Guide: Setting Up WSL, Ollama, Fabric and Running LLM and AI Models Locally

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Repository: https://github.com/rpriven/ai_setup

This guide walks you through setting up Windows Subsystem for Linux (WSL), installing Ollama, Fabric and running LLM and AI models locally, with integration to Anthropic models.

For more information, including an easy-to-use setup script, please visit my GitHub repository at: https://github.com/rpriven/ai_setup

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Installing WSL

1. Open PowerShell as Administrator and run:

```
wsl --install
```

2. Restart your computer when prompted.
3. After restart, an Ubuntu terminal will open (If not, look for 'Terminal' or 'Ubuntu')
4. Create a username and password when prompted.
5. Update your Linux distribution:

```
sudo apt update && sudo apt upgrade -y
```

Setting Up Ollama

1. Install Ollama in your WSL environment:

```
curl -fsSL https://ollama.com/install.sh | sh
```

2. Verify the installation:

```
ollama --version
```

3. Start the Ollama service:

```
ollama serve &
```

You can also browse for additional models at https://ollama.com/

Running Local LLM Models

1. Pull a model (example with Llama 2):

```
ollama pull llama3.2:1b
```

2. Run a model and start an interactive chat:

```
ollama run llama3.2:1b
```

3. Basic usage examples:

```
# Chat (interactive) with the model
ollama run llama3.2:1b

# Generate a response to a prompt
echo "Explain quantum computing in simple terms" | ollama run llama3.2:1b
```

Integrating with Fabric

1. Install Go, then Fabric for Linux (amd64):

```
# Go install
wget https://go.dev/dl/go1.24.1.linux-amd64.tar.gz && \
sudo rm -rf /usr/local/go && \
sudo tar -C /usr/local -xzf go1.24.1.linux-amd64.tar.gz && \
echo 'export PATH=$PATH:/usr/local/go/bin' >> ~/.profile && \
source ~/.profile && \
go version

# Fabric install with go
go install github.com/danielmiessler/fabric@latest

# Golang environment variables
export GOROOT=/usr/local/go
export GOPATH=$HOME/go

# Update PATH to include GOPATH and GOROOT binaries
export PATH=$GOPATH/bin:$GOROOT/bin:$HOME/.local/bin:$PATH
```

```
    # IF having issues with go, Git clone install
    curl -L
https://github.com/danielmiessler/fabric/releases/latest/download/fabric-
linux-amd64 > fabric && chmod +x fabric && ./fabric --version
```

2. Run the setup to configure your directories and API keys:

```
./fabric --setup
```

3. Select appropriate number for Anthropic setup, as well as Ollama:
4. Basic usage examples:

```
# Get help
fabric --help

# List available models (-L or --listmodels)
fabric -L
fabric --listmodels

# Change default model (-d or --changeDefaultModel)
fabric -d ollama3.2:1b
fabric --changeDefaultModel ollama3.2:1b

# List patterns (-l or --listpatterns)
```

```
fabric -l
fabric --listpatterns

# Generate response to a prompt
echo "Explain black holes like I'm 5" | fabric -s

# Extract wisdom from a YouTube video (will need YouTube API key)
yt <url> | fabric -sp extract_wisdom

# Analyze claims of a website
fabric -u https://github.com/danielmiessler/fabric/ -p analyze_claims

# Run a summarize pattern from a local file
cat file.txt | fabric -sp summarize
```

5. Optional: Move the fabric executable to your path for easier access:

```
sudo mv fabric /usr/local/bin/
```

> **Note:** For the latest installation instructions and usage, refer to the official Fabric GitHub repository.

Fabric UI Setup

Streamlit

1. Install Streamlit

```
 sudo apt update && \
 sudo apt install -y python3 python3-pip && \
 pip3 install streamlit
```

2. Install Streamlit files and dependencies for Fabric, then launch:

```
   # Just get the streamlit.py file and requirements.txt from the repo
   curl -O
https://raw.githubusercontent.com/danielmiessler/fabric/main/streamlit.py
   curl -O
https://raw.githubusercontent.com/danielmiessler/fabric/main/requirements.tx
t
   pip install -r requirements.txt
   streamlit run streamlit.py
```

This should open up a web interface for you to work with: http://localhost:8501/

From there you can use a GUI to interact with Fabric and various patterns.

Additional Resources

- Official WSL Documentation
- Ollama GitHub Repository
- Fabric GitHub Repository
- Anthropic API Documentation

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