

## How to create Packet Content type ACL with NET-SNMP on DGS-3200-10

```
DGS-3200-10:4#show switch
Command: show switch

Device Type       : DGS-3200-10 Gigabit Ethernet Switch
MAC Address       : 00-21-91-92-E3-64
IP Address        : 10.90.90.90 (Manual)
VLAN Name         : default
Subnet Mask       : 255.0.0.0
Default Gateway   : 0.0.0.0
Boot PROM Version : Build 1.00.B006
Firmware Version  : Build 1.62.B019
Hardware Version  : A2
Serial Number     : P1R3289000009
System Name       :
System Location   :
System Contact    :
Device Uptime     : 0 days, 0 hours, 11 minutes, 7 seconds
Spanning Tree     : Disabled
GVRP              : Disabled
IGMP Snooping     : Disabled
MLD Snooping      : Disabled
VLAN Trunk        : Disabled
Telnet            : Enabled (TCP 23)
Web               : Enabled (TCP 80)
SNMP              : Enabled
```

### Example

1) Create an Access profile as the following command, whose filter range is single source IP:

```
snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.2.8.1.2.1 i 1
1.3.6.1.4.1.171.12.9.2.8.1.3.1 i 1 1.3.6.1.4.1.171.12.9.2.8.1.4.1 x 0000ffff
1.3.6.1.4.1.171.12.9.2.8.1.5.1 i 2 1.3.6.1.4.1.171.12.9.2.8.1.8.1 i 2
1.3.6.1.4.1.171.12.9.2.8.1.11.1 i 2 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 4
```

```
C:\>snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.2.8.1.2.1 i 1 1.3.
6.1.4.1.171.12.9.2.8.1.3.1 i 1 1.3.6.1.4.1.171.12.9.2.8.1.4.1 x 0000ffff 1.3.6.1
.4.1.171.12.9.2.8.1.5.1 i 2 1.3.6.1.4.1.171.12.9.2.8.1.8.1 i 2 1.3.6.1.4.1.171.1
2.9.2.8.1.11.1 i 2 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 4
SNMPv2-SMI::enterprises.171.12.9.2.8.1.2.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.9.2.8.1.3.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.9.2.8.1.4.1 = Hex-STRING: 00 00 FF FF
SNMPv2-SMI::enterprises.171.12.9.2.8.1.5.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.9.2.8.1.8.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.9.2.8.1.11.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.9.2.8.1.14.1 = INTEGER: 4
```

```
DGS-3200-10:4#
DGS-3200-10:4#show access_profile
Command: show access_profile
```

Access Profile Table

Total Unused Rule Entries:200  
Total Used Rule Entries :0

Access Profile ID: 1 Type : Packet Content

```
=====
Owner       : ACL
MASK Option :
offset_chunk_1 : 1      value : 0x0000FFFF
=====
```

Unused Entries: 200

1.2) Add a one ACL entry to **permit** the target packet on port 1

```
snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.3.7.1.4.1.1 x 000000ff 1.3.6.1.4.1.171.12.9.3.7.1.16.1.1 i 2 1.3.6.1.4.1.171.12.9.3.7.1.17.1.1 x 80000000 1.3.6.1.4.1.171.12.9.3.7.1.18.1.1 i 4
```

```
C:\>snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.3.7.1.4.1.1 x 000000ff 1.3.6.1.4.1.171.12.9.3.7.1.16.1.1 i 2 1.3.6.1.4.1.171.12.9.3.7.1.17.1.1 x 80000000 1.3.6.1.4.1.171.12.9.3.7.1.18.1.1 i 4
SNMPv2-SMI::enterprises.171.12.9.3.7.1.4.1.1 = Hex-STRING: 00 00 00 FF
SNMPv2-SMI::enterprises.171.12.9.3.7.1.16.1.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.9.3.7.1.17.1.1 = Hex-STRING: 80 00 00 00
SNMPv2-SMI::enterprises.171.12.9.3.7.1.18.1.1 = INTEGER: 4
```

```
DGS-3200-10:4#show access_profile
Command: show access_profile
```

Access Profile Table

```
Total Unused Rule Entries:199
Total Used Rule Entries :1
```

```
Access Profile ID: 1                                     Type : Packet Content
=====
Owner      : ACL
MASK Option :
offset_chunk_1 : 1      value : 0x0000FFFF
Access ID : 1          Mode: Permit          RX Rate(64Kbps) : no_limit
Ports     : 1
offset_chunk_1 : 1      value : 0x000000FF
=====
Unused Entries: 199
```

