FL SWITCH 2000
FL WLAN 1100/2100

Command-line Interface (CLI) User manual

User manual

Order No. —

PHOENIX CONTACT
INSPIRING INNOVATIONS

User manual

FL CLI

2018-10-04

Designation: UM EN FL CLI

Revision: 00

Order No.: —

This user manual is valid for:

Please observe the following notes

User group of this manual

The use of products described in this manual is oriented exclusively to:

- Qualified electricians or persons instructed by them, who are familiar with applicable standards and other regulations regarding electrical engineering and, in particular, the relevant safety concepts.
- Qualified application programmers and software engineers, who are familiar with the safety concepts of automation technology and applicable standards.

Explanation of symbols used and signal words

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety measures that follow this symbol to avoid possible injury or death.

There are three different categories of personal injury that are indicated with a signal word.

DANGER This indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING This indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION This indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

This symbol together with the signal word **NOTE** and the accompanying text alert the reader to a situation which may cause damage or malfunction to the device, hardware/software, or surrounding property.

This symbol and the accompanying text provide the reader with additional information or refer to detailed sources of information.

How to contact us

Internet

Up-to-date information on Phoenix Contact products and our Terms and Conditions can be found on the Internet at:
phoenixcontact.com

Make sure you always use the latest documentation.
It can be downloaded at:
phoenixcontact.net/products

Subsidiaries

If there are any problems that cannot be solved using the documentation, please contact your Phoenix Contact subsidiary.
Subsidiary contact information is available at phoenixcontact.com.

Published by

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
32825 Blomberg
GERMANY

Should you have any suggestions or recommendations for improvement of the contents and layout of our manuals, please send your comments to:
tecdoc@phoenixcontact.com

General terms and conditions of use for technical documentation

Phoenix Contact reserves the right to alter, correct, and/or improve the technical documentation and the products described in the technical documentation at its own discretion and without giving prior notice, insofar as this is reasonable for the user. The same applies to any technical changes that serve the purpose of technical progress.

The receipt of technical documentation (in particular user documentation) does not constitute any further duty on the part of Phoenix Contact to furnish information on modifications to products and/or technical documentation. You are responsible to verify the suitability and intended use of the products in your specific application, in particular with regard to observing the applicable standards and regulations. All information made available in the technical data is supplied without any accompanying guarantee, whether expressly mentioned, implied or tacitly assumed.

In general, the provisions of the current standard Terms and Conditions of Phoenix Contact apply exclusively, in particular as concerns any warranty liability.

Phoenix Contact reserves the right to register its own intellectual property rights for the product identifications of Phoenix Contact products that are used here. Registration of such intellectual property rights by third parties is prohibited.

Other product identifications may be afforded legal protection, even where they may not be indicated as such.

Table of contents

1 Command Line Interface (CLI)

1.1 Using the Command Line Interface (CLI)

The Command Line Interface (CLI) is a text-based tool that can be used to configure and diagnose the device. The CLI is accessed by means of a connection via Telnet (factory default) or SSH. Configuration of the CLI service via the web-based management of the device is described in the user manual of the device.

1.2 Access to the CLI

The CLI is accessed via a Telnet connection (factory default) or SSH connection from a management host, e.g., a PC. The Windows command prompt or the PuTTY freeware tool can be used as an input terminal, for example.

The device requires an IP address and a subnet mask in order to access the CLI. Configuration of the device network parameters is described in the user manual of the device.

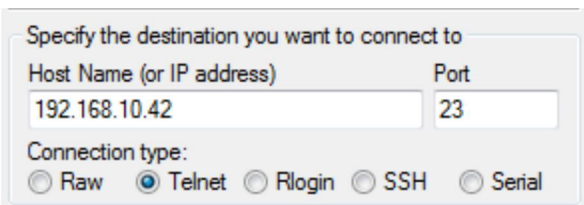


Figure 1-1 Configuration of a Telnet connection in PuTTY

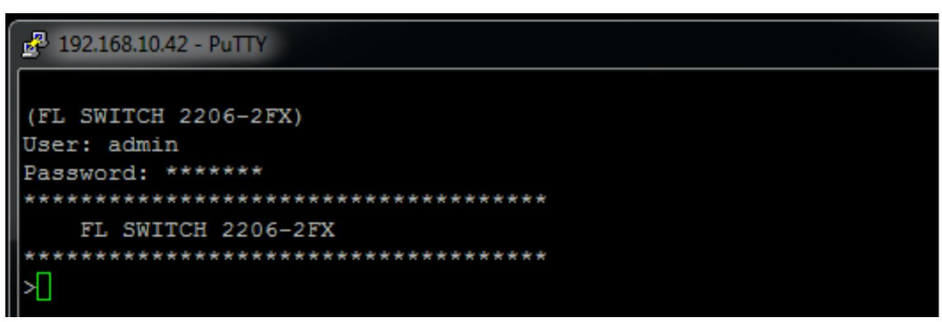


Figure 1-2 Command terminal in PuTTY

Figure 1-3 Establishing a Telnet connection via Windows command prompt

Figure 1-4 Command terminal in Windows command prompt

1.3 Basic principles for using CLI commands

In this section, the **CLI command names** are written in bold. *CLI parameters* are written in italics and must be replaced by appropriate values (e.g., names or numbers). If a command has several parameters, the order of these must be strictly observed.

The parameters of a command may be mandatory, optional or a selection of values (see Table “Structure of CLI commands” on page 8).

Table 1-1 Structure of CLI commands

Icon	Example	Description
< > Angle brackets	<Value>	Denotes a mandatory parameter that must be entered in place of the brackets
[ ] Square brackets	[Value]	Denotes an optional parameter that can be entered in place of the brackets
{} Braces	{choice1 | choice2}	Denotes the mandatory selection of a value from a given list of values
| Vertical bar	choice1 | choice2	Separates mutually exclusive selection options
[{}] Braces within square brackets	[{choice 1 | choice 2}]	Denotes a selection within an optional parameter

1.4 Command syntax

A command consists of one or more terms which can be followed by one or more parameters. These parameters can be mandatory or optional values.

Some commands, e.g., **show network** or **clear config**, do not require parameters. Other commands, e.g., **network parms**, require values to be specified after the command name. The parameters must be entered in the specified order, whereby optional parameters always follow mandatory parameters.

The following example illustrates the syntax using the **network parms** command:

network parms *<ipaddr> <netmask> [gateway]*

• **network parms** is the command name.

• *<ipaddr>* and *<netmask>* are parameters and represent mandatory values, which must be specified after entering the command name.

• *[gateway]* is an optional parameter, which means that a value does not have to be specified.

The following examples illustrate the correct syntax for entering the **network parms** command:

network parms *192.168.10.42 255.255.255.0*

network parms *192.168.10.42 255.255.255.0 192.168.10.0*

The following examples illustrate incorrect syntax for entering the **network parms** command:

network parms 192.168.10.42 - missing mandatory parameter

network parms 255.255.255.0 - missing mandatory parameter

network parms 255.255.255.0 192.168.10.42 - incorrect parameter sequence

1.5 Using the CLI help

Entering a question mark (?) in the command prompt displays a list of all the commands currently available together with a brief description.

Table 1-2 Structure of CLI commands

Command	Description
?	Displays the available commands

Typing a question mark (?) after each entry displays all the available command names or parameters from this point on.

```
>spanning-tree

port                Configure spanning tree port parameter
max-age             Configure bridge maximum aging time.
fwd-delay           Configure bridge forward delay.
hello-time          Configure bridge hello time.
bdg-prio            Configure bridge priority.
frd                 Configure fast ring detection.
lts                 Configure large tree support.
status              Select spanning tree status.

>spanning-tree bdg-prio
```

If Help outputs a parameter in angle brackets, this parameter must be replaced by a value. Example:

<*ipaddr*> Enter the IP address

```
>network parms

<ipaddress>         Enter IP address.

>network parms 192.168.10.43
```

If at any point there are no further command names or parameters available, or further parameters are optional, the following message appears prompting you to execute the command that was entered:

<cr> Press Enter to execute the command

```
>show mrp

<cr>                Press Enter to execute the command.

>show mrp

 OK
```

1.6 Auto completion of commands

The auto completion command is an additional way of writing a command, provided enough letters have already been entered to clearly identify the command name. As soon as enough letters have been entered, press space or TAB to automatically complete the words.

```
>spanning-tree f
 2 Possibilities:
      fwd-delay
      frd

>spanning-tree fwd-delay
```

1.7 Using the CLI network scripting UI

The CLI network scripting UI enables CLI commands from scripts to be loaded into the device via the network. This means that the device can be configured and diagnosed using a URL via a PC or from a controller. Each command that is entered is confirmed by the device, either with OK (config commands) or by outputting the device data (show commands).

