

A comprehensive guide to Mercurial, covering essential commands for version control, branching, merging, and collaboration.

Basic Commands

Repository Operations

| hg clone [source] [destinatio | Example: hg init myrepo Clone an existing repository from a source (local or remote) to a destination. Example: |
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| n] | hg clone https://example.com/repo |

| nds |
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| hg add [file(s)] | Add the specified file(s) to the repository for tracking. Example: hg add myfile.txt hg add *.txt | |
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| hg remove [file(s)] | Remove the specified file(s) from the repository. The files are removed from the next commit, but are still present in your working directory until you delete them. Example: hg remove myfile.txt | |
| hg statu s | Show the status of files in the working directory (modified, added, removed, unknown, ignored). Example: hg status | |
| hg revert [file(s)] | Revert the specified file(s) to the last committed version. Example: hg revert myfile.txt | |

Commit Operations

| hg commit -m " [message]" | Commit the changes in the working directory with a descriptive message. Example: hg commit -m "Fixed a bug in the login page" |
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| hg log | Show the commit history of the repository. Example: hg log |
| hg diff [file(s)] | Show the differences between the working directory and the last committed version. Example: hg diff myfile.txt |

Branching and Merging

Branch Management

| hg branch [name] | Create a new named branch. Example: hg branch feature-x |
|--|---|
| hg branches | List existing branches. Example: hg branches |
| hg update [branch] | Switch to a different branch. Example: hg update feature-x |
| hg merge [branch] | Merge changes from a specified branch into the current branch. Example: Ing merge feature-x |
| <pre>hg resolve [file(s)]</pre> | Mark conflicts as resolved after a merge. Example: hg resolve -m myfile.txt |
| hg commit -m "Merged branch feature-x" | Commit the merge after resolving conflicts. Example: hg commit -m "Merged branch feature-x" |

Named Branches vs. Bookmarks

Mercurial offers both named branches and bookmarks for managing concurrent development. Named branches are permanent and shared with other repositories, while bookmarks are local and lightweight, ideal for tracking experimental changes.

Bookmarks

| hg bookmark [name] | Create a new bookmark at the current revision. Example: Ing bookmark my-experiment |
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| hg bookmarks | List existing bookmarks. Example: Ing bookmarks |
| hg update [bookmark] | Switch to a different bookmark. Example: hg update my-experiment |
| hg bookmark -d [bookmark] | Delete a bookmark. Example: hg bookmark -d my- experiment |

Remote Repositories

Synchronization

Configuration

| hg pull [source] | Pull changes from a remote repository to the local repository. Example: | Remote repository URLs can be configured in thehg/hgrc file for easier access. This allows you to use aliases instead of full URLs. | | |
|------------------------|---|---|--|--|
| hg push [destinatio | hg pull https://example.com/repo Push changes from the local repository to a remote repository. | [paths] default = <u>https://example.com/repo</u> origin = ssh:// <u>hg@bitbucket.org</u> /user/repo | | |
| n] | Example: hg push https://example.com/repo | Example Workflow | | |
| hg incoming | Show incoming changes from the default remote repository without applying them. Example: Ing incoming | A common workflow involves pulling changes, updating the working directory, making changes, committing them, and then pushing the changes back to the remote repository. | | |
| hg outgoing | Show outgoing changes to the default remote repository. Example: hg outgoing | hg pull && hg update && (make changes) && hg commit -m "Your message" && hg push | | |

Revisions

Advanced Features

Ignoring Files

Shelving

| .hgign ore | Create a .hgignore file in the root of your repository to specify files and patterns that should be ignored by Mercurial. Example: syntax: glob *.log tmp/* | hg update -r [revision] | Update to a specific revision number or tag. Example: hg update -r 123 hg update -r mytag | hg shelve | Shelve the current changes in the working directory. Example: hg_shelve Unshelve the shelved changes and |
|---------------|---|--------------------------------------|--|---------------|--|
| Syntax | .hgignore supports glob and regexp syntax. Use syntax: glob or syntax: regexp at the top of the file to specify the syntax. Glob is the default. | hg diff -r [rev1] -r [rev2] | Show the differences between two revisions. Example: hg diff -r 10 -r 20 | hq shelve -1 | apply them to the working directory. Example: hg unshelve Shelve with a description. |
| | | hg revert -r [revision] [file(s)] | Revert specific files to a specific revision. Example: hg revert -r 5 myfile.txt | [description] | Example: hg shelve -1 "My important changes" |