

```
> merge ufz git
```

Conflict discovered in file 'repositories/svn'.

Select: (p) postpone, (df) show diff, (e) edit file, (m) merge,  
(mc) my side of conflict, (tc) their side of conflict

---

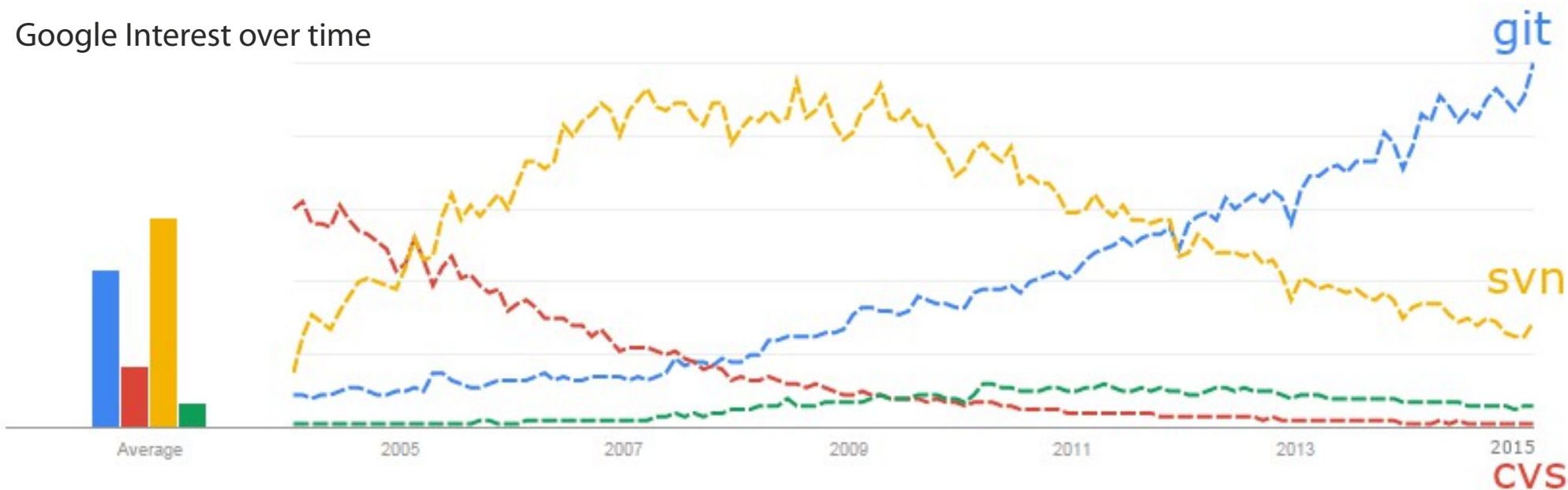


HELMHOLTZ  
CENTRE FOR  
ENVIRONMENTAL  
RESEARCH - UFZ



GitLab

Google Interest over time





heise online > News > 06/2018 > Microsoft kauft GitHub für 7,5 Milliarden US-Dollar

## Microsoft kauft GitHub für 7,5 Milliarden US-Dollar

04.06.2018 15:34 Uhr – Martin Holland

 vorlesen



Was sich bereits angedeutet hat, wurde nun bestätigt: Der US-amerikanische Softwarekonzern Microsoft kauft GitHub und legt dafür stolze 7,5 Milliarden US-Dollar auf

Ähnliche Artikel

### Die Highlights der Build 2018

Der Dotnet-Doktor fasst die wesentlichen Nachrichten von Microsofts Build-Konferenz 2018 zusammen.

 heise **Developer**  2

### US-Handelsausschuss für Technikübernahmen: Mächtige Bazooka

Ein wenig bekannter Ausschuss der US-Regierung verfügt über erheblichen Einfluss und hat die Übernahme von Qualcomm durch Broadcom verhindert.

**Technology Review**



### TTIP: Verdammt, die Zombies kommen?

Ein handelspolitischer Leichnam scheint im Vorfeld



# Why version-control?

## "FINAL".doc



FINAL.doc!



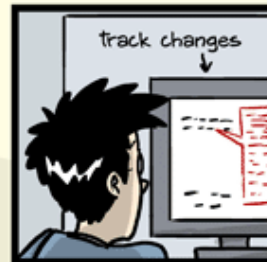
FINAL\_rev.2.doc



FINAL\_rev.6.COMMENTS.doc



FINAL\_rev.8.comments5.  
CORRECTIONS.doc



FINAL\_rev.18.comments7.  
corrections9.MORE.30.doc



FINAL\_rev.22.comments49.  
corrections.10.##\$%WHYDID  
ICOMETOGRADSCHOOL?????.doc



JORGE CHAM © 2012

# Why version-control?

- paper
  - proof
  - accepted
  - cover
  - revision2
  - revision
  - review
  - templates
  - version20170629-131553
  - arxiv
  - version20170815-215708
  - version20170815-144416
  - version20170706-131944
  - version20170612-124214
  - version20160907-steffen
  - version20161012-170207
  - version20161018-140634

## "FINAL".doc



FINAL.doc!



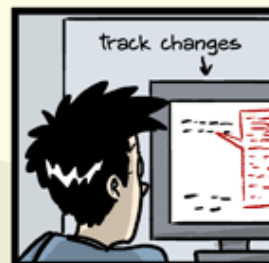
FINAL\_rev.2.doc



FINAL\_rev.6.COMMENTS.doc



FINAL\_rev.8.comments5.  
CORRECTIONS.doc



FINAL\_rev.18.comments7.  
corrections9.MORE.30.doc

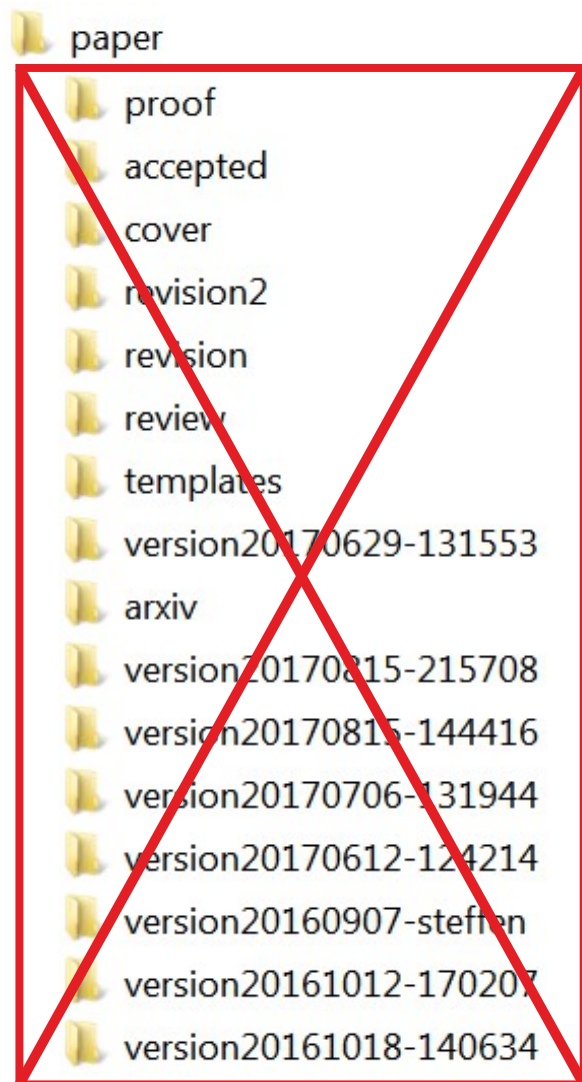


FINAL\_rev.22.comments49.  
corrections.10.##\$%WHYDID  
ICOMETOGRADSCHOOL?????.doc

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# Why version-control?



.git

## "FINAL".doc



FINAL.doc!



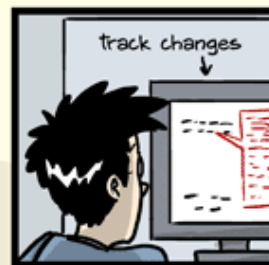
FINAL\_rev.2.doc



FINAL\_rev.6.COMMENTS.doc



FINAL\_rev.8.comments5.  
CORRECTIONS.doc



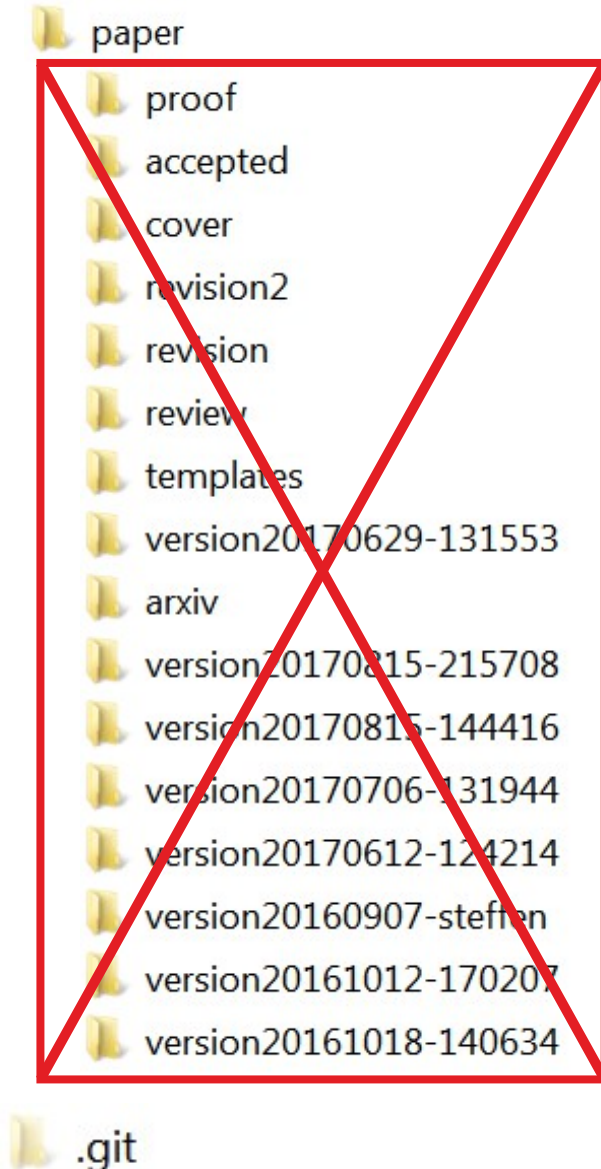
FINAL\_rev.18.comments7.  
corrections9.MORE.30.doc



FINAL\_rev.22.comments49.  
corrections.10.##\$%WHYDID  
ICOMETOGRADSCHOOL?????.doc

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# Why version-control?