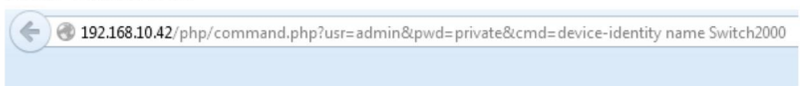
The command entry must follow a specific syntax:

http://ipaddress/php/command.php?usr=username&pwd=password&cmd=cli_command_1 | cli_command_2 | ....

The following examples illustrate the correct syntax for entering commands via the CLI network scripting UI:

Example: changing the device name

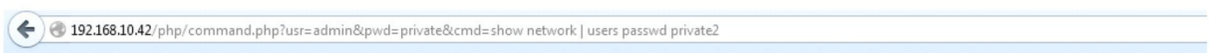
http://192.168.10.42/php/command.php?usr=admin&pwd=private&cmd=device-identity name Switch2000



OK

Example: displaying the network parameters and changing the user password

http://192.168.10.42/php/command.php?usr=admin&pwd=private&cmd=show network | users passwd private2



OK IP Assignment : bootp IP Address : 192.168.10.42 Network Mask : 255.255.255.0 Default Gateway : 0.0.0.0 Management VLAN : 1 ACD Mode : None ERROR

1 CLI commands

1.1 Port security commands

ID	Command	Value range	Default	Answer
PSec001	port-security status enable	{enable | disable}		OK
Description				
Enable port security				
Example				
port-security status enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec002	port-security port <wifiId> status <Status>	{none | trap | block | pass | IP-whitelist}		OK
Description				
Set port security mode for a specific port (WLAN 1, WLAN 2, etc.) none: no security function trap: (for SWITCH 7000 family only) send trap when a new device/new MAC address is detected block: block everything except the exceptions entered (whitelist) for SWITCH 7000 family: whitelist filter for entered MAC addresses for WLAN family (access points only): whitelist filter for entered WLAN clients pass: forward everything except the exceptions entered (blacklist) for WLAN family (access points only): blacklist filter for entered WLAN clients IP-Whitelist: (WLAN family only) only packets for the specified IP addresses and ports are forwarded				
Example				
port-security port 101 status IP-whitelist				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec003	port-security port <wifiId> add-ip <ip-address> <IP-Port>	IP address: (xxx.xxx.xxx.xxx) Port: (1…| all)		OK
Description				
Create new filter entry An entry consists of IP and UDP/TCP port. Note: the command “port-security port 101 configure-ip” can be used to add a description.				
Example				
port-security port 101 add-ip 192.168.0.250 8881				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec004	port-security port <wifiId> configure-ip <ip-address> <IP-Port> describtion <description>	IP address: (xxx.xxx.xxx.xxx) Port: (1…l all)		OK
Description				
Edit an existing filter entry.				
Example				
port-security port 101 configure-ip 192.168.0.250 8881 description "Testdesc1"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec005	port-security port <wifiId> remove-ip <ip-address> <IP-Port>	IP address: (xxx.xxx.xxx.xxx) Port: (1…l all)		OK
Description				
Delete a security entry The entry to be deleted is specified by means of “IP address” and “Port”.				
Example				
port-security port 101 remove-ip 192.168.0.250 8881				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec006	port-security port <wifiId> add-mac <MAC> <VLAN>	MAC: (xx:xx:xx:xx:xx:xx) VLAN: for WLAN: 1		OK
Description				
Create new filter entry An entry consists of MAC and VLAN. Always use “VLAN 1” for WLAN. Note: the command “port-security port 101 configure” can be used to add a description.				
Example				
port-security port 101 add-mac 00:A0:45:DD:5E:8C 1				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec007	port-security port <wifiId> remove-mac <MAC> <VLAN>	MAC: (xx:xx:xx:xx:xx:xx) VLAN: for WLAN: 1		OK
Description				
Remove filter entry. The entry is specified via MAC and VLAN.				
Example				
port-security port 101 remove-mac 00:a0:45:dd:5e:8c 1				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec008	port-security port <wifiId> configure <MAC> <VLAN> description <description>	MAC: (xx:xx:xx:xx:xx:xx) VLAN: for WLAN: 1 description: (15 alphanumeric characters)		OK
Description				
Add or edit description for filter entry. The entry is specified via MAC and VLAN.				
Example				
port-security port 101 configure 00:a0:45:dd:5e:8c 1 description "Testdesc1"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
PSec009	show port-security port <wifiId>	show port-security port 101		
Description				
Show all current security settings for the port				
Example				
show port-security port 101				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

1.2 WLAN Radius commands

ID	Command	Value range	Default	Answer
WRad001	users radius auth-server_Id <Id> shared-secret			OK
Description				
Shared secret (password) for login to Radius server				
Example				
users radius auth-server_Id 1 shared-secret "MySecret"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
WRad002	users radius auth-server_Id <Id> udp-port			OK
Description				
Radius server port				
Example				
users radius auth-server_Id 1 udp-port 8888				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

ID	Command	Value range	Default	Answer
WRad003	users radius auth-server_Id <Id> ip-address			OK
Description				
IP address of the Radius server Only “1” may be used as the Id at present.				
Example				
users radius auth-server_Id 1 ip-address 192.168.0.250				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.61	

1.3 WLAN roaming commands

ID	Command	Value range	Default	Answer
WRoa001	wlan wifi config <wifiId> roaming trigger-manual {normal|bssid} <xx:xx:xx:xx:xx:xx>	“normal 00:00:00:00:00:00”: connection to best AP “bssid 00:a0:45:d8:b5:29”: the client establishes a connection (only) to the access point with the specified MAC address. To return to “normal” mode, the command “bssid 00:00:00:00:00:00” must be executed first.	normal	OK
Description				
Starts a connection attempt to a defined access point. In “normal” mode, the client establishes a connection to the access point with the corresponding SSID and the best signal quality. In “bssid” mode, an attempt is made to establish a connection to a defined AP, even if other APs offer a stronger signal. For execution, the WLAN module must be enabled (“wlan global-activation enable”) and one of the client modes must be activated.				
Example				
wlan wifi config 101 roaming trigger-manual bssid 00:a0:45:d8:b5:29				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRoa002	wlan wifi config <wifiId> roaming bgScanIdle {value}	1 ... 5000	2 [ms]	
Description				
Time in ms during which no data to be transmitted is pending in order to be considered “free”. Waits until the network is “free” so that active communication is not interrupted by a scan.				
Example				
wlan wifi config 101 roaming bgScanIdle 2				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRoa003	wlan wifi config <wifiId> roaming rssiThrshForceScan {value}	-1 ... -94	-90 [dBm]	
Description				
RSSI value below which a client performs a “forced scan”. A “forced scan” terminates an existing WLAN connection and performs an intensive search for a potential access point. This results in a relatively long communication interruption. For this reason, the threshold for normal operation should be set to a very low value.				
Example				
wlan wifi config 101 roaming rssiThrshForceScan -94				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRoa004	wlan wifi config <wifiId> roaming rssiChang-eRoam {value}	1 ... 94	4 [dB]	
Description				
Minimum RSSI difference compared to a stronger access point which still results in a change. If an AP that has a higher signal strength than the current connection is found during a scan, a change only occurs if the new signal strength is better by at least this value. A higher value reduces the number of roaming operations				
Example				
wlan wifi config 101 roaming rssiChangeRoam 10				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRoa005	wlan wifi config <wifiId> roaming rssiChangeBgS-can {value}	1 ... 94	5 [dB]	
Description				
Decrease in the RSSI value, which triggers another background scan. Below the background scan threshold, a new background scan is started if the signal strength has fallen by this amount since the last scan.				
Example				
wlan wifi config 101 roaming rssiChangeBgScan 3				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRoa006	wlan wifi config <wifiId> roaming rssiThrshBgScan {value}	-1 ... -94	-60 [dBm]	
Description				
RSSI value below which a client performs a background scan. A background scan is started when the signal value of the active connection falls below this threshold value. A background scan briefly interrupts an existing WLAN connection and searches for other access points on other channels. The device then reverts back to the active connection. Below this threshold, the background scan is repeated at least every 10 s.				
Example				
wlan wifi config 101 roaming rssiThrshBgScan -65				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.4 WLAN Client commands

