System Documentation: FOG Server

Version: 1.0 Author: Tycho Date: 21 April 2025

Revision History

Date	Change	Author
21-04-2025	Initial version	Tycho

1. Overview

This document describes the system configuration and operation of the FOG (Free Opensource Ghost) Server. The FOG server is used for network-based OS deployment and disk imaging in IT environments, often in education or enterprise networks.

2. Purpose

The FOG server provides centralized, automated deployment and management of operating systems and software to multiple client devices over a local network. It eliminates the need for manual installations and reduces setup time.

3. System Information

ITEM	VALUE
HOSTNAME	fogserver
OS	Ubuntu Server 24.04.1 LTS
FOG VERSION	1.5.10.1655
SERVER IP ADDRESS	192.168.2.100
GATEWAY	192.168.2.254
DHCP SERVER	192.168.2.198
DNS SERVER	192.168.2.198
SUBNET MASK	255.255.255.0
INTERFACE NAME	Eth0

4. Software Components

- Apache Web Server
- PHP
- MySQL/MariaDB
- TFTP Server
- NFS
- FOG Imaging Daemon
- PXE Bootloader (undionly.kpxe or ipxe.efi)

5. Installation Steps

ITEM	COMMAND
UPDATE AND UPGRADE SYSTE M:	sudo apt update && sudo apt upgrade -y
INSTALL GIT:	sudo apt install git -y
CLONE FOG INSTALLER:	git clone https://github.com/FOGProject/fogproject.git cd fogproject/bin sudo ./installfog.sh
ANSWER THE PROMPTS:	 Version of Linux: Ubuntu, 2 Install type: Normal Server, N Network Interface: eth0, N All router, DNS, and DHCP setting: No, n Language pack: No, n Enable https: No, n Change hostname: No, n Sending information: No, n

6. Services and Ports

SERVICE	PORT
НТТР	80
TFTP	69
NFS	2049
MYSQL	3306
FOG IMAGING	7272

7. Web Interface

ITEM	COMMAND
ACCESS VIA BROWSER:	http/192.168.2.100/fog
DEFAULT LOGIN:	Username: `fog` Password: `password`
	(change immediately after setup)

8. Backup & Recovery

ITEM	COMMAND
DATABASE BACKUP	mysqldump -u root -p fog > /home/##USERNAME##/fog_backup.sql
IMAGE BACKUP	tar -czvf /home/##USERNAME##/fog_images_backup.tar.gz /images

SCHEDULE AUTOMATIC BACKUPS VIA `CRON`.

9. Maintenance Tasks

ITEM	COMMAND
KEEP SYSTEM UPDATED	sudo apt update && sudo apt upgrade -y
MONITOR DISK SPACE	df -h
RESTART FOG SERVICES IF NEEDED	sudo systemctl restart apache2 sudo systemctl restart mysql
CLEAR LOGS	sudo rm /var/log/apache2/*.log

10. Troubleshooting

ITEM	COMMAND
PXE BOOT FAILS	Check DHCP and TFTP services, network adapter settings
WEB INTERFACE NOT LOADING	Restart Apache and MySQL (`sudo systemctl restart apache2 mysql`)
CLIENT NOT APPEARING IN FOG	Verify it booted over PXE, and check for pending hosts in the FOG dashboard

11. Additional Notes

Admin responsible: ###### Physical location: Virtual Backup schedule: Monthly DHCP Options:

- Option 66: 192.168.2.100

- Option 67: ipxe.efi