DGVOX Installation Steps (Debian 12)

DGVOX

SpeechLogix

Contents

Overview

This manual provides a detailed, step-by-step guide to install and configure the **DGVOX v10** system on a clean **Debian 12** machine. It is designed specifically for **first-time users**, system administrators, and IT teams who need a reliable and repeatable method to deploy DGVOX in enterprise or production environments.

the guide walks you through every critical stage of the installation process, including:

- System preparation and dependency installation
- Disabling conflicting services like Apache2 and system logging
- Locale and shell configuration to support automation tools
- Installing Ansible and Git for deployment orchestration
- Generating and applying SSH keys for secure Git access
- Cloning the DGVOX repository and setting up the virtual environment
- Running the DGVOX installer with licensing and serial key generation
- Using Ansible playbooks for automated component deployment
- Post-installation hardening and system optimizations

Each section includes written commands and configuration tips to make the installation process intuitive, even for those with limited Linux experience. Screenshots and FAQ sections can be added where needed to further support users during the installation.

DGVOX Installation Manual (Debian 12)

DGVOX Installation and Configuration Steps

Step 1: Install Dependencies and Configure System

1.1 Update Package Lists

This updates the system's package list to ensure you get the latest versions during installation.

```
apt update
```

1.2 Install Essential Packages

These tools are required for network checks and secure remote access (SSH).

```
apt install net-tools -y
apt install openssh-server -y
```

```
root@DGVox:~# apt update
apt install net-tools -y
apt install openssh-server -y
Get:1 http://security.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Hit:2 http://deb.debian.org/debian bookworm InRelease
Get:3 http://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]
Get:4 http://security.debian.org/debian-security bookworm-security/main Sources [142 kB]
Get:5 http://security.debian.org/debian-security bookworm-security/main amd64 Packages [272 kB]
Fetched 518 kB in 1s (629 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
2 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 2 not upgraded.
Need to get 243 kB of archives.
After this operation, 1,001 kB of additional disk space will be used.
Get:1 http://security.debian.org/debian-security bookworm-security/main amd64 net-tools amd64 2.10-0.1+deb12u2 [243 kB]
Fetched 243 kB in 0s (1,227 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 504752 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1+deb12u2_amd64.deb ...
Unpacking net-tools (2.10-0.1+deb12u2) ...
Setting up net-tools (2.10-0.1+deb12u2) ...
Processing triggers for man-db (2.11.2-2) ...
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-server is already the newest version (1:9.2p1-2+deb12u6).
openssh-server set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
root@DGVox:~#
```

1.3 Disable Apache2 (if running by default)

Apache2 may conflict with DGVOX services, so we stop and disable it.

```
systemctl stop apache2
systemctl disable apache2
```

```
root@DGVox:~# systemctl stop apache2
systemctl disable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install disable apache2
Removed "/etc/systemd/system/multi-user.target.wants/apache2.service".
root@DGVox:~#
```

1.4 Configure Log Rotation to Limit Log Size

Prevents system logs from using too much disk space.

```
nano /etc/logrotate.conf
```

- Comment the weekly line:

```
#weekly
```

- Add the line:

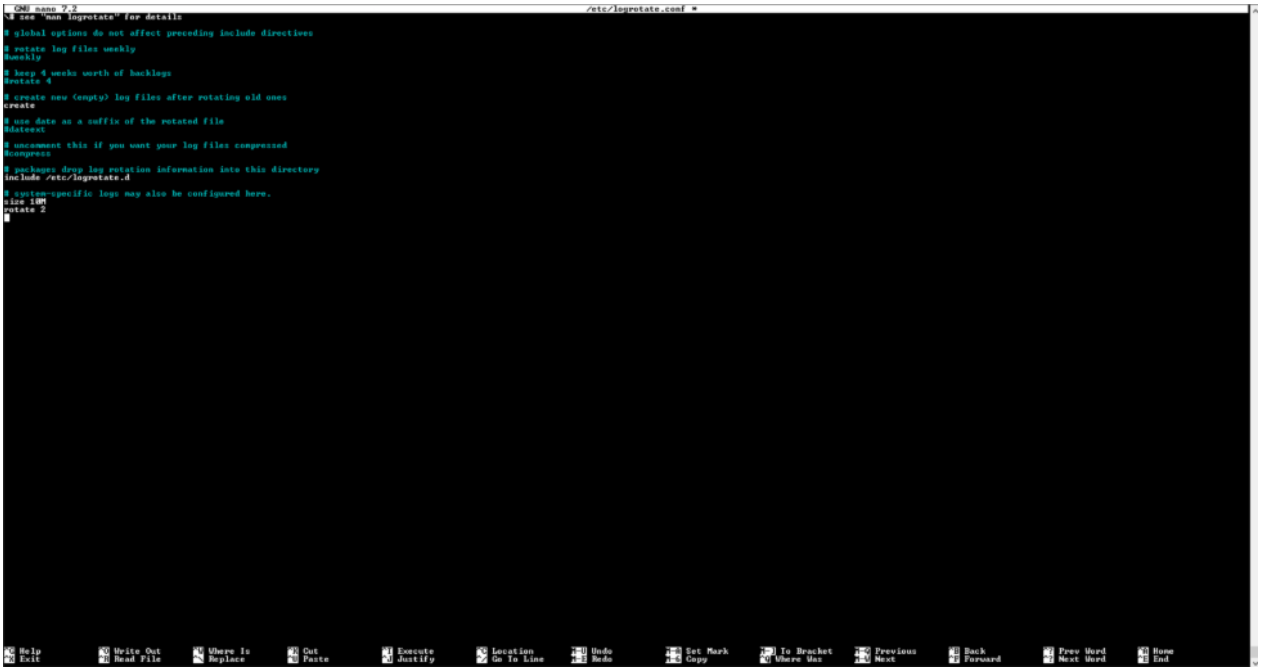
```
size 10M
```

- Change:

```
rotate 2
```

Then, save with Ctrl + O, exit with Ctrl + X.

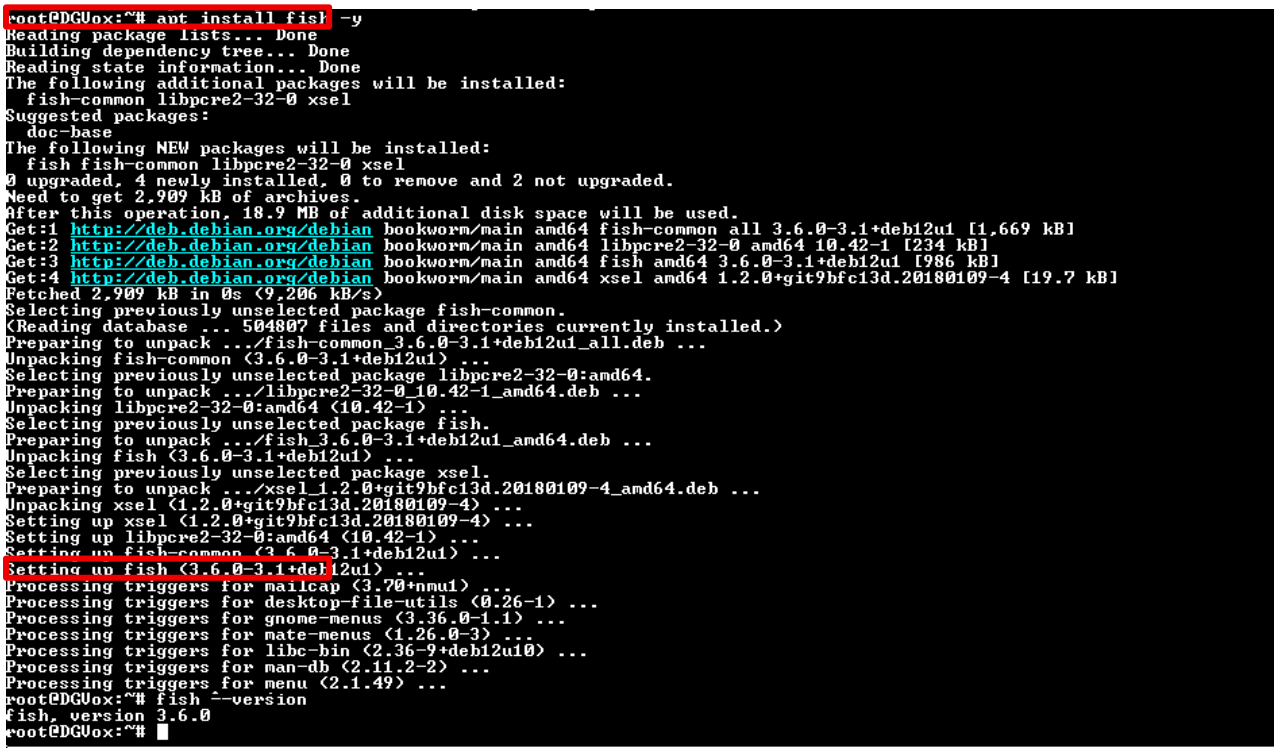
This limits logs to 10MB and retains only two backups.



1.5 Install Fish Shell

Fish provides a user-friendly shell environment for easier command execution.

```
apt install fish -y
fish –version
```



1.6 Install Ansible and Configure Locale

Ansible is used for automation and needs locale settings for proper operation.

```
apt install ansible
apt install locales
locale-gen en_US.UTF-8
```

Edit default locale:

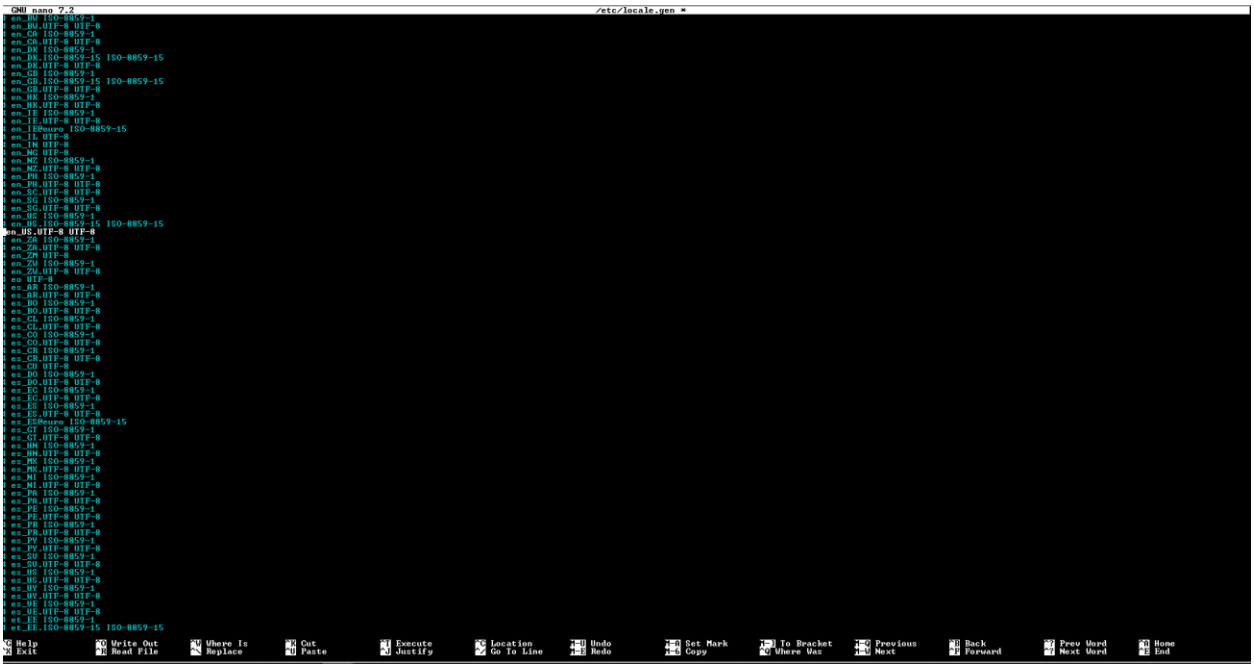
```
nano /etc/default/locale
```

Add:

```
LANG="en_US.UTF-8"
LC_ALL="en_US.UTF-8"
```

Uncomment locale in:

```
nano /etc/locale.gen
en_US.UTF-8 UTF-8
```



Apply changes:

```
source /etc/default/locale
export LANG=en_US.UTF-8
export LC_ALL=en_US.UTF-8
dpkg-reconfigure locales
```

Use spacebar to select en_US.UTF-8, then Tab to OK.

