

D-link Switch: DES-3526 Firmware: R4 MIB File: V4

How to use NET-SNMP –RFC1213 (ARP Table)

The Location of ARP Table OID

The screenshot shows the D-Link MIB Compiler interface. The 'Browse Agent IP' field is set to 192.168.0.1. The left pane displays a list of MIBs with their corresponding Root IDs. The 'RFC1213-MIB' entry is highlighted with a red box, showing a Root ID of 1.3.6.1.2.1.1. The right pane shows a tree view of the MIB structure, with the 'ipNetToMediaTable' and its sub-entries highlighted by a red box. The sub-entries include 'ipNetToMediaEntry', 'ipNetToMediaIndex', 'ipNetToMediaPhysAddress', 'ipNetToMediaNetAddress', and 'ipNetToMediaType'.

MIB	Root ID
RADIUS-AUTH-CLIENT-MIB	1.3.6.1.2.1.67.1.2
RFC1155-SMI	0
RFC1212	None
RFC1213-MIB	1.3.6.1.2.1.1
RFC1215	None
RFC1215-MIB	None
RFC1271-MIB	1.3.6.1.2.1.16
RIP-MGMT-MIB	1.3.6.1.4.1.171.12.32
RIPv2-MIB	1.3.6.1.2.1.23
RMON-MIB	1.3.6.1.2.1.16
RSTP-MIB	1.3.6.1.2.1.17.11
SAFEGUARD-ENGINE-MIB	1.3.6.1.4.1.171.12.19
SINGLE-IP-MIB	1.3.6.1.4.1.171.12.8
SNMP-COMMUNITY-MIB	1.3.6.1.6.3.18
SNMP-FRAMEWORK-MIB	1.3.6.1.6.3.10
SNMP-MPD-MIB	1.3.6.1.6.3.11
SNMP-TARGET-MIB	1.3.6.1.6.3.12
SNMP-USER-BASED-SM-MIB	1.3.6.1.6.3.15
SNMPv2-CONF	None
SNMPv2-MIB	1.3.6.1.6.3.1
SNMPv2-SMI	0
SNMPv2-TC	None
SNMPv2-TM	1.3.6.1.6.1.1
SNMP-VIEW-BASED-ACM-MIB	1.3.6.1.6.3.16

- ipRouteType
- ipRouteProto
- ipRouteAge
- ipRouteMask
- ipRouteMetric5
- ipRouteInfo
- ipNetToMediaTable
 - ipNetToMediaEntry
 - ipNetToMediaIndex
 - ipNetToMediaPhysAddress
 - ipNetToMediaNetAddress
 - ipNetToMediaType
- ipRoutingDiscards
- icmp
 - icmplnMsgs
 - icmplnErrors
 - icmplnDestUnreachs
 - icmplnTimeExcds
 - icmplnParmProbs
 - icmplnSrcQuenchs
 - icmplnRedirects
 - icmplnEchos
 - icmplnEchoReps
 - icmplnTimestamps
 - icmplnTimestampReps
 - icmplnAddrMasks
 - icmplnAddrMaskReps

MIB File: RFC1213-MIB

OID: 1.3.6.1.2.1.4.22

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Object name	ipNetToMediaEntry
Object ID	1.3.6.1.2.1.4.22.1
Module	RFC1213-MIB
Base syntax	Sequence
Access	Not_Accessible
Status	Mandatory
Index	1.ipNetToMediaIfIndex 2.ipNetToMediaNetAddress
Parent node	ipNetToMediaTable
First child	ipNetToMediaIfIndex
Description	Each entry contains one IpAddress to `physical` address equivalence.

Show Net To Media Interface Index

:: Command ::

snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.2.1.4.22.1.1

Object name	ipNetToMediaIfIndex
Object ID	1.3.6.1.2.1.4.22.1.1
Module	RFC1213-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Mandatory
Parent node	ipNetToMediaEntry
First child	None
Description	The interface on which this entry's equivalence is effective. The interface identified by a particular value of this index is the same interface as identified by the same value of ifIndex.

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Show Net To Media Physical Address

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.2.1.4.22.1.2
```

Object name	ipNetToMediaPhysAddress
Object ID	1.3.6.1.2.1.4.22.1.2
Module	RFC1213-MIB
Base syntax	Octet String
Composed syntax	PhysAddress
Access	Read-Write
Status	Mandatory
Parent node	ipNetToMediaEntry
First child	None
Description	The media-dependent `physical' address.

Show Net To Media Net Address

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.2.1.4.22.1.3
```

Object name	ipNetToMediaNetAddress
Object ID	1.3.6.1.2.1.4.22.1.3
Module	RFC1213-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Write
Status	Mandatory
Parent node	ipNetToMediaEntry
First child	None
Description	The IpAddress corresponding to the media-dependent `physical' address.

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Show Net To Media Type

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.2.1.4.22.1.4
```

Object name	ipNetToMediaType
Object ID	1.3.6.1.2.1.4.22.1.4
Module	RFC1213-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Mandatory
Value list	1 : other(1) 2 : invalid(2) 3 : dynamic(3) 4 : static(4)
Parent node	ipNetToMediaEntry
First child	None
Description	The type of mapping. Setting this object to the value invalid(2) has the effect of invalidating the corresponding entry in the ipNetToMediaTable. That is, it effectively disassociates the interface identified with said entry from the mapping identified with said entry. It is an implementation-specific matter as to whether the agent removes an invalidated entry from the table. Accordingly, management stations must be prepared to receive tabular information from agents that corresponds to entries not currently in use. Proper interpretation of such