Sixnet

**IndustrialPro™ and MobilityPro™
Gateway Wireless Modems**

BT Series Firmware Release Notes
Version 3.8.12

April 2012

Sixnet

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1   Related Products

This release applies to the following products:

- Legacy Industrial Wireless Modems (BT-4000 / BT-5000 Series):
    - CDMA 1xRTT: BT-4200, BT-5200
    - GSM/GPRS: BT-4400, BT-5400
    - CDMA EvDO: BT-4600, BT-4600A, BT-5600, BT-5600A
    - CDMA EvDO A: BT-4600A, BT-5600A
- **IndustrialPro™ Gateway** wireless modems (BT-6000 Series):
    - GSM/EDGE: BT-6401, BT-6401EB, BT-6421
    - CDMA EvDO A: BT-6600, BT-6601, BT-6601EB, BT-6621
    - GSM/HSPA: BT-6800, BT-6801, BT-6801EB, BT-6821
- **MobilityPro™ Gateway** wireless modems with GPS (BT-5000v2 Series):
    - CDMA EvDO A with GPS: BT-5600v2
    - GSM/HSPA with GPS: BT-5800v2

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2   Upgrade Instructions

Table 1, below, provides a summary of the update procedure to follow depending on the firmware which currently resides in the modem (i.e. is being upgraded from).

Model	Normal update	Advanced update required	Advanced update for IPsec support[1]
BT-4000 or BT-5000 series	>= 3.x	<= 2.x	N/A
BT-6000 or BT-5000v2 series	>= 3.6.0	<= 3.4.9	<= 3.6.1

Table 1 - Upgrade Process Matrix

2.1   Normal update

1. Use an Ethernet crossover cable (BT-4000/BT-5000), an Ethernet straight or crossover cable (BT-6000/BT-5000v2) or USB cable to connect modem and PC
2. Start BlueVue Device Manager (BVDM) and Click **Change connection type** and select **Modem IP**.
3. Type the modem IP address in the related field if needed
    a. For Ethernet connection the default Modem IP is **192.168.0.1**
    b. For USB connection, the default Modem IP is **192.168.111.1**
4. After the modem is detected, **click File > Configuration** and click **Firmware** tab
5. Select the update file you want to use, then click **Upgrade**
6. Wait for the firmware update to end and the modem to restart

2.2   Advanced update

Download the Advanced Update Package from the Sixnet website and follow the instructions in the "Advanced Firmware Update & Recovery Guide" (BT-4000/BT-5000) or "Advanced Firmware Update Procedure" (BT-6000 and BT-5000v2).

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[1] In this case, an advanced upgrade is necessary to gain IPsec support. IPsec functionality is optional, so if IPsec support is not required, a basic upgrade can be performed instead, assuming that the minimum release is met as per the "Advanced update required" column.

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3   Release Notes

3.1   Version 3.8.12 – Release Notes – April 04, 2012

The 3.8.12 release is intended for MobilityPro™ Gateway (BT-5600v2 and BT-5800v2) wireless modems with or without the USB Host extension.

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw09	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw07	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.
- USB Host support (MobilityPro™ Gateway only) requires kernel 2.6.21 #btw09 and u-boot 1.2.0-btw06.

New Features & Improvements

ID	Subject	Description
1256	Network	Implemented TCP poll for Rastrac
1255	RF	HSPA RF hangs in IP Pass-thru mode at Telus lab tests
1252	Serial IP	AT&C3 -- DCD signal is decided by SIP TCP connection status
1251	BEP	BEP events not sent while the server is available
1250	BEP	ignition status is falsely reported on IO1 payload
1249	BEP	+BEVENT? not working in BEP MOM
1248	AT	Missing line feed character via serial port
1243	Events	Local Event Going to Wrong Destination
8558	Factory Tests	Expand the length for AT+BFACTINF command
1241	Fire Wall	IP source violation in IP pass-through mode
1227	GPS	Erroneous GPS GOS data reported – SNR filter as software solution
1223	RF	AT+BMDIAG to show override SPN name instead of network name

3.2   Version 3.8.11 – Release Notes – July 07, 2011

The 3.8.11 release is intended for MobilityPro™ Gateway (BT-5600v2 and BT-5800v2) wireless modems with or without the USB Host extension.

Dependencies

Legacy modems	IndustrialPro™ and MobilityPro™ Gateway

	BT-4000 / BT-5000 Series		BT-5000v2 / BT-6000 Series	
	Current Version	**Minimum Version**	**Current Version**	**Minimum Version**
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw09	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw07	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.
- USB Host support (MobilityPro™ Gateway only) requires kernel 2.6.21 #btw09 and u-boot 1.2.0-btw06.

