

How to delete the ARP Entry via SNMP

Example on DGS-3600

Check all ARPEntry Table via---

CLI:: # Show arprentry

```
DGS-3650:admin#show arprentry
Command: show arprentry

ARP Aging Time : 20

Interface      IP Address      MAC Address      Type
-----
System         10.0.0.0        FF-FF-FF-FF-FF-FF Local/Broadcast
System         10.90.90.90     00-1C-F0-1E-1A-41 Local
System         10.90.90.91     00-18-8B-C4-52-0C Dynamic
System         10.255.255.255  FF-FF-FF-FF-FF-FF Local/Broadcast
i2             192.168.1.0     FF-FF-FF-FF-FF-FF Local/Broadcast
i2             192.168.1.1     00-1C-F0-1E-1A-40 Local
i2             192.168.1.2     00-00-04-00-04-D4 Dynamic
i2             192.168.1.255  FF-FF-FF-FF-FF-FF Local/Broadcast
test           192.168.2.0     FF-FF-FF-FF-FF-FF Local/Broadcast
test           192.168.2.1     00-1C-F0-1E-1A-42 Local
test           192.168.2.255  FF-FF-FF-FF-FF-FF Local/Broadcast

Total Entries: 11
```

SNMP:: # snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.2.1.4.22

```
C:\>snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.2.1.4.22
IP-MIB::ipNetToMediaIfIndex.5121.10.0.0.0 = INTEGER: 5121 ipif: System
IP-MIB::ipNetToMediaIfIndex.5121.10.90.90.90 = INTEGER: 5121
IP-MIB::ipNetToMediaIfIndex.5121.10.90.90.91 = INTEGER: 5121
IP-MIB::ipNetToMediaIfIndex.5121.10.255.255.255 = INTEGER: 5121
IP-MIB::ipNetToMediaIfIndex.5122.192.168.1.0 = INTEGER: 5122 ipif: i2
IP-MIB::ipNetToMediaIfIndex.5122.192.168.1.1 = INTEGER: 5122
IP-MIB::ipNetToMediaIfIndex.5122.192.168.1.2 = INTEGER: 5122
IP-MIB::ipNetToMediaIfIndex.5122.192.168.1.255 = INTEGER: 5122
IP-MIB::ipNetToMediaIfIndex.5123.192.168.2.0 = INTEGER: 5123 ipif: test
IP-MIB::ipNetToMediaIfIndex.5123.192.168.2.1 = INTEGER: 5123
IP-MIB::ipNetToMediaIfIndex.5123.192.168.2.255 = INTEGER: 5123
IP-MIB::ipNetToMediaPhysAddress.5121.10.0.0.0 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.90 = STRING: 0:1c:f0:1e:1a:41
IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.91 = STRING: 0:18:8b:c4:52:c
IP-MIB::ipNetToMediaPhysAddress.5121.10.255.255.255 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaPhysAddress.5122.192.168.1.0 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaPhysAddress.5122.192.168.1.1 = STRING: 0:1c:f0:1e:1a:40
IP-MIB::ipNetToMediaPhysAddress.5122.192.168.1.2 = STRING: 0:0:4:0:4:d4
IP-MIB::ipNetToMediaPhysAddress.5122.192.168.1.255 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaPhysAddress.5123.192.168.2.0 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaPhysAddress.5123.192.168.2.1 = STRING: 0:1c:f0:1e:1a:42
IP-MIB::ipNetToMediaPhysAddress.5123.192.168.2.255 = STRING: ff:ff:ff:ff:ff:ff
IP-MIB::ipNetToMediaNetAddress.5121.10.0.0.0 = IPAddress: 10.0.0.0
IP-MIB::ipNetToMediaNetAddress.5121.10.90.90.90 = IPAddress: 10.90.90.90
IP-MIB::ipNetToMediaNetAddress.5121.10.90.90.91 = IPAddress: 10.90.90.91
IP-MIB::ipNetToMediaNetAddress.5121.10.255.255.255 = IPAddress: 10.255.255.255
IP-MIB::ipNetToMediaNetAddress.5122.192.168.1.0 = IPAddress: 192.168.1.0
IP-MIB::ipNetToMediaNetAddress.5122.192.168.1.1 = IPAddress: 192.168.1.1
IP-MIB::ipNetToMediaNetAddress.5122.192.168.1.2 = IPAddress: 192.168.1.2
IP-MIB::ipNetToMediaNetAddress.5122.192.168.1.255 = IPAddress: 192.168.1.255
IP-MIB::ipNetToMediaNetAddress.5123.192.168.2.0 = IPAddress: 192.168.2.0
IP-MIB::ipNetToMediaNetAddress.5123.192.168.2.1 = IPAddress: 192.168.2.1
IP-MIB::ipNetToMediaNetAddress.5123.192.168.2.255 = IPAddress: 192.168.2.255
IP-MIB::ipNetToMediaType.5121.10.0.0.0 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5121.10.90.90.90 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5121.10.90.90.91 = INTEGER: dynamic(3)
IP-MIB::ipNetToMediaType.5121.10.255.255.255 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5122.192.168.1.0 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5122.192.168.1.1 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5122.192.168.1.2 = INTEGER: dynamic(3)
IP-MIB::ipNetToMediaType.5122.192.168.1.255 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5123.192.168.2.0 = INTEGER: other(1)
IP-MIB::ipNetToMediaType.5123.192.168.2.1 = INTEGER: other(1)
```

