

6 Command Line Interface

The D-Link Web Smart Switch allows a computer or terminal to perform some basic monitoring and configuration tasks by using the Command Line Interface (CLI) via TELNET protocol.

To connect a switch via TELNET:

1. Make sure the network connection between the switch and PC is active.
2. To connect, launch any terminal software like **HyperTerminal** in Microsoft Windows, or just use the command prompt by typing the command *telnet* followed by the switch IP address, eg. *telnet 10.90.90.90*.
3. The login prompt will appear.

Logging on to the Command Line Interface:

Enter your User Name and Password to log in. The default user name and password is **admin**. Note that the user name and password are case-sensitive. Press **Enter** in both the Username and Password fields. The command prompt will appear as shown below (**DES-1210-28P>**):

```
DES-1210-28P login: admin
Password:
DES-1210-28P>
```

Figure 118 – Command Prompt

The user session is automatically terminated if idle for the login timeout period. The default login timeout period is 5 minutes. To change the login timeout session please refers to chapter 5.

CLI Commands:

There are a number of helpful features included in the CLI. Enter the **?** command will display a list of commands.

```
DES-1210-28P> ?
USEREXEC commands :
  config account admin password <passwd>
  config ipif System { ipaddress <ip-address> <subnet-mask> gateway
<gw-address> | dhcp }
  debug info
  download { firmware_fromTFTP tftp://ip-address/filename | cfg_fromTFTP
tftp://ip-address/filename }
  logout
  ping <ip_addr> [times <integer (1-255)>] [timeout <integer (1-99)>]
  reboot
  reset config
  save
  show ipif
  show switch
  upload { firmware_toTFTP tftp://ip-address/filename | cfg_toTFTP
tftp://ip-address/filename }
DES-1210-28P>
```

Figure 119 – The ? command

Download

The **download** command is used to download and install new firmware or a Switch configuration file from a TFTP server.

Syntax

```
download { firmware_fromTFTP tftp://ip-address/filename | cfg_fromTFTP  
tftp://ip-address/filename }
```

Parameters

Parameter	Description
firmware_fromTFTP	Download and install new firmware on the Switch from a TFTP server.
cfg_fromTFTP	Download a switch configuration file from a TFTP server.
tftp://ip-address/	The IP address of the TFTP server.
filename	The filename of the firmware or switch configuration file on the TFTP server. You need to specify the DOS path if the file is not at the root directory of the TFTP server.



Note: Switch will reboot after restore and all current configurations will be lost

Upload

The **upload** command is used to upload the firmware file or a Switch configuration file to a TFTP server.

Syntax

```
upload { firmware_toTFTP tftp://ip-address/filename | cfg_toTFTP  
tftp://ip-address/filename }
```

Parameters

Parameter	Description
firmware_toTFTP	Upload the firmware on the Switch from a TFTP server.

<code>cfg_toTFTP</code>	Specifies that the Switch's current settings will be uploaded to the TFTP server.
<code>tftp://ip-address/</code>	The IP address of the TFTP server.
<code>filename</code>	The filename of the firmware or switch configuration file on the TFTP server. You need to specify the DOS path if the file is not at the root directory of the TFTP server.

Config ipif system

The **config ipif system** command sets the IP address of the switch.

Syntax

```
config ipif system { ipaddress <ip-address> <subnet-mask> gateway <gw-address>
| dhcp }
```

Parameter

Parameter	Description
<code>ipaddress</code> <code><ip-address></code> <code><subnet-mask></code>	The IP address and subnet mask to be created. Users need to specify the address and mask information using the traditional format (for example, 10.1.2.3/255.0.0.0).
<code>gateway</code> <code><gw-address></code>	The IP address of the router or gateway.
<code>dhcp</code>	Allows the selection of the DHCP protocol for the assignment of an IP address to the Switch's System IP interface.

Example

```
DES-1210-28P> config ipif system ipaddress 172.17.5.214 255.255.255.0
gateway 172.17.5.214
% The IP setting mode change to static will cause CLI disconnect.
```

Figure 120 – The config ipif system command

Logout

This command closes the current connection.

Syntax

```
logout
```

Example

```
DES-1210-28P> logout
```

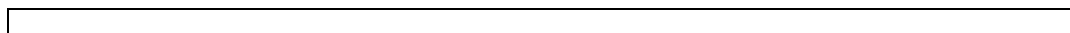


Figure 121 – The logout command

Ping

This command checks if another IP address is reachable on the network. You can ping the IP address connected to through the managed VLAN (VLAN 1 by default), as long as there is a physical path between the switch and the target IP equipment. By default, Switch sends five pings to the target IP.