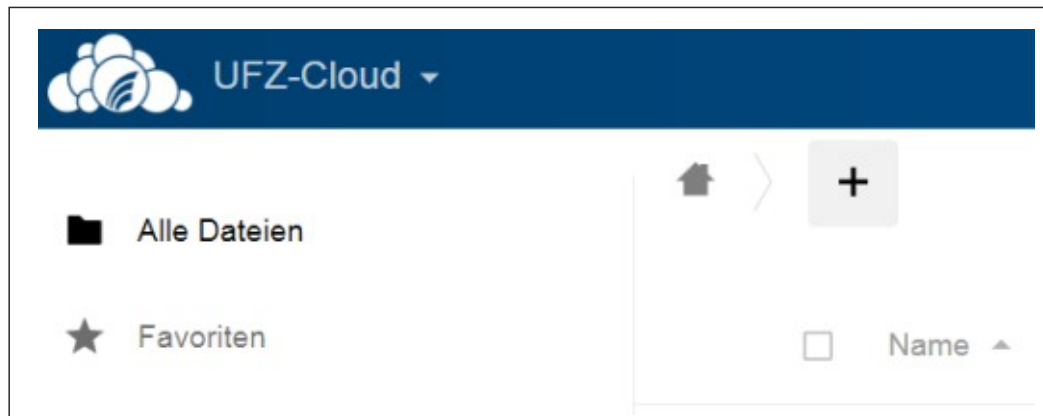
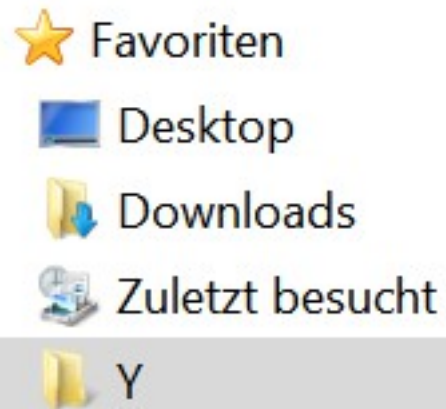
> `git checkout tags/revision`

> `git checkout tags/submitted`

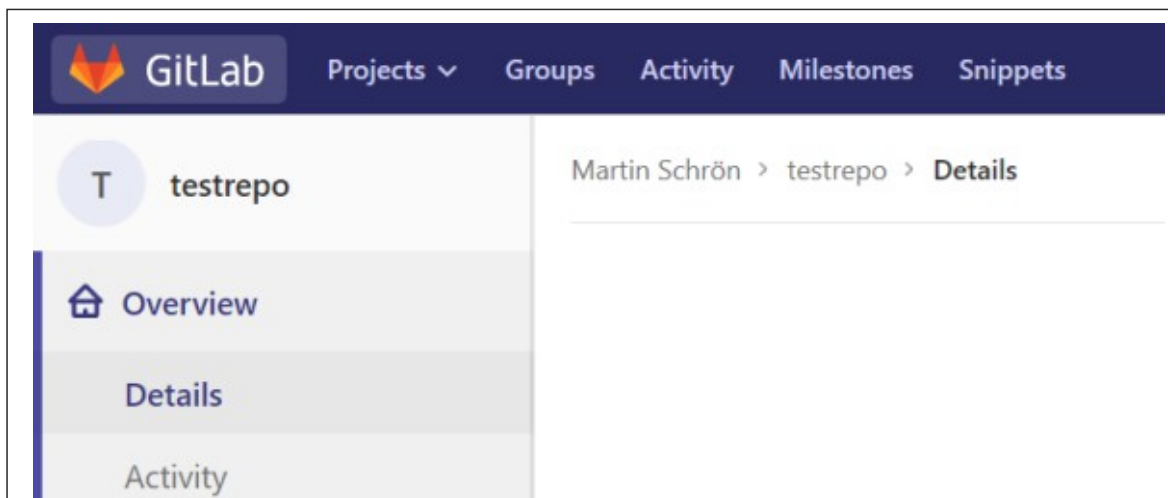
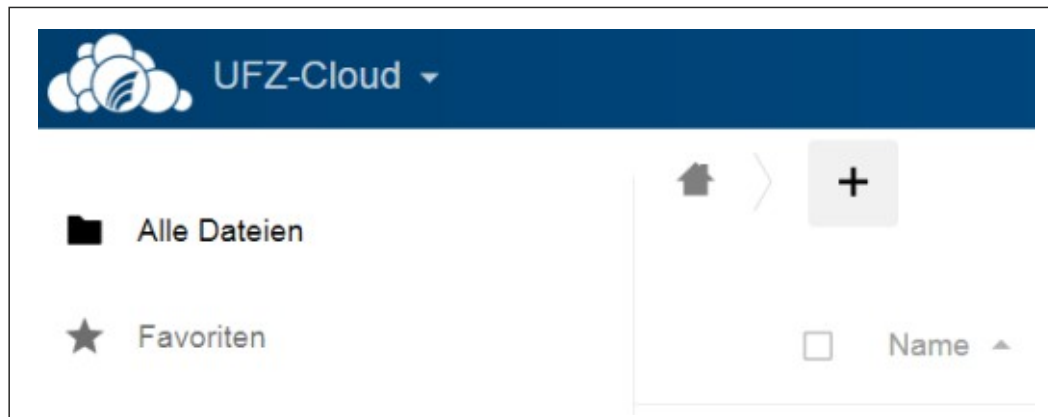
> `git checkout tags/initial_draft`

...

# Why GitLab?



# Why GitLab?



Store a copy  
of your work  
remotely.



# Until now UFZ had an SVN server

angemeldet als schroen

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Projektplan

Quellen durchsehen

Tickets anzeigen

Neues Ticket

Suche

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Letzte Änderung

Änderungshistorie

Dargestellte Revision:

Name ▲	Größe	Rev	Alter	Autor	Letzte Änderung
▸ <a href="#">brennerj</a>		5295	<a href="#">6 Monate</a>	brennerj	stohyd: R: load Helper4me.R as library
▸ <a href="#">kumar</a>		1789	<a href="#">5 Jahre</a>	Luis Samaniego-Eguiguren	text v2 by luis 2nd
▼ <a href="#">progs</a>		5412	<a href="#">3 Monate</a>	schaefed	stohyd/basin_extractor_v2: removed forgotton debug statement
▸ <a href="#">basin_extractor_v1</a>		4637	<a href="#">19 Monate</a>	rakovec	basin_extractor_v1: correction of reporting the basin area
▸ <a href="#">basin_extractor_v2</a>		5412	<a href="#">3 Monate</a>	schaefed	stohyd/basin_extractor_v2: removed forgotton debug statement
▸ <a href="#">bin2netCDF</a>		2869	<a href="#">4 Jahre</a>	thober	bin2netCDF: removed valid_range attribute from variable easting
▸ <a href="#">edk_nc</a>		5105	<a href="#">12 Monate</a>	zink	syohyd: progs: added edk
▸ <a href="#">granger_test</a>		2865	<a href="#">4 Jahre</a>	thober	granger: adding all src files
▸ <a href="#">SMI</a>		5258	<a href="#">7 Monate</a>	thober	smi: small clean up in the inversion of CDFs
▸ <a href="#">SMI_GDM</a>		3450	<a href="#">3 Jahre</a>	marxa	German Drought Monitor
▸ <a href="#">rakovec</a>		4556	<a href="#">21 Monate</a>	rakovec	rakovec: tws_calib_2016
▸ <a href="#">samaniego</a>		5480	<a href="#">13 Tage</a>	lese	new
▸ <a href="#">shrestha</a>		5237	<a href="#">7 Monate</a>	shresthp	creating mhm dam module work doc folder
▸ <a href="#">thober</a>		5357	<a href="#">6 Monate</a>	thober	isi-mip2b/noah-mp: adjusted parameters for Noah-MP
▸ <a href="#">zink</a>		5481	<a href="#">9 Tage</a>	zink	backup from eve

Hinweis: Hilfe zum Repository-Browser finden Sie in [TracBrowser](#).

Änderungen anzeigen...

# Why Git?

everything is fast

every clone is a backup

work offline

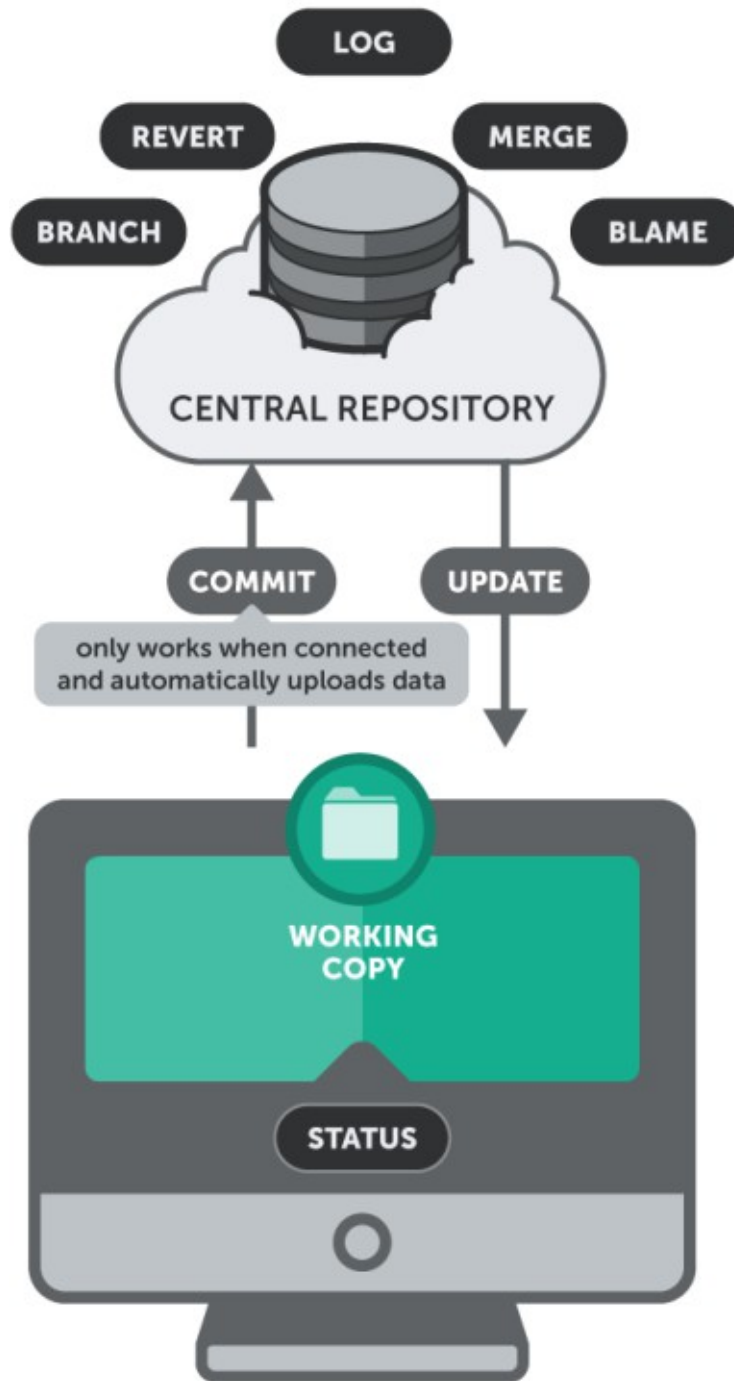
# Why Git?

