

VC7300 White List Function

VC7300 White List Function



Reported
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Setup the SDK configuration

Set up the SDK configuration from menu.

The whitelist function should set SDK configuration in Root setting as the steps below:

1. Select the root setting

Module → Configure as root node

```
.config - SDK Configurations
----- Module -----
Arrow keys navigate the menu. <Enter> selects submenus --->.
Highlighted letters are hotkeys. Pressing <Y> selectes a feature,
while <N> will exclude a feature. Press <Esc><Esc> to exit, <?> for
Help, </> for Search. Legend: [*] feature is selected [ ] feature is
[*] Configure as root node ←
[*] Enable watchdog timer (NEW)
    Board --->
    Radio --->
    App --->
    Middleware --->
[ ] event alarm interrupt (NEW)
    Dying-gasp --->
```

Setup the SDK configuration

2. Select the SDK board

Module → Board → vc7300BHDK

```
.config - SDK Configurations
```

BOARD

Use the arrow keys to navigate this window or press the hotkey of the item you wish to select followed by the <SPACE BAR>. Press <?> for additional information about this option.

- () vc7300AMTR
- () vc7300AHDK
- () vc7300BMTR
- (X) vc7300BHDK
- () vc7300RFGMADP

<Select> < Help >

Setup the SDK configuration

3. Select the whitelist function

Parameter → Networking → DHCPv6 → DHCPv6 authority list mode (0/1/2)

Change the value from 0 to 1 (0: Disable 1: whitelist 2: blacklist)

```
.config - SDK Configurations
-----
DHCPv6
Arrow keys navigate the menu. <Enter> selects submenus --->.
Highlighted letters are hotkeys. Pressing <Y> selects a feature,
while <N> will exclude a feature. Press <Esc><Esc> to exit, <?> for
Help, </> for Search. Legend: [*] feature is selected [ ] feature is
(30) Max delay of first Solicit (seconds) (NEW)
(30) Initial Solicit timeout (seconds) (NEW)
(30) Max Solicit timeout value (seconds) (NEW)
(0) Max Request retry attempts (NEW)
(0xffffffff) DHCPv6 lease time (seconds) (NEW)
(0) Enable DHCPv6 reclaim ip function (NEW)
(0) Do NTP before DHCP server init (NEW)
(0) Enable DHCPv6 lease file (NEW)
[*] DHCPv6 authority list mode (0/1/2)
(120) Enable DHCPv6 retry time when get DENY from server (NEW)
```



Add the whitelist

- Command : **rpl whitelist add xxxxx**

xxxxx : WiSUN node mac address

- Example :

To add the 00:18:23:00:00:00:09:c4 in the whitelist

```
vc#  
vc# rpl whitelist add 00:18:23:00:00:00:09:c4
```



Display the whitelist data

AENEAS

- Command : **rpl whitelist dump**

Display the whitelist which had been added in SRAM

- Example :

```
vc# rpl whitelist dump
[0001] ff:ff:ff:ff:f4:5a:0c:83
[0002] ff:ff:ff:ff:f4:5a:0c:5a
```



Delete the whitelist

- Command : **rpl whitelist delete xxxxx**

xxxxx : WiSUN node mac address

- Example :

To delete the 00:18:23:00:00:00:09:c4 from the whitelist

```
vc#  
vc# rpl whitelist delete 00:18:23:00:00:00:09:c4
```




Save the whitelist to Flash

AENEAS

- Command : **rpl whitelist export**

Save the whitelist to keep in Flash memory

- Example :

```
vc#  
vc# rpl whitelist export
```



Check the whitelist in Flash

AENEAS

- Command : **list**

Each list record will use 8 bytes space

- Example :

```
vc#  
vc# list
```

Example

1. When no whitelist data, check the SRAM space, you will find no record information.
2. Use **list** command, you will find the whitelist size is 0 in the Flash.
3. To add a whitelist, then dump the whitelist information, but you will find the whitelist size is still 0 in the Flash, because it does not been kept in the Flash.
4. With **rpl whitelist export** command, to save data to the Flash.
5. Check whitelist again, you will find the whitelist size is 8.

```
vc#  
vc# rpl whitelist dump ①  
  
vc# list ②  
dir .  
dir ..  
file dhcp6s_whitelist size 0  
vc#  
vc#  
vc# rpl whitelist add 00:18:23:00:00:00:09:c4 ③  
  
vc# rpl whitelist dump  
20019250-0: 00:18:23:00:00:00:09:c4  
  
vc# list  
dir .  
dir ..  
file dhcp6s_whitelist size 0  
vc# rpl whitelist export ④  
  
vc# list ⑤  
dir .  
dir ..  
file dhcp6s_whitelist size 8
```



API List:

DHCP_CONFIG.server_whitelist

dhcp6s_check_whitelist(uiplib_addr *lladdr)

return: **1** the uip_lladdr in whitelist ; **0** , the uip_lladdr not in whitelist

dhcp6s_import_whitelist_from_file() //remove record from file

return: **0** normal ; -1 error or the unsaved size

dhcp6s_export_whitelist_to_file() //save record to file

return: the file error information

dhcp6s_add_whitelist()

dhcp6s_delete_whitelist()

dhcp6s_dump_whitelist()



Thank You!

