



# FortiDB™

Version 4.0.0

CLI Reference

## **FortiDB CLI Reference**

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# Command Line Interface (CLI)

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## Using the FortiDB CLI

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This topic describes the basics of using the CLI (Command Line Interface). You can use CLI commands to view all system information and to change all system configuration settings.

To use the FortiDB CLI:

1. Logon to the FortiDB appliance as the `admin` user or as a user with the FortiDB System Administrator role via the following methods:
  - SSH (Secure Shell)
  - Telnet
2. Enter the CLI command of interest.

### Basic CLI Information

This topic provides basic information for using the FortiDB CLI.

This section includes information about:

- Command help
- Command completion
- Recalling commands
- Editing commands
- Line continuation
- Command abbreviation
- Encrypted password support
- File names and locations
- Entering spaces in strings
- Entering quotation marks in strings
- Entering a question mark (?) in a string
- Special characters
- IP address formats
- DNS for Hostname Recognition
- FTP-directory abbreviations

#### Command help

You can press the question mark (?) key to display command help.

- Press the question mark (?) key at the command prompt to display a list of the commands available and a description of each command.
- Type a command followed by a space and press the question mark (?) key to display a list of the options available for that command and a description of each option.
- Type a command followed by an option and press the question mark (?) key to display a list of additional options available for that command-option combination and a description of each option.

#### Command completion

You can use the tab key or the question mark (?) key to complete commands.

- You can press the tab key at any prompt to scroll through the options available for that prompt.
- You can type the first characters of any command and press the tab key or the question mark (?) key to complete the command or to scroll through the options that are available at the current cursor position.
- After completing the first word of a command, you can press the space bar and then the tab key to scroll through the options available at the current cursor position.

### Recalling commands

You can recall previously entered commands by using the Up and Down arrow keys to scroll through commands you have entered.

### Editing commands

Use the **Left** and **Right** arrow keys to move the cursor back and forth in a recalled command. You can also use the **Backspace** and **Delete** keys and the control keys listed in the following table in order to edit the command.

Function	Key combination
Beginning of line	CTRL+A
End of line	CTRL+E
Back one character	CTRL+B
Forward one character	CTRL+F
Delete current character	CTRL+D
Previous command	CTRL+P
Next command	CTRL+N
Abort the command	CTRL+C
If used at the root prompt, exit the CLI	CTRL+C

### Line continuation

To break a long command over multiple lines, use a \ at the end of each line.

### Command abbreviation

You can abbreviate commands and command options to the smallest number of non-ambiguous characters. For example, the command `get system status` can be abbreviated to `g sy st`.

### File names and locations

Filenames and locations should consist only of letters, numbers, hyphens, and underscores. Do not use spaces or special characters. For example, `my_file` is an acceptable name; `my&file` is not.

### Entering spaces in strings



**Note:** Spaces are not allowed in strings that represent filenames or file locations.

When a string value, for other than a filename or locations, contains a space, do one of the following:

- Enclose the string in quotation marks; "Security Administrator", for example.
- Enclose the string in single quotes; 'Security Administrator', for example.
- Use a backslash ("\") preceding the space; Security\ Administrator, for example.

### Entering quotation marks in strings

If you want to include a quotation mark, single quote or apostrophe in a string, you must precede the character with a backslash character. To include a backslash, enter two backslashes.

### Entering a question mark (?) in a string

If you want to include a question mark (?) in a string, you must precede the question mark with **CTRL-V**. Entering a question mark without first entering **CTRL-V** causes the CLI to display possible command completions, terminating the string.

### Special characters

The characters <, >, (, ), #, ', and " are not permitted in most FortiDB CLI fields nor are they permitted in the passwords used to protect configuration-file backups.

### IP address formats

You can enter an IP address and subnet using either dotted decimal or slash-bit format. For example you can type either:

```
set ip 192.168.1.1 255
```

or

```
set ip 192.168.1.1/24
```

The IP address is displayed in the configuration file in dotted decimal format.

### DNS for hostname recognition

A Domain Name Service (DNS) will enable you to use machine names as well as IP addresses in your CLI commands.

You can setup DNS via:

- The FortiDB GUI
- The FortiDB CLI console (using SSH or *telnet*)

In order to setup DNS using the FortiDB GUI:

1. Go to the **Appliance** section of the left-side tree navigator and select **Network**
2. On the **Network Configuration** page, select the **DNS** tab.
3. Enter the IP addresses for your **Primary DNS Server** and **Secondary DNS Server**.
4. Select the **Apply** button.