ID	Command	Value range	Default	Answer
WCli001	wlan wifi config <wifiId> scb-manual-mac <value>	wlan wifi config 101 scb-manual-mac 00:A0:45:D8:B5:29 or wlan wifi config 101 scb-manual-mac 00:a0:45:d8:b5:29		
Description				
MAC address that the WLAN device (SCB mode) uses to log into the WLAN. The MAC address of the end device that is connected to the LAN interface of the WLAN device is entered here. The WLAN device uses this MAC address for communication in the wireless network. This means that devices in the WLAN can reach the end device (L2-) in a transparent way.				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WCli002	wlan wifi config <wifiId> scb-mode {auto|manual}	auto: the WLAN device automatically adopts the MAC address of the end device from the last packet received at the LAN port (if end devices send packets with variable MAC addresses, communication may be aborted). manual: the MAC address used is assigned using the command “wlan wifi config <wifiId> scb-manual-mac <value>”.	auto	OK
Description				
Selection of the method for adopting the end device MAC address				
Example				
wlan wifi config 101 scb-mode manual				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WCli003	wlan wifi config <wifiId> start-scanning			OK
Description				
Starts a scan process To perform a scan, the WLAN interface must first be enabled via “wlan global-activation enable”. The scan results can be displayed via “show wlan wifi <wifiId> scan-results”.				
Example				
wlan wifi config 101 start-scanning				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WCli004	wlan wifi config <wifiId> channel-scanlist	all, 1…, 40, 44, … (depending on the country setting)	all	OK
Description				
Channels on which the client searches for an AP. Connections are established faster if fewer channels are scanned.				
Example				
wlan wifi config 101 channel-scanlist 1,6,40				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WCli005	wlan wifi config <wifiId> wds-aging-time {value}	60...4294967	60 [s]	
Description				
Time in seconds after which an ARP entry of an end device downstream of a client in FTB mode is discarded. The time can be increased for network devices that do not send ARP requests for a long period of time.				
Example				
wlan wifi config 101 wds-aging-time 60				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.5 WLAN AP commands

ID	Command	Value range	Default	Answer
WAp001	wlan wifi config <wifiId> max-number-clients	1 ... 10	10	OK
Description				
Maximum number of WLAN clients that can simultaneously log into this access point. Once the maximum number of clients has been authenticated at the access point, no further clients can be authenticated.				
Example				
wlan wifi config 101 max-number-clients 2				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WAp002	wlan wifi config <wifiId> wds-broadcast {enable|disable}	disable: only packets known to the WLAN device are forwarded. enable: unicast packets at end devices that are not known to this WLAN device are also forwarded (similar to a switch).	disable	
Description				
Enables or disables the forwarding of a frame to an unknown MAC address. Activation of the WDS broadcast increases the load in the network; however, it enables a packet to be sent to devices that have not communicated for a long time without having to send another ARP request (see “wds-aging-time”).				
Example				
wlan wifi config 101 wds-broadcast enable				

ID	Command	Value range	Default	Answer
WAp003	wlan wifi config <wifiId> hide-ssid {enable|disable}	disable: the “beacon” packets contain the SSID. enable: the SSID is not displayed in the “beacon” packets.	disable	
Description				
Enables or disables automatic transmission of the network ID (SSID). An access point with a “hidden SSID” cannot be identified during a scan, but it will usually be shown as an “unknown network”. This feature offers a slight improvement in security.				
Example				
wlan wifi config 101 hide-ssid enable				

ID	Command	Value range	Default	Answer
WAp004	wlan wifi config <wifiId> fast-eapol-retry {enable | disable}	enable: the connection is terminated immediately in the event of an error. disable: standard-compliant timeouts are observed.	enable	OK
Description				
Fast login retry on unsuccessful attempts (stabilizes roaming behavior). The feature may have to be deactivated for clients that respond very slowly.				
Example				
wlan wifi config 101 fast-eapol-retry disable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WAp005	wlan wifi config <wifiId> wlan-channel {value}	In standard b, g, and n: (1)…(14) Active in standard a: (36) (40) (44) (48) (indoor8): automatic selection of 36 to 48 (indoor16): automatic selection of 36 to 140 (excluding 120, 124, 128) (Auto): automatic selection of 36 to 165 (indoor) or 100 to 165 (outdoor) Depending on the country settings: (52) (56) (60) (64) (132) (136) (140) (149) (153) (157) (161) (165)	6	OK
Description				
Select WLAN channel (access point only). The possible settings depend on the selected 802.11 standard. This must be set accordingly beforehand. Note: if another VAP is configured as the client, the AP also follows the channel of the client (repeater).				
Example				
wlan wifi config 101 wlan-channel 40				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.6 WLAN VAP commands

ID	Command	Value range	Default	Answer
WVap001	wlan wifi create <wifiId>	102	(101 vorhanden)	OK
Description				
Create a virtual WLAN module (VAP). The first interface (101) is always available. The command is applied immediately (“wlan apply-settings” not required), but is not permanently saved (see “write”).				
Example				
wlan wifi create 102				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap002	wlan wifi delete <wifiId>	102		
Description				
Delete a virtual WLAN module (VAP) The command is applied immediately (“wlan apply-settings” not required), but is not permanently saved (see “write”). The first interface (101) is always available and cannot be deleted.				
Example				
wlan wifi delete 102				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap003	wlan wifi config <wifiId> operation-mode {ap|ftb|mcb|scb|monitor}	ap: access point ftb: “FullyTransparent-Bridge” client mode mcb: “MultiClientBridge” client mode scb: “SingleClientBridge” client mode monitor: monitor mode	ap	OK
Description				
Select the operating mode of the virtual WLAN module Note: if a VAP is operating in “AP” mode, “SCB” client mode cannot be used for other VAPs.				
Example				
wlan wifi config 101 operation-mode ap				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap004	wlan wifi config <wifiId> enable-state	enable: virtual WLAN module on disable: virtual WLAN module off	enable	OK
Description				
Enables or disables a virtual WLAN module (VAP).				
Example				
wlan wifi config 101 enable-state disable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap005	wlan wifi config <wifiId> excessive-retries {0..100}	0: disabled, the connection is not terminated due to unsuccessful transmission attempts. 1…100: the connection is terminated after n consecutive unsuccessful transmission attempts.	50	OK
Description				
Connection abort due to unsuccessful transmission. If a consecutive number of packets cannot be transmitted successfully, the wireless connection is terminated. This allows a roaming operation to be initiated quickly. This feature should be disabled for static networks.				
Example				
wlan wifi config 101 excessive-retries 0				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap006	wlan wifi config <wifiId> profile config <profileId> ssid {value}	1 - 32 characters: A...Z, a…z, 0...9, (space) $%@&/()=?![]{}+*-_<> '	PhoenixContact	
Description				
Set SSID (ESSID, network ID)				
Example				
wlan wifi config 101 profile config 1 ssid "My New SSID"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap007	wlan wifi config <wifiId> profile config <profileId> authentication	{none | wpa-psk | wep64 | wep128 | wpa2-psk | wpa2-eap | wpa+wpa2-psk}	wpa2-psk	
Description				
Set authentication method. We recommend using “wpa2-psk”.				
Example				
wlan wifi config 101 profile config 1 authentication "wpa2-psk"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap008	wlan wifi config <wifiId> profile config <profileId> encryption {aes|tkip|tkip+aes}	{aes | tkip | tkip+aes}	aes	
Description				
Set encryption method. We recommend using “aes”.				
Example				
wlan wifi config 101 profile config 1 encryption "aes"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WVap009	wlan wifi config <wifiId> profile config <profileId> psKey {value}	8 - 63 characters: A...Z, a...z, 0...9, (space) $%@&/()=?![]{}+*-_<> ' WEP 64 (client only): 5 alphanumeric characters or 10 hex characters WEP 128 (client only): 13 alphanumeric characters or 26 hex characters	2bchanged	
Description				
Set password for encryption Possible entries depend on the security settings used. It is absolutely essential that a secure password is used in a productive network.				
Example				
wlan wifi config 101 profile config 1 psKey "My New-Password"				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.7 WLAN radio commands

