



Getting Started with Fossil

Repository Creation & Setup

<code>fossil new <repository-name>.fossil</code> - Creates a new Fossil repository.
Example: <code>fossil new project.fossil</code>
<code>fossil open <repository-name>.fossil</code> - Opens an existing Fossil repository in the current directory.
Example: <code>fossil open project.fossil</code>
<code>fossil close</code> - Closes the currently open Fossil repository.
<code>fossil info</code> - Displays information about the currently open repository.

Basic Workflow

<code>fossil add <file></code>	Adds a new file to the Fossil repository.
<code>fossil commit -m "<commit-message>"</code>	Commits the changes to the local repository with a descriptive message.
<code>fossil update</code>	Updates the local workspace to the latest version from the repository.
<code>fossil changes</code>	Shows the list of changes.

Configuration

<code>fossil set <setting> <value></code> - Sets a Fossil configuration option.
Example: <code>fossil set autosync 1</code> (Enables automatic synchronization)
<code>fossil unset <setting></code> - Unsets a Fossil configuration option.
<code>fossil config list</code> - Lists all Fossil configuration options.

Branching and Merging

Branch Management

<code>fossil branch new <branch-name></code>	Creates a new branch.
<code>fossil branch list</code>	Lists existing branches.
<code>fossil checkout <branch-name></code>	Switches to the specified branch.
<code>fossil update <branch-name></code>	Updates the local workspace to the specified branch.

Merging Changes

<code>fossil merge <branch-name></code> -	Merges changes from the specified branch into the current branch.
Note: Resolve any conflicts manually after the merge.	
<code>fossil commit -m "Merged <branch-name>"</code> -	Commits the merged changes.
<code>fossil revert <file></code> -	Reverts changes to a specific file.

Resolving Conflicts

Fossil marks conflicted files with conflict markers. Edit the files to resolve the conflicts manually.

`fossil resolved <file>` - Marks the conflict as resolved after manual editing.

Remote Operations

Synchronization

<code>fossil clone <url> <repository-name>.fossil</code>	Clones a remote Fossil repository.
<code>fossil sync</code>	Synchronizes changes with the remote repository. It pushes local changes and pulls remote changes.
<code>fossil push</code>	Pushes local changes to the remote repository.
<code>fossil pull</code>	Pulls remote changes to the local repository.

Remote Management

<code>fossil remote add <name> <url></code> -	Adds a remote repository with a specified name and URL.
<code>fossil remote list</code> -	Lists all configured remote repositories.
<code>fossil remote remove <name></code> -	Removes a remote repository.

Troubleshooting Sync Issues

Ensure the remote URL is correct and accessible. Check network connectivity. Resolve any merge conflicts before pushing changes.
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Advanced Fossil Features

Fossil Artifacts

Fossil uses content-addressable storage. Each version of each file is stored as an artifact.
<code>fossil find <artifact-id></code> - Finds an artifact by its ID.
<code>fossil cat <artifact-id></code> - Displays the content of an artifact.

Fossil Tickets

<code>fossil ticket new</code>	Creates a new ticket in the Fossil repository.
<code>fossil ticket list</code>	Lists all tickets.
<code>fossil ticket show <ticket-id></code>	Shows details of a specific ticket.

Fossil Web Interface

<code>fossil ui</code> - Starts the Fossil web interface in your default browser.
The web interface provides access to repository content, history, tickets, and other features.