

# Introduction to Git and git-svn

Paul Gier

Red Hat

Sept. 27, 2011



# Overview

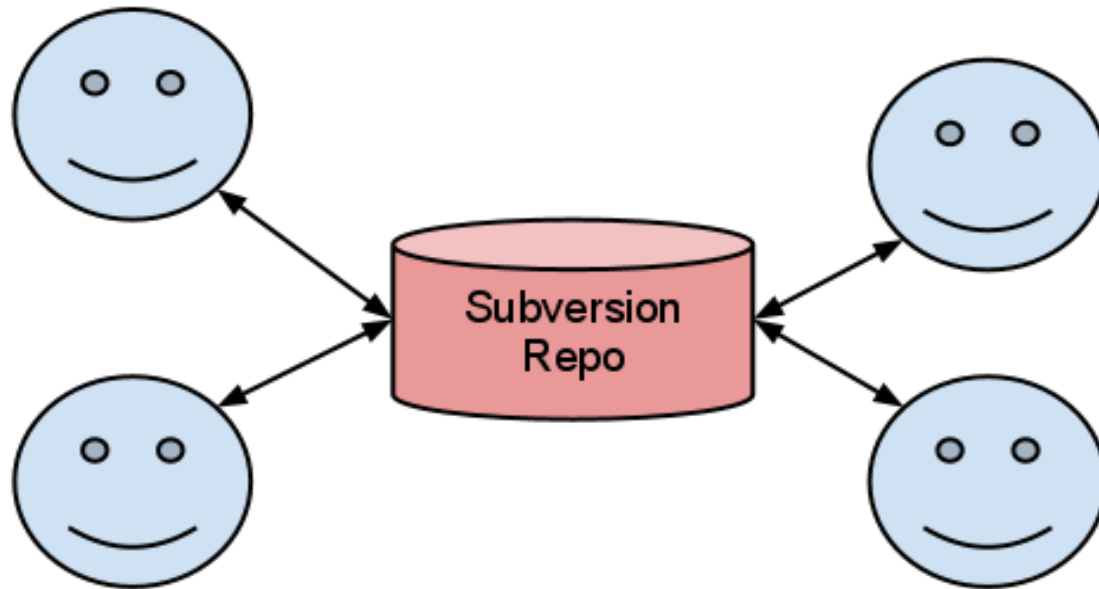
- What is Git?
- How to use Git?
- How to use Git with SVN?
- Questions

# What is Git?

- SCM Created by Linus Torvalds (and others)
- Git - British English slang for a stupid or unpleasant person
- Linus Torvalds - "I'm an egotistical bastard, and I name all my projects after myself. First Linux, now git."

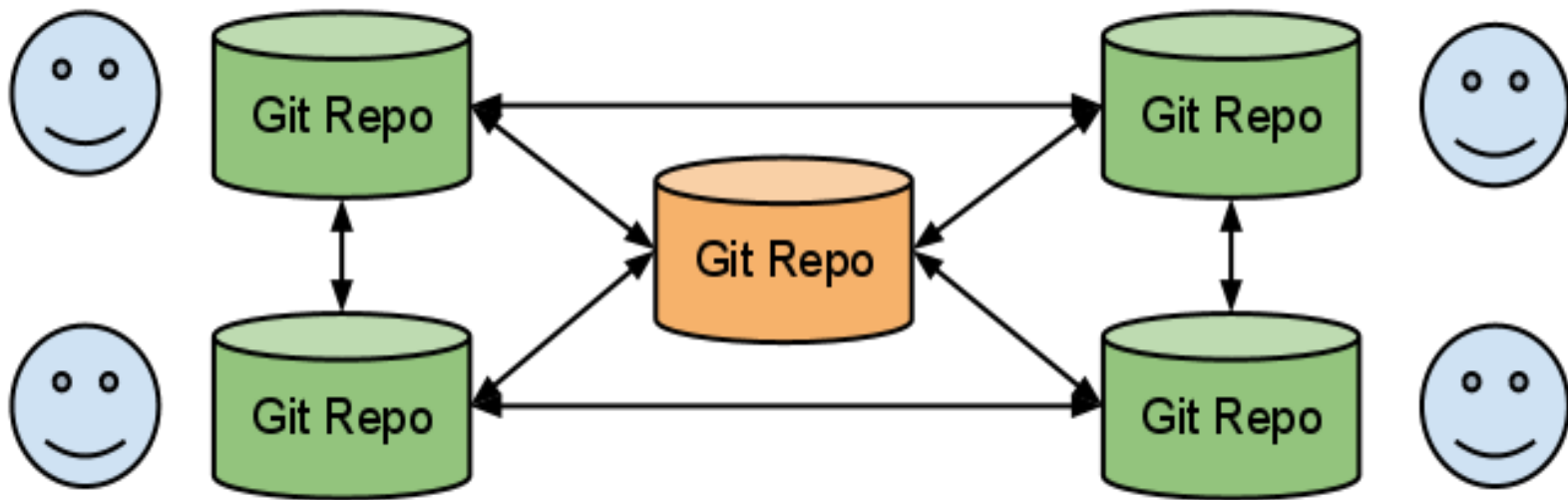
# What is Git?

