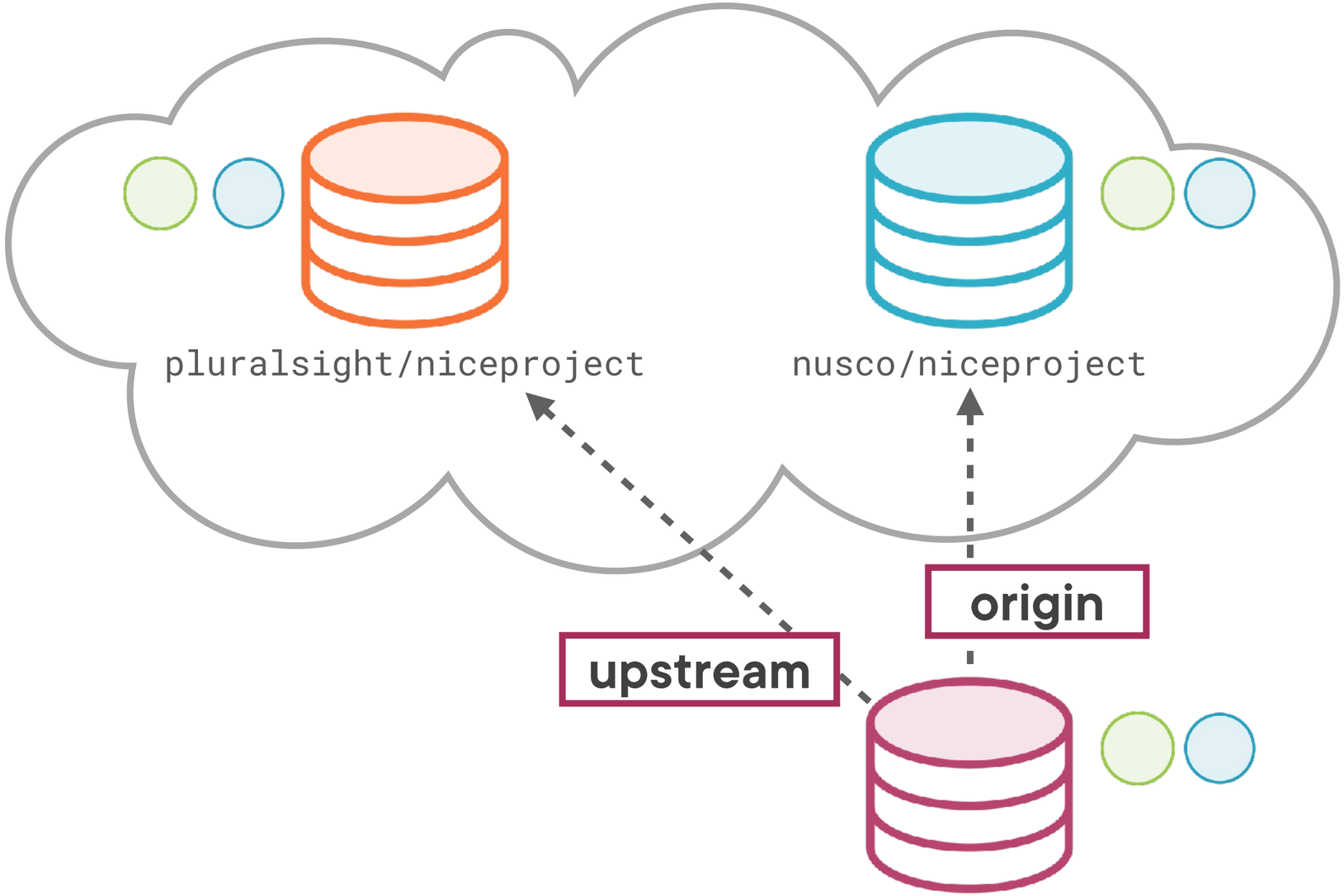
Pull Requests



Pull Requests

