MIKROTIK

HashiCorp Terraform

HA WAN

**High Available
internet access
(Multi WAN)**

PPPOE (bridge internet access)

pppoe-client

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Terraform
to setup PPP based
internet connection

Wireless
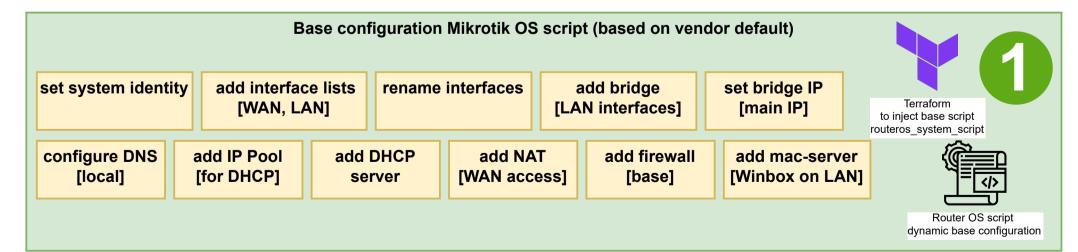
routeros_wifi*

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Terraform
based wifi
configuration

Wireguard

Site 2 Site VPN

VLAN support

1G/10G Trunk ports

Base configuration Mikrotik OS script (based on vendor default)

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set system identity

add interface lists
[WAN, LAN]

rename interfaces

add bridge
[LAN interfaces]

set bridge IP
[main IP]

configure DNS
[local]

add IP Pool
[for DHCP]

add DHCP
server

add NAT
[WAN access]

add firewall
[base]

add mac-server
[Winbox on LAN]

Terraform
to inject base script
routeros_system_script

Router OS script
dynamic base configuration

Source: https://registry.terraform.io/providers/terraform-routeros/routeros/latest/docs

Source: https://help.mikrotik.com/docs/spaces/ROS/pages/328151/First+Time+Configuration

**Project: Automatic Gateway Configuration
Mikrotik Modular Configuration Scripts**
An effort to automate Mikrotik Router OS Configuration
Attila Macskasy, Peter Karpati, Veronika Nemeth
March 3, 2025

All Mikrotik RouterOS is managed
via official Terraform provider
HTTPS/SSL API

Setup Terraform Provider

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Setup Terraform Provider
RouterOS certificate for API access
Environmental variables for TF
Test connection