It's not SVN



# What is Git?

It is distributed



# Why distributed?

# **(almost) Everything is Local**

- Everything is fast
- Every clone is a backup
- Work offline

# No Network Needed

- Performing a diff
- Viewing file history
- Committing changes
- Merging branches
- Obtaining any other revision of a file
- Switching Branches



# More Git Awesomeness

- Every commit has a unique checksum
  - Looking at you Visual SourceSafe
- Separates Author vs. Committer
- Powerful Commit Management
- For more advantages, try google

Ok, Git is great,  
so how do I use it?

# How to Use Git

- Install

```
$ yum install git
```

- Configure

```
$ git config --global user.name "Paul Gier"
```

```
$ git config --global user.email "pgier@redhat.com"
```

# How to Use Git

`git init`

vs.

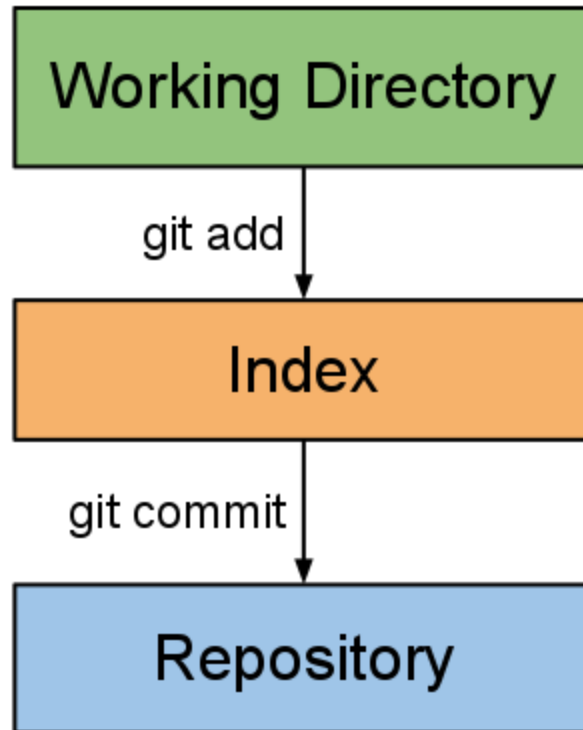
`git clone`

# How to Use Git

```
git add
```

```
git commit
```

# How to Use Git

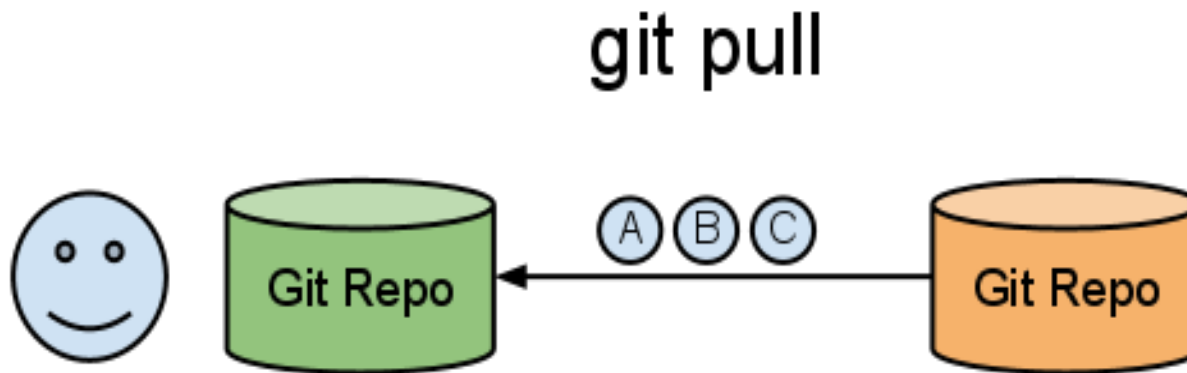


# How to Use Git

## git status

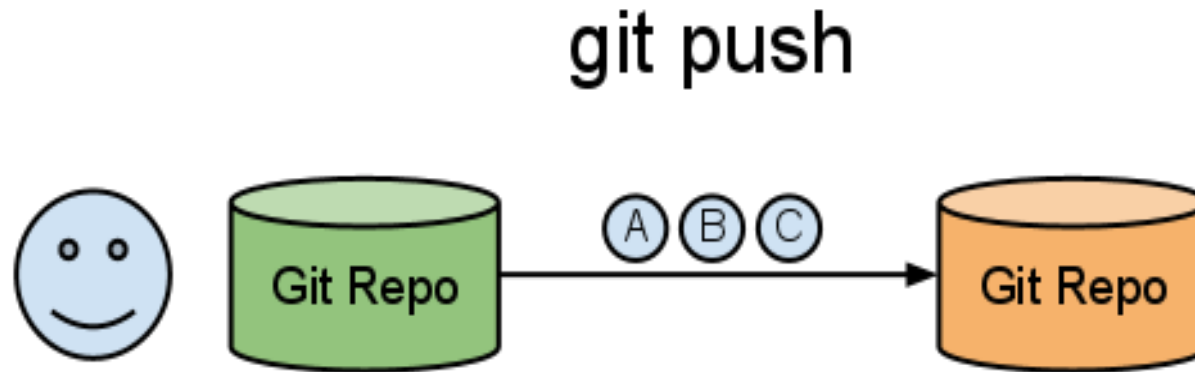
```
