

# Wlan command usage

Version: 1.0

Release date: 2011-12-22

### © 2011 MediaTek Inc.

This document contains information that is proprietary to MediaTek Inc.

Unauthorized reproduction or disclosure of this information in whole or in part is strictly prohibited.

Specifications are subject to change without notice.



MTXXXX Chip Name

**Confidential B** 

# **Document Revision History**

Revision	Date	Author	Description



### **Table of Contents**

Docu	ıment Revision History	2
Table	e of Contents	3
Notic	se	5
1	wlanphxcmd up Command	6
2	wlanphxcmd down Command	7
3	wlanphxcmd cmdver display Command	8
4	wlanphxcmd driverver display Command	9
5	wlanphxcmd mode set Command	10
6	wlanphxcmd mode display Command	11
7	wlanphxcmd rate set Command	12
8	wlanphxcmd rate display Command	13
9	wlanphxcmd rateset set Command	14
10	wlanphxcmd channel set Command	15
11	wlanphxcmd channel display Command	16
12	wlanphxcmd txpwr set Command	17
13	wlanphxcmd phytype display Command	18
14	wlanphxcmd region set Command	19
15	wlanphxcmd bssid display Command	20
16	wlanphxcmd ssid set Command	21
17	wlanphxcmd ssid display Command	22
18	wlanphxcmd hide set Command	. 23
19	wlanphxcmd assoclist display Command	24
20	wlanphxcmd secmode set Command	. 25
21	wlanphxcmd wepkey set Command	. 26
22	wlanphxcmd wepkeyindex set Command	. 27
23	wlanphxcmd pskkey set Command	. 28
24	wlanphxcmd wpaencryption set Command	29
25	wlanphxcmd fltmac set Command	30
26	wlanphxcmd fltmacctrl set Command	31
27	wlanphxcmd fltmacmode set Command	32
28	wlanphxcmd assocctl set Command	33
29	wlanphxcmd mbss set Command	34
30	wlanphxcmd ap_isolate set Command	. 35
31	wlanphxcmd wme set	36

# MTXXXX Chip Name

### **Confidential B**



32	wlanphxcmd dtim set Command	37
33	wlanphxcmd bgprotection set Command	38
34	wlanphxcmd rtsthreshold set Command	39
35	wlanphxcmd fragthreshold set Command	40
36	wlanphxcmd beaconperiod set Command	41
37	wlanphxcmd txburst set Command	42
38	wlanphxcmd HT_GI set Command	43
39	wlanphxcmd HT_BW set Command	44
40	wlanphxcmd HT_MCS set Command	45
41	wlanphxcmd wps_ctl set Command	46
42	wlanphxcmd wps_mode set Command	47
43	wlanphxcmd wps_pinval set Command	48
44	wlanphxcmd wps_switch set Command	49
45	wlanphxcmd wps_conf set Command	50
46	wlanphxcmd help display Command	51



### **Notice**

- 1. Ssid value should be set again, after wireless commands are executed;
- 2. Basic configuration info should be written into the file RT2684AP.dat under the directory of /usr/etc/Wireless/RT2860AP/ before the driver is activated.
- (1) In the first line, only the key word Default is written
- (2) BssidNum should be set to 4
- (3) For auto channel selection, set AutoChannelSelect=1 or AutoChannelSelect=0.
- (4) Other configurations are set by cmd



### 1 wlanphxcmd up Command

[COMMAND PURPOSE] this command activates WLAN interface

【COMMAND SYNTAX】 wlanphxcmd up -i {ssidindex}

【PRECONDITION】 None

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index	[optional]

[NOTICE] -i option must be followed by virtual interface number

[EXAMPLE] wlanphxcmd up -i 0



# 2 wlanphxcmd down Command

 $\cline{COMMAND}$  PURPOSE  $\cline{Delta}$  this command deactivates the WLAN interface

【COMMAND SYNTAX】 wlanphxcmd down -i {ssidindex}

[DESCRIPTION] this command stops the WLAN interface

[PRECONDITION] none

【PARAMETERS】

Parameter	Description	Notice
SsidIndex	SSID index	[optional]

[NOTICE] -i option most be followed by virtual interface number

[EXAMPLE] wlanphxcmd down -i 0



# 3 wlanphxcmd cmdver display Command

【COMMAND PURPOSE】 this command displays WLANPHXCMD version info

【COMMAND SYNTAX】 wlanphxcmd cmdver display

[DESCRIPTION] this command displays WLANPHXCMD version info

【PRECONDITION】 none

【PARAMETERS】 none

[NOTICE] none. (related to specific product)

[EXAMPLE]



# 4 wlanphxcmd driverver display Command

[COMMAND PURPOSE] this command displays WLAN driver version info

【COMMAND SYNTAX】 wlanphxcmd driverver display

[DESCRIPTION] this command displays WLAN driver version info

【PRECONDITION】 none

【PARAMETERS】 none. (Related to specific product)

[NOTICE] none

(EXAMPLE)

[COMMAND PURPOSE] this command displays the WLAN chipset firmware version info

【COMMAND SYNTAX】 wlanphxcmd firmwarever display

[DESCRIPTION] this command displays the WLAN chipset firmware version info

【PRECONDITION】 none

【PARAMETERS】 none

[NOTICE] none. (Related to specific product)

**(EXAMPLE)** 





# 5 wlanphxcmd mode set Command

[COMMAND PURPOSE] this command sets the wirless mode for WLAN interface

【COMMAND SYNTAX】 wlanphxcmd mode set {mode}

[DESCRIPTION] SIX wireless modes are supported

[PRECONDITION] none

【PARAMETERS】

Parameter	Description	Notice
mode	bonly, setting the wireless mode to IEEE 802.11b-Only;	[optional]
	gonly, setting the wireless mode to IEEE 802.11g-Only;	
	mixed, setting the wireless mode to IEEE 802.11b/g mixed.	
	nonly, setting the wireless mode to IEEE 802.11n-Only;	
	<pre>gnmixed, setting the wireless mode to IEEE 802.11g/n mixed;</pre>	
	bgnmixed, setting the wireless mode to IEEE 802.11b/g/n mixed	

### [NOTICE]

The WLAN basic rate is set, after the wireless mode command is applied. The respective values for each are listed as follows:

wlanphxcmd rateset set 15: in N-only mode, mixed mode and B/G/N-mixed mode

wlanphxcmd rateset set 3 : in B-only mode

wlanphxcmd rateset set 351: in G-only mode, and G/N-mixed node

### **EXAMPLE**

# wlanphxcmd mode set nonly /\*setting the wireless mode to n-Only\*/



# 6 wlanphxcmd mode display Command

【COMMAND PURPOSE】 this command sets the wireless mode for WLAN interface

【COMMAND SYNTAX】 wlanphxcmd mode display

【DESCRIPTION】 SIX wireless modes are supported: IEEE 802.11b, IEEE 802.11g, IEEE 802.11n,b/g-Mixed Mode, g/n-Mixed Mode, b/g/n-Mixed Mode

【PRECONDITION】 none

【PARAMETERS】 none

[NOTICE] none

**(EXAMPLE)** 



# 7 wlanphxcmd rate set Command

[COMMAND PURPOSE] this command sets the WLAN data transmission rate

【COMMAND SYNTAX】 wlanphxcmd rate set {rate value}

【DESCRIPTION】 this command sets the WLAN data transmission rate according to the given parameter

【 PRECONDITION 】 the data transmission rate is relative to mcs parameter in IEEE 802.11n mode

### [PARAMETERS]

Parameter	Description	Notice
rate value	Data rate When CPE works in 802.11b mode, following data rates are supported:1, 2, 5.5, 11Mbps;	[optional]
	When CPE Works in 802.11g mode, following data rates are supported: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54Mbps.	

[NOTICE] the routine of this command is dependent on the wireless mode

### [EXAMPLE]

# wlanphxcmd rate set 11 /\*setting the data rate to 11Mbps\*/



# 8 wlanphxcmd rate display Command

 $\mbox{\cite{COMMAND PURPOSE}}\mbox{\cite{Discrete}}$  this command displays the  $\mbox{\cite{WLAN}}$  data rate

【COMMAND SYNTAX】 wlanphxcmd rate display

[DESCRIPTION] this command displays the WLAN data rate

【PRECONDITION】 none

【PARAMETERS】 none

[NOTICE] none

[EXAMPLE]



# 9 wlanphxcmd rateset set Command

[COMMAND PURPOSE] this command set the WLAN basic data rate

[COMMAND SYNTAX] wlanphxcmd rateset set {rate value}

【 DESCRIPTION 】 this command set the WLAN basic data rate according to the given parameter

【PRECONDITION】 none

[PARAMETERS]

[NOTICE] none

**EXAMPLE** 

NOTE: In default mode the data rate is adjusted automatically, and the above mentioned 3 commands are not necessary.



### 10 wlanphxcmd channel set Command

[COMMAND PURPOSE] this command set the WLAN channel

【COMMAND SYNTAX】 wlanphxcmd channel set {channel value}

[DESCRIPTION] this command set the WLAN channel according the given parameters

【PRECONDITION】 none

#### [PARAMETERS]

Parameter	Description	Notice
channel value	Wireless Channel	[optional]
	Wireless channel settings differs according to different country code	
	For 2.4G spectrum device and 802.11b/g mode, possible channels are 1 - 14.	

#### [NOTICE]

- 1. Possible channels differ from country to country(eg: China and European countries are 1-13, North American Countries 1-11, Japan 1-14)
- 2. When the channel is automatically selected, this command would be executed. However the configuration file RT2860.dat for WLAN driver should be put into the directory of usr/etc/Wireless/RT2860AP. The detailed procedures are listed as follows:
  - (1) in first line the key word 'Default' is written
- (2) when automatic channel selection is enabled AutoChannelSelect=1 should be written in the next line, otherwise AutoChannelSelect=0 is written.
  - (3) deactivate all the WLAN interfaces with 'wlanphxcmd down' command
  - (4) activate the selected WLAN interface with 'wlanphxcmd up' command
  - (5) adding all the activated WLAN interfaces into bridge 'br0'
- (6) when automatic channel selection is not enabled the following command should be executed: wlanphxcmd channel set xxx
  - (7) set all the wireless parameters with cmd again

#### (EXAMPLE)

# wlanphxcmd channel set 11 /\*setting the wireless channel to 11\*/



# 11 wlanphxcmd channel display Command

【COMMAND PURPOSE】 this command displays the wireless channel for WLAN interface

【COMMAND SYNTAX】 wlanphxcmd channel display

[DESCRIPTION] this command displays the wireless channel for WLAN interface

[PRECONDITION] none

【PARAMETERS】 none

 $\[$  NOTICE  $\]$  Possible channels differ from country to country(eg: China and European countries are 1-13, North American Countries 1-11, Japan 1-14)

[EXAMPLE]



# 12 wlanphxcmd txpwr set Command

[COMMAND PURPOSE] this command configures the WLAN RF power

[COMMAND SYNTAX] wlanphxcmd txpwr set {-p value}

[DESCRIPTION] WLAN channel is adjusted according to different unit

【PRECONDITION】 none

【PARAMETERS】

Parameter	Description	Notice
-p value	Range: 1~100	[optional]

[NOTICE]

**(EXAMPLE)** 

# wlanphxcmd txpwr set -p 10



# 13 wlanphxcmd phytype display Command

【COMMAND PURPOSE】 this command displays the physical wireless mode

【COMMAND SYNTAX】 wlanphxcmd phytype display

【DESCRIPTION】 physical wireless mode includes 802.11b, 802.11g, 802.11n, which should be displayed by calling this function