Check Ansible version:

```
ansible --version
```

```
root@DGUox ~# ansible --version
ansible [core 2.14.18]
  config file = None
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  ansible collection location = /root/.ansible/collections:/usr/share/ansible/collections
  executable location = /usr/bin/ansible
  python version = 3.11.2 (main, Apr 28 2025, 14:11:48) [GCC 12.2.0] (/usr/bin/python3)
  jinja version = 3.1.2
  libyaml = True
```

1.7 Install Git

Git is needed to download the latest DGVOX installation scripts from the repository.

```
apt install git
git --version
```

Step 2: DGVOX v10 Linux Setup Installation

2.1 Generate SSH Key (For Git Authentication)

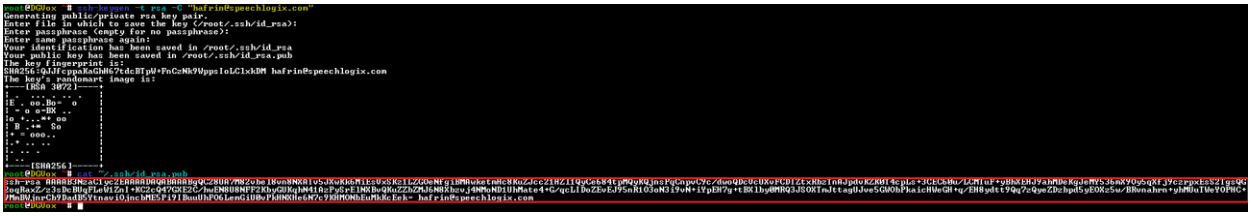
This creates a secure key to authenticate with the Git server.

```
ssh-keygen -t rsa -C "hafrin@speechlogix.com"
```

Press Enter 3 times to accept the default path.

Display the key:

```
cat ~/.ssh/id_rsa.pub
```



Now, copy and share this key to get access to the Git repository.

2.2 Clone DGVOX Repository

This command downloads the DGVOX installation files from the official repository.

```
cd /opt/
git clone -b feature/debian_12_ansible git@bitbucket.org:cctel/ansible.git
```

Type yes when prompted.

2.3 Run DGVOX Setup

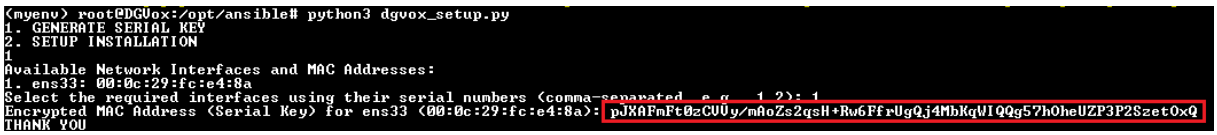
This installs Python dependencies required for DGVOX setup (only once).

```
cd /opt/ansible
source myenv/bin/activate
sh python_packages.sh
```

Then

```
python3 dgvox_setup.py
```

Launches the main setup script.



- Select 1 to **Generate Serial Key**
- Choose a MAC address
- *Copy* the displayed serial and *send* it to the *support team* to generate the **LICENSE KEY**

Complete Installation with LICENSE KEY

After receiving the LICENSE KEY, rerun:

```
python3 dgvox_setup.py
```

- Select 2 for Setup Installation
- Paste the LICENSE KEY
- Enter the system's **Static IP** when prompted

Ensure a static IP is configured before this step. Then press Ctrl + C and exit.

