Module 03

Installing OpenClaw 🦞

From Zero to a Running AI Agent

🧭 Navigation Chart

By the end of this module, you will be able to:

1. **Run** the 🦞 OpenClaw installer inside WSL2

2. **Walk through** every step of the onboarding wizard

3. **Choose** an AI provider and configure your 🔑 API key

4. **Avoid** the token formatting gotcha that breaks most first installs

5. **Configure** the ⛵ gateway for secure local operation

6. **Install** the daemon so OpenClaw runs 24/7

7. **Verify** that everything is working

8. **Access** the dashboard and TUI (Terminal User Interface)

📜 Ship's Logbook

Term	Definition
⛵ Gateway	The core OpenClaw process -- coordinates messages, AI models, and actions
Onboarding wizard	Interactive setup process after installation
🔑 API key	Secret credential letting OpenClaw talk to your AI provider
TUI	Terminal User Interface -- text-based chat in your terminal
Control UI	Web-based dashboard for managing OpenClaw
Provider	Company whose AI model you use (Anthropic, OpenAI, Google, etc.)
Daemon	Background service that keeps the gateway running 24/7
Token	(1) Authentication credential, or (2) units of text the AI processes

Before You Start

Make sure you have completed Module 02:

- [ ] WSL2 with Ubuntu running

- [ ] systemd enabled

- [ ] Node.js 22+ installed

- [ ] Your 🐚 Ubuntu terminal open

Everything in this module happens inside WSL2.

Also decide which AI provider you want to use…

AI Provider Comparison

Provider	Model	Monthly Cost	Strengths
Anthropic	Claude Opus 4.6	~$200/mo	Most capable, best prompt injection resistance, recommended by creator
Anthropic	Claude Sonnet 4.5	~$50-100/mo	Good balance of capability and cost
OpenAI	GPT-4 / GPT-5.2 Turbo	~$20-200/mo	Permissive about OpenClaw use, strong coding
Google	Gemini 2.5 Flash	Free (20 req/day)	Free tier, great value
Kimi	K2.5	Very cheap	Excellent bang-for-buck
MiniMax	M2.5	~$10/mo	Extremely affordable, surprisingly capable

Our choice: *Anthropic Claude. For a free start, Google Gemini 2.5 Flash.*

🚩 Rough Waters: Claude Max/Pro Subscriptions

Can you use your Claude Max or Pro subscription with 🦞 OpenClaw? No.

- Using Max/Pro with OpenClaw is **against Anthropic's Terms of Service**

- People have been **banned** -- losing access to **all Anthropic products**

- Workarounds exist online -- we do **not** recommend them

The correct approach:

- Use the **Anthropic API** with a separate 🔑 API key (pay-as-you-go)

- Set a **spending limit** (start at $20-50/month)

- Module 09 covers how to reduce costs by up to **90%**

🚩 Rough Waters: No Spending Limits

Real story: One user ran 8 agents on pay-per-use API without a spending limit. ***$800 burned in less than a week.***

Protection	How	Priority
Hard spending limit	Anthropic Console > Settings > Usage Limits > $20-50/month	Non-negotiable
Start with one agent	Understand your token burn rate first	Critical
Monitor daily (first week)	Check console.anthropic.com/usage every day	High
Use cheap models for routine	Haiku for heartbeats, Sonnet for simple tasks (Module 09)	High

Step 1: Install 🦞 OpenClaw

In your 🐚 Ubuntu terminal, run:

```
curl -fsSL https://openclaw.ai/install.sh | bash
```

What this does:

- Downloads the install script from openclaw.ai
- `-fsSL` = fail silently, no progress bar, follow redirects
- Pipes the script into bash to execute

Step 1: Install 🦞 OpenClaw (continued)

Expected output:

```
Installing OpenClaw...
Checking Node.js version... v22.x.x
Installing OpenClaw packages...
Installation complete!
Run 'openclaw onboard' to get started.
```

If you see "Installation complete!" you are ready for the onboarding wizard.

Step 2: Launch the Onboarding Wizard

Run the wizard with the daemon flag:

```
openclaw onboard --install-daemon
```

This starts an **interactive wizard** that asks a series of questions. We will walk through **every single one**.

> *Take your time. If you make a mistake, you can re-run the wizard or change settings with* `openclaw config`.

Wizard Q1-Q2: ⛵ Gateway Type and Workspace

Question 1: Gateway Type

```
? Gateway type: > Local Gateway
```

Choose: Local Gateway -- runs on this machine.

Question 2: Workspace Directory

```
? Workspace directory: (~/.openclaw)
```

Accept the default (press Enter). Creates `~/.openclaw/` in your Linux file system. Do not move it to the Windows side.

Wizard Q3: AI Model Provider

```
? Select your AI provider:
  > Anthropic
    OpenAI
    Google
    MiniMax
    Open Router
    Custom
```

Choose: Anthropic (or your preferred provider)

We will walk through the Anthropic setup. Other providers follow the same pattern -- you will be asked for a 🔑 API key.

Wizard Q4: 🔑 API Key Setup

This is where **most beginners get tripped up**.

Getting your Anthropic API key:

1. Go to **console.anthropic.com** in your Windows browser

2. Create an account if needed, verify email

3. **Settings > Billing** -- add a payment method

4. **Set a spending limit** ($20-50/month to start)

5. **Settings > API Keys** -- click "Create Key"

6. Name it "OpenClaw" and click Create

7. **Copy the key immediately** -- you can only see it once

The key starts with `sk-ant-...` and is very long.

🚩 Rough Waters: The Token Formatting Gotcha

The Problem (the #1 install error)

Browsers add hidden characters (line breaks, spaces) when copying. Pasting directly into the terminal **corrupts the key**.

The Solution -- The Notepad Trick

1. Copy the 🔑 API key from the Anthropic console

2. Paste into **Notepad** on Windows -- verify it is **one single line** starting with `sk-ant-`

3. Select all (`Ctrl + A`), copy (`Ctrl + C`)

4. Paste into the terminal (`right-click` or `Ctrl + Shift + V`)

```
? Enter your Anthropic API key: sk-ant-api03-xxxx...
```

Wizard Q5-Q6: Model and Port

Question 5: Model Selection

```
? Select model: > claude-opus-4-6
```

Choose: claude-opus-4-6 -- most capable, strongest prompt injection resistance.

> *Module 09 covers configuring cheaper models for routine tasks.*

Question 6: ⛵ Gateway Port

```
? Gateway port: (18789)
```

Accept the default (press Enter). Port 18789 is the standard OpenClaw port.

Wizard Q7: ⛵ Gateway Bind

```
? Gateway bind: > Loopback
```

Choose: Loopback (most secure -- only this computer can connect)

Option	Who Can Connect	When to Use
Loopback	Only this computer	Default -- most secure
LAN	Devices on your WiFi	Access from another local machine
Tailscale	Your Tailscale network	Secure remote access
Custom	Whatever IP you specify	Advanced users only

Change later with `openclaw config gateway bind`

Wizard Q8-Q9: Tailscale and Token

Question 8: Tailscale Exposure

```
? Tailscale exposure: (Off)
```

Choose: Off -- enable later when security is fully configured.

Question 9: ⛵ Gateway Token

```
? Gateway token: (leave blank to auto-generate)
```

Leave blank -- auto-generates a secure random token. **Save it when displayed.**

Wizard Q10: Chat Channels

```
? Configure chat channels? > Skip for now
```

Choose: Skip for now -- we set up Telegram in Module 06.

Get the base installation working first. You can always add channels later with `openclaw config channels`.

Wizard Q11-Q14: 🐠 Skills, Hooks, Service

- **Q11: Skills** -- Skip all (covered in Module 07)

- **Q12: Hooks** -- Enable BOOT.md and session 🪸 memory

- **Q13: Service Runtime** -- Choose Node.js (only option)

- **Q14: Install as Background Service:**

```
? Install gateway as background service? (Y/n)
```

Choose: Y -- makes the ⛵ gateway start on boot and run 24/7.

BOOT.md runs on every startup; session memory saves context between conversations.

Step 3: Onboarding Complete

The wizard finishes with output like this:

```
Gateway configured
AI provider connected (Anthropic - claude-opus-4-6)
Daemon installed (systemd service)
Dashboard:      http://127.0.0.1:18789/
Gateway Token: abc123xyz... (save this!)
```

Save your gateway token immediately -- store it in a password manager or secure note. You need it for dashboard access.