Syntax

```
ping <ipaddr> [times <integer (1-255)>] [timeout <integer (1-99)>]
```

Parameter

Parameter	Description
<ipaddr>	The IP address of the target station.
times <integer (1-255)>	Specify how many ping requests will be sent to the target IP address.
timeout <integer (1-99)>	Specify the timeout interval waiting the ping reply for target IP address.

Example

```
DES-1210-28P> ping 10.90.90.91 times 3 timeout 1
Reply Received From :10.90.90.91, TimeTaken : 20 msecs
Reply Received From :10.90.90.91, TimeTaken : 20 msecs
Reply Received From :10.90.90.91, TimeTaken : 20 msecs

--- 10.90.90.91 Ping Statistics ---
3 Packets Transmitted, 3 Packets Received, 0% Packets Loss
DES-1210-28P>
```

Figure 122 – The ping command



Note: DES-1210-08P does not support times and timeout configurations.

Reboot

This command reboots the system. All network connections are terminated and the boot code executes.

Syntax

```
reboot
```

Example

```
DES-1210-28P> reboot
% Device will reboot, please wait a few minutes to re-login.
DES-1210-28P>
```

Figure 123 – The reboot command

Reset

All configurations will be reset to the default settings.

Syntax

reset config

Example

```
DES-1210-28P> reset config
% Device will reboot after reset configuration successfully.
DES-1210-28P>
```

Figure 124 – The reset config command

Show ipif

The command displays the current IP address of the switch.

Syntax

show ipif

Example

```
DES-1210-28P> show ipif
IP Setting Mode           : Static
IP Address                : 172.17.5.214
Subnet Mask               : 255.255.255.0
Default Gateway           : 172.17.5.254
DES-1210-28P>
```

Figure 125 – The show ipif command

Show switch

The command displays the status of the switch.

Syntax

show switch

Example

```

DES-1210-28P> show switch
System name           :
System Contact        :
System Location       :
System up time        : 0 days, 6 hrs, 32 min, 17 secs
System Time           : 01/01/2009 06:32:19
System hardware version : A1
System firmware version : 1.00.001
System boot version    : 1.00.000
System Protocol version : 2.001.004
System serial number   : 1MB1733K0000A
MAC Address           : 00-18-E7-48-85-50
DES-1210-28P>

```

Figure 126 – The show switch command

Config account admin password

The command sets the administrator password.

Syntax

```
config account admin password <passwd>
```

Parameter

Parameter	Description
<passwd>	The new password of the administrator.

Example

```

DES-1210-28P> config account admin password admin
DES-1210-28P>

```

Figure 127 – The config account admin password command

Save

The command saves the configuration changes to the memory.

Syntax

```
save
```

Example

```

DES-1210-28P> save
Building configuration ...
[OK]
DES-1210-28P>

```

Figure 128 – The save command

Debug info

This command displays the ARP table and MAC FDB of the Switch.

Syntax

debug info

Example

```
DES-1210-28P> debug info
% ARP table :
```

Address	Hardware Address	Type	Interface	Mapping
172.17.5.85	00:18:8b:bf:75:30	ARPA	vlanMgmt	Dynamic
172.17.5.254	00:19:5b:14:3d:c4	ARPA	vlanMgmt	Dynamic

```
% MAC table :
```

Vlan	Mac Address	Type	Ports
1	00:00:00:00:00:26	Learnt	Fa0/4
1	00:00:48:bf:f3:01	Learnt	Fa0/4
1	00:03:1b:66:66:5c	Learnt	Fa0/4
1	00:03:64:00:01:23	Learnt	Fa0/4
1	00:0d:60:cb:6e:5d	Learnt	Fa0/4
1	00:0e:7b:a0:12:97	Learnt	Fa0/4
1	00:0f:3d:a8:88:9b	Learnt	Fa0/4
1	00:0f:ea:f0:0e:1e	Learnt	Fa0/4
1	00:10:db:73:68:31	Learnt	Fa0/4
1	00:11:25:2c:43:c6	Learnt	Fa0/4
1	00:11:25:43:38:83	Learnt	Fa0/4

```
Total Mac Addresses displayed: 11
DES-1210-28P>
```

Figure 129 – The debug info command