F1000G Release Letter
Revision 0.1

Release Number <V2.70st >

Revision History

Revision #	Author	Reviewed By	A. Description Of Change B. Summary of Review	Issued By / Issue Date
0.1	Channu Sannappanavar		V2.70st Release Notes for F1000G handset	2006-06-09

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1. OVERVIEW

This is external release letter for UTStarcom F1000G release package V2.70st.

This release has a fix to prevent downloading of F1000 firmware into F1000G handset. As a result once the F1000G handset is upgraded to 2.70st release, it can not be downgraded back to previous release using local or remote firmware upgrade procedures.

2. RELEASE CONTENT

2.1 NEW FEATURES AND FUNCTIONS

2.1.1 F1000G Release V2.70st

- **Incoming RTP port:** F1000 didn't accept RTP message from other end if its originating RTP port did not match negotiated RTP port. This restriction is removed in this version and handset doesn't check if originating port of incoming RTP messages matches negotiated port in SDP.

- **WPA enabled AP connectivity:** Sometimes handset could not connect to the AP which had WPA security turned ON and SSID broadcast disabled. This issue is fixed in this version.

- **WPA Key hiding:** Access to WPA key in SSID profile configuration is enabled only after entering user code. This restriction is added to prevent WPA key access by unauthorized person thro' handset menu, which could be used to access Enterprise or user WLAN network.

- **Dynamic payload type** for telephone event in SDP: Apart from 100 and 101, F1000G should accept any payload type selected by SIP server.

- **SIP 302:** SIP 302 Redirect/Moved temporarily message is supported.

- **Removing eZi mode:** eZi predictive text input option is removed from Address book and other configuration menus since it is not used.

- **NULL Encryption key:** Default encryption key in F1000G is NULL and in previous firmware version NULL key was used to decode provisioning file received from provisioning server. In version 2.70st NULL key is treated as no key or no encryption. So whenever F1000G has NULL key (or no key) as an encryption key, F1000G will look for ut<MAC>.ini file on the provisioning server. When encryption key exists (other than NULL) then handset will look for encrypted ut<MAC>.aes provisioning file and decode it using configured encryption key on the receipt of the file.

- **Block F1000 firmware download:** This version blocks downloading F1000 firmware into F1000G handset. Due to this modification, F1000G handset can not be downgraded using remote or local firmware upload methods below 2.70st firmware version. Even in the future firmware versions, handset can be downgraded to firmware version up to 2.70st version but not below 2.70st version.

- **Close the telnet port:** Access to telnet port is disabled.

- **Display Sip Username on main display:** Add a menu in "Settings->Scheme" level for users to enable or disable the main display to show SIP username.

2.1.2 F1000G Release V1.90st

This is the first external release of F1000G. All the features of F1000G are listed in section 2.2

2.2 FEATURES

F1000 provides the following features and functions:
- Call Features
    - Basic Call setup
    - Call Waiting
    - Blind Call transfer
    - Consult Call transfer
    - Three Way call
    - Call Hold and unhold
    - Mute capability while in conversation
    - Repeat dial on busy
    - Caller ID Block
    - Reject Anonymous Calls
    - SIM (Simultaneous) Ring
    - Shared Call Appearance
    - Alternate Number

- Call Processing:
    - SIP protocol (RFC3261 and RFC3264)
    - SDP for codec negotiation (RFC 2327)
    - RTP for media transfer (RFC 1889)
    - RTCP for RTP statistics collection (RFC 1890)
    - SNTP
    - DNS failover
    - DNS SRV
    - FQDN support for SIP server and Registration server
    - SIP server fail over
    - Handover between APs with same SSID, Wepkey and same subnet
    - MWI-Message waiting Indicator
    - SIP Authentication Id other than SIP User name
    - STUN for NAT traversal
    - SIP 302

- RF and Power Management:
    - Output Power: 20mW
    - 80211b/g at 2.4GHz
    - Battery:Li-ion DC 3.6V 1500mAh
    - Battery Life: 4 Hours Talk time, 100 Hours Standby time
    - Battery Charge Time: 2-3 Hours

- Codec and Voice Processing:
    - G711u-law
    - G711a-law
    - G729
    - RFC 2833 for DTMF encoding
    - In band (PCM) DTMF
    - Comfort Noise Generation (CNG)
    - Voice Activity Detection (VAD)
    - Adaptive Jitter Buffer
    - Echo Cancellation

- .Various Indicators on first row of the screen:
  Antenna strength indicator to connected AP
  Battery Life indicator
  Screen Lock indicator
  Ring mode and Vibration mode indicator
  Message Waiting Indicator
  Alarm indicator

- Provisioning Capability:
  1. F1000G handset menus provide ability to do most of the provisioning required for basic operation of handset.
  2. Remote TFTP/HTTP process can be used for secure provisioning over Internet.
  3. HTTP based Web interface can be used to configure most of the parameters.

