



This document provides a guide for configuring the Dandy vBNG router. It includes instructions on how to set up various aspects of the router, such as Network, Radius, NAT, Log, user accounts etc. By following this guide, you can ensure that your Dandy vBNG router is properly configured and optimized for your specific needs.

Useful tips:

1. Always disable any **hyper threading (Logical)** and **Virtualization in bios**.
1. Default Login: `username = admin Password= Dandy@123`
2. “commit” to save the configuration and “commit discard” exit without save.
3. Use double TAB for next available commands.
4. Press ‘q’ to exit.
5. **Bold** highlighted are commonly used command
6. Always keep a copy (backup) of your configuration in Text file.
7. Change admin password and delete users which are not required.
(set system login user admin authentication password <your password>)

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1.1.1 Interface configuration

```
set interfaces ethernet <interface> address <address/mask>
```

{Enter IP address and Mask}

```
delete interfaces ethernet <interface> address <address>
```

```
set interfaces ethernet <interface> ipv6-address <address/mask>
```

{Enter IPv6 address and Mask}

```
delete interfaces ethernet <interface> ipv6-address <address/mask>
```

```
set interfaces ethernet <interface> gateway <address>
```

{Enter Default Gateway address}

```
delete interfaces ethernet <interface> gateway <address>
```

```
set interfaces ethernet <interface> ipv6-gateway <address>
```

{Enter Default ipv6 Gateway address}

```
delete interfaces ethernet <interface> ipv6-gateway <address>
```

```
set interfaces bonding <bond100> <address> <downdelay> <gateway> <hash-policy> <ipv6-  
address> <ipv6-gateway> <lacp-rate> <member> <miimon> <mode> <updelay>
```

{Bonding interfaces}

```
set interfaces ethernet <interface.vlan> address <address/mask>
```

{Enter IP address on Vlan interface and Mask}

```
delete interfaces ethernet <interface.vlan> address <address>
```

1.1.2 Radius configuration

```
set service pppoe-server access-concentrator <name>
```

{Name of your NAS}

```
set service pppoe-server ip-pool gw-ip-address <address>
```

{Server WAN IP}

```
set service pppoe-server ipv6-pool gw-ip-address <address>
```

{Server ipv6 WAN IP}

```
set service pppoe-server authentication radius nas-ip-address <address>
```

{Server WAN IP}

```
set service pppoe-server authentication radius nas-identifier <name>
```

{Identity of your NAS for radius}

```
set service pppoe-server authentication radius attribute mikrotik
```

{To use mikrotik type attribute with radius}

```
set service pppoe-server authentication radius server <address> key <secret>
```

{Enter your Radius Server address and secret key}

```
set service pppoe-server authentication radius server <address> acct-port <value>
```

{Default accounting port is 1813}

```
set service pppoe-server authentication radius server <address> port <value>
```

{Default authentication port is 1812}

```
set service pppoe-server authentication radius dae-server <address> port <value> key  
<secret>
```

{Enter (Incoming) dae-server address same as WAN IP and port number with secret key}

set service pppoe-server dns-servers dns1 <address>

{Enter Your First DNS server for pppoe users}

delete service pppoe-server dns-servers dns1 <address>

set service pppoe-server ipv6-dns-servers dns1 <address>

{Enter Your First ipv6 DNS server for pppoe users}

delete service pppoe-server ipv6-dns-servers dns1 <address>

set service pppoe-server dns-servers dns2 <address>

{Enter Your Secondary DNS server for pppoe users}

delete service pppoe-server dns-servers dns2 <address>

set service pppoe-server ipv6-dns-servers dns2 <address>

{Enter Your Secondary ipv6 DNS server for pppoe users}

delete service pppoe-server ipv6-dns-servers dns2 <address>

set service pppoe-server authentication radius acct-timeout <value>

{Default value is 0}

set service pppoe-server authentication radius timeout <value>

{Default value is 3}

set service pppoe-server authentication radius max-try <value>

{Default value is 3}

set service pppoe-server authentication radius server <address> fail-time <value>

{Default value is 0}

set service pppoe-server authentication radius server <address> max-fail <value>

{Default value is 10}

set service pppoe-server authentication radius server <address> req-limit <value>

