

# EKI-6232 & EKI-136x-AE

## Ping Watchdog configuration SOP

Revision Date	Revision	Description	Author
April/2018	V1.0	Initial release	ICG AE Jacky.Lin
April/2018	V2.0	Add watchdog trigger mechanism description	ICG AE Jacky.Lin

# Abstract

- ❖ **This SOP explains how to configure Ping watchdog on the EKI-6232 & EKI-136x-AE**
- ❖ **Related products:**  
EKI-6232, EKI-136x-AE
- ❖ **Requirement:** EKI-6232 or EKI-136x-AE



# EKI-136x-AE Ping Watchdog setting Page

Home

System

Ethernet Configuration

Wireless Configuration

Wlan 1

Port Configuration

Port 1

Monitor

Alarm

Syslogd

Tools

Management

Wireless Configuration

Mode	<input checked="" type="radio"/> Client <input type="radio"/> Ad-hoc <input type="radio"/> Access Point	
SSID	S-Net-M	<a href="#">Site survey</a>
Country code	United States ▼	
Channel	6 - 2.437 GHz ▼	
Encryption	WPA/WPA2-Personal ▼	
WPA version	<input type="radio"/> WPA <input checked="" type="radio"/> WPA2 <input type="radio"/> WPA + WPA2	
WPA key	5132135788	

Advanced Wireless Setting

RTS threshold	2347	
Fragment threshold	2346	
Preamble	<input type="radio"/> Short <input checked="" type="radio"/> Long	
Roaming	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
Antenna	<input checked="" type="radio"/> ANT 1+2 <input type="radio"/> ANT 1	
Watchdog trigger	<input type="radio"/> None <input type="radio"/> Disassociate <input checked="" type="radio"/> Ping	
Watchdog	<input type="radio"/> Restart Wifi <input checked="" type="radio"/> Reboot <input type="radio"/> Reassociate	
Ping target host		
Ping loss counter		
Ping wait time		

Save

# EKI-6232 Ping Watchdog setting Page

EKI-6232GN-AE web configuration interface Logout

Overview  
Network Settings  
Wireless Settings  
Basic  
**Advanced**  
Security  
Statistics  
Site Survey  
Log  
Administration

