VigorAccess IVD

Quick Start Guide

Version: 1.0

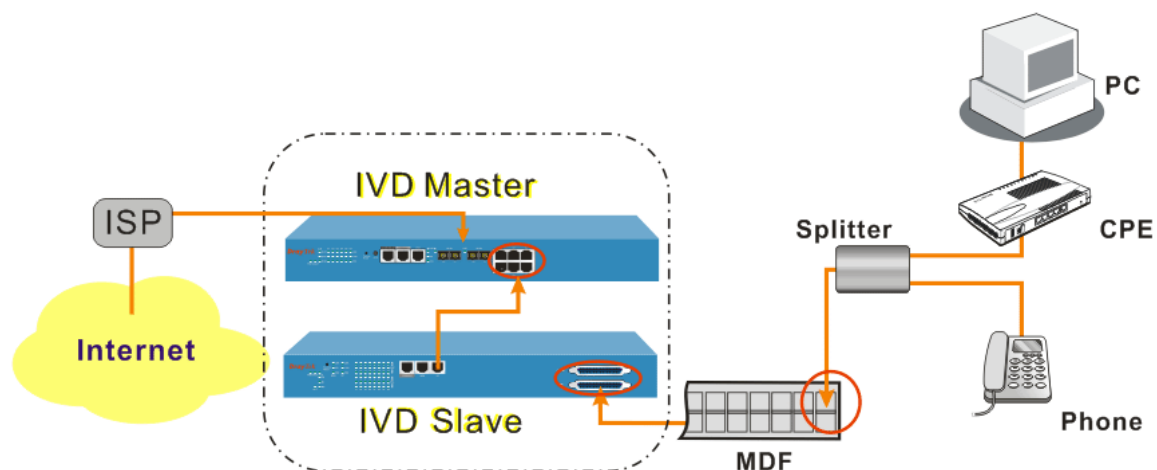**Date: 2007/05/08**

# **Dray**Tek IVD Quick Start Guide

This quick start guide will provide basic configuration for accessing Internet with VigorAccess IVD.

❶ **Network Topology Overview**

Above diagram shows the basic network topology (example) among master device, slave device, MDF, CPE (ATU-R) router, user's computer, and phone. One thing is important – always set the VPI/VCI value for the CPE the same as the ones configured in master and slave IVD device. The default setting for VPI/VCI of IVD is 8/35. By the way, the values for these devices can be changed (yet must match with CPE) if necessary. Please finish all the connections according to the real situation of the environment for the devices.

> **Note:** A master device connects to Internet through UP-G connector. Yet, a slave device also can work alone without connecting the master device. For a standalone slave device, please use UP port to access Internet with Ethernet cable.
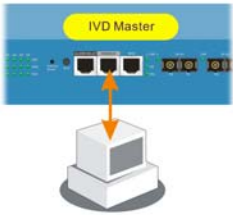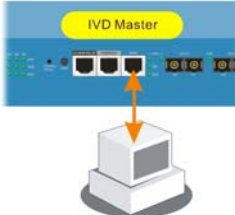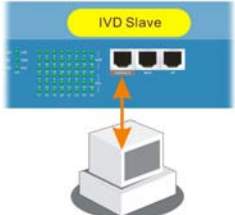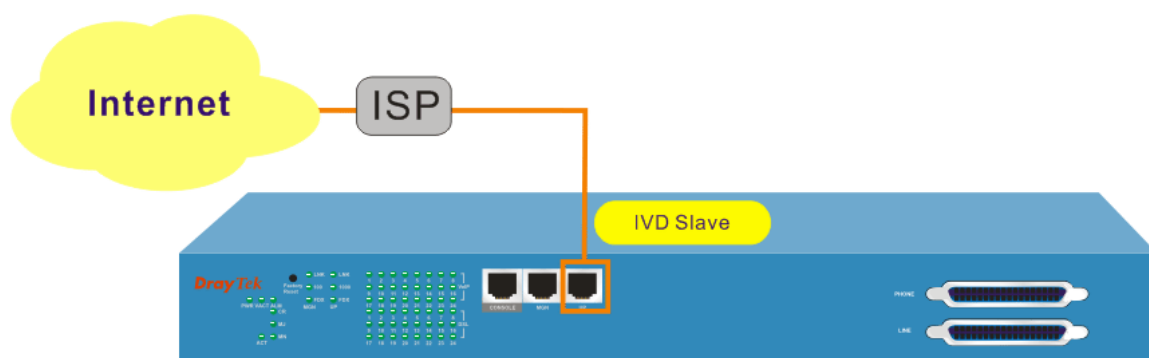
❷ Management for IVD

If users want to configure or monitor the devices, there are some methods provided here. The **MGN** port on the master device allows you to make control remotely; yet the **Console** port on the master/slave device only allows you to make control locally.

> **Note:** If you are not used to configure the settings with terminal emulator software or Telnet commands, you can use EMS (SNMP-based) software to manage these devices. For the detailed information, please contact your dealer.

IP DSLAM can be managed via MGN, Console, even Uplink Ports. It depends on your necessity.

❸ Port Connection for Management

No matter what tool you would like to use for managing master and/or slave device, the first thing you have to do is making correct port connection.

For Master Device		For Slave Device	
Connect to a PC through **CONSOLE** port. It is useful for controlling the device locally.	Connect to a PC through **MGN** port. It is useful for controlling the master device locally or remotely.	Connect to a PC through **CONSOLE** port. It is useful for controlling the device locally.	Connect to a PC through **MGN** port. It is useful for controlling the slave device locally or remotely.

❹ Configuration by Using Terminal Emulator Software

▲ How to Login with a Terminal Emulator Software

For Master /Slave Device

1.   The default setting is "baud rate 9600, no parity, and 8 bit with 1 stop bit (N,8,1)".

2.   Use any terminal emulator software for executing commands.

   Username – **admin**
   Password – **1234**

   (type '**exit**' to return)

▲ How to Login with Telnet

For IVD Device

1. Make sure the device IP has been configured well. The default IP setting is 172.16.1.2

2. Make sure the connection of MGN port (for outband) or UPLINK port (for inband) is well done.

3. Open Telnet command screen.

4. Username/Password   **- admin/1234**   (type '**exit**' to return)

▲ How to Login to DSL Module for Managing IVD Slave

Slave device have DSL/VoIP modules installed. The DSL module plays the core role for aggregating all ATM traffic coming from DSL ports to the uplink Ethernet interface, and vice versa. Through the master controller in the master device, administrator can login to the DSL module inside slave device for managing IVD.

To DSL Module in IVD Slave Device

Only one slave device can be logged in at one time.
- **IVD>dsl –c** (Connect to dsl device via serial port)

- **IVD>dsl –cf** (Force the CLI access right to be occupied by a new operator)

▲ How to Plug and Play Slave Device

By default, ports G1 to G6 on master device are disabled. If the slave connects to the master device, please refer to the picture below to ensure the connection is working well.

Note: Ports G1 to G6 will be enabled with default if the DSL F/W version is above V2.10.2.6.

Please turn on the interface that connected to a slave device. In the above picture, you have to turn **ON** the interface G1, G4 and G6 for they connect to different slave devices. Use the command below to turn on the interface.

- **Admin>system link -m gn on**
      (**n** means "1" to "6")

- **Admin>system link**
      (check the status)
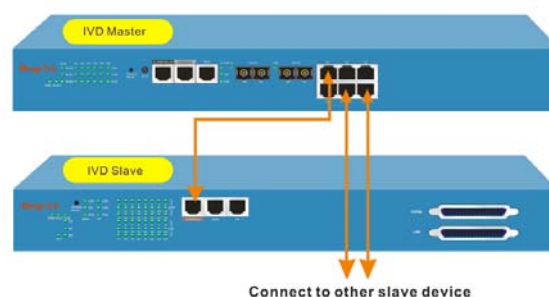
▲ How to Check the Connectivity

To check the connectivity between the Master and Slave Devices, please do the following:	The results
1. Login through terminal emulator software. 2. Type the following command **- Admin>dsl**	You will get the following results: **- Admin>dsl**

Logic-Name	Slave-IP	Connection-Status
dsl-slave-01	**10.0.1.18**	**(NA)**
dsl-slave-02	**10.0.1.34**	**ON LINE**
dsl-slave-03	**10.0.1.50**	**ON LINE**
dsl-slave-04	**10.0.1.66**	**(NA)**
dsl-slave-05	**10.0.1.82**	**(NA)**
dsl-slave-06	**10.0.1.98**	**ON LINE**

▲ How to Check the Version Information

To display the basic information of the controller inside the master device	The results

1. Login through terminal emulator software.
 	
2. Type the following command
  - Admin > **system basic**
	You will get the following results:
	-Admin> system basic
	--- 	
	    SYSTEM BASIC INFORMATION
	--- 	
	Machine Model : IP DSLAM MASTER
	Firmware Version : V3.1.17.16
	Hardware Version : 1.1 - 1 Fiber(s)
	Build Time : Fri Jul 21 09:47:32 CST 2006
	System Uptime : 3 days 17h:30m:38s
	System Contact : admin@urcompany.com
	System Name : IPDSLAM
	System Location : urlocation
	CPU Usage : 01%
	Memory Usage : 52%
	Current Time : Mon Jan 05 01:30:19 1970

To display the IVD module information inside slave device	**The results**

1. Login the specified IVD slave module.
 	
2. Type the following command to get the DSL module information
  - IVD>system basicinfo
	You will get the following results:
	- IVD/system> basicInfo
	-- 	
	    SYSTEM BASIC INFORMATION
	-- 	
	Machine Model : IVD system
	Firmware Version : IVD_VOIP_V1.0.1.9
	Hardware Version : V1.0
	Build Time : Mon Jan 15 15:09:43 CST 2007
	System Uptime : 0 days 05h:49m:43s
	System Contact : admin@urcompany.com
	System Name : IVD
	System Location : urlocation
	Memory Usage : 41%
	Current Time : Thu Jan 01 05:49:43 1970

To display the DSL module information inside the IVD slave device	**The results**

1. Login the specified DSL module.
  - IVD>dsl –c (Connect to dsl device via serial port)
 	
2. Type the following command to get the DSL module information
  - $get system info
	You will get the following results:
	$get system info
	Description : IP DSLAM
	Name : IPDSLAM
	Location :
	Contact :
	Vendor :
	LogThreshold : 0
	Object-id : 1.3.6.1.4.1.7367.2.11.1
	Up Time(HH:MM:SS) : 140:49:31
	HwVersion : 1.2

CPSwVersion	**: A24-A-1GE-2.10.2.8**
DPSwVersion	**: DP_B02_10_14_60_ip1000a**
System Time	**: Tue Jan 06 23:39:02 1970**
Time Zone	**: GMT**
DST	**: off**

▲ How to Save the Configuration

To save the configuration for the controller	To save the configuration for the DSL module
Type the following command to save the configuration. - **Admin>commit (Master)** - **IVD>commit (IVD slave)** **Note – For VoIP functions, users need to activate it by manual as following command.** - **IVD/voip>config activate**	Type the following command to save the configuration. - **$commit**

❺ Configuration by Using Telnet

To use Telnet for managing Master/Slave device, refer to the following sections.

Default IP Settings for Master Device	Default IP Settings for Slave Device
1. The default IP address of Outband (MGN port): **172.16.1.1/255.255.255.0**) 2. IP address for Inband (UPLINK port): **0.0.0.0** (disable)	1. The default IP address of Outband (MGN port): **172.16.1.2/255.255.255.0**) 2. IP address for Inband (UPLINK port): **0.0.0.0** (disable)

▲ How to Change Master IP Setting

Changing master IP address setting (for management) is allowed to suit environment requirement. Type the command below to change the settings.

For Outband (MGN port connection) , please set as the following
- Admin>network out <new-ip> <mask> [vlanid]

For Inband (UPLINK port connection) , please set as the following
- Admin>network in <new-ip> <mask> [vlanid]

For the Status, please set as the following
- Admin>network out or - Admin>network in

Note: The IP addresses for MGN port and UPLINK ports cannot belong to the same domain.

▲ How to Change Slave IP Setting

Changing IVD IP address setting (for management) is allowed to suit environment requirement. Type the command below to change the settings.

For MGN/UP port connection , please set as the following
-   IVD>network staticIP <ip> <netmask> <gateway>

Note: It is applied below version V1.0.1.7, MGN and UP will be different when the version is above V1.0.1.7.

For the Status, please set as the following
- IVD>network staticIP -s

▲ How to Configure IP Address for Slave-Standalone DSL module

A slave device can work alone without connecting the master device. The device with **one Gigabit Ethernet** interface version.

For one gigabit-ethernet interface version, please set as the following

- $ipconfig <ip> <mask>

▲ How to Login with Telnet
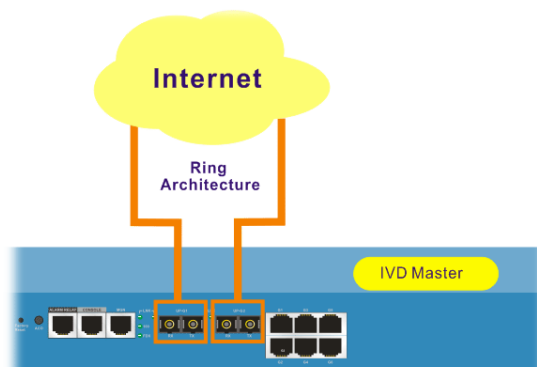
For Master/Slave Device

1. Make sure the device IP has been configured well.

2. Make sure the connection between MGN port (for outband) and UPLINK port (for inband).

3. Open Telnet command screen.

4. Username/Password
- admin/1234   (type '**exit**' to return)

Now, please use Telnet commands to manage the master/slave device for your necessity.

▲ How to Set G5 and G6 as UPLINK Interface

For the environment with available Fiber connection, the UP-G1/UP-G2 connector in Master device is used as the channel to access Internet. For such condition, you can connect slave devices from G1 to G6.
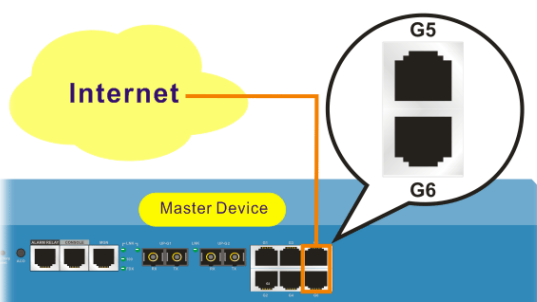

However, for the environment without available Fiber connection, G5 and/or G6 in Master device can be used as the channel to access Internet. For such condition, only G1 to G4 connectors can be used for the slave devices.

For example,

- **Admin>system uplink G6 up**

Enable the port by typing:

- **Admin>system link –m G6 on**

❻ Reference – Common Use Commands for Configuration

Part I:

Here provides some general and common commands used in IVD for users to configure the IVD Master.

▲ How to configure Inband IP Address

Users can use the following commands to configure the inband IP address for the UP-LINK interface or inband management.

Command	Description
`Admin> network`	Enter network directory
`Admin/network> inband ?`	Help
`Admin/network> inband -s`	Display the settings
`Admin/network> inband <IP_addr> <NetMask>`	Edit the inband IP address without VLAN
`Admin/network> inband <IP_addr> <NetMask> <vlan_id>`	Edit the inband IP address with VLAN

▲ How to configure Outband IP Address

Users can use the following commands to configure the outband IP address for outband management.

Command	Description
`Admin> network`	Enter network directory
`Admin/network> outband ?`	Help
`Admin/network> outband -s`	Display the settings
`Admin/network> outband <IP_addr> <NetMask>`	Edit the outband IP address without VLAN
`Admin/network> outband <IP_addr> <NetMask> <vlan_id>`	Edit the outband IP address with VLAN

▲ How to configure Static Route

Users can use the following commands to configure the default route and some static routes.

Command	Description
`Admin> network`	Enter network directory
`Admin/network> route ?`	Help
`Admin/network> route -r`	Display the routing table
`Admin/network> route -s`	Display the static route entries
`Admin/network> route default <RtIP>`	Add a default route
`Admin/network> route default 0.0.0.0`	Delete the default route

`Admin/network> route -a <TargetIP> <NetMask> <GatewayIP>`	Add a static route entry
`Admin/network> route -e <RtIdx> <TargetIP> <NetMask> <GatewayIP>`	Edit the static route entry
`Admin/network> route -d <RtIdx>`	Delete the static route entry
`Admin/network> route -D`	Delete all static route entries

▲ How to configure NTP and Time

Users can use the following commands to configure the NTP server IP , the polling interval, time zone and the daylight saves time. Users can enable/disable NTP function, too.

Command	Description
`Admin> service`	Enter service directory
`Admin/service> ntp -s`	Display the settings
`Admin/service> ntp ?`	Help
`Admin/service> ntp now`	Display the current time
`Admin/service> ntp -e <IP_addr> <interval>`	Edit the NTP server IP address and the polling interval
`Admin/service> ntp -t <MMDDhhmmYYYY>`	Edit the year, month, date, hour, and minute.
`Admin/service> ntp -z <time_zone> <DST>`	Edit the time zone and the daylight saving time.
`Admin/service> ntp on/off`	Turn on/off the NTP

▲ How to configure SNMP

Users can use the following commands to configure the SNMP settings, including SNMP community, SNMP Trap port, and SNMP Trap host. After the following setting, EMS can communicate with IVD via SNMP.

Command	Description
`Admin> service`	Enter service directory
`Admin/service> snmp -l`	Display the general SNMP settings
`Admin/service> snmp -s`	Display the SNMP Trap host entries
`Admin/service> snmp -c <CommRO> <CommRW> <CommTrap>`	Edit the read-only, read-write, and trap community
`Admin/service> snmp -a <HostIP>`	Add a trap host
`Admin/service> snmp -e <EntryIdx> <HostIP>`	Edit the trap host
`Admin/service> snmp -d <EntryIdx>`	Delete the trap host entry
`Admin/service> snmp -D`	Delete all the trap host entries

▲ How to Upgrade Firmware

Users can use the following commands to upgrade new firmware. Make sure you have prepared a TFTP server on a host and put the firmware (ivd.all for example) in the right directory of the TFTP server

Command	Description
`Admin> system`	Enter system directory
`Admin/system> upgrade <ServIP> <FirmName>`	Execute the firmware upgrading
`Admin/system> reboot`	Reboot the Controller to run the new firmware
`Admin/system> basicInfo`	After rebooting, check the firmware version

▲ How to Save Configuration

Users can use the following command to save the current configuration.

Command	Description
`Admin> commit`	Save the configuration

▲ How to Enable/Disable the Switch Port

Users can use the following commands to enable or disable the port on Controller. By default, G1 to G6 are off, but G0 and UP-G are on. If users find that when they connect the subtend slave machines to the master machine but the connection cannot be constructed, check the link status of the port connected to the master machine is enabled.

Note: Ports G1 to G6 will be on with default if the DSL F/W version is above V2.10.2.6.

Command	Description
`Admin> system`	Enter system directory
`Admin/system> link_state -s`	Display the current status of all ports
`Admin/system> link_state -m <IntfName> on/off`	Turn on/off of the specific port

▲ How to Connect to DSL Module

Users can login to DSL module in master or slave units using the following command. Once entering into DSL module, the command described in Part II can be used.

Command	Description
`Admin> dsl`	Display the current connectivity with DSL modules
`Admin> dsl –c`	Login to DSL module in master via serial channel
`Admin> dsl –m`	Login to DSL modules in master via Ethernet channel
`Admin> dsl –s <salveId>`	Login to DSL modules in slave via Ethernet channel

Part II:
Here provides some general and common commands used in IVD for users to configure the IVD DSL Module.

> **Note:** Please refer to the Command Line Interface manual for getting more commands that IVD supports. Contact your dealer for advanced information.

▲ How to Monitor DSL Status

Users can use the following command to check the status for specified DSL port. The commands are listed as below.

Command	Description
`$get adsl atuc physical ifname dsl-*`	for downstream (*: 0 ~ 23)
`$get adsl atur physical ifname dsl-*`	for upstream (*: 0 ~ 23)

▲ How to Enable/Disable a DSL Port

Users can use the following command to enable or disable DSL port for certain user. The commands are listed as below.

Command	Description
`$modify adsl line intf ifname dsl-* enable`	Enable (*: 0 ~ 23)
`$modify adsl line intf ifname dsl-* disable`	Disable (*: 0 ~ 23)

▲ How to Read DSL Training Rate

Users can use the following command to read DSL Training Rate for specified DSL port. The commands are listed as below.

Command	Description
`$get adsl atuc channel ifname dsli-*`	for downstream/interleave channel (*: 0 ~ 23)
`$get adsl atur channel ifname dslf-*`	for upstream/fast channel (*: 0 ~ 23)
`$get adsl atuc channel ifname dsli-*`	for downstream/interleave channel (*: 0 ~ 23)
`$get adsl atur channel ifname dslf-*`	for upstream/fast channel (*: 0 ~ 23)

▲ How to Change ADSL Line Profile

Users can use the following command to change the ADSL Line Profile for specified DSL port. The commands are listed as below.

Command	Description
`$modify adsl line intf ifname dsl-* disable`	Disable (*: 0 ~ 23)
`$modify adsl line profile ifname dsl-* ?`	(*: 0 ~ 23, ?: means to get more information)
`$modify adsl line intf ifname dsl-* enable`	Enable (*: 0 ~ 23)

▲ How to Change ADSL Line Rate

Users can use the following command to change the ADSL Line Rate for specified DSL port. The commands are listed as below.

Command	Description
`$modify adsl line intf ifname dsl-*` `disable`	Disable (*: 0 ~ 23)
`$modify adsl line profile ifname dsl-*` `atucintlmaxtxrate 0x7e0000`	Necessary variables (*: 0 ~ 23)
`$modify adsl line intf ifname dsl-*` `enable`	Enable (*: 0 ~ 23)

▲ How to Change ADSL to Fast Channel/Rate

Users can use the following command to change the ADSL to fast channel/rate for specified DSL port. The commands are listed as below.

Command	Description
`$modify adsl line intf ifname dsl-*` `disable`	Disable (*: 0 ~ 23)

`$modify adsl line profile ifname dsl-*`
`type fastOnly atucfastmaxtxrate`
`0x7e0000`
	Necessary variables (*: 0 ~ 23)

`$modify adsl line intf ifname dsl-*` `enable`	Enable (*: 0 ~ 23)

▲ How to Set ADSL Alarm Profile

Users can use the following command to change the ADSL Alarm profile for specified DSL port. The commands are listed as below.

Command	Description
`$modify adsl line intf ifname dsl-*` `disable`	Disable (*: 0 ~ 23)
`$modify adsl alarm profile ifname` `dsl-*` ?	(*: 0 ~ 23, ?: means to get more information)
`$modify adsl line intf ifname dsl-*` `enable`	Enable (*: 0 ~ 23)

▲ How to Change VPI/VCI for Existing VCC

Users can use the following command to change VPI/VCI for existing VCC. The commands are listed as below. We strongly recommend to delete original VCC, then re-create a new VCC with new values.

Command	Description

`$pvc delete <dsl: 1~24> <pvc: 1~8>`
 	
`$pvc create <dsl: 1~24> <pvc: 1~8> <vpi> <vci> [<llcmux|vcmux>] [<interleaved|fast>]`	

▲ How to Change Management IP Address for Existing Ethernet Port

Users can use the following command to change management IP address for existing uplink Ethernet port. The commands are listed as below.

Command	Description
`$ipconfig <ip> <mask>`	

▲ How to Create more VC/EOA/Bridge

Users can use the following command to create more VC/EOA/Bridge. The commands are listed as below.

Command	Description
`$create atm vc intf ifname aal5-* vpi <vpi> vci <vci> lowif atm-* [vcmux/llcmux] [fast/interleaved]`	(*:0 ~ 23 is used for atm; 0~191 is used for aal5)
`$create eoa intf ifname eoa-* lowif aal5-*`	(*:0~191 is used for aal5 and eoa)
`$create bridge port intf portid <bridge-port-id> ifname eoa-*`	(*:0~191 is used for eoa,; 1~192 is used for <bridge-port-id>)

▲ How to Setup SNMP Community/Host/Trap

Users can use the following command to setup SNMP community/host/trap. The commands are listed as below.

Command	Description
`$snmpconfig <ro community> <rw community> <trap community> <host ip>`	Create SNMP community and host to manage the device through SNMP

▲ How to Create VLAN

Users can use the following command to create VLAN. The commands are listed as below.

Command	Description
`$create vlan static vlanname <vlan-name> valnid <vlan-id> [egressports <bridge ports>]`	Create VLAN (vlan-id is from 1~4094)

▲ How to Setup Port VLAN ID (PVID)

Users can use the following command to setup port VLAN ID. The commands are listed as below.

Command	Description

`$modify gvrp port info portid`
`<bridge-port-id> portvlanid`
`<default-pvid>`
	Setup port VLAN ID

▲ How to Filter MAC Address by Port

Users can use the following command to filter MAC address by port. The commands are listed as below.

Command	Description

`$create acl port macentry portId`
`<bridge-port-id> macaddr`
`00:00:00:01:02:03`
	Allow source address 00:00:00:01:02:03 access from bridge port; bridge-port-id means other source addresses from bridge port <bridge-port-id> are denied

`$create acl port macentry portId`
`<bridge-port-id> macaddr`
`00:00:00:01:02:04`
	Allow source address 00:00:00:01:02:04 access from bridge port; bridge-port-id means other source addresses from bridge port <bridge-port-id> are denied

▲ How to Deny MAC Address Globally

Users can use the following command to deny MAC Address globally. The commands are listed as below.

Command	Description
`$create acl global macentry macaddr` `00:00:00:01:02:03 deny enable`	Mac source address 00:00:00:01:02:03,04 access from any bridge ports is denied

▲ How to Filter Net BIOS

Users can use the following command to filter Net BIOS. The commands are listed as below.

Command	Description

`$create filter rule entry ruleid <id>`
`action drop description NETBIOS-TCP`
 	
`$create filter subrule tcp ruleid <id>`
`subruleid 1 srcportfrom 137 srcportto`
`139 srcportcmp inrange`
 	
`$modify filter rule entry ruleid <id>`
`status enable`
 	
`$create filter rule map ifname all`
`ruleid <id> stageid 1`
 	
`$create filter rule entry ruleid <id2>`
`action drop description NETBIOS-UDP`
 	
`$create filter subrule udp ruleid <id2>`
`subruleid 1 srcportfrom 137 srcportto`
`139 srcportcmp inrange`
 	
`$modify filter rule entry ruleid <id2>`
	NETBIOS-NS: Name Service137 TCP/UDP
	
	NETBIOS-DGM: Datagram Service 138 TCP/UDP
	
	NETBIOS-SSN: Session Service 139 TCP/UDP

```
status enable

$create filter rule map ifname all
ruleid <id2> stageid 1
```

▲ How to Enable Spanning Tree Protocol

Users can use the following command to enable spanning tree protocol. The commands are listed as below.

Command	Description
`$modify stp info enable`	Enable STP globally
`$modify stp port info portid <bridge-port-id> enable`	Bridge port id: 1~193
`$get stp port info portid <bridge-port-id>`	

▲ How to Enable IGMP Snooping

Users can use the following command to enable IGMP snooping.   The commands are listed as below. Be aware that IGMP Snooping is the Factory Default Setting.

Command	Description
`$create filter rule entry ruleid <id> action sendtocontrol description IGMP`	The feature is enabled in default.
`$create filter subrule ip ruleid <id> subruleid 1 prototypefrom 2 prototypecmp eq`	
`$modify filter rule entry ruleid <id> status enable`	
`$create filter rule map ifname all ruleid <id> stageid 1`	
`$modify igmpsnoop cfg info status enable`	

`$modify igmpsnoop port info portid <bridge-port-id> status enable leavemode fastNormal`
 	
    or
 	
`$modify igmpsnoop port info portid <bridge-port-id> status enable leavemode Fast`	

▲ How to Upgrade Control Plane Code Remotely

Users can use the following command to remotely upgrade control plane code. Make sure you have prepared TFTP server, vendor supplied CP.bin.gz , and put CP.bin.gz into root directory of TFTP server. The commands are listed as below.

Command	Description
`$firmware upgrade [-]<source file> <CP|DP|FD|DSL|ALL> <server ip>`	Upgrade the control plane code

▲ How to Upgrade Full Image Remotely

Users can use the following command to remotely upgrade full image. Make sure you have prepared TFTP server. The commands are listed as below.

Command	Description
(Master) Type command as below – -Admin> system upgrade <tftp server ip> <F/W file name>	<tftp server ip> IP address of TFTP server. <F/W file name> ex. IVD_V3.1.17.2.all
(Slave – IVD module) Type command as below – -IVD> system upgrade <F/W file name> <tftp server ip>	<tftp server ip> IP address of TFTP server. <F/W file name> ex. IVD_VOIP_V1012.all
(Slave – DSL module) 1. Enter DSL module from IVD. 　-IVD> dsl -c 　Connect to DSL Console... 　Press <Ctrl-\> or <Ctrl-Z> to return. 2. If current firmware version is below V2.10.2.4 　1) Upgrade CP file 　　$firmware upgrade [-]<source file> 　　<CP|DP|FD|DSL|ALL> <server ip> 　　Example- 　　$firmware upgrade 　　-CP-A24-A-1GE-2.10.2.8.bin.gz CP 　　<server ip> 　2) Upgrade image file 　　Example- 　　$firmware upgrade 　　-DSLImage-A24-A-1GE-2.10.2.8.all ALL 　　<server ip> 　　* If current firmware version is above V2.10.2.5 　　$firmware upgrade 　　-DSLImage-A24-A-1GE-2.10.2.8.all ALL 　　<server ip>	Switch CLI mode to DSL module. <server ip> IP address of TFTP server.
$reboot	Reboot from Default mode

▲ Wizard Commands

In addition to the primitive commands described as above. Several wizard commands are provided which is used easily. Type *wizard* to see the command syntax.

Command	Description
```$ wizard <List of Wizard Commands> -- $dsl show [fast] $alarm show $pvc show $pvc create <dsl: 1~24> <vc: 1~8> <vpi> <vci> [<llcmux|vcmux>] [<interleaved|fast>] $pvc delete <dsl: 1~24> <vc: 1~8> $bridge delete <bridge id: 1~193> $tca show <acked> $critical show <acked> $firmware upgrade [-]<source file> <CP|DP|FD|DSL|ALL> <server ip> $fd show $port <disable|enable|restart> <dsl: 1~24> $config backup <filename> <server ip> $config restore <filename> <server ip> --```	
`dsl show [fast]`	Display all the 24 ports DSL status
`firmware upgrade`	Upgrade firmware without removing the existing one in advance
`config backup/restore`	Backup or restore the current configuration

Part III:

Here provides commands used in IVD for users to configure VoIP features.

▲ How to Reboot

- Help
IVD/system> reboot ?

- Reboot the system
IVD/system> reboot

- Reboot the system with keeping some important configuration
IVD/system> reboot keep

- Reboot the system with factory default configuration
IVD/system> reboot default

- Reboot the IVD VOIP board only
IVD/system> reboot voip

- Reboot the IVD DSL board only
IVD/system> reboot dsl

▲ How to Exit

- Help
IVD> ?

- Logout the CLI or the Telnet connection
IVD> exit
or
IVD> logout
or
IVD> quit

▲ How to Set VoIP Protocol Setting

- Help
IVD/voip>protocol ?

- Display the setting
IVD/voip>protocol -s

- Choose the voip protocol
IVD/voip>protocol <Protocol>

Protocol	Users can choose one of two protocols, one is **SIP**, and another is **MGCP**. 0: MGCP 1: SIP (Default is 1)

▲ How to Set SIP local port Setting

- Help
IVD/voip/sip> localport ?

- Display the setting
IVD/voip/sip> localport –s

- Edit sip local port number
IVD/voip/sip> localport <Port>

Port	1…65535 (Default is 5060)

▲ How to Set SIP Proxy Server Setting

- Help
IVD/voip/sip> server ?

- Display the setting
IVD/voip/sip> server -s

- Enable/Disable the proxy server
IVD/voip/sip> server <Proxy#> <Active>

- Enable/Disable the proxy server and outbound proxy
IVD/voip/sip> server <Proxy#> <Active> <Outbound>

- Edit the proxy server parameters
IVD/voip/sip> server <Proxy#> <Active> <Outbound> <ProxyName> <ProxyIP>
<ProxyPort> <RegistrarIP> <RegistrarPort> <Expires> <Domain>

Proxy#	Proxy number is from 1 to 3.
Active	0: Disable (Default is 0)
	1: Enable
Outbound	If users click this option, it means that each SIP protocol packet will be sent to SIP proxy server always.
	0: Disable (Default is 0)
	1: Enable (It means that each SIP protocol packet will be sent to SIP proxy server always.)
ProxyName	Assign a name of SIP proxy server. (Default is none)
ProxyIP	Assign an IP address of SIP proxy server. (Default is 0)
ProxyPort	Assign a port number of SIP proxy server. 1...65535 (Default is 5060)
RegistrarIP	Assign an IP address or domain name of SIP register server. (Default is 0)
RegistrarPort	Assign a port number of SIP register server. 1...65535 (Default is 5060)
Expires	Assign a timeout value for SIP protocol, the default value is 300. (minimum 60 seconds)
Domain	Assign an IP address or domain name of SIP Domain/Realm. (Default is 0)

▲ How to Set MGCP Local Port Setting

- Display the setting
IVD/voip/mgcp> localport -s

- Edit the local port number for MGCP protocol
IVD/voip/mgcp> localport <Port>

Port	Assign a UDP port number to Call Agent server. 1...65535 (Default is 2427)

▲ How to Set MGCP Call Agent Setting

- Help
IVD/voip/mgcp> callagent ?

- Display the setting
IVD/voip/mgcp> callagent -s

- Edit the IP address and port number for call agent
IVD/voip/mgcp> callagent <IPAddress> <Port>

MGCP Call Agent IP Address	Assign an IP address of Call Agent server in MGCP. (Default is 192.168.100.100)
MGCP Call Agent Port	Assign a UDP port number to Call Agent server. 1...65535 (Default is 2727)

▲ How to Set MGCP End Point ID Style Setting

- Help
IVD/voip/mgcp> epidstyle ?

- Display the setting
IVD/voip/mgcp> epidstyle -s

- Edit the style mode for end point
IVD/voip/mgcp> epidstyle <Mode>

- Edit the port number base id for end point
IVD/voip/mgcp> epidstyle –b <BaseNum>

- Edit the domain name for end point
IVD/voip/mgcp> epidstyle –m <DomainName>

EndPoint Name Style	There are four options for users to select. **0. aaln/#@[ip_addr]** ex: aaln/1@[1.1.1.1] **1. mac_addr/#@[ip_addr]** ex: 000504030201/1@[1.1.1.1] **2. aaln/#@mac_addr** ex: aaln/1@000504030201 **3. aaln/#@domain_name** ex: aaln/1@callagent.com (Default is 0)

▲ How to Set MGCP Wildcarded End Point ID Setting

- Help
IVD/voip/mgcp> wildrsip ?

- Display the setting
IVD/voip/mgcp> wildrsip -s

- Setting the wildcarded RSIP action
IVD/voip/mgcp> wildrsip <Active>

Active	There are two options for users to select. **Each endpoint sends its own RSIP** **Send only one wild-carded RSIP**
	0: Disable (Default is 0)
	1: Enable

▲ How to Set Phone Number

- Help
IVD/voip/sip> phonenumber ?

- Display the setting
IVD/voip/sip> phonenumber -s

- Enable/Disable the port#
IVD/voip/sip> phonenumber <Port> <Active>

- Edit phone number, password, display name and authentication id for port#
IVD/voip/sip> phonenumber <Port> <Active> <PhoneNum> <Password> <DisplayName>
<AuthID>

Port	Device port number (1~24).
Active	0: Disable (Default is 0)
	1: Enable
PhoneNum	Assign a number as a user name for each phone line. (Default is 1001~1024 mapped to 1~24 port)
Password	Assign a user password for each phone line. (Default is 0000)
Display Name	Assign a user name to be displayed on another phone terminal. (Default is 1001~1024 mapped to 1~24 port)
AuthID	Assign a auth ID to authenticate with proxy server. (Default is 1001~1024 mapped to 1~24 port)

▲ How to Set Codec Setting

- Help
IVD/voip/sip> codec ?

- Display the setting
IVD/voip/sip> codec -s

- Edit prefect codec, codec rate and VAD for the port#
IVD/voip/sip> codec <Port> <PreferCodec> <CodecRate> <VAD>

- Edit single codec for the port#
IVD/voip/sip> codec –single <Port> <Active>

Port	Device port number (1~24)
Preferred Codec	Select one Codec to be applied on this port. IVD supports five Codecs.
	0: G.711U(PCMU) -64kbps
	1: G.711A(PCMA) -64kbps
	2: G.729A -8kbps (Default is 2)
	3: G.723.1 -6.3kbps
	4: G.726-32kbps
Codec Rate	Select one rate value to be applied on this port.
	20/40 - for PCMU or PCMA (Default is 20)
	20/40/60/80 - for G.729A (Default is 20)
	30/60 - for G.723.1 (Default is 30)
	20/40 - for G.726 (Default is 20)
VAD	"**Enable**" to activate VAD (Voice Activity Detection, also known as Silence Suppression) function. "**Disable**" to stop using VAD.
	0: Disable (Default is 0)
	1: Enable
Active	0: Disable (Default is 0)
	1: Enable

▲ How to Set Gain Control Setting

- Help
IVD/voip/misc> gain ?

- Display the setting
IVD/voip/misc> gain -s

- Edit the speaker and microphone gain
IVD/voip/misc> gain <Device port> <Speaker Gain> <Microphone Gain>

Device port	Device port number (1~24).
Speaker Gain	Assign the gain value while receiving voice, default value is 0. The range is from -14 to 6. (Default is 0)
Microphone Gain	Assign the gain value while transmitting voice, default value is 0. The range is from -14 to 6. (Default is 0)

▲ How to Set DTMF Relay Setting

- Help
IVD/voip/sip> dtmf_relay ?

- Display the setting
IVD/voip/sip> dtmf_relay -s

- Edit dtmf relay mode for the port#
IVD/voip/sip> dtmf_relay <Port> <Mode>

- Edit dtmf relay mode and SIP INFO mode for the port#
IVD/voip/sip> dtmf_relay <Port> <Mode> <SipInfoMode>

Port	Device port number (1~24)
Mode	0: Disable
	1: RFC2833 (Default is 1)
	2: SIP INFO
SipInfoMode	Click one option to be applied in DTMF function. There are three options to be supported as below – **Disable(Inband)** **RFC2833** **SIP INFO**
	0: CISCO
	1: NORTEL
	(If Mode is 1, default is none)
	(If Mode is 2, default is 0)

▲ How to Set Fax Transport Mode Setting

- Help
IVD/voip/sip> fax ?

- Display the setting
IVD/voip/sip> fax -s

- Edit fax mode for the port#
IVD/voip/sip> fax <Port> <Mode>

Port	Device port number (1~24)
Mode	Select a mode to be applied on FAX function. There are two options to be supported as below – **Transparent : FAX will be transmitted via voice channel, no fax relay nor Codec change will be involved**. **T.38 Relay : Using T.38 Fax Relay.** It is the default value.
	0: Transparent
	1: T.38 Relay (Default is 1)

▲ How to Set Call Forwarding Setting

- Help
IVD/voip/sip> callforward ?

- Display the setting
IVD/voip/sip> callforward –s

- Edit call forwarding mode
IVD/voip/sip> callforward <Port> <Mode>

- Edit call forwarding mode and SIP URL
IVD/voip/sip> callforward <Port> <Mode> <SipURL>

- Edit call forwarding mode, SIP URL and ringing number for no answer
IVD/voip/sip> callforward <Port> <Mode> <SipURL> <NoAnswerRings>

Port	device port number (1~24)
Mode	0: Disable (Default is 0) 1: Call forwarding all calls 2: Call forwarding busy 3: Call forwarding no answer
SIP URL	sip url format, ex: 101@iptel.org (Default is none)
NoAnswerRings	1~10 (ringing times) (Default is 3)

▲ How to Set User Group Setting

- Help
IVD/voip/sip> group ?

- Display the setting
IVD/voip/sip> group –s

- Enable/Disable group function and edit ring type
IVD/voip/sip> group <Active > <Rings>

- Edit the group number for the port
IVD/voip/sip> group –p <Port> <Group>

Active	0: Disable (Default is 0) 1: Enable
Rings	0: Rings all ports in the group 1: Rings the first available port 2: Rings by round robin (Default is 2)
Port	Assign a port number (1~24) (Default is 1~24 mapped to 1~ 24 port)
Group	Assign a group number for assigned port (1~24)

	(Default is 1~24 mapped to 1~ 24 port)

> **Note -** It is very important to provide Group function for voice service in company. Customers can simultaneously call a same phone number to destination. When IVD gets a phone which configured in the first port of a group from Internet, IVD will ring all available ports belonged to this group to provide voice service at the same time. It is the benefit for customer to remember one phone number corresponding to one company. Users can configure 24 groups at most and select each phone line belongs to one specific group. Each phone line is only for one group and not permitted to be overlapped.

▲ How to Set Hotline Setting

- Help
IVD/voip/sip> hotline ?

- Display the setting
IVD/voip/sip> hotline -s

- Enable/Disable the hotline function
IVD/voip/sip> hotline <Port> <Active>

- Edit the hotline number
IVD/voip/sip> hotline <Port> <Active> <<Digits>

Port	device port number (1~24)
Active	0: Disable (Default is 0) 1: Enable
Digits	Default is none

▲ How to Set Speed Dial Setting

- Help
IVD/voip/sip> speeddial ?

- Display the setting
IVD/voip/sip> speeddial –s

- Add speeddial number and destination for the entry
IVD/voip/sip> speeddial –a <Number> <Destination> <Memo>

- Edit speeddial number, destination and memo for the entry
IVD/voip/sip> speeddial –e <Index> <Number> <Destination> <Memo>

- Delete the entry
IVD/voip/sip> speeddial –d <Index>

- Delete all entries
IVD/voip/sip> speeddial –D

Index	1~150
Number	Assign a dialing phone number.Ex: 101

Destination	Assign an address of dialing destination. Ex: 101@iptel.org
Memo	Users can add some descriptions for each number. (Default is none)

▲ How to Set Advanced Speed Dial Setting

- Help
IVD/voip/sip> advspdial ?

- Display the setting
IVD/voip/sip> advspdial –s

- Add prefix, strip length, append number, destination and memo for the entry
IVD/voip/sip> advspdial –a <Prefix> <Strip> <Append> <Destination> <Memo>

- Edit prefix, strip length, append number, destination and memo for the entry
IVD/voip/sip> advspdial –e <EntryIdx> <Prefix> <Strip> <Append> <Destination> <Memo>

- Delete the entry
IVD/voip/sip> advspdial –d <EntryIdx>

- Delete all entries
IVD/voip/sip> advspdial –D

EntryIdx	1~30
Prefix	Prefix number, ex: 101 (Default is none)
Strip	Strip length (Default is none)
Append	Append number (Default is none)
Destination	IP or Domain name (Default is none)
Memo	Free text (Default is none)

▲ How to Set Region Code for Tone Setting

- Help
IVD/voip/tone> region ?

- Display the setting
IVD/voip/tone> region -s

- choose the region for CPT setting
IVD/voip/tone> region <Region Number>

Region Number	Select one country area for using VoIP feature. There is one option **User Defined** for proprietary setting.
	0 : User Defined
	1 : Australia
	2 : British (Default is 2)
	3 : Canada
	4 : China
	5 : Denmark
	6 : Finland
	7 : France
	8 : Germany
	9 : Hong Kong
	10 : India
	11 : Japan
	12 : Netherlands
	13 : Norway
	14 : Singapore
	15 : Taiwan
	16 : USA

▲ How to Set User Defined Busy Tone Setting

- Help
IVD/voip/tone/user_defined> busy ?

- Display the setting
IVD/voip/tone/user_defined> busy -s

- Edit frequency and cadence for busy tone
IVD/voip/tone/user_defined> busy <Lowfreq> <Highfreq> <Ton1> <Toff1> <Ton2> <Toff2>

Lowfreq	Assign a low frequency number in Hertz unit. (unit is HZ) (Default is 350)
Highfreq	Assign a high frequency number in Hertz unit. (unit is HZ) (Default is 440)
Ton1(msec)	The duration of the first ringing. (10msec per unit) (Default is 0)
TOff1(msec)	The silence duration after the first ringing. (10msec per unit) (Default is 0)
Ton2(msec)	The duration of the next continuous ringing. (10msec per unit) (Default is 0)
Toff2(msec)	The silence duration after the next continuous ringing. (10msec per unit) (Default is 0)

▲ How to Set User Defined Ringing Tone Setting

- Help
IVD/voip/tone/user_defined> ringing ?

- Display the setting
IVD/voip/tone/user_defined> ringing -s

- Edit frequency and cadence for ringing tone
IVD/voip/tone/user_defined> ringing <Lowfreq> <Highfreq> <Ton1> <Toff1> <Ton2> <Toff2>

Lowfreq	Assign a low frequency number in Hertz unit. (unit is HZ) (Default is 440)
Highfreq	Assign a high frequency number in Hertz unit. (unit is HZ) (Default is 480)
Ton1(msec)	(10msec per unit) (Default is 0)
TOff1(msec)	(10msec per unit) (Default is 0)
Ton2(msec)	(10msec per unit) (Default is 200)
Toff2(msec)	(10msec per unit) (Default is 400)

▲ How to Set User Defined Congestion Tone Setting

- Help
IVD/voip/tone/user_defined> congestion ?

- Display the setting
IVD/voip/tone/user_defined> congestion -s

- Edit frequency and cadence for congestion tone
IVD/voip/tone/user_defined> congestion <Lowfreq> <Highfreq> <Ton1> <Toff1> <Ton2> <Toff2>

Lowfreq	Assign a low frequency number in Hertz unit.
	(unit is HZ) (Default is 480)
Highfreq	Assign a high frequency number in Hertz unit.
	(unit is HZ) (Default is 620)
Ton1(msec)	(10msec per unit) (Default is 0)
TOff1(msec)	(10msec per unit) (Default is 0)
Ton2(msec)	(10msec per unit) (Default is 25)
Toff2(msec)	(10msec per unit) (Default is 25)

▲ How to Set Caller ID Type Setting

- Help
IVD/voip/tone/user_defined> callerid ?

- Display the setting
IVD/voip/tone/user_defined> callerid -s

- Edit caller id type
IVD/voip/tone/user_defined> callerid <Type>

Type	0: North America
	1: JAPAN
	2: ETSI (Default is 2)
	3: DTMF

▲ How to Set VoIP RTP Port Setting

- Help
IVD/voip/misc> rtp_port ?

- Display the setting
IVD/voip/misc> rtp_port -s

- Edit the rtp starting port
IVD/voip/misc> rtp_port <Port number>

Port number	Assign a starting port number in RTP protocol packet.
	1…65535. (Default is 13456)

▲ How to Set ToS Setting

- Help
IVD/voip/qos> tos ?

- Display the setting
IVD/voip/qos> tos -s

- Edit the tos value for RTP
IVD/voip/qos> tos   -r <Value>

- Edit the tos value for MGCP
IVD/voip/qos> tos   -g <Value>

- Edit the tos value for SIP
IVD/voip/qos> tos   -i <Value>

Value	Assign a TOS value in VoIP protocol packet.
	Range: 00 ~ ff (by hex value) (Default is 0xa0)

▲ How to Set T.38 Starting Port Setting

- Help
IVD/voip/misc> t38port ?

- Display the setting
IVD/voip/misc> t38port -s

- Edit the T.38 starting port
IVD/voip/misc> t38port <port>

port	Assign a starting port number in T.38 protocol packet.
	1...65535 (Default is 49170)

▲ How to Set T.38 Redundancy Number Setting

- Help
IVD/voip/misc> t38redundancy ?

- Display the setting
IVD/voip/misc> t38redundancy -s

- Edit the T.38 redundancy number
IVD/voip/misc> t38redundancy <Number>

Number	Assign a redundancy number in T.38 protocol. It means how many payloads to be attached in the tail of packet.
	0~4 (Default is 1)

▲ How to Set Dialing Timeout Setting

- Help
IVD/voip/misc> dialing_timeout ?

- Display the setting
IVD/voip/misc> dialing_timeout -s

- Edit the dialing completion timeout value
IVD/voip/misc> dialing_timeout <value>

Value	1~60 (unit is second) (Default is 4)

▲ How to Set Metering

- Help
IVD/voip/misc> metering ?

- Display the setting
IVD/voip/misc> metering -s

- Setting Metering mode
IVD/voip/misc> metering -m <Metering Mode>

- Setting Reversal mode
IVD/voip/misc> metering -r <Reversal Mode>

Metering Mode	0:Line polarity reversal (default) 1:12KHZ Tone 2:16KHZ Tone
Reversal Mode	0: Reverse as peer end-point On-hook (default) 1: Reverse as callee Off-hook

▲ How to Set NAT Traversal Setting

- Help
IVD/voip/misc> nat ?

- Display the setting
IVD/voip/misc> nat -s

- Disable NAT traversal function
IVD/voip/misc> nat <Disable Mode>

- Enable Manual mode and WAN IP Address for NAT router
IVD/voip/misc> nat <Manual Mode> <NatIpAddr>

- Enable Auto mode and related parameters
IVD/voip/misc> nat <Auto Mode> <Type> <LocalPort> <ServerIP> <ServerPort>

- Edit symmetric media setting
IVD/voip/misc> nat –sym <sym_rtp_t38>

Disable mode	Disable this function. The application is IVD has a public WAN IP address. (not behind a NAT router)
	0: Disable NAT traversal (Default is 0)

	1: Manually input NAT IP address
	2: Auto discover NAT IP address

Manually Input NAT IP Address

NAT IP Address	Assign an IP address as NAT IP address. The application is when IVD is behind a NAT router, and NAT router uses a static WAN IP address. This value is same as WAN IP in NAT router. (Default is 172.0.0.1)

Auto Discovery NAT IP Address

STUN Local Port	Assign a port number of STUN server. (Default is 3478)
STUN Server Address	Assign an IP address of STUN server. (Default is stun.fwdnet.net)
STUN Server Port	Assign a server port number of STUN server. (Default is 3478)
Type	0: Semi-auto (need to configure NAT) 1: Full-auto (no need to configure NAT) (Default is 1)
Sym_Rtp_T38	Symmetric Media Setting 0: Disable symmetric RTP and T.38 (Default is 0) 1: Enable symmetric RTP and T.38

> **Note:** "Auto Discovery NAT IP Address" option is used when IVD is behind a NAT router, NAT uses dynamic WAN IP address like as DHCP or PPPoE client. There must be having a STUN server in Internet. IVD needs to negotiate with STUN server for this function.
>
> **Note:** The "STUN"(Simple Traversal of UDP through NATs) server is an implementation of the STUN protocol that enables STUN functionality in SIP-based systems. STUN is an application-layer protocol that can determine the public IP and nature of a NAT device that sits between the STUN client and STUN server.

▲ How to Show VoIP Connection Status

- Help
IVD/voip> status ?

- Show voip status of port#
IVD/voip> status <Port>

- Show all voip status
IVD/voip> status

Port	Port number is 1 ~ 24
Register Status	It shows the status of registering in proxy server.
Call Status	It shows the calling status.
Call Type	It shows the dialing direction for this phone calling.
Caller Number	It shows the phone number of caller.
Callee Number	It shows the phone number of calling receiver.
Start Time	It shows the starting time of calling.
Remote RTP Address	It shows the IP address of remote voice site.

Remote RTP Port	It shows the used port number of remote voice site.
RTP Statistic	It shows the RTP Statistic.
Codec Type	It shows the Codec mode used for this phone calling.
Packet Period	It shows the period of time for sampling on voice signal.
VAD	It shows the status of VAD.
DTMF Relay	It shows the status of DTMF.

▲ How to Show SIP Syslog Message

- Help
IVD/system> syslogd ?

- Display the syslog setting
IVD/system> syslogd -s

- Edit the syslog setting
IVD/system> syslogd <Active> <RIP> <RPort>

▲ How to Set Incoming Call Barring Setting

- Help
IVD/voip/sip/incallbarring> set ?

- Display the setting
IVD/voip/sip/incallbarring> set -s

- Edit the class, match mode and speeddial entries
IVD/voip/sip/incallbarring> set <Class> <MatchName> <MatchIP> <SpeeddialFrom>
                                        <SpeeddialTo>

Class	There are five options users can use.
	0: Allow all incoming calls. (Default is 0)
	1: Allow only calls from allow list.
	2: Allow only calls from speed dial entries.
	3: Deny only calls from deny list.
	4: Deny all incoming calls.

Match Method

MatchName	"**Disable**" to disable this field mapped in speed dial table as "**Speed Dial Phone Number**" to be checked. "**Enable**" to enable this field mapped in speed dial table as "**Speed Dial Phone Number**" to be checked. (Default is Enable)
MatchIP	"**Disable**" to disable this field mapped in speed dial table as "**Speed Dial Destination**" to be checked. "**Enable**" to enable this field mapped in speed dial table as "**Speed Dial Destination**" to be checked. (Default is Enable)
SpeeddialFrom	1~150 (Default is 1)
SpeeddialTo	1~150 (Default is 150)

▲ How to Set Allow List of Incoming Calls Setting

- Help
IVD/voip/sip/incallbarring> allow ?

- Display the setting
IVD/voip/sip/incallbarring> allow -s

- Add the index entry in the allow list
IVD/voip/sip/incallbarring> allow –a <Name> <IP/Domain>

- Edit the index entry in the allow list
IVD/voip/sip/incallbarring> allow –e <Index> <Name> <IP/Domain>

- Delete the index entry in the allow list
IVD/voip/sip/incallbarring> allow –d <Index>

- Delete all entries
IVD/voip/sip/incallbarring> allow –D

Index	1~30 (Default is none)
Name	Assign a name or number in allow list. Free text (Default is none)
IP/Domain	Assign an IP address or domain name in allow list. If the other side had registered in SIP proxy server, please type the domain name of SIP proxy server. If the other side had not registered in SIP proxy server, please type the static IP address or DDNS domain name. ex: 192.168.1.1/iptel.org (Default is none)

▲ How to Set Deny List of Incoming Calls

- Help
IVD/voip/sip/incallbarring> deny ?

- Display the setting
IVD/voip/sip/incallbarring> deny -s

- Add the index entry in the deny list
IVD/voip/sip/incallbarring> deny -a <Name> <IP/Domain>

- Edit the index entry in the deny list
IVD/voip/sip/incallbarring> deny -e <Index> <Name> <IP/Domain>

- Delete the index entry in the deny list
IVD/voip/sip/incallbarring> deny –d <Index>

- Delete all entries
IVD/voip/sip/incallbarring> deny –D

Index	1~30 (Default is none)
Name	Assign a name in deny list. Free text (Default is none)
IP/Domain	Assign an IP address or domain name in deny list. If the other side had registered in SIP proxy server, please type the domain name of SIP proxy server. If the other side had not registered in SIP proxy server, please type the static IP address or DDNS domain name. ex: 192.168.1.1/iptel.org (Default is none)

▲ How to Activate VoIP configuration

- Help
IVD/voip> config ?

- To activate voip configuration
IVD/voip> config activate