# Version Control Virtual Hosting

Geoffrey Thomas scripts.mit.edu project geofft@mit.edu

September 16, 2008

# Why do we want virtual hosting?

- scripts.mit.edu hosting platform
  - hosts many MIT websites, e.g., debathena.mit.edu
  - existing standard for *username*.scripts.mit.edu

# Why do we want virtual hosting?

- scripts.mit.edu hosting platform
  - hosts many MIT websites, e.g., debathena.mit.edu
  - existing standard for username.scripts.mit.edu
- Technical considerations
  - Cleaner URLs (not svn://svn.mit.edu/myproject)
  - Overhead
  - Why not? Can we add virtual hosting?

 git: interpolated paths git://debathena.mit.edu/trunk/ ⇒ /srv/debathena.mit.edu/svn/trunk/

 git: interpolated paths git://debathena.mit.edu/trunk/ ⇒ /srv/debathena.mit.edu/svn/trunk/ Can't look up home directories

- git: interpolated paths git://debathena.mit.edu/trunk/ ⇒ /srv/debathena.mit.edu/svn/trunk/ Can't look up home directories
- svn: patch to keep the server name svn://debathena.mit.edu/trunk ⇒ /srv/svn/debathena.mit.edu/trunk

- git: interpolated paths git://debathena.mit.edu/trunk/ ⇒ /srv/debathena.mit.edu/svn/trunk/ Can't look up home directories
- svn: patch to keep the server name svn://debathena.mit.edu/trunk ⇒ /srv/svn/debathena.mit.edu/trunk
  Even less flexible

• Hack for svn, to support set-user-id

- Hack for svn, to support set-user-id
- FUSE filesystem with symlinks!
   /mnt/ldapfs/git/debathena.mit.edu/trunk ⇒
   /afs/.../debathena/Scripts/git/trunk

- Hack for svn, to support set-user-id
- FUSE filesystem with symlinks!
   /mnt/ldapfs/git/debathena.mit.edu/trunk ⇒
   /afs/.../debathena/Scripts/git/trunk
  - Would support SVN too

- Hack for svn, to support set-user-id
- FUSE filesystem with symlinks!
   /mnt/ldapfs/git/debathena.mit.edu/trunk ⇒
   /afs/.../debathena/Scripts/git/trunk
  - Would support SVN too
  - Only the filesystem needs intelligence

- Hack for svn, to support set-user-id
- FUSE filesystem with symlinks!
   /mnt/ldapfs/git/debathena.mit.edu/trunk ⇒
   /afs/.../debathena/Scripts/git/trunk
  - Would support SVN too
  - Only the filesystem needs intelligence
  - Many other applications: dynamically create a directory structure