Git is orders of magnitude faster than SVN

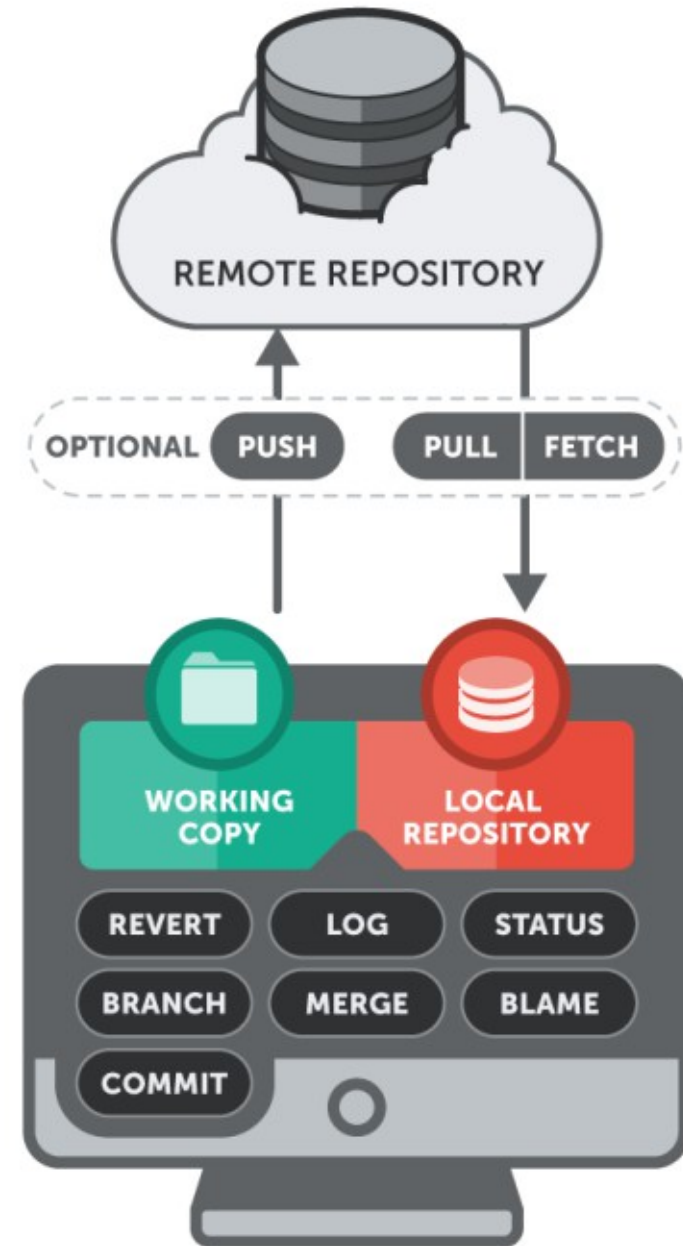
Operation	Git	SVN	Speed
Commit Files (A)	0.64	2.60	4x
Commit Images (B)	1.53	24.70	16x
Diff Current	0.25	1.09	4x
Diff Recent	0.25	3.99	16x
Diff Tags	1.17	83.57	71x
Log (50)	0.01	0.38	31x
Log (All)	0.52	169.20	325x
Log (File)	0.60	82.84	138x
Update	0.90	2.82	3x
Blame	1.91	3.04	1x

