



vitals

Tomorrow's best of breed solutions delivered today

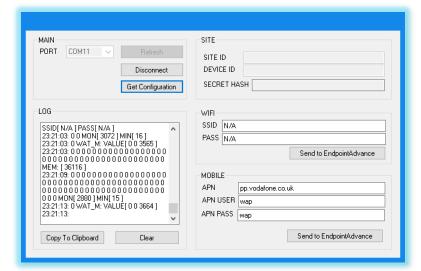
BOAT MONITORING

DATA INPUT, TRANSPORT, BLEND, CONTROLLING AND INFORMATION

BOAT-VITALS – DIAGNOSTICS

boat

LOG



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All diagnostics is done using the log.

Download and install USB driver for your Endpoint from:

https://www.silabs.com/products/develop ment-tools/software/usb-to-uart-bridgevcp-drivers

Download and install the Advanced Endpoint Configurator from: http://www.boat-vitals.com/setup.html

- 1. Connect the device using USB to micro USB cable.
- 2. Start Advanced Endpoint configurator
- 3. Click "Refresh"
- 4. Click "Connect"
- Click "Get Configuration"
- 6. IF all is OK the SSID, PASS, APN, APN USER, APN PASS should be filled with values. if not check the connection.



SETUP WITH (WIFI+GPRS/GSM + 10T)

