AirDefense Services Platform

Appliance Command Line Interface

Contents

1.0 Categories 1

2.0 Commands 2

2.1 Device Management 2

discover Command 2

import Command 3

reconfigure Command 3

dataCollection Command 4

moveDevices Command 4

2.2 Firmware Upgrade/Downgrade 5

updateFirmware Command 5

installFirmware Command 6

2.3 Troubleshooting Functionality 7

frameCapture Command 7

apTest Command 7

wvaTest Command 9

2.4 WIPS Functionality 12

terminate Command 12

acl Command 12

portLookup Command 13

portSup Command 14

3.0 Support and Sales 15

AirDefense Services Platform (ADSP) provides a Command Line Interface (CLI) for users to execute a limited set of commands while logged into an ADSP appliance.

1 Categories

The CLI includes the following categories:

- **Device Management**
  - Device discovery (**discover**)
  - Device and profile imports (**import**)
  - Device configuration (**reconfigure**)
  - Device polling (**dataCollection**)
  - Device relocation (**moveDevices**)
- **Firmware Upgrade / Downgrade**
  - Load firmware to ADSP (**updateFirmware**)
  - Push Firmware to Device (**installFirmware**)
- **Troubleshooting**
  - Frame Capture (**frameCapture**)
  - AP Test (**apTest**)
  - Wireless Vulnerability Assessment (**wvaTest**)
- **WIPS Functionality**
  - Termination (**terminate**)
  - ACL (**acl**)
  - Port Lookup (**portLookup**)
  - Port Suppression (**portSup**)

2 Commands

Each category includes a set of commands that are described below.

2.1 Device Management

2.1.1 discover Command

Usage

discover *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

name	Name of the job. If none is specified, it will be auto-generated. For better status monitoring results, name should be an unique string.
networks	Comma-separated list of networks to discover. (default: 10.0.0.1)
	Example: 192.168.0.1,192.168.1.0/24
port	SNMP port to use (default: 161)
retries	Number of SNMP retries (default: 3)
timeout	Initial SNMP timeout value (default: 200)
version	SNMP version: v1, v2c or v3 (default: v2c)
readCommunity	Community string to use for SNMP (default: public)
user	SNMP v3 user parameter (default: admin)
authType	SNMP v3 parameter: none, md5 or sha (default: md5)
authPassphrase	SNMP v3 authentication passphrase (default: 12345678)
privType	SNMP v3 parameter: none, des, 3des, aes128, aes192 or aes256 (default: des)
privPassphrase	SNMP v3 privacy passphrase (default: 12345678)

folderId	Folder ID for the floor where the discovered devices will be added. By default, auto-placement rules are utilized.
folderPath	Folder path for the floor where the discovered devices will be added. Example: '/ADSP/Unplaced Devices'. By default, auto-placement rules are utilized.
maxStatusPollTime	Maximum number of seconds to wait for the job to complete (default: 60)
statusPollInterval	Wait time between job status polls (default: 1000)

2.1.2 import Command

Usage

import *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

filename	Name of the firmware file to be installed.
user	A valid ADSP user. (default: admin)
folderId	Folder in which to place imported devices. If this switch is not supplied, auto-placement rules are used instead.
replace	Imported auto-placement rules will replace existing rules, not add to them. (default: false)

2.1.3 reconfigure Command

Usage

reconfigure *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

jobDescription	Name of the job. If none is specified, it will be auto-generated. For better status monitoring results, name should be an unique string.
deviceType	Either AP or Switch (default: AP)

deviceMac	MAC of device to reconfigure
deviceIp	IP Address of device to reconfigure
user	A valid ADSP user. (default: admin)
maxStatusPollTime	Maximum number of seconds to wait for the job to complete (default: 60)
statusPollInterval	Wait time between job status polls (default: 1000)

2.1.4 dataCollection Command

Usage

dataCollection *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

macs	MACs to search. If not specified, will poll all MACs for within the search scope.
folderId	Folder id for the poll scope. By default, the system scope is used.
folderPath	Folder path for the poll scope. By default, the system scope is used.
autoUpdateConfig	Auto update non-compliant devices: true or false (default: false)
type	Type of poll to perform: status or dataCollection. (default: dataCollection)

