

Using Git with a GUI

THE CASE FOR GIT WITH A GUI:
MINIMIZING THE LEARNING CURVE



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PASSIONATE ABOUT TEACHING

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Command Line or GUI?

Command Line

```
posh-git ~ using-git-with-gui [master]
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

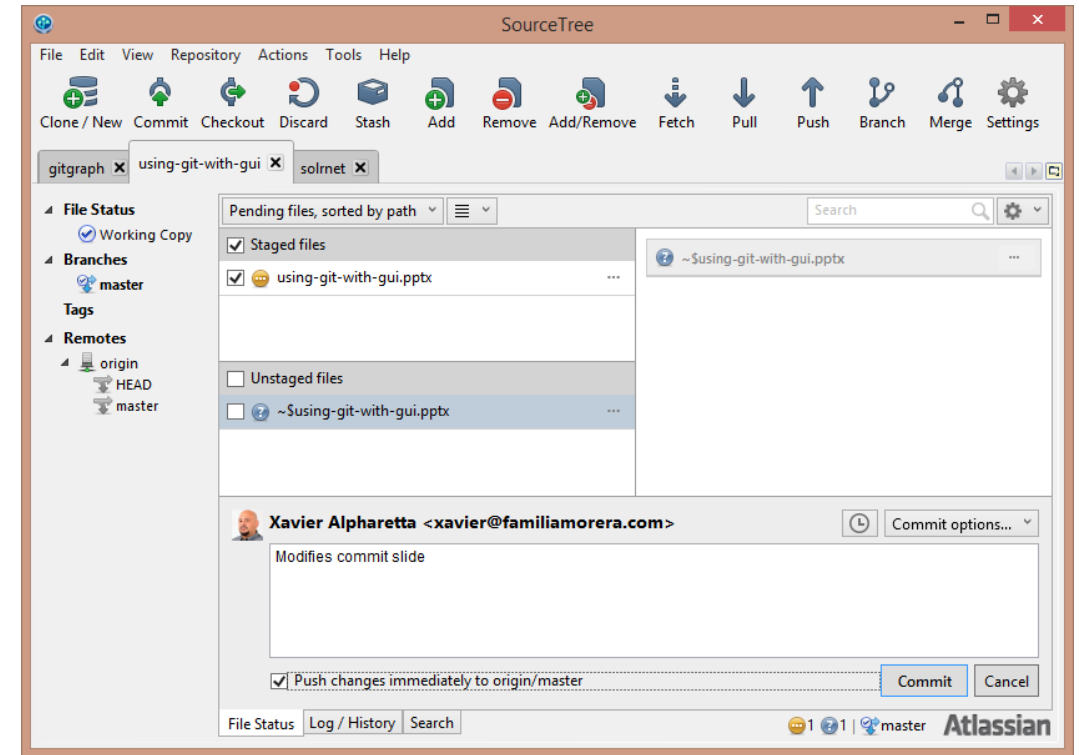
    modified:   using-git-with-gui.pptx

no changes added to commit (use "git add" and/or "git commit -a")
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git add using-git-with-gui.pptx
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   using-git-with-gui.pptx

D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master +0 ~1 -0] > git commit -m "Modifies commit slide"
[master 7dce2e6] Modifies commit slide
 1 file changed, 0 insertions(+), 0 deletions(-)
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] > git push
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 71.54 KiB | 0 bytes/s, done.
Total 3 (delta 2), reused 0 (delta 0)
To https://xmorera@bitbucket.org/xmorera/pluralsight-sourcetree-git.git
 f9a46a6..7dce2e6 master -> master
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] > git status
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working directory clean
D:\Dropbox\xavier-morera-pluralsight-dev\using-git-with-gui [master] >
```

Atlassian SourceTree



IMHO: A GUI Makes Me More Effective



Demo



Command Line vs. GUI



Why Git?