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```
ets Jun 8 2016 00:22:57
07:29:09: rst:0x1 (POWERON RESET),boot:0x17 (SPI FAST FLASH BOOT)
07:29:09: configsip: 0, SPIWP:0xee
07:29:09: clk_drv:0x00,q_drv:0x00,d drv:0x00,cs0 drv:0x00,hd drv:0x00,wp drv:0x00
07:29:09: mode:DIO, clock div:1
07:29:09: load:0x3fff0018,len:4
07:29:09: load:0x3fff001c,len:812
07:29:09: load:0x40078000,len:0
07:29:09: load:0x40078000,len:11572
07:29:09: entry 0x40078a5c
*UPPER SECTION MEANING: DEVICE IS RESET - ALL GOOD
07:29:09: Initialized: SERIAL LOG64
07:29:11: ID: S ID[ 10 ] D ID[ 103 ] WIFI SSID[ PLUSNET-7F63NX ] WIFI PASS[ 4e3acd6a4f ]
GPRS APN[pp.vodafone.co.uk] GPRS USER[wap] GPRS PASS[wap]
07:29:11: Ver.#2.14.588
07:29:11: LED MONITOR: INIT
07:29:11: START V: Characterized using eFuse Vref.
07:29:11: START V: INIT
07:29:11: HOUSE V: Characterized using eFuse Vref.
07:29:11: HOUSE V: INIT
07:29:11: BAT V: INIT
07:29:11: OPTIONAL_V: Characterized using eFuse Vref.
07:29:11: OPTIONAL V: INIT
07:29:11: WAT M: INIT
07:29:11: DHT: INIT
07:29:13: RF: INIT
07:29:14: DISPLAY: INIT START
07:29:14: DISPLAY: INIT END
*UPPER SECTION MEANING: GAUGES INITIALIZED - ALL GOOD
```

Example log in the left.

In case some of the possible transports are not available or not configured – e.g. GPRS./GSM is not configured you will see message like (which are expected and normal):

07:34:05: GPRS: RESPONSE[ERROR]

07:34:08: GPRS: RESPONSE NOT EXPECTED - RESET 07:34:08: GPRS: COMMAND[AT+CFUN=15] SIZE[11]

07:34:08: GPRS: RESPONSE[OK]

Etc.

If WiFi is not available or not configured you will see messages like (which are expected and normal):

WIFI: SEND DATA SYNC: Connecting to SSID[N/A] PASS[N/A] < 07:25:51: > Can't connect for 30sec

07:26:50: WIFI: Schedule connecting to SSID[N/A] PASS[N/A]



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```
07:29:37: HEARTBEAT CALL WITH: TRUE - * GENERATED "I'm here" MESSAGE TO SERVER
07:29:14: Connecting to SSID[ PLUSNET-7F63NX ] PASS[ 4e3acd6a4f ] <
07:29:14:1
                                                                            07:29:37: OPER: GET HEARTBEAT INFO AND SYNC SITE ID[0] LAST PACKET TIME[0]
07:29:15:2
                                                                            07:29:37: HEARTBEAT INFO ASYNC SENT GPRS - *SCHEDULED to be send over GPRS/GSM
07:29:16:3
                                                                            07:29:37: WIFI: SEND DATA SYNC: CONNECTED HOST: PORT[ server.boat-vitals.com : 5409 ]
07:29:17: > Connected for 3 sec IP[ 192 . 168 . 1 . 16 ]
                                                                            07:29:38: WIFI: SEND DATA SYNC: SIZE[8]
*UPPER SECTION MEANING: CONNECTED TO WIFI - ALL GOOD
                                                                            07:29:38: WIFI: TRASFER TIME[ 601 ]
07:29:18: WIFI: INIT
                                                                            07:29:38: HEARTBEAT INFO SYNC SENT
07:29:18: Version: v3.1-dev-661-gf586f5e6
                                                                            07:29:38: HEARTBEAT: SERVER TIME[ 4157985904]
07:29:18: GPRS: TRY RECONFIG BAUD
                                                                            *UPPER SECTION MEANING: SENT OVER WIFI AND RESONSE RECEIVED - ALL GOOD
07:29:19:2400
                                                                            07:29:38: MON[ 1344 ] MIN[ 7 ]
07:29:20:4800
                                                                            07:29:38: GPRS: WORKER START
07:29:21:9600
                                                                            07:29:38: GPRS: COMMAND[ AT+CPIN? ] SIZE[ 9 ]
07:29:22:14400
                                                                            07:29:38: MEM: [ 34672 ]
07:29:23:19200
                                                                            07:29:39: GPRS: RESPONSE[ +CPIN: READY ]
07:29:24: 28800
                                                                            07:29:43: GPRS: RESPONSE[ OK ]
07:29:25:38400
                                                                            07:29:43: GPRS: COMMAND[ AT+CREG? ] SIZE[ 9 ]
07:29:26:57600
                                                                            07:29:43: MON[ 1344 ] MIN[ 7 ]
07:29:27:115200
                                                                            07:29:48: GPRS: RESPONSE[ +CREG: 0,1]
07:29:29:230400
                                                                            07:29:48: GPRS: RESPONSE OK 1
07:29:30:460800
                                                                            07:29:48: GPRS: COMMAND[AT+CSQ] SIZE[7]
07:29:31: GPRS: ECHO OFF
                                                                            07:29:48: GPRS: SIGNAL[ 22]
07:29:36:
                                                                            07:29:48: GPRS: RESPONSE[ OK ]
07:29:36: O K
                                                                            07:29:48: GPRS: COMMAND[ AT+XISP=0 ] SIZE[ 10 ]
07:29:36:
                                                                            07:29:48: GPRS: RESPONSE[ OK ]
                                                                            07:29:48: GPRS: COMMAND[ AT+CGDCONT=1,"IP","pp.vodafone.co.uk" ] SIZE[ 38 ]
07:29:36:
                                                                            07:29:48: GPRS: RESPONSE[OK]
07:29:37: GPRS: INIT
                                                                            07:29:48: GPRS: COMMAND[ AT+XGAUTH=1,1,"wap","wap" ] SIZE[ 26 ]
*UPPER SECTION MEANING: INITIALIZING GPRS/GSM- ALL GOOD
                                                                            07:29:48: GPRS: RESPONSE[ OK ]
07:29:37: GPS:INIT
07:29:37: BLE: INIT
                                                                            07:29:48: GPRS: COMMAND[ AT+CGATT=1 ] SIZE[ 11 ]
*UPPER SECTION MEANING: INITIALIZING GPS AND BLUETOOTH-ALL GOOD
                                                                            07:29:48: GPRS: RESPONSE[ OK ]
                                                                            07:29:51: GPRS: COMMAND[ AT+CGATT? ] SIZE[ 10 ]
                                                                            07:29:51: GPRS: RESPONSE[ +CGATT: 1 ]
                                                                            07:29:56: GPRS: RESPONSE[ OK ]
```