2.1.5 moveDevices Command

Usage

moveDevices *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

macs	Comma separated list of MAC addresses of device(s) to move.
folderId	Destination folder ID.
folderPath	Destination folder path.
reconfigure	Reconfigure now; do not defer. (default: true)

block	Block while reconfiguring. (default: true)
jobDescription	Name of the job. If none is specified, it will be auto-generated. For better status monitoring results, name should be an unique string.
maxStatusPollTime	Maximum number of seconds to wait for the job to complete. (default: 60)
statusPollInterval	Wait time between job status polls. (default: 1000)

2.2 Firmware Upgrade/Downgrade

2.2.1 updateFirmware Command

Usage

updateFirmware *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

type	Operation to perform: add or remove (default: add)
filename	Name of the firmware file to be installed.
path	The path to the file on the appliance. (add only) (default: /usr/local/smx/tmp/)
version	Firmware file version (add only)
deviceType	CLUSTER, WIRELESS_SWITCH, L2BRIDGE, SENSOR, MU, AP, GENERIC_MIB2_DEVICE, AP_OR_SWITCH, WIRELESS_MANAGER (add only) (default: AP)
vendor	Device manufacturerer (add only) (default: Motorola)
deviceName	Name of the device type (add only) (default: AP5131)

2.2.2 installFirmware Command

Usage

installFirmware *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

name	Name of the job. If none is specified, it will be auto-generated. For better status monitoring results, name should be an unique string.
deviceMacs	List of device MAC addresses to upgrade. Example: 00:11:22:33:44:55,55:44:33:22:11:00
folderId	Folder ID for the floor where devices will be updated.
folderPath	Folder path for the floor where the devices will be upgraded. Example: '/ADSP/Unplaced Devices'
downgradeAllowed	Should downgrades be performed: true or false (default: false)
cancelJobOnFailure	Should the entire job fail if a firware update fails: true or false (default: false)
bandwidthLimit	Bandwidth on data transfer. -1 for unlimited. (default: -1)
concurrentUpgrades	Number of concurrent upgrades to perform. -1 for unlimited. (default: -1)
maxStatusPollTime	Maximum number of seconds to wait for the job to complete (default: 60)
statusPollInterval	Wait time between job status polls (default: 1000)
firmwareNames	Comma delimited list of firmware names.

2.3 Troubleshooting Functionality

2.3.1 frameCapture Command

Usage

frameCapture *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

interactions	Whether to check for feature interactions: true or false. (default: true)
username	The user to associate the frame capture with. (defaults to unix user)
deviceMAC	The MAC Address of the device being captured.
sensor	Is the device being captured a sensor: true or false. (default: false)
filename	Output filename.
secondsToRun	Number of seconds to capture. Unlimited if not specified. (default: 0)
framesToCapture	Number of frames to capture. 10,000 if not specified. (default: 10000)
truncMgt	Bytes of management frames to capture. (default: -1)
truncCtl	Bytes of control frames to capture. (default: -1)
truncDat	Bytes of data frames to capture. (default: -1)

2.3.2 apTest Command

Usage

apTest *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

profileName	Saved profile to use for this test. (ignores other params)
ssid	SSID
authentication	Authentication: OPEN, SHARED_KEY, NETWORK_EAP (default: OPEN)

uEncryption	Unicast Encryption: NONE, WEP, TKIP, AES_CCMP (default: NONE)
mEncryption	Multicast Encryption: NONE, WEP, TKIP, AES_CCMP (default: NONE)
keyGen	Key Generation: None, WPA_PSK, WPA_EAP, X8021 (default: NONE)
eap	EAP Method: LEAP, PEAP_GTC, EAP_FAST_AUTO, EAP_FAST_MANUAL
wpa	WPA Type: WPA, WPA2
stationMAC	MAC address of station (default: 00:11:22:33:44:55)
ipAddress	If the IP address is specified, then we assume dhcp is disabled.
subnetMask	Subnet Mask (ipAddress must be specified
defaultGateway	Default Gateway (ipAddress must be specified
primaryDNS	Primary DNS
secondaryDNS	Secondary DNS (primaryDNS must be specified
domainName	Domain Name (primaryDNS must be specified
asciiKey	Is ASCII WEP key: true false (default: false)
wepSize	Size of WEP Key: WEP64, WEP128 (default: WEP64)
eapUser	EAP user name
eapPass	EAP password
pskKey	PSK Key
wepIndex	WEP Index (default: 1)
wepKey	WEP Key
user	User to run this test (this can affect scope)
testMAC	MAC address of the BSS to test. If not specified, will return all MACs for all sanctioned BSSs within the scope.
sensorMAC	MAC address of the Sensor scope to. If not specified, will return all MACs for all sanctioned BSSs within the scope. If testMAC is specified, then test the BSS with this sensor
folderId	Folder ID for the test scope. By default, the system scope is used.

folderPath	Folder path for the test scope. By default, the system scope is used.
retryCount	Retry count per test. (default: 2)
signalThreshold	RSSI value below which we will not test BSSs (default: -70)
lastSeen	How recent (in minutes) was the BSS seen (in order to be tested). (default: 120)
waitMinutes	How long (in minutes) to wait for a sensor to become free. (default: 2)
switchSensors	Switch sensors on test retry: true or false (default: true)
skipTest	Skip BSS when sensor is busy: true or false (default: false)
ssidFilter	Filter BSSs within scope by SSID: true or false (default: true)
forceStart	Force start of test even if sensor is busy: true or false (default: false)
parallel	Tests to run in parallel (default: 1)
forceUnknown	Force test of a BSS that is not seen by any sensor: true or false. You must also specify sensorMAC. (default: false)
traceroutes	Traceroutes: www.google.com,192.168.1.1
pings	Ping Hosts: www.google.com:PINGABLE,192.168.1.1:NOTPINGABLE
scans	Scan Ports: www.google.com:80:Open,192.168.1.1:443:Closed
lookups	DNS Lookups: <hostname>:<ResolveToAddress>,www.google.com,50.4.128.3
pcap	File to store pcap to.

2.3.3 wvaTest Command

Usage

wvaTest *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

profileName	Saved profile to use for this test (ignores other params)
ssid	SSID

authentication	Authentication: OPEN, SHARED_KEY, NETWORK_EAP (default: OPEN)
uEncryption	Unicast Encryption: NONE, WEP, TKIP, AES_CCMP (default: NONE)
mEncryption	Multicast Encryption: NONE, WEP, TKIP, AES_CCMP (default: NONE)
keyGen	Key Generation: None, WPA_PSK, WPA_EAP, X8021 (default: NONE)
eap	EAP Method: LEAP, PEAP_GTC, EAP_FAST_AUTO, EAP_FAST_MANUAL
wpa	WPA Type: WPA, WPA2
stationMAC	MAC address of station (default: 00:11:22:33:44:55)
ipAddress	If the IP address is specified then we assume dhcp is disabled.
subnetMask	Subnet Mask (ipAddress must be specified
defaultGateway	Default Gateway (ipAddress must be specified
primaryDNS	Primary DNS
secondaryDNS	Secondary DNS (primaryDNS must be specified
domainName	Domain Name (primaryDNS must be specified
asciiKey	Is ASCII WEP key: true false (default: false)
wepSize	Size of WEP Key: WEP64, WEP128 (default: WEP64)
eapUser	EAP user name
eapPass	EAP password
pskKey	PSK Key
wepIndex	WEP Index (default: 1)
wepKey	WEP Key
user	User to run this test (this can affect scope)
testMAC	MAC address of the BSS to test. If not specified, will return all MACs for all sanctioned BSSs within the scope.
sensorMAC	MAC address of the Sensor scope to. If not specified, will return all MACs for all sanctioned BSSs within the scope. If testMAC is specified, then test the BSS with this sensor.