# How does Git work?

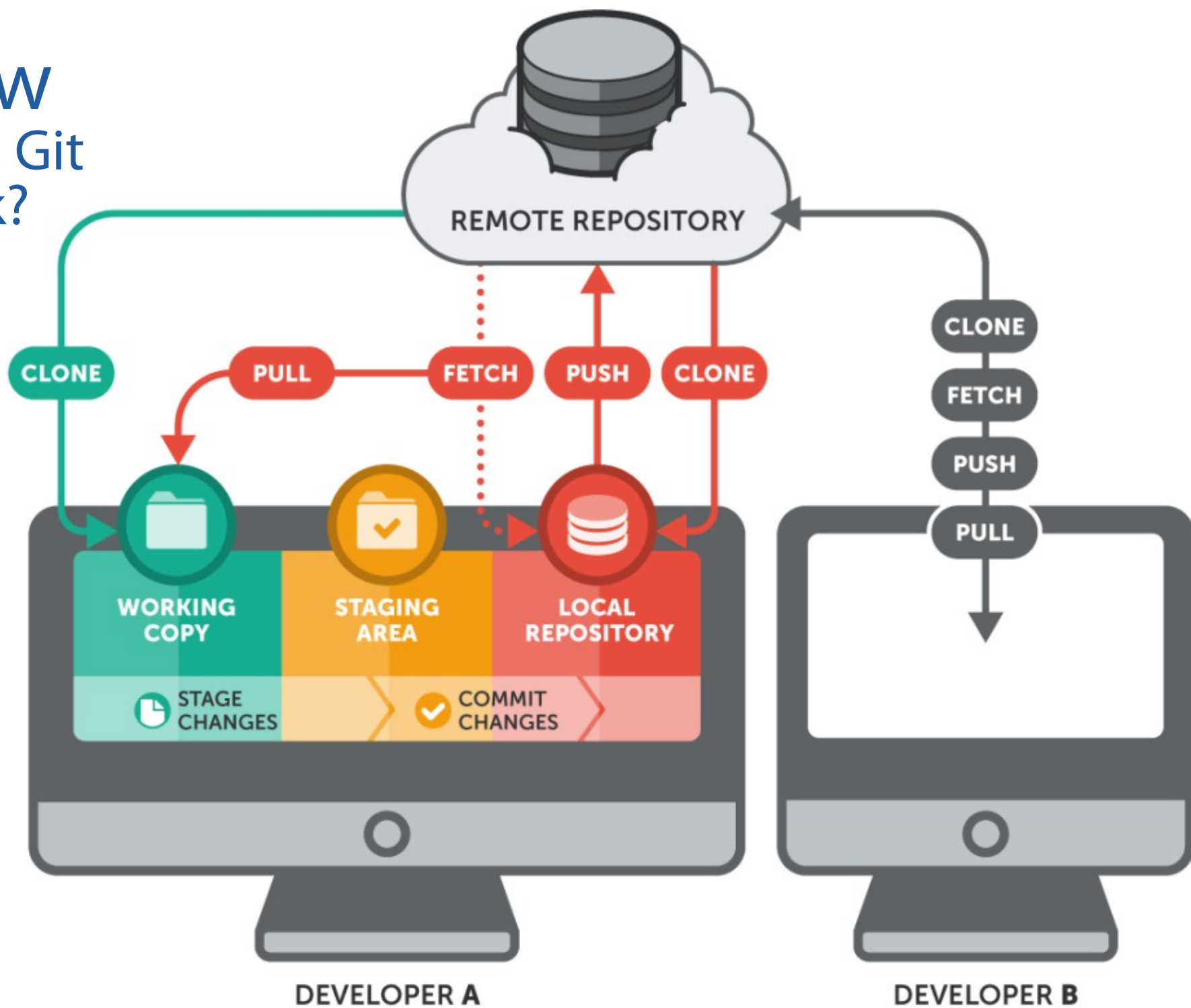
## SUBVERSION



## GIT



# How does Git work?





# How

## to create a repository?

### **A. Create locally, push to remote**

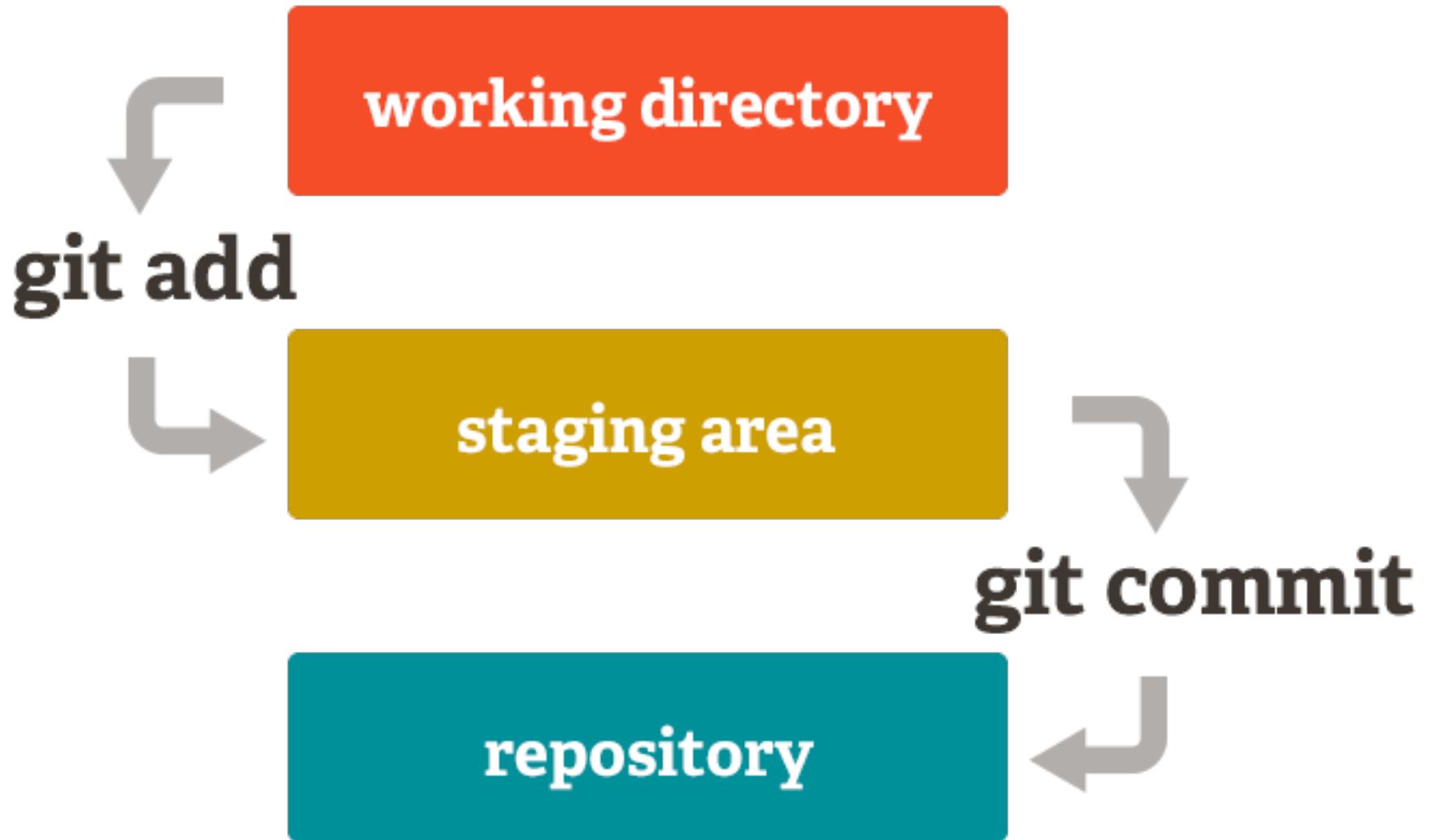
```
mkdir myproject  
cd myproject  
git init  
[add some files]  
git add .  
git commit -am "my first commit"
```

```
git remote add origin https://git.ufz.de/username/myproject.git  
git push --set-upstream origin master
```

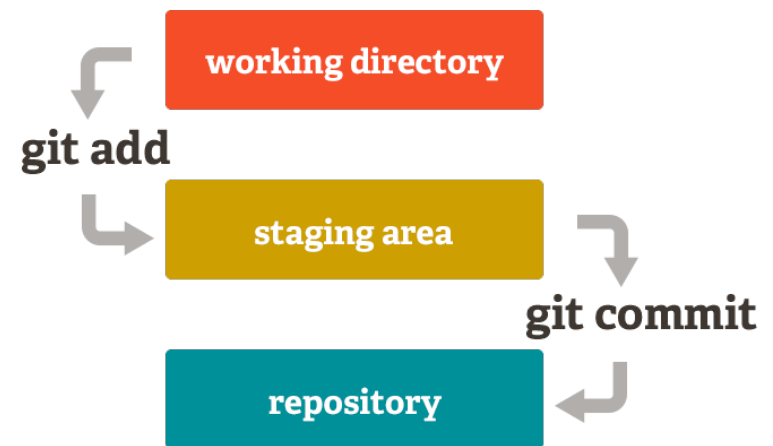
### **B. Create remotely, clone to local**

```
git clone https://.../myproject.git
```

# How does Git work?



# How does Git work?



	COMMENT	DATE
○	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
○	ENABLED CONFIG FILE PARSING	9 HOURS AGO
○	MISC BUGFIXES	5 HOURS AGO
○	CODE ADDITIONS/EDITS	4 HOURS AGO
○	MORE CODE	4 HOURS AGO
○	HERE HAVE CODE	4 HOURS AGO
○	AAAAAAAAA	3 HOURS AGO
○	ADKFJSLKDFJSDKLFJ	3 HOURS AGO
○	MY HANDS ARE TYPING WORDS	2 HOURS AGO
○	HAAAAAAAAAANDS	2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT  
MESSAGES GET LESS AND LESS INFORMATIVE.

# How does Git work?

README.txt

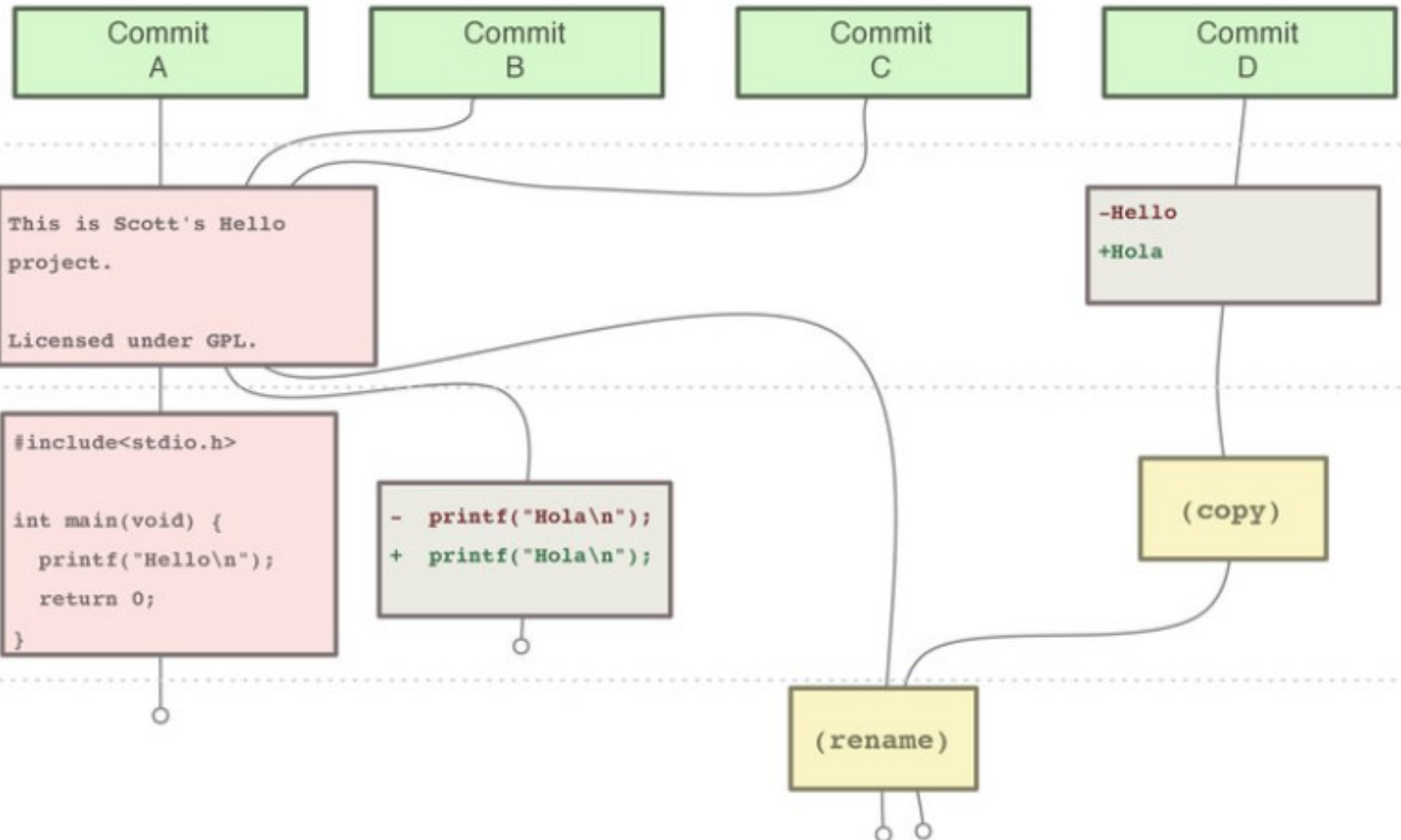
```
This is Scott's  
Hola project.  
  
Licensed under GPL.
```

hola.c

```
#include<stdio.h>  
  
int main(void) {  
    printf("Hola\n");  
    return 0;  
}
```

hello.c

```
#include<stdio.h>  
  
int main(void) {  
    printf("Hola\n");  
    return 0;  
}
```



# History

```
$ git log
commit 16758d868a4e97c9d4281940438b7ea1680cfc0a
Merge: 5eea9cf 4b2a7ae
Author: Scott Chacon <schacon@gmail.com>
Date:   Wed Jul 28 16:29:23 2010 -0700
```

Merge branch 'i18n'

```
commit 4b2a7ae83bcbb213c7d88c6fada3700f77d43a2e
Author: Scott Chacon <schacon@gmail.com>
Date:   Wed Jul 28 16:28:45 2010 -0700
```

fix spacing issues in both c files

```
commit 1d6389c30cf766daf3dcfe7cc1e3b7fdbfc5cc48
Author: Scott Chacon <schacon@gmail.com>
Date:   Wed Jul 28 16:28:18 2010 -0700
```

added i18n file

```
commit 5eea9cf450d5b200d7f134e4024d1c062cb5b341
Author: Scott Chacon <schacon@gmail.com>
Date:   Wed Jul 28 16:27:35 2010 -0700
```

documented issue file



# History

```
$ git log --oneline il8n
faf4ece update README to be more specific
4b2a7ae fix spacing issues in both c files
1d6389c added il8n file
79c2add initial project import
```

```
$ git log
commit 16758d868a4e97c9d4281940438b7ea1680cfc0a
Merge: 5eea9cf 4b2a7ae
Author: Scott Chacon <schacon@gmail.com>
Date: Wed Jul 28 16:29:23 2010 -0700
```

Merge branch 'il8n'

```
commit 4b2a7ae83bcbb213c7d88c6fada3700f77d43a2e
Author: Scott Chacon <schacon@gmail.com>
Date: Wed Jul 28 16:28:45 2010 -0700
```

fix spacing issues in both c files

```
commit 1d6389c30cf766daf3dcfe7cc1e3b7fdbfc5cc48
Author: Scott Chacon <schacon@gmail.com>
Date: Wed Jul 28 16:28:18 2010 -0700
```

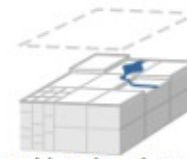
added il8n file

```
commit 5eea9cf450d5b200d7f134e4024d1c062cb5b341
Author: Scott Chacon <schacon@gmail.com>
Date: Wed Jul 28 16:27:35 2010 -0700
```

documented issue file

```
$ git log --oneline --graph
* 16758d8 Merge branch 'il8n'
| \
| * 4b2a7ae fix spacing issues in
| * 1d6389c added il8n file
* | 5eea9cf documented issue file
* | 4db9f5c added issue file
| /
* 79c2add initial project import
```