Retrieve it later with: `openclaw config gateway token`

Immediately After Onboarding: Install QMD

Before doing anything else, install **QMD** -- an on-device search engine for your agent's 🪸 memory files:

```
openclaw skills install qmd
openclaw service restart
```

Why this matters:

- Without QMD, your agent re-reads files every time it needs information (wastes tokens)

- With QMD, your agent can search indexed files instantly

- Saves money from day one by avoiding redundant file reads

- Takes 30 seconds to install

Install this before your first real conversation. You will thank yourself later.

Step 4: Verify the Installation

Run these three commands in order:

```
openclaw status                      # Should show: Running
openclaw doctor                      # All critical checks should pass
openclaw security audit --deep --fix # Fixes file permissions
```

- If `doctor` reports failures, run `openclaw doctor fix`

- Security audit sets dirs to 700 and files to 600

Step 5: Access the Dashboard

1. Open your **Windows** web browser

2. Go to `http://127.0.0.1:18789/`

3. Enter your ⛵ **gateway token**

4. You are in!

Dashboard vs. TUI

Interface	What It Is	Best For
Control UI (Dashboard)	Web page at localhost:18789	Configuration, monitoring, logs
TUI (Terminal UI)	Text chat in your terminal	Talking to your agent, running commands

Most day-to-day interaction happens in the **TUI**. The dashboard is for **management**.

Step 6: Your First Chat

```
openclaw tui
```

A full-screen terminal interface opens. Type a simple greeting:

```
Hello! My name is [your name]. What's your name?
```

Step 6: Your First Chat (continued)

What should happen:

- Your message appears in the chat

- After 1-5 seconds, the AI responds

- The token counter increments

If you get a response -- 🦞 **OpenClaw is working!**

> *Do not have a full conversation yet. We will do that in Module 04. Type* `/exit` *or* `Ctrl + C` *to leave.*

Step 7: Verify the Daemon

Check the service status

```
openclaw service status      # Look for: Active: active (running)
```

Test terminal independence

1. **Close** your 🐚 Ubuntu terminal completely

2. Wait 10 seconds, then open `http://127.0.0.1:18789/`

3. Dashboard should **still load** -- the daemon kept it alive

Step 7: Service Commands Reference

```
openclaw service start      # Start the daemon
openclaw service stop       # Stop the daemon
openclaw service restart    # Restart the daemon
openclaw service logs       # View daemon logs
```

Use `restart` after any config change. Use `logs` to debug startup issues.

🚩 Damage Control

Problem	Fix
`openclaw: command not found`	Run `source ~/.bashrc` or reopen terminal
"API key invalid"	Use the **Notepad trick** -- hidden line breaks are the cause
"Port already in use"	`openclaw config gateway port 18790` then restart
"Connection refused" in browser	Check `openclaw service status`; use `http://` not `https://`
Daemon does not start on boot	Verify systemd: `systemctl is-system-running`
AI responses very slow (30s+)	Check `status.anthropic.com`; try Sonnet 4.5 temporarily
"Insufficient credits"	Check billing at console.anthropic.com
Token counter climbs fast	Use `/compact` to compress history; start new chats with `/new`

⚙ Hands on Deck

Complete this checklist before proceeding to Module 04:

- [ ] `openclaw --version` shows a version number

- [ ] `openclaw status` shows "Running" and `openclaw doctor` passes

- [ ] `openclaw security audit --deep` has no critical issues

- [ ] Dashboard loads at `http://127.0.0.1:18789/`

- [ ] TUI opens with `openclaw tui` and AI responds to a test message

- [ ] ⛵ Gateway stays running after closing the terminal

- [ ] Gateway token saved somewhere secure

- [ ] `~/.openclaw/` directory is mode 700

Bonus: Run `openclaw service logs` and read the last few lines.

💎 Treasure Chest

1. **Installation is one command** -- but the onboarding wizard is where the real setup happens

2. **The token formatting gotcha is real** -- always paste API keys into Notepad first

3. **Start with loopback binding** -- most secure, only this machine can connect

4. **Set API spending limits** before chatting -- tokens burn faster than you expect

5. **The daemon keeps the gateway running 24/7** -- even after closing the terminal

6. **Two interfaces**: TUI for chatting, Dashboard for managing

7. **Run the security audit** after installation -- catches permission issues

8. **Save your gateway token** -- retrieve with `openclaw config gateway token`

9. **Everything stays local except API calls** -- your data never leaves your machine

🌊 Next Port of Call

Module 04: Your First Conversation 🦞

Your agent is awake. Time to introduce yourself, do a "brain dump" of your life and goals, and learn the essential commands for daily use.