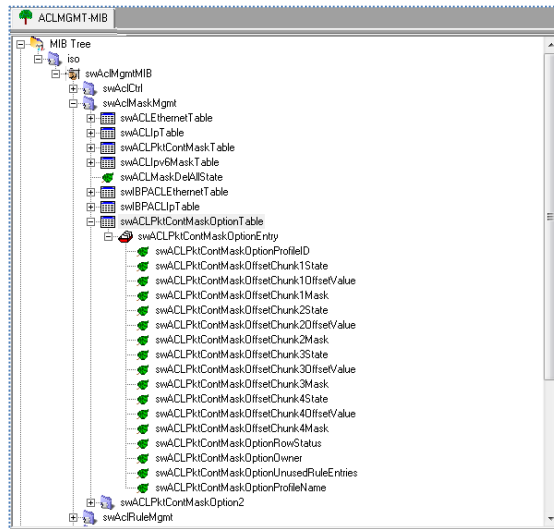




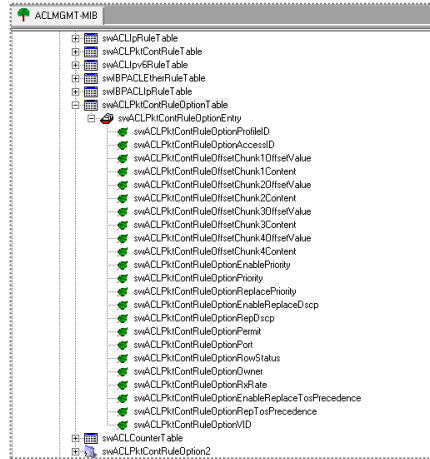
How to setup PCF ACL on DES-3200 / C1 via SNMP




ACLMGMT-MIB: swAcMaskMgmt → swACLpktContMaskOptionTable → 1.3.6.1.4.1.171.12.9.2.8


Example	Create an PCF ACL profile	
CLI	create access_profile profile_id 1 profile_name test packet_content_mask offset_chunk_1 14 0xFFFF	
SNMP	CMD	snmpset -v2c -c private 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 14 1.3.6.1.4.1.171.12.9.2.8.1.4.1 x 0000ffff 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 4 1.3.6.1.4.1.171.12.9.2.8.1.17.1 x 74657374
	Description	1 = PCF profile ID 1
		1 = Chunk1 State enabled
		14 = Chunk1 Offset Value 14
		0000ffff = Chunk1 Mask 0xffff
	4 = Action "createAndGo(4)"	
	74657374 = Profile Name, ASCII table: the Hex value of character "test"	
Packet Example	 Create_PCF_ACL_Profile.pcap	

Example	Delete an PCF ACL profile	
CLI	delete access_profile profile_id 1	
SNMP	CMD	snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.9.2.8.1.14.1 i 6
	Description	1 = PCF profile ID 1 6 = Action "destroy(6)"
Packet Example	 Delete_PCF_ACL_Profile.pcap	



ACLMGMT-MIB: swAclRuleMgmt → swACLPCntRuleOptionTable → 1.3.6.1.4.1.171.12.9.3.7

Example	Add an Access Rule	
CLI	config access_profile profile_id 1 add access_id 1 packet_content offset_chunk_1 0x800 port 10 deny	
SNMP	CMD	snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.9.3.7.1.4.1.1 x 00000800 1.3.6.1.4.1.171.12.9.3.7.1.16.1.1 i 1 1.3.6.1.4.1.171.12.9.3.7.1.17.1.1 x 0040 1.3.6.1.4.1.171.12.9.3.7.1.18.1.1 i 4
	Description	1 = PCF profile ID 1
		1 = PCF Access Rule ID 1
		00000800 = Chunk1 content
		1 = action "deny"
	4 = Action "createAndGo(4)"	
	0040 = port 10	
	[Each character 0 can turn into binary 0000, which can stand for 4 ports. For example, character "8" turns into binary is "1000", which means port 1; Character "6" turns into binary is "0110", which means ports 2-3. Hence, if you want to select ports 10, then your octet string value is:0040, which binary is <u>0000</u> <u>0000</u> <u>0100</u> <u>0000</u> <u>0000</u> <u>0000</u> <u>0000</u> <u>0000</u> => <u>00400000</u>]	
Packet Example	 Add_PCF_ACL_Rule.pcap	

Example	delete an Access Rule	
CLI	config access_profile profile_id 1 delete access_id 1	
SNMP	CMD	snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.9.3.7.1.18.1.1 i 6
	Description	1 = PCF profile ID 1
		1 = PCF Access Rule ID 1
	6 = Action "destroy(6)"	
Packet Example	 Delete_PCF_ACL_Rule.pcap	

Relative OIDs

ACLMGMT-MIB: swAclMaskMgmt → swACLPktContMaskOptionTable → 1.3.6.1.4.1.171.12.9.2.8

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
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	The ID of the ACL mask entry, unique to the mask list. The maximum value of this object depends on the device.

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 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the state of chunk3.

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 : 0..31
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content offset of chunk3.

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 : 4..4
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content mask of chunk3.

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 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the state of chunk4.

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 : 0..31
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content offset of chunk4.

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 : 4..4
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	Specifies the frame content mask of chunk4.

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) 8 : ismvlan(8) 9 : dhcp-relay(9) 10 : pppoe(10) 11 : arp-spoofing(11) 12 : bpdu-tunnel(12)
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	The owner of the ACL mask entry. The type of ACL entry created. ACL type entries can only be modified when being configured through the same type command. For example, IP-MAC Binding entries can only be modified or deleted through the IP-MAC Binding configurations or commands.

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 number of unused rule entries of this IP profile entry.