【PRECONDITION】 none

【PARAMETERS】 none

[NOTICE] none

**(EXAMPLE)** 

# wlanphxcmd phytype display

# 2(g)



# 14 wlanphxcmd region set Command

【COMMAND PURPOSE】 This command sets the respective country code

【COMMAND SYNTAX】 wlanphxcmd phytype set {region value}

[DESCRIPTION] This command sets the respective country code

【PRECONDITION】 none

【PARAMETERS】 the country code is represented by 2 capitalized characters(eg: China is represented by CN, TAIWAN: TW), the definition of which can be found on the following website:

http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html#sz

[NOTICE] none

[EXAMPLE]

# wlanphxcmd region set CN



# 15 wlanphxcmd bssid display Command

【COMMAND PURPOSE】 this command displays the wireless BSSID value

【COMMAND SYNTAX】 wlanphxcmd bssid display [-i ssidindex]

【DESCRIPTION】 BSSID value can be fetched by executing this command. When the BSSID index is not given, all BSSIDs are displayed.

【PRECONDITION】 none

[PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index	[optional]

[NOTICE] when -i option is not added, the operation is done to the first SSID

(EXAMPLE)

# wlanphxcmd bssid display - i 0 /\*display the BSSID value for the first SSID\*/



# 16 wlanphxcmd ssid set Command

【COMMAND PURPOSE】 this command configures the SSID value for WLAN interfaces

[COMMAND SYNTAX] wlanphxcmd ssid set [-i SsidIndex] {ssid}

 $\mbox{\tt I}$  DESCRIPTION  $\mbox{\tt J}$  SSID index is represented by  $\mbox{\tt SsidIndex}$  , when multiple  $\mbox{\tt SSID}$  are supported

[PRECONDITION] none

[PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3.	[optional]
ssid	SSID value.  Effective value are printable ASCII characters within the length of 32 (0°f).	[optional]

[NOTICE] when -i option is not added, the operation is done to the first SSID

### **EXAMPLE**

# wlanphxcmd ssid set-i 0 brian /\*setting the first virtual SSID value
to "brian"\*/



# 17 wlanphxcmd ssid display Command

[COMMAND PURPOSE] this command displays the WLAN SSID.

[COMMAND SYNTAX] wlanphxcmd ssid display [-i SsidIndex]

 $\mbox{\tt I}$  DESCRIPTION  $\mbox{\tt J}$  SSID index is represented by  $\mbox{\tt SsidIndex}$  , when multiple  $\mbox{\tt SSID}$  are supported

【PRECONDITION】 none

[PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]

[NOTICE] when -i option is not added, the operation is done to the first SSID

[EXAMPLE]

# 18 wlanphxcmd hide set Command

[COMMAND PURPOSE] this command sets the SSID state to hidden

[COMMAND SYNTAX] wlanphxcmd hide set [-i ssidindex] [value]

【DESCRIPTION】 SSID hide operation can be executed to specific interface independently. This command is applied to activate/deactivate the hide SSID function

【PRECONDITION】 none

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index	[optional]
value	Disable: deactivate the function	[compulsory]
	Enable: activate the function	
	The default state is set to disable	

[NOTICE] when -i option is not added, the operation is done to the first SSID

### **(EXAMPLE)**

# wlanphxcmd hide set -i 0 enable /\*activate the SSID hide function for the first SSID\*/



# 19 wlanphxcmd assoclist display Command

【COMMAND PURPOSE】 this command displays MAC address of the wireless station that the wireless device is connected to.

### [COMMAND SYNTAX] wlanphxcmd assoclist display [-i SsidIndex]

【 DESCRIPTION 】 this command displays MAC address of wireless station each SSID is connected to

【PRECONDITION】 none

[PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index	[optional]

[NOTICE] none

**(EXAMPLE)** 

# wlanphxcmd assoclist display -i 0 /\*display the MAC address of wireless STA that the first SSID is connected to\*/



### 20 wlanphxcmd secmode set Command

[COMMAND PURPOSE] this command sets the WLAN security mode

[ COMMAND SYNTAX ] wlanphxcmd secmode set [-i SsidIndex] { open |wep | wpa | wpapsk |
wpa2psk | wpapsk wpa2psk}

