

# SETUP

## **Install and Configure SSH on IPFire**

- apt-get update
- apt-get install openssh-server
- nano /etc/ssh/sshd\_config
- PermitRootLogin yes
- PasswordAuthentication yes
- service sshd restart

## **Install SSH Client on Device A and Device B**

- apt-get update
- apt-get install openssh-client

## **Assign Static IPs to IPFire Interfaces**

- ip addr add 192.168.1.1/24 dev eth0
- ip addr add 203.0.113.1/24 dev eth1

## **Enable SSH Access on IPFire**

- nano /etc/ssh/sshd\_config
- PermitRootLogin yes
- PasswordAuthentication yes
- service sshd restart

## **Configure Port Forwarding on IPFire**

1. Access the IPFire web interface.
2. Navigate to Firewall > Port Forwarding.
3. Add a rule with:

Source: Any

Destination: IPFire RED IP

Protocol: TCP

Destination Port: 22

### **Add Firewall Rules on IPFire**

1. Navigate to Firewall > Rules.
2. Add a rule with:

Action: Allow

Protocol: TCP

Source Zone: GREEN

Destination Zone: RED

Port: 22

### **Establish Reverse SSH on Device A**

- `ssh-keygen -t rsa`
- `ssh-copy-id user@<IPFire_IP>`
- `ssh -R 2222:localhost:22 user@<IPFire_IP>`

### **Connect to Device A from Device B**

- `ssh-keygen -t rsa`

- `ssh-copy-id user@<IPFire_IP>`
- `ssh -p 2222 user@<IPFire_IP>`