# Branching



angemeldet als schroen

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source: @ 2871

Wechseln zu:

Dargestellte Revision:

Name ▲	Größe	Rev	Alter	Autor	Letzte Änderung
▼ <a href="#">branches</a>		<a href="#">2871</a> ⚙	<a href="#">3 Stunden</a>	thober	branches: varying_celerity: minor clean ups
▶ <a href="#">corMU</a>		<a href="#">2777</a> ⚙	<a href="#">4 Monate</a>	brennerj	branches: corMU: added PET option process(5)=4: Penman-Monteith with two ...
▶ <a href="#">FeddesPlusRootfract</a>		<a href="#">2625</a> ⚙	<a href="#">10 Monate</a>	extdemir	branches: new branch FeddesPlusRootfract?
▶ <a href="#">g_water</a>		<a href="#">1741</a> ⚙	<a href="#">4 Jahre</a>	mai	branches: g_water: cleaned-up mo_gwater and mo_flow_depth
▶ <a href="#">genetic_tf</a>		<a href="#">2759</a> ⚙	<a href="#">6 Monate</a>	extklotz	branches/genetic_tf/ - Added logging functionality.
▶ <a href="#">gw_coupling</a>		<a href="#">2868</a> ⚙	<a href="#">5 Tage</a>	schueler	branch: gw_coupling: Added a routine to calculate the channel depth and ...
▶ <a href="#">mc_jm_dk_likelihood</a>		<a href="#">2393</a> ⚙	<a href="#">2 Jahre</a>	cuntz	mHM/branches/mc_jm_dk: new catchments and new distribution naming - 3
▶ <a href="#">mhm_ensemble</a>		<a href="#">2214</a> ⚙	<a href="#">2 Jahre</a>	rakovec	branch: mhm_ensemble: setting back the perturbations in the mhm call, ...
▶ <a href="#">mk-neutron</a>		<a href="#">2787</a> ⚙	<a href="#">4 Monate</a>	kaluza	branches: mk-neutron: L3 and latticeWater have parameters in ...
▶ <a href="#">mlm_dev</a>		<a href="#">2869</a> ⚙	<a href="#">5 Tage</a>	shresthp	Branches: mLM - working on auto mRM inflow calculations using lake class ...
▶ <a href="#">mpr_extract</a>		<a href="#">2870</a> ⚙	<a href="#">4 Tage</a>	ottor	branch: mpr_extract, ./src: - advances pre-processor to successfully read ...
▶ <a href="#">neutron_calib</a>		<a href="#">2201</a> ⚙	<a href="#">3 Jahre</a>	schroen	B:neutron_calib: final implementation for neutron calibration
▶ <a href="#">nitrate-mhm5.7</a>		<a href="#">2674</a> ⚙	<a href="#">7 Monate</a>	yangx	branches:nitrate-mhm5.7:revert changes on hydrological source code
▶ <a href="#">nitrate_2017</a>		<a href="#">2645</a> ⚙	<a href="#">9 Monate</a>	yangx	branches:nitrate_2017: updated nitrate routines
▶ <a href="#">pareto_dds_2</a>		<a href="#">2293</a> ⚙	<a href="#">2 Jahre</a>	mai	branches: pareto_dds: enable historic writing of pareto fronts
▶ <a href="#">QET_calib</a>		<a href="#">2621</a> ⚙	<a href="#">10 Monate</a>	brennerj	branches: QET_calib: merged trunk into branch
▶ <a href="#">remko</a>		<a href="#">1787</a> ⚙	<a href="#">4 Jahre</a>	mai	branches/remko: remove unused variables and too long lines
▶ <a href="#">varying_celerity</a>		<a href="#">2871</a> ⚙	<a href="#">3 Stunden</a>	thober	branches: varying_celerity: minor clean ups
▶ <a href="#">outreach</a>		<a href="#">2671</a> ⚙	<a href="#">7 Monate</a>	rakovec	outreach: update colors and file extent
▶ <a href="#">releases</a>		<a href="#">2740</a> ⚙	<a href="#">6 Monate</a>	rakovec	releases: NEW RELEASE mHM v.5.8
▶ <a href="#">trunk</a>		<a href="#">2857</a> ⚙	<a href="#">10 Tage</a>	thober	trunk: make.config: updated files for stmac



# Branching



angemeldet als schroen

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Wechseln zu:

Dargestellte Revision:

Name ▲	Größe	Rev	Alter	Autor	Letzte Änderung
▼ <b>branches</b>		2871	3 Stunden	thober	branches: varying_celerity: minor clean ups
▶ <b>corMU</b>		2777	4 Monate	brennerj	branches: corMU: added PET option process(5)=4: Penman-Monteith with two ...
▶ <b>FeddesPlusRootfract</b>		2625	10 Monate	extdemir	
▶ <b>g_water</b>		1741	4 Jahre	mai	
▶ <b>genetic_tf</b>		2759	6 Monate	extklotz	
▶ <b>gw_coupling</b>		2868	5 Tage	schueler	
▶ <b>mc_jm_dk_likelihood</b>		2393	2 Jahre	cuntz	
▶ <b>mhm_ensemble</b>		2214	2 Jahre	rakovec	
▶ <b>mk-neutron</b>		2787	4 Monate	kaluza	
▶ <b>mlm_dev</b>		2869	5 Tage	shresthp	
▶ <b>mpr_extract</b>		2870	4 Tage	ottor	
▶ <b>neutron_calib</b>		2201	3 Jahre	schroen	
▶ <b>nitrate-mhm5.7</b>		2674	7 Monate	yangx	
▶ <b>nitrate_2017</b>		2645	9 Monate	yangx	
▶ <b>pareto_dds_2</b>		2293	2 Jahre	mai	
▶ <b>QET_calib</b>		2621	10 Monate	brennerj	
▶ <b>remko</b>		1787	4 Jahre	mai	
▶ <b>varying_celerity</b>		2871	3 Stunden	thober	
▶ <b>outreach</b>		2671	7 Monate	rakovec	
▶ <b>releases</b>		2740	6 Monate	rakovec	
▶ <b>trunk</b>		2857	10 Tage	thober	

In Git,  
a branch  
is a first-class  
concept.  
Branches live  
under **.git/**  
and replace  
your working  
directory upon  
checkout.

```
check/
doc/
.git/
.gitattributes
LICENSE
make.config/
Makefile
mhm.fbp
mhm.nml
mhm_outputs.nml
mhm_parameter.nml
mrm_outputs.nml
post-proc/
pre-proc/
README.md
src/
test_basin/
test_basin_2/
```

# Merge conflicts

Whoops, it looks like you have some merge conflicts !



## Merge

- ✓ The facility to merge data is also there in SVN, but it is somewhat incomplete
- ✓ SVN merge records seem to miss some of the important details that Git keeps track of.

## Merge

- ✓ Users to have control over the merging of data in synchronized repositories.
- ✓ Merges are always pulled by someone and nobody can push to commit merges in someone else's repository.

If a merge failes,  
everyone is stuck!



# Merge tools

The screenshot displays a code editor interface with three open files: `srf_LOCAL_6767.py`, `srf.py`, and `srf_REMOTE_6767.py`. Each file contains Python code for testing memory availability and calculating Fourier modes. The code is organized into sections: a header comment, a loop for chunking, a calculation of phase values, a summation of modes, and a seed function.

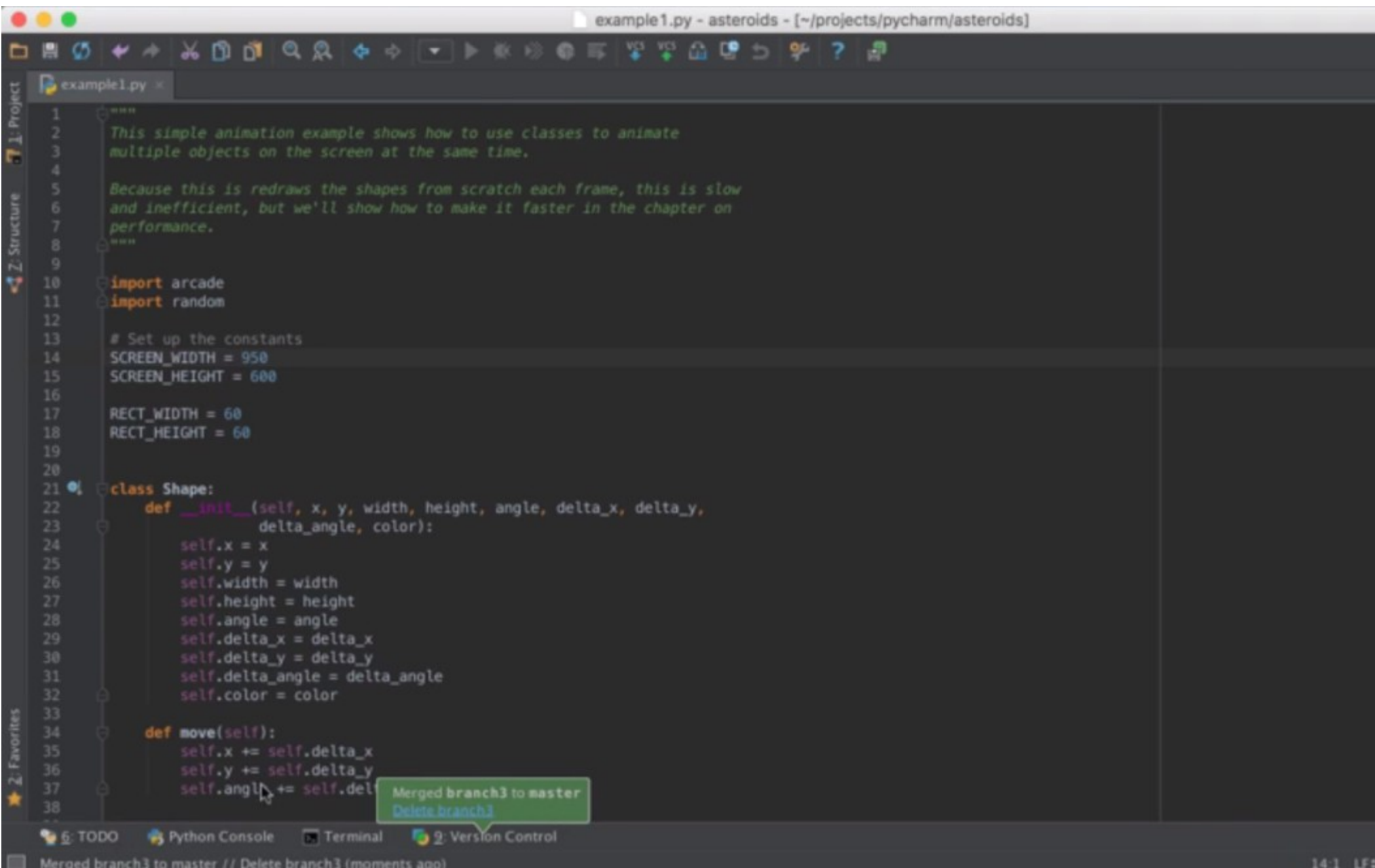
Key differences between the files are highlighted by red arrows:

- In `srf.py`, the variable `c` is used instead of `chunk` in several places, such as `for c in range(c_no)` and `a = c * c_len`.
- In `srf_REMOTE_6767.py`, the variable `chunk` is consistently used throughout, such as `for chunk in range(chunk_no)` and `a = chunk * chunk_len`.