 $\hfill {\tt DESCRIPTION}$  ] SSID index is represented by  $\hfill {\tt SSidIndex}$  , when multiple  $\hfill {\tt SSID}$  are supported

【PRECONDITION】 none

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]

[NOTICE] when —i option is not added, the operation is done to the first SSID. Security parameters are related to each other. When these commands are executed, CPE should be restarted. WLANPHXCMD is memory less

#### **(EXAMPLE)**

Wlanphxcmd secmode set - i 0 wpapsk /\*setting the security mode of first ssid to WPA-PSK\*/

### Note: for command 22, 23

- 1. wlanphxcmd wepkey set, -k option specifies the key to set into;
- 2. wlanphxcmd wepkeyindex set, this command activates the key.

In wep mode, command should follow the following sequence:

wlanphxcmd secmode set -i 0 wep

wlanphxcmd wepkey set -i 0 -k 2 abcde

wlanphxcmd wepkeyindex set -i 0 2

wlanphxcmd ssid set -i 0 brian



### 21 wlanphxcmd wepkey set Command

[COMMAND PURPOSE] this command configures the WEP key the WLAN interface

[COMMAND SYNTAX] wlanphxcmd wepkey set [-i SsidIndex] [-k KeyIndex] {KeyValue}

[ DESCRIPTION ] SSID index is represented by SsidIndex, when multiple SSID are supported. WEP key index is represented by KeyIndex, and keyValue refers to the value of the WEP key.

[PRECONDITION] the wireless encryption mode must be set to WEP

#### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
KeyIndex	Key index	[optional]
KeyValue	Key value	[compulsory]

### [NOTICE]

- 1. When —i option is not added, the operation is done to the first SSID. Security parameters are related to each other. When these commands are executed, CPE should be restarted. WLANPHXCMD is memory—less
- 2. The key value checked by the following rules first:
- (1) 5 or 13 characters excluding symbols;
- (2) 10 or 26 characters ranging from 0°9, a, b, c, d, e, f;

### [EXAMPLE]

Wlanphxcmd wepkey set - i 0 - k 1 abcde



### 22 wlanphxcmd wepkeyindex set Command

【COMMAND PURPOSE】 this command sets the WLAN WEP key index currently in use

[COMMAND SYNTAX] wlanphxcmd wepkeyindex set [-i SsidIndex] {KeyNumber}

[ DESCRIPTION ] SSID index is represented by SsidIndex, when multiple SSID are supported, while KeyNumber refers to the key index

[PRECONDITION] the wireless encryption mode must be set to WEP

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
KeyNumber	Key index	[compulsory]

[NOTICE] when —i option is not added, the operation is done to the first SSID. Security parameters are related to each other. When these commands are executed, CPE should be restarted. WLANPHXCMD is memory-less

### [EXAMPLE]

wlanphxcmd wepkeyindex set -i 0 1 /\*using the first key\*/



### 23 wlanphxcmd pskkey set Command

[COMMAND PURPOSE] this command configures the current WLAN WPA-PSK key

[COMMAND SYNTAX] wlanphxcmd pskkey set [-i SsidIndex] {Keyvalue}

[ DESCRIPTION ] SSID index is represented by SsidIndex, when multiple SSID are supported, while KeyValue refers to the key value.

[ PRECONDITION ] security mode should be set to WPAPSK, WPA2PSK of WPAPSKWPA2PSK

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
KeyValue	Key value	[compulsory]

[NOTICE] when —i option is not added, the operation is done to the first SSID. Security parameters are related to each other. When these commands are executed, CPE should be restarted. WLANPHXCMD is memory-less

#### (EXAMPLE)

# wlanphxcmd pskkey set - i 0 1234567890



## 24 wlanphxcmd wpaencryption set Command

[COMMAND PURPOSE] this command configures the encryption mode of WPAWPA2

[COMMAND SYNTAX] wlanphxcmd wpaencryption set [-i SsidIndex] {aes|tkip|tkipaes}

 $\hfill {\tt DESCRIPTION}$  ] SSID index is represented by  $\hfill {\tt SSID}$  are supported