New Features & Improvements

ID	Subject	Description
1240	**BEP**	Wrong RSSI value reported in BEP events

3.3   Version 3.8.10 – Release Notes – June 20, 2011

The 3.8.10 release is intended for MobilityPro™ Gateway (BT-5600v2 and BT-5800v2) wireless modems with or without the USB Host extension.

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	**Minimum Version**	**Current Version**	**Minimum Version**
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw09	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw06	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.
- USB Host support (MobilityPro™ Gateway only) requires kernel 2.6.21 #btw09 and u-boot 1.2.0-btw06.

New Features & Improvements

ID	Subject	Description
1212	Serial IP	Mobile Originated SIP :Add a modem ID(ESN/IMEI) as a header for each outgoing UDP packets
1223	RF	AT+BMDIAG and AT+BNSTAT to show override SPN name instead of network name for HSPA
1219	DNS	Added framework for DNS resolving, implemented for AT+BGPSDS, AT+BRPRDS, AT+BSIPDS, and AT+BIPREG
1233	Embedded APP	DNS support for embedded applications
1225	GPS	Add a new AT command for GPS elevation angle mask
1235	IO	Add a new AT command to adjust IO sampling interval
1215	RF	BT6400 Ping-keep-alive reset may keep the modem offline Add RF module reset as part of soft reset process
1213	RF	AT+BRFPON=0 takes too long to complete for CDMA during data session
1218	GPS	No GPS fix after intensive Ignition resets Added GPS module reset process in modem warm-reset process
1224	GPS	Losing GPS UDP report to local destination at ignition start-up
1222	RF	HSPA and CDMA RF power mode switched on/off multiple times causing modem reset
1228	RF	Turning off HSPA modem RF power causing long delay on RF event reporting
1231	Serial IP	Configuring the Serial IP on poll and push mode simultaneously may cause SIP to switch to command mode
1234	RF	WAN led remains on after Radio Power is turn off when using CDMA RF version MC5727 1.49
1236	BEP	BEP packets to local host stopped when RF is powered off

3.4   Version 3.8.9 – Release Notes – February 15, 2011

The 3.8.9 release is intended for MobilityPro™ Gateway (BT-5600v2 and BT-5800v2) wireless modems with or without the USB Host extension.

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw09	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw06	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.
- USB Host support (MobilityPro™ Gateway only) requires kernel 2.6.21 #btw09 and u-boot 1.2.0-btw06.

New Features & Improvements

ID	Subject	Description
1191	USB Host	Add USB Host to BT-5000v2 series. The feature requires the addition of a daughter card in the modem and of a USB Type A receptacle.
1203	USB Host	Add the AT+BUSBHOST=<mode> command to enable/disable and query the USB Host power
1210	USB Host	Add support for USB to Serial adapters. Include drivers for the two main devices: FTDI (ftdi_sio) and Prolific (pl2303)
1211	RF	Added workaround for Bell CDMA 01.67.01 call hangs on cold-start

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3.5   Version 3.8.8 – Release Notes – December 14, 2010

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw08	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw05	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.

New Features & Improvements

ID	Subject	Description
646	IP routing	Double the number of IP forwarding ports to 40 ports (AT+BIPFWD)
1071 1178	Serial IP	Add the AT+BSIPMO (Serial IP Mobile Originated settings) command to allow setting up a timer used for keeping the Serial IP connection alive. The timer is used for TCP Keep-Alive timer setting or for periodically sending an empty UDP packet to keep firewalls open. When configured with a non-null timer value the modem is not waiting for data to be present on the serial port to establish a connection.
1185	BEP	Add network information to RF2 payload for GSM modems The BEP RF2 Carrier information now contains the GSM operator name (see AT+BMDIAG?) for GSM modems (GPRS/EDGE/HSPA). For CDMA modems, the field contains the programmed carrier name.
1189	IP Forwarding	Add the AT+BIPFWDI=<index>,<interface> command to set/query the interface of the incoming IP packets to forward. With this command, the modem can now perform IP forwarding on packets arriving on the Ethernet(1), USB(2) or WAN(3 - default) interface.

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Fixed Issues

ID	Subject	Description
1179	LAN	DNS settings are now updated into the DHCP configuration even when it changes during a connection. DHCP lease time shall be configured for the DHCP client to get the updated DNS settings.
1182	RF	The RF power off state (available via AT+BRFPON=0 on BT-4600A/BT-5600A, BT-6000 series, and BT-5000v2 series) is now persistent after a reboot (broken in 3.8.5).
1184	BEP	The MI3 payload was missing RF and GPS information when associated with the IGN ON trigger.
1190	RF	RF Tx power can now be disabled via AT+BRFPON=0 on BT-6600 series and BT-5600v2 without triggering a modem reset.

