

The FortiAP CLI controls radio and network operation through the use of variables manipulated with the `cfg` command.

The `cfg` command include the following:

<code>cfg -s</code>	List variables.
<code>cfg -a var=value</code>	Add or change a variable value.
<code>cfg -c</code>	Commit the change to flash.
<code>cfg -x</code>	Reset settings to factory defaults.
<code>cfg -r var</code>	Remove variable.
<code>cfg -e</code>	Export variables.
<code>cfg -h</code>	Display help for all commands.

Var	Description and Values
BAUD_RATE	Console data rate: 9600, 19200, 38400, 57600, or 115200 baud.
WTP_NAME	By default, the name is the FortiAP serial number.
FIRMWARE_UPGRADE	Default is 0.
LOGIN_PASSWD	Administrator login password. By default this is empty.
ADMIN_TIMEOUT	Administrative timeout in minutes. Applies to Telnet and web-based manager sessions. Default is 5 minutes.
ADDR_MODE	How the FortiAP unit obtains its IP address and netmask. DHCP - Fortigate interface assigns address STATIC - Specify in AP_IPADDR and AP_NETMASK. Default is DHCP.
AP_IPADDR	These variables set the FortiAP unit IP address, netmask and default gateway when ADDR_MODE is STATIC.
AP_NETMASK	Default 192.168.1.2 255.255.255.0, gateway 192.168.1.1.
IPGW	
AP_MODE	FortiAP operating mode. 0 - Thin AP (default) 2 - Unmanaged Site Survey mode. See SURVEY variables.
DNS_SERVER	DNS Server for clients. If ADDR_MODE is DHCP the DNS server is automatically assigned.
STP_MODE	Spanning Tree Protocol. 0 is off. 1 is on.
AP_MGMT_VLAN_ID	Non-zero value applies VLAN ID for unit management. Default: 0.

TELNET_ALLOW	By default (value 0), Telnet access is closed when the FortiAP unit is authorized. Set value to 1 to keep Telnet always available.
HTTP_ALLOW	Access to FortiAP web-based manager 1 - Yes (default), 0 - No.
AC_DISCOVERY_TYPE	1 - Static. Specify WiFi Controllers 2 - DHCP 3 - DNS 5 - Broadcast 6 - Multicast 0 - Cycle through all of the discovery types until successful.
AC_IPADDR_1	WiFi Controller IP addresses for static discovery.
AC_IPADDR_2	
AC_IPADDR_3	
AC_HOSTNAME_1	WiFi Controller host names for static discovery.
AC_HOSTNAME_2	
AC_HOSTNAME_3	
AC_DISCOVERY_MC_ADDR	Multicast address for controller discovery. Default 224.0.1.140.
AC_DISCOVERY_DHCP_OPTION_CODE	Option code for DHCP server. 138 (default)
AC_CTL_PORT	WiFi Controller control (CAPWAP) port. Default 5246.
AC_DATA_CHAN_SEC	Data channel security. 0 - Clear text 1 - DTLS (encrypted) 2 - Accept either DTLS or clear text (default)
MESH_AP_TYPE	Type of communication for backhaul to controller: 0 - Ethernet (default) 1 - WiFi mesh 2 - Ethernet with mesh backup support
MESH_AP_SSID	SSID for mesh backhaul. Default: fortinet.mesh.root
MESH_AP_BSSID	WiFi MAC address
MESH_AP_PASSWD	Pre-shared key for mesh backhaul.
MESH_ETH_BRIDGE	1 - Bridge mesh WiFi SSID to FortiAP Ethernet port. This can be used for point-to-point bridge configuration. This is available only when MESH_AP_TYPE =1. 0 - No WiFi-Ethernet bridge (default).
MESH_MAX_HOPS	Maximum number of times packets can be passed from node to node on the mesh. Default is 4.

Examples:

cfg -a ADDR_MODE="STATIC"	> set local AP address mode to static
cfg -a AP_IPADDR="192.168.1.2"	> set local IP
cfg -a AP_NETMASK="255.255.255.0"	> set Network Mask
cfg -a IPGW="192.168.1.1"	> set gateway IP to reach the AC
cfg -a AC_IPADDR_1="192.168.1.1"	> AC static IP
cfg -a AC_DISCOVERY_TYPE="1"	> set discovery type to 1 = static

Diagnose commands include:

cw_diag help	Display help for all diagnose commands.
cw_diag uptime	Show daemon uptime.
cw_diag sys-performance	Display system memory and CPU status
cw_diag	Display kernel-panic
cw_diag --tlog <on off>	Turn on/off telnet log message.
cw_diag --clog <on off>	Turn on/off console log message.
cw_diag baudrate [9600 19200 38400 57600 115200]	Set the console baud rate.
cw_diag plain-ctl [0 1]	Show or change current plain control setting.
cw_diag sniff-cfg ip port	Set sniff server ip and port.
cw_diag sniff [0 1 2]	Enable/disable sniff packet.
cw_diag stats wl_intf	Show wl_intf status.
cw_diag admin-timeout [30]	Set shell idle timeout in minutes.
cw_diag -c wtp-cfg	Show current wtp config parameters in control plane.
cw_diag -c radio-cfg	Show current radio config parameters in control plane.
cw_diag -c vap-cfg	Show current vaps in control plane.
cw_diag -c ap-rogue	Show rogue APs pushed by AC for on-wire scan.
cw_diag -c sta-rogue	Show rogue STAs pushed by AC for on-wire scan.
cw_diag -c arp-req	Show scanned arp requests.
cw_diag -c ap-scan	Show scanned APs.

cw_diag -c sta-scan
cw_diag -c sta-cap
cw_diag -c wids
cw_diag -c darrp
cw_diag -c mesh
cw_diag -c mesh-veth-acinfo
cw_diag -c mesh-veth-vap
cw_diag -c mesh-veth-host
cw_diag -c mesh-ap
cw_diag -c scan-clr-all
cw_diag -c ap-suppress
cw_diag -c sta-deauth
diag_debug_crashlog read

Show scanned STAs.
Show scanned STA capabilities.
Show scanned WIDS detections.
Show darrp radio channel.
Show mesh status.
Show mesh veth ac info, and mesh ether type.
Show mesh veth vap.
Show mesh veth host.
Show mesh ap candidates.
Flush all scanned AP/STA/ARPs.
Show suppressed APs.
De-authenticate an STA.
Show crash logs