➢ Linux Based OS Configuration

Configuring various Linux-based operating systems involves setting up essential components like package management, user management, networking, and security settings. Below is an overview of configuring different Linux distributions with commands and examples.

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1. Ubuntu Configuration

Ubuntu is a popular Debian-based Linux distribution.

Basic Configuration Steps

1. Update System Packages

bash

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sudo apt update && sudo apt upgrade -y

2. Add a New User

bash

CopyEdit

sudo adduser newuser

sudo usermod -aG sudo newuser

3. Configure Firewall (UFW)

bash

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sudo ufw enable

sudo ufw allow ssh

sudo ufw allow 80/tcp

sudo ufw allow 443/tcp

4. Install Essential Software

bash

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sudo apt install vim curl wget git -y

5. Enable SSH for Remote Access

bash

CopyEdit

sudo systemctl enable ssh

sudo systemctl start ssh

6. Check System Resource Usage

bash

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htop

df -h

free -m

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2. Kali Linux Configuration

Kali Linux is a Debian-based distribution designed for penetration testing and security research.

Basic Configuration Steps

1. Update System Packages

bash

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sudo apt update && sudo apt upgrade -y

2. Install Metasploit Framework

bash

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sudo apt install metasploit-framework -y

3. Start PostgreSQL Service for Metasploit

bash

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sudo systemctl start postgresql

sudo systemctl enable postgresql

4. Enable SSH for Remote Access

bash

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sudo systemctl enable ssh

sudo systemctl start ssh

5. Set Up a New User

bash

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sudo adduser pentester

sudo usermod -aG sudo pentester

6. Start Kali Tools

bash

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msfconsole

nmap -sV <target-ip>

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3. Arch Linux Configuration

Arch Linux is a rolling-release, minimal Linux distribution that requires manual setup.

Basic Configuration Steps

1. Update System Packages

bash

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sudo pacman -Syu

2. Install Essential Packages

bash

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sudo pacman -S vim git curl wget base-devel

3. Set Up a New User

bash

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sudo useradd -m -G wheel -s /bin/bash archuser

sudo passwd archuser

4. Configure Sudo for the User

bash

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sudo visudo

Uncomment: %wheel ALL=(ALL) ALL

5. Enable Networking

bash

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sudo systemctl enable NetworkManager

sudo systemctl start NetworkManager

6. Install and Configure a Firewall

bash

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sudo pacman -S ufw

sudo systemctl enable ufw

sudo systemctl start ufw

sudo ufw enable

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4. Parrot OS Configuration

Parrot OS is another Debian-based distribution used for penetration testing and security research.

Basic Configuration Steps

1. Update System Packages

bash

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sudo apt update && sudo apt upgrade -y

2. Enable SSH for Remote Access

bash

CopyEdit

sudo systemctl enable ssh

sudo systemctl start ssh

3. Install Essential Tools

bash

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sudo apt install vim git curl wget -y

4. Configure Firewall

bash

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sudo ufw enable

sudo ufw allow ssh

5. Start Penetration Testing Tools

bash

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nmap -sV <target-ip>

msfconsole

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5. CentOS Configuration

CentOS is a stable enterprise-grade Linux distribution based on RHEL.

Basic Configuration Steps

1. Update System Packages

bash

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sudo yum update -y

2. Install Essential Packages

bash

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sudo yum install vim wget curl git -y

3. Add a New User

bash

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sudo useradd centosuser

sudo passwd centosuser

sudo usermod -aG wheel centosuser

4. Configure Firewall

bash

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sudo firewall-cmd --permanent --add-service=ssh

sudo firewall-cmd --reload

5. Enable and Start SSH

bash

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sudo systemctl enable sshd

sudo systemctl start sshd

6. Enable Networking

bash

CopyEdit

sudo systemctl enable NetworkManager

sudo systemctl start NetworkManager

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6. Red Hat Enterprise Linux (RHEL) Configuration

RHEL is an enterprise Linux distribution with a focus on security and stability.

Basic Configuration Steps

1. Register RHEL Subscription

bash

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sudo subscription-manager register --username=your-username --password=your-password

sudo subscription-manager attach --auto

2. Update System Packages

bash

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sudo yum update -y

3. Install Essential Software

bash

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sudo yum install vim wget curl git -y

4. Add a New User

bash

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sudo useradd rheluser

sudo passwd rheluser

sudo usermod -aG wheel rheluser

5. Enable and Start SSH

bash

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sudo systemctl enable sshd

sudo systemctl start sshd

6. Configure Firewall

bash

CopyEdit

sudo firewall-cmd --permanent --add-service=ssh

sudo firewall-cmd --reload

Conclusion

Each Linux distribution has its own package manager and configuration methods, but the core concepts of user management, security, networking, and software installation remain similar. Let me know if you need more details on a specific configuration! 🚀