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3.6 Version 3.8.7 – Release Notes – September 28, 2010

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	**Minimum Version**	**Current Version**	**Minimum Version**
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw07	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw04	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.

Fixed Issues

ID	Subject	Description
1180	**WAN**	EvDO Rel. 0: Cannot connect in Always-on The RF Power status test intended for EvDO A modems was preventing BT-4600 and BT-5600 modems to connect when in Always-on mode.
1181	**Events**	Modem fails to send raw NMEA GPS using AT+BEVRPR.

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3.7   Version 3.8.6 – Release Notes – September 17, 2010

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw07	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw04	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.

Fixed Issues

ID	Subject	Description
1176	AT	In on-demand mode, requesting a manual disconnection while the modem is being disconnected due to RF conditions may cause a modem restart.

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3.8 Version 3.8.5 – Release Notes – September 9, 2010

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw07	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw04	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.

New Features & Improvements

ID	Subject	Description
956	Events	Increase the number of configurable events (AT+BEVENT) to 63.
1157	GPS	Add the capability to log received GPS fixes (AT+BGPSLOG). When enabled, the GPS logs are part of the modem log files.
1161	GPS	Periodically save GPS odometer value in non-volatile memory independently of IGN state.
1158	RF	Report the RF module type in ATI1. Report PRI (CDMA EvDO.A and HSPA) and PRL Region (HSPA) in ATI1.
1150	RF (EVDO.A)	Add support for MC5728V RF module
1160 1169	RF (HSPA)	Add Sasktel and MTS to automatic HSPA configuration. Automatic GSM/EDGE/HSPA configuration occurs when the modem is reset to its factory configuration (AT&F) according to the installed SIM card. This feature may be restricted on some modems.

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Fixed Issues

ID	Subject	Description
1155	AT	An incorrect IP settings in AT+BIPREG was crashing the modem
1156	AT	Modem failed to properly close the telnet to ports 5070/6070 when the peer terminates the connection.
1159	AT	AT+COPN? was returning ERROR since the response is too long to fit in the AT command response buffer. The results may now be obtained by issuing successive AT+COPN commands.
1162	AT	Modem may restart randomly when AT+BMDIAG? is automatically issued at very high frequency.
1151	Events	Legacy modems (BT-4000/BT-5000) had an invalid device ID in BEP messages.
1153	Events	AT command response was restricted to short strings.
1165	Events	Reduce latency to send first BEP message
1167	Events	IMOM (Initial Mobile Originated Management) Server errors are logged too frequently. IMOM connection to a remote server is now only attempted every 30 minutes.
1154	IP Registration	The IP registration message sent by GSM modems had an extra white space.
1166	IP Routing	Incorrect LAN routing when in On-Demand mode and not connected to WAN.
1152	Partner Apps	The application was occasionally failing to start.
1164	RF	Add WD to recover from a failure to connect in on-demand mode.
1048	RF (HSPA)	Show the HSPA packet session status in the RF state of AT+BMDIAG? and AT+BNSTAT? of HSPA modems.
1103	RF (HSPA)	Re-enabling the HSPA RF module transmit (AT+BRFPON=1) is no longer triggering a modem reset.
1163	RF (HSPA)	Modem to report only the RSSI of the active cell (HSPA).

3.9   Version 3.8.4 – Release Notes – June 7, 2010

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw07	2.6.21 #btw03
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw04	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- IPsec support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw04 or above.
- GRE tunnel support (IndustrialPro™ and MobilityPro™ Gateway only) requires kernel 2.6.21 #btw06 or above.

New Features & Improvements

ID	Subject	Description
1023	Modem Time	**Synchronize modem time on NTP, GPS or CELL** Add the AT+BMTIME command to select the time source, the AT+BNTP to select NTP servers and the AT+BNTPST command to monitor the NTP client.
1042	GRE Tunnels	**GRE Tunnel support** Add the AT+BGRETUN, AT+BGREOPT, AT+BGREKEY, AT+BGREMR, AT+BGREDI, AT+BMCASTR, AT+BSROUTE AT commands to support GRE tunneling. This feature is available on BT-6000 and BT-5600v2/BT-5800v2 only with kernel 2.6.21 btw#06 or above.
1043	GPS	**Specific NMEA sentence mask per destination** The AT+BGPSRP allows to set a specific NMEA message mask per GPS destination (IP1, IP2 and Serial).
1044	GPS	**Specific reporting timer per destination** The AT+BGPSRP allows to set a specific reporting timer per GPS destination (IP1, IP2 and Serial).
1116	Events	**Add capability to log BEP events (AT+BEVLOG).**
1117	Events	**Add capability to purge stored BEP events (AT+BSFMRM=1)** Note: The modem needs to be reset once the command is issued.
1118	Events	**Report Store and Forward memory status (AT+BSFMST?)** The AT+BSFMST? command reports the number of used and free memory blocks as well as the number of stored events per BEP destination.
1142	Security	**Serial port AT command protection** Access to AT command can now be password protected the same way as access from LAN and/or WAN with the AT+BRPSWD command.

Fixed Issues

ID	Subject	Description
898	WAN	Traffic from USB causes WAN to disconnect when in IP pass-through
902	Events	Incorrect event ACK in UDP causes reporting destination to change This was an issue when the BEP server did not use the same port for source and destination.
1074	Events	Modem does not report signal strength in EVDO-only mode
1081	GPS	GPS sensitivity Improve GPS stationary detection, especially for Copernicus firmware 3.02 and Copernicus II firmware 1.04.
1093	Events	BEP: BT-5400 reports 0 as device ID
1091	GPS	Close GPS port 9999. The modem GPS server port may be re-opened with AT+BGPSSV
1119	DUN	Dial-up Networking (DUN) PC failed to connect after a few connect/disconnect cycles.
1120	Apps	Partner apps: No access to localhost when in IP pass-through
1122		Support for BT-4600/BT-5600 (EVDO rel. 0) Re-introduce support for those models (broken in 3.8.3)
1123	Apps	Internal connections to tcp:5070/tcp:6070 when AT password is enabled
1124	Events	BEP RSSI value in RF2 payload The value is now coded according to specification (positive in RF2 and negative in RF1).
1127	GPS	GPS reporting to IP destination faster than the value specified in the reporting timer of AT+BGPSPR.
1128	Events	MOM: Modem jobs fail when configured with UDP
1129	Apps	Partner apps: last reserved port not configured
1131	Serial IP	Listening server hangs when client disconnects
1133	Events	MOM: multiple re-transmissions of TCP/IP BEP packets
1134	AT	AT commands: timeout and out of sequence From time to time the modem AT interface fails until the modem is restarted.
1135	Events	+BEVENT: "WAN" signal trigger is missing The WAN signal trigger of AT+BEVENT was documented but not implemented.
1140	Apps	Partner apps: Frequent app enabling/disabling breaks AT commands
1141	WAN	+BMDIAG does not show correct WAN IP address The WAN IP address in AT+BMDIAG is occasionally prefixed with the string 'ppp'. When this happens, AT+BIPINF fails (returns ERROR) and the modem cannot communicate on its WAN interface.
1144	Events	+BEVAIS value2 parsed as an integer instead of a float Correctly parse the two values of the comparison expression.
1146	Diagnostics	EVDO modems fail pass-through to RF diagnostic port (DM)
1148	AT	ATO occasionally does not return modem to Serial IP mode
1149	AT	Long AT responses not entirely written on serial port

3.10 Version 3.8.3 – Release Notes – February 18, 2010

Dependencies

Unchanged from 3.8.0, see below.

Fixed Issues

ID	Subject	Description
1113	IP pass-through	Occasionally, when first acquiring the WAN IP address or when the WAN IP address gets re-negotiated, the modem may fail to configure the interface assigned to IP pass-through with the WAN IP until the modem resets.

3.11 Version 3.8.2 – Release Notes – February 12, 2010

Dependencies

Unchanged from 3.8.0, see below.

New Features & Improvements

ID	Subject	Description
1053	**HSPA**	**HSPA automatic configuration** When the modem is reset to factory configuration (AT&F or Action > Reset Modem in BVDM), the connection dial string, username, password and APN are automatically set according to the SIM card settings.

Fixed Issues

ID	Subject	Description
1032	Serial port	Serial port not reset to configuration settings after BVDM disconnects.
1037	Events	AT+BEVGSS syntax should be verified
1039	Serial IP	IP->Serial and Serial->IP values inverted in SIP diag
1092	RF	EVDO A modems may fail to connect (Verizon and Sprint only).
1097	RF	WAN LED does not blink to indicate WAN activity
1098	RF	Modem failed to log RF Diagnostic information (DM) in QxDM
1099	Configuration	Modem looses its password after upgrade
1102	RF	HSPA: Manual network selection (+COPS) is missing parameter
1107	AT	Frequent +BMDIAG/+BNSTAT resets modem
1108	Configuration	Firmware upgrade sets MTU to zero

Known issues

Unchanged from 3.8.0, see below.