[ PRECONDITION ] security mode should be set to WPAPSK, WPA2PSK or WPAPSKWPA2PSK

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]

[NOTICE] when —i option is not added, the operation is done to the first SSID. Security parameters are related to each other. When these commands are executed, CPE should be restarted. WLANPHXCMD is memory—less

#### [EXAMPLE]

# wlanphxcmd wpaencryption set -i 0 aes /\*setting the encryption type of first SSID into AES\*/

Note: for command 26 - 28, when the filter function is activated/deactivated, commands should be executed in the following sequence:

- 1. wlanphxcmd fltmacctrl set enable
- 2. wlanphxcmd fltmacmode set allow
- 3. wlanphxcmd fltmac set 00:11:22:33:44:55



# 25 wlanphxcmd fltmac set Command

【COMMAND PURPOSE】 this command configures the MAC addresses of wireless devices that should be filtered

### [COMMAND SYNTAX] wlanphxcmd fltmac set [-i SsidIndex] {MAC address}

 $\hfill {\tt LESCRIPTION}$   $\hfill {\tt MAC}$  address filtering of the two different wireless modes are both implemented by this command

【PRECONDITION】 none

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
MAC address	MAC address	[compulsory]

[NOTICE] when -i option is not added, the operation is done to the first SSID.

#### (EXAMPLE)

# wlanphxcmd fltmac set **-i 0** 00:11:22:33:44:55 /\*adding the MAC address 00:11:22:33:44:55 into the MAC address list\*/



# 26 wlanphxcmd fltmacctrl set Command

【COMMAND PURPOSE】 this command configures the state of MAC address filtering

[COMMAND SYNTAX] wlanphxcmd fltmacctrl set [-i SsidIndex] {mode}

[DESCRIPTION] this command configures the state of MAC address filtering

[PRECONDITION] none

【PARAMETERS】

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
mode	enable, enable the MAC address filtering disable, disable the MAC	[compulsory]
	address filtering	

[NOTICE] when -i option is not added, the operation is done to the first SSID.

[EXAMPLE]

# wlanphxcmd fltmacmode set enable/\*enable the MAC address filtering\*/



**Confidential B** 

# 27 wlanphxcmd fltmacmode set Command

【COMMAND PURPOSE】 this command sets the working mode of MAC address filtering

[COMMAND SYNTAX] wlanphxcmd fltmacmode set [-i SsidIndex] {mode}

【DESCRIPTION】 2 working modes are supported: black list mode & white list mode

【PRECONDITION】 none

【PARAMETERS】

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
mode	deny, working as black list mode allow, working as white list mode	[compulsory]

[NOTICE] when -i option is not added, the operation is done to the first SSID.

#### **(EXAMPLE)**

# wlanphxcmd fltmacmode set deny/\*setting the MAC address filtering mode into black list mode\*/



# 28 wlanphxcmd assocctl set Command

【COMMAND PURPOSE】 this command sets the maximum number of associated devices

[COMMAND SYNTAX] wlanphxcmd assocctl set [-i SsidIndex] {devicenum}

[DESCRIPTION] number of associated devices can be configured

[PRECONDITION] none

【PARAMETERS】

Parameter	Description	Notice
SsidIndex	SSID index, eg: when four SSIDs are supported, possible indexes are 0~3	[optional]
devicenum	Number of associated devices	[compulsory]

[NOTICE] when -i option is not added, the operation is done to the first SSID.