ID	Command	Value range	Default	Answer
WRd001	wlan outdoor-mode {enable|disable}	{enable | disable}	disable	
Description				
Configure device for use outdoors				
Example				
wlan outdoor-mode enable				

ID	Command	Value range	Default	Answer
WRd002	wlan country <CountryName>	open		
Description				
Country ID of the access point				

ID	Command	Value range	Default	Answer
WRd003	wlan radio <hwId> antenna-mask <value>	0x1: only port 1 (directional antenna) on 0x2: only port 2 (omnidirectional antenna) on 0x3: port 1 and 2 on	0x3	OK
Description				
Enable/disable antenna connections To achieve full data throughput (MIMO), both antennas should be enabled in normal operation (0x3). For special applications, the range can be increased if the total transmission power is used for the directional antenna (0x1).				
Example				
wlan radio 1 antenna-mask 0x3				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRd004	wlan radio <hwId> aggregation-mode {enable|disable}	enable: aggregation on disable: aggregation off	enable	OK
Description				
Enable packet aggregation for the WLAN device. This function optimizes data throughput in standard n.				
Example				
wlan radio 1 aggregation-mode enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRd005	wlan wifi config <wifiId> 80211-mode {a|b|bg|an|gn}	a: 5 GHz up to 54 Mbps b: 2.4 GHz up to 11 Mbps bg: 2.4 GHz up to 11 Mbps an: 5 GHz up to 300 Mbps gn: 2.4 GHz up to 300 Mbps	gn	OK
Description				
Select WLAN band and standard. The standard must be selected before specifying a channel or channel list.				
Example				
wlan wifi config 101 80211-mode gn				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRd006	wlan wifi config <wifiId> channel-bandwidth {20Mhz|40Mhz}	20mhz: use one WLAN channel 40mhz: bundle two WLAN channels	20mhz	OK
Description				
Bundling of two WLAN channels. If the 40 MHz option is selected, a second channel is automatically used if it is not occupied by other systems.				
Example				
wlan wifi config 101 channel-bandwidth 40mhz				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRd007	wlan wifi config <wifiId> tx-power-radiated <value>	5 ... 20	17	OK
Description				
Radiated transmission power in dBm (EIRP) The actual transmission power also depends on the regulatory conditions and may be lower than the value set.				
Example				
wlan wifi config 101 tx-power-radiated 20				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WRd008	wlan wifi config <wifiId> fragment-thresh-old <value>	0 ... 65535 (0: auto)	0	OK
Description				
open				
Example				
wlan wifi config 101 fragment-threshold 1024				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.8 WLAN global commands

ID	Command	Value range	Default	Answer
WGlo001	wlan management-access {enable|disable}	enable: WLAN on disable: WLAN off	enable	OK
Description				
Enable/disable configuration access via WLAN				
Example				
wlan management-access disable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WGlo002	wlan global-activation {enable|disable}	enable: WLAN on disable: WLAN off	disable	OK
Description				
Enable/disable WLAN. The “LNK” LED lights up when the WLAN interface is enabled.				
Example				
wlan global-activation enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WGlo003	wlan apply-settings			OK
Description				
Apply setting. After making WLAN configuration changes, this command must be executed to apply all the changes. The changes will not be permanently saved with this command (see “write”).				
Example				
wlan apply-settings				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

ID	Command	Value range	Default	Answer
WGlo004	show wlan global			
Description				
Displays general information about the wireless module settings				
Example				
show wlan global				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	

1.9 General commands

ID	Command	Value range	Default	Answer
GCom001	reload			OK
Description				
Device restart				
Example				
reload				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
GCom002	logout			
Description				
Exit the CLI session (unsaved changes will be lost).				
Example				
logout				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
GCom003	help			Commandline help
Description				
Open the CLI help				
Example				
help				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
GCom004	quit			
Description				
Exit the CLI session (unsaved changes will be lost).				
Example				
quit				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
GCom005	show tech-support			
Description				
Example				
show tech-support				

ID	Command	Value range	Default	Answer
GCom006	users passwd <username> <old-password> <new-password> <repeat-new-password>	<username> Current user name <old-password> Current password <new-password> New password (8 - 64 chars)	<username> = admin <password> = private	OK
Description				
Change a user password				
Example				
user passwd admin private Switch123 Switch123				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.10 System commands

ID	Command	Value range	Default	Answer
SCom001	show version			ERROR
Description				
Display the device description and hardware information: Serial number Hardware version Firmware version Bootloader version				
Example				
show version				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SCom002	show sys-info			OK + parameter list
Description				
Display the system information: Device name Object ID Device description Contact person Device location				
Example				
show sys-info				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SCom003	device-identity name <name>	<name> max. 256 chars	<name> = leer	OK
Description				
Change the device name				
Example				
device-identity name Switch2008_2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SCom004	device-identity description <description>	<description> max. 256 chars	<description> = leer	OK
Description				
Change the device description				
Example				
device-identity description Switch 2008				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SCom005	device-identity location <location>	<location> max. 256 chars	<location> = leer	OK
Description				
Change the device location				
Example				
device-identity location Building 2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SCom006	device-identity contact <contact>	<contact> max. 256 chars	<contact> = leer	OK
Description				
Change the contact person				
Example				
device-identity contact Mr. Doe				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.11 Event Table commands

ID	Command	Value range	Default	Answer
ETab001	show event-table			Entries of event table
Description				
Display the event table with the following columns: Index Event Device runtime				
Example				
show event-table				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
ETab002	clear event-table			OK
Description				
Delete/clear the event table				
Example				
clear event-table				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.12 MAC Address Table commands

ID	Command	Value range	Default	Answer
MTab001	management-access {enable | disable}			OK + MAC address table
Description				
Display the MAC address table				
Example				
show mac-address-table				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MTab002	wlan global-activation	enable: WLAN on disable: WLAN off	disable	OK
Description				
Enable/disable WLAN The “LNK” LED lights up when the WLAN interface is enabled				
Example				
wlan global-activation enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	
FLOS product range FL SWITCH 2000			1.00	

1.13 FW Image Handling commands

ID	Command	Value range	Default	Answer
FImg001	management-access {enable | disable}	<ip-address> IP address (xxx.xxx.xxx.xxx) <filename> File name of the firmware image		OK
Description				
Transfer of a firmware image file to the device. The firmware update is performed immediately, the device then restarts and the CLI connection is terminated.				
Example				
file-transfer tftp write-to-device firmware 192.168.0.1 FL_SWITCH_2000_v1_00.bin				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.14 Memcard commands

ID	Command	Value range	Default	Answer
MCrd001	management-access {enable | disable}			OK + parameter
Description				
Display the SD card information: Status of the SD card Status of the configuration file on the SD card Name of the configuration on the SD card IP address of the configuration creator Firmware version of the configuration creator Serial number of the SD card				
Example				
show mem-card				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MCrd002	wlan global-activation	enable: WLAN on disable: WLAN off	disable	OK
Description				
Enable/disable WLAN The “LNK” LED lights up when the WLAN interface is enabled				
Example				
wlan global-activation enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	
FLOS product range FL SWITCH 2000			1.00	

1.15 Script Handling commands

ID	Command	Value range	Default	Answer
Scpt001	management-access {enable | disable}			
Description				
Example				
show script				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
Scpt002	wlan global-activation	enable: WLAN on disable: WLAN off	disable	OK
Description				
Enable/disable WLAN The “LNK” LED lights up when the WLAN interface is enabled				
Example				
wlan global-activation enable				
Device range			**As of firmware version**	
FLOS product range FL WLAN 1100/2100			1.0	
FLOS product range FL SWITCH 2000			1.00	

1.16 Network commands

ID	Command	Value range	Default	Answer
NW001	show network			OK + Parameters
Description				
Display the current network parameters: IP address assignment (static, BootP, DHCP) IP address Network mask Default gateway Management VLAN Address Conflict Detection (ACD) mode				
Example				
show network				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
NW002	network parms <ip-address> <netmask> [gateway]	<ip-address> IP address (xxx.xxx.xxx.xxx) <netmask> Subnet mask (xxx.xxx.xxx.xxx) [gateway] Default gateway (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0 <netmask> = 0.0.0.0 [gateway] = 0.0.0.0	OK
Description				
Change the network parameters: IP address Network mask Default gateway				
Example				
network parms 192.168.0.150 255.255.255.0				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
NW003	network protocol {bootp | dhcp | none}	{bootp | dhcp | none} Selection of the network protocol for IP address assignment	bootp	OK
Description				
Change the IP address assignment				
Example				
network protocol dhcp				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
NW004	network mgmt-vlan <vlan-id>	<vlan-id> VLAN ID (1 - 4000)	<vlan-id> = 1	OK
Description				
Change the management VLAN				
Example				
network mgmt-vlan 2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
NW005	network acd-mode {acd | none}	{acd | none} Selection of the ACD mode	none	OK
Description				
Change the ACD (Address Conflict Detection) mode				
Example				
network acd-mode acd				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.17 FLOS Services commands

