

How to check the status of internal/external (redundant) power via SNMP

Object name	swPowerTable
Object ID	1.3.6.1.4.1.171.12.11.1.6
Module	EQUIPMENT-MIB
Base syntax	Sequence Of swPowerEntry
Access	Not_Accessible
Status	Current
Sequence	1:swPowerUnitIndex - Integer 2:swPowerID - Integer 3:swPowerStatus - Integer
Parent node	swEquipment
First child	swPowerEntry
Description	A list of power information values.

MIB: D-Link-Common-Mgmt → equipment.MIB

Step1) check the Power ID of internal/external power supply by following SNMP:

```
snmpwalk -v2c -c public 10.90.90.90 1.3.6.1.4.1.171.12.11.1.6.1.2
```

```
C:\>snmpwalk -v2c -c public 10.90.90.90 1.3.6.1.4.1.171.12.11.1.6.1.2
EQUIPMENT-MIB::swPowerID.1.1 = INTEGER: 1
EQUIPMENT-MIB::swPowerID.1.2 = INTEGER: 2
```

Object name	swPowerID
Object ID	1.3.6.1.4.1.171.12.11.1.6.1.2
Module	EQUIPMENT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..65535
Parent node	swPowerEntry
First child	None
Description	Indicates ID of the power 1 : main power 2 : redundant power .

So now you know 1.1 is for main power (internal), and 1.2 is for redundant power (external).

Step2) Check the status of power supply:

- CLI (DES-3528 for example):

show device_status

```
DES-3528:admin#show device_status
Command: show device_status

Internal Power: Active
External Power: Fail
```

NOTE: if older device ex: DES-3526, you can 'show switch' to check the power supply status:

```
DES-3526:admin#show sw
Command: show switch

Device Type           : DES-3526 Fast-Ethernet Switch
Combo Port Type       : 1000Base-T + 1000Base-T
MAC Address           : 1C-AF-F7-71-2D-E0
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 5.00.011
Firmware Version      : Build 6.00.B54
Hardware Version      : A4
Serial Number         : DR2M4A3000008
Power Status          : Main - Normal, Redundant - Not Present
System Name           : D-Link
```

- SNMP:

snmpwalk -v2c -c public 10.90.90.90 1.3.6.1.4.1.171.12.11.1.6.1.3

```
C:\>snmpwalk -v2c -c public 10.90.90.90 1.3.6.1.4.1.171.12.11.1.6.1.3
EQUIPMENT-MIB::swPowerStatus.1.1 = INTEGER: working(3)
EQUIPMENT-MIB::swPowerStatus.1.2 = INTEGER: fail(4)
```

Note: 1.1 is main power (internal), 1.2 is redundant power (external).

Object name	swPowerStatus
Object ID	1.3.6.1.4.1.171.12.11.1.6.1.3
Module	EQUIPMENT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : other(0) 2 : lowVoltage(1) 3 : overCurrent(2) 4 : working(3) 5 : fail(4) 6 : connect(5) 7 : disconnect(6)
Parent node	swPowerEntry
First child	None
Description	Indicates the current power status. lowVoltage : The voltage of the power unit is too low. overCurrent: The current of the power unit is too high. working : The power unit is working normally. fail : The power unit has failed. connect : The power unit is connected but not powered on. disconnect : The power unit is not connected.