

How to configure ERPS via SNMP

ERPS configuration example (use DES-3200-28 fw 1.60.B012 for the test):

```

config ipif System ipaddress 10.90.90.32/24
create vlan vlanid 3
config vlan vlanid 3 add tagged 3-4
1) create erps raps_vlan 3
2) config erps raps_vlan 3 ring_port west 3
3) config erps raps_vlan 3 ring_port east 4
4) config erps raps_vlan 3 protected_vlan add vlanid 1
5) config erps raps_vlan 3 rpl_port west
6) config erps raps_vlan 3 rpl_owner enable
7) enable erps
8) config erps log enable
9) config erps trap enable
    
```

SNMP command example:

1) CLI CMD	Create erps raps_vlan 3
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.3.1.1.100.3 i 4 3 = vlan id 3 4 = action "CreateAndGo"
Description	<pre> Object name swERPSMgmtRAPSRowStatus Object ID 1.3.6.1.4.1.171.12.78.3.1.1.100 Module ERPS-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 swERPSMgmtRAPSvlanEntry First child None Description This object indicates the RowStatus of this entry. </pre>

2) CLI CMD	config erps raps_vlan 3 ring_port west 3
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.3.1.1.2.3 i 3 1.3.6.1.4.1.171.12.78.3.1.1.100.3 i 1 3 = vlan id 3 3 = port 3 1 = action "Active"
Description	<pre> Object name swERPSMgmtRAPSWestPort Object ID 1.3.6.1.4.1.171.12.78.3.1.1.2 Module ERPS-MIB Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 0.65535 Parent node swERPSMgmtRAPSvlanEntry First child None Description This is one of the RPL owner ports. The RPL owner may block this port. The value 0 indicates the west port is a virtual channel. </pre>

swERPSMgmtRAPSRingAdminState	Object name	swERPSMgmtRAPSProtectionVlanRangeList1to64
swERPSMgmtRAPSRPLOwnerOperStatus	Object ID	1.3.6.1.4.1.171.12.78.3.1.1.16
swERPSMgmtRAPSProtectionVlanRangeList1to64	Module	ERPS-MIB
swERPSMgmtRAPSProtectionVlanRangeList65to128	Base syntax	Octet String
swERPSMgmtRAPSProtectionVlanRangeList129to192	Composed syntax	OCTET STRING
swERPSMgmtRAPSProtectionVlanRangeList193to256	Access	Read-Write
swERPSMgmtRAPSProtectionVlanRangeList257to320	Status	Current
swERPSMgmtRAPSProtectionVlanRangeList321to384	Value list	1 : 64.64
swERPSMgmtRAPSProtectionVlanRangeList385to448	Parent node	swERPSMgmtRAPSVlanEntry
swERPSMgmtRAPSProtectionVlanRangeList449to512	First child	None
swERPSMgmtRAPSPerWestPort	Description	This object indicates the VLAN range (1-512) that belong to the protected VLANs.
swERPSMgmtRAPSPerEastPort		
swERPSMgmtRAPSPerRPLPort		
swERPSMgmtRAPSPerRPLOwnerInnerState		

swERPSMgmtRAPSProtectionVlanRangeList1to64:

- This object indicates the VLAN range (1-512).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.16

swERPSMgmtRAPSProtectionVlanRangeList65to128:

- This object indicates the VLAN range (513-1024).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.17

swERPSMgmtRAPSProtectionVlanRangeList129to192:

- This object indicates the VLAN range (1025-1536).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.18

Description

swERPSMgmtRAPSProtectionVlanRangeList193to256:

- This object indicates the VLAN range (1537-2048).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.19

swERPSMgmtRAPSProtectionVlanRangeList257to320:

- This object indicates the VLAN range (2049-2560).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.20

swERPSMgmtRAPSProtectionVlanRangeList321to384:

- This object indicates the VLAN range (2561-3072).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.21

swERPSMgmtRAPSProtectionVlanRangeList385to448:

- This object indicates the VLAN range (3073-3584).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.22

swERPSMgmtRAPSProtectionVlanRangeList449to512:

- This object indicates the VLAN range (3585-4096).
- OID: 1.3.6.1.4.1.171.12.78.3.1.1.23

