

# How to use NETSNMP

## Configure & Monitor Safeguard\_Engine in DGS-3100 series

The OIDs for configuring “Safeguard\_Engine” are defined in “DLINK-3100-SAFE-GUARD-MIB” ( [rlSafeGuard.mib](#) ).

### # rlSafeGuard

Module:	DLINK-3100-SAFE-GUARD-MIB
Name:	rlSafeGuard
Type:	MODULE-IDENTITY
OID:	1.3.6.1.4.1.171.10.94.89.131
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-product
Module:	DLINK-3100-SAFE-GUARD-MIB
Parent:	md
First child:	rlSafeGuardEnabled
Last updated:	July 11, 20 at 18:00 GMT (2007111800Z)
Organization:	Dlink, Inc.
Contact:	www.dlink.com
Revision 1:	
Date:	November 18, 2007 at 00:00 GMT (200711180000Z)
Description:	Initial revision.
Description:	Safe Guard MIBs

### # rlSafeGuardEnabled

Module:	DLINK-3100-SAFE-GUARD-MIB
Name:	rlSafeGuardEnabled
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.131.1
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-product
Module:	DLINK-3100-SAFE-GUARD-MIB
Parent:	rlSafeGuard
Next sibling:	rlSafeGuardStatus
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Default values:	1: false (name)
Description:	The scalar enables/disables Safeguard engine.

## # rISafeGuardStatus

Module: DLINK-3100-SAFE-GUARD-MIB	
Name:	rISafeGuardStatus
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.131.2
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-product
Module:	DLINK-3100-SAFE-GUARD-MIB
Parent:	rISafeGuard
Prev sibling:	rISafeGuardEnabled
Next sibling:	rISafeGuardCpuUtilizationUpper
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-only
Value list:	1: idle(0) 2: attack(1)
Description:	Returns the SafeGuard status.

## # rISafeGuardCpuUtilizationUpper

Module: DLINK-3100-SAFE-GUARD-MIB	
Name:	rISafeGuardCpuUtilizationUpper
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.131.3
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-product
Module:	DLINK-3100-SAFE-GUARD-MIB
Parent:	rISafeGuard
Prev sibling:	rISafeGuardStatus
Next sibling:	rISafeGuardCpuUtilizationLower
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Size list:	1: 1..100
Default values:	1: 70 (int)
Description:	The scalar defines CPU utilization percentage threshold for dete

## # rISafeGuardCpuUtilizationLower

Module: DLINK-3100-SAFE-GUARD-MIB	
Name:	rISafeGuardCpuUtilizationLower
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.131.4
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-product
Module:	DLINK-3100-SAFE-GUARD-MIB
Parent:	rISafeGuard
Prev sibling:	rISafeGuardCpuUtilizationUpper
Next sibling:	rISafeGuardBroadcastRateUpper
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Size list:	1: 1..100
Default values:	1: 20 (int)
Description:	The scalar defines CPU utilization percentage threshold for dete

## Step1. Enable Safeguard\_Engine.

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.1.0 i 1
```

```
DGS-3100# show safeguard_engine
safe Guard : Disable

C:\WINDOWS\system32\cmd.exe
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.1.0 i 1
SNMPv2-SMI::enterprises.171.10.94.89.89.131.1.0 = INTEGER: 1
C:\>

DGS-3100#
DGS-3100#
DGS-3100#
DGS-3100# show safeguard
Command: show
DGS-3100# show safeguard_engine
safe Guard : Enable
Rising Threshold (20%-100%) : 70
Falling Threshold (20%-100%): 20
Status : No attack
DGS-3100#
```

⇒ “1” for “Enable”

⇒ “2” for “Disable”

## Step2. Configure Rising Threshold from 70% to 80%.

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.3.0 i 80
```

