

Gemini CLI — Built-in Tools (Summary)

◆ What is Gemini CLI?

- An AI-powered terminal **assistant** by Google Gemini.
 - It can **interact with your local environment**, access the internet, and **perform actions beyond text generation**.
 - Think of it like: “ChatGPT + command line + automation.”
-

Purpose of Built-in Tools

- Help Gemini interact with:
 - **Local system:** Read/write files, list folders, analyze content.
 - **External web:** Do Google searches, fetch URLs, summarize content.
 - **Note:** These are *not* the same as *MCP tools* (those come later and are externally configured).
-

Setup Tip

If you already have it installed, **update first** using:

```
npm upgrade -g @google/gemini-cli
```

Viewing Built-in Tools

Use command:

```
/tools
```

This lists all available built-in tools.



Permission Control

Gemini CLI **won't run sensitive actions** (like file writes or web fetches) without permission.

Modes:

- `--yolomode` → Runs freely (⚠️ risky)
- `--approval-mode` → Asks for your permission or auto-approves based on your choice

You can **allow once, always allow, or deny**.



Key Built-in Tools (with examples)

1 ReadFolder

Purpose: Reads contents of a folder.



Example:

Prompt: “Are there any files in this folder?”

→ Gemini uses **ReadFolder** to list them.

2 GoogleSearch + WriteFile

Purpose: Search the web and save results locally.



Example:

Prompt: “Search for the latest finance headlines in India and save them in finance-news-today.txt”

→ Uses **GoogleSearch** → asks permission → uses **WriteFile** → file saved ✓

Then you can check it with `ls` and even search within:

Prompt: “Search for ‘GST’ in finance-news-today.txt”

3 WebFetch

Purpose: Fetches web content directly from a URL.



Example:

Prompt: “Fetch Google Cloud Release Notes from September 9, 2025.”

→ Gemini uses **WebFetch**, summarizes updates, and can **save** them as:

`gcp-release-notes-sep9-2025.txt`

4 File Conversion

Purpose: Converts one file type to another.

 Example:

“Convert finance-news-today.txt to Markdown.”

→ Creates [finance-news-today.md](#).

Gemini CLI Built-in Tools (All)— Use Cases + Examples

 Tool	 What it Does	 Real-World Example
Edit	Modifies existing files — adds, deletes, or rewrites code/text based on your prompt.	“Edit <code>app.js</code> to add error handling in the <code>login</code> function.”
FindFiles	Searches your local directory for files matching a pattern or name.	“Find all <code>.py</code> files in the <code>scripts</code> folder.”
GoogleSearch	Uses Gemini’s API to do a Google Search and summarize web results.	“Search for the latest AI tools launched this week.”
ReadFile	Reads and displays the content of a single file.	“Read the contents of <code>config.json</code> .”
ReadFolder	Lists all files and folders inside a directory.	“Show me everything in the <code>Downloads</code> folder.”

ReadManyFiles	Reads multiple files at once (batch reading).	<i>“Read all .txt files in the notes directory and summarize them.”</i>
SaveMemory	Saves key facts or instructions to memory for later recall in the same session.	<i>“Remember that my project folder is /Users/Ashna/Documents/AIProjects.”</i>
SearchText	Searches inside files for a particular keyword or phrase (like grep).	<i>“Search all .js files for the word ‘API_KEY’.”</i>
Shell	Runs shell/terminal commands inside the Gemini CLI environment.	<i>*“!ls” or “!npm start”</i>
WebFetch	Fetches and retrieves the contents of a specific webpage or URL.	<i>“Fetch the RSS feed from https://cloud.google.com/blog/rss and summarize it.”</i>
WriteFile	Creates or overwrites a file with new content.	<i>“Write today’s finance headlines into finance-news-today.txt.”</i>

Quick Memory Tip

Think of these tools in **three power groups**:

-  **Local Environment Tools** — `ReadFile`, `ReadFolder`, `FindFiles`, `ReadManyFiles`, `WriteFile`, `Edit`, `SearchText`

→ Let Gemini handle files like a smart file manager.

-  **Online Access Tools** — `GoogleSearch`, `WebFetch`

→ Let Gemini pull live info from the web.

-  **System Interaction Tools** — `Shell`, `SaveMemory`

→ Let Gemini run commands or remember context.

5 Multimodal Support

Gemini can process **images, PDFs, and text** together.



Example:

You have 4 invoice images (`inv1.png` ... `inv4.png`).

Prompt:

“Extract Invoice Number, Date, Sender, Due Date, and Amount into a table.”

→ Gemini reads the images and outputs a clean **table** of all info.

🔒 Safety First

- Gemini **asks before performing** any write/read or online action.
 - Always double-check before approving tools.
-

✳️ Bottom Line

Gemini CLI's built-in tools =



Your bridge between AI and your computer.

They let Gemini **see, read, write, search, and act**, but **you stay in control**.

Next step? ➡ SOON Adding **MCP tools** for even more power.