

# FS S3700-24T4F Port Additional Characteristics CLI User Guide

Home » FS » FS S3700-24T4F Port Additional Characteristics CLI User Guide





S3700-24T4F Port Additional Characteristics CLI **User Guide** Model: S3700-24T4F

# **Chapter 1 Port Additional Characteristics Configuration Commands**

### **Contents**

- **1 Configuring Port Isolation**
- 2 Configuring the Storm Control Command
- 3 Configuring Switch port Rate Limit
- **4 Configuring Port Loop Check**
- 5 Configuring MAC Address Learning
- **6 Configuring Port Security**
- 7 Configuring Port Binding
- 8 SVL/IVL
- 9 Configuring Link Scan Commands
- 10 Configuring the Enhanced Link State Detection Command
- 11 Configuring System MTU
- 12 Documents / Resources
- 12.1 References
- 13 Related Posts

# **Configuring Port Isolation**

# 1.1.1 port-protected **Syntax**

To configure a port isolation group, run the following command. To return to the default setting, use the no form of this command.

port-protected group-id [no] port-protected group-id

#### **Parameters**

Parameters	Description
group-id	Configures port isolation group 1 to 28.

#### **Default Value**

None

### **Usage Guidelines**

The command can be used to configure the group isolation in global configuration mode.

#### Example

The following example shows how to set ID of the isolation group to 1. Switch config#port-protected 1

# 1.1.2 Description

#### **Syntax**

To set the port isolation group description, run the following command. To delete the description, use the no form of this command.

description word no description

#### **Parameters**

Parameters	Description
Word	Sets the port isolation description. The description covers 31 characters at most.

#### **Default Value**

None

# **Usage Guidelines**

The command can be used to describe the group in global configuration mode.

#### Example

The following example shows how to set ID of the isolation group g 1 to 1. Switch-config-p 1 #description g 1

# 1.1.3 switchport protected

#### Syntax

To set port isolation, run the following command. To return to the default setting, use the no form of this command. switchport protected <group-id> no switch port protected

#### **Parameters**

Parameters	Description
group-id	Selects the port isolation group 1 to 28.

# **Default Value**

None

# **Usage Guidelines**

The command must be configured in layer-2 port configuration mode. The system configures isolation not based on groups by default and group-id doesn't need to configure at the end. If configures isolation based on groups, it should be configured in global mode. Only deleting the isolation on all ports can you reselect isolation based on groups or not based on groups.

# **Example**

The following example shows how to set isolation of port g0/1 not based on groups.

Switch\_config\_g0/1 #switch port protected

# **Configuring the Storm Control Command**

### **Syntax**

To configure the storm control function of the port, run the following command. To return to the default setting, use the no form of this command. storm-control {broadcast I multicast I unicast} threshold count no storm-control {broadcast I multicast I unicast} threshold

#### **Parameters**

Parameters	Description
broadcast I multicast I unicast	Defines broadcast/multicast/unicast storm control.
count	Defines the threshold flux of the storm. 1-65535

#### **Default Value**

The storm control function is disabled by default.

#### **Usage Guidelines**

The command must be configured in L2 port configuration mode.

#### **Example**

The following example shows how to set the unknown unicast-frame storm to 20pps on port g0/1.

Switch config#interface g0/1

Switch\_config\_g0/1 #storm-control unicast threshold 20

# **Configuring Switch port Rate Limit**

# **Syntax**

To configure the rate limit for a port, run this command. To return to the default setting, use the no form of this command.

switchport rate-limit {band ] bandwidth percent} { ingress]egress} no switchport rate-limit{ ingress[egress}

### **Parameters**

Parameters	Description
Band	Means the rate of the flow. The step length is 64Kbps.
percent	Means the percentage of the flow. unit 1 %
ingress	Functions on the ingress port.
egress	Functions on the egress port.

# **Default Value**

The rate of the port is not limited by default.

### **Usage Guidelines**

Layer-2 port configuration mode

# **Example**

The following example shows how to set the incoming flow rate to 1 Mon port g0/1.