{Default value is 0}

set service pppoe-server authentication radius server <address> weight <value>

{Default value is 1}

set service pppoe-server authentication radius acct-delay-time <value>

{Default value is 0}

set service pppoe-server authentication radius acct-interim-interval <value>

{Default value is 30}

set service pppoe-server authentication radius acct-interim-jitter <value>

{Default value is 60}

set service pppoe-server ip-pool-name <name>

{Name your first private IP pool – Default is pool1}

delete service pppoe-server ip-pool-name <name>

set service pppoe-server ipv6-pool-name <name>

{Name your first private IPv6 pool}

delete service pppoe-server ipv6-pool-name <name>

set service pppoe-server ipv6-pool-delegate-name <name>

{Name your first private IPv6 delegated pool}

delete service pppoe-server ipv6-pool-delegated-name<name>

set service pppoe-server ip-pool address <address/mask> name <name>

{PPPoE Pool and Name – Defatult 10.56.0.0/16}

delete service pppoe-server ip-pool address <pool> name <name>

set service pppoe-server ipv6-pool address <address/mask,prefix length> name <name>

delete service pppoe-server ipv6-pool address <pool> name <name>

set service pppoe-server ipv6-pool delegated-address <address/mask,prefix length > name <name>

delete service pppoe-server ipv6-pool delegated-address <pool> name <name>

1.1.3 Adding Vlans and Service Name

```
set service pppoe-server interface <interface> descriptions <name>
```

{PPPoE request to listen on Direct Interface}

```
delete service pppoe-server interface <interface>
```

```
set service pppoe-server interface <interface> vlan-id <value> descriptions <name>
```

{PPPoE request to listen on Vlan Interface}

```
delete service pppoe-server interface <interface> vlan-id <value>
```

```
set service pppoe-server service-name blank enable/disable
```

{Set Service-name blank globally – to all interfaces}

```
set service pppoe-server service-name <name> interface <interface>
```

{Set Service name to physical Interface}

```
delete service pppoe-server service-name <name> interface <interface>
```

```
set service pppoe-server service-name <name> interface <interface> vlan-id <value>
```

{Set service name to vlan interface}

```
delete service pppoe-server service-name <name> interface <interface> vlan-id <value>
```

```
set service pppoe-server service-name anyname interface <interface> vlan-id <value>
```

{Set blank or any service name to vlan interface}

```
delete service pppoe-server service-name <name> interface <interface> vlan-id <value>  
description <ABCD>
```

```
set service pppoe-server service-name blank interface <interface> vlan-id <value>
```

{Set blank or any service name to accept blank on vlan interface (disable blank service name globally)}

```
delete service pppoe-server service-name blank interface <interface> vlan-id <value>
```

1.1.4 System configuration (S-NAT)

```
set system snat source-address-pool <pool> translation IP <public ip> out-interface <interface>
```

{set private IP pool mentions in IP pool address, out-interface will be your WAN interface}

{Default source-address-pool is 10.56.0.0/16}

```
delete system snat source-address-pool <pool> translation IP <public ip> out-interface <interface>
```

```
set system snat source-address-pool <pool> translation IP <public ip>,<public ip> out-interface <interface>
```

{set Multiple Public IP}

```
delete system snat source-address-pool <pool> translation IP <public ip>,<public ip> out-interface <interface>
```

```
set system snat source-address-pool <pool> translation pool <public ip pool> out-interface <interface>
```

{set private IP pool mentions in IP pool address, out-interface will be your WAN interface}

{Default source-address-pool is 10.56.0.0/16}

```
set system snat source-address-pool <pool> translation pool <public ip pool>,<public ip pool> out-interface <interface>
```

{set Multiple Public IP pools}

```
delete system snat source-address-pool <pool> translation pool <public ip pool>,<public ip pool> out-interface <interface>
```

```
set system host-name
```

{Set your system host name – which you can see in your web login}

1.1.5 Create route policy

(Default bypass route policy created for IX pools. Can be added and removed)

```
set policy route ix network 1.0.0.0/24
set policy route ix network6 2404:f340::/32
```

```
delete policy route <name>
```

```
set policy route <name>
```