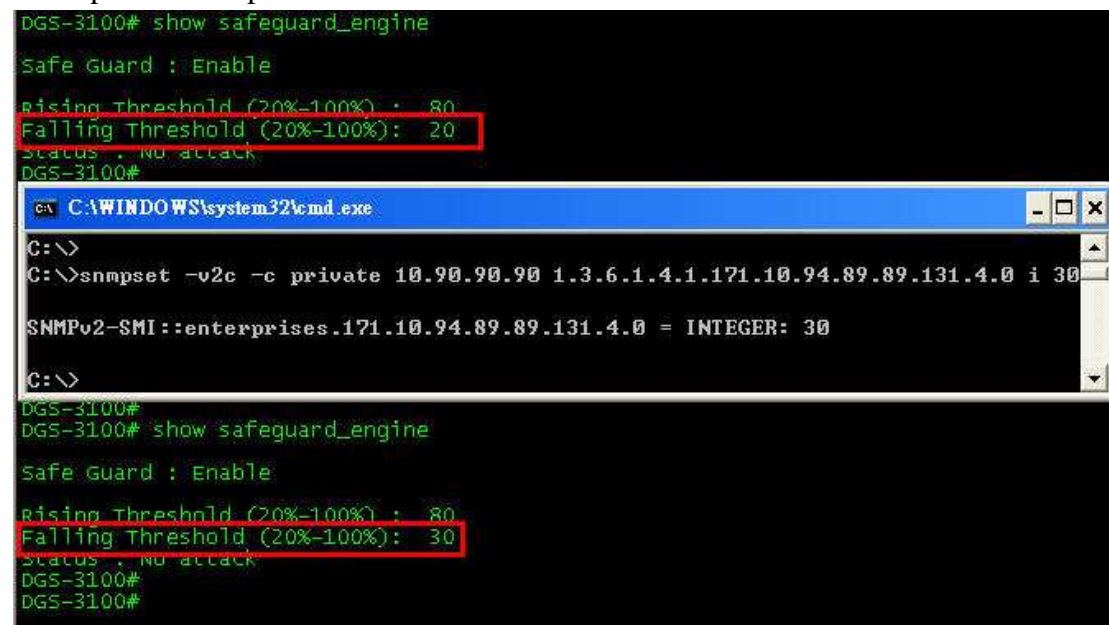
```
DGS-3100# show safeguard_engine
safe Guard : Enable
Rising Threshold (20%-100%) : 70
Falling Threshold (20%-100%): 20
Status : No attack
DGS-3100#

C:\WINDOWS\system32\cmd.exe
C:\>
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.3.0 i 80
SNMPv2-SMI::enterprises.171.10.94.89.89.131.3.0 = INTEGER: 80
C:\>

DGS-3100#
DGS-3100#
DGS-3100# show safeguard_engine
safe Guard : Enable
Rising Threshold (20%-100%) : 80
Falling Threshold (20%-100%): 20
Status : No attack
DGS-3100#
```

### Step3. Configure Falling Threshold from 20% to 30%.

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.4.0 i 30
```



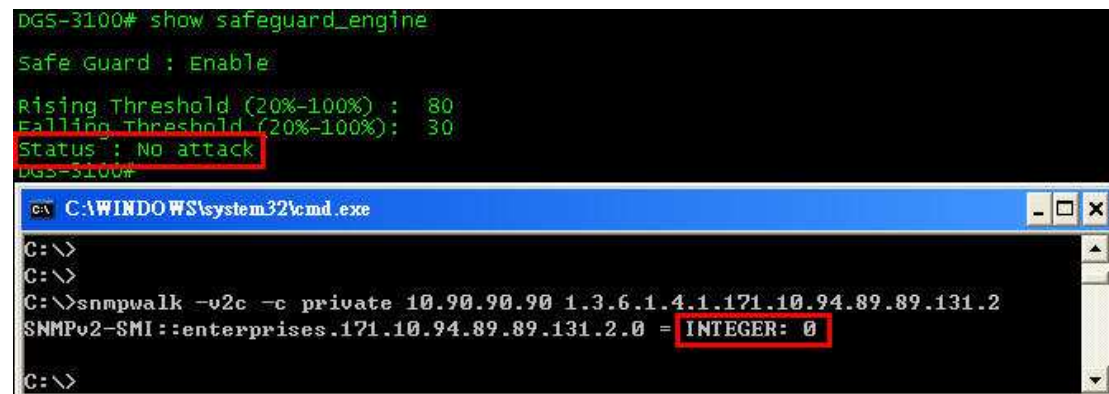
```
DGS-3100# show safeguard_engine
Safe Guard : Enable
Rising Threshold (20%-100%) : 80
Falling Threshold (20%-100%): 20
Status : NO attack
DGS-3100#