# On branch master
# Changes to be committed:
#   (use "git reset HEAD <file>..." to unstage)
#
#       modified:   index.html
#
# Changed but not updated:
#   (use "git add <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working directory)
#
#       modified:   license.txt
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#       junk.html
```

# How to Use Git





# How to Use Git



# How to Use Git

`git branch`

`git merge`

`git rebase`

# Got all that?

- git init
- git clone
- git add
- git commit
- git status
- git pull
- ...

# How to Use Git

Demo

Ok, Git is great, but my  
boss/IT dept./Sig. Other  
says I must use SVN

# How to Use git-svn

## Checkout Latest Trunk

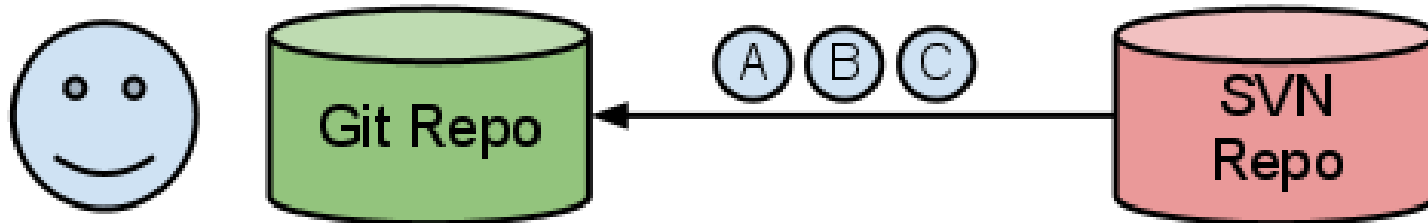
```
$ git svn init https://svn.jboss.org/repos/maven/demo/trunk  
$ git svn fetch -r558
```

## Convert the SVN History

```
$ git svn clone https://svn.jboss.org/repos/maven/demo/
```

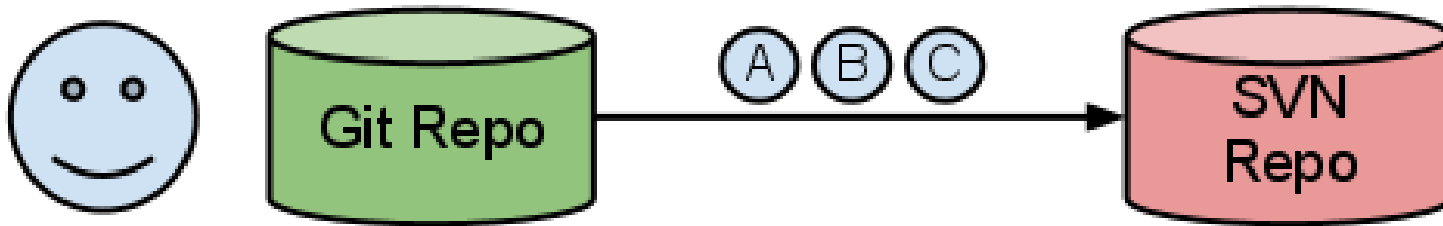
# How to Use git-svn

git svn rebase



# How to Use git-svn

`git svn dcommit`





# How to Use Git with SVN

Demo

# The End

Questions?