

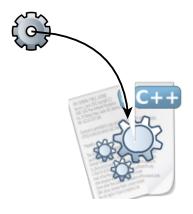
Universität Paderborn Softwaretechnik Prof. Dr. Wilhelm Schäfer

# An introduction to git



# Christian Stritzke

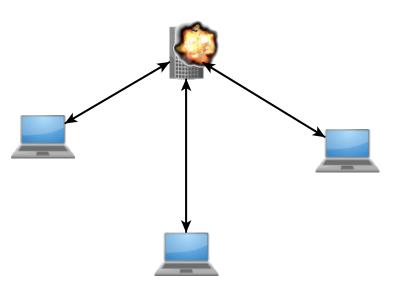




# Why git?



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# ınik, Heinz Nixdorf Institut, Universität Paderborn

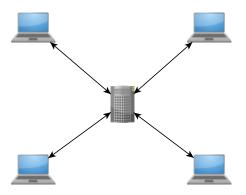


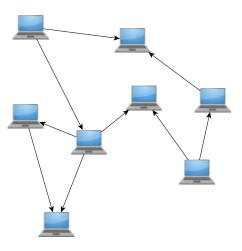
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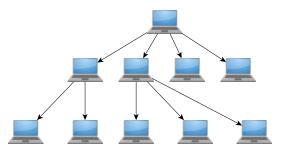




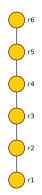




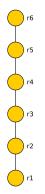




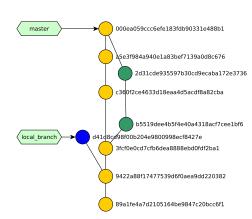
# **SVN log**



# **SVN** log



# **Git log**



# Initialize empty git repository:

git init

# Clone a git repository:

```
git clone https://github.com/piotr152/git-
   tutorial.git
```

# Set up name and E-Mail:

```
git config --global user.name "Your Name Comes
  ..Here"
git config --global user.email you@yourdomain.
   example.com
```

# **Commit**



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## Add files to index:

git add <list of files>

# **Check your index:**

git status

# Perform the commit:

git commit -m "commit $_{\sqcup}$ message" [--amend]

# Check the history:

gitk [--all]

# **Branching**



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# Create a branch:

git branch <branch\_name>

### Checkout a branch:

git checkout <branch\_name>

# Merge a branch:

git merge <branch\_name>

# Using remotes



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# **Update your repository:**

git fetch origin <branch\_name>

# Update your working copy:

git merge origin/<branch\_name>

# Do both with one command:

git pull

# I screwed something up! What now?



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# Revert a single file:

git checkout <filename>

# Revert your complete workspace:

git reset --hard HEAD

# Revert to a previous commit:

git reset --hard HEAD~<commits\_from\_here>

# Get rid of untracked files:

git clean -df

# Pull a git repo from an SVN repi:

git svn clone

# Update your local copy:

git svn rebase

# Commit your local commits to the SVN server:

git svn dcommit

# Further Reading



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Linus Torvalds on git: http://youtu.be/4XpnKHJAok8

Documentation, Tutorials, (incomplete) List of GUIs: git-scm.com

Tortoise git: http://code.google.com/p/tortoisegit/

SmartGit: http://www.syntevo.com/smartgit