Delete one specific ARPEntry via--

CLI: #delete arpentry 192.168.1.2

SNMP:: # snmpset -c private -v2c 10.90.90.90 1.3.6.1.2.1.4.22.1.2.5122.192.168.1.2 x
 0000040004D4 1.3.6.1.2.1.4.22.1.4.5122.192.168.1.2 i 2
 [5122: IPmediaIndex, for ipif "i2".
 192.168.1.2: IP address
 0000040004D4: MAC address
 i 2: integer 2, for parameter "invalid"]

```
C:\>snmpset -c private -v2c 10.90.90.90 1.3.6.1.2.1.4.22.1.2.5122.192.168.1.2 x
0000040004D4 1.3.6.1.2.1.4.22.1.4.5122.192.168.1.2 i 2
IP-MIB::ipNetToMediaPhysAddress.5122.192.168.1.2 = STRING: 0:0:4:0:4:d4
IP-MIB::ipNetToMediaType.5122.192.168.1.2 = INTEGER: invalid(2)
```

SNMP Packet::



del-arpentry-3600.pc
 ap

No. -	Time	Source	Destination	Protocol	Info
1655	403.	10.90.90.91	10.90.90.90	SNMP	set-request IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.92 IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.92
<ul style="list-style-type: none"> ⊕ Frame 1655 (119 bytes on wire, 119 bytes captured) ⊕ Ethernet II, Src: Dell_c4:52:0c (00:18:8b:c4:52:0c), Dst: D-Link_1e:1a:41 (00:1c:f0:1e:1a:41) ⊕ Internet Protocol, Src: 10.90.90.91 (10.90.90.91), Dst: 10.90.90.90 (10.90.90.90) ⊕ User Datagram Protocol, Src Port: gtp-user (2152), Dst Port: snmp (161) ⊕ Simple Network Management Protocol <ul style="list-style-type: none"> version: v2c (1) community: private data: set-request (3) <ul style="list-style-type: none"> ⊕ set-request <ul style="list-style-type: none"> request-id: 1278 error-status: noError (0) error-index: 0 variable-bindings: 2 items <ul style="list-style-type: none"> ⊕ IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.92 (1.3.6.1.2.1.4.22.1.2.5121.10.90.90.92): 0000040004D4 <ul style="list-style-type: none"> Object Name: 1.3.6.1.2.1.4.22.1.2.5121.10.90.90.92 (IP-MIB::ipNetToMediaPhysAddress.5121.10.90.90.92) IP-MIB::ipNetToMediaEntry.ipNetToMediaIfIndex: 5121 IP-MIB::ipNetToMediaEntry.ipNetToMediaNetAddress: 10.90.90.92 (10.90.90.92) IP-MIB::ipNetToMediaPhysAddress: 0000040004D4 ⊕ IP-MIB::ipNetToMediaType.5121.10.90.90.92 (1.3.6.1.2.1.4.22.1.4.5121.10.90.90.92): invalid (2) <ul style="list-style-type: none"> Object Name: 1.3.6.1.2.1.4.22.1.4.5121.10.90.90.92 (IP-MIB::ipNetToMediaType.5121.10.90.90.92) IP-MIB::ipNetToMediaEntry.ipNetToMediaIfIndex: 5121 IP-MIB::ipNetToMediaEntry.ipNetToMediaNetAddress: 10.90.90.92 (10.90.90.92) IP-MIB::ipNetToMediaType: invalid (2) 					

MIB OID:

<ul style="list-style-type: none"> ipOutDiscards ipOutNoRoutes ipReasmTimeout ipReasmReqds ipReasmOKs ipReasmFails ipFragOKs ipFragFails ipFragCreates ipAddrTable ipRouteTable ipNetToMediaTable <ul style="list-style-type: none"> ipNetToMediaEntry <ul style="list-style-type: none"> ipNetToMediaIfIndex ipNetToMediaPhysAddress ipNetToMediaNetAddress ipNetToMediaType ipRoutingDiscards 	<ul style="list-style-type: none"> Object name: ipNetToMediaTable Object ID: 1.3.6.1.2.1.4.22 Module: RFC1213-MIB Base syntax: Sequence Of ipNetToMediaEntry Access: Not_Accessible Status: Mandatory Sequence: <ul style="list-style-type: none"> 1:ipNetToMediaIfIndex - Integer 2:ipNetToMediaPhysAddress - Octet String 3:ipNetToMediaNetAddress - IP Address 4:ipNetToMediaType - Integer Parent node: ip First child: ipNetToMediaEntry Description: The IP Address Translation table used for mapping from IP addresses to physical addresses.
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1:ipNetToMediaIfIndex – Integer

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.

2:ipNetToMediaPhysAddress - Octet String

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.

3:ipNetToMediaNetAddress - IP Address

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.

4:ipNetToMediaType – Integer

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 entries requires examination of the relevant ipNetToMediaType object.