

Docker Notes

How to use docker

- [How to create a docker image from a linux disto ISO](#)
 - [Creating a docker image from a live ISO](#)

How to create a docker image from a linux distro ISO

How to create a fresh linux distro from a live ISO

How to create a docker image from a linux disto ISO

Creating a docker image from a live ISO

Download Live ISO, example

Example: debian ISO: **debian-live-13.1.0-amd64-standard.iso**

<https://cdimage.debian.org/debian-cd/current-live/amd64/iso-hybrid/>

Make a directory to mount the ISO

```
sudo mkdir /media/iso
```

Mount the ISO to the /media/iso

```
sudo mount -o loop debian-live-13.1.0-amd64-standard.iso /media/iso
```

Extract the Root Filesystem using SquashFS

```
sudo unsquashfs -d debian-fs /media/iso/live/filesystem.squashfs
```

Delete unnecessary files

```
sudo rm -rf "debian-fs/proc" "debian-fs/sys" "debian-fs/dev" "debian-fs/run"
```

Create a compressed file of the root filesystem

```
sudo tar -C debian-fs -czf debian-fs.tar.gz .
```

Import the compressed Debian filesystem into Docker as an Image

```
cat debian-fs.tar.gz | docker import - debian-image:latest
```

Run the Docker Container

```
docker run -it debian-image /bin/bash
```

Script to create a Debian Docker Image from a Debian ISO

```
#!/bin/bash

DEBIAN_ISO="debian-live-13.1.0-amd64-standard.iso"
MOUNT_DIR="/media/iso"
EXTRACT_DIR="./debian-fs"
TARBALL_NAME="debian-fs.tar.gz"
DOCKER_IMAGE_NAME="debian-image:latest"

sudo mkdir -p "$MOUNT_DIR"
sudo mount -o loop "$DEBIAN_ISO" "$MOUNT_DIR"
sudo unsquashfs -d "$EXTRACT_DIR" "$MOUNT_DIR/live/filesystem.squashfs"
sudo rm -rf "$EXTRACT_DIR/proc" "$EXTRACT_DIR/sys" "$EXTRACT_DIR/dev" "$EXTRACT_DIR/run"
sudo tar -C "$EXTRACT_DIR" -czf "$TARBALL_NAME" .
cat "$TARBALL_NAME" | docker import - "$DOCKER_IMAGE_NAME"

echo "Run your new Debian Docker image with:"
echo "  docker run -it $DOCKER_IMAGE_NAME /bin/bash"
```