Create a new git/git-annex repo

mkdir ~/aNewRepo && cd ~/aNewRepo
git Standard git repo init
git init .
⏻ Create git-annex[1] repo
git-annex init . "R2D2-aNewRepo"

[1] http://git-annex.branchable.com/
ⓘ Suggest location-repo name scheme for multi git repo setups
ie. R2D2-aNewRepo
ⓘ Suggest location-repo-annex name scheme for multi git-annex repo setups
ie. R2D2-aNewRepo-Annex

⚙ Customizations

git Override global git config (optional)
cd ~/aNewRepo
git config user.name name
git config user.email email
Speed up large commits at memory cost[1]
git config annex.queuesize 1024000
Add metadata {a,c,m}time at first commit[2]
git config annex.genmetadata true
Change how git-annex looksup files[3]
git config annex.backends {MD5E,WORM,..}

[1] Default is 102400
[2] Filesystem metadata can only be added during initial commit
[3] Lots of other hashes to include SHA1, **SHA256E**(default).
🖻 MD5E is useful for correlation against legacy media.
🖼 WORM is useful for fast imports and media files prone to changing metadata.

Indirect/Direct Mode

⚠ Use git-annex in direct mode
git-annex direct
Use git-annex in indirect mode
git-annex indirect

Default is **indirect** mode.
⊞ Direct mode is used when a filesystem can't support sym links like FAT32 or when operating in a Windows OS.
🐧 NTFS/exFAT can still be used.
  ? OSX might cover FAT32 deficiencies and work in indirect mode.
ⓘ git-annex repos can be switched between direct and indirect at will.
⚠ Operating in direct mode takes away some of git-annex's safety in ensuring the availability of a file.

Helpful Aliases

alias ga='git-annex'
alias gaa='git-annex add'
alias gas='git-annex sync'
alias gag='git-annex get'
alias gad='git-annex drop'
alias gal=git-annex unlock'
alias gau='git-annex unused'
alias gam='git-annex move'
alias gac='git-annex copy'
alias gaf='git-annex fsck'
alias gai='git-annex info'
alias gaw='git-annex whereis'

File Management (indirect mode)

Use git-annex instead of git[1]
git-annex add afile
🔓 Unlock a file for editing
git-annex unlock afile && echo ' ' >> afile
git mv afile bfile
git rm bfile
git commit -a -m "commit msg"

[1] Faster for large binary files

File Management (direct mode)

git add/rm/mv will **not** work in direct mode
git-annex add afile
mv afile bfile
rm bfile
git commit will **not** work in direct mode
Use git-annex sync in lieu of git commit
git-annex sync -m "commit msg"
⏮ Undo change as git revert will not work[1]
git-annex undo afile

[1] Use with --depth to revert to earlier versions of file
❗ Use of git-annex sync` is crucial in direct mode

Web/Torrent Sources

alias ga='git-annex'
☁ Use git-annex to add afile from the web[1]
ga addurl http://fqdn/afile --file afile
Add an URL to a file after the fact
git-annex addurl afile http://fqdn/afile
Download/Add the contents of a torrent
ga addurl http://fqdn/a.torrent
☋ Add the contents of magnet link

Web/Torrent Sources (cont)

ga addurl magnet?....

[1] If --file is not specified, the filename is appended to the fqdn. **Not usually desired.**

⊟ Adding remotes

cd /mnt/usb
git Standard git clone
git clone ~/aNewRepo
cd aNewRepo
Init git-annex with a unique name
git-annex init "XWING-aNewRepo"
git Standard git remote config in new USB repo
git remote add R2D2 ~/aNewRepo
git Std git remote config from origin repo
cd ~/aNewRepo
git remote add XWING /mnt/usb/aNewRepo

cp/mv/drop/find on remotes

cd ~/aNewRepo
⎙Copy from this repo **to** a remote
git-annex copy afile --to XWING-aNewRepo
Moves a file from this repo**to** a remote
git-annex move afile -t XWING-aNewRepo
⎙Copy to this repo **from** a remote
cd /mnt/usb/aNewRepo
git-annex move bfile --from R2D2-aNewRepo
#Removes file from current repo **only**[2]
git-annex drop afile
🔍Find who has a copy of a file
git-annex whereis afile

[1] Checks against numcopies
[2]Checks against numcopies. Use for space management.

Sync Repos

⚠Sync repo metadata - **No content**
cd /mnt/usb/aNewRepo
git-annex sync R2D2-aNewRepo
⇄Sync metadata **and** content
git-annex sync R2D2-aNewRepo --content

Special Remotes (To Do)

🗄bup[1]

[1] https://bup.github.io/

Extra

Tell git-annex to not rely on a repo[1]
git-annex untrust C3PO-aNewRepo
⊘Tell a repo is no longer available
git-annex dead JABBA-aNewRepo

[1] We all know C3PO is flaky. git-annex by default only **semi-trusts** a repo. You can use this with remotes using direct mode, cloud storage, etc.

🔧 Repo maintenance

Show git-annex information
git-annex info
Fsck git-annex repo
git-annex fsck
🗑 Do git garbage collection
git gc
Show unused objects in the repo[1]
git-annex unused

[1] These are objects that have not been dropped, but removed from a branch. Might want for archival reasons. Best to copy to an archival remote like bup.

Tags/Branches/Views [To Do]

Add git-annex to existing git repos [To Do]