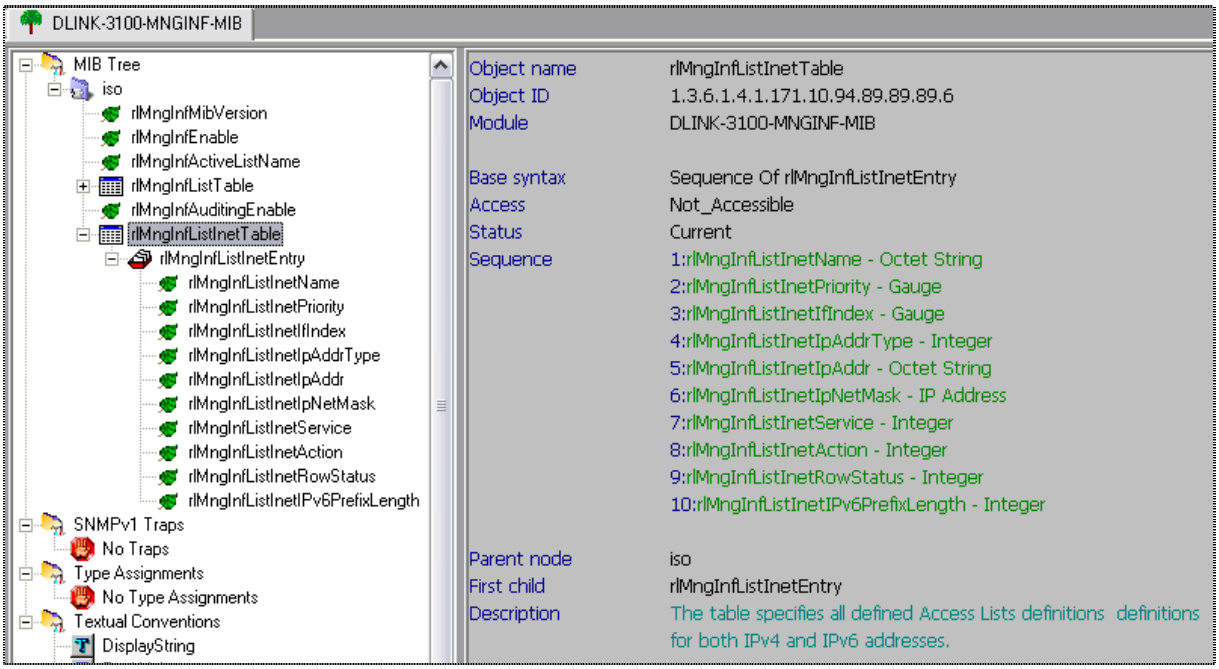
How to configure Trusted Host via SNMP on DGS-3100

MIB File: mnginf.mib



[CLI Command]

create trusted_host 10.90.90.91 network 255.0.0.0 application all

[SNMP Command]

snmpset -v2c -c private 10.90.90.90

1.3.6.1.4.1.171.10.94.89.89.89.6.1.5.12.116.114.117.115.116.101.100.95.104.111.115.116.7 x 0A5A5A5B

1.3.6.1.4.1.171.10.94.89.89.89.6.1.6.12.116.114.117.115.116.101.100.95.104.111.115.116.7 a 255.0.0.0

1.3.6.1.4.1.171.10.94.89.89.89.6.1.7.12.116.114.117.115.116.101.100.95.104.111.115.116.7 i 0

1.3.6.1.4.1.171.10.94.89.89.89.6.1.8.12.116.114.117.115.116.101.100.95.104.111.115.116.7 i 0

1.3.6.1.4.1.171.10.94.89.89.89.6.1.9.12.116.114.117.115.116.101.100.95.104.111.115.116.7 i 4

[Description]

12. = fixed value.

116.114.117.115.116.101.100.95.104.111.115.116. = the ASCII char, which means “trusted_host”.

7 = a random priority value, suggest use the multiple of 7, ex: 7, 14, 21, 28… etc.

x 0A5A5A5B = Octet String for x, Hex value for IP address, which means “10.90.90.91”.

a 255.0.0.0 = IP address format for a, and “255.0.0.0” here means subnet mask.

i 0 = integer for i, value 0 for application “all”, you can see the value list here ->

dontCare(0)
telnet(1)
snmp(2)
http(3)
https(4)
ssh(5)
icmp(6)

i 0 = integer for i, value 0 for action permit (value 1 is for action deny.)

i 4 = integer for i, value 4 for action CreateAndGO, see the value list as below:

active(1)
notInService(2)
notReady(3)
createAndGo(4)
createAndWait(5)
destroy(6)

[Packet example]

DGS3100-TrustedHost.pcap

[OID Description]

There are 5 OIDs needed in this setting:

1) rlMngInfListInetIpAddr - Octet String

Object name	rlMngInfListInetIpAddr
Object ID	1.3.6.1.4.1.171.10.94.89.89.89.6.1.5
Module	DLINK-3100-MNGINF-MIB
Base syntax	Octet String
Composed syntax	InetAddress
Access	Read-Write
Status	Current
Value list	1 : 0..255
Parent node	rlMngInfListInetEntry
First child	None
Description	The Inet address.Used for both IPv4 and IPv6 addresses. The InetIpAddress can be configured to be 0.0.0.0 and address type IPv4 , which means ignored value.

2) rlMngInfListInetIpNetMask - IP Address

Object name	rlMngInfListInetIpNetMask
Object ID	1.3.6.1.4.1.171.10.94.89.89.89.6.1.6
Module	DLINK-3100-MNGINF-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Write
Status	Current
Parent node	rlMngInfListInetEntry
First child	None
Description	This field will used in case of IPv4 addresses . For IPv6 this field ignored. Default value 255.255.255.255.

3) rlMngInfListInetService – Integer

Object name	rlMngInfListInetService
Object ID	1.3.6.1.4.1.171.10.94.89.89.89.6.1.7
Module	DLINK-3100-MNGINF-MIB
Base syntax	Integer
Composed syntax	RlMngInfServiceType
Access	Read-Write
Status	Current
Value list	1 : dontCare(0) 2 : telnet(1) 3 : snmp(2) 4 : http(3) 5 : https(4) 6 : ssh(5) 7 : icmp(6)
Parent node	rlMngInfListInetEntry
First child	None
Description	Service type. The Service type address can be configured to be 0, which means any of Telnet, SNMP, HTTP, HTTPS, SSH.

4) rlMngInfListInetAction – Integer

Object name	rlMngInfListInetAction
Object ID	1.3.6.1.4.1.171.10.94.89.89.89.6.1.8
Module	DLINK-3100-MNGINF-MIB
Base syntax	Integer
Composed syntax	RlMngInfActionType
Access	Read-Write
Status	Current
Value list	1 : permit(0) 2 : deny(1)
Parent node	rlMngInfListInetEntry
First child	None
Description	Action type. Can be permit or deny.

5) rlMngInfListInetRowStatus – Integer

Object name	rlMngInfListInetRowStatus
Object ID	1.3.6.1.4.1.171.10.94.89.89.89.6.1.9
Module	DLINK-3100-MNGINF-MIB
Base syntax	Integer
Composed syntax	RowStatus
Access	Read-Write
Status	Current
Value list	1 : active(1) 2 : notInService(2) 3 : notReady(3) 4 : createAndGo(4) 5 : createAndWait(5) 6 : destroy(6)
Parent node	rlMngInfListInetEntry
First child	None
Description	The row status variable, used according to row installation and removal conventions.