**(The Best)
Source Control**

**Integrity
Amazingly Fast**

**Local Operations
Disconnected**

Distributed

**Incredibly
Powerful**

**A Must In Your
Skillset**



Killer Feature



Branches



They Are Different



Let Me Tell You a Story

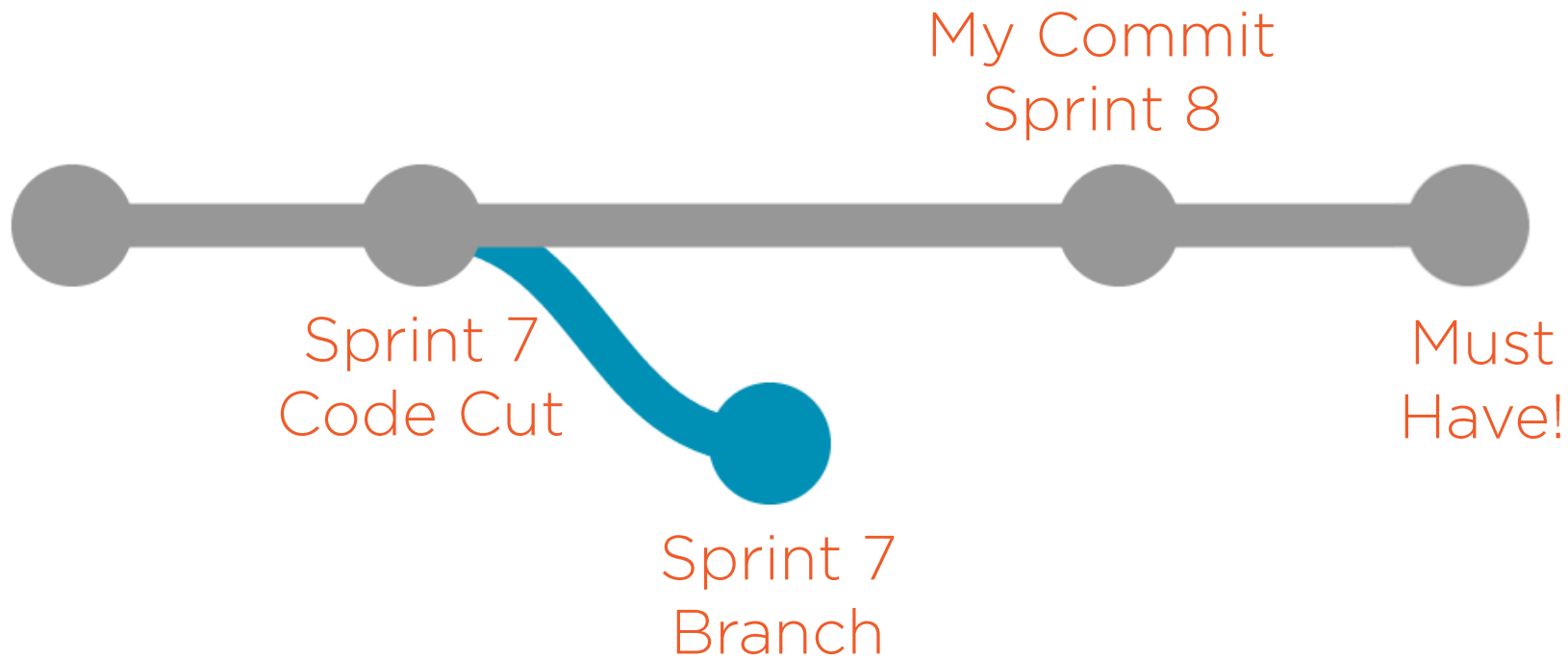


Sprint 7
Code Cut

(with another source control)



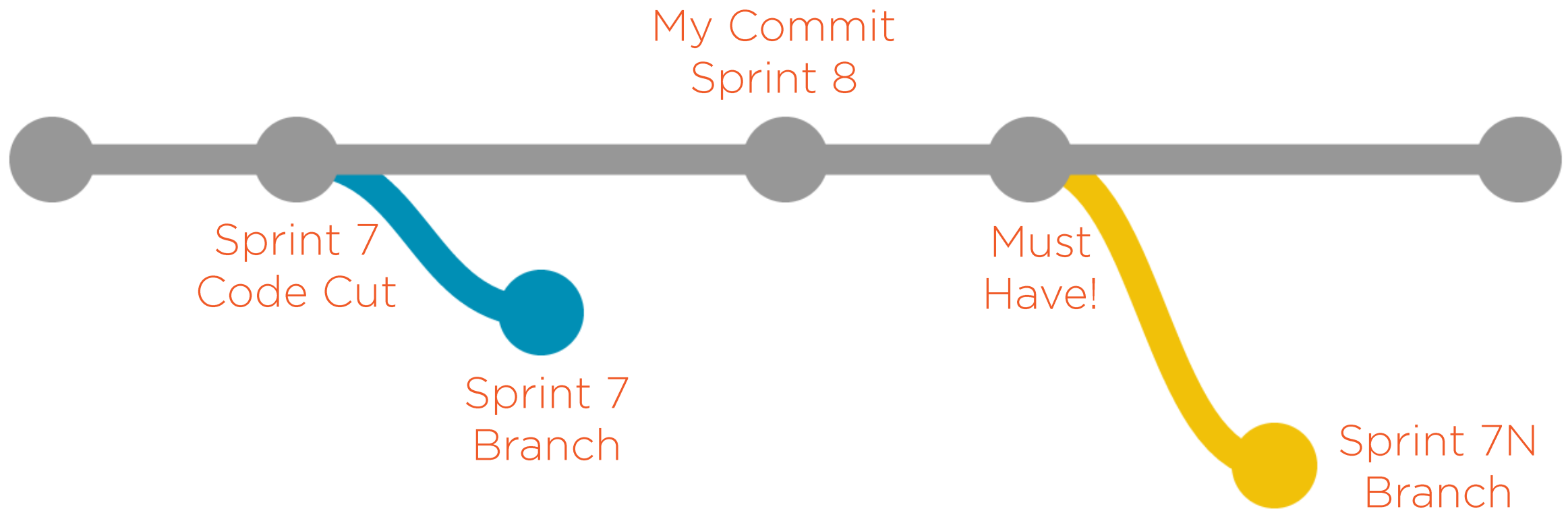
Let Me Tell You a Story



(with another source control)



Let Me Tell You a Story



(with another source control)



Do You See the Problem?

Sprint 7
Without Must Have



Sprint 7N
With Must Have
“My Commit” Sprint 8



This Is What Happened

Chaos and Debugging



With Git





Still Not Convinced?