- Software Upgrade Capability:
  1. SO writer hardware along with aFlash Utility can be used for upgrading the software.
  2. Local TFTP utility for software upgrade.
  3. Remote TFTP/HTTP can be used for software upgrade

- Handset Security
  1. User Code: Upto 6 digit code for web interface login, protecting SIP password in hanset menu, handset power on locking and User setting reset in the handset.
  2. Admin Password: Up to 20 characters long for "resetting the parameter to default values" thro' web interface.
- Languages supported: English, Spanish, Chinese, French (Two languages in one firmware)
- Message Logs: Local log on the handset menu, Syslog on the remote server
- Supports four set of AP configuration (SSID and WEP Key)
- Support for Auto Scanning for open AP
- Supports NULL, 64 bit and 128bit WEP key encryption, 1 to 4 index keys and open or shared key.
- Support for TKIP based WPA-PSK encryption.
- Hot spot Login: Supports script based HTTP based hotspot login. ScriptCreator tool is provided to write a Hot spot login script for the handset.
- Support for 12 and 24 hour time format.
- Call Log: Dialed, Missed, Received and Delete call log and Duration of call
- Calculator, Calendar and Alarm in Tools menu
- Phone Book
- Speed Dial
- Ear Piece
- Some of the parameters in "WiFi-Settings" menu can take effect without rebooting handset
- Power on can be enabled to be User Code protected
- Supports various user modifiable profiles and user modifiable setting. Please refer to the user guide for learn about these options.

2.3 PROBLEMS RESOLVED

2.3.1 V2.70st

- When ring mode is set to vibration, and incoming call is rejected by pressing "hang up", the vibration is still extended even after pressing "hang up" (red) key. This problem is resolved in 2.70st version.

- After powering on the handset, if entered into the MISC->Local TFTP menu and stayed there, when the handset is registered successfully, then the screen was modified to show 'Parse the config' instead of 'Enter Code' screen.

- Sometimes if call between two F1000G subscribers (A-calling party and B- Called Party) is picked up within one ring on called party (B) handset , then A to B there is no voice transmission, and B to A has very quite volume. This happened in very few scenarios and it is fixed in this version

- Interaction between Mute and hold/unhold: When both the parties in a call are turned "Mute", pressing hold/unhold few times could lead to two way voice transmission despite phone is still in "Mute" state. This interaction is corrected in this version.

- Syslog Messages: Some messages were not transmitted to syslog server and some RTP flow related messages were not transmitted fully to the syslog server. This is fixed in 2.70st.

3. SUMMARY OF KNOWN PROBLEMS AND WORKAROUNDS
.
There are no known issues in 2.70st firmware version of F1000G.

4. RELEASE PACKAGE

4.1 SOFTWARE

aflash utility for software upgrade
TFTP upgrade utility

4.2 FIRMWARE

Module	File Name	Version	File Size (MBytes)
Firmware for serial-port Download	F1000G_software_2.70st.sre	V2.70st (English/ Spanish version)	15.1
Firmware for TFTP Download	F1000G_Firmware.bin.Z	V2.70st (English/ Spanish version)	1.96

4.3 DOCUMENTATION

4.3.1 USER MANUAL

"F1000G User Manual" is added along with each handset in a box and also available at
http://www.utstar.com/Document_Library/F1000_User_Manual.pdf

4.3.2 Release Package Distribution

The release package is being made available through the following two methods:

Internally, released through Release Tool.
Externally, released through Email Distribution.

5. INSTALLATION / UPGRADING INSTRUCTIONS

Software Upgrade is supported through following methods:

- Single handset, software upgrade using Local TFTP downloads using WiFi. Please refer to the User manual.
- Single handset, software upgrade using SO writer and "aflash" utility. Please refer to the User manual.
- Upgrading multiple handsets using special 8 serial ports PCI board and SO writer. Please refer to the user manual for setting up and upgrading procedure.
- Upgrading multiple handsets using remote TFTP/HTTP method.

6. REFERENCE DOCUMENTS

1   Local TFTP upgrade manual
2   "aflash" programming utility user guide
3   F1000G User Guide and Quick Start guide at http://www.utstar.com/Solutions/Handsets/WiFi/
4   F1000 Remote Management Guide
5   Generic Configuration Parameters
6   WiFi Handset forum at http://userforums.utstar.com/index.cfm?frmid=27 (registration using email address is required)