In order to setup DNS using the FortiDB CLI:

1. Logon as the `admin` user in your SSH or telnet console window.
2. Enter the following:

```
config system dns
    set primary <dns-server-ip>
    set secondary <dns-server-ip>
end
```

where:

- `<dns-server-ip>` represents the IP address for your primary and secondary DNS-server machines

### FTP-directory abbreviations

When specifying file locations on your FTP server, you can use these abbreviations:

- `.` which refer to the currently logged-in user's home directory on the FTP server. For example:

```
diagnose system export va_log <your_ftp_server> <your_ftp_username>
<your_ftp_password> . myDiagnose.tar
```
- `./<subdirectory>` which refer to an existing subdirectory of the currently logged-in user's home directory on the FTP server. For example:

```
diagnose system export va_log <your_ftp_server> <your_ftp_username>
<your_ftp_password> ./diagnostics myDiagnose.tar
```

## CLI Command Syntax

This topic provides general CLI-syntax information.

This guide uses the following conventions to describe command syntax:

- Angle brackets `< >` indicate variables.

For example:

```
execute restore config <filename_str>
```

You enter:

```
execute restore config myfile.bak
```

- Vertical bar and curly brackets `{ | }` separate alternative, mutually exclusive required keywords.

For example:

```
set protocol {ftp | sftp}
```

You can enter:

```
set protocol ftp or set protocol sftp
```

- Square brackets `[ ]` indicate that a keyword or variable is optional.

For example:

```
show system interface [<name_str>]
```

To show the settings for all interfaces, you can enter `show system interface`. To show the settings for the `Port1` interface, you can enter `show system interface port1`.

- A space separates options that can be entered in any order and in any combination and that must be separated by spaces.

For example:

```
set allowaccess {https ping ssh}
```

You can enter any of the following:

```
- set allowaccess ping
- set allowaccess https ping
- set allowaccess ssh
- set allowaccess https ssh
- set allowaccess https ping ssh
```

In most cases to make changes to lists that contain options separated by spaces, you need to retype the whole list including all the options you want to apply and excluding all the options you want to remove.

- Special characters:
  - The `\` is supported to escape spaces or as a line continuation character
  - The single quotation mark `'` and the double quotation mark `"` are supported, but must be used in pairs.

- If there are spaces in a string, you must precede the spaces with the `\` escape character or put the string in a pair of quotation marks.

## Administration Commands

This topic lists the system-administration commands that are available to the FortiDB user.



**Note:** FortiDB-specific commands are also explained in the next section.



**Note:** For general CLI usage information, see the *Basic CLI Information* section of this document.

The following general commands are available for the FortiDB CLI:

Command branch	Supported commands	Description
<i>config</i>	<ul style="list-style-type: none"> <li>• system admin setting</li> <li>• system backup all-settings</li> <li>• system dns</li> <li>• system interface</li> <li>• system ntp</li> <li>• system route</li> </ul>	Use <i>config</i> to configure objects of FortiDB functionality. Top-level objects are not configurable; they are containers for more specific lower-level objects. For example, the <i>system</i> object contains DNS addresses, interfaces, routes and so on. When these objects are multiple, such as routes, they are organized in the form of a table. You can add, delete or edit the entries in the table. Table entries each consist of keywords that you can set to particular values. Simpler objects, such as system DNS, are a single set of keywords.
<i>diagnose</i>	<ul style="list-style-type: none"> <li>• system export fd_log</li> </ul>	Use <i>diagnose system export</i> to get diagnostic information about FortiDB and send it to an FTP server. For exporting diagnostic information to an FTP server, please refer to FortiDB-Specific Commands
<i>execute</i>	<ul style="list-style-type: none"> <li>• backup all-settings</li> <li>• backup-remove fd-archive</li> <li>• backup-remove fd-report</li> <li>• date</li> <li>• format disk</li> <li>• ping</li> <li>• reboot</li> <li>• reset</li> <li>• restart</li> <li>• restore all-settings</li> <li>• restore fd-archive</li> </ul>	Use <i>execute</i> to run static commands, to reset the FortiDB unit to factory defaults, or to back up or restore the FortiDB configuration. The execute commands are available only from the root prompt.

Command branch	Supported commands	Description
<i>show</i>	<ul style="list-style-type: none"> <li>shutdown</li> <li>time</li> <li>top</li> <li>traceroute</li> <li>system admin setting</li> <li>system backup all-settings</li> <li>system dns</li> <li>global</li> <li>system interface</li> <li>system ntp</li> <li>system route</li> </ul>	Use <i>show</i> to display the FortiDB unit configuration. Only changes to the default configuration are displayed. You can use <i>show</i> within a <i>config</i> shell to display the configuration of that shell, or you can use <i>show</i> with a full path to display the configuration of the specified shell.