Now run the following command:

```
deactivate
sh set_env_and_reboot.sh
```

(only for first-time installation)

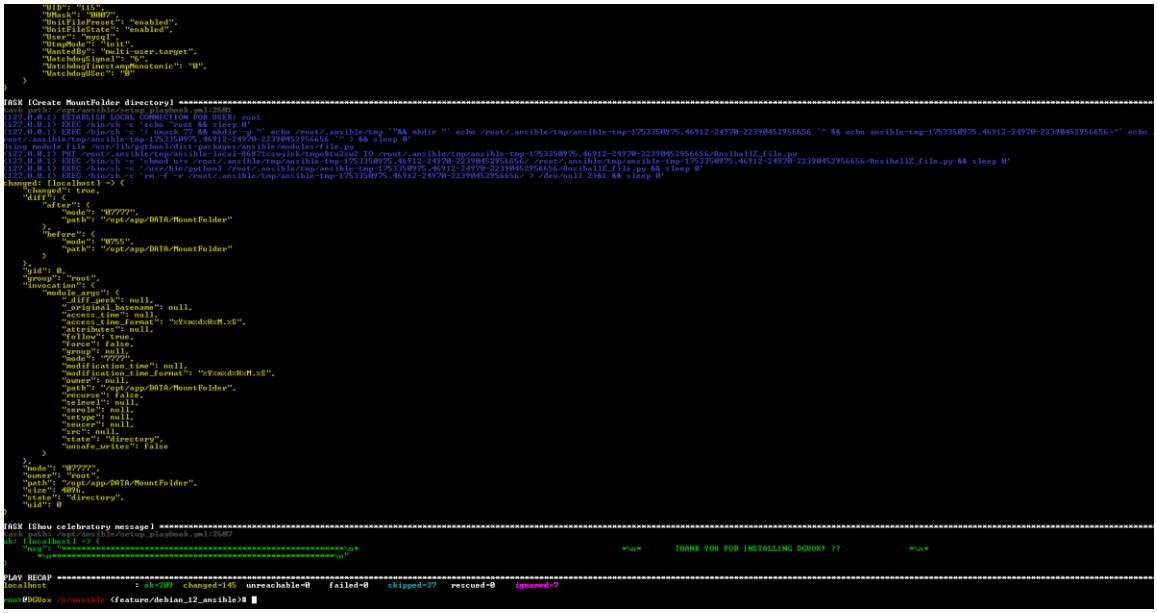
This will finalize setup and restart the system to apply changes.

2.4 Run Ansible for DGVOX Auto Installation

This command runs the Ansible playbook, which installs and configures all DGVOX components.

```
cd /opt/ansible
cp -r /usr/local/lib/shcti /usr/local/lib/shctiAnalog
ansible-playbook -i host_vars/localhost.yml /opt/ansible/setup_playbook.yml -vvv
```

It may take time (~10 GB of data will be downloaded).



2.5 Open DGVOX Web Interface

Open a browser and go to http://<your-system-ip>
You should now see the DGVOX login page.

Step 3: Disable Docker Image Auto-Update (Optional but Recommended)

Comment out the following 2 lines in each service:

```
#ExecStartPre=/usr/bin/docker login -u ${DOCKER_USERNAME} -p ${DOCKER_PASSWORD}
#ExecStartPre=/usr/bin/docker pull speechlogix/<imagename>:latest
```

Edit the following files under /etc/systemd/system:

```
nano storageserver.service
nano dgui.service
nano dgbackend.service
nano dgvox_auto_delete.service
nano dgvox_collecting_uuid.service
nano dgvox_archive.service
nano dgvox_alert_sender.service
nano dgvox_alert_monitoring.service
nano dgvoxrtpproxy.service
nano dgvoxmediaproxy.service
nano dgvoxmediaserver.service
nano <recordername>.service
```

Disabling these lines stops DGVOX services from auto-pulling updated images on reboot. You can also use **WinSCP** to edit these files if you're more comfortable with a GUI.

DGVOX System Maintenance – FAQs

Q1: How can I check which log files are using up disk space?

A: Run the following command to see the size of each log file:

```
sudo du -sh /var/log/*
```

Q2: How do I disable system logs to prevent them from filling up my disk?

