

Change Management

Week 4

Adding and removing patches

Lab Scenario

- You are developing an operating system and command set that must pass automated tests
- You recently updated to coreutils 8.0 and now one of your tests fails
- You can't change the tests so your only option is to conform and pass them

The Problem

- When running the command `rm` improperly on files starting with a dash (e.g. "`rm -file`" instead of "`rm ./-file`") you receive different output than before
- You expect:
`rm: invalid option -- 'f'`
Try ``rm --help'` for more information.
- But you receive:
`rm: invalid option -- 'f'`
Try ``rm ./-file'` to remove the file ``-file'`.
Try ``rm --help'` for more information.

The Solution

- You track down the specific patch that was added to the source code that produces this extra line
- You can now try to figure out how remove the patch from the source code so you no longer receive the extra line

Getting Started

- Read the lab
- Read the patch notes
- Download coreutils 8.0
- Save the patch to a file
- Read "man diff" and "man patch"
- Remove the patch from coreutils 8.0, build, and test

Removing the Patch

- There are multiple solutions
- It's possible to remove the patch without editing the patch or directly editing the source code
- Try examining the contents of the patch
- Experiment with "diff" and "patch"

Test the Removal

- Configure your makefiles and make
- Test it
 - mkdir test
 - cd test
 - touch ./-oops a b c
 - rm *

Generate a tentative version of your patch

- `diff -u rm.c rm.c.orig`
- `rm.c.orig` is your backup file for `rm.c`