

Introduction to Version Control with Git

🕒 3 hours

🔧 Prerequisites (see below)

📍 At your campus

💰 No cost to members

```
nelle@training:~/repository$ git init
Initialized empty Git repository in /home/nelle/repo
nelle@training:~/repository$ touch hello.txt
nelle@training:~/repository$ git add hello.txt
nelle@training:~/repository$ git commit -m "first commit"
[master (root-commit) 705e172] first commit
1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 hello.txt
nelle@training:~/repository$ echo "a change" >> hello.txt
nelle@training:~/repository$ git add hello.txt
nelle@training:~/repository$ git commit -m "a small change"
[master ea15efc] a small change
1 file changed, 1 insertion(+)
nelle@training:~/repository$ git log
commit ea15efcddd2e87accd71418983f2eee51644a996
Author: Nelle <nelle@intersect.org.au>
Date: Thu Aug 4 04:37:10 2016 +0000

    a small change

commit 705e172aa79b5ffdd94598f91221008d07f794ee0
Author: Nelle <nelle@intersect.org.au>
Date: Thu Aug 4 04:36:33 2016 +0000

    first commit
nelle@training:~/repository$
```

Why do this course?

Have you mistakenly overwritten programs or data and want to learn techniques to avoid repeating the loss? Version control systems are one of the most powerful tools available for avoiding data loss and enabling reproducible research. While the learning curve can be steep, our trainers are there to answer all your questions while you gain hands on experience in using Git, one of the most popular version control systems available.

Join us for this workshop where we cover the fundamentals of version control using the researcher-focused training modules from the highly regarded Software Carpentry Foundation (software-carpentry.org).

You'll learn how to:

- keep versions of data, scripts, and other files
- examine commit logs to find which files were changed when
- restore earlier versions of files
- compare changes between versions of a file
- push your versioned files to a remote location, for backup and to facilitate collaboration

The Intersect approach to training

At Intersect, we work closely with our member universities to develop and deliver training that targets the day-to-day software and technology problems that researchers face. We deliver hands-on courses in a relaxed setting with knowledgeable, helpful trainers who are themselves researchers and who know how researchers work.

Questions always welcome.

Working directory

git add

Staging area

git commit

Repository

Prerequisites

This course assumes basic familiarity with the Bash command line environment found on GNU/Linux and other Unix-like environments. Take our **Introduction to Unix** course to get up to speed quickly.

For more information visit
Learn.intersect.org.au



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intersect.org.au