Microsoft/dotnet

Linux

SolrNet

Json.NET

Bootstrap

FontAwesome

Node.js

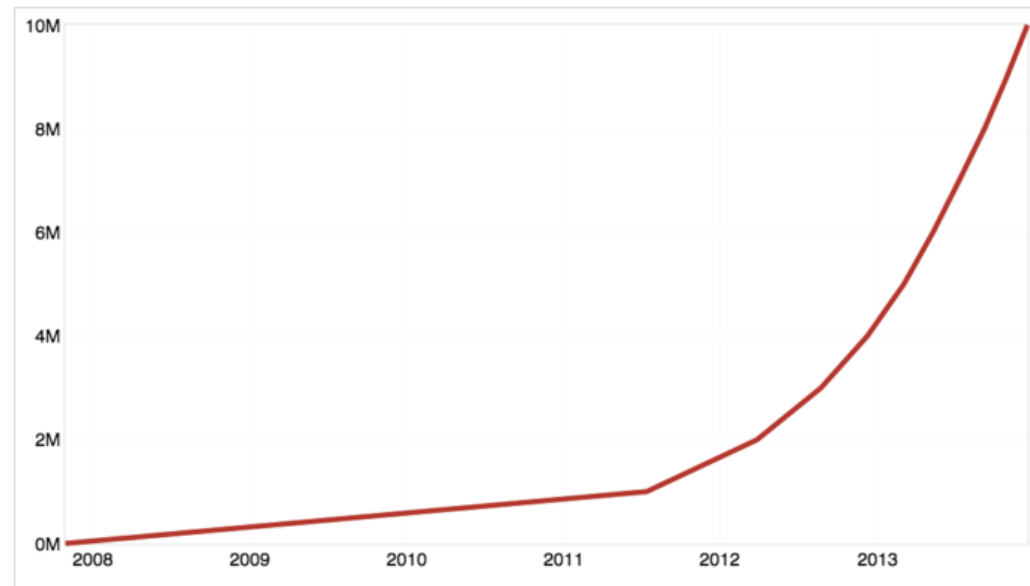
AngularJS

D3

JQuery

Backbone.js

Ruby on Rails



<https://github.com/blog/1724-10-million-repositories>

GitHub



Git



Why Is It Hard to Learn Git?

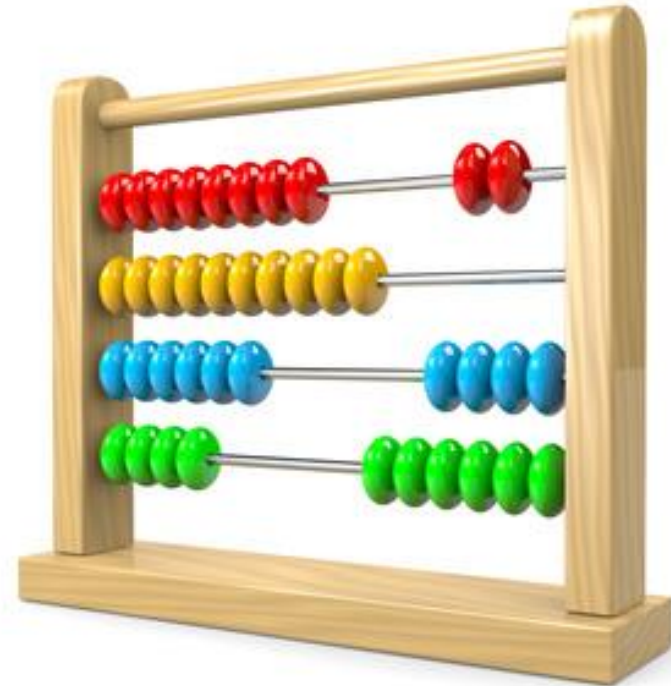


Why Is It Hard to Learn Git?

SVN, TFS and others...

They are easier!

- Simpler workflow
 - Downsides
- Not distributed
- Not as powerful as Git
- Git is different



Why Is It Hard to Learn Git?

More places where your code can exist

- Stash, local working directory, index, local repository and remote repository
- Increases possible interactions



A few concepts that are hard at first

- Merge, rebase? Fast forward merge?

Git internals



Tools - Why Is It Hard to Learn Git?

- Many - command line being widely used
- Can be hard - especially if used to IDE
- Others tools are not very good
- Atlassian SourceTree is here to help!



Git Is Hard

“Early versions of Git did require a certain amount of brain power to wrap your mind around...”

