

How to get Authentication Server List via NETSNMP

in DES-3200 A1/B1 series?

The OIDs are defined in "**swAACServerInfoTable**" of "**AAC.mib**".

swAACServerInfoTable (1.3.6.1.4.1.171.12.5.10)

Object name	swAACServerInfoTable
Object ID	1.3.6.1.4.1.171.12.5.10
Module	AAC-MIB
Base syntax	Sequence Of swAACServerInfoEntry
Access	Not_Accessible
Status	Current
Sequence	1:swAACServerIPAddr - IP Address 2:swAACServerAuthProtocol - Integer 3:swAACServerAuthPort - Integer 4:swAACServerAuthKey - Octet String 5:swAACServerTimeout - Integer 6:swAACServerRetryCount - Integer 7:swAACServerRowStatus - Integer
Parent node	swDlinkAACMIB
First child	swAACServerInfoEntry
Description	A table that contains information about servers.

For example:

```
snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10
```

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10
SNMPv2-SMI::enterprises.171.12.5.10.1.1.1.1.1.3 = IPAddress: 1.1.1.1
SNMPv2-SMI::enterprises.171.12.5.10.1.1.2.2.2.2.4 = IPAddress: 2.2.2.2
SNMPv2-SMI::enterprises.171.12.5.10.1.2.1.1.1.1.3 = INTEGER: 3
SNMPv2-SMI::enterprises.171.12.5.10.1.2.2.2.2.2.4 = INTEGER: 4
SNMPv2-SMI::enterprises.171.12.5.10.1.3.1.1.1.1.3 = INTEGER: 49
SNMPv2-SMI::enterprises.171.12.5.10.1.3.2.2.2.2.2.4 = INTEGER: 1812
SNMPv2-SMI::enterprises.171.12.5.10.1.4.1.1.1.1.3 = ""
SNMPv2-SMI::enterprises.171.12.5.10.1.4.2.2.2.2.2.4 = ""
SNMPv2-SMI::enterprises.171.12.5.10.1.5.1.1.1.1.3 = INTEGER: 5
SNMPv2-SMI::enterprises.171.12.5.10.1.5.2.2.2.2.2.4 = INTEGER: 5
SNMPv2-SMI::enterprises.171.12.5.10.1.6.1.1.1.1.3 = INTEGER: 0
SNMPv2-SMI::enterprises.171.12.5.10.1.6.2.2.2.2.2.4 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.5.10.1.7.1.1.1.1.3 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.5.10.1.7.2.2.2.2.2.4 = INTEGER: 1
```

Suppose the authentication server list as below, how to get this information?

=> Command: "*show authen server_host*"

```
DES-3200-52:admin#show authen server_host
Command: show authen server_host

IP Address          Protocol Port  Timeout Retransmit Key
-----
1.1.1.1             TACACS+ 49    5       -       123
2.2.2.2             RADIUS  1812  5       2       456

Total Entries : 2
```

1) Server IP address (1.3.6.1.4.1.171.12.5.10.1.1)

Object name	swAACServerIPAddr
Object ID	1.3.6.1.4.1.171.12.5.10.1.1
Module	AAC-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Only
Status	Current
Parent node	swAACServerInfoEntry
First child	None
Description	The IP address of Server

For example:

snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.1

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.1
SNMPv2-SMI::enterprises.171.12.5.10.1.1.1.1.1.3 = IpAddress: 1.1.1.1
SNMPv2-SMI::enterprises.171.12.5.10.1.1.2.2.2.2.4 = IpAddress: 2.2.2.2
```

2) Authenticated protocol (1.3.6.1.4.1.171.12.5.10.1.2)

Object name	swAACServerAuthProtocol
Object ID	1.3.6.1.4.1.171.12.5.10.1.2
Module	AAC-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : tacacs(1) 2 : xtacacs(2) 3 : tacacs-plus(3) 4 : radius(4)
Parent node	swAACServerInfoEntry
First child	None
Description	The authentication protocol provide by the Server.

For example:

snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.2

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.2
SNMPv2-SMI::enterprises.171.12.5.10.1.2.1.1.1.1.3 = INTEGER: 3
SNMPv2-SMI::enterprises.171.12.5.10.1.2.2.2.2.2.4 = INTEGER: 4
```

3) Authenticated port (1.3.6.1.4.1.171.12.5.10.1.3)

Object name	swAACServerAuthPort
Object ID	1.3.6.1.4.1.171.12.5.10.1.3
Module	AAC-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 1.65535
Parent node	swAACServerInfoEntry
First child	None
Description	The TCP/IP port. The default authentication port is 49, and port 5001 to 65535 are valid setting in the system, other value except 49,5001-65535 will work while set this object.

For example:

```
snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.3
```

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.3
SNMPv2-SMI::enterprises.171.12.5.10.1.3.1.1.1.1.3 = INTEGER: 49
SNMPv2-SMI::enterprises.171.12.5.10.1.3.2.2.2.2.4 = INTEGER: 1812
```

4) Timeout (1.3.6.1.4.1.171.12.5.10.1.5)

Object name	swAACServerTimeout
Object ID	1.3.6.1.4.1.171.12.5.10.1.5
Module	AAC-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 1.255
Parent node	swAACServerInfoEntry
First child	None
Description	Server response timeout.

For example:

```
snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.5
```

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.5
SNMPv2-SMI::enterprises.171.12.5.10.1.5.1.1.1.1.3 = INTEGER: 5
SNMPv2-SMI::enterprises.171.12.5.10.1.5.2.2.2.2.4 = INTEGER: 5
```

5) Retry counter (1.3.6.1.4.1.171.12.5.10.1.6)

Object name	swAACServerRetryCount
Object ID	1.3.6.1.4.1.171.12.5.10.1.6
Module	AAC-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 1..255
Parent node	swAACServerInfoEntry
First child	None
Description	The client retry count.

For example:

```
snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.6
```

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.6
SNMPv2-SMI::enterprises.171.12.5.10.1.6.1.1.1.1.3 = INTEGER: 0
SNMPv2-SMI::enterprises.171.12.5.10.1.6.2.2.2.2.4 = INTEGER: 2
```

6) Server Status (1.3.6.1.4.1.171.12.5.10.1.7)

Object name	swAACServerRowStatus
Object ID	1.3.6.1.4.1.171.12.5.10.1.7
Module	AAC-MIB
Base syntax	Integer
Composed syntax	RowStatus
Access	Read-Create
Status	Current
Value list	1 : active(1) 2 : notInService(2) 3 : notReady(3) 4 : createAndGo(4) 5 : createAndWait(5) 6 : destroy(6)
Parent node	swAACServerInfoEntry
First child	None
Description	This object indicates the status of this entry. A set request with RowStatus is 'CreateAndGo' will be fail while the current entry of the table is equal to swAACMaxServer.

For example:

```
snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.7
```

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.5.10.1.7
SNMPv2-SMI::enterprises.171.12.5.10.1.7.1.1.1.1.3 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.5.10.1.7.2.2.2.2.4 = INTEGER: 1
```