## **config command**

This topic contains the information about the *config* commands that are available to the FortiDB user.

You can use the FortiDB CLI in order to perform the following *config* tasks.

### **config system admin setting**

The *config system admin setting* command allows you to configure web administration settings.

#### **Syntax:**

```
config system admin setting
  set http_port <integer>
  set https_port <integer>
  set idle_timeout <integer>
end
```

where:

Variables	Description	Default
http_port	The HTTP port number for web administration.	80
https_port	The HTTPS port number for web administration.	443
idle_timeout	The idle-timeout value which ranges from 1 to 480 minutes	5

**Sample command:** (This example sets an idle-timeout value of 2 minutes and port 444 for HTTPS web administration.)

```
config system admin setting
  set idle_timeout 2
  set https_port 444
end
```

### **config system backup all-setting**

The *config system backup all-settings* command allows you to set or check the settings for scheduled backups.

**Syntax:**

```

config system backup all-settings
  set crptpasswd <passwd>
  set directory <dir_name>
  set passwd <pwd>
  set protocol {ftp | sftp}
  set server <string>
  set status {enable | disable}
  set time <hh:mm:ss>
  set user <user_name>
  set week_days {monday tuesday wednesday thursday friday}
end

```

where:

Keywords and variables	Description	Default
crptpasswd <passwd>	Optional password to protect backup content	None
directory <dir_name>	The directory on the backup server in which to save the backup file.	None
passwd <pwd>	The password for the backup server.	None
protocol {ftp   sftp}	The backup protocol.	sftp
server <string>	The IP address or DNS-resolvable host name for the backup server.	None
status {enable   disable}	Enable or disable scheduled backups.	disable
time <hh:mm:ss>	The time of day to perform the backup. Time is required in the form <hh:mm:ss>.	None
user <user_name>	The user account name for the backup server.	None
week_days {monday tuesday wednesday thursday friday}	The day(s) of the week on which to perform backups. You may select multiple days.	None

**Sample command:**

The backup server is at 172.20.120.11 using the admin account with no password and saving the backup in the /usr/local/backups directory. Backups will be done on Mondays at 1:00pm using ftp.

```

config system backup all-settings
  set status enable
  set server 172.20.120.11
  set user admin
  set directory /usr/local/backups
  set week_days monday
  set time 13:00:00
  set protocol ftp
end

```

**config system dns**

The *config system dns* command allows you to set the DNS server addresses.

**Syntax:**

```
config system dns
  set primary <dns_ip>
  set secondary <dns_ip>
end
```

where:

Keywords and variables	Description	Default
primary <dns_ip>	Enter the primary DNS server IP address.	172.30.62.6
secondary <dns_ip>	Enter the secondary DNS IP server address.	65.39.139.63

**Sample Command:**

```
config system dns
  set primary 65.39.139.53
  set secondary 65.39.139.63
end
```

**config system global**

The *config system global* command allows you to configure global settings that affect miscellaneous FortiDB features.

**Syntax:**

```
config system global
  set console-output {more | standard}
  set daylightsavetime {enable | disable}
  set hostname <unithostname>
  set ssl-low-encryption {enable | disable}
  set swapmem {enable | disable}
  set timezone <timezone_number>
end
```

Where:

Keywords and variables	Description	Default
console-output {more   standard}	Select how the output is displayed on the console. Select more to pause the output at each full screen until keypress. Select standard for continuous output without pauses.	standard
daylightsavetime {enable   disable}	Enable or disable daylight saving time. If you enable daylight saving time, the FortiDB system automatically adjusts the system time when the time	enable

Keywords and variables	Description	Default
hostname <unithostname>	zone changes to or from daylight saving time. Enter a name for this FortiDB system.	FD-XXX. The default hostname varies depending on the appliances.
ssl-low-encryption {enable disable}	Enable or disable low-grade (40-bit) encryption.	disable
swapmem {enable   disable}	Enable or disable virtual memory.	enable
timezone <timezone_number>	The number corresponding to your time zone. Press ? to list time zones and their numbers. Choose the time zone for the FortiDB system from the list and enter the correct number.	00

**Sample Command:**

The following command turns on daylight saving time, sets the FortiDB system name to FDB1K, and chooses the Eastern timezone for US & Canada.

```
config system global
  set daylightsavetime enable
  set hostname FDB1k
  set timezone 12
end
```

**config system interface**

The *config system interface* command allows you to edit the configuration of a FortiDB network interface.

