

How to configure link-aggregation via SNMP (DES-3028/52)

The related OID located in **swL2MgmtMIB**

Following is the related OID for DES-3028/52 series

1.3.6.1.4.1.171.11.63.6.2	DES-3028
1.3.6.1.4.1.171.11.63.7.2	DES-3028P
1.3.6.1.4.1.171.11.63.8.2	DES-3052
1.3.6.1.4.1.171.11.63.9.2	DES-3052P
1.3.6.1.4.1.171.11.63.11.2	DES-3028G

Take DES-3028 for example

Create link aggregation in static mode

master port 10

member port 10-11

Algorithm MAC_source

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.63.6.2.4.3.1.2.1 i 10 1.3.6.1.4.1.171.11.63.6.2.4.3.1.3.1 x
0060000000000000 1.3.6.1.4.1.171.11.63.6.2.4.3.1.4.1 i 1 1.3.6.1.4.1.171.11.63.6.2.4.3.1.6.1 i 4
1.3.6.1.4.1.171.11.63.6.2.4.4.0 i 2
```

```
Link Aggregation Algorithm = MAC_source
Group ID      : 1
Type          : TRUNK
Master Port   : 10
Member Port   : 10-11
Active Port   :
Status        : Disabled
Flooding Port : 0
Total Entries : 1
```

Enable Link-aggregation status

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.63.6.2.4.3.1.6.1 i 1
```

```
Link Aggregation Algorithm = MAC_source
Group ID      : 1
Type          : TRUNK
Master Port   : 10
Member Port   : 10-11
Active Port   :
Status        : Enabled
Flooding Port : 0
Total Entries : 1
```

Create link aggregation in LACP mode

master port 10

member port 10-11

Algorithm MAC_source

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.63.6.2.4.3.1.2.1 i 10 1.3.6.1.4.1.171.11.63.6.2.4.3.1.3.1 x
0060000000000000 1.3.6.1.4.1.171.11.63.6.2.4.3.1.4.1 i 2 1.3.6.1.4.1.171.11.63.6.2.4.3.1.6.1 i 4
1.3.6.1.4.1.171.11.63.6.2.4.4.0 i 2
```

```
Link Aggregation Algorithm = MAC_source

Group ID      : 1
Type          : LACP
Master Port   : 10
Member Port   : 10-11
Active Port   :
Status        : Disabled
Flooding Port : 0

Total Entries : 1
```

Enable Link-aggregation status

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.63.6.2.4.3.1.6.1 i 1
```

```
Link Aggregation Algorithm = MAC_source

Group ID      : 1
Type          : LACP
Master Port   : 10
Member Port   : 10-11
Active Port   :
Status        : Enabled
Flooding Port : 0

Total Entries : 1
```

Related OID

The screenshot shows a network management interface with a tree view on the left and a detailed view on the right. The tree view shows the following structure:

- swL2TrunkMgmt
 - swPortTrunkMaxEntries
 - swPortTrunkMaxPortMembers
 - swPortTrunkTable
 - swPortTrunkEntry
 - swPortTrunkIndex
 - swPortTrunkMasterPort
 - swPortTrunkPortList
 - swPortTrunkType
 - swPortTrunkActivePort
 - swPortTrunkState
 - swPortTrunkFloodingPort
 - swL2TrunkAlgorithm
 - swL2TrunkLACPPortTable
 - swL2TrunkLACPPortEntry
 - swL2TrunkLACPPortIndex
 - swL2TrunkLACPPortState
 - swL2TrunkVLANTable
 - swL2TrunkVLANEntry
 - swL2TrunkVLANPort
 - swL2TrunkVLANState

The detailed view on the right shows the following information for the selected object:

Object name	swL2TrunkMgmt
Object ID	1.3.6.1.4.1.171.11.63.6.2.4
Module	DES3028-L2MGMT-MIB
Base syntax	Object Identifier
Access	Not_Accessible
Status	Mandatory
Parent node	swL2MgmtMIB
First child	swPortTrunkMaxEntries

	Object name	swPortTrunkMaxEntries
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	Integer32
	Access	Read-Only
	Status	Current
	Parent node	swL2TrunkMgmt
	First child	None
	Description	The max entries of the swPortTrunkTable

	Object name	swPortTrunkMaxPortMembers
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.2
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	Integer32
	Access	Read-Only
	Status	Current
	Parent node	swL2TrunkMgmt
	First child	None
	Description	The max number of ports allowed in a trunk.

	Object name	swPortTrunkTable
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence Of swPortTrunkEntry
	Access	Not_Accessible
	Status	Current
	Sequence	1:swPortTrunkIndex - Integer 2:swPortTrunkMasterPort - Integer 3:swPortTrunkPortList - Octet String 4:swPortTrunkType - Integer 5:swPortTrunkActivePort - Octet String 6:swPortTrunkState - Integer 7:swPortTrunkFloodingPort - Integer
	Parent node	swL2TrunkMgmt
	First child	swPortTrunkEntry
	Description	This table specifies the port membership for each logical link.