ID	Command	Value range	Default	Answer
Mng001	show service			OK + parameter
Description				
Status indicator for all of the following services: Web server SNMP server CLI service CLI network scripting UI (CLI command entry via URL)				
Example				
show service				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
Mng002	service cli-service {disable | telnet | ssh}	{disable | telnet | ssh} Selection of the CLI service protocol	telnet	OK
Description				
Change the CLI service protocol				
Example				
service cli-service telnet				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
Mng003	service cli-network-script-ui {enable | disable}	{enable | disable} Enable/ disable	enable	OK
Description				
Activation/deactivation of the CLI network scripting UI (CLI command entry via URL)				
Example				
service cli-network-script-ui disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
Mng004	service web-server {disable | http | https}	{disable | http | https} Selection of the web server protocol	http	OK
Description				
Change the web server protocol				
Example				
service web-server https				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
Mng005	service snmp-agent {disable | snmp-v2 | snmp-v3}	{disable | snmp-v2 | snmp-v3} Selection of the SNMP version	snmp-v2	OK
Description				
Change the SNMP server				
Example				
service snmp-agent snmp-v2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.18 LLDP commands

ID	Command	Value range	Default	Answer
LLDP001	show lldp topology all			OK + LLDP topology table
Description				
Tabular display of the LLDP topology with the following columns: Local port Chassis ID of the connected device IP address of the connected device Remote port of the connected device Description of the remote port on the connected device				
Example				
show lldp topology all				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP002	show lldp global			OK + Parameters
Description				
Display the configuration parameters: LLDP status LLDP transmission interval LLDP transmit port LLDP receive port				
Example				
show lldp global				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP003	show lldp topology port-no <port-no>	<port-no> Port number		OK + LLDP port topology
Description				
Display the topology information at a port: Complete chassis ID Complete port name System name System description				
Example				
show lldp topology port-no 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP004	lldp status {enable | disable}	{enable | disable} Enable/ disable	enable	OK
Description				
Change the LLDP status				
Example				
lldp status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP005	lldp tx-interval <value>	<value> Interval in seconds (5 - 32768)	5	OK
Description				
Change the LLDP transmission interval				
Example				
lldp tx-interval 10				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP006	lldp port-tx enable <port-list>	<port-list> Comma-separated list of port numbers	all enable	OK
Description				
Activation of the LLDP transmit ports				
Example				
lldp port-tx enable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP007	lldp port-tx disable <port-list>	<port-list> Comma-separated list of port numbers	no disable	OK
Description				
Deactivation of the LLDP transmit ports				
Example				
lldp port-tx disable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP008	lldp port-rx enable <port-list>	<port-list> Comma-separated list of port numbers	all enable	OK
Description				
Activation of the LLDP receive ports				
Example				
lldp port-rx enable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
LLDP009	lldp port-rx disable <port-list>	<port-list> Comma-separated list of port numbers	no disable	OK
Description				
Deactivation of the LLDP receive ports				
Example				
lldp port-rx disable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.19 Port Features commands

ID	Command	Value range	Default	Answer
PFtr001	show port-info all			OK + parameter
Description				
Display the basic parameters of all ports: Port number Port name Port type Port status Port mode				
Example				
show port-info all				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr002	show port-info port-no <port-no>	<port-no> Port number		OK + parameter
Description				
Display the basic parameters of one port: Port number Port name Port type Port status Port mode Status flow control Status link monitoring				
Example				
show port-info port-no 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr003	show port-stat port-no <port-no>	<port-no> Port number		OK + parameter
Description				
Display the port statistics of one port				
Example				
show port-stat port-no 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr004	show port-util port-no <port-no>	<port-no> Port number		OK + parameter
Description				
Display the RX and TX utilization of one port				
Example				
show port-util port-no 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr005	show port-util all			OK + parameter
Description				
Display the RX and TX utilization of all ports				
Example				
show port-util all				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr006	port <port-no> admin-mode {enable | disable}	<port-no> Port number {enable | disable} Enable/ disable	all enable	OK
Description				
Activation/deactivation of a port				
Example				
port 3 admin-mode disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr007	port <port-no> modus autoneg	<port-no> Port number		OK
Description				
Activation/deactivation of auto-negotiation on one port				
Example				
port 3 modus autoneg				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr008	port <port-no> modus auto10_100	<port-no> Port number		OK
Description				
Activation/deactivation of auto-negotiation on one port (only 10/100 Mbps, not 1000 Mbps)				
Example				
port 3 modus auto10_100				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			2.01	

ID	Command	Value range	Default	Answer
PFtr009	port <port-no> modus speed <speed> {half-duplex | full-duplex}	<port-no> Port number <speed> Transmission speed in Mbps (selection options: {10 | 100 | 1000}) {half-duplex | full-duplex} Selection of the duplex mode		OK
Description				
Change the transmission speed and duplex mode on one port				
Example				
port 3 modus speed 100 half-duplex				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr010	port <port-no> modus fast-startup	<port-no> Port number		OK
Description				
Activation/deactivation of Fast Startup mode on one port.				
Example				
port 3 modus faststartup				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr011	port <port-no> description <text>	<port-no> Port number <text> Port designation (0 - 31 chars)	<text> = leer	OK
Description				
Change the port name				
Example				
port 3 description RingPort1				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr012	port <port-no> link-monitoring {enable | disable}	<port-no> Port number {enable | disable} Enable/disable	all disable	OK
Description				
Activation/deactivation of link monitoring on one port				
Example				
port 3 link-monitoring disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PFtr013	port <port-no> flow-control {enable | disable}	<port-no> Port number {enable | disable} Enable/disable	all disable	OK
Description				
Activation/deactivation of flow control on one port				
Example				
port 3 flow-control disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.20 Port Mirroring commands

ID	Command	Value range	Default	Answer
PMir001	show port-mirror			OK + parameter
Description				
Display the port mirroring parameters: Global status Receive port (mirroring port) Mirrored ports (incoming traffic) Mirrored ports (outgoing traffic)				
Example				
show port-mirror				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir002	port-mirror status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Activation/deactivation of the global port mirroring status				
Example				
port-mirror status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir003	port-mirror dest <port-no>	<port-no> Port number	1	OK
Description				
Change the receive port (mirroring port)				
Example				
port-mirror dest 8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir004	port-mirror ingress enable <port-list>	<port-list> Comma-separated list of port numbers	all disable	OK
Description				
Activation of RX port mirroring (incoming traffic) on multiple ports				
Example				
port-mirror ingress enable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir005	port-mirror ingress disable <port-list>	<port-list> Comma-separated list of port numbers	all disable	OK
Description				
Deactivation of RX port mirroring (incoming traffic) on multiple ports				
Example				
port-mirror ingress disable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir006	port-mirror egress enable <port-list>	<port-list> Comma-separated list of port numbers	all disable	OK
Description				
Activation of TX port mirroring (outgoing traffic) on multiple ports				
Example				
port-mirror egress enable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
PMir007	port-mirror egress disable <port-list>	<port-list> Comma-separated list of port numbers	all disable	OK
Description				
Deactivation of TX port mirroring (outgoing traffic) on multiple ports				
Example				
port-mirror egress disable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.21 VLAN commands

ID	Command	Value range	Default	Answer
VLan001	show vlan global			OK + parameter
Description				
Display the current VLAN mode				
Example				
show vlan global				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan002	show vlan static-table			OK + VLAN static table
Description				
Display the static VLAN table: VLAN ID VLAN name Device ports (untagged) Device ports (tagged)				
Example				
show vlan static-table				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan003	show vlan current-table			
Description				
Display the current VLAN table: VLAN ID VLAN name Device ports (untagged) Device ports (tagged)				
Example				
show vlan current-table				

ID	Command	Value range	Default	Answer
VLan004	show vlan port-table			OK + VLAN port table
Description				
Display the port-based static VLAN table for all ports: VLAN ID VLAN name Device ports (untagged) Device ports (tagged)				
Example				
show vlan port-table				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan005	show vlan port <port-no>	<port-no> Port number		OK + parameter
Description				
Display the port-based static VLAN table for one port: VLAN ID VLAN name Device ports (untagged) Device ports (tagged)				
Example				
show vlan port 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan006	show vlan vlan-id <vlan-id>	<vlan-id> VLAN ID (1 - 4000)		OK + parameter
Description				
Display the VLAN information for a VLAN: VLAN ID VLAN name Device ports (untagged) Device ports (tagged)				
Example				
show vlan vlan-id 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan007	vlan status {transparent | tagged}	{transparent | tagged} Selection of the VLAN mode	transparent	OK
Description				
Change the VLAN mode				
Example				
vlan status tagged				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan008	vlan create <vlan-id>	<vlan-id> VLAN ID (1 - 4000)		OK
Description				
Create a new static VLAN				
Example				
vlan create 5				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan009	vlan delete <vlan-id>	<vlan-id> VLAN ID (1 - 4000)		OK
Description				
Delete a static VLAN				
Example				
vlan delete 5				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan010	vlan static <vlan-id> name <vlan-name>	<vlan-id> VLAN ID (1 - 4000) <vlan-name> VLAN name (0 - 31 chars)		OK
Description				
Change the name of a static VLAN				
Example				
vlan static 5 name VLAN_5				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan011	vlan static <vlan-id> tagged-mem-ports <port-list>	<vlan-id> VLAN ID (1 - 4000) <port-list> Comma-separated list of port numbers		OK
Description				
Assignment of device ports (tagged) to a VLAN				
Example				
vlan static 5 tagged-mem-ports				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan012	vlan static <vlan-id> untagged-mem-ports <port-list>	<vlan-id> VLAN ID (1 - 4000) <port-list> Comma-separated list of port numbers		OK
Description				
Assignment of device ports (untagged) to a VLAN				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan013	vlan static <vlan-id> no-member <port-list>	<vlan-id> VLAN ID (1 - 4000) <port-list> Comma-separated list of port numbers		OK
Description				
Removal of device ports from a VLAN				
Example				
vlan static 5 no-member				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan014	vlan port <port-no> vlan <vlan-id>	<port-no> Port number <vlan-id> VLAN ID (1 - 4000)		OK
Description				
Assignment of a default VLAN ID to a port				
Example				
vlan port 3 vlan 5				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan015	vlan port <port-no> priority <value>	<port-no> Port number <value> Priority (0 - 7)	0	OK
Description				
Assignment of a default priority to a port				
Example				
vlan port 3 priority				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
VLan016	vlan port <port-no> ingress-filter {enable | disable}	<port-no> Port number {enable | disable} Enable/disable	all disable	OK
Description				
Activation/deactivation of the ingress filter at a port				
Example				
vlan port 3 ingress-filter disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.22 Multicast commands

ID	Command	Value range	Default	Answer
MC001	show multicast igmp			OK + parameter
Description				
Display the IGMP snooping information: Status IGMP Snooping Snoop Aging Time IGMP Query Version Query interval Status of IGMP extension FUQ Status of IGMP extension BUQ Status of IGMP extension auto query port List of static query ports				
Example				
show multicast igmp				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC002	show multicast static-groups			OK + parameter list
Description				
Tabular display of the static multicast groups with the following columns: Multicast address VLAN ID Member ports including status				
Example				
show multicast static-groups				

ID	Command	Value range	Default	Answer
MC003	show multicast current-groups			OK + current multi-cast groups
Description				
Tabular display of the current multicast groups with the following columns: VLAN ID Multicast address Port member				
Example				
show multicast current-groups				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC004	multicast igmp snoop status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Activation/deactivation of IGMP snooping				
Example				
multicast igmp snoop status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC005	multicast igmp snoop aging <value>	<value> Aging time in seconds (30 - 3600)	<value> = 300	OK
Description				
Change the aging time				
Example				
multicast igmp snoop aging				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC006	multicast igmp querier version {disable | v1 | v2}	{disable | v1 | v2} Selection of the querier version	disable	OK
Description				
Change the querier version				
Example				
multicast igmp querier version v2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC007	multicast igmp querier interval <value>	<value> Querier interval in seconds (10 - 3600)	<value> = 125	OK
Description				
Change the querier interval				
Example				
multicast igmp querier interval				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC008	multicast igmp extension fuq {enable | disable}	{enable | disable} Enable/ disable	enable	OK
Description				
Activation/deactivation of the IGMP extension FUQ				
Example				
multicast igmp extension fuq enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC009	multicast igmp extension buq {enable | disable}	{enable | disable} Enable/ disable	enable	OK
Description				
Activation/deactivation of the IGMP extension BUQ				
Example				
multicast igmp extension buq enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC010	multicast igmp extension auto-query {enable | dis- able}	{enable | disable} Enable/ disable	enable	OK
Description				
Activation/deactivation of the IGMP extension auto query port				
Example				
multicast igmp extension auto-query disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC011	multicast igmp extension clear-auto-query			OK
Description				
Delete all auto query ports				
Example				
multicast igmp extension clear-auto-query				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC012	multicast igmp extension static-query-port add <port-list>	<port-list> Comma-separated list of port numbers		OK
Description				
Add static query ports				
Example				
multicast igmp extension static-query-port add				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC013	mutlicast igmp extension static-query-port remove <port-list>	<port-list> Comma-separated list of port numbers		OK
Description				
Delete static query ports				
Example				
multicast igmp extension static-query-port remove				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MC014	multicast static create <mac-address> <vlan-id>	<mac-address> Multicast MAC address (xx:xx:xx:xx:xx:xx) <vlan-id> Multicast VLAN ID		OK
Description				
Generate a new static multicast group				
Example				
multicast static create 01:00:5e:00:18:0e 1				

ID	Command	Value range	Default	Answer
MC015	multicast static delete <mac-address> <vlan-id>	<mac-address> Multicast MAC address (xx:xx:xx:xx:xx:xx) <vlan-id> Multicast VLAN ID		OK
Description				
Delete an existing static multicast group				
Example				
multicast static delete 01:00:5e:00:18:0e 1				

ID	Command	Value range	Default	Answer
MC016	multicast static configure <mac-address> <vlanid> static-mem-ports <port-list>	<mac-address> Multicast MAC address (xx:xx:xx:xx:xx:xx) <vlan-id> Multicast VLAN ID <port-list> Comma-separated list of port numbers		OK
Description				
Add ports to a static multicast group				
Example				
multicast static configure 01:00:5e:00:18:0e 1 static-mem-ports 3,5,8				

ID	Command	Value range	Default	Answer
MC017	multicast static configure <mac-address> <vlanid> forbidden-mem-ports <port-list>	<mac-address> Multicast MAC address (xx:xx:xx:xx:xx:xx) <vlan-id> Multicast VLAN ID <port-list> Comma-separated list of port numbers		OK
Description				
Forbid membership of ports in a static multicast group				
Example				
multicast static configure 01:00:5e:00:18:0e 1 forbidden-mem-ports 3,5,8				

ID	Command	Value range	Default	Answer
MC018	multicast static configure <mac-address> <vlanid> no-member <port-list>	<mac-address> Multicast MAC address (xx:xx:xx:xx:xx:xx) <vlan-id> Multicast VLAN ID <port-list> Comma-separated list of port numbers		OK
Description				
Delete ports from a static multicast group				
Example				
multicast static configure 01:00:5e:00:18:0e 1 no-member 3,5,8				

