

An Introduction to Mercurial

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Utah Python Users Group

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Introduction

Mercurial
Basics

Mercurial
Specialties

Mercurial
Resources

What is mercurial?

- **Mercurial** – (n) a fast, lightweight Source Control Management system designed for efficient handling of very large distributed projects.

Who uses mercurial?

- Mozilla
- NetBeans
- Octave
- OpenJDK
- OpenSolaris

Identify Yourself

```
$HOME/.hgrc:
```

```
[ui]
```

```
username = My Name <me@example.com>
```

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Get a Repository

- `hg clone <repository> [<destination>]`

Repositories:

- `/opt/repos/foo`
- `http://code.example.com/foo`
- `ssh://me@code.example.com//opt/repos/foo`
- `hg init`

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- `hg status`
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- hg annotate
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- `hg serve`
- `hg archive`
- `hg export`
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Extensions

Extensions are just python modules that add additional commands to Mercurial.

Enable extensions by adding them to `$HOME/.hgrc`:

```
[extensions]
churn =
color =
convert =
fetch =
inotify =
mq =
purge =
record =
```

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Blatantly stolen from darcs. Allows the user to be very selective about which changes make up a changeset.

- `hg record`

- **Imagine `quilt` on top of a DVCS.**
- Example of `thttpd` patch and upgrade.

Queues

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- Example of `thttpd` patch and upgrade.

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Easily manage a repository containing many repositories.

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Named Branches

Named branches allow more than one long-lived branch to reside in the same repository.

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When dealing with large repositories, running `stat(2)` on each file becomes expensive. Mercurial can use inotify and a small server application to make these lookups fast.

- `hg inserve`

- Mercurial Home Page/Wiki
(<http://www.selenic.com/mercurial/>)
- *Distributed Revision Control with Mercurial*
(<http://hgbook.red-bean.com/>)
- Free Mercurial Hosting (<http://www.bitbucket.org/>)