
DAS-3248

Basic Configuration & CLI Command Guide

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1. Abstract

This document describes the configuration for the basic function of the DAS-3248, and how to use CLI commands to configure the DAS-3248 via RS-232 or TELNET.

Most of below configurations were encapsulated into FD.cfg (Factory default).

Which path of DAS-3248 is /nvram/cfg/factorydef/FD.cfg.

This file provides you the basic functionality examples. Which items were individual to accomplished.

You can complete the features either by create a property file which file name is myconfig.cfg or by CLI.

2. Configuration example

```
verbose off //disable the process shown on screen
```

2.1. Create a new user

```
create user name admin passwd admin root //create a root user whose ID. and PW. are "admin"
```

2.2. Create dsl ports

```
create dsl system txcfg q9921potsnonoverlapped q9921potsoverlapped q9922Adsl2PotsOverlapped q9922Adsl2PotsNonOverlapped  
q9922Adsl2PlusPotsOverlapped q9922Adsl2PlusPotsNonOverlapped
```

// It had been created by default configuration(FD.cfg) ; The command is "create dsl system" beyond Ver1.03(include).

2.3. Create Ethernet interface

```
create ethernet intf ifname eth-0 ip 192.168.100.111 mask 255.255.255.0 //create port Uplink 1(eth-0)  
create bridge port intf portid 385 ifname eth-0 status enable // create bridge port 385 maps to Eth-0  
modify bridge mode enable  
create ethernet intf ifname eth-1 ip 192.168.101.112 mask 255.255.255.0 //create port Uplink 2(eth-1)  
create bridge port intf portid 386 ifname eth-0 status enable // create bridge port 386 maps to Eth-1  
modify bridge mode enable  
create ethernet intf ifname eth-2 ip 192.168.102.113 mask 255.255.255.0 //create MGNT (bridge port is unnecessary for MGNT.)  
//Uplink 1 ,Uplink 2 and MGNT. must be assigned for different domain.
```

2.4. Delete Ethernet interface

```
delete bridge port intf portid 385 //delete bridge port 385 maps to eth-0  
delete ethernet intf ifname eth-0 //delete eth-0  
delete bridge port intf portid 386 //delete bridge port 386 maps to eth-1  
delete ethernet intf ifname eth-1 //delete eth-1  
//It must be deleted bridge port before delete ethernet port
```

2.5. Stackability

```
create ethernet intf ifname eth-1 type downlink enable // eth-1 be used to downlink for stacking  
create bridge port intf portid 386 ifname eth-1 learning enable status enable //Refer to "how to stack 2 units.doc"
```

2.6. Management

```
$create ethernet intf ifname eth-2 ip 192.168.100.111 mask 255.255.255.0 // eth-1 used to downlink for stackability
```

2.7. Create atm interface

```
create atm port ifname atm-0 lowif dsl-0 //be note that in sequence.  
create atm vc intf ifname aal5-0 lowif atm-0 vpi 8 vci 81  
create eoa intf ifname eoa-0 lowif aal5-0  
create bridge port intf ifname eoa-0 portid 1 learning enable status enable  
modify adsl lineprofile atucintlmaxtxrate 0x2ee000 ifname dsl-0  
modify adsl lineprofile aturintlmaxtxrate 0x1f400 ifname dsl-0  
:  
create atm port ifname atm-47 lowif dsl-47  
create atm vc intf ifname aal5-47 lowif atm-47 vpi 8 vci 81  
create eoa intf ifname eoa-47 lowif aal5-47  
create bridge port intf ifname eoa-47 portid 48 learning enable status enable  
modify adsl lineprofile atucintlmaxtxrate 0x2ee000 ifname dsl-47  
modify adsl lineprofile aturintlmaxtxrate 0x1f400 ifname dsl-47
```

2.8. Enable adsl line interface

```
modify adsl line intf ifname dsl-0 enable  
:
```

Ethernet interface

Default IP	mask	Interface Name	Bridge No.	Label
127.0.0.1	255.0.0.0	Lo-0		
192.168.100.111	255.255.255.0	Eth-0	385	Uplink 1
0.0.0.0	255.255.255.0	Eth-1	386	Uplink 2
0.0.0.0	255.255.255.0	Eth-2		MGNT.

※ Uplink 1, Uplink 2 and MGNT. must be at different subnet

Eg: 192.168.100.111 Uplink 1
192.168.101.112 Uplink 2
192.168.102.113 MGNT

ATM model

Support NO.	Interface	Interface Name	Append
0~3	Ethernet	eth-x	
0~387	Bridge	eoax	portid x
0~47	EOA	eoax	
0~47	ATM vc	aal5-x	
0~47	ATM port	atm-x	vpi/vci
0~47	DSL	dsl-x	

Eg. Low interface of atm is dsl, and so forth.

```
modify adsl line intf ifname dsl-47 enable
```

2.9. Enable filter function

```
create filter rule entry ruleid 1 action sendtocontrol description IGMP
create filter subrule ip ruleid 1 subruleid 1 prototypefrom 2 prototypecmp eq
modify filter rule entry ruleid 1 status enable
create filter rule map ruleid 1 ifname eth-0 stageid 1
create filter rule map ruleid 1 ifname eoa-0 stageid 1
:
create filter rule map ruleid 1 ifname eoa-47 stageid 1
```

2.10. IGMP Snooping

```
modify igmpsnoop port info portid 385 status enable
modify igmpsnoop port info portid 1 status enable
:
modify igmpsnoop port info portid 48 status enable
```

2.11. LACP aggregate

```
create ethernet intf ifname eth-0 // L2 switch is essential to trunk both port eth-0 and eth-1.
create ethernet intf ifname eth-1 //Refer to "how to aggregate 2 ports.doc"
modify bridge mode enable
create aggr intf ifname aggr-0 ip 192.168.100.111 mask 255.255.255.0 enable // aggregate Eth-0 and Eth-1
create bridge port intf portid 385 ifname aggr-0 status enable
create lacp aggr agrifname aggr-0 agrtype static
modify lacp aggrport info ifname eth-0 agrstatus enable
modify lacp aggrport info ifname eth-1 agrstatus enable
```

```
1. Eth-0 should be erased for aggregate interface.
2. Following are the commands for delete eth-0
$delete bridge port intf portid 385
$delete filter rule map ifname eth-0 stageid 1 ruleid 1
$delete ethernet intf ifname eth-0
```

2.12. VLAN (VLAN Group)

```
create vlan static vlanname vlan-3 vlanid 3 egressports 1 3 5 7 9 11 385 forbidegressports 48 untaggedports 1 3 5 7 9 11
modify gvrp port info portid 1 portvlanid 3 acceptframetypes all ingressfiltering true //create VLAN group as Port VLAN ID
modify gvrp port info portid 3 portvlanid 3 acceptframetypes all ingressfiltering true
modify gvrp port info portid 5 portvlanid 3 acceptframetypes all ingressfiltering true //Vlan static must be added egressports 386
modify gvrp port info portid 7 portvlanid 3 acceptframetypes all ingressfiltering true for master downlink, but slave.
modify gvrp port info portid 9 portvlanid 3 acceptframetypes all ingressfiltering true
modify gvrp port info portid 11 portvlanid 3 acceptframetypes all ingressfiltering true
create vlan static vlanname vlan-5 vlanid 5 egressports 2 4 6 7 9 385 forbidegressports 48 untaggedports 2 4 6 7 9
```

VLAN (Port VLAN ID)

```
modify gvrp port info portid 2 portvlanid 5 acceptframetypes all ingressfiltering true
modify gvrp port info portid 4 portvlanid 5 acceptframetypes all ingressfiltering true
modify gvrp port info portid 6 portvlanid 5 acceptframetypes all ingressfiltering true
```

2.13. Multicast

```
create bridge static mcast vlanid 3 egressports 1 3 5 385 forbidegressports 48 mcastaddr 01:00:5e:01:01:04 //Create multicast group
create bridge static mcast vlanid 5 egressports 2 4 6 385 forbidegressports 48 mcastaddr 01:00:5e:01:01:05
create bridge static mcast vlanid 1 egressports 5 7 9 385 forbidegressports 48 mcastaddr 01:00:5e:01:01:03
modify bridge mcast fwdunreg vlanid 1 egressports 8 10 11 forbidegressports 48
modify bridge mcast fwdunreg vlanid 3 egressports 9 forbidegressports 48
modify bridge mcast fwdunreg vlanid 5 egressports 7 9 forbidegressports 48
```

2.14. IGMP

```
create filter rule entry ruleid 1 action sendtocontrol description IGMP // create IGMP rule and mapping to ports
create filter subrule ip ruleid 1 subruleid 1 prototypefrom 2 prototypecmp eq
modify filter rule entry ruleid 1 status enable
create filter rule map ruleid 1 ifname eoa-21 stageid 1
create filter rule map ruleid 1 ifname eoa-22 stageid 1
create filter rule map ruleid 1 ifname eth-0 stageid 1
modify igmpsnoop cfg info status enable //enable IGMP snooping by port
modify igmpsnoop port info portid 22 status enable
modify igmpsnoop port info portid 23 status enable
modify igmpsnoop port info portid 51 status enable
```

2.15. SNMP

```
create snmp comm community public rw // manager has both read-write permission
```

```
create snmp host ip 192.168.100.55 community public //community name is "public"
create snmp traphost ip 192.168.100.55 community public
```

2.16. Global ACL filter

```
create acl global macentry macaddr 00:01:eb:00:23:23 deny enable track enable // deny the access by mac form Uplink port
```

2.17. Port ACL filter

```
create acl port macentry portid 1 macaddr 00:01:23:23:23:34 // only this mac address have access from CPE site
create acl port macentry portid 2 macaddr 00:01:32:23:35:43
```

2.18. IP filter

```
create filter rule entry ruleid 2 action drop ruledir in //applied on incoming interface(ingress)
create filter subrule ip ruleid 2 subruleid 1 srcaddrcmp notingenlist //source IP address comparison type : not in generic list
create filter rule map ifname eoa-0 stageid 1 ruleid 2
create filter rule map ifname eoa-1 stageid 1 ruleid 2
create filter rule map ifname eoa-2 stageid 1 ruleid 2
modify filter rule entry ruleid 2 status enable
create clfr list genentry ifname eoa-0 value 0xc0a864c8 //192.168.100.200(Hexadecimal)
create clfr list genentry ifname eoa-0 value 0xc0a864ca //192.168.100.202
```

action	behavior
drop	forbid
allow	all pass
gotonextrule	all pass

2.19. DHCP Filter

```
create filter rule entry ruleid 2 action drop ruledir in //applied on incoming interface(ingress)
create filter subrule udp ruleid 2 subruleid 1 dstportfrom 67 dstportto 69 srcportcmp any dstportcmp inrange subruleprio high
modify filter rule entry ruleid 2 status enable //enable filter rule ID 2
create filter rule map ifname eoa-0 stageid 1 ruleid 2 // filter packets comes from dsl interface
create filter rule map ifname eth-0 stageid 1 ruleid 2 // filter packets comes from ethernet interface
```

2.20. FTP Filter

```
create filter rule entry ruleid 1 action drop ruledir in
create filter subrule tcp ruleid 2 subruleid 1 dstportfrom 21 dstportto 23 srcportcmp any dstportcmp inrange subruleprio high
modify filter rule entry ruleid 1 status enable
create filter rule map ifname eoa-0 stageid 1 ruleid 1
```

2.21. Http Filter

```
create filter rule entry ruleid 3 action drop ruledir in
create filter subrule tcp ruleid 3 subruleid 1 dstportfrom 80 srcportcmp any dstportcmp inrange subruleprio high
modify filter rule entry ruleid 3 status enable
create filter rule map ifname eoa-0 stageid 1 ruleid 3
```

```
verbose on
end
```