Switch config#interface g0/1 Switch config g0/1 #switch port rate-limit 16 ingress

# **Configuring Port Loop Check**

# **Syntax**

To configure the interval for a port to transmit the loop check packets, run keepalive second. To return to the default setting, use the no form of this command.

keepalive second [no] keepalive second

### **Parameters**

Parameters	Description
Second	Interval, unit: second.

#### **Default Value**

12 seconds

#### **Usage Guidelines**

The command must be configured in physical interface configuration mode.

#### **Example**

The following example shows how to set the transmission interval to 10 seconds on interface g0/1.

Switch\_config#interface g0/1

Switch\_config\_g0/1#keepalive10

# **Configuring MAC Address Learning**

# **Syntax**

To configure the MAC address learning for a port, run switchport disable-learning. To return to the default setting, use the no form of this command.

switch port disable-learning [no] switch port disable-learning

#### **Parameters**

None

#### **Default Value**

The MAC address learning is enabled by default.

# **Usage Guidelines**

The command must be configured in physical interface configuration mode.

### Example

The following example shows how to disable the MAC address learning on interface g0/1.

Switch\_config#interface g0/1

Switch\_config\_g0/1 #switchport disable-learning

# **Configuring Port Security**

The port security configuration commands include:

- · switchport port-security mode
- · switch port port-security dynamic
- · switch port port-security static
- · switch port port-security sticky

### 1.6.1 switchport port-security mode

# **Syntax**

To set the interface security mode, run the following command. To return to the default setting, use the no form of this command.

switch port port-security mode {dynamic I static accept/reject I sticky} [no] switch port port-security mode

### **Parameters**

None

### **Default Value**

The port security is disabled by default.

#### **Usage Guidelines**

The command must be configured in physical interface configuration mode.

#### **Example**

The following example shows how to set interface g0/1 to the dynamic port security mode.

Switch\_config#inter g0/1

### 1.6.2 switch port port-security dynamic

# **Syntax**

To configure the maximum number of MAC addresses when the port is in dynamic security mode, run switchport port-security dynamic maximum. To return to the

default setting, use the no form of this command.

switch port port-security dynamic maximum dynamic\_number [no] switch port port-security dynamic maximum

#### **Parameters**

Parameters	Description	Value Range
dynamic_number	The maximum address number that can be learned	Jan-48

#### **Default Value**

The number of MAC addresses that can be learned is 1- the maximum number of items in the MAC address table.

#### **Usage Guidelines**

The command must be configured in physical interface configuration mode.

#### Example

The following example shows how to set the number of that can be learned MAC addresses of port g0/1 to 10. Switch\_config#inter g0/1

Switch config g0/1 # switch port port-security dynamic maximum 10

# 1.6.3 switchport port-security static mac-address

#### **Syntax**

To configure a static security MAC address, run switchport port-security static mac-address H.H.H. To return to the default setting, use the no form of this command.

switch port port-security static mac-address H.H.H [no] switch port port-security static mac-address H.H.H

#### **Parameters**

None

#### **Default Value**

None

### **Usage Guidelines**

The command must be configured in physical interface configuration mode.

#### Example

The following example shows how to set MAC address 0001.0002.0003 to a static security MAC address.

Switch\_config#inter g0/1

Switch\_config\_g0/1 # switch port port-security static mac-address 1.2.3

# 1.6.4 switchport port-security sticky

### **Syntax**

To configure the sticky characteristic of MAC address, run the following command. To return to the default setting, use the no form of this command.

switchport port-security sticky {maximum sticky\_number] mac-address H.H.H] aging-time aging\_time I absolute-aging I inactivity-aging}

[no] switchport port-security sticky {maximum ] mac-address H.H.H] aging-time absolute-aging I inactivity-aging}[

### **Parameters**

Parameters	Description
sticky_number	The maximum address number that can be learned. The default is 100 and the value rang e is from 1 to 2048.
н.н.н	Mac Address
aging_time	aging time Unit: minute, the default value is O and the value range is Oto 100.

# **Default Value**

There is no sticky of mac address by default.

#### **Usage Guidelines**

The command must be configured in physical interface configuration mode.

# Example

The following example shows how to set mac: 4433.0002.0021 to the sticky mac.