2.Delete Access\_profile command

```
snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 6
```

```
C:\>snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 6
SNMPv2-SMI::enterprises.171.12.9.2.8.1.14.1 = INTEGER: 6
C:\>

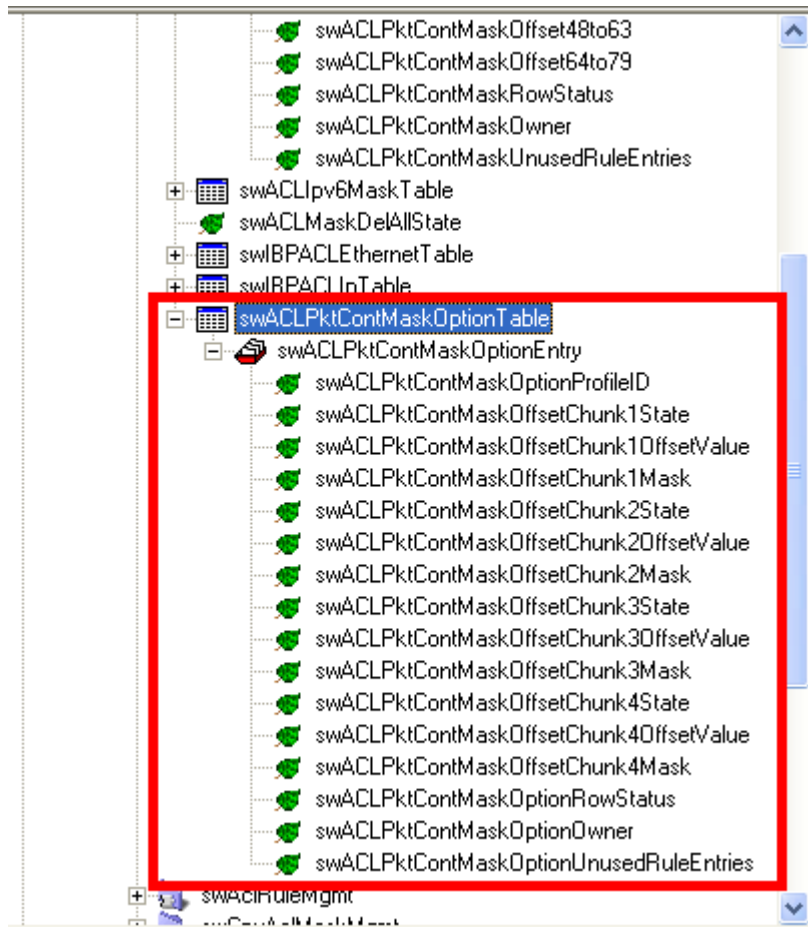
DGS-3200-10:4#show access_profile
Command: show access_profile

There is no access profile created.
DGS-3200-10:4#
```

3. Delete ACL entry command

```
snmpset -c private -v 2c 10.90.90.90 1.3.6.1.4.1.171.12.9.3.7.1.18.1.1 i 6
```

Related OID



Object name	swACLpktContMaskOptionProfileID
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.1
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 1..255
Parent node	swACLpktContMaskOptionEntry
First child	None
Description	The ID of ACL mask entry, unique to the mask list.

Object name	swACLPktContMaskOffsetChunk1State
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.2
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the state of chunk1.

Object name	swACLPktContMaskOffsetChunk1OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.3
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..31
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content offset of chunk1.

Object name	swACLPktContMaskOffsetChunk1Mask
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.4
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4..4
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content mask of chunk1.

Object name	swACLPktContMaskOffsetChunk2State
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.5
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the state of chunk2.

Object name	swACLPktContMaskOffsetChunk2OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.6
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..31
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content offset of chunk2.

Object name	swACLPktContMaskOffsetChunk2Mask
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.7
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4..4
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content mask of chunk2.

Object name	swACLPktContMaskOffsetChunk3State
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.8
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : <a href="#">enabled(1)</a> 2 : <a href="#">disabled(2)</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the state of chunk3.</a>

Object name	swACLPktContMaskOffsetChunk3OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.9
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : <a href="#">0..31</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the frame content offset of chunk3.</a>

Object name	swACLPktContMaskOffsetChunk3Mask
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.10
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : <a href="#">4..4</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the frame content mask of chunk3.</a>

Object name	swACLPktContMaskOffsetChunk4State
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.11
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : <a href="#">enabled(1)</a> 2 : <a href="#">disabled(2)</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the state of chunk4.</a>

Object name	swACLPktContMaskOffsetChunk4OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.12
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : <a href="#">0..31</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the frame content offset of chunk4.</a>

Object name	swACLPktContMaskOffsetChunk4Mask
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.13
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : <a href="#">4..4</a>
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	<a href="#">Specifies the frame content mask of chunk4.</a>

Object name	swACLPktContMaskOptionRowStatus
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.14
Module	ACLMGMT-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	swACLPktContMaskOptionEntry
First child	None
Description	This object indicates the status of this entry.

Object name	swACLPktContMaskOptionOwner
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.15
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : any(1) 2 : acl(2) 3 : ipbind(3) 4 : other(4) 5 : dhcp(5) 6 : netbios(6) 7 : ext-netbios(7)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	The owner of ACL mask entry. The type of ACL entries can only be modified when being configured through the configuration type command. For example IP-MAC Binding entries can be added or deleted through the IP-MAC Binding configuration



Object name	swACLPktContMaskOptionUnusedRuleEntries
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.16
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	The unused rule entries number of this IP profile entr