The code includes comments explaining the purpose of each section, such as "Test to see if enough memory is available" and "In case there isn't, divide Fourier modes into small chunks". It also features a seed function that initializes a random number generator.

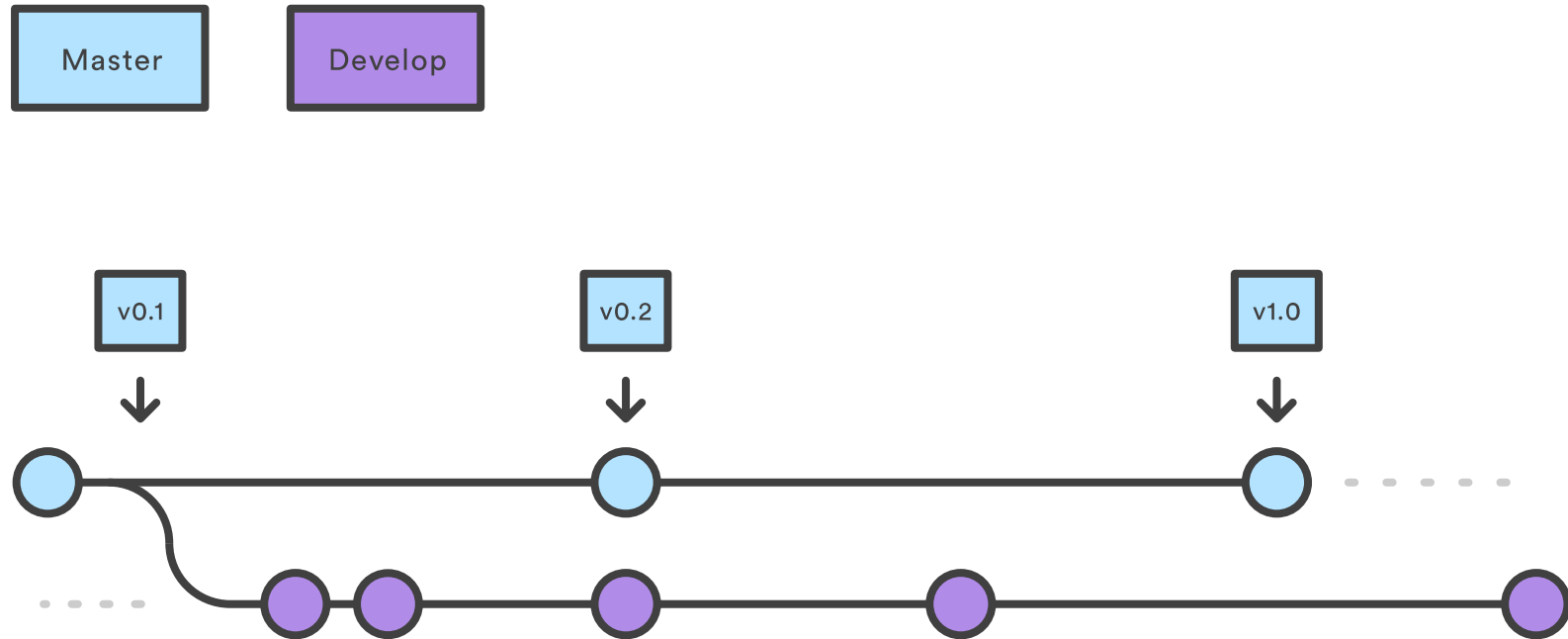


# Merge tools



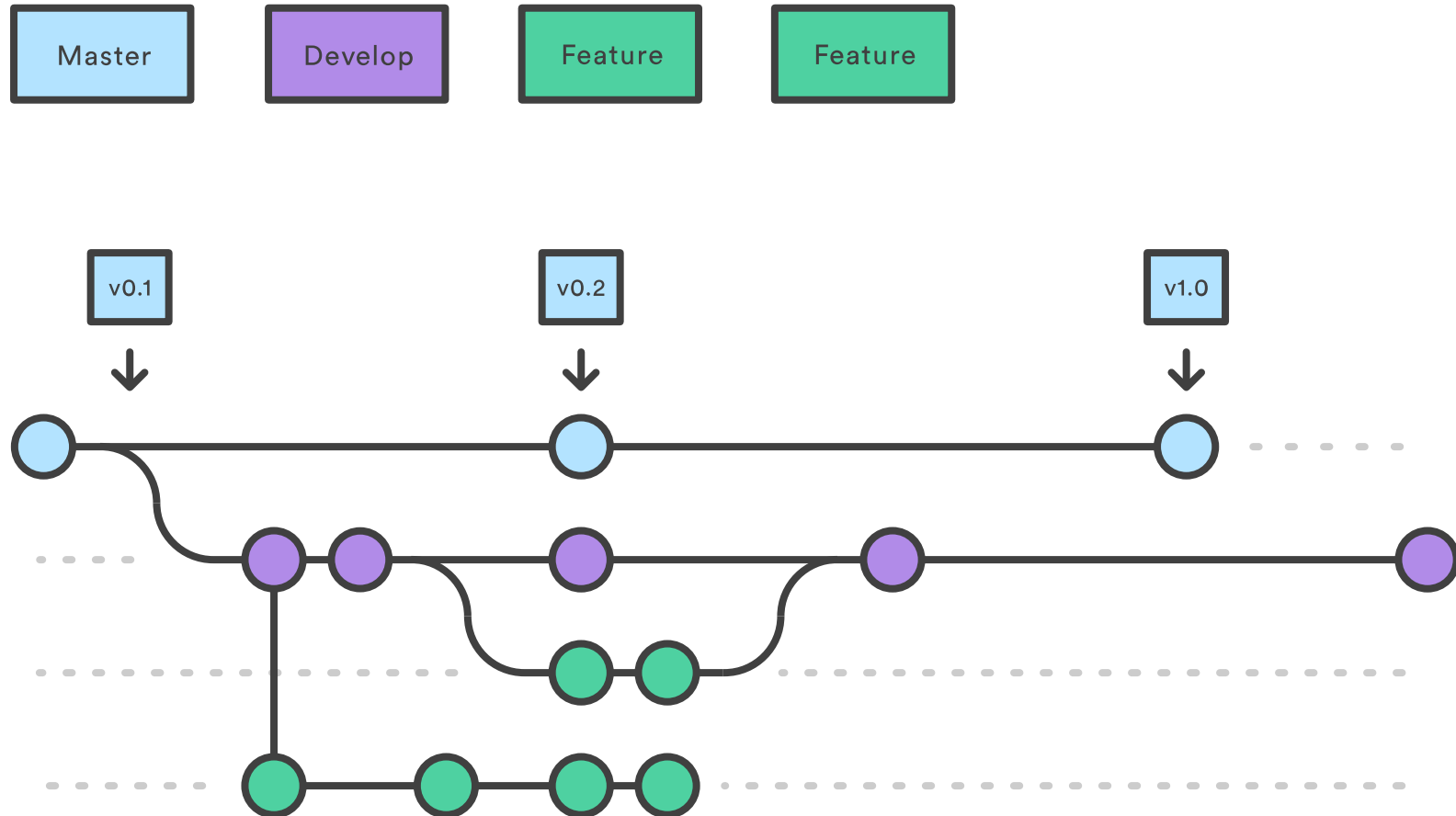
# Git Workflow

for Teams and Release-based development (e.g. mHM)