	Object name	swPortTrunkEntry
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence
	Access	Not_Accessible
	Status	Current
	Index	1.swPortTrunkIndex
	Parent node	swPortTrunkTable
	First child	swPortTrunkIndex
	Description	A list of information that specifies which port group forms a single logical link.

	Object name	swPortTrunkIndex
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	Integer32
	Access	Read-Only
	Status	Current
	Value list	1 : 1..3
	Parent node	swPortTrunkEntry
	First child	None
Description	The index of logical port trunk.	

	Object name	swPortTrunkMasterPort
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.2
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	Integer32
	Access	Read-Create
	Status	Current
	Parent node	swPortTrunkEntry
	First child	None
	Description	The object indicates the master port number of the port trunk entry. The first port of the trunk is implicitly configured to be the master logical port. When using a Port Trunk, you can not configure the other ports of the group except the master port. Their configuration must be the same as the master port (e.g. speed, duplex, enabled/disabled, flow control, and so on).

	Object name	swPortTrunkPortList
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.3
	Module	DES3028-L2MGMT-MIB
	Base syntax	Octet String
	Composed syntax	PortList
	Access	Read-Create
	Status	Current
	Value list	1 : 0..127
	Parent node	swPortTrunkEntry
	First child	None
Description	Indicate member ports of a logical trunk.	

	Object name	swPortTrunkType
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.4
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Create
	Status	Current
	Value list	1 : static(1) 2 : lacp(2)
	Parent node	swPortTrunkEntry
	First child	None
Description	This object indicates the type of this entry.	

	Object name	swPortTrunkActivePort
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.5
	Module	DES3028-L2MGMT-MIB
	Base syntax	Octet String
	Composed syntax	PortList
	Access	Read-Only
	Status	Current
	Value list	1 : 0..127
	Parent node	swPortTrunkEntry
	Description	This object indicates the active ports of this entry.

	Object name	swPortTrunkState
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.6
	Module	DES3028-L2MGMT-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	swPortTrunkEntry
	Description	This object indicates the status of this entry. when the state is CreatAndGo (4),the type of trunk is static (1); when the state is CreatAndWait (5), the type of trunk is lacp(2).

	Object name	swPortTrunkFloodingPort
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.3.1.7
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	Integer32
	Access	Read-Only
	Status	Current
	Parent node	swPortTrunkEntry
	First child	None
	Description	The flooding port of every trunk.

	Object name	swL2TrunkAlgorithm
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.4
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : other(1) 2 : mac-source(2) 3 : mac-destination(3) 4 : mac-source-dest(4)
	Parent node	swL2TrunkMgmt
	Description	This object configures part of the packet to be examined by the switch when selecting the egress port for transmitting load-sharing data.

	Object name	swL2TrunkLACPPortTable
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.5
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence Of swL2TrunkLACPPortEntry
	Access	Not_Accessible
	Status	Current
	Sequence	1:swL2TrunkLACPPortIndex - Integer 2:swL2TrunkLACPPortState - Integer
	Parent node	swL2TrunkMgmt
	First child	swL2TrunkLACPPortEntry
	Description	This table specifies which port group a set of ports (up to 8) is formed into a single logical link.

	Object name	swL2TrunkLACPPortEntry
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.5.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence
	Access	Not_Accessible
	Status	Current
	Index	1.swL2TrunkLACPPortIndex
	Parent node	swL2TrunkLACPPortTable
	First child	swL2TrunkLACPPortIndex
	Description	A list of information specifies which port group a set of ports (up to 8) is formed into a single logical link.

	Object name	swL2TrunkLACPPortIndex
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.5.1.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Only
	Status	Current
	Value list	1 : 0..65535
	Parent node	swL2TrunkLACPPortEntry
	First child	None
Description	The index of the logical port LACP.	

	Object name	swL2TrunkLACPPortState
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.5.1.2
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : active(1) 2 : passive(2)
	Parent node	swL2TrunkLACPPortEntry
	First child	None
Description	The state of the logical port LACP.	

	Object name	swL2TrunkVLANTable
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.6
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence Of swL2TrunkVLANEntry
	Access	Not_Accessible
	Status	Current
	Sequence	1:swL2TrunkVLANPort - Integer 2:swL2TrunkVLANState - Integer
	Parent node	swL2TrunkMgmt
	First child	swL2TrunkVLANEntry
	Description	This table is used to manage the VLAN trunking feature of the device.

	Object name	swL2TrunkVLANEntry
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.6.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Sequence
	Access	Not_Accessible
	Status	Current
	Index	1.swL2TrunkVLANPort
	Parent node	swL2TrunkVLANTable
	First child	swL2TrunkVLANPort
	Description	This object is used to configure the VLAN trunking settings for each port.

	Object name	swL2TrunkVLANPort
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.6.1.1
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Only
	Status	Current
	Value list	1 : 0..65535
	Parent node	swL2TrunkVLANEntry
	First child	None
Description	This object indicates the port being configured.	

	Object name	swL2TrunkVLANState
	Object ID	1.3.6.1.4.1.171.11.63.6.2.4.6.1.2
	Module	DES3028-L2MGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : enabled(1) 2 : disabled(2)
	Parent node	swL2TrunkVLANEntry
	First child	None
Description	The state of the logical port LACP.	