### [EXAMPLE]

# wlanphxcmd assocct1 set -i 0 12 /\* maximum associated device number of ssid1 is set to 12 \*/



### 29 wlanphxcmd mbss set Command

【COMMAND PURPOSE】 this command activates/deactivates the multiple SSID function

[COMMAND SYNTAX] wlanphxcmd mbss set [-n num] {value}

[DESCRIPTION] this command activates/deactivates the multiple SSID function

[PRECONDITION] none

### [PARAMETERS]

Parameter	Description	Notice
ssidnum	Number of ssid	[optional]
value	enable, enable the mutple-ssid function disable, disable the mutple-ssid function	[compulsory]

### [NOTICE]

- 1. this command is for testing only
- 2. in practical cases then multiple ssid is applied, commands should be executed in the following sequence:
  - (1) BssidMum is set to 4 in RT2860AP. dat file, when WLAN driver is loaded;
- (2) when 4 virtual ssid are required, following commands are executed: wlanphxcmd up -i 0 up; wlanphxcmd up -i 1 up; wlanphxcmd up -i 2 up; wlanphxcmd up -i 3 up;
  - (3) bind all the activated interfaces into br0;
- (4) when mutipule-ssid function is no longer necessary, deactivate all the wireless interfaces except raO with 'wlanphxcmd down' command



# 30 wlanphxcmd ap\_isolate set Command

[COMMAND PURPOSE] this command sets whether each SSID should be isolated from the ap

[COMMAND SYNTAX] wlanphxcmd ap\_isolate set [-i SsidIndex] [value]

【DESCRIPTION】 this command sets whether each SSID should be isolated from the ap, ie, whether the stations connected by the same SSID can communicate with each other;

【PRECONDITION】 none

### [PARAMETERS]

Parameter	Description	Notice
SsidIndex	SSID index	[compulsory]
value	State of SSID isolation,	[compulsory]
	O: not isolated;	
	1: isolated	



# 31 wlanphxcmd wme set

this command set whether each SSID should be isolated from the ap

【COMMAND PURPOSE】 this command sets the state of WMM function

[COMMAND SYNTAX] wlanphxcmd wme set [value]

[DESCRIPTION] this command sets the state of WMM function

【PRECONDITION】 this function is on in default state of 11n

[PARAMETERS]

Parameter	Description	Notice
value	Setting the state of WMM, O:down, 1:up	[compulsory]



## 32 wlanphxcmd dtim set Command

【COMMAND PURPOSE】 this command set the period of power saving hibernation

[COMMAND SYNTAX] wlanphxcmd dtim set [value]

【DESCRIPTION】 this command set the period of power saving hibernation

【PRECONDITION】 none

Parameter	Description	Notice
value	Range:1~255	[compulsory]



## 33 wlanphxcmd bgprotection set Command

【COMMAND PURPOSE】 this command sets the protection mode.

[COMMAND SYNTAX] wlanphxcmd bgprotection set [value]

[DESCRIPTION] this command set 11/g protection mode

[PRECONDITION] this command is only valid in b/g mode

Parameter	Description	Notice
value	11/g protection mode, 0:auto 1:on, 2:off	[compulsory]



## 34 wlanphxcmd rtsthreshold set Command

【COMMAND PURPOSE】 this command set the rts threshold value

[COMMAND SYNTAX] wlanphxcmd rtsthreshold set [value]

[DESCRIPTION] this command set the rts threshold value

【PRECONDITION】 none

Parameter	Description	Notice
value	Range:1~2347	[compulsory]



## 35 wlanphxcmd fragthreshold set Command

[COMMAND PURPOSE] this command set the fragmentation threshold.

[COMMAND SYNTAX] wlanphxcmd fragthreshold set [value]

[DESCRIPTION] this command set the fragmentation threshold.

【PRECONDITION】 none

Parameter	Description	Notice
value	Range: 256~2346	[compulsory]



# 36 wlanphxcmd beaconperiod set Command

【COMMAND PURPOSE】 this command set the beacon period

[COMMAND SYNTAX] wlanphxcmd beaconperiod set [value]

[DESCRIPTION] this command set the beacon period

【PRECONDITION】 none

Parameter	Description	Notice
value	Range: 20~1023	[compulsory]



## 37 wlanphxcmd txburst set Command

【COMMAND PURPOSE】 this command sets the state of tx rate optimization

[COMMAND SYNTAX] wlanphxcmd txburst set [value]