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3.12 Version 3.8.1 – Release Notes – January 11, 2010

Dependencies

Unchanged from 3.8.0, see below.

Fixed Issues

ID	Subject	Description
1082	AT	Frequent connections/disconnections from telnet AT commands reset modem.
1087	Events	MI2 and MI3 PRL and GPS version fields are missing for some modem models.
1089	Events	Information is missing in initial ignition ON BEP message.
1088	RF	BT-6400 series modems fail to report EDGE service when available.
1092	RF	EVDO A modems may fail to connect (Verizon and Sprint only).
1090	Startup	Improve hardware verification (Ethernet and USB) at modem startup.
1100	Startup	Improve cold weather modem startup.

Known issues

Unchanged from 3.8.0, see below.

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3.13 Version 3.8.0 – Release Notes – December 18, 2009

Dependencies

	Legacy modems BT-4000 / BT-5000 Series		IndustrialPro™ and MobilityPro™ Gateway BT-5000v2 / BT-6000 Series	
	Current Version	Minimum Version	Current Version	Minimum Version
Kernel	2.6.15.1bt5	2.6.15.1bt5	2.6.21 #btw06	2.6.21 #btw02[2]
Boot Loader	1.1.3bt10	1.1.3bt8	1.2.0-btw04	1.2.0-btw02
File System	3.0.0	2.0.0	3.0.0	3.0.0

Important Notes

- Release 3.6.2 added IPsec functionality to the BT-5000v2 and BT-6000 series modems. If upgrading from a version prior to 3.6.2, an advanced upgrade is necessary to enable IPsec support.

New Features & Improvements

ID	Subject	Description
674	Firmware upgrade	**Modem initiated upgrade package download** The AT+BWGET can be used to download an upgrade package from an FTP or HTTP site.
1014	Events	**WAN event added to BEP** The WAN event (see AT+BEVENT) can be used to signal when the modem has a WAN IP address and when it changes.
1015	Events	**Modem Originated Management** Destination type 3 (MOM) can now be used to initiate management action from the modem. See AT+BRPRDS/AT+BEVRPR/AT+BEVENT. This feature is meant to operate with BlueVue Group (release 2.1.80)
1017	Events	**Add new BEP payloads: MI2, MI3, RF2, IP1** Those new message payloads can be used to report status information to a management server.
1018	Events	**Add new BEP payload: AU1** This new BEP payload can be used authenticate BEP messages.
1019	Events	**Add new BEP payload: AC1** This new BEP payload can be used to exchange AT commands and responses between a management server (BVG) and the modem.
1027	GPS	**Synchronize modem time on GPS: AT+BGPSDT**

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[2] The "minimum" kernel version of 2.6.21 #btw02 does not support IPsec. If IPsec is required, an advanced upgrade should be performed to upgrade the kernel to 2.6.21 #btw04 or above.

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Fixed Issues

ID	Subject	Description
1028	Serial IP	Modem fails to transfer files via Serial IP
1035	IPSEC	AT+BIPSSN? does not display the remote subnet configuration
1040	RF	RF diagnostic pass-through via serial fails
1054	FTP	The FTP server was failing when enabled multiple times.
1055	DHCP	In IP pass-through, the DHCP lease time is reduced to 30 seconds until the WAN IP is available and assigned to the local interface. The configured DHCP lease time is then used.
1056	GPS/Events	GPS/BEP UDP destinations connects/disconnects every 30 seconds This occurred when +BSYNC was used and no ACK messages were received.
1057	RF	HSPA: Intermittent high latency and ping packet loss
1073	AT	AT+BIPINF returns ERROR
1077	GPS	GPS fix not reported
1079	UDP	Intermittent high latency and loss of UDP packets
1080	RF	HSPA: MCC reported instead of MNC

Known Issues

ID	Subject	Description
917	Activation	New modems on Sprint now utilize OMA-DM instead of IOTA for provisioning, resulting in an error when the AT!IOTASTART command is issued. OMA-DM can be started with AT!dmdc=2 instead. This change requires BlueVue Device Manager 1.7.9 for automatic activation.
880	Activation	A bug in the Sierra Wireless MC5727 module returns ERROR during activation when in fact the activation may have been successful. A workaround is available in BlueVue Device Manager 1.7.9.
966	WAN LED	The WAN LED on BT-5800v2 and BT-6800 series may not indicate the connection status when the RF Transmit has been disabled and then re-enabled using AT+BRFPON. This issue only exists with RF module firmware: K1_0_2_8AP.

4   Support Information

Visit the Industrial Wireless Product Support section of Sixnet website to download product manuals, software updates and modem firmware updates.

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