Linus Torvalds



Git

Get Started

Don't Get Scared



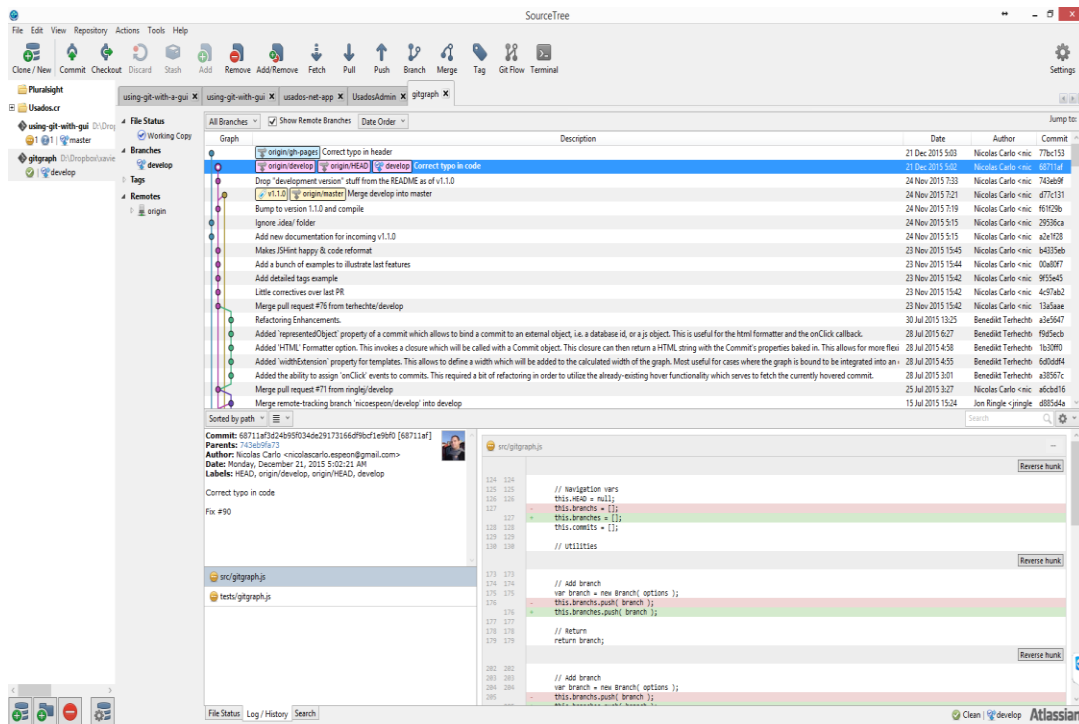
Using Git with a GUI

Easier
Quicker
Productive



Why Git with a Gui?