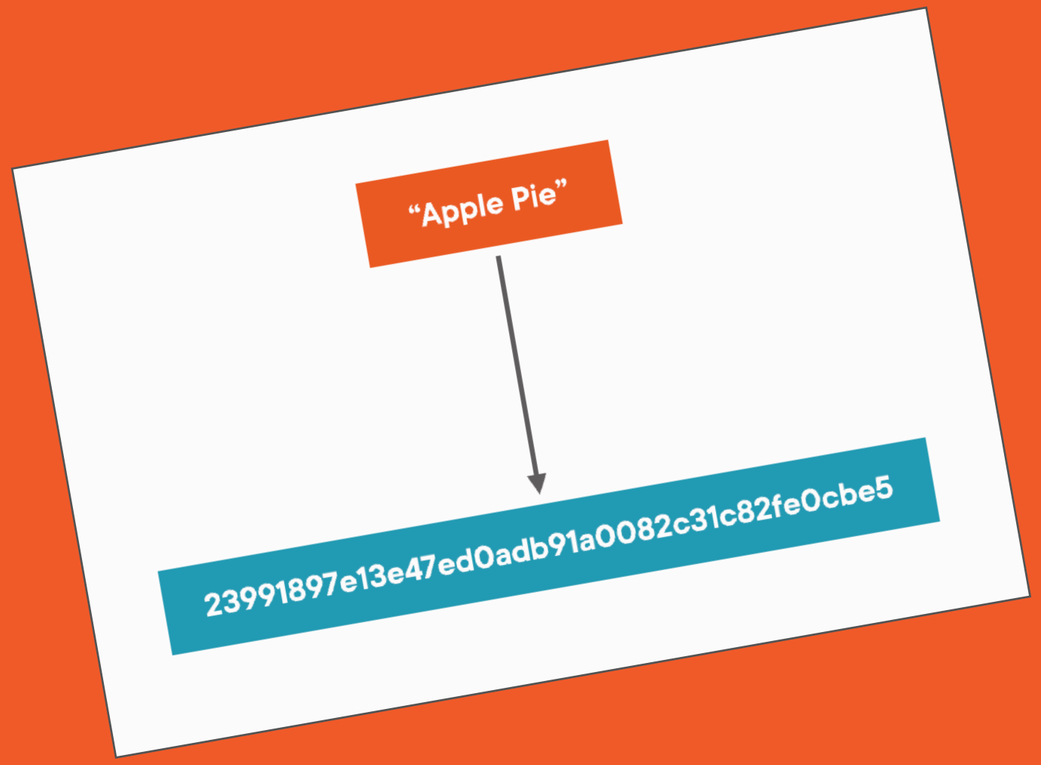


The Open Source Workflow



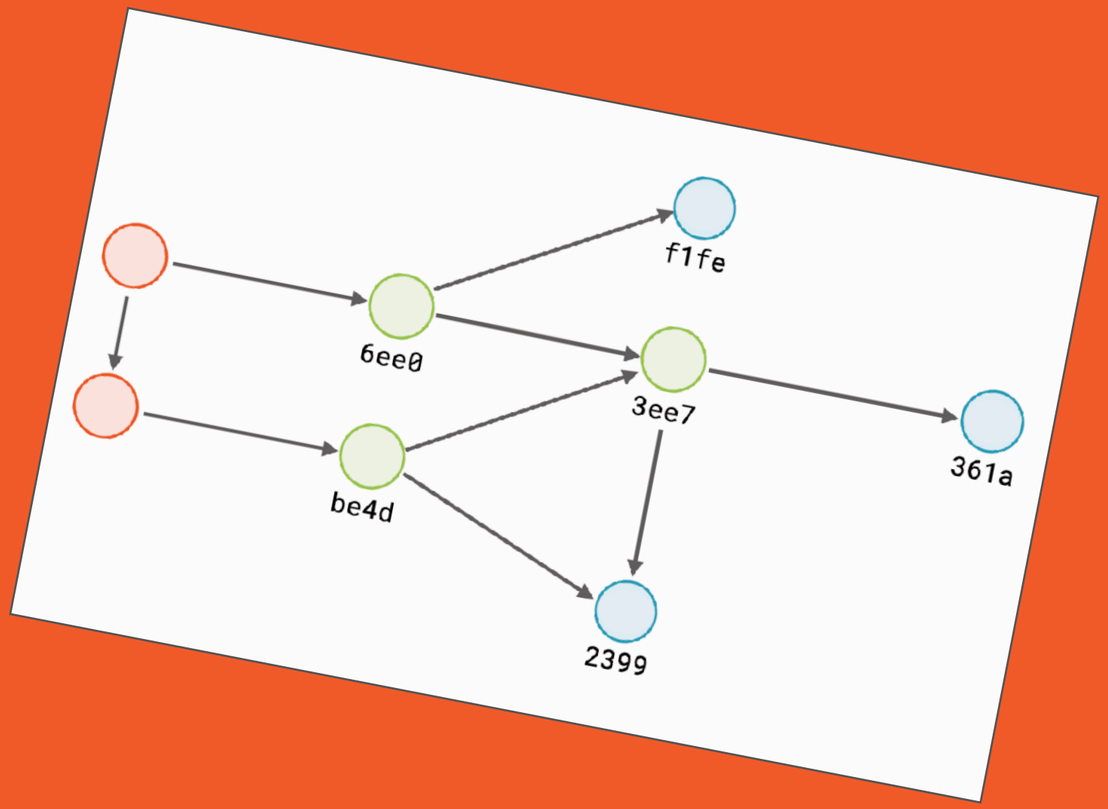
