xTP Release Notes

# xTP Software Version 2.3.0 – November 16, 2012

Includes xBio firmware 18322

Application Feature Changes:

* Device access through the console and ssh is protected by a password.
* LED script changes for new default UI

Bug Fixes:

* Fixed an issue where the xBio device could become bricked during a firmware update.
* Fixed issue where the config file can be erased (zero length) under certain circumstances.
* Biometric lights turn off on tap.
* Queued events are cleared when we receive a command to turn LED sequence off.
* Playing a new LED sequence first stops any currently playing sound.
* xTPra Only: Automatically disable LEDs and ambient light sensor code. The “disable lights” config option now acts as an override to turn off lights on xTP.
* xTPra Only: Fixed crash on application shutdown.

# xTP Software Version 2.2.0 – November 2, 2012

Includes xBio firmware 18228

Bug Fixes:

* Play/stop idle effect after it is changed/removed or updated through a media package update.
* Fixed empty reply (no HTTP status) on “DELETE /media/idle”.
* Fixed setmac-eeprom script to clear udev persistent device assignment. Prevents an issue where the device Ethernet interface gets renamed on the next boot.
* Fixed a LED script parsing issue where empty lines would turn off all LEDS.

Feature Changes:

* “PUT /media/color?name=off” and “PUT /media/sequence?name=off” now supports timeout parameter.
* Updated default UI interaction.
* Updated default color calibration values for DVT2 hardware.
* Light sensor will update whenever all LEDs are off rather than when no sequence is playing. This is an improvement for devices that have an idle effect playing at all times.
* “GET /media/sequence” now returns the name of the currently playing effect.
* Added “GET /reader/log” to return the contents of the application log.

# xTP Software Version 2.1.3 – 2507 – October 31, 2012

includes xbio firmware 18228

The xbio firmware is the only difference between this and the previous release. There is no change to the xTP application.

# xTP Software Version 2.1.3 - 2506 – October 15, 2012

includes xbio firmware 18034

Bug Fixes:

* Fixed a memory leak in the Media handling thread that is not currently possible, but could have become a problem in the future.

Feature Changes:

* u-boot changed to remove 5 second delay at startup. This removes potential failure to boot caused by activity on the serial line. This change also prevents unwanted access to the device booloader.
* Only allow one instance of reader application to run at a time.

# xTP Software Version 2.1.2 – October 10, 2012

Bug fixes:

* RFID radio re-initialized on errors which seems to work around some radio failure modes.
* Reader application restarts when new network connection detected. This fixes a potential problem with old cached DNS information preventing network communications.

4960 - Reader name can now be set to empty string using PUT /reader/name.

# xTP Software Version 2.1.1 – October 9, 2012

Bug fixes:

* Fixed several bugs relating to playing of LED scripts
* Fixed potential deadlock when upgrading xbio firmware
* Added retry on radio initialization
* Added recovery from some xbio errors that caused a loss of the xbio link

Feature changes:

* Added external hardware information to hello and /reader/info.
* Added offset value to color calibration
* Returns 400 error code to biometric rest calls if no biometric present
* Updated UI interactions
* Added GET /media/brightness rest call
* Added $lock and $unlock commands to LED scripts

# xTP Software Version 2.1.0 – September 20, 2012

Feature changes:

* Changes to integrate with the new RGB capable Biometric Reader from Lumidigm.
* New candidate media files.
* New media script commands to support the biometric reader.
* Reader will now attempt to locate the xBRMS through a DNS SRV look up and say hello to it in order to retrieve its xