Common Solution v3.5.1 Release Notes

03 JUNE 2021

iTest support for WIL v0.112

iTest now supports communication with BRFM firmware version 0.112

Major performance improvements were included

– VRFM v0.93 support will co-exist with BRFM v0.112

Wireless mote watchdog timeout threshold has been reduced from **20 seconds** to **5 seconds**

To use WIL v0.112, make sure the following configurations are set correctly on green hardware config dialog:

– CMU type is set to **BRFM**

– BDSB is set to **Beta2 BDSB** for pack setup, or **Not Specified** for module setup

iTest can now communicate with BRFM v0.112 in addition to VRFM v0.93

Environmental Monitoring System

Environmental Monitoring System (EMS) has been added to the display and main log

If the pack is equipped with environmental sensors in BRFM, then the values can be seen on the display as shown on the right. *This option is unavailable for module setup.*

EMS iTest Channels:

tarBLINC1SPI_AmbientTemps[0] – sensor 1 ambient temperature in °C

tarBLINC1SPI_AmbientTemps[1] – sensor 2 ambient temperature in °C

prarBLINC1SPI_AmbientPres[0] – sensor 1 ambient pressure in kPa

prarBLINC1SPI_AmbientPres[1] – sensor 2 ambient pressure in kPa

voarBLINC1SPI_AmbientGas[0] – sensor 1 ambient gas concentration in %

voarBLINC1SPI_AmbientGas[1] – sensor 2 ambient gas concentration in %

Environmental Sensor Data	
BRFM Ambient Temperature[(	0.00 °C
BRFM Ambient Temperature['	0.00 °C
BRFM Ambient Pressure[0]	0.00 kPa
BRFM Ambient Pressure[1]	0.00 kPa
BRFM Ambient Gas Concentr	0.00 %
BRFM Ambient Gas Concentr	0.00 %

Environmental Monitoring System is now available in iTest

Manual Comm Function

Manual Comm button can be found on the display

Allows for easier comm troubleshooting by running applicable commands

Normal comm needs to be *OFF* before manual comm can be run


```
C:\apps\ADT\iTest3.9\solution_common\EXECUTE\BRFM_Comm\VRFM_Pinnacle_Tester.exe

Initializing WBMS Interface Library (WIL)...
WIL_FN | adi_wil_Initialize | RC=ADI_WIL_ERR_SUCCESS
WIL_FN | adi_wil_GetWILSoftwareVersion | RC=ADI_WIL_ERR_SUCCESS
WIL Version: 0.112.0.3

Select a choice below by typing the number that corresponds to desired choice:
0 - Exit application
1 - Enable or disable debug outputs
2 - Get Cheetah device info
3 - Auto detect and connect to manager(s)
4 - Query manager info
5 - Connect to manager(s)
6 - Disconnect from manager(s)
7 - Get Manager System Mode
8 - Set Manager System Mode
9 - Get Manager ACL
10 - Set Manager ACL
11 - Get Device Version
12 - Get Network Status
13 - Get Device GPIO
14 - Set Device GPIO
15 - Send On-the-fly Device Script
16 - Start Logging Sensor Data
17 - Stop Logging Sensor Data
18 - Send File to Device
19 - Reset Device
20 - Select Device Script
21 - Toggle Network Data Capture Flag

Choice input:
```

New manual comm function can be launched from display for easier troubleshooting.

Module Addresses Update

GBSLid.ini will no longer be used to get module MAC addresses

MAC addresses will be obtained directly from the BRFM manager

New ACL Confirm dialog will be shown every time BRFM comm is started

Operator to confirm that all MAC addresses match with the module's order on the label

ACL will need to be updated if the orders don't match

ACL can be updated via manual comm option

Module 1 to 12

Module 13 to 24

BRFM Access Control List Confirmation	
Batt1 Module Count	0

Below are the MAC addresses of the modules to be communicated. If these addresses do not match with the label's addresses, then BRFM will fail to connect to the modules.

Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000
Manager Access Control L	0.000000	Manager Access Control	0.000000

Confirm ACL and Close

Module MAC addresses will be obtained from BRFM instead of GBSLid.ini

Packet Error Rate (PER) and RSSI Logging

PER and RSSI will no longer be logged in native iTest logs

Due to the changes from WIL, Python script will no longer calculate packet error rates and average RSSI

- These data can be processed via new logs (Network Statistics and Health Report)
  - These logs can be found in DATA drive
    - the folder name has the format of "BRFM_Core_Logs_<CommStartedDate>"
  - To safe data space, each data log will be limited to no more than 3 backup files with each file having no more than 41MB

Statistics display will no longer show valid info as the results

Packet Error Rate and RSSI Logging will be unavailable in iTest.