A: Follow these steps:

1. Open the syslog config file and comment all lines:
   ```
   sudo nano /etc/rsyslog.conf
   ```
2. Do the same in the default rsyslog settings:
   ```
   sudo nano /etc/rsyslog.d/50-default.conf
   ```
3. Stop and disable the rsyslog service:
   ```
   sudo systemctl stop rsyslog
   sudo systemctl disable rsyslog
   ```
4. Edit the journald configuration:
   ```
   sudo nano /etc/systemd/journald.conf
   ```
   Add or change these lines:
   ```
   Storage=none
   RuntimeMaxUse=0
   ```
5. Restart the journald service:
   ```
   sudo systemctl restart systemd-journald
   ```

Q3: How do I clear existing logs that are already stored?

A: Use the following commands to delete commonly used log files:

```
sudo rm -f /var/log/syslog*
sudo rm -f /var/log/daemon.log*
sudo rm -f /var/log/messages*
sudo rm -f /var/log/kern.log*
sudo rm -f /var/log/user.log*
```

Q4: How do I disable deep sleep or suspend mode on my system?

A: Deep sleep is enabled by default. To disable it:

1. Edit the logind config:
   ```
   sudo nano /etc/systemd/logind.conf
   ```
   Add or update these lines:
   ```
   HandleSuspendKey=ignore
   HandleLidSwitch=ignore
   HandleLidSwitchDocked=ignore
   ```

```
IdleAction=ignore
IdleActionSec=0
```

2. Check for existing suspend logs (optional):

```
journalctl | grep suspend
```

3. Restart logind service:

```
systemctl restart systemd-logind
```

4. Mask sleep-related targets:

```
systemctl mask sleep.target suspend.target hibernate.target hybrid-sleep.target
```

Q5: How can I disable automatic offline updates during reboot?

A: Run the following commands:

```
sudo ln -sf /dev/null /etc/systemd/system/packagekit-offline-update.service
```

Then edit auto-upgrade config:

```
sudo nano /etc/apt/apt.conf.d/20auto-upgrades
```

Add or modify these lines:

```
APT::Periodic::Update-Package-Lists "0";
APT::Periodic::Unattended-Upgrade "0";
```

Q6: How do I assign a static IP to my Debian system?

A:

1. Edit the network interface configuration:

```
sudo nano /etc/network/interfaces
```

Add the following:

```
auto eth0
iface eth0 inet static
  address 192.168.1.100
  netmask 255.255.255.0
  gateway 192.168.1.1
  dns-nameservers 8.8.8.8 8.8.4.4
```

2. Restart networking:

```
sudo systemctl restart networking.service
```

3. Check if the IP is applied:

```
ip a
```

Q7: I only want to configure DNS servers. How can I do that?

A: Edit the resolver config file:

```
nano /etc/resolv.conf
```

Add these lines:

```
nameserver 8.8.8.8
nameserver 8.8.4.4
```

Q8: I'm having issues with the locale while installing Ansible. How can I fix it?

A: Configure locale with the following steps:

1. Install locale package:
   ```
   sudo apt install locales
   ```
2. Generate locale:
   ```
   sudo locale-gen en_US.UTF-8
   ```
3. Set locale variables:
   ```
   LANG="en_US.UTF-8"
   LC_ALL="en_US.UTF-8"
   ```
4. Edit locale generation file:
   ```
   sudo nano /etc/locale.gen
   ```
   Uncomment this line:
   ```
   en_US.UTF-8 UTF-8
   ```
5. Apply changes:
   ```
   source /etc/default/locale
   ```

Conclusion

By following this guide step by step, you will have successfully installed and configured the DGVOX v10 system on a clean Debian 12 environment. The process includes installing essential dependencies, disabling conflicting services, generating SSH keys, cloning the latest DGVOX setup from the Git repository, and executing Ansible-based automation to deploy all components seamlessly.

For troubleshooting, frequently asked questions are included to guide you through common issues that may arise during or after installation.

If you encounter any issues, require licensing support, or need advanced customization, please don't hesitate to reach out to support@speechlogix.com.