{Set a policy route}

```
delete policy route <name>
```

```
set policy route ix qos cbq all <50mbit>
```

{Per connection base bandwidth limit on ix list 50mbps to all connection }

```
delete policy route ix qos cbq
```

```
set policy route ix qos cbq plus <30mbit>
```

{Per connection base bandwidth limit on ix list ie. Package rate(20mbps)+30mbps = 50mbps}

```
delete policy route ix qos cbq
```

```
set policy route ix qos cbq multiply <4>
```

{Per connection base bandwidth limit on ix list i.e. Package rate (20mpbs) x4 =80mbps}

```
delete policy route ix qos cbq
```

```
set policy qos <ppp0> rate-limit download 40mbit
```

{Change the ppp0 rate-limit manually}

```
set policy qos all rate-limit download 40mbit
```

{Change all pppoe connection limit download speed to 40mbit manually}

1.1.6 System configuration (users)


```
set system login user dandy authentication password <password>
set system login user dandy level admin
set system login user read authentication password <password>
set system login user read level user
set system login user super authentication password <password>
set system login user super level superadmin
{Create user along with level permissions}
```

1.1.7 Log Server

```
set system log-server address <IP address > port 2055 version 9
```

{Sending Logs to single Log server}

```
set system log-server address <IP address >, <IP address> port 2055,2056 version 9
```

{Sending Logs to Multiple Log servers – If ports are same, you can use single port number in port for both server}

```
delete system log-server address <IP address >, <IP address> port 2055,2056 version 9
```

NOTE: We support Netflow V9 log format to generate logs

1.1.8 Local User

```
set service pppoe-server local-user username <username> password <password> speed
download 100mbit upload 100mbit
```

{The user will get IP address from pool assign in ip-pool address}

```
set service pppoe-server local-user username <username> password <password> speed
download 100mbit upload 100mbit address <ip address>
```

{You can set diffenet IP address to user}

NOTE: If a user is added locally, priority is assigned to the local user, and a request is not sent to the radius server.

```
delete service pppoe-server local-user username <username>
```

1.1.9 Displaying configuration

show configuration set

{Show you all configurations in set format}

(Press "q" to quit)

show configuration

{Show you all configurations}

(Press "q" to quit)

show interfaces

{interface details}

show system status

{Check your System Status including pppoe connections}

show interfaces ethernet

{Show all interfaces along with configuration}

show interfaces ethernet <eno1> blink count 10

{Find out interfaces by blinking interface}

show interfaces ethernet <name>

{Show select interfaces along with configuration}

show interface connections

{Number of PPPoE Connections on each interface}

show connections

{See all PPPoE connections}

show connections log

{See all PPPoE Authentication logs}

(Press "q" to quit)

show connections <username >

{Search PPPoE client by username}

disconnect user <username >

{disconnect a user}

show policy set

{See all policy}

show policy route

{show all route policy}

show policy route <name>

{Show route policy by name}

show service

{See all services configurations}

show service pppoe-server

{See all PPPoE Services configurations}

show service pppoe-server service-name

{See all Service Name}

show service pppoe-server service-name interface <interface>

{See all Service name on Interfaces}

show service pppoe-server authentication

```
show service pppoe-server authentication radius
```

```
show service pppoe-server authentication radius dae-server
```

```
show service pppoe-server dns-servers
```

```
show service pppoe-server interface
```

```
show service pppoe-server interface <interface>
```

{See all PPPoE service by Interface name}

```
show service pppoe-server ip-pool
```

{See all ip-pools configured}

```
show service pppoe-server ip-pool-name
```

```
show system
```

```
show system host-name
```

```
show system snat
```

{See all SNAT configurations}

```
show system snat source-address pool
```

{See all SNAT source pools of private IPs}

```
show system snat translation pool
```

{See all Translation Public IP pools}

1.1.10 Web Services

```
set system web address 103.120.211.138 port 8000
```

```
set system web login user abcd authentication password <password>
```

{Creating user for web login}

```
set system web login user test authentication password <password>
```

```
set system web login user test interface eno2 vlan-id 81
```

{Creating and allowing user to monitor only selected interfaces in web login}