**Syntax:**

```
config system interface
  edit <port>
  set allowaccess {http https ping ssh telnet}
  set ip <ipmask>
  set status {up | down}
end
```

Variable	Description	Default
<port>	<port> can be one of port1, port2, port3, port4.	No default.
allowaccess {http https ping ssh telnet}	Enter the types of management access permitted on this interface. Valid types are: http https ping ssh telnet. Separate multiple selected types with spaces. If you want to add or remove an option from	Varies for each interface.

Variable	Description	Default
ip <ipmask>	the list, retype the list as required. Enter the interface IP address and netmask. The IP address cannot be on the same subnet as any other interface.	No default
status {up   down}	Start or stop the interface. If the interface is stopped it does not accept or send packets. If you stop a physical interface, VLAN interfaces associated with it also stop.	up

**Sample Command:**

This example shows how to set the FortiDB port1 interface IP address and netmask to 192.168.100.159 255.255.255.0, and the management access to ping, https, and ssh.

```
config system interface
  edit port1
  set allowaccess ping https ssh
  set ip 192.168.100.159 255.255.255.0
  set status up
end
```

**config system ntp**

The *config system ntp* command allows you to configure automatic time setting using a network time protocol (NTP) server.

**Syntax:**

```
config system ntp
  set server <server_ip>
  set status {enable | disable}
  set sync_interval <minutes>
end
```

Variable	Description	Default
server <server_ip>	Enter the IP address or fully qualified domain name of the NTP server.	No default.
status {enable   disable}	Enable or disable NTP time setting.	disable
sync_interval <minutes>	Enter how often, in minutes, the FortiDB system synchronizes its time with the NTP server.	60

**config system route**

The *config system route* command allows you to view or configure static routing table entries.

**Syntax:**

```

config system route
edit <seq_num>
set device <port>
set dst <dst_ip_mask>
set gateway <gw_ip>
end

```

Variable	Description	Default
<seq_num>	Enter an unused routing sequence number to create a new route. Enter an existing route number to edit that route.	No default.
device <port>	Enter the port used for this route.	No default.
dst <dst_ip_mask>	Enter the IP address and mask for the destination network.	0.0.0.0 0.0.0.0
gateway <gw_ip>	Enter the default gateway IP address for this network.	0.0.0.0

**diagnose command**

diagnose command display diagnostic information that helps you to troubleshoot problems.

You can use the FortiDB CLI in order to perform the following *config* tasks.

**diagnose system export**

This FortiDB CLI allows you to export diagnostic information to an FTP server.

**Syntax:**

```

diagnose system export fd_log <ftp server> <user> <password> [directory]
[filename]

```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the diagnostic file to be placed.
[filename]	Name of the zip file that contains several log files that will be put on the FTP server. If you don't specify a filename, you will get a default file called <i>fortidb.zip</i> .

**Sample command:**

```
diagnose system export fd_log <your_ftp_server> <your_ftp_username>
<your_ftp_password> . myDiagnose.zip
```

**execute command**

This topic explains the *execute* administration commands that are available to the FortiDB user.



**Note:** For general CLI usage information, see the *Basic CLI Information* section of this document.

You can use the FortiDB CLI in order to perform the following *execute* tasks:

**execute backup all-settings**

This FortiDB CLI allows you to backup your local database, FortiDB system-configuration settings, archives and reports.




**Note:** Please press <enter> to get back to the original prompt after the backup has completed with the message saying "Transfer Finished".

**Syntax:**

```
execute backup all-settings <ftp server> <filepath> <username> <password>
[crptpasswd]
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location on FTP server where you want the settings file to be placed.   <b>Note:</b> If you don't specify a name, you will get a default file called fdb_allbackup.dat.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[crptpasswd]	Optional password for protecting the settings file on the FTP server.

**Sample command:**

```
execute backup all-settings <your_ftp_server> . <your_ftp_username>
<your_ftp_password> myCrptpasswd
```

**execute backup-remove fd-archive**

This FortiDB CLI allows you to backup and then remove your archives.

**Syntax:**

