

# ITK Commit Reference

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## One-time Global Setup

SETUP USER INFORMATION	<code>git config --global user.name "Jane Doe"</code> <code>git config --global user.email "jane@doe.org"</code> <code>git config --global color.ui auto</code>	Use your full name. Enable color output in Git (optional).
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## Create and Configure Your Repository

CLONE REPOSITORY	<code>git clone --recursive git://itk.org/ITK.git</code> <code>cd ITK</code>	Clones the source tree.
CONFIGURE	<code>./Utilities/SetupForDevelopment.sh</code>	Follow prompts, sets up local hooks, remotes, push URLs etc.

## Topic Branch Lifecycle

UPDATE	<code>git status</code> <code>git checkout master</code> <code>git pullall</code>	Review local modifications, delete, stash or commit them.
NEW TOPIC BRANCH	<code>git checkout -b my-topic origin/master</code>	Create branch off master.
WRITE CODE	<code>vim MyExistingFile.cxx MyNewFile.cxx</code>	Use your favorite editor.
NEW COMMIT	<code>git add MyExistingFile.cxx MyNewFile.cxx</code> <code>git commit</code>	Stage changes to existing and new files. Commit changes locally.
AMEND COMMIT	<code>vim MyExistingFile.cxx</code> <code>git add MyExistingFile.cxx</code> <code>git commit --amend</code>	Edit the file. Stage changes. Amend previous commit locally.
SUBMIT FOR REVIEW	<code>git prepush</code> <code>git gerrit-push</code>	Check what will be pushed to Gerrit. Push the topic to Gerrit for review.
RESPOND TO REVIEW	<code>git rebase -i HEAD~3</code> <code>git prepush</code> <code>git gerrit-push</code>	Modify local commits (3 back here). Check what will be pushed to Gerrit. Push the updated topic to Gerrit.
MERGE TOPIC	<code>git gerrit-merge</code>	Stage the topic branch. Merge the topic branch to master.
DELETE TOPIC	<code>git fetch</code> <code>git branch -d my-topic</code>	Fetch the latest changes from origin. Delete topic, fails if not merged.

## General Guidelines

COMMIT MESSAGE	<code>&lt;short-description&gt;</code> <code>&lt;long description&gt;</code> <code>refs #1234</code>	Should be less than 60 characters. Blank line after short description. Could be several paragraphs. Mantis issue number if applicable.
TOPIC NAMING	<code>summary-of-topic</code>	Lower case, separated by dashes.

For more information, see [www.itk.org/Wiki/ITK/Git](http://www.itk.org/Wiki/ITK/Git).