

DUAL WAN E2000 / WRT320N Introduction

This tutorial brings to you all the steps to allow your E2000 router works as a "DUAL WAN" Router with DHCP on every WAN port, assuming you have 2 ISP providers and they give you an "always on" connection (no pppoe) just plug the patch cord in your wan port and you receive a public IP address.

I'm Using "DD-WRT v24-sp2 (04/11/11) mini - build 16773M NEWD-2 K2.6 Eko"

First Approach to "Dual Wan" on these models is to have clear the standard VLANs & ports default configuration :

E2000 Default Port & Vlan Assignment

```
root@DD-WRT:~# nvram show | grep vlan.*ports
vlan2ports=0 8
size: 19998 bytes (41442 left)
vlan1ports=4 3 2 1 8*
```

It means :
Physic port 0 (WAN) = WAN port Logic
Physic port 4 = LAN port 1 Logic
Physic port 3 = LAN 2 Logic
Physic port 2 = LAN 3 Logic
Physic port 1 = LAN 4 Logic
Port 8 = It has to be present in every VLAN since it is a logical bridge

Next Step is to have clear port membership on every VLAN.

```
root@DD-WRT:~# nvram show | grep port.*vlans
port5vlans=1 2 16
port3vlans=1
port1vlans=1
port4vlans=1
port2vlans=1
size: 19998 bytes (41442 left)
port0vlans=2
```

It Means : Ports 3, 1, 4 and 2 belong only to VLAN 1
Port 0 (WAN) belongs to VLAN 2
Port 5 Vlan is an internal port just for bridging and you don't have to consider this port.

Next Step is to have clear the Name of the vlans in Logical interface name.

```
root@DD-WRT:~# nvram show | grep vlan.*hwname
size: vlan2hwname=et0
19998 bytes (41442 left)
vlan1hwname=et0
```

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It means VLAN1 & VLAN2 are part of interface ETH0

Next Step is to know the default interfaces in our router.

root@DD-WRT:~# ifconfig

br0 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D6

```
inet addr:192.168.10.1 Bcast:192.168.10.255 Mask:255.255.255.0
UP BROADCAST RUNNING PROMISC MULTICAST MTU:1500 Metric:1
RX packets:755 errors:0 dropped:0 overruns:0 frame:0
TX packets:230 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:102932 (100.5 KiB) TX bytes:21854 (21.3 KiB)
```

br0:0 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D6

```
inet addr:169.254.255.1 Bcast:169.254.255.255 Mask:255.255.0.0
UP BROADCAST RUNNING PROMISC MULTICAST MTU:1500 Metric:1
```

eth0 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D6

```
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:551 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:0 (0.0 B) TX bytes:102048 (99.6 KiB)
Interrupt:4 Base address:0x2000
```

eth1 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D8

```
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:750 errors:0 dropped:0 overruns:0 frame:703
TX packets:754 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:113108 (110.4 KiB) TX bytes:121036 (118.1 KiB)
Interrupt:3 Base address:0x1000
```

lo Link encap:Local Loopback

```
inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MULTICAST MTU:16436 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)
```

vlan1 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D6

```
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:533 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 B) TX bytes:96144 (93.8 KiB)
```

vlan2 Link encap:Ethernet HWaddr 00:25:9C:C4:17:D7

```
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
```

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```
TX packets:18 errors:0 dropped:0 overruns:0 carrier:0  
collisions:0 txqueuelen:0  
RX bytes:0 (0.0 B) TX bytes:5904 (5.7 KiB)
```

Next Step is to create space by enabling jffs to hold load balancing & Firewall scripts.

E2000 & WRT320N have 8MB Flash & 32 MB Ram so you have plenty space to save scripts on JFFS space.

Go to "Administration TAB" then "Management TAB" and change the values to ENABLE JFFS and CLEAN JFFS, then Hit "Save" and "Apply Settings" and finally "Reboot Router"

Next Step is to allow SSH protocol to transfer files to JJFS Space created in our router.

When Router comes back alive again , It is time to allow connections through SSH protocol : Is is done from the TAB "Services" and look for "Secure Shell" on the menu SSHd just click "Enable" now again , Hit "Save" button an the botton of that page, next " Apply Setting" and next "Reboot Router"

To be continued ASAP

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Gatekeeper