

# SANE scanning in the network

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## Introduction

A machine has a scanner attached to it and this resource should be shared in the network. How to configure and install sane

## Installation

### server and client

The basic package that provides the scan daemon is saned, this needs to be installed on the server and the client

```
aptitude install sane
```

### LTSP specific

If the packages need to be installed on the ltsp client first run the ltsp-chroot command

```
ltsp-chroot -m  
apt-get install sane
```

No need to run the ltsp-update-image just yet, as the package needs to be configured

## Configuration

### server

On the server we need to enable the start of the daemon

```
/etc/default/saned
```

```
RUN=yes
```

Configure the network to where it should expose the scanner, adapt to actual configuration

```
/etc/sane.d/saned.conf
```

```
192.168.10.0/24
```

and add the saned user to the group lp, or whatever group write permissions are set

```
adduser saned lp
```

restart the saned service

```
service saned stop
service saned start
```

Note for Jessie: the saned service is masked. So:

```
rm /lib/systemd/system/saned.service
systemctl daemon-reload
systemctl unmask saned.service
systemctl daemon-reload
systemctl restart saned.service
```

## client

Configure the host it should connect to scanners, adapt to actual configuration

```
/etc/sane.d/net.conf
```

```
192.168.10.1
```

If the scanner is a HP and connected on the LAN (configured with cups/hplip): install the package `libsane-hpio`.

## LTSP specific

Edit the file in the ltsp filesystem

```
/opt/ltsp/i386/etc/sane.d/net.conf
```

```
192.168.10.1
```

and now update the image

```
ltsp-update-image
```

## Trouble Shooting

### no access to device

error message "*Access to resource* has been denied"

1. check if the scanner is recognized by the system

```
# as root
lsusb
--snip--
Bus 002 Device 005: ID 03f0:3b17 Hewlett-Packard LaserJet M1005 MFP
--snip--
```

in this case, look at the permissions of bus 002 and device 005

```
ls -l /dev/bus/usb/002/005
crw-rw-r--+ 1 root lp 189, 132 Jan 21 12:00 /dev/bus/usb/002/005
```

And see that the process that needs to access the scanner is in the correct group. To change the group, edit the udev rules in `/etc/udev/rules.d/`