Git Is...

...a Persistent Map



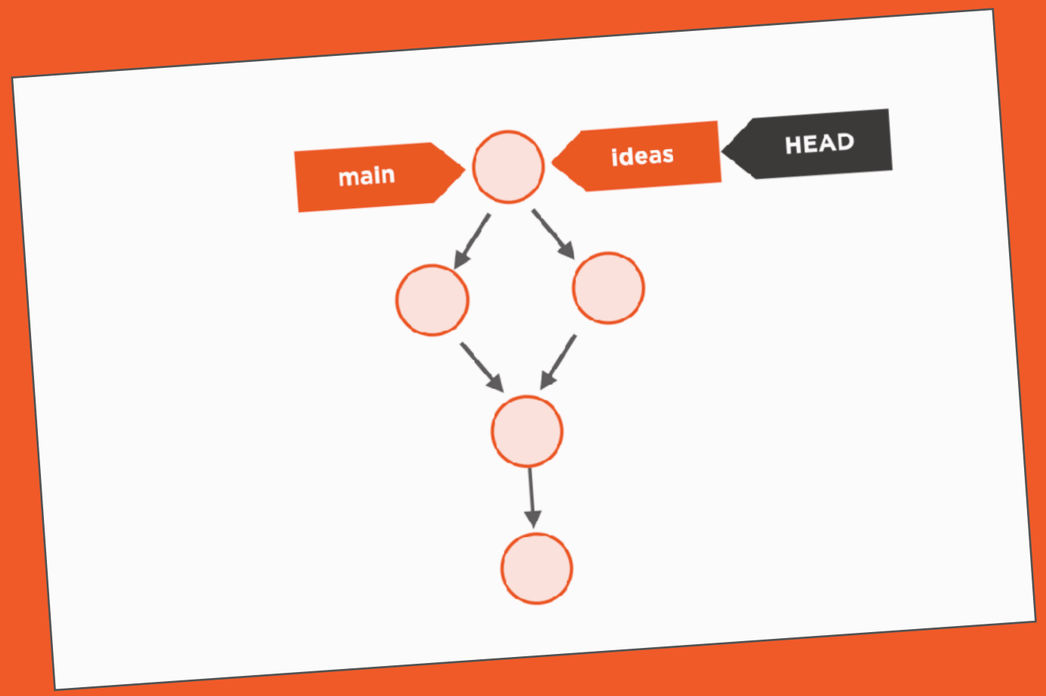
Git Is...