```
execute backup-remove fd-archive <before-date> <ftp server> <username>
<password> [directory][filename]
```

where:

Variable	Description
<before-date>	Date of the last archive you want included in your backup. For example, if you specify 2008-12-31, the backup will include archives for up to this date. The format is YYYY-MM-DD (MM(1-12), DD(1-31)). <ul style="list-style-type: none"> <li>• YYYY is a 4-digit number representing the year.</li> <li>• MM is a 2-digit number from 1 to 12 representing the month.</li> <li>• DD is a 2-digit number from 1 to 31 representing the day of the month.</li> </ul>
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the tar file to be placed.
[filename]	Name for the tar file on the FTP server where you want the archives to be placed. The default file name is FD-ARCHIVE-<before-date>.tar.

**Sample command:**

```
execute backup-remove fd-archive 2008-07-30 <your_ftp_server>
<your_ftp_username> <your_ftp_password> . myArchives.tar
```

**execute backup-remove fd-report**

This FortiDB CLI allows you to backup and then remove your reports.

**Syntax:**

```
execute backup-remove fd-report <before-date> <ftp server> <username>
<password> [directory][filename]
```

where:

Variable	Description
<before-date>	Date of the reports you want included in your backup. For example, if you specify 2008-12-31, the backup will include reports for up to this date. The format is YYYY-MM-DD (MM(1-12), DD(1-31)). <ul style="list-style-type: none"> <li>• YYYY is a 4-digit number representing the year.</li> <li>• MM is a 2-digit number from 1 to 12 representing the month.</li> </ul>

Variable	Description
	<ul style="list-style-type: none"> <li>DD is a 2-digit number from 1 to 31 representing the day of the month.</li> </ul>
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the tar file to be placed.
[filename]	Name for the tar file on the FTP server where you want the reports to be placed. The default file name is FD-REPORT-<before-date>.tar.

**Sample command:**

```
execute backup-remove fd-report 2008-07-30 <your_ftp_server>
<your_ftp_username> <your_ftp_password> . myReports.tar
```

**execute date**

The *execute date* command allows you to get or set the system date. If you do not specify a date, the command returns the current system date.

**Syntax:**

```
execute date [<date_str>]
```

where:

Variable	Description
<date_str>	<p>This variable has the form mm/dd/yyyy.</p> <ul style="list-style-type: none"> <li>mm is the month and can be 01 to 12</li> <li>dd is the day of the month and can be 01 to 31</li> <li>yyyy is the year and can be 2001 to 2100</li> </ul> <p>Dates entered will be validated - mm and dd require 2 digits, and yyyy requires 4 digits.</p>

**Sample command** (This example sets the date to 17 September 2008):

```
execute date 09/17/2008
```

**execute format disk**

The *execute format disk* command allows you to format the hard disk on the FortiDB system. Executing this command will erase all device settings/images, VPN & Update Manager databases, and log data on the FortiDB system's hard drive. FortiDB's IP address and routing information will be preserved.

**Syntax:**

```
execute format disk
```

When you run this command, you will be prompted to confirm the request.

**Warning:** If you use this command without executing `backup all settings` command, you may not be able to view assessments or reports after you archive and restore your data. When you want to archive and format disk, make sure that you execute `config system backup all-settings` command before archiving.

### execute ping

The *execute ping* command allows you to send an ICMP echo request (ping) to test the network connection between the FortiDB system and another network device.

#### Syntax:

```
execute ping {<ip> | <hostname>}
```

where:

Variable	Description
<ip>	IP address of network device to contact
<hostname>	DNS resolvable hostname of network device to contact

**Sample command** (This example shows how to ping a host with the IP address 192.168.1.23):

```
execute ping 192.168.1.23
```

### execute reboot

The *execute reboot* command allows you to restart the FortiDB system. This command will disconnect all sessions on the FortiDB system.

#### Syntax:

```
execute reboot
```

### execute reset

The *execute reset* command allows you to reset the FortiDB system to factory defaults. This command will disconnect all sessions and restart the FortiDB system.

#### Syntax:

```
execute reset {admin-password | all-settings | data}
```

where:

commands	Description
admin-password	Reset admin's password to default password.
all-settings	Reset the all settings.
data	Reset the database.

#### Sample command:

```
execute reset all-settings
```

### execute restart

This FortiDB CLI allows you to shutdown and restart the application server under which FortiDB is running.

#### Syntax:

```
execute restart appserver
```

**execute restore all-settings**

This FortiDB CLI allows you to restore previously backed up your local database, FortiDB system-configuration settings, archives and reports.

**Syntax:**

```
execute restore all-settings <ftp server> <filepath> <username> <password>
[crptpasswd]
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location of, and filename for, the settings file on the FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[crptpasswd]	Optional password for protecting the settings file on the FTP server.