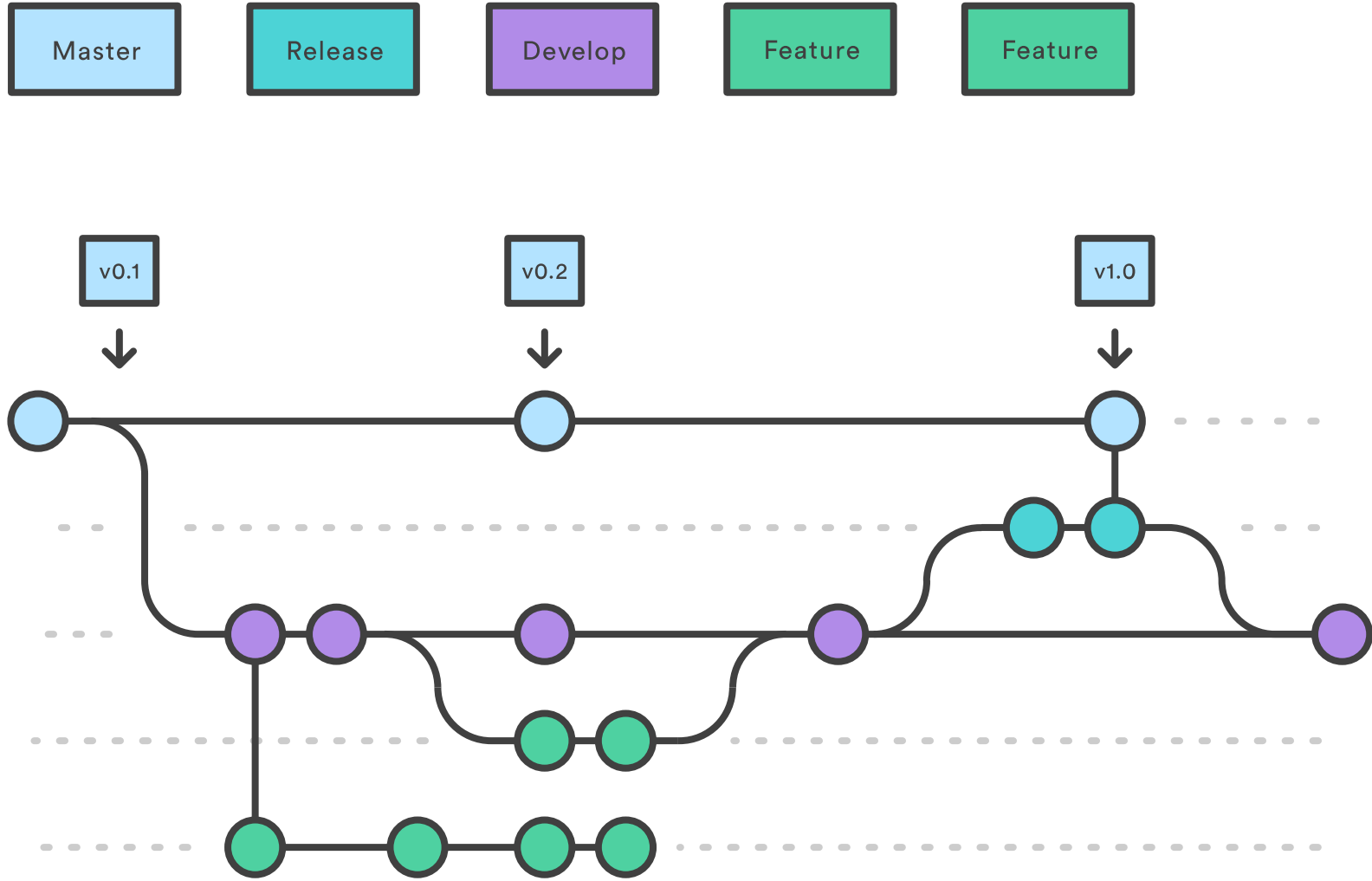
# Git Workflow

for Teams and Release-based development (e.g. mHM)



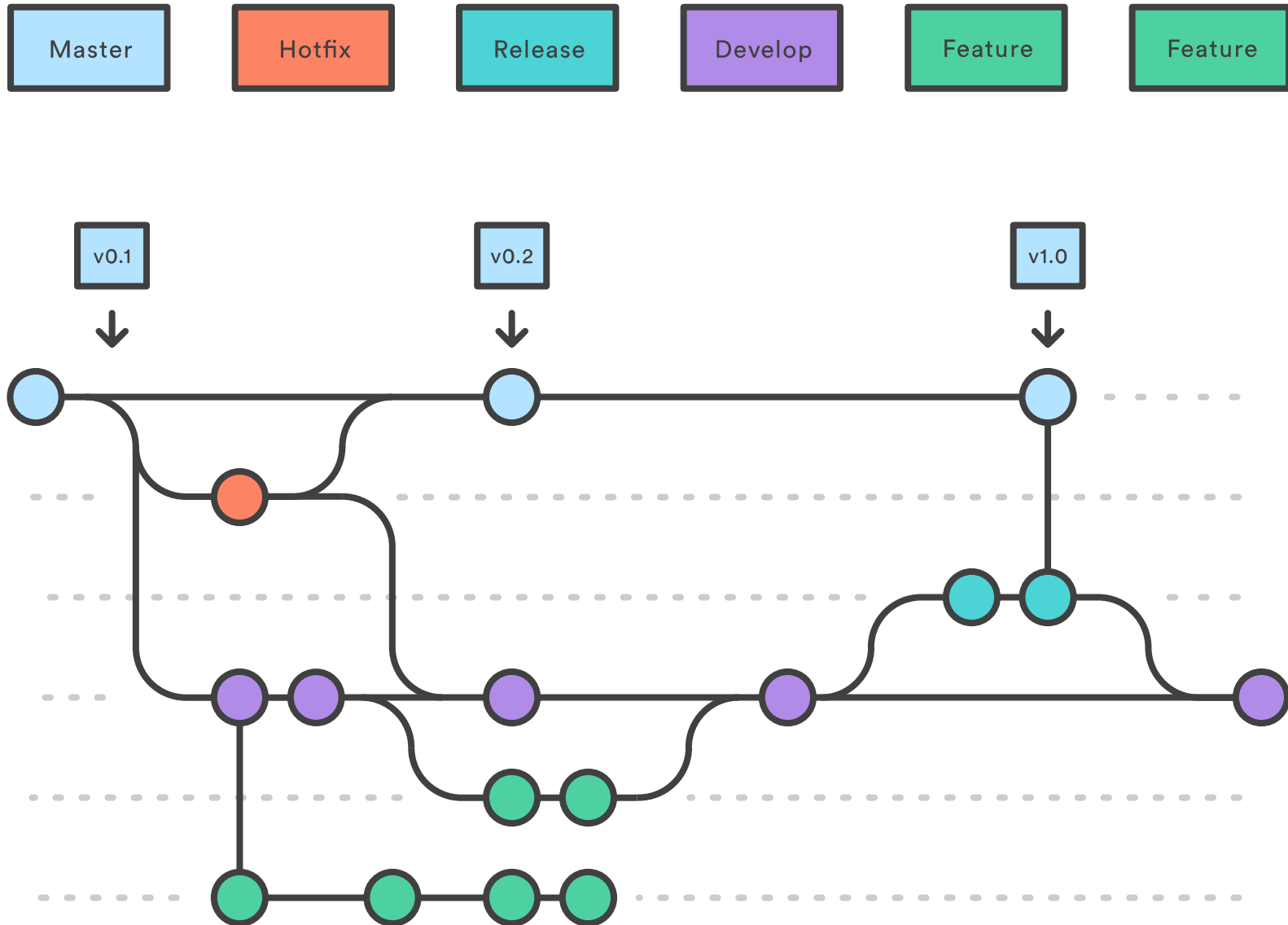
# Git Workflow

## for Teams and Release-based development (e.g. mHM)




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# .gitignore

 .gitignore

```
*.aux  
*.glo  
*.idx  
*.log  
*.toc  
*.ist  
*.acn  
*.acr  
*.alg  
*.bbl  
*.blg  
*.dvi  
*.glg  
*.gls  
*.ilg  
*.ind  
*.lof  
*.lot  
*.maf  
*.mtc  
*.mtc1  
*.out  
*.synctex.gz
```

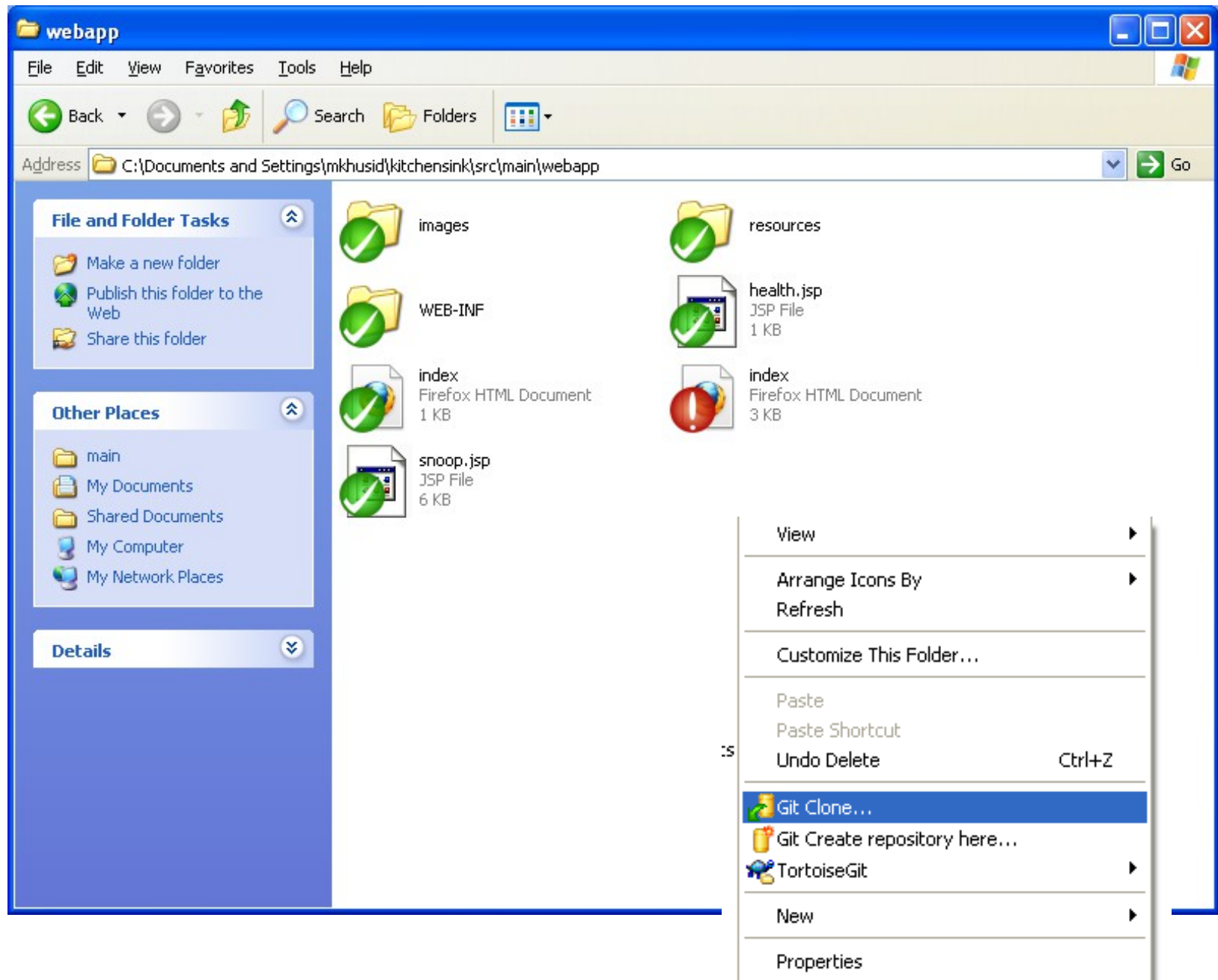
## Large files?