5) CLI CMD	config erps raps_vlan 3 rpl_port west																						
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.3.1.1.6.3 i 2 1.3.6.1.4.1.171.12.78.3.1.1.100.3 i 1 3 = vlan id 3 2 = west port 1 = action "Active"																						
Description	<table border="0"> <tr> <td>Object name</td> <td>swERPSMgmtRAPSRLPort</td> </tr> <tr> <td>Object ID</td> <td>1.3.6.1.4.1.171.12.78.3.1.1.6</td> </tr> <tr> <td>Module</td> <td>ERPS-MIB</td> </tr> <tr> <td>Base syntax</td> <td>Integer</td> </tr> <tr> <td>Composed syntax</td> <td>INTEGER</td> </tr> <tr> <td>Access</td> <td>Read-Write</td> </tr> <tr> <td>Status</td> <td>Current</td> </tr> <tr> <td>Value list</td> <td>1 : none(1) 2 : west(2) 3 : east(3)</td> </tr> <tr> <td>Parent node</td> <td>swERPSMgmtRAPSvlanEntry</td> </tr> <tr> <td>First child</td> <td>None</td> </tr> <tr> <td>Description</td> <td>When the port enable state is enabled, the RPL port's current port role is defined by the ERPS application.</td> </tr> </table>	Object name	swERPSMgmtRAPSRLPort	Object ID	1.3.6.1.4.1.171.12.78.3.1.1.6	Module	ERPS-MIB	Base syntax	Integer	Composed syntax	INTEGER	Access	Read-Write	Status	Current	Value list	1 : none(1) 2 : west(2) 3 : east(3)	Parent node	swERPSMgmtRAPSvlanEntry	First child	None	Description	When the port enable state is enabled, the RPL port's current port role is defined by the ERPS application.
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6) CLI CMD	config erps raps_vlan 3 rpl_owner enable																						
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.3.1.1.7.3 i 1 1.3.6.1.4.1.171.12.78.3.1.1.100.3 i 1 3 = vlan id 3 1 = enabled 1 = action "Active"																						
Description	<table border="0"> <tr> <td>Object name</td> <td>swERPSMgmtRAPSRLOwnerAdminState</td> </tr> <tr> <td>Object ID</td> <td>1.3.6.1.4.1.171.12.78.3.1.1.7</td> </tr> <tr> <td>Module</td> <td>ERPS-MIB</td> </tr> <tr> <td>Base syntax</td> <td>Integer</td> </tr> <tr> <td>Composed syntax</td> <td>INTEGER</td> </tr> <tr> <td>Access</td> <td>Read-Write</td> </tr> <tr> <td>Status</td> <td>Current</td> </tr> <tr> <td>Value list</td> <td>1 : enabled(1) 2 : disabled(2)</td> </tr> <tr> <td>Parent node</td> <td>swERPSMgmtRAPSvlanEntry</td> </tr> <tr> <td>First child</td> <td>None</td> </tr> <tr> <td>Description</td> <td>The administrative value of the RPL owner state. The RPL owner is an Ethernet Ring Node adjacent to the RPL that is responsible for blocking its end of the RPL under normal conditions.</td> </tr> </table>	Object name	swERPSMgmtRAPSRLOwnerAdminState	Object ID	1.3.6.1.4.1.171.12.78.3.1.1.7	Module	ERPS-MIB	Base syntax	Integer	Composed syntax	INTEGER	Access	Read-Write	Status	Current	Value list	1 : enabled(1) 2 : disabled(2)	Parent node	swERPSMgmtRAPSvlanEntry	First child	None	Description	The administrative value of the RPL owner state. The RPL owner is an Ethernet Ring Node adjacent to the RPL that is responsible for blocking its end of the RPL under normal conditions.
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7) CLI CMD	enable erps
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.1.1.0 i 1 1 = enabled
Description	<pre> Object name swERPSAdminState Object ID 1.3.6.1.4.1.171.12.78.1.1 Module ERPS-MIB Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : enabled(1) 2 : disabled(2) Parent node swERPSCtrl First child None Description This object indicates the ERPS state of the bridge. </pre>

8) CLI CMD	config erps log enable
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.1.2.0 i 1 1 = enabled
Description	<pre> Object name swERPSLogState Object ID 1.3.6.1.4.1.171.12.78.1.2 Module ERPS-MIB Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : enabled(1) 2 : disabled(2) Parent node swERPSCtrl First child None Description This object indicates the ERPS log state of the bridge. </pre>

9) CLI CMD	config erps trap enable
SNMP CMD	snmpset -v2c -c private 10.90.90.32 1.3.6.1.4.1.171.12.78.1.3.0 i 1 1 = enabled
Description	<pre> Object name swERPSTrapState Object ID 1.3.6.1.4.1.171.12.78.1.3 Module ERPS-MIB Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : enabled(1) 2 : disabled(2) Parent node swERPSCtrl First child None Description This object indicates the ERPS trap state of the bridge. </pre>