**Note:** This operation will replace your current settings and necessitate a reboot.

**Sample command:**

```
execute restore all-settings <your_ftp_server> ./fdb_allbackup.dat
<your_ftp_username> <your_ftp_password> myCrptpasswd
```

**execute restore fd-archive**

This FortiDB CLI allows you to restore previously backed up your archives.

**Syntax:**

```
execute restore fd-archive <ftp server> <filepath> <username> <password>
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location of, and filename for, the settings file on the FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.



**Note:** This operation will replace your current settings and necessitate a reboot.

**Sample command:**

```
execute restore fd-archive <your_ftp_server> ./fdb_allbackup.dat
<your_ftp_username> <your_ftp_password>
```

**execute shutdown**

The *execute shutdown* command allows you to shut down the FortiDB system. This command will disconnect all sessions.

**Syntax:**

```
execute shutdown
```

**execute time**

The *execute time* command allows you to get or set the system time.

**Syntax:**

```
execute time [<time_str>]
```

where:

Variable	Description
<time _str>	<p>This variable has the form hh:mm:ss.</p> <ul style="list-style-type: none"> <li>• hh is the hour and can be 00 to 23</li> <li>• mm is the minutes and can be 00 to 59</li> <li>• ss is the seconds and can be 00 to 59</li> </ul> <p>All parts of the time are required. Single digits are allowed for each of hh, mm, and ss.</p>

If you do not specify a time, the command returns the current system time.

**Sample command** (This example set the system time to 15:31:03):

```
execute time 15:31:03
```

**execute top**

The *execute top* command allows you to view the processes running on the FortiDB system.

**Syntax:**

```
execute top
```

To exit the display, type q. Other interactive commands are available while running top. For help on them, type h.

The *execute top* command displays the following information:

```
15:28:03 up 2 days, 0 users, load average: 0.06, 0.04, 0.01
Tasks: 82 total, 2 running, 80 sleeping, 0 stopped, 0 zombie
CPU(s): 0.0% us, 0.0% sy, 0.0% ni, 100.0% id, 0.0% wa, 0.0% hi, 0.0% si
Mem: 2069772K total, 485764K used, 1584008K free, 40124K buffers
Swap: 2069764K total, 0K used, 2069764K free, 7275k cached
```

```
PID  USER  PR  NI  VIRT  RES  SHR  S  %CPU  %MEM  TIME+  COMMAND
  1   root   18   0  3232  1012  720  S    0   0.0  0:07.12  init
  2   root   RT   0    0     0    0  S    0   0.0  0:00.00  migration/0
  3   root   34  19    0     0    0  S    0   0.0  0:00.00  ksoftirqd/0
  4   root   RT   0    0     0    0  S    0   0.0  0:00.00  migration/1
  5   root   39  19    0     0    0  S    0   0.0  0:00.00  ksoftirqd/1
  6   root   RT   0    0     0    0  S    0   0.0  0:00.00  migration/2
  7   root   33  19    0     0    0  S    0   0.0  0:00.00  ksoftirqd/2
  8   root   RT   0    0     0    0  S    0   0.0  0:00.00  migration/3
  9   root   34  19    0     0    0  S    0   0.0  0:00.00  ksoftirqd/3
 10   root   10  -5    0     0    0  S    0   0.0  0:00.00  events/0
```

```

11  root  10  -5  0  0  0  S  0  0.0  0:00.00  events/1
12  root  10  -5  0  0  0  S  0  0.0  0:00.00  events/2
13  root  10  -5  0  0  0  S  0  0.0  0:00.00  events/3
14  root  10  -5  0  0  0  S  0  0.0  0:00.00  khelper
15  root  10  -5  0  0  0  S  0  0.0  0:00.00  kthread
21  root  10  -5  0  0  0  S  0  0.0  0:00.00  kblockd/0

```

### execute traceroute

The *execute traceroute* command allows you to test the connection between the FortiDB system and another network device, and display information about the network hops between the device and the FortiDB system.

#### Syntax:

```
execute traceroute {<address_ipv4> | <host-name>}
```

where:

Variable	Description
<address_ipv4>	IP address of network device.
<host-name>	FQDN hostname of network device.

#### Sample command :

```
execute traceroute <your_IPaddress>
```

## show commands

This topic contains the information about the *show system* commands that are available to the FortiDB user. Only changes to the default configuration are displayed.

You can use the *show* command within a config shell to display the configuration of that shell, or you can use the *show* command with a full path to display the configuration of the specified shell. To display the configuration of all config shells, you can use the *show* command from the root prompt.

### show system admin setting

The *show system admin setting* command allows you to display the change of system-administration settings.

#### Syntax:

```
show system admin setting
```

### show system backup all-settings

The *show system backup all-settings* command allows you to display the change of system backup settings.

#### Syntax:

```
show system backup all-settings
```

### show system dns

The *show system dns* command allows you to display the change of the DNS server addresses.

#### Syntax:

```
show system dns
```

#### Sample Result:

```
FD-XXX # show system dns
```

```
config system dns
  set primary 65.39.139.53
  set secondary 65.39.139.63
end
```

### show system global

The *show system global* command allows you to display the change of global settings.

#### Syntax:

```
show system global
```

### show system interface

The *show system interface* command allows you to display the change of a FortiDB network interface.

#### Syntax:

```
show system interface
```

#### Sample Result:

```
FD-XXX # show system interface
config system interface
  edit "port1"
    set ip 172.30.62.80 255.255.255.0
    set allowaccess ping https ssh telnet http
  end
```

### show system ntp

The *show system ntp* command allows you to display the change of the automatic time setting using a network time protocol (NTP) server.

#### Syntax:

```
show system ntp
```

#### Sample Result:

```
FD-XXX # show system ntp
config system ntp
  set server "132.246.168.147"
  set status enable
  set sync_interval 120
end
```

### show system route

The *show system route* command allows you to display the change of the static routing table entries.

#### Syntax:

```
show system route
```

#### Sample Result:

```
FD-XXX # show system route
config system route
  edit 1
    set device "port1"
    set gateway 172.30.62.254
  end
```

## get and set commands

This topic describes some examples to use get command and set command.

### get command

The `get` command allows you to retrieve system settings.

Here is an example which retrieves the current system-administration settings:

```
get system admin setting <Enter>
http_port           : 80
https_port          : 443
idle_timeout        : 2
```

### set command

The `set` command allows you to set specific properties within a settings category.

Here is an example which uses `set` to change a default value for a property within the system-administration settings category:

```
show system admin setting <Enter>

config system admin setting <Enter>
(setting)# set idle_timeout 2
end

show system admin setting <Enter>
config system admin setting
    set idle_timeout 2
end
```

---

## FortiDB-Specific Commands

This topic contains the information about CLI commands that perform FortiDB-specific tasks.



**Note:** For general CLI information, see the *Basic CLI Information* section of this document.

You can use the FortiDB CLI in order to perform the following tasks:

- Export System Diagnostics: get diagnostic information about FortiDB and send it to an FTP server
- Restart Application: shutdown and restart the FortiDB application server
- Backup All-Settings: backup your local database, FortiDB system-configuration settings, archives and reports to an FTP server
- Restore All-Settings: restore your local database, FortiDB system-configuration settings, archives and reports from a backup on an FTP server
- Backup and Remove Archives: backup (to an FTP server) and remove archives (from the FortiDB appliance)
- Restore Archives: restore archives from an FTP server
- Backup and Remove Reports: backup (to an FTP server) and remove reports (from the FortiDB appliance)

If a command you entered fails, a return code is displayed:

- When a command fails to connect to the FTP server, you may receive return code= -56 or -9999. If you receive one of these return codes, please check that your FTP server is up and running, and the FTP server information is correct.
- If you enter [crptpasswd] during backup all settings, and during restore all-settings you enter the wrong value for [crptpasswd], you may receive return code=-902. If you receive this return code, please check the value of your [crptpasswd].



**Note:** When you enter an incorrect information for the host name and that causes your system hung, please press <enter> to get back to the original prompt.

### diagnose system export

This FortiDB CLI allows you to export diagnostic information to an FTP server.

#### Syntax:

```
diagnose system export fd_log <ftp server> <user> <password> [directory]
[filename]
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the diagnostic file to be placed.
[filename]	Name of the zip file that contains several log files that will be put on the FTP server. If you don't specify a filename, you will get a default file called <i>fortidb.zip</i> .

#### Sample command:

```
diagnose system export fd_log <your_ftp_server> <your_ftp_username>
<your_ftp_password> . myDiagnose.zip
```

### execute restart

This FortiDB CLI allows you to shutdown and restart the application server under which FortiDB is running.

#### Syntax:

```
execute restart appserver
```

### execute backup all-settings

This FortiDB CLI allows you to backup your local database, FortiDB system-configuration settings, archives and reports.




**Note:** Please press <enter> to get back to the original prompt after the backup has completed with the message saying "Transfer Finished".

