

# Squoosh CLI Setup and Bulk Image Compression Documentation

This documentation provides step-by-step instructions for installing and running Squoosh CLI on Windows using WSL and Ubuntu.

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## Prerequisites

- Windows 10/11 with WSL support
  - Internet connection
  - Administrative access to install software
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## Step 1: Install WSL

1. Open Command Prompt or PowerShell.
2. Run:

```
wsl.exe --list --online
```

3. Choose a Linux distribution (Ubuntu is recommended) and install:

```
wsl --install -d Ubuntu
```

4. Launch Ubuntu and create a user account:

```
# Follow prompts to create username and password
```

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## Step 2: Update Ubuntu and Install Prerequisites

Update Ubuntu packages:

```
sudo apt update
```

Install required packages:

```
sudo apt install -y curl gnupg ca-certificates apt-transport-https
```

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## Step 3: Install Node.js

### Option 1: Node.js 20 (may cause WebAssembly errors)

```
curl -fsSL https://deb.nodesource.com/setup_20.x | sudo -E bash -  
sudo apt install -y nodejs
```

Check version:

```
node -v
```

### Option 2: Node.js 18 (Recommended if Node 20 fails)

```
sudo apt remove -y nodejs  
sudo apt autoremove -y  
curl -fsSL https://deb.nodesource.com/setup_18.x | sudo -E bash -  
sudo apt install -y nodejs
```

Check version:

```
node -v
```

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## Step 4: Install Squoosh CLI

Install globally using `npm`:

```
sudo npm install -g @squoosh/cli
```

**Note:** Use `sudo` if you encounter permission errors.

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## Step 5: Fix WebAssembly URL Issue (if applicable)

If you encounter the `ERR_INVALID_URL` error when running Squoosh CLI:

```
export NODE_OPTIONS="--no-experimental-fetch"
```

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## Step 6: Prepare Input and Output Folders

Inside your project directory:

```
mkdir input output
```

Place all images you want to compress inside the `input` folder.

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## Step 7: Run Squoosh CLI for Bulk Compression

Compress all PNG, JPG, and JPEG files to WebP format with quality 75:

```
squoosh-cli  
--webp '{"quality":75}'  
input/*.png input/*.jpg input/*.jpeg  
-d output
```

Optional: Adjust compression effort:

```
squoosh-cli  
--webp '{"quality":75, "effort":6}'  
input/*.png input/*.jpg input/*.jpeg  
-d output
```

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## Step 8: Verify Output

List files in the output folder:

```
ls output
```

Check sizes and compression results.

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## Notes

- Node.js 18 is recommended for Squoosh CLI to avoid WebAssembly fetch issues.
  - Always use `sudo` when installing global npm packages to prevent permissions errors.
  - The `input` folder should contain only the images you want to compress.
  - The `output` folder will store all converted WebP files.
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## References

- [Squoosh CLI GitHub](#)
  - [NodeSource Node.js Setup](#)
  - [WSL Installation Guide](#)
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*End of Documentation*