C:\WINDOWS\system32\cmd.exe
C:\>
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.4.0 i 30
SNMPv2-SMI::enterprises.171.10.94.89.89.131.4.0 = INTEGER: 30
C:\>

DGS-3100#
DGS-3100# show safeguard_engine
Safe Guard : Enable
Rising Threshold (20%-100%) : 80
Falling Threshold (20%-100%): 30
Status : NO attack
DGS-3100#
DGS-3100#
```

### Step4. Monitor Safeguard\_Engine status.

```
# snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.2
```



```
DGS-3100# show safeguard_engine
Safe Guard : Enable
Rising Threshold (20%-100%) : 80
Falling Threshold (20%-100%): 30
Status : NO attack
DGS-3100#

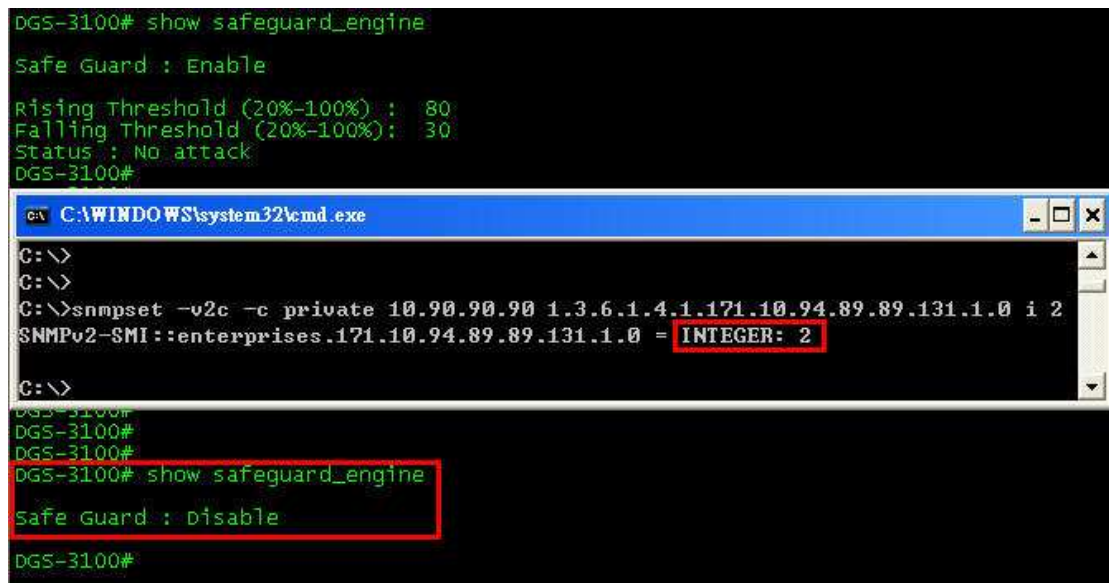
C:\WINDOWS\system32\cmd.exe
C:\>
C:\>
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.2
SNMPv2-SMI::enterprises.171.10.94.89.89.131.2.0 = INTEGER: 0
C:\>
```

⇒ “0” for “idle” which means no attack.

⇒ “1” for “Attack”

## Step5. Disable Safeguard\_Engine.

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.1.0 i 2
```



```
DGS-3100# show safeguard_engine
Safe Guard : Enable
Rising Threshold (20%-100%) : 80
Falling Threshold (20%-100%): 30
Status : No attack
DGS-3100#
C:\WINDOWS\system32\cmd.exe
C:\>
C:\>
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.131.1.0 i 2
SNMPv2-SMI::enterprises.171.10.94.89.89.131.1.0 = INTEGER: 2
C:\>
DGS-3100#
DGS-3100#
DGS-3100# show safeguard_engine
Safe Guard : Disable
DGS-3100#
```