Browser

Browser Troubleshooting

Problem: “Failed to start Chrome CDP on port 18800”

OpenClaw’s browser control server fails to launch Chrome/Brave/Edge/Chromium with the error:

```
{"error":"Error: Failed to start Chrome CDP on port 18800 for profile
```

Root Cause

On Ubuntu (and many Linux distros), the default Chromium installation is a **snap package**. Snap’s AppArmor confinement interferes with how OpenClaw spawns and monitors the browser process.

The `apt install chromium` command installs a stub package that redirects to snap:

```
Note, selecting 'chromium-browser' instead of 'chromium'
chromium-browser is already the newest version (2:1snap1-0ubuntu2).
```

This is NOT a real browser — it’s just a wrapper.

Solution 1: Install Google Chrome (Recommended)

Install the official Google Chrome `.deb` package, which is not sandboxed by snap:

```
wget https://dl.google.com/linux/direct/google-chrome-stable_current_a
sudo dpkg -i google-chrome-stable_current_amd64.deb
sudo apt --fix-broken install -y  # if there are dependency errors
```

Then update your OpenClaw config (`~/.openclaw/openclaw.json`):

```
{
  "browser": {
    "enabled": true,
    "executablePath": "/usr/bin/google-chrome-stable",
    "headless": true,
    "noSandbox": true
  }
}
```

Solution 2: Use Snap Chromium with Attach-Only Mode

If you must use snap Chromium, configure OpenClaw to attach to a manually-started browser:

1. Update config:

```
{
  "browser": {
    "enabled": true,
    "attachOnly": true,
    "headless": true,
    "noSandbox": true
  }
}
```

2. Start Chromium manually:

```
chromium-browser --headless --no-sandbox --disable-gpu \
  --remote-debugging-port=18800 \
  --user-data-dir=$HOME/.openclaw/browser/openclaw/user-data \
  about:blank &
```

3. Optionally create a systemd user service to auto-start Chrome:

```
# ~/.config/systemd/user/openclaw-browser.service
[Unit]
Description=OpenClaw Browser (Chrome CDP)
After=network.target

[Service]
ExecStart=/snap/bin/chromium --headless --no-sandbox --disable-gpu --remote-debug
Restart=on-failure
RestartSec=5

[Install]
WantedBy=default.target
```

Enable with: `systemctl --user enable --now openclaw-browser.service`

Verifying the Browser Works

Check status:

```
curl -s http://127.0.0.1:18791/ | jq '{running, pid, chosenBrowser}'
```

Test browsing:

```
curl -s -X POST http://127.0.0.1:18791/start
curl -s http://127.0.0.1:18791/tabs
```

Config Reference

Option	Description	Default
`browser.enabled`	Enable browser control	`true`
`browser.executablePath`	Path to a Chromium-based browser binary (Chrome/Brave/Edge/Chromium)	auto-detected (prefers default browser when Chromium-based)
`browser.headless`	Run without GUI	`false`
`browser.noSandbox`	Add `--no-sandbox` flag (needed for some Linux setups)	`false`
`browser.attachOnly`	Don't launch browser, only attach to existing	`false`
`browser.cdpPort`	Chrome DevTools Protocol port	`18800`

Problem: "Chrome extension relay is running, but no tab is connected"

You're using the `chrome` profile (extension relay). It expects the OpenClaw browser extension to be attached to a live tab.

Fix options:

1. **Use the managed browser:** `openclaw browser start --browser-profile openclaw` (or set `browser.defaultProfile: "openclaw"`).
2. **Use the extension relay:** install the extension, open a tab, and click the OpenClaw extension icon to attach it.

Notes:

The `chrome` profile uses your **system default Chromium browser** when possible.

Local `openclaw` profiles auto-assign `cdpPort` / `cdpUrl`; only set those for remote CDP.

‹ Chrome Extension

Agent Send ›