1.23 RSTP commands

ID	Command	Value range	Default	Answer
RSTP001	show spanning-tree global			OK + parameter
Description				
Display the RSTP information: Status RSTP Mode Status Large Tree Support Status Fast Ring Detection Bridge Priority Bridge Hello Time Bridge Forward Delay Bridge Max Age MAC address of the root Root Port Root Cost Number of topology changes Last topology change Hello Time Forward Delay Max Age				
Example				
show spanning-tree global				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP002	show spanning-tree port port-no <port-no>	<port-no> Port number		OK + parameter
Description				
Display the RSTP information for a specific port: Status RSTP Mode Admin Path Cost Operating Path Cost Status Auto Edge Status Admin Edge Status Operating Edge Priority Number of forward transitions MAC address of the root MAC address of the bridge Port ID Cost				
Example				
show spanning tree port port-no 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP003	show spanning-tree port all			OK + Port
Description				
Tabular display of the RSTP information for a specific port with the following columns: Port number Status RSTP Mode Path Cost Operating Edge Blocking State Protocol Role				
Example				
show spanning-tree port all				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP004	spanning-tree status {disable | 802.1w}	{disable | 802.1w} Disable/enable	Firmware revision 1.00: disable From Firmware revision 2.01: 802.1w	OK
Description				
Activation/deactivation of RSTP				
Example				
spanning-tree status 802.1w				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP005	spanning-tree lts {enable | disable}	{enable | disable} Enable/disable	disable	OK
Description				
Activation/deactivation of Large Tree Support				
Example				
spanning-tree lts enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP006	spanning-tree frd {enable | disable}	{enable | disable} Enable/disable	disable	OK
Description				
Activation/deactivation of Fast Ring Detection				
Example				
spanning-tree frd enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP007	spanning-tree bdg-prio <value>	<value> Bridge Priority (0 - 61440 in increments of 4096)	<value> = 32768	OK
Description				
Change the Bridge Priority				
Example				
spanning-tree bdg-prio 4096				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP008	spanning-tree hello-time <value>	<value> Hello time in seconds (1 - 10)	<value> = 2	OK
Description				
Change the Bridge Hello Time				
Example				
spanning-tree hello-time 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP009	spanning-tree fwd-delay <value>	<value> Bridge Forward Delay in seconds (4 - 30)	<value> = 15	OK
Description				
Change the Bridge Forward Delay				
Example				
spanning-tree fwd-delay 20				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP010	spanning-tree max-age <value>	<value> Bridge Max Age in seconds (6 - 40)	<value> = 20	OK
Description				
Change the Bridge Max Age				
Example				
spanning-tree max-age 25				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP011	spanning-tree port <port-no> status {enable | disable}	<port-no> Port number {enable | disable} Enable/ disable	all enable	OK
Description				
Activation/deactivation of RSTP for a specific port				
Example				
spanning-tree port 3 status disable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP012	spanning-tree port <port-no> path-cost <value>	<port-no> Port number <value> Path cost (0 = automatic detection based on the current port speed; 1 - 200000000 = manual setting)	<value> = 0	OK
Description				
Change the path cost for a specific port				
Example				
spanning-tree port 3 path-cost 20000				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP013	spanning-tree port <port-no> auto-edge {enable | disable}	<port-no> Port number {enable | disable} Enable/ disable	all enable	
Description				
Activation/deactivation of Auto Edge for a specific port				
Example				
spanning-tree port 3 auto-edge enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP014	spanning-tree port <port-no> admin-edge {edge | non-edge}	<port-no> Port number {edge | non-edge} Selection of Admin Edge	all non-edge	
Description				
Activation/deactivation of Admin Edge for a specific port				
Example				
spanning-tree port 3 admin-edge non-edge				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP015	spanning-tree port <port-no> priority <value>	<port-no> Port number <value> Priority (0 - 240 in increments of 16)	<value> = 128	OK
Description				
Change the priority for a specific port				
Example				
spanning-tree port 3 priority 192				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
RSTP016	spanning-tree port <port-no> force-rstp	<port-no> Port number		OK
Description				
Force change from STP to RSTP for a specific port				
Example				
spanning-tree port 3 force-rstp				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.24 MRP commands

ID	Command	Value range	Default	Answer
MRP001	show mrp			OK + parameter
Description				
Display the MRP information: Domain name MRP UUID MRP device status Status of MRP manager function MRP VLAN ID Ring port 1 Ring port 2 MRP manager priority level Ring status Counter for status change in the ring Last status change in the ring				
Example				
show mrp				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP002	mrp mode {none | client | manager}	{none | client | manager} Selection of the MRP mode	none	OK
Description				
Change the MRP device status				
Example				
mrp mode client				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP003	mrp ports <mrp-port1> <mrp-port2>	<mrp-port1> Port number for MRP port 1 <mrp-port2> Port number for MRP port 2	<mrp-port1> = 1 <mrp-port2> = 2	OK
Description				
Change the MRP ports				
Example				
mrp ports 3 4				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP004	mrp vlan <vlan-id>	<vlan-id> VLAN ID (1 - 4000)	<vlan-id> = 1	OK
Description				
Change the MRP VLAN ID				
Example				
mrp vlan 2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP005	mrp uuid <UUID-string>	<UUID-string> MRP UUID (xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx)	<UUID-string> = ffffffff-ffff-ffff-ffff-ffffffffffff	OK
Description				
Change the MRP UUID				
Example				
mrp uuid ffffffff-ffff-ffff-ffff-ffffffffffff				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP006	mrp domain-name <string>	<string> MRP domain name (max. 256 chars)	<string> = default-mrpdomain	OK
Description				
Change the MRP domain name				
Example				
mrp domain-name mrpdomain2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
MRP007	mrp manager-priority <value>	<value> MRP manager priority (0 - 61439 in increments of 4096)	<value> = 32768	OK
Description				
Change the MRP manager priority				
Example				
mrp manager-priority 4096				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.25 Security Context commands

ID	Command	Value range	Default	Answer
SecC001	show sec-context			OK + parameter
Description				
Display the security context status				
Example				
show sec-context				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SecC002	sec-context generate			OK
Description				
Generate a security context				
Example				
sec-context generate				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
SecC003	file-transfer {tftp | http} {write-to-device | read-from-device} sec-context <ip-address> <filename>	{tftp | http} Selection of the transfer method {write-to-device | read-from-device} Selection of the transfer direction <ip-address> IP address (xxx.xxx.xxx.xxx) <filename> File name of the root CA certificate		OK
Description				
Transfer of a root CA certificate file to the device or from the device to the PC.				
Example				
file-transfer tftp write-to-device sec-context 192.168.0.1 cacert.cer				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.26 DHCP commands