#### Syntax:

```
execute backup all-settings <ftp server> <filepath> <username> <password>
[cryptpasswd]
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.

Variable	Description
<filepath>	Location on FTP server where you want the settings file to be placed.  <b>Note:</b> If you don't specify a name, you will get a default file called fdb_allbackup.dat.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[crptpasswd]	Optional password for protecting the settings file on the FTP server.

**Sample command:**

```
execute backup all-settings <your_ftp_server> . <your_ftp_username>
<your_ftp_password> myCrptpasswd
```

**execute restore all-settings**

This FortiDB CLI allows you to restore previously backed up your local database, FortiDB system-configuration settings, archives and reports.

**Syntax:**

```
execute restore all-settings <ftp server> <filepath> <username> <password>
[crptpasswd]
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location of, and filename for, the settings file on the FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[crptpasswd]	Optional password for protecting the settings file on the FTP server.



**Note:** This operation will replace your current settings and necessitate a reboot.

**Sample command:**

```
execute restore all-settings <your_ftp_server> ./fdb_allbackup.dat
<your_ftp_username> <your_ftp_password> myCrptpasswd
```

**execute restore fd-archive**

This FortiDB CLI allows you to restore previously backed up your archives.

**Syntax:**

```
execute restore fd-archive <ftp server> <filepath> <username> <password>
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location of, and filename for, the settings file on the FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.



**Note:** This operation will replace your current settings and necessitate a reboot.

**Sample command:**

```
execute restore fd-archive <your_ftp_server> ./fdb_allbackup.dat  
<your_ftp_username> <your_ftp_password>
```

**execute backup-remove fd-archive**

This FortiDB CLI allows you to backup and then remove your archives.

**Syntax:**

```
execute backup-remove fd-archive <before-date> <ftp server> <username>  
<password> [directory][filename]
```

where:

Variable	Description
<before-date>	Date of the last archive you want included in your backup. For example, if you specify 2008-12-31, the backup will include archives for up to this date. The format is YYYY-MM-DD (MM(1-12), DD(1-31)). <ul style="list-style-type: none"> <li>• YYYY is a 4-digit number representing the year.</li> <li>• MM is a 2-digit number from 1 to 12 representing the month.</li> <li>• DD is a 2-digit number from 1 to 31 representing the day of the month.</li> </ul>
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the tar file to be placed.

Variable	Description
[filename]	Name for the tar file on the FTP server where you want the archives to be placed. The default file name is FD-ARCHIVE-<before-date>.tar.

**Sample command:**

```
execute backup-remove fd-archive 2008-07-30 <your_ftp_server>
<your_ftp_username> <your_ftp_password> . myArchives.tar
```

**execute restore fd-archive**

This FortiDB CLI allows you to restore archives from an FTP server.

**Syntax:**

```
execute restore fd-archive <ftp server> <filepath> <username> <password>
```

where:

Variable	Description
<ftp server>	IP address or hostname of FTP server.
<filepath>	Location on the FTP server of, and the filename for, your archive file.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.



**Note:** This operation will replace your current archives if any.

**Sample command:**

```
execute restore fd-archive <your_ftp_server> ./myArchives.tar
<your_ftp_username> <your_ftp_password>
```

**execute backup-remove fd-report**

This FortiDB CLI allows you to backup and then remove your reports.

**Syntax:**

```
execute backup-remove fd-report <before-date> <ftp server> <username>
<password> [directory][filename]
```

where:

Variable	Description
<before-date>	Date of the reports you want included in your backup. For example, if you specify 2008-12-31, the backup will include reports for up to this date. The format is YYYY-MM-DD (MM(1-12), DD(1-31)). <ul style="list-style-type: none"> <li>YYYY is a 4-digit number representing the year.</li> </ul>

Variable	Description
	<ul style="list-style-type: none"> <li>MM is a 2-digit number from 1 to 12 representing the month.</li> <li>DD is a 2-digit number from 1 to 31 representing the day of the month.</li> </ul>
<ftp server>	IP address or hostname of FTP server.
<username>	User name of account that logs on to the FTP server.
<password>	Password of account that logs on to the FTP server.
[directory]	Location on FTP server where you want the tar file to be placed.
[filename]	Name for the tar file on the FTP server where you want the reports to be placed. The default file name is FD-REPORT-<before-date>.tar.

**Sample command:**

```
execute backup-remove fd-report 2008-07-30 <your_ftp_server>
<your_ftp_username> <your_ftp_password> . myReports.tar
```

