

# Downloading the Source

The Android source tree is located in a Git repository hosted by Google. The Git repository includes metadata for the Android source, including changes to the source and when the changes were made. This page describes how to download the source tree for a specific Android code line.

To start with a factory image for a specific device instead of downloading the source, see [Selecting a device build](#).

## [ Initializing a Repo client ]

After [installing the Repo Launcher](#), set up your client to access the Android source repository:

1. Create an empty directory to hold your working files. Give it any name you like:

```
cd ~
mkdir aosp
cd aosp
```

2. Configure Git with your real name and email address. To use the Gerrit code-review tool, you need an email address that's connected with a [registered Google account](#). Ensure that this is a live address where you can receive messages. The name that you provide here shows up in attributions for your code submissions.

```
git config --global user.name Your Name
git config --global user.email you@example.com
```

3. Run `repo init` to get the latest version of Repo with its most recent bug fixes. You must specify a URL for the manifest, which specifies where the various repositories included in the Android source are placed within your working directory.

```
repo init -u https://android.googlesource.com/platform/manifest
```

Run the following command in the terminal:

```
...
sudo ln -s /usr/bin/python3 /usr/bin/python
...
```

A successful initialization ends with a message stating that Repo is initialized in your working directory. Your client directory now contains a `.repo` directory where files such as the manifest are kept.

## [ Downloading the Android source tree ]

More rarely, Linux clients experience connectivity issues, getting stuck in the middle of downloads (typically during *receiving objects*). Adjusting the settings of the TCP/IP stack and using non-parallel commands can improve the situation. You must have root access to modify the TCP setting.

To download the Android source tree to your working directory from the repositories as specified in the default manifest, run:

```
sudo sysctl -w net.ipv4.tcp_window_scaling=0
repo sync -j1
```

The Android source files are downloaded in your working directory under their project names.

To suppress output, pass the `-q` (quiet) flag. See the [Repo Command Reference](#) for all options.