

## Nexans Switches Frequently Asked Questions I Userport Configuration

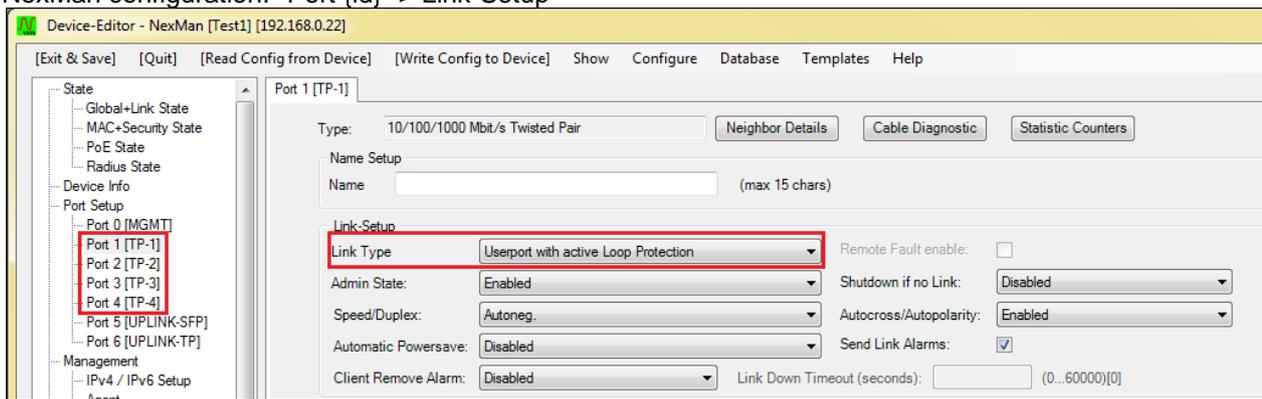
Version 1

To prevent a loop occurrence in the network such as short-circuiting two user ports, the Link Type “Userport with active Loop Protection” should be enabled on all user ports. With this function, the respective ports will automatically be disabled before a loop occurs. In the meantime, it is possible to enable the BPDU Guard on the Userports to protect the networks against undesired Spanning-Tree devices.

### Userport with active Loop Protection

The “Userport with active Loop Protection” function can be enabled on the Port Tabs in the Manager or via CLI.

NexMan configuration: Port {id} -> Link-Setup



CLI configuration: `in:interface <if-no> link-t:ype {us:erport|lo:op-protect|up:link-downlink}`

#### Description:

This configuration will prevent from a switching loop to crash the network. Loops can be caused by short-circuiting two ports or downstream hubs and switches.

When a loop occurs, specific Loop Protection packets will be sent over to this port and verified whether these packets are received on the same port or on another port, which also needs to be set to the corresponding link type. If so, the port is disabled and Loop Disabled will be displayed in the Admin State.

#### IMPORTANT:

In order to detect loops reliably, the management VLAN should not be enabled on the corresponding ports.

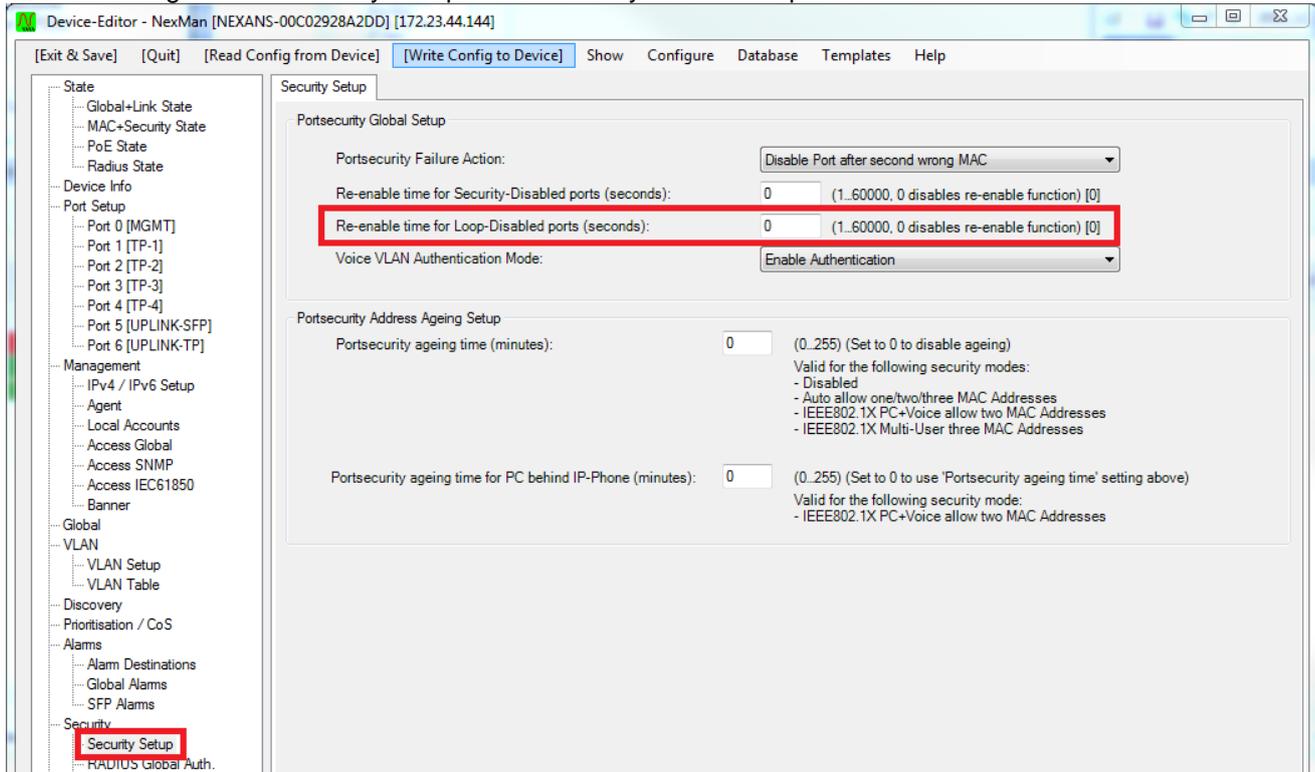
#### Note:

This function will cause an additional quiet time of approximately 5 seconds after a Link-Up. During this time the switch is already sending Loop Protection packets, however, any other traffic will be blocked, in order to prevent a temporary loop in case of a short-circuit.

## Re-Enable Time for Loop-Disabled ports

Loop disabled Ports can be automatically re-enabled by using the “Re-Enable time for Loop-Disabled ports”.

NexMan configuration: Security Setup -> Portsecurity Global Setup



CLI configuration: `co:nfig r:e-enable l:oop-disabled (0...60000)`

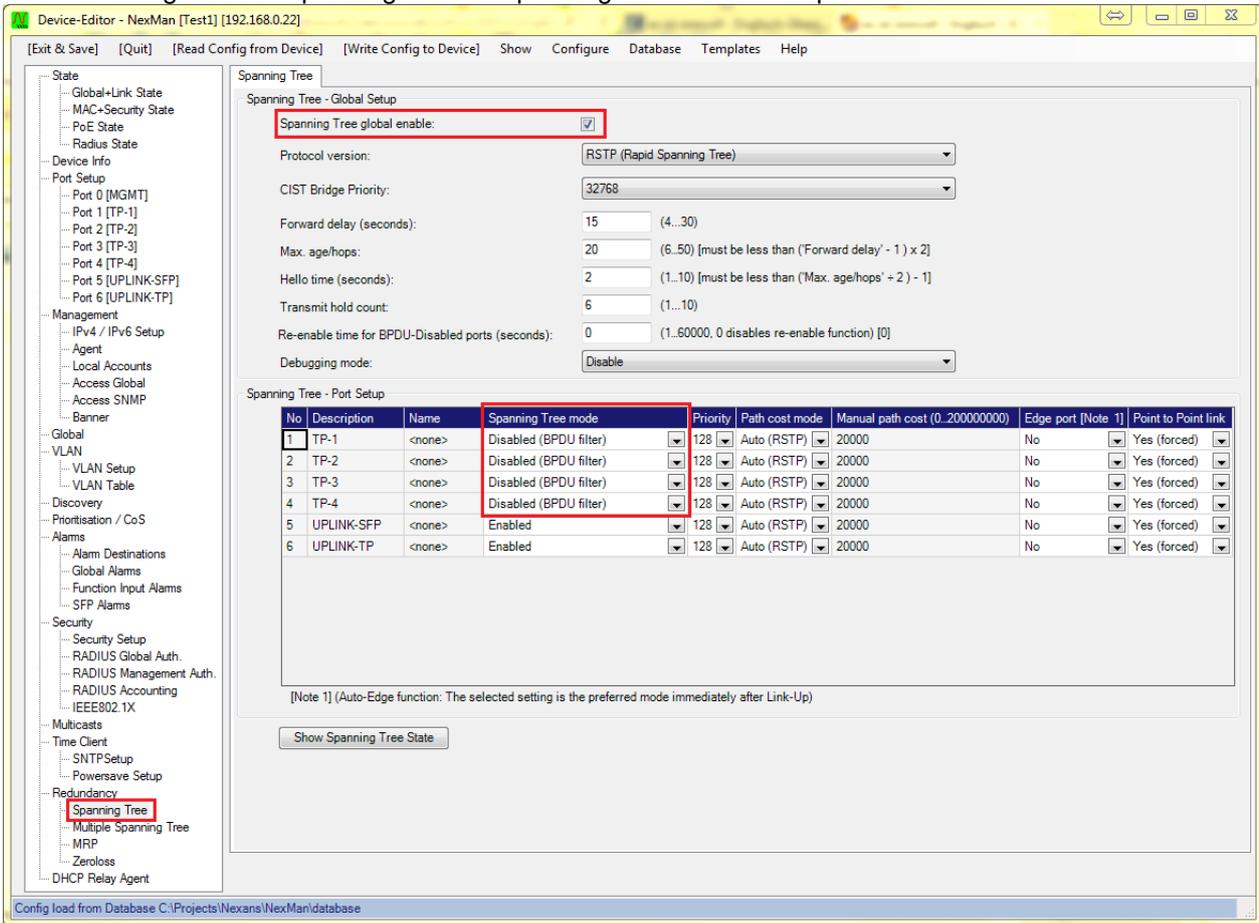
### Description:

Disabled ports can automatically be re-enabled after “Re-Enable time for Loop-Disabled Ports” has been configured. The time value can be set in the range from 1 to 60000 seconds.

# BPDU (Bridge Protocol Data Unit) Guard

The BPDU Guard can be enabled on the “Spanning Tree” tab. There are two modes available: “Disabled (BPDU filter)” and “Disabled (BPDU disables Port)”.

NexMan configuration: Spanning Tree -> Spanning Tree – Port Setup



CLI configuration: `rs:tp mo:de {e:nabled|d:disabled}`  
 Valid values for {setup} are:  
 {e:nable|l:oop-protect-enable|d:isable|b:pdu-disable}

### Description:

#### Disabled (BPDU filter):

The port does not send any BPDU packets and the received BPDU packet are ignored.

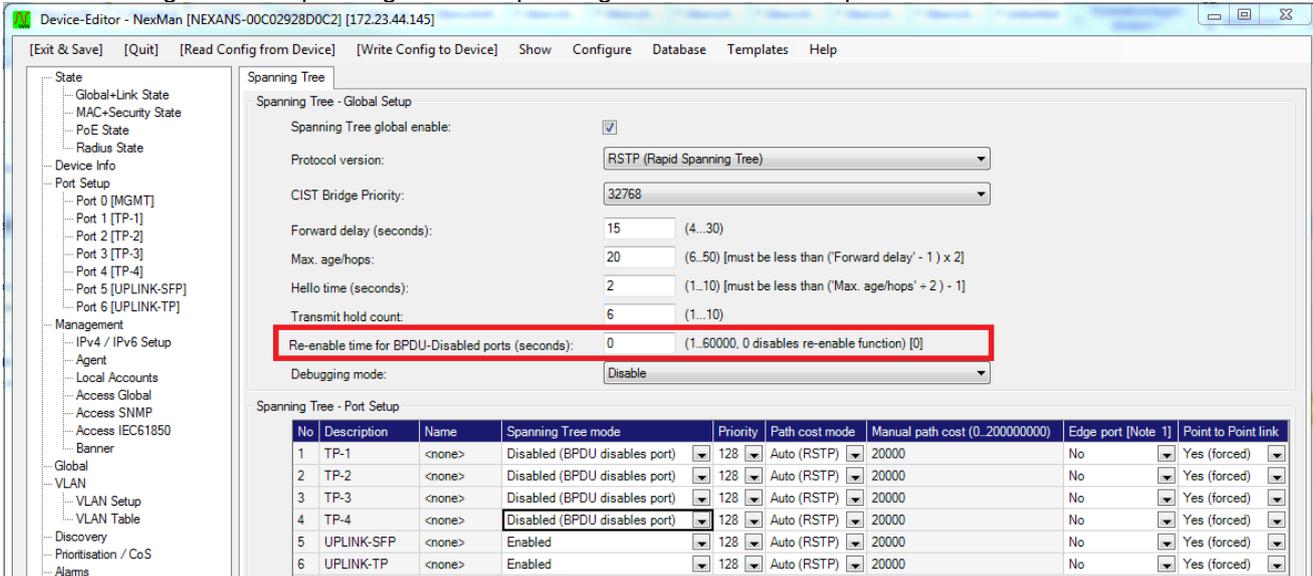
#### Disabled (BPDU disables Port):

The port does not send any BPDU packets and the received BPDU packets will disable the port. In this case BPDU-DISABLED will be indicated as the port’s link status and a Port Error Disable alarm will be sent.

# Re-Enable Time for BPDU-DISABLED ports

BPDU disabled Ports can be automatically Re-Enabled by using the “Re-Enable time for BPDU-Disabled ports”.

NexMan configuration: Spanning Tree -> Spanning Tree – Global Setup



CLI configuration: `co:nfig r:e-enable b:pdu-disable (0...60000)`

### Description:

BPDU-DISABLED ports can automatically be re-enabled after “Re-Enable time for BPDU-Disabled Ports” has been configured. The time value can be set in the range from 1 to 60000 seconds.

### IMPORTANT:

If Spanning Tree is globally disabled, the switch will be transparent for the BPDU packets and any received BPDU packets will be forwarded to all ports of the same VLAN.