folderId	Folder ID for the test scope. By default, the system scope is used.
folderPath	Folder path for the test scope. By default, the system scope is used.
retryCount	Retry count per test. (default: 2)
signalThreshold	RSSI value below which we will not test BSSs (default: -70)
lastSeen	How recent (in minutes) was the BSS seen (in order to be tested). (default: 120)
waitMinutes	How long (in minutes) to wait for a sensor to become free. (default: 2)
switchSensors	Switch sensors on test retry: true or false (default: true)
skipTest	Skip BSS when sensor is busy: true or false (default: false)
ssidFilter	Filter BSSs within scope by SSID (default: true)
forceStart	Force start of test even if sensor is busy. (default: false)
parallel	Tests to run in parallel (default: 1)
forceUnknown	Force test of a BSS that is not seen by any sensor. Must specify sensorMAC. (default: false)
type	Type of WVA scan: black or white (default: black)
zoneTransfer	Discover hosts via zone transfer (default: false)
tracerouteDNS	Perform traceroute to DNS (default: false)
tracerouteWINS	Perform traceroute to WINS (default: false)
tracerouteHost	Perform traceroute to supplied host
scanUnpingable	Port scan unpingable hosts. (default: false)
reverseLookup	Perform reverse lookup on address. (default: false)
internetHost	Address to check for internet access.
internetPort	Port of internetHost to check for internet access. (default: 80)
scanTimeout	Number of minutes before we time out the test. (default: 1440)
additionalPorts	Additional ports to scan: 80,443,8543,etc

hostEntry1	Host entry: <network>,<ports>,<ping>,<source>.
hostEntry2	Host entry: 192.168.1.1,80:443,ALLOWED|NOTALLOWED|DONT_CARE,192.168.1.1
hostEntry3	Additional hostEntries can be added in contiguous increments

2.4 WIPS Functionality

2.4.1 terminate Command

Usage

terminate *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

deviceType	Either BSS or Station (default: BSS)
deviceMac	The MAC address of the device being terminated
terminationDuration	Number of minutes to terminate. Unlimited if not specified.

2.4.2 acl Command

Usage

acl *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

mac	MAC address to ACL (default: 00:00:00:00:00:01)
get	Gets ACL entries
add	Adds an ACL entry
remove	Removes an ACL entry for the specified MAC address
refresh	Refreshes ACL entries for the specified MAC address
reaply	Reapplies ACL entries for the specified MAC address

user	Need to specify a valid ADSP user here for scope permission validation. (default: admin)
folderId	Folder ID for the port-lookup scope. By default, the system scope is used.
folderPath	Folder path for the port-lookup scope. By default, the system scope is used.
maxStatusPollTime	Maximum number of seconds to wait for the job to complete (default: 60)
statusPollInterval	Wait time between job status polls (default: 1000)

2.4.3 portLookup Command

Usage

portLookup *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

macs	MAC addresses to search. If not specified, will return all MAC addresses for all switches within the search scope.
user	Need to specify a valid ADSP user here for scope permission validation. (default: admin)
switchMac	Specifies the switch MAC address for a single-switch lookup
switchIp	Specifies the switch IP address for a single-switch lookup
folderId	Folder ID for the port-lookup scope. By default, the system scope is used.
folderPath	Folder path for the port-lookup scope. By default, the system scope is used.
maxStatusPollTime	Maximum number of seconds to wait for the job to complete (default: 60)
statusPollInterval	Wait time between job status polls (default: 1000)

2.4.4 portSup Command

Usage

portSup *-paramName1 paramValue1 -paramName2 paramValue2 -paramName3 paramValue3 ...*

Use the -debug switch to turn on debug messages.

Parameters

switchMac	Specifies the switch MAC address
switchIp	Specifies the switch IP address (alternative to switchMac)
ifIndex	Specifies the index of the interface to enable/disable (default: 0)
ifName	Specifies the name of the interface to enable/disable (used for information purposes only)
ifDescr	Specifies the name of the interface to enable/disable (used for information purposes only)
user	Need to specify a valid ADSP user here for scope permission validation. (default: admin)
enable	If specified, will enable the interface instead of disabling it

3 Support and Sales

Motorola Solutions' Enterprise Mobility Support Center

If you have a problem with your equipment, contact Enterprise Mobility support for your region. Support and issue resolution are provided for products under warranty or that are covered by an Enterprise Mobility Services agreement. Contact information and web self-service are available by visiting http://supportcentral.motorola.com/.

When contacting Enterprise Mobility support, please provide the following information:

- Serial number of the unit
- Model number or product name
- Software type and version number

Motorola responds to calls by email, telephone or fax within the time limits set forth in support agreements. If you purchased your Enterprise Mobility business product from a Motorola business partner, contact that business partner for support.

Customer Support Web Site

Motorola's Support Central Web site, located at http://supportcentral.motorola.com/ provides information and online assistance including developer tools, software downloads, product manuals, support contact information and online repair requests.

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