

SapIP TIPS

You need this tip if you:

- If the SapIp was registered, and you still have radio contact.
- The SAPIP responds to a radio ping on Agrisensors
- However you are unable to get Software REMOTE reboot, or a VERSION ping to work.
- Version 200.12 or better Firmware.
- Rev E Hardware, SAPIP90278 or higher.
- Rev E Hardware, SAPIP20157 or higher

CONCLUSION:

Previous versions (REV D hardware) require the user disconnect the power and reconnect the power at the battery, or the 28 pin circular connector.

Version

A SapIP is in the next county and it needs to be rebooted with a hardware boot. You can run out there and waste a lot of gas, or get on to etherios.com and reboot remotely with a couple of I/O commands.

SAPIP90221	BISAPIP90221	SAPIP			VERSION	RADIO	
SAPIP90241	BISAPIP90241	SAPIP			VERSION	RADIO	
SAPIP90278	BISAPIP90278	SAPIP	-84dBm	14 minutes ago	VERSION	RADIO	✗
SAPIP90278	BISAPIP90278	SAPIP	-83dBm	1 hour ago	VERSION	RADIO	V200.012 ✓
SAPIP90337	BISAPIP90337	SAPIP		1 month ago	VERSION	RADIO	

The SAPIP 90278 is not responding to the Version command, meaning it is not registered to the gateway, or there is another reason that is causing the SAPIP to hang up.

Inside this issue:

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Check the Gateway to make sure there is no long Queue. A lot of data recover or a series of other SAPIP commands can slow up a Gateway response to your efforts.

Device ID: 00409D44AA8E
 Gateway Name: Gate90006 Cell
 Timezone: America/Los_Angeles
 Account: CSU
 iDigi: DynamaxProduction
 Xbee Ext. Addr.: 00:13:a2:00:40:2d:48:74
 Longitude: -119.736981
 Latitude: 36.815708
 Debug Mode: ✗ START
 Sleep Time: 20 ms
 Wake Time: 2000 ms
 Suspended during: -Suspend Missing Raw Data Sync
 Queue Depth: 0 - Flush Queue



A SapIP may be not communicating due to a “hung” process. It may have had a very low battery, and is now recovered.

Equipment you will need:

- Web browser on a PC or Laptop with access to Agri8sensors and Etherios.com
- LAN, Smart phone , or WIFI connection
- SAPIP remote much have good RF antenna connectivity, and good 12 V power.

SET I/O BIT 1

The AD1/DIO1 Bit is attached to the hardware reset line in the newer versions of SAPIP.

Remote control the I/O line with the Gateway access portal on Etherios.com

Set AD1/DIO1 BITS to 4,

SAVE that setting.

Make the port an output.

rk's Alarms Operations Schedules

0:8D:86:01 (SAPIP90276)

Settings

(LT)	Associate LED blink time:	0	x 10 msec
(BH)	Broadcast radius:	0	
(CH)	Operating channel:	0x0000000b	
(CC)	Command sequence character:	+	
(CT)	Command mode timeout:	192	x 100 msec
(CE)	Coordinator enable:	0	
(DH/DL)	Destination address:	00:13:a2:00:40:2d:48:74!	
(D0)	AD0/DIO0 configuration:	1	
(D1)	AD1/DIO1 configuration:	4	
(D2)	AD2/DIO2 configuration:	0	
(D3)	AD3/DIO3 configuration:	0	
(D4)	AD4/DIO4 configuration:	0	
(D5)	DIO5/Assoc configuration:	1	
(D6)	DIO6 configuration:	0	
(D7)	DIO7 configuration:	1	
(D8)	DIO8/SleepRQ configuration:	0	
(D9)	DIO9/ON_SLEEP configuration:	1	
(P0)	DIO10/PWM0 configuration:	1	
(P1)	DIO11/PWM1 configuration:	0	
(P2)	DIO12/CD configuration:	0	
(IC)	DIO change detect:	0x0	
(NT)	Node discovery timeout:	130	x 100 msec
(EE)	Encryption enable:	0	
(FT)	Flow control threshold:	319	bytes
(GT)	Guard times:	200	msec

Save Refresh

Set the AD1/DIO1 Bit s to 5.

Make the bit go HIGH.

:01 (SAPIP90276)

Settings

(LT)	Associate LED blink time:	0	x 10 msec
(BH)	Broadcast radius:	0	
(CH)	Operating channel:	0x0000000b	
(CC)	Command sequence character:	+	
(CT)	Command mode timeout:	192	x 100 msec
(CE)	Coordinator enable:	0	
(DH/DL)	Destination address:	00:13:a2:00:40:2d:48:74!	
(D0)	AD0/DIO0 configuration:	1	
(D1)	AD1/DIO1 configuration:	5	
(D2)	AD2/DIO2 configuration:	0	
(D3)	AD3/DIO3 configuration:	0	
(D4)	AD4/DIO4 configuration:	0	

Restore to original config.

Change the AD1/DIO1 Configuration Back to 0 , where it started..

The reset line is now released. It less than a minute the SAPIP will reboot. Then a few minutes later it will be rediscovered. Accelerate discovery, by using Gateway Refresh.

If the gateway did not discover the SAPIP, try to reboot the gateway. Got to devices on Etherios, right click the device address, and click the REBOOT.

Occasionally a SAPIP will hang up, and the gateway cannot re-discover the SAPIP.

Settings

(LT)	Associate LED blink time:	0	x 10 msec
(BH)	Broadcast radius:	0	
(CH)	Operating channel:	0x0000000b	
(CC)	Command sequence character:	+	
(CT)	Command mode timeout:	192	x 100 msec
(CE)	Coordinator enable:	0	
(DH/DL)	Destination address:	00:13:a2:00:40:2d:48:74!	
(D0)	AD0/DIO0 configuration:	1	
(D1)	AD1/DIO1 configuration:	0	
(D2)	AD2/DIO2 configuration:	0	
(D3)	AD3/DIO3 configuration:	0	
(D4)	AD4/DIO4 configuration:	0	
(D5)	DIO5/Assoc configuration:	1	
(D6)	DIO6 configuration:	0	
(D7)	DIO7 configuration:	1	
(D8)	DIO8/SleepRQ configuration:	0	

