

# Why new version control system?

#### CVS is

- ▶ slow, cumbersome
- ▶ tied to one central computer
- hard to change names, rearrange directories
- ▶ file oriented
- generally creaky

## Why git?

- convinced by talk Linus Torvalds gave at google.
- oriented to whole directory hierarchy rather than files
- easy to rearrange, rename
- work (on notebooks) disconnected from net
- ▶ fast
- much more capable

### Why 64 bit?

- now feasible: machines and software support
- some programs hitting limits, largely miniseed
- memory issues tend to disappear
- ▶ speed?

# Significant changes for c programmers?

- mostly, integers and pointers become 64 bit
- various pitfalls, mostly around variable argument lists
- many changes now in include files

# Skew between release and development

- include file differences can cause compilation failures
- BRTT will provide 4.10p development branch libraries and include files -- details tbd
- already providing window on contrib compiles

#### regression tests

- ▶ What are they?
  - compare output from two runs, hope for same results
- certify perl script is a framework for managing regression tests
- currently ~900 tests for antelope
- essential for port to 64 bit
- ▶ part of 4.10 release

#### more detail if you want

- ▶ git introduction
- ▶ 64 bit programming issues
- certify introduction