ID	Command	Value range	Default	Answer
DHCP001	show dhcp global			OK + parameter
Description				
Display the global DHCP status				
Example				
show dhcp global				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP002	show dhcp server current-lease			OK + lease table
Description				
Tabular display of the current DHCP leases (assigned IP addresses): Number Assigned IP address MAC address of the device Local port Status				
Example				
show dhcp server current-lease				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP003	show dhcp server static-lease			OK + lease table
Description				
Tabular display of the current static DHCP leases (assigned IP addresses): Number Assigned IP address MAC address of the device				
Example				
show dhcp server static-lease				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP004	show dhcp server port-local <port-no>	<port-no> Port number		OK + parameter
Description				
Display the port-based DHCP server information: Port Status of the port-based DHCP server IP address Subnet mask Default gateway DNS server				
Example				
show dhcp server port-local 3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP005	dhcp-service service {none | relay-agent | server}	{none | relay-agent | server} Selection of the DHCP server operating mode	none	OK
Description				
Set the operating mode of the DHCP server				
Example				
dhcp-service service server				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP006	dhcp-service relay-agent remote-id {ip | mac}	{ip | mac} Selection of the relay agent remote ID	ip	OK
Description				
Change the relay agent remote ID				
Example				
dhcp-service relay-agent remote-id mac				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP007	dhcp-service relay-agent server <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change the DHCP server in relay agent mode				
Example				
dhcp-service relay-agent server 192.168.0.2				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP008	dhcp-service relay-agent port-mode enable <port-list>	<port-list> Comma-separated list of port numbers		OK
Description				
Activation of the relay agent on multiple ports				
Example				
dhcp-service relay-agent port-mode enable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP009	dhcp-service relay-agent port-mode disable <port-list>	<port-list> Comma-separated list of port numbers		OK
Description				
Deactivation of the relay agent on multiple ports				
Example				
dhcp-service relay-agent port-mode disable 3,4,8				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP010	dhcp-service server pool-start-addr <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change the start address of the DHCP pool				
Example				
dhcp-service server pool-start-addr 192.168.0.3				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP011	dhcp-service server pool-size <size>	<size> DHCP pool size (depends on subnet)	<size> = 32	OK
Description				
Change the maximum number of IP addresses specified by the DHCP server (size of the address pool)				
Example				
dhcp-service server pool-size 20				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP012	dhcp-service server net-mask <net-mask>	<net-mask> Subnet mask (xxx.xxx.xxx.xxx)	<net-mask> = 0.0.0.0	OK
Description				
Change the subnet mask that is assigned to the DHCP clients				
Example				
dhcp-service server net-mask 255.255.255.0				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP013	dhcp-service server router-ip <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change the default gateway that is assigned to the DHCP clients				
Example				
dhcp-service server router-ip 192.168.0.1				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP014	dhcp-service server dns-ip <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change the DNS server that is assigned to the DHCP clients				
Example				
dhcp-service server dns-ip 192.168.10.10				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP015	dhcp-service server lease-time <value>	<value> DHCP lease time in seconds (300 - 2592000)	<value> = 3600	OK
Description				
Change the DHCP lease time (validity of the IP address assignment)				
Example				
dhcp-service server lease-time 3600				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP016	dhcp-service server accept-bootp {enable | disable}	{enable | disable} Enable/ disable	enable	OK
Description				
Activation/deactivation of the acceptance of BootP requests by the DHCP server				
Example				
dhcp-service server accept-bootp enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP017	dhcp-service server static-lease create <ip-address> <client-mac-address>	<ip-address> IP address (xxx.xxx.xxx.xxx) <client-mac-address> Client MAC address (xx:xx:xx:xx:xx:xx)		OK
Description				
Create a static IP assignment (DHCP lease) for a defined client address (MAC address)				
Example				
dhcp-service server static-lease create 192.168.0.20 XX:XX:XX:6C:D2:05				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP018	dhcp-service server static-lease delete <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)		OK
Description				
Delete a statically assigned IP address (DHCP lease)				
Example				
dhcp-service server static-lease delete 192.168.0.20				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP019	dhcp-service server static-lease clear			OK
Description				
Delete all static IP assignments (DHCP lease)				
Example				
dhcp-service server static-lease clear				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP020	dhcp-service server port-local <port-no> status {enable | disable}	<port-no> Port number {enable | disable} Enable/ disable	all disable	OK
Description				
Activation/deactivation of a port-based DHCP server				
Example				
dhcp-service server port-local 3 status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP021	dhcp-service server port-local <port-no> local-ip <ip-address>	<port-no> Port number <ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change an IP address assigned by a port-based DHCP server				
Example				
dhcp-service server port-local 3 local-ip 192.168.0.30				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP022	dhcp-service server port-local <port-no> net-mask <net-mask>	<port-no> Port number <net-mask> Subnet mask (xxx.xxx.xxx.xxx)	<net-mask> = 0.0.0.0	OK
Description				
Change a subnet mask assigned by a port-based DHCP server				
Example				
dhcp-service sercer port-local 3 net-mask 255.255.255.0				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP023	dhcp-service server port-local <port-no> router-ip <ip-address>	<port-no> Port number <ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change a default gateway address assigned by a port-based DHCP server				
Example				
dhcp-service server port-local 3 router-ip 192.168.0.1				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP024	dhcp-service server port-local <port-no> dns-ip <ip-address>	<port-no> Port number <ip-address> IP address (xxx.xxx.xxx.xxx)	<ip-address> = 0.0.0.0	OK
Description				
Change a DNS server address assigned by a port-based DHCP server				
Example				
dhcp-service server port-local 3 dns-ip 192.168.10.10				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
DHCP025	dhcp-service server port-local-clear			OK
Description				
Delete all port-based DHCP servers				
Example				
dhcp-service server port-local-clear				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.27 Alarm Output commands

ID	Command	Value range	Default	Answer
AL001	show alarm-output <output-no>	<output-no> Alarm contact number		OK
Description				
Display the alarm contact information: Alarm contact status Alarm contact output status (error state) Event status power supply interrupted Event status link down Event status configuration memory missing Event status MRP ring error				
Example				
show alarm-output 1				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL002	alarm-output <output-no> global {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	enable	OK
Description				
Change alarm contact status				
Example				
alarm-output 1 global enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL003	alarm-output <output-no> pow-supply-lost {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	enable	OK
Description				
Change event status power supply interrupted				
Example				
alarm-output 1 pow-supply-lost enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL004	alarm-output <output-no> link-down {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	disable	OK
Description				
Change event status link down				
Example				
alarm-output 1 link-down enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL005	alarm-output <output-no> mrp {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	disable	OK
Description				
Change event status MRP ring error				
Example				
alarm-output 1 mrp enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL006	alarm-output <output-no> plug-mem-miss {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	disable	OK
Description				
Change event status configuration memory missing				
Example				
alarm-output 1 plug-mem-miss enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
AL007	alarm-output <output-no> port-sec-violation {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	disable	OK
Description				
Change event status violation of the port security				
Example				
alarm-output 1 port-sec-violation enable				

ID	Command	Value range	Default	Answer
AL008	alarm-output <output-no> dlr-ring-fail {enable | disable}	<output-no> Alarm contact number {enable | disable} Enable/ disable	disable	OK
Description				
Change event status DLR error				
Example				
alarm-output 1 dlr-ring-fail enable				

1.28 QoS commands

ID	Command	Value range	Default	Answer
QOS001	show broadcast-limiter			OK + parameter
Description				
Display the broadcast limiter information: Status of the broadcast limiter Broadcast threshold value Status of the multicast limiter Multicast threshold value Status of the unknown unicast limiter Unknown unicast threshold value				
Example				
show broadcast-limiter				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
QOS002	broadcast-limiter broadcast status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Change the broadcast limiter status				
Example				
broadcast-limiter broadcast status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
QOS003	broadcast-limiter broadcast threshold <value>	<value> Threshold value in frames per second (0 - 1048576 in increments of 1024)	<value> = 1024	OK
Description				
Change the broadcast limiter threshold				
Example				
broadcast-limiter broadcast threshold 2048				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
QOS004	broadcast-limiter multicast status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Change the multicast limiter status				
Example				
broadcast-limiter multicast status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
QOS005	broadcast-limiter multicast threshold <value>	<value> Threshold value in frames per second (0 - 1048576 in increments of 1024)	<value> = 1024	OK
Description				
Change the multicast limiter threshold				
Example				
broadcast-limiter multicast threshold 2048				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
QOS006	broadcast-limiter unicast status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Change the unknown unicast limiter status				
Example				
broadcast-limiter unicast status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.01	

ID	Command	Value range	Default	Answer
QOS007	broadcast-limiter unicast threshold <value>	<value> Threshold value in frames per second (0 - 1048576 in increments of 1024)	<value> = 1024	OK
Description				
Change the broadcast limiter threshold				
Example				
broadcast-limiter unicast threshold 2048				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.02	

1.29 Trap Manager commands

ID	Command	Value range	Default	Answer
TMgr001	show snmp-trap			OK + trap status list
Description				
Tabular display of the SNMP trap states with the following columns: Trap Name Status				
Example				
show snmp-trap				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
TMgr002	snmp-trap status {enable | disable}	{enable | disable} Enable/ disable	disable	OK
Description				
Change the global SNMP status				
Example				
snmp-trap status enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
TMgr003	snmp-trap server add <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)		OK
Description				
Add an SNMP trap server				
Example				
snmp-trap server add 192.168.0.50				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
TMgr004	snmp-trap server remove <ip-address>	<ip-address> IP address (xxx.xxx.xxx.xxx)		OK
Description				
Delete an SNMP trap server				
Example				
snmp-trap server remove 192.168.0.50				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
TMgr005	snmp-trap trap <trap> {enable | disable}	<trap> SNMP trap (selection options: {mrp | ip-conflict | fw-status-chg | port-sec-violation | link-up | link-down | rstp-top-chg | rstp-new-root | rstp-link-fail | pow-src-chg | fw-config | auth-fail | user-pwd-chg | sd-card-out | sd-card-in | config-diff | warm-start | cold-start})	all enable	OK
Description				
Change the SNMP trap states				
Example				
snmp-trap trap link-up,auth-fail,warm-start enable				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

ID	Command	Value range	Default	Answer
TMgr006	snmp-trap send-test-trap			OK
Description				
Send a test trap				
Example				
snmp-trap send-test-trap				
Device range			**As of firmware version**	
FLOS product range FL SWITCH 2000			1.00	

1.30 FLOS MTU commands

ID	Command	Value range	Default	Answer
MTU001	show mtu all			
Description				
Display the MTU information for all ports				
Example				
show mtu all				

ID	Command	Value range	Default	Answer
MTU002	show mtu port <port-no>	<port-no> Port number		
Description				
Display the MTU information for one port				
Example				
show mtu port 2				