Symlink to Y  
Symlink to OC  
Git LFS

# Git commands

SVN	Git
svn checkout	git clone
svn up	git pull
svn commit	git push
svn log	git whatchanged
svn import	git add -A
svn revert file	git checkout file
svn revert . -R	git reset --hard HEAD

# Git with the Windows Explorer



# GitHub Desktop

The screenshot displays the GitHub Desktop application interface. The top menu bar includes 'File', 'Edit', 'View', 'Repository', 'Branch', and 'Help'. Below the menu, the 'Current repository' is 'desktop', the 'Current branch' is 'esc-pr' (with a green checkmark and '#3972'), and the 'Fetch origin' button shows 'Last fetched 2 minutes ago'.

The left sidebar shows a list of commits under the 'History' tab. The commits are:

- Appease linter (iAmWillShepherd committed a day ago)
- Add event handler to dropdown compon... (iAmWillShepherd and Markus Olsson co...)
- Move escape behavior to correct compo... (iAmWillShepherd and Markus Olsson co...)
- Remove event handler from the branches.. (iAmWillShepherd and Markus Olsson co...)
- Merge branch 'master' into esc-pr (iAmWillShepherd committed a day ago)
- Merge pull request #4044 from desktop/... (Neha Batra committed a day ago)
- Merge pull request #4070 from desktop/... (Brendan Forster committed 2 days ago)
- bump to beta3 (Brendan Forster committed 2 days ago)
- Merge pull request #4057 from desktop/... (Brendan Forster committed 2 days ago)
- Merge pull request #4067 from desktop/... (Brendan Forster committed 2 days ago)
- Release to 1.1.0-beta2 (Neha Batra committed 2 days ago)

The main area shows the diff for the commit 'Add event handler to dropdown component' by iAmWillShepherd and Markus Olsson (commit c79e71c, 1 changed file). The diff view shows changes to 'app\src\ui\toolbar\dropdown.tsx'.

The diff view shows the following changes:

```
@@ -145,6 +145,10 @@ export class ToolbarDropdown extends React.Component<
    this.state = { clientRect: null }
  }
+
+ private get isOpen() {
+   return this.props.dropdownState === 'open'
+ }
+
+ private dropdownIcon(state: DropdownState): OcticonSymbol {
+   // @TODO: Remake triangle octicon in a 12px version,
+   // right now it's scaled badly on normal dpi monitors.
+ }
+
+ private onFoldoutKeyDown = (event: React.KeyboardEvent<HTMLElement>) => {
+   if (event.defaultPrevented && this.isOpen && event.key === 'Escape') {
+     event.preventDefault()
+   }
+ }
```

# GitLab web platform

The screenshot displays the GitLab web interface. At the top, a dark blue navigation bar contains the GitLab logo, a menu with 'Projects', 'Groups', 'Activity', 'Milestones', and 'Snippets', and a search bar. Below this, a sidebar on the left lists navigation options: 'road' (selected), 'Overview', 'Repository', 'Files', 'Commits', 'Branches', 'Tags', 'Contributors', 'Graph', 'Compare', 'Charts', 'Issues' (with a badge '1'), 'Merge Requests' (with a badge '0'), 'CI / CD', and 'Registry'. The main content area shows the 'road' repository. A breadcrumb trail indicates the path: 'road / analysis / Croad / croad-shape-check.R'. A 'Find file' search bar is present. Below the breadcrumb, a commit summary shows a 'finalized revision' by 'Martin Schrön' from 3 months ago, with the commit hash 'b330ec3b'. The file 'croad-shape-check.R' (2.56 KB) is open in the editor, with options for 'Edit', 'Web IDE', 'Replace', and 'Delete'. The code is written in R and includes comments and function calls.

GitLab Projects Groups Activity Milestones Snippets + This project Search

R road

Overview

Repository

Files

Commits

Branches

Tags

Contributors

Graph

Compare

Charts

Issues 1

Merge Requests 0

CI / CD

Registry

CRNS road Repository

master road / analysis / Croad / croad-shape-check.R Find file Blame History Permalink

finalized revision  
Martin Schrön authored 3 months ago b330ec3b

croad-shape-check.R 2.56 KB Edit Web IDE Replace Delete

```
1 setwd("/Users/schroen/paper/2-working/road/")
2 source("/Users/schroen/dev/crns-tools/basics.R")
3 source("/Users/schroen/dev/crns-tools/readwrite.R")
4 source("/Users/schroen/dev/crns-tools/corrections.R")
5 source("/Users/schroen/dev/crns-tools/tools.R")
6 source("/Users/schroen/dev/crns-tools/footprint.R")
7
8 C_road(2,0.05,0.1,0)
9 C_road(2,0.07,0.2,0)
10 C_road(2,0.1,0.3,0)
11
12 W <- seq(0,10,0.5)
13 M <- seq(0,16,1)/100
14 Field <- seq(0,80,1)/100
15 R <- seq(1,5,1)
16
17 # width test
18
19 makepdf("analysis/Croad/croad-tests.pdf")
20 play(4,4)
21 for (m in M) {
22   for (f in Field) {
23     for (w in W) {
24       C_road(2,w,f,m)
25     }
26   }
27 }
```



# Integration in Editors

The screenshot displays the Atom text editor interface. The main window shows the 'devices.csv' file, which contains a list of sensor data entries. The file is open at line 87, which is highlighted in yellow. The left sidebar shows the project structure, including a 'config' folder containing 'devices.csv'. The right sidebar shows the Git status, indicating that the file has been staged for commit. The commit message field is empty, and the 'Commit to CRNS' button is visible. The bottom status bar shows the file encoding as UTF-8 and the line number 87:44.

devices.csv — C:\Users\schroen\dev\data\_progs — Atom

File Edit View Selection Find Packages Help

Project

data\_progs

- .git
- check\_usage
  - check\_usage.py
  - usage\_alert\_email.txt
- config
  - \_\_init\_\_.py
  - devices.csv
  - devices.org
  - stations.csv
  - stations.org
- level1
- lib
- monthly\_archive
- tmp
- tools
- transfer\_level0\_level1
- transfer\_level1\_level2b
- update\_zip\_archive
  - \_\_init\_\_.py
  - daily.bat
  - monthly.bat
  - ToDos.txt
  - weekly.bat

devices.csv

```
58 HH,, ,SoilRespiration/continuous_data,rawdata,processed_data,derived_data,, ,chh-hohesho
59 HH,, ,pheno,PhenoCam,rawdata,processed_data,derived_data,, ,chh-hohesho
60 GB,W1,meteo,MeteoData/Logger_W1,rawdata,processed_data,derived_data,, ,chh-hohesho
61 GB,W2,meteo,MeteoData/Logger_W2,rawdata,processed_data,derived_data,, ,chh-hohesho
62 GB,, ,eddy,EddyData,, ,processed_data,derived_data,, ,chh-hohesho
63 GB,Box01,soilnet,Soilnet,rawdata,processed_data/Box01,derived_data/Box01,
64 GB,Box02,soilnet,Soilnet,rawdata,processed_data/Box02,derived_data/Box02,
65 GB,Box05,soilnet,Soilnet,rawdata,processed_data/Box05,derived_data/Box05,
66 GB,Box06,soilnet,Soilnet,rawdata,processed_data/Box06,derived_data/Box06,
67 GB,Box07,soilnet,Soilnet,rawdata,processed_data/Box07,derived_data/Box07,
68 GB,Box08,soilnet,Soilnet,rawdata,processed_data/Box08,derived_data/Box08,
69 GB,Box09,soilnet,Soilnet,rawdata,processed_data/Box09,derived_data/Box09,
70 GB,Box10,soilnet,Soilnet,rawdata,processed_data/Box10,derived_data/Box10,
71 GB,Box11,soilnet,Soilnet,rawdata,processed_data/Box11,derived_data/Box11,
72 GB,Box13,soilnet,Soilnet,rawdata,processed_data/Box13,derived_data/Box13,
73 GB,Box14,soilnet,Soilnet,rawdata,processed_data/Box14,derived_data/Box14,
74 GB,Box15,soilnet,Soilnet,rawdata,processed_data/Box15,derived_data/Box15,
75 GB,Box17,soilnet,Soilnet,rawdata,processed_data/Box17,derived_data/Box17,
76 GB,Box18,soilnet,Soilnet,rawdata,processed_data/Box18,derived_data/Box18,
77 GB,Box19,soilnet,Soilnet,rawdata,processed_data/Box19,derived_data/Box19,
78 GB,Box20,soilnet,Soilnet,rawdata,processed_data/Box20,derived_data/Box20,
79 GB,Box21,soilnet,Soilnet,rawdata,processed_data/Box21,derived_data/Box21,
80 GB,Box23,soilnet,Soilnet,rawdata,processed_data/Box23,derived_data/Box23,
81 GB,Box30,soilnet,Soilnet,rawdata,processed_data/Box30,derived_data/Box30,
82 GB,, ,pheno,PhenoCam,rawdata,processed_data,derived_data,, ,chh-hohesho
83 HD,H1,meteo,MeteoData/Logger_H1,rawdata,processed_data,derived_data,, ,chh-hohesho
84 HD,H2,meteo,MeteoData/Logger_H2,rawdata,processed_data,derived_data,, ,chh-hohesho
85 HD,, ,eddy,EddyData,, ,processed_data,derived_data,, ,chh-hohesho
86 HD,, ,pheno,PhenoCam,rawdata,processed_data,derived_data,, ,chh-hohesho
87 GB,CRS07,neutrons,CRNS,rawdata,processed_data,derived_data,cal-files
88
```

Git

Unstaged Changes

Stage All

config\devices.csv

Staged Changes

No changes

Commit message

Commit to CRNS

72

added CRNS device for station GB Undo 4d

git-svn-id: https://svn.ufz.de/svn/chs-svn/data\_progs@336... 20d

data\_progs/tools/get\_from\_CHSconfig.py: added to SVN 20d

config\devices.csv 87:44

CRLF UTF-8 Plain Text CRNS Fetch 1 file



HELMHOLTZ  
CENTRE FOR  
ENVIRONMENTAL  
RESEARCH – UFZ



GitLab

Thank you  
for being open  
to new stuff!

- Robin
- Ben
- Jan
- Lennart
- Maren
- Martin

THIS IS GIT. IT TRACKS COLLABORATIVE WORK  
ON PROJECTS THROUGH A BEAUTIFUL  
DISTRIBUTED GRAPH THEORY TREE MODEL.

COOL. HOW DO WE USE IT?

NO IDEA. JUST MEMORIZE THESE SHELL  
COMMANDS AND TYPE THEM TO SYNC UP.  
IF YOU GET ERRORS, SAVE YOUR WORK  
ELSEWHERE, DELETE THE PROJECT,  
AND DOWNLOAD A FRESH COPY.