Object name	swACLPktContMaskOptionProfileName
Object ID	1.3.6.1.4.1.171.12.9.2.8.1.17
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Create
Status	Current
Value list	1 : 1..32
Parent node	swACLPktContMaskOptionEntry
First child	None
Description	The name of the ACL mask entry unique to the mask list.

ACLMGMT-MIB: swAclRuleMgmt → swACLpktContRuleOptionTable → 1.3.6.1.4.1.171.12.9.3.7

Object name	swACLpktContRuleOptionProfileID
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.1
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	The ID of the ACL mask entry, which is unique to the mask list. The maximum value of this object depends on the device.

Object name	swACLpktContRuleOptionAccessID
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.2
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..65535
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	The ID of the ACL rule entry in relation to the swACLpktContRuleProfileID. When row creation is set to 0, access ID is automatically created for the ports in the swACLpktContRulePort to create rule entries for swACLpktContRulePort accordingly. Set to 1-65535 indicates to create swACLpktContRuleRepDscptate the exact access ID for the swACLpktContRulePort. The swACLpktContRulePort must be set to one port only, otherwise the row creation will fail.

Object name	swACLpktContRuleOffsetChunk1OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.3
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..31
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Displays the frame content offset of chunk1.

Object name	swACLpktContRuleOffsetChunk1Content
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.4
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4.4
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Specifies the frame content of chunk1.

Object name	swACLpktContRuleOffsetChunk2OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.5
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..31
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Displays the frame content offset of chunk2.

Object name	swACLpktContRuleOffsetChunk2Content
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.6
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4.4
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Specifies the frame content of chunk2.

Object name	swACLPktContRuleOffsetChunk3OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.7
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..31
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Displays the frame content offset of chunk3.

Object name	swACLPktContRuleOffsetChunk3Content
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.8
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4..4
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies the frame content of chunk3.

Object name	swACLPktContRuleOffsetChunk4OffsetValue
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.9
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..31
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Displays the frame content offset of chunk4.

Object name	swACLPktContRuleOffsetChunk4Content
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.10
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	OCTET STRING
Access	Read-Create
Status	Current
Value list	1 : 4..4
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies the frame content of chunk4.

Object name	swACLPktContRuleOptionEnablePriority
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.11
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies that the access rule will only apply to packets with this priority value.

Object name	swACLPktContRuleOptionPriority
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.12
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..7
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies that the priority will change for the packets while the swACLPktContRuleReplacePriority is enabled.

Object name	swACLPktContRuleOptionReplacePriority
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.13
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies if the switch will change priorities of packets that match the access profile 802.1p priority tag or not.

Object name	swACLPktContRuleOptionEnableReplaceDscp
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.14
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies if the switch will change priorities of packets that match the access profile DSCP field or not. Replace DSCP and replace ToS precedence can not both be supported.

Object name	swACLPktContRuleOptionRepDscp
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.15
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..63
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies a value to be written to the DSCP field of an incoming packet that meets the criteria specified in the first part of the command. This value will over-write the value in the DSCP field of the packet.

Object name	swACLpktContRuleOptionPermit
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.16
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : deny(1) 2 : permit(2) 3 : mirror(3)
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	This object indicates if the result of the packet examination is 'permit' or 'deny'. The default is 'permit'. permit - Specifies that packets that match the access profile are permitted to be forwarded by the switch. deny - Specifies that packets that match the access profile are not permitted to be forwarded by the switch and will be filtered. mirror - Specifies that the packets that match the access profile are copied to the mirror port. Note: The ACL mirror function will function after mirror is enabled and a mirror port has been configured.

Object name	swACLpktContRuleOptionRowStatus
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.18
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	swACLpktContRuleOptionEntry
First child	None
Description	This object indicates the status of this entry.

Object name	swACLpktContRuleOptionPort
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.17
Module	ACLMGMT-MIB
Base syntax	Octet String
Composed syntax	PortList
Access	Read-Create
Status	Current
Value list	1 : 0..127
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Specifies that the access rule will only apply to port(s). This object and swACLpktContRuleOptionVID can not be set together.

Object name	swACLpktContRuleOptionOwner
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.19
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) 8 : ismvlan(8) 9 : dhcp-relay(9) 10 : pppoe(10) 11 : arp-spoofing(11) 12 : bpdutunnel(12)
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	The owner of the ACL rule entry. Only owners can modify this entry.

Object name	swACLpktContRuleOptionRxRate
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.20
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Parent node	swACLpktContRuleOptionEntry
First child	None
Description	Specifies the rx-rate, 0 denotes no_limit. The maximum value of this object depends on the device.

Object name	swACLPktContRuleOptionEnableReplaceTosPrecedence
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.21
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies if the switch will change priorities of packets that match the access profile ToS precedence field or not. Replace DSCP and replace ToS precedence can not both be supported.

Object name	swACLPktContRuleOptionRepTosPrecedence
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.22
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..7
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies a value to be written to the ToS precedence field of an incoming packet that meets the criteria specified in the first part of the command. This value will over-write the value in the ToS precedence field of the packet.

Object name	swACLPktContRuleOptionVID
Object ID	1.3.6.1.4.1.171.12.9.3.7.1.23
Module	ACLMGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Create
Status	Current
Value list	1 : 0..4094
Parent node	swACLPktContRuleOptionEntry
First child	None
Description	Specifies this rule only applies to the specified VLAN. There are two conditions: 1. only the portlist that belongs to this VLAN will be included; 2. packets must belong to this VLAN. This object and swACLPktContRuleOptionPort can not be set together. When you set swACLPktContRuleOptionPort, the value of this object will automatically change to 0. And this object can not be set 0.