

Mozilla worksheet

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1 intro

- In this worksheet you will set up your mozilla build environment.
- You can't do this on Nostromo at present, but you can use the virtual machine image linked here.
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2 Mercurial Commands we will use

- **hg strip tip -force**
 - Remove local edits
- **hg pull -u**
 - Pull down the latest source
- **hg tags**
 - List all tags in a mercurial repository.
- **hg diff**
 - Run from the repository folder. Compares the current state of the files with that on the last commit and shows any differences.
- **hg qnew [patchname]**
 - Creates a patch (written to `firefox/.hg/patches`) that will allow any local changes to be applied to another clone of this codebase (or different branches of the same one).
- **./mach mercurial-setup**
 - Set up Mercurial to work with mach.
- **hg log -l 10**
 - list the last 10 commits. To go back further, just specify a different number

3 Tasks

3.1 Get The Code

- The virtual machine downloads the latest source on first being opened.

3.2 Set up Mercurial for Mozilla Patch Creation

- Out of the box mercurial isn't set up to work with the mozilla build system (*mach*).
- All these commands are run in the mozilla source code directory (often mozilla-central, sometimes firefox).
- **./mach mercurial-setup**
- This will start off a series of questions that either need data (name/email etc) or yes/no answers.
- Answer yes or **y** to every yes/no question.
- You particularly need to say yes to submitting commits to Mozreview, since we will be doing that.

YThen you need to create an API key an import it so you an commit your bugfixes. You will find instruction on how to do this here.

- Once completed you will be able to create and patches and submits successfully.

3.3 List all the tags

- **hg tags**
- Evidence this by piping the ouput to a text file, then include that in your submission for this worksheet.

3.4 compile the source code

- This will take quite a while, so use the **&** again in case you have to log out before the build finishes.
- **./mach build &**
- Once it has built, you can launch it with this command:
- **./mach run**
- Screenshot the running program and include it in your submission.

3.5 edit a cpp file

- Select any cpp file and make a change to it. This change can be trivial, it only needs to show up in a diff.

3.6 Create a patch

- Diff the codebase, if there are changes shown, create a patch. This patch then goes in your submission for this worksheet.
- You will need to get your evidence out of the virtual machine. Use email or an online service like dropbox to achieve this.

3.7 restore the codebase

- Use the command listed above that will remove any local edits so you can begin your proper bug fixing work.

3.8 inspecting the commit history

- List the last ten commits

4 Worksheet evidence.

- Put the tags listing, the list of the last ten commits and your Patch, in a **single** document.