

Git vs Bazaar test data

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VCS Speed Tests

Performed on an Intel Core 2 Duo @ 2.00GHz, 3GB RAM, on Ubuntu 9.10.

All times given are “real” (using “time”). All experiments performed one time, so not scientific, just ball-park figures.

Git

Sizes

Repo alone: 27MB
Entire directory: 53MB

Init

```
git init  
0.018s
```

Initial branch from server

```
git clone git://github.com/brosner/django.git dj-git  
24.55 MiB  
67.357s
```

Subsequent local branch (separate repo)

```
git clone dj-git dj-git2  
5.466s
```

OR (equivalent)

```
cp -a dj-git dj-git2  
5.692s
```

Local branch (within same repo):

```
git branch mybranch  
0.011s
```

Log

```
git log > /dev/null  
0.247s
```

Tag

```
git tag mytag  
0.010s
```

On an empty changeset

Status

```
git status  
0.057s
```

Diff

```
git diff  
0.032s
```

On a one-line change

Status

```
git status  
0.054s
```

Diff

```
git diff  
0.021s
```

Commit

```
git commit -m "Add a new line."  
0.096s
```

Adding 2000 random files to a directory with 1000 bytes each

Add

```
git add .  
2.827s
```

Status

```
git status  
0.295s
```

Diff

```
git diff  
* Note: git diff doesn't show anything for added files  
0.046s
```

Commit

```
git commit -m "Add 2000 files."  
0.376s
```

Bazaar

Sizes:

```
Repo alone: 24MB  
Entire directory: 50MB
```

Init:

```
bzr init  
0.286s
```

Initial branch from server:

```
bzr branch lp:django dj-bzr
152.754s
```

Subsequent local branch (no shared repo):

```
bzr branch dj-bzr dj-bzr2
31.740s
```

OR (equivalent)

```
cp -a dj-bzr dj-bzr2
3.212s
```

Local branch (within shared repo):

```
bzr branch dj-bzr-repo/dj1 dj-bzr-repo/dj2
7.306s
```

Log

```
bzr log > /dev/null
1.996s
```

Tag

```
bzr tag mytag
0.201s
```

On an empty changeset**Status**

```
bzr status
0.640s
```

Diff

```
bzr diff
0.261s
```

On a one-line change**Status**

```
bzr status
0.285s
```

Diff

```
bzr diff
0.302s
```

Commit

```
bzr commit -m "Add a new line."
0.392s
```

Adding 2000 random files to a directory with 1000 bytes each**Add**

```
bzr add
1.564s
```

Status

```
bzr status  
0.537s
```

Diff

```
bzr diff > /dev/null  
0.834s
```

Commit

```
bzr commit -m "Add 2000 files."  
2.918s
```

Note the 2000 random files were added with this Python script:

```
import sys  
import os  
import random  
  
dir = sys.argv[1]  
  
alphanum = 'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789'  
def randstr(length):  
    return ''.join([random.choice(alphanum) for i in xrange(length)])  
  
for i in xrange(2000):  
    f = open(os.path.join(dir, randstr(32)), 'w')  
    f.write(randstr(1000))  
    f.close()
```