...a Stupid Content Tracker



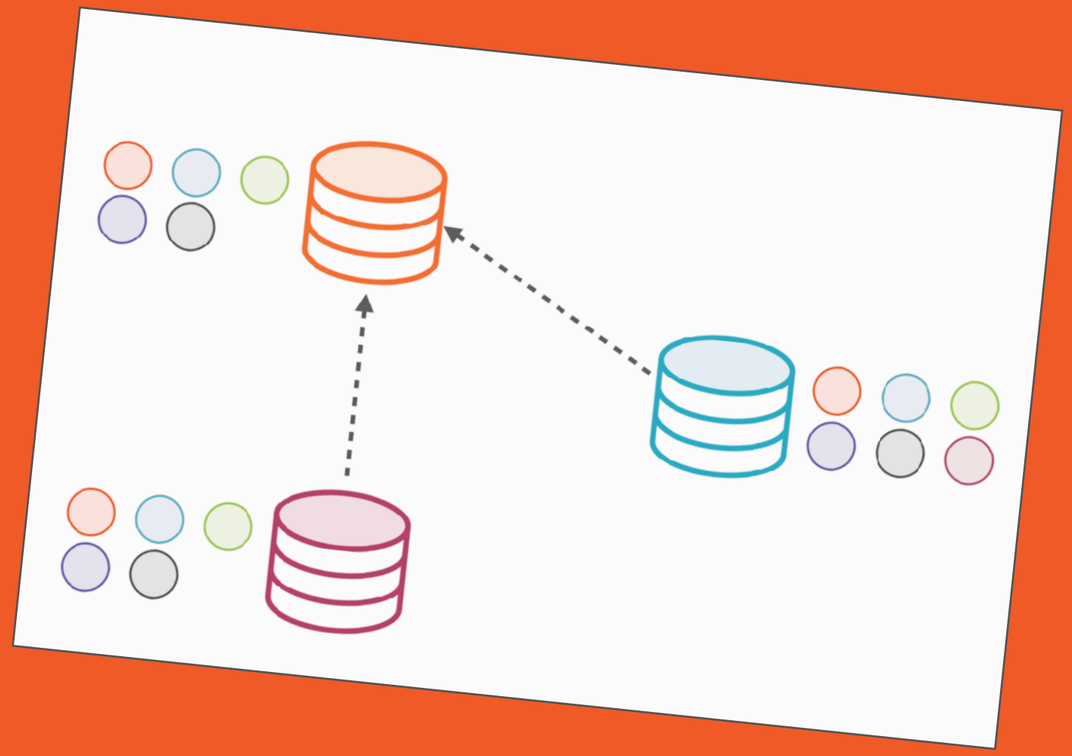
Git Is...

...a Revision Control System



Git Is...