Atlassian SourceTree



Makes you life easier

Git Personal Assistant

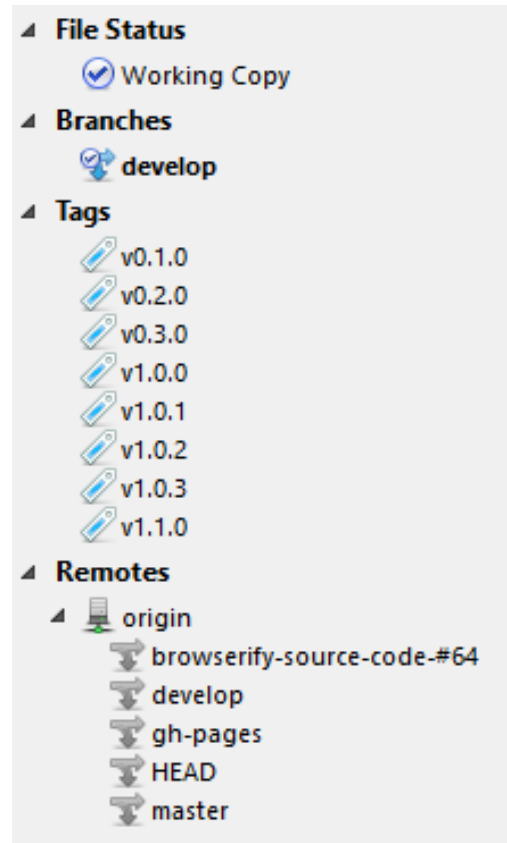


Helps you improve productivity

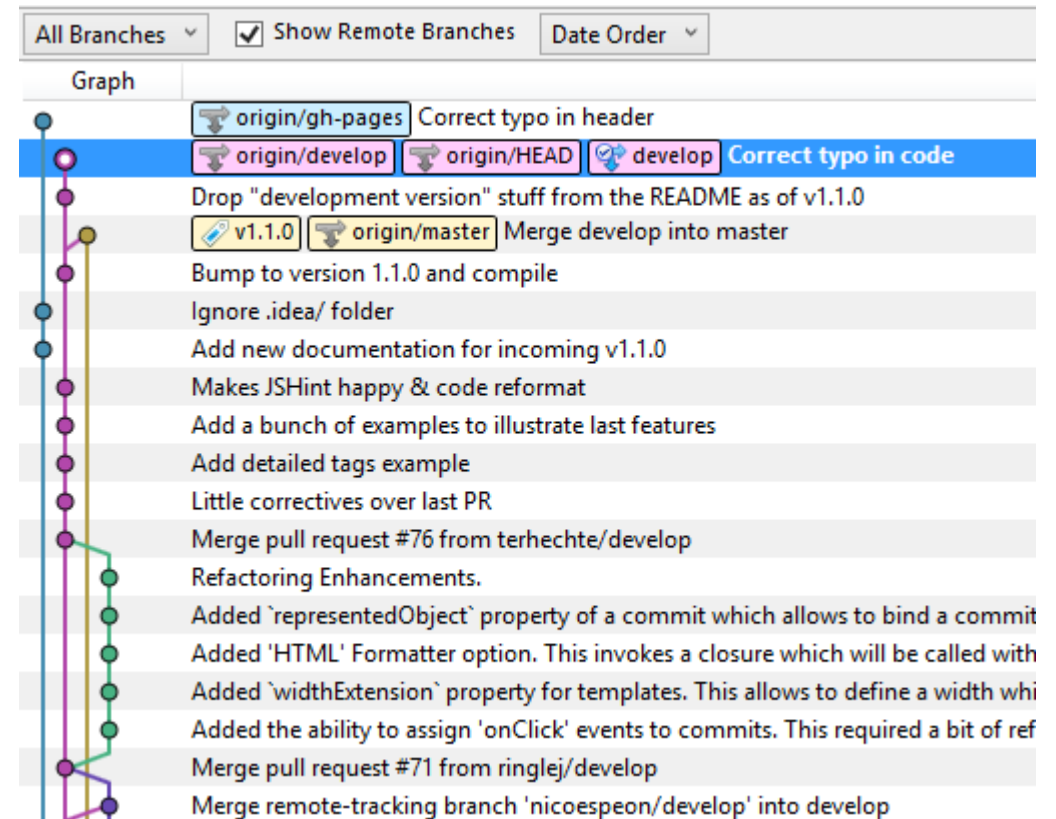


Minimize Git's Learning Curve

Visualize Branches



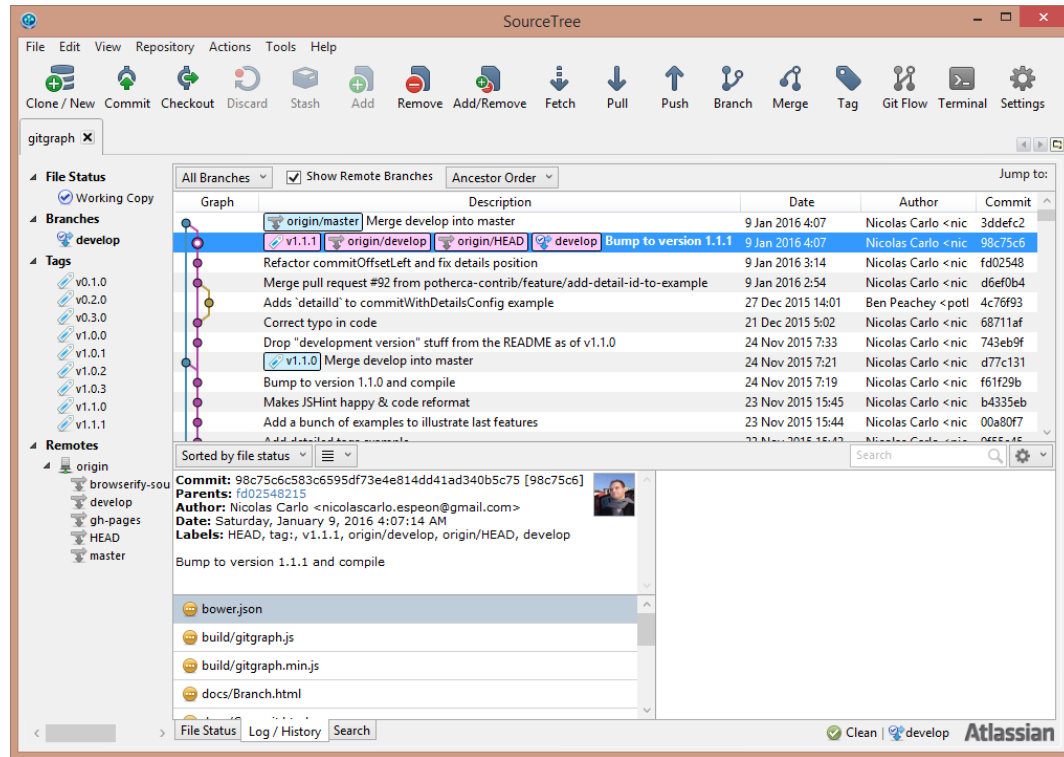
And History



Minimize Git's Learning Curve

Git's Commands

From Basic To Advanced...



Checkout...

Merge...

Rebase...

Tag...

Archive...

Branch...

Rebase children of 77bc153 interactively...

Reset current branch to this commit

Reverse commit...

Create Patch...