Home / Wireless Settings / Advanced

Advanced Wireless Settings

Client Settings

Roam

Watchdog

Watchdog Action   
Restart WiFi  
Reboot  
Force re-associate

Ping target

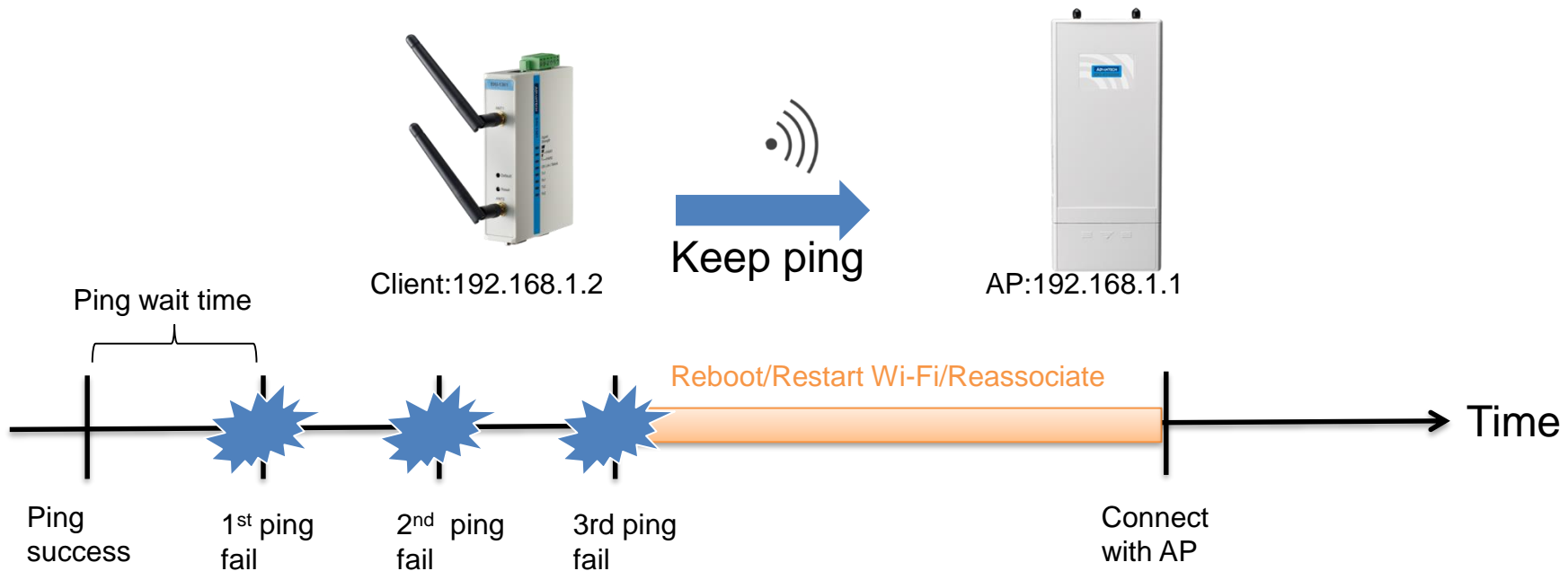
Ping Waittime

Ping Loss Counter

# Ping Watchdog example

- Ping target host : please enter the Target IP
  - Ex. 192.168.1.1 (AP's IP)
- Ping loss counter:
  - Ex. Ping loss counter = 3
- Ping wait time (s): interval between each ping
  - Ex. 10s
- Waiting time: Reboot > Restart Wi-Fi > Reassociate

- Reboot : Reboot EKI device (about 50s)
- Restart Wi-Fi: initial the demon and send the associate packet (about 2~3s)
- Reassociate: send associate packet immediately (about 2~3s)



# Check by the WLAN Log

- If the Pingwatchdog is triggered to Restart Wi-Fi /Reassociate, you can check the WLAN log and see the event.
  - Please refer the SOP “EKI-136x WLAN Log” for how to collect the WLAN Log

```
[1970-03-14 21:47:23].861332 us: P2P: Channels - hexdump(len=11): 01 02 03 04 05 06 07 08 09 0a 0b
[1970-03-14 21:47:23].861552 us: P2P: Update channel list
[1970-03-14 21:47:23].861775 us: P2P: channels: 81:1,2,3,4,5,6,7,8,9,10,11
[1970-03-14 21:47:23].861925 us: P2P: cli_channels:
[1970-03-14 21:47:31].258823 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 1
[1970-03-14 21:47:31].259102 us: Ping watchdog target IP=172.168.1.152 waittime=12 ping_count=3 fail=3
[1970-03-14 21:47:31].259235 us: Func: do_adv_watchdog: Restart wireless device by watchdog
[1970-03-14 21:47:31].259417 us: Reading configuration file '/tmp/wpa_supplicant.conf'
[1970-03-14 21:47:31].259713 us: ctrl_interface='/tmp/wpa_supplicant'
```

Record for Restart Wi-Fi

```
[2000-02-19 22:24:07].100553 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 0
[2000-02-19 22:24:07].100819 us: Register Advantech watchdog timeout event loop , method = ping, adv_ping_waittime=10
[2000-02-19 22:24:17].260182 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 0
[2000-02-19 22:24:17].260449 us: Register Advantech watchdog timeout event loop , method = ping, adv_ping_waittime=10
[2000-02-19 22:24:27].420548 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 0
[2000-02-19 22:24:27].420817 us: Register Advantech watchdog timeout event loop , method = ping, adv_ping_waittime=10
[2000-02-19 22:24:27].580833 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 1
[2000-02-19 22:24:40].581095 us: Ping watchdog target IP=192.168.1.52 waittime=10 ping_count=3 fail=1
[2000-02-19 22:24:40].581256 us: Register Advantech watchdog timeout event loop , method = ping, adv_ping_waittime=10
[2000-02-19 22:24:51].610876 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 1
[2000-02-19 22:24:51].611148 us: Ping watchdog target IP=192.168.1.52 waittime=10 ping_count=3 fail=2
[2000-02-19 22:24:51].611285 us: Register Advantech watchdog timeout event loop , method = ping, adv_ping_waittime=10
[2000-02-19 22:25:04].750928 us: Func:wpa_supplicant_adv_watchdog_timeout_ping ping exit status = 1
[2000-02-19 22:25:04].751199 us: Ping watchdog target IP=192.168.1.52 waittime=10 ping_count=3 fail=3
[2000-02-19 22:25:04].751334 us: Func: do_adv_watchdog: Re-associate by watchdog
[2000-02-19 22:25:04].751461 us: Fast associate: Old scan results
[2000-02-19 22:25:04].751629 us: wlan0: Setting scan request: 0.000000 sec
```

Record for Reassociate

- Note: It's not able to see the event on WLAN log if the Pingwatchdog is triggered to “Reboot” device. Because after rebooting ,the log will be clear.





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