07:29:56: GPRS: COMMAND[AT+XIIC=1] SIZE[10]



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07:29:56: GPRS: RESPONSE[ OK ]
07:29:56: GPRS: COMMAND[ AT+XIIC? ] SIZE[ 9 ]
07:29:56: MON[ 1344 ] MIN[ 7 ]
07:29:58: GPRS: RESPONSE[ +XIIC: 0, 0.0.0.0]
07:30:01: GPRS: RESPONSE NOT EXPECTED - RETRY LEFT[ 10 ]
07:30:01: GPRS: COMMAND[ AT+XIIC? ] SIZE[ 9 ]
07:30:01: GPRS: RESPONSE[ +XIIC: 1, 10.33.168.167 ]
07:30:06: GPRS: RESPONSE[ OK ]
07:30:06: GPRS: COMMAND[ AT+DNS="server.boat-vitals.com" ] SIZE[ 32 ]
07:30:06: GPRS: RESPONSE[ OK ]
07:30:06: GPRS: SERVER IP[ 109.169.26.34 ]
07:30:06: GPRS: RESPONSE[ +DNS:OK ]
07:30:06: GPRS: COMMAND[ AT+TCPSETUP=1,109.169.26.34,5409 ] SIZE[ 33 ]
07:30:06: GPRS: RESPONSE[ OK ]
07:30:06: GPRS: RESPONSE[ +TCPSETUP:1,OK ]
07:30:07: GPRS: DATA PREPARED LEN[8]
07:30:07: GPRS: COMMAND[ AT+TCPSEND=1,8 ] SIZE[ 15 ]
07:30:07: GPRS: RESPONSE[ > ]
07:30:07: GPRS: SEND DATA: SIZE[8] WAITING SYNC
07:30:07: GPRS: COMMAND[?
                                     ] SIZE[ 9 ]
07:30:07: GPRS: RESPONSE[ OK ]
07:30:07: GPRS: RESPONSE[ +TCPSEND:1,8 ]
07:30:07: GPRS: DATA[ 4 120 71 214 247 ]
07:30:07: GPRS: SERVER TIME[ 4158015352 ]
07:30:07: GPRS: COMMAND[AT+TCPCLOSE=1] SIZE[14]
07:30:07: GPRS: RESPONSE[ +TCPCLOSE:1,OK ]
07:30:07: GPRS: COMMAND[ AT+CGATT=0 ] SIZE[ 11 ]
07:30:07: GPRS: RESPONSE[ OK ]
07:30:08: MON[ 1344 ] MIN[ 7 ]
07:30:08: MEM: [ 34672 ]
07:30:09: MON[ 1152 ] MIN[ 6 ]
07:30:18: GPRS: TIMEOUT HIT ON LAST COMMAND - MOVING TO FIRST WITHOUT RESET
07:30:27: GPRS: COMMAND[ AT+CPIN? ] SIZE[ 9 ]
07:30:27: MON[ 1152 ] MIN[ 6 ]
07:30:28: GPRS: RESPONSE[ +CPIN: READY ]
07:30:32: GPRS: RESPONSE[ OK ]
07:30:32: GPRS: WORKER STOP - NO DATA TO BE SENT.
```

*UPPER SECTION MEANING: SENT OVER GPRS/GSMAND RESONSE RECEIVED - ALL GOOD

In case there is a issue and you cannot identify it from the log – please use the button "Copy To Clipboard", Paste is a email and send the email to:

support@boat-vitals.com

for analysing and instruction how to fix the issue.