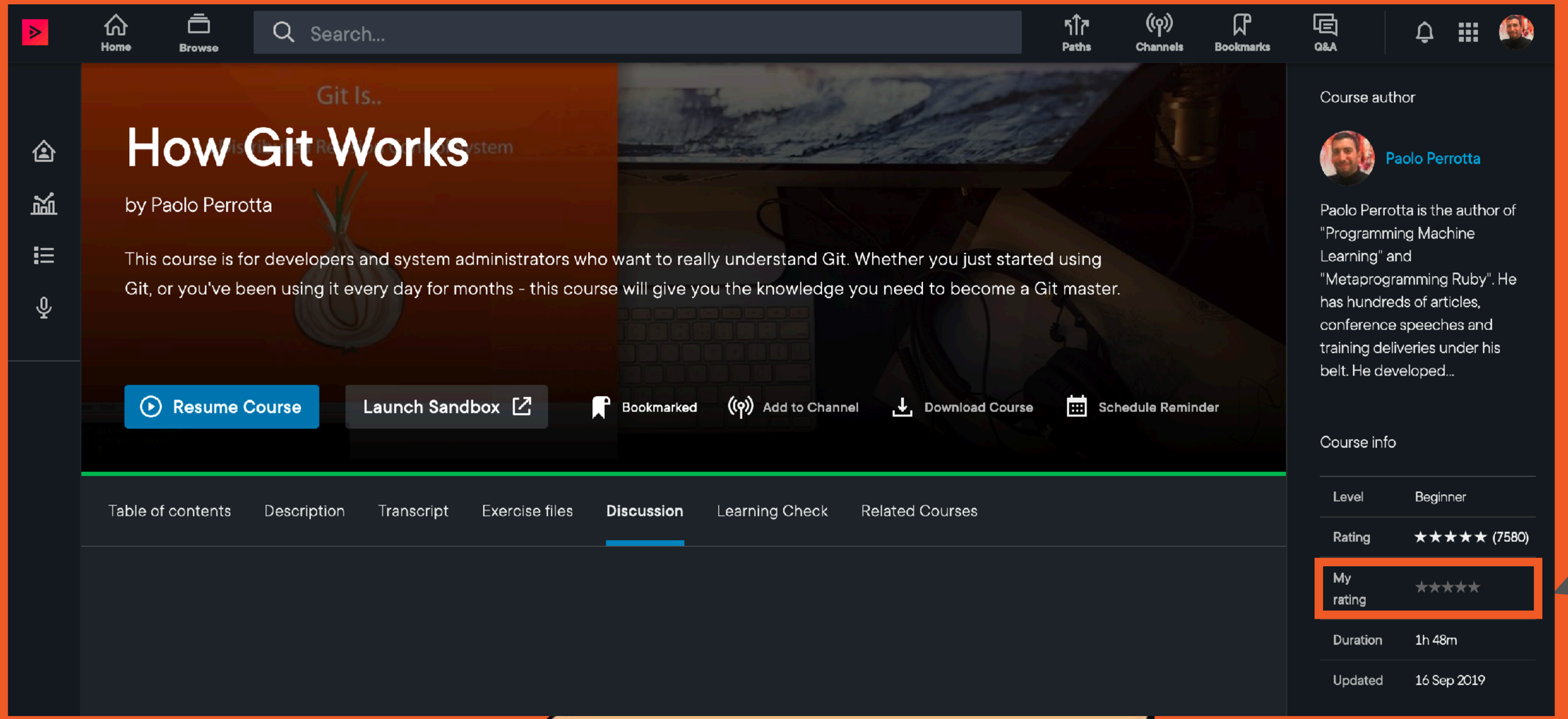
...a Distributed Revision Control System



Git Is...

...a Distributed Revision Control System

Wrapping Your Head Around Git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How Git Works
by Paolo Perrotta
This course is for developers and system administrators who want to really understand Git. Whether you just started using Git, or you've been using it every day for months - this course will give you the knowledge you need to become a Git master.
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Paolo Perrotta
Paolo Perrotta is the author of "Programming Machine Learning" and "Metaprogramming Ruby". He has hundreds of articles, conference speeches and training deliveries under his belt. He developed...
Course info
Level
Beginner
Rating
★★★★★ (7580)
My rating
★★★★★
Duration
1h 48m
Updated
16 Sep 2019

Mastering Git

by Paolo Perrotta

If you already have some experience with Git, this is the training that will make you an expert. From a deep look at the fundamental commands, to the design of a distributed workflow, this training will give you a full overview of the Git toolset.

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This course is part of: Managing Source Code with Git Path

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Course Overview ✓ 1m 33s

Course author

Paolo Perrotta

Paolo Perrotta is the author of "Programming Machine Learning" and "Metaprogramming Ruby". He has hundreds of articles, conference speeches and training deliveries under his belt. He developed...

Course info

Level	Intermediate
Rating	★★★★★ (199)
My rating	★★★★★
Duration	3h 2m
Released	11 Jun 2020

Thank you!

Paolo Perrotta

Freelance Developer

@nusco