GUIDE

Webmin Secure Administration

v1.0.0

Author:

Eldon Gabriel

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Webmin Secure Administration Lab

Installed and secured Webmin on Ubuntu 24.04. Implemented IP-based access restrictions, managed system users and services, and documented recovery procedures for authentication and firewall lockout scenarios.

REVISION HISTORY

Version	Date	☺ Author	Description of Changes
v1.0.0	01/25/2026	Eldon G.	Initial draft.

Overview

This guide consolidates the core commands and configuration steps used during the installation, access verification, troubleshooting, and authentication recovery of **Webmin** on an Ubuntu 24.04 system.

The guide is intended for hands-on system administration and security labs, with a focus on validating Webmin functionality, managing users and services, configuring access controls, and recovering from common lockout or misconfiguration scenarios.

Target OS: Ubuntu 24.04 (Debian-based systems noted where applicable)

Scope: Webmin installation, service management, network access verification, authentication (PAM and internal), firewall configuration, recovery procedures, and lab validation tasks

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1. Access & Login

Webmin URL

`https://<VM-IP>:10000`

Authentication

- Default: system `root` account

- Recommended: normal user with `sudo` privileges (PAM-based login)

- Use HTTPS, not HTTP

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2. Installation

Debian / Ubuntu (Manual Package)

```
wget
https://prdownloads.sourceforge.net/webadmin/webmin_2.000_all.
deb
sudo dpkg -i webmin_2.000_all.deb
sudo apt-get install -f
```

Verify installation

```
systemctl status webmin
```

AlmaLinux / Oracle Linux (DNF/YUM)

```
sudo tee /etc/yum.repos.d/webmin.repo <<EOF
[Webmin]
name=Webmin
mirrorlist=https://download.webmin.com/download/yum/mirrorlist
enabled=1
gpgkey=http://www.webmin.com/jcameron-key.asc
EOF

sudo dnf update -y
sudo dnf install webmin -y
```

3. Service Management

Check Webmin status

```
sudo systemctl status webmin
```

Start Webmin

```
sudo systemctl start webmin
```

Stop Webmin

```
sudo systemctl stop webmin
```

Restart Webmin

```
sudo systemctl restart webmin
```

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4. Network & Access Verification

Find the VM IP address

```
ip a
```

Confirm Webmin is listening on port 10000

```
sudo ss -tulpn | grep 10000
```

Access Webmin from a browser

```
https://<VM-IP>:10000
```

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5. Logs (Critical for Debugging)

View Webmin error log

```
sudo tail -n 50 /var/webmin/miniserv.error
```

View Webmin access log

```
sudo tail -n 50 /var/webmin/miniserv.log
```

---

6. Key Files & Directories

Config directory:

```
/etc/webmin
```

Log directory:

```
/var/webmin
```

Main config file:

```
/etc/webmin/miniserv.conf
```

Authentication files:

```
/etc/webmin/miniserv.users
/etc/webmin/webmin.acl
```

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7. User & PAM Verification

Confirm user exists

getent passwd <username>

Check user shell (must not be nologin or false)

getent passwd <username> | cut -d: -f7

Fix the shell if blocked

```
sudo usermod -s /bin/bash <username>
```

Test root access

```
sudo -i
```

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8. Webmin Authentication Management

View Webmin users

```
sudo cat /etc/webmin/miniserv.users
```

View Webmin ACLs

```
sudo cat /etc/webmin/webmin.acl
```

Create or reset the Webmin internal user

```
sudo /usr/share/webmin/changepass.pl /etc/webmin <username>
```

Grant full Webmin permissions

```
sudo /usr/share/webmin/set-permissions.pl /etc/webmin
<username>
```

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9. PAM-only Mode (Recommended for Ubuntu 24.04)

Edit config

```
sudo nano /etc/webmin/miniserv.conf
```

Required settings

```
pam=1
passwd_mode=0
```

Force PAM authentication

```
sudo rm -f /etc/webmin/miniserv.users
```

Restart Webmin after changes

```
sudo systemctl restart webmin
```

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10. IP Blocking (Silent Lockout Fix)

Clear the blocked IPs

```
sudo rm -f /etc/webmin/blocked-hosts
sudo rm -f /var/webmin/blocked-hosts
```

Disable Webmin IP blocking (lab-safe):
Edit `/etc/webmin/miniserv.conf` **and set**

```
blockhost_failures=0
blockhost_time=0
```

Restart Webmin

```
sudo systemctl restart webmin
```

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11. Firewall Notes (Lab Context)

- Use **Webmin → Networking → Linux Firewall**

- Implement **deny-all + whitelist** logic

- Restrict port **10000/TCP**

- Test from:

    - Whitelisted IP: access allowed

    - Non-whitelisted IP: connection blocked

- Browser mode does not change IP. Source IP is what matters.

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12. Full Webmin Reset (Last Resort)

Stop Webmin

```
sudo systemctl stop webmin
```

Backup configuration

```
sudo cp -r /etc/webmin /root/webmin-backup
```

Remove auth state

```
sudo rm -f /etc/webmin/miniserv.users
sudo rm -f /etc/webmin/webmin.acl
sudo rm -f /etc/webmin/miniserv.pem
```

Re-run setup

```
sudo /usr/share/webmin/setup.sh
```

Start Webmin

```
sudo systemctl start webmin
```

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13. Common Modules

System

- Users and Groups

- Software Packages

- Running Processes

- Scheduled Cron Jobs

Networking

- Linux Firewall

- Network Configuration

Others

- Command Shell

- File Manager

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14. Security Notes

- Default port: `10000`

- Change port in `/etc/webmin/miniserv.conf` if required

- Ensure Webmin version is **> 1.997** (CVE-2022-36446 mitigation)

- Re-enable IP blocking only after firewall rules are correct

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Lab Usage Notes

- Prefer PAM-only login using a `sudo` user (e.g., `eldon`)
- Use `sudo` inside Webmin for admin tasks
- Restrict access using the Webmin Firewall module (IP whitelist)
- Re-enable IP blocking only after firewall rules are in place
- Keep Webmin & Cockpit on **separate VMs** for operational clarity

This guide covers all the commands needed to recover, secure, and demonstrate Webmin access on Ubuntu 24.04.