Switch config#inter g0/1

Switch\_config\_g0/1 # switch port port-security sticky mac-address 4433.0002.0021

# **Configuring Port Binding**

# **Syntax**

To bind a MAC address to a

IP address, run switchport port-security bind|block {ip/arp|both-arp-ip ip-addr| ipv6 ipv6-addr| mac mac-addr }.

To cancel the address binding one by one or to exit the port binding state by cancelling all addresses on the port, run no switchport port-security bind]block {iplarp}

both-arp-ip ip-addr I ipv6 ipv6-addr I mac mac-addr}.

switchport port-security bind]block {ip]arp]both-arp-ip ip-addr] ipv6 ipv6-addr] mac mac-addr} no switchport port-security bind]block {iplarp] both-arp-ip ip-addr] ipv6 ipv6-addr] mac mac-addr}

#### **Parameters**

Parameters	Description	Value Range
ip-addr	IP address	A.B.C.D
ipv6-addr	Stands for the IPV6 address	X:X:X:XX
Mac-addr	Stands for the MAC address.	н.н.н

#### **Default Value**

None

### **Usage Guidelines**

It works in layer-2 port configuration mode.

The port binding function is forbidden by default. However, if one address is bound, the port is then in binding state unless you use the negative form of this command to clear all bound address items.

# Example

The following example shows how to bind IP address 1.2.3.4 to MAC address

0001.0001.1111 on interface g0/1 to decline the IP packets and ARP packets from the bound address.

Switch\_config#inter g0/1

Switch\_config\_g0/1 # switchport port-security block both-arp-ip 1.2.3.4 mac 0001.0001.1111

#### SVL/IVL

#### **Syntax**

To set SVL, run the following command.

[no]vlan shared-learning

#### **Parameters**

None

### **Default Value**

VLAN IVL on the port

# **Usage Guidelines**

This command is run in global configuration mode.

# **Example**

The following example shows how to set SVL.

Switch config#vlan shared-learning

# **Configuring Link Scan Commands**

#### **Syntax**

To set the scan interval of an interface, run the following command.

[no] Link scan [normal I fast] interval

#### **Parameters**

Parameters	Description
[normal I fast]	Normal means standard link scan mode. Fast means fast link scan mode.
interval	scan interval, unit 1 ms, 10-1000.

#### **Default Value**

The scan interval is SOOms in standard mode by default.

Fast mode, the default interval is 1 Oms.

# **Usage Guidelines**

This command is configured in global configuration mode. The Fast mode is mainly used for cooperating with the protocol, for instance, RSTP. The Normal mode is mainly used for finding up/down.

### **Example**

The following example shows how to set the scan interval of a switch to 20ms.

Link scan normal 20

# **Configuring the Enhanced Link State Detection Command**

### **Syntax**

To enable/disable the enhanced link state detection command, run the following command. [no] switchport enhanced-link

# Parameters

None

### **Default Value**

Disabled.

#### **Usage Guidelines**

The command must be configured in port configuration mode.

### Example

The following example shows how to enable the enhanced link state detection on interface g0/1:

Switch config#interface g0/1

Switch\_config\_g0/1 #switch port enhanced-link

# **Configuring System MTU**

# **Syntax**

To configure the value of system mtu, run the following command.

[no] system mtu mtu

### **Parameters**

Parameters	Description
mtu	Sets the value of system mtu, 1500-9216.

### **Default Value**

The default mtu is 1500 bytes.

### **Usage Guidelines**

This command is configured in global configuration mode.

#### Example

The following example shows how to set system mtu to 2000 bytes.

Switch#config



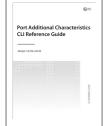
# https://www.fs.com

The information in this document is subject to change without notice.

FS has made all efforts to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty.

Copyright 2009-2022 FS.COM All Rights Reserved.

# **Documents / Resources**



FS S3700-24T4F Port Additional Characteristics CLI [pdf] User Guide S3700-24T4F Port Additional Characteristics CLI, S3700-24T4F, Port Additional Characteristics CLI, Characteristics CLI, CLI

# References

• **G** FS.com - Data Center, Enterprise, Telecom

Manuals+,