Cherry Pick

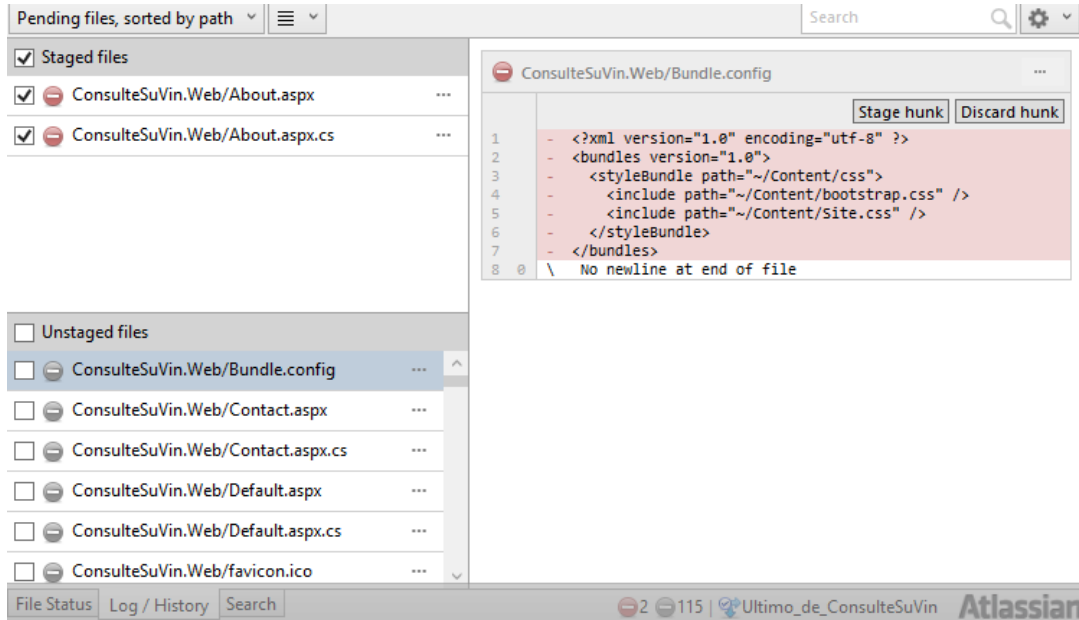
Copy SHA to Clipboard

Custom Actions

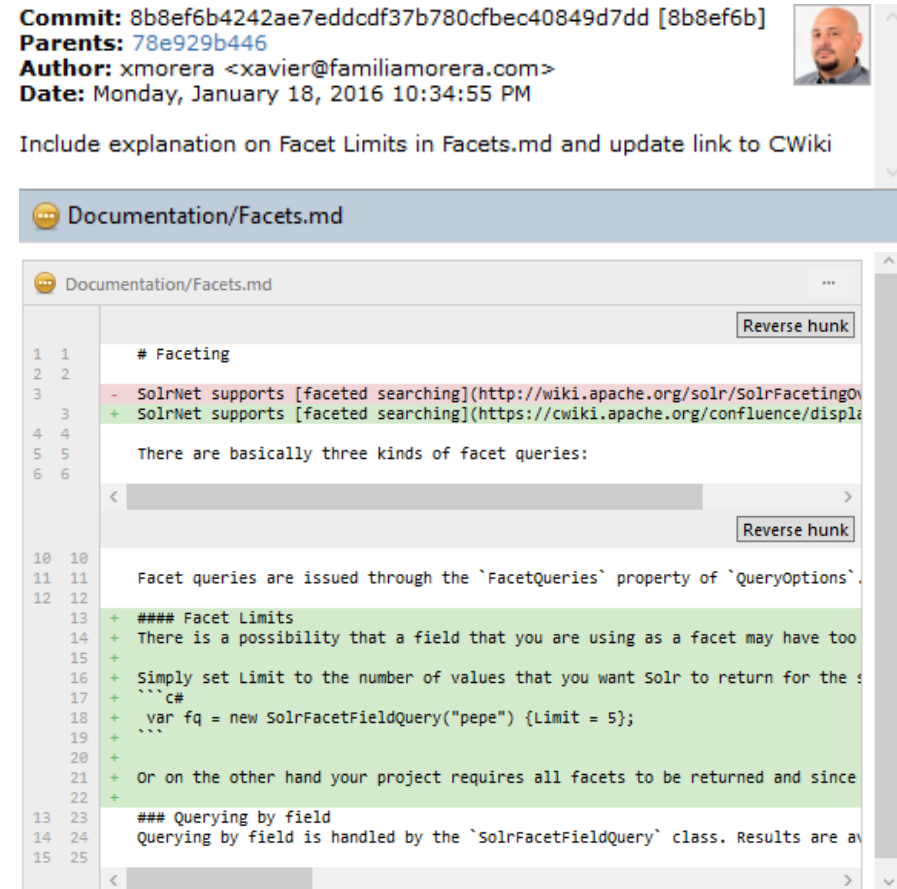


Minimize Git's Learning Curve

Prepare Commits



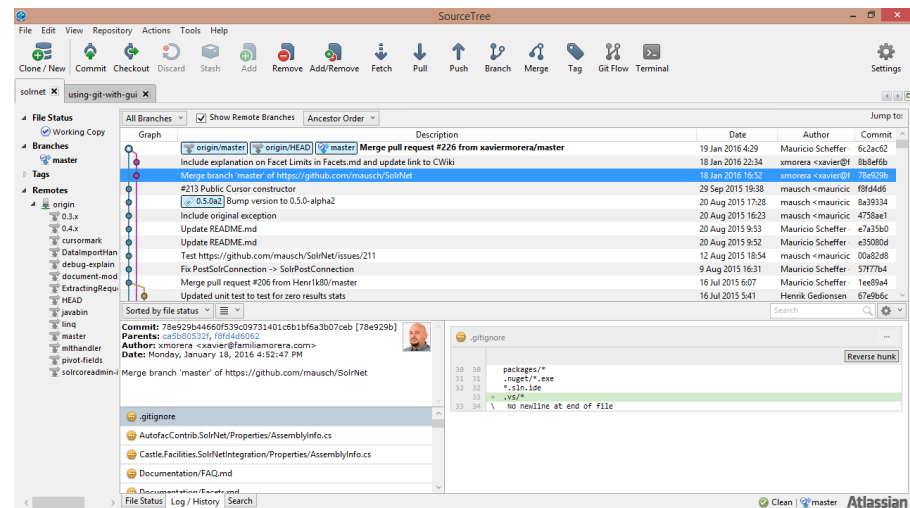
Visualize Changes



Demo



Improving Productivity With a GUI



Atlassian SourceTree

Perfect for Beginners

GUI

Much easier than command line

Pareto's Law (80/20 Rule)

Most likely does everything you need

Easy... Simple...

Smoother learning curve

Git feel familiar from day 1

Powerful Enough for Experts

Terminal

Extensible

Custom Actions

Review outgoing/incoming changesets

Cherry-pick between branches

Patch handling, (interactive) rebase, stash, shelve, and much more



Atlassian Behind SourceTree

The screenshot displays the SourceTree application window. The top menu bar includes File, Edit, View, Repository, Actions, Tools, and Help. The Help menu is open, showing options like 'About SourceTree...', 'Check For Updates', 'Release Notes...', 'Frequently Asked Questions', 'Ask a Question at Atlassian Answers', 'Raise a Support Ticket', and 'Report Bug / Request a New Feature'. The main toolbar contains icons for Pull, Push, Branch, Merge, Tag, Git Flow, and Terminal. The left sidebar shows the 'File Status' section with 'Working Copy' and 'Branches' (master). The 'Remotes' section lists 'origin' and various branches like '0.3.x', '0.4.x', 'cursormark', 'DataImportHan', 'debug-explain', 'document-mod', 'ExtractingRequ', 'HEAD', 'javabin', 'linq', 'master', 'mlthandler', 'pivot-fields', and 'solrcoreadmin-i'. The main area shows a commit history table with columns: Description, Date, Author, and Commit. The selected commit is 'Include explanation on Facet Limits in Facets.md and update link to CWiki' by 'xmorera <xavier@f...' with commit hash '8b8ef6b'. Below the table, the commit details are shown: 'Commit: 8b8ef6b4242ae7eddcdf37b780cfbec40849d7dd [8b8ef6b]', 'Parents: 78e929b446', 'Author: xmorera <xavier@familiamorera.com>', and 'Date: Monday, January 18, 2016 10:34:55 PM'. The bottom right pane shows a diff view for 'Documentation/Facets.md', highlighting changes in the 'Faceting' section.

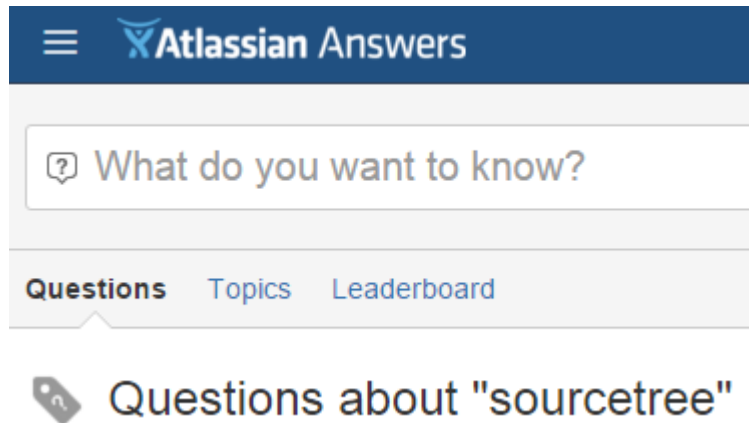
Description	Date	Author	Commit
request #226 from xaviormorera/master	19 Jan 2016 4:29	Mauricio Scheffer	6c2ac62
Include explanation on Facet Limits in Facets.md and update link to CWiki	18 Jan 2016 22:34	xmorera <xavier@f...	8b8ef6b
Merge branch 'master' of https://github.com/mausch/SolrNet	18 Jan 2016 16:52	xmorera <xavier@f...	78e929b
#213 Public Cursor constructor	29 Sep 2015 19:38	mausch <mauric...	f8fd4d6
0.5.0a2 Bump version to 0.5.0-alpha2	20 Aug 2015 17:28	mausch <mauric...	8a39334
Include original exception	20 Aug 2015 16:23	mausch <mauric...	4758ae1
Update README.md	20 Aug 2015 9:53	Mauricio Scheffer	e7a35b0
Update README.md	20 Aug 2015 9:52	Mauricio Scheffer	e35080d
Test https://github.com/mausch/SolrNet/issues/211	12 Aug 2015 18:54	mausch <mauric...	00a82d8
Fix PostSolrConnection -> SolrPostConnection	9 Aug 2015 16:31	Mauricio Scheffer	57f77b4
Merge pull request #206 from Henr1k80/master	16 Jul 2015 6:07	Mauricio Scheffer	1ee89a4
Updated unit test to test for zero results stats	16 Jul 2015 5:41	Henrik Gedionsen	67e9b6c

Commit: 8b8ef6b4242ae7eddcdf37b780cfbec40849d7dd [8b8ef6b]
Parents: 78e929b446
Author: xmorera <xavier@familiamorera.com>
Date: Monday, January 18, 2016 10:34:55 PM

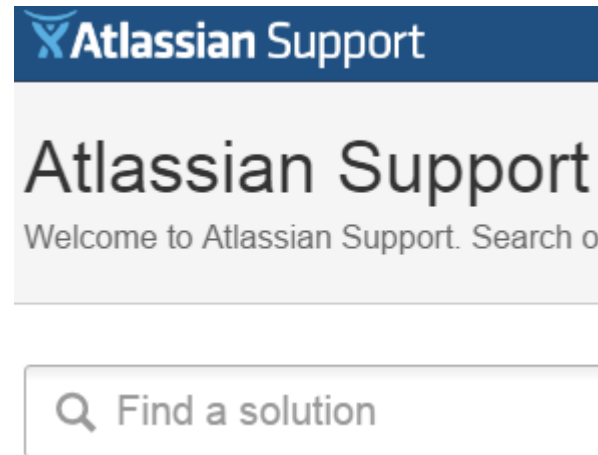
Documentation/Facets.md

```
1 1 # Faceting
2 2
3 3 - SolrNet supports [faceted searching](http://wiki.apache.org/solr/SolrFacetingOverview).
4 4 + SolrNet supports [faceted searching](https://cwiki.apache.org/confluence/display/solr/Faceting)
5 5
```

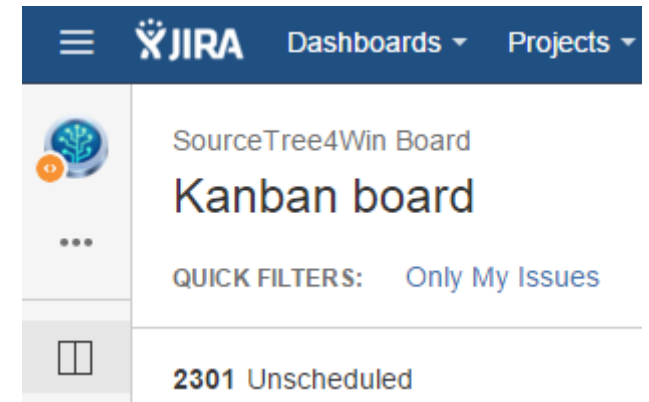
Atlassian Behind SourceTree



Atlassian Answers



Support Ticket



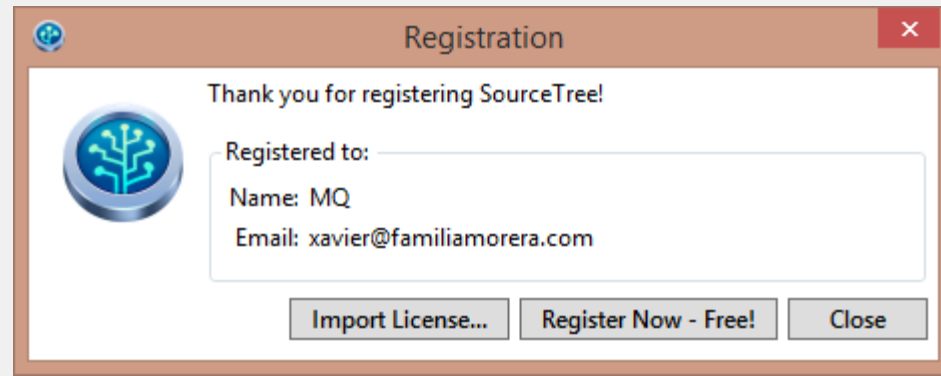
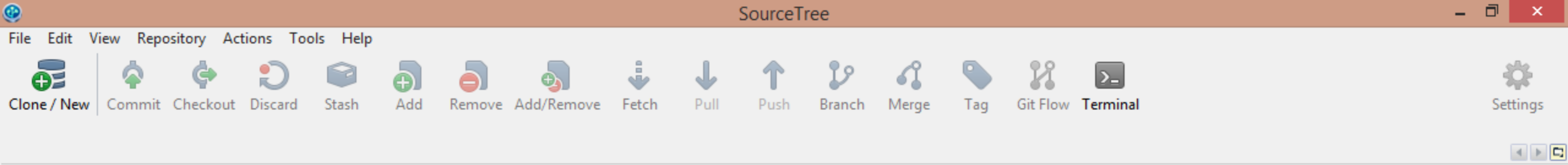
Report Bug
Request Feature



How Do I Get SourceTree?

The image shows a web browser window displaying the SourceTree website. The browser's address bar shows the URL <https://www.sourcetreeapp.com>. The website features the Atlassian SourceTree logo and the text "A free Git & Mercurial client for Windows or Mac." Below this, there are two download buttons: "Download SourceTree Free" for Microsoft Windows 7+ and "Download SourceTree for Mac OS X 10.9+".

At the bottom of the image, a portion of the SourceTree application window is visible. The window has a blue title bar and a menu bar with options: File, Edit, View, Repository, Actions, Tools, and Help. Below the menu bar is a toolbar with icons for various actions: Clone / New, Commit, Checkout, Discard, Stash, Add, Remove, Add/Remove, Fetch, Pull, Push, Branch, Merge, Tag, and Terminal. A Settings gear icon is located in the bottom right corner of the application window.



Free!

Takeaway

Git is Great

Widely Used

Hard

**Minimize the
Learning Curve**

Git with a GUI

**Atlassian
SourceTree**