[DESCRIPTION] this command sets the state of tx rate optimization

【PRECONDITION】 none

【PARAMETERS】

Parameter	Description	Notice
value	1:enable; 0:disable	[compulsory]

 $\[ \]$  NOTICE  $\[ \]$  security parameters are relative to each other, and must be deactivated when wmm function is on



## 38 wlanphxcmd HT\_GI set Command

 $\cline{COMMAND}$  PURPOSE  $\cline{D}$  this command sets the protection interval

[COMMAND SYNTAX] wlanphxcmd HT\_Gl set [value]

[DESCRIPTION] this command sets the protection interval

【PRECONDITION】 this command can only be executed in 11n mode

Parameter	Description	Notice
value	short, long	[compulsory]



## 39 wlanphxcmd HT\_BW set Command

【COMMAND PURPOSE】 this command sets the channel bandwidth

[COMMAND SYNTAX] wlanphxcmd HT\_BW set [value]

[DESCRIPTION] this command sets the channel bandwidth

【PRECONDITION】 this command can only be executed in 11n mode

Parameter	Description	Notice
value	20, 20/40	[compulsory]



## 40 wlanphxcmd HT\_MCS set Command

[COMMAND PURPOSE] this command sets the mcs type

[COMMAND SYNTAX] wlanphxcmd HT\_MCS set [value]

[DESCRIPTION] this command sets the mcs type

【PRECONDITION】 this command can only be executed in 11n mode

[PARAMETERS]

Parameter	Description	Notice
value	0~15, 33 (auto)	[compulsory]

#### (NOTE)

For RT3390 chipset, possible values are  $0^{\sim}7$ 



## 41 wlanphxcmd wps\_ctl set Command

[COMMAND PURPOSE] this command sets the state of wps function

[COMMAND SYNTAX] wlanphxcmd wps\_ctl set [value]

[DESCRIPTION] this command sets the state of wps function

【PRECONDITION】 none

Parameter	Description	Notice
value	enabled, activate wps disabled, deactivate wps	[compulsory]



# 42 wlanphxcmd wps\_mode set Command

[COMMAND PURPOSE] this command sets the wps mode

[COMMAND SYNTAX] wlanphxcmd wps\_mode set [value]

[DESCRIPTION] this command sets the wps mode

【PRECONDITION】 none

Parameter	Description	Notice
value	ap-pin: pin mode ap-pbc: pbc mode	[compulsory]



## 43 wlanphxcmd wps\_pinval set Command

【COMMAND PURPOSE】 this command sets the pincode value

[COMMAND SYNTAX] wlanphxcmd wps\_ctl set [value]

[DESCRIPTION] this command sets the pincode value

Parameter	Description	Notice
value	8 digit	[compulsory]



## 44 wlanphxcmd wps\_switch set Command

【COMMAND PURPOSE】 this command initiates/terminates a wps process

[COMMAND SYNTAX] wlanphxcmd wps\_switch set [value]

[DESCRIPTION] this command initiates/terminates a wps process

【PRECONDITION】 none

Parameter	Description	Notice
value	enabled, initiates a wps process disabled, terminates a wps process	[compulsory]



## 45 wlanphxcmd wps\_conf set Command

【COMMAND PURPOSE】 this command sets the state of wps\_conf.

[COMMAND SYNTAX] wlanphxcmd wps\_conf set [value]

 $\hfill {\tt DESCRIPTION}$  ] if configured, only sending is allowed. Otherwise, both sending and reception are allowed.

【PRECONDITION】 none

Parameter	Description	Notice
value	configured, unconfigured,	[compulsory]



## 46 wlanphxcmd help display Command

【COMMAND PURPOSE】 this command displays the usage of the cmd

[COMMAND SYNTAX] wlanphxcmd wps\_conf set [value]

[DESCRIPTION] this command displays the usage of the  $\ensuremath{\mathsf{cmd}}_{\,\circ}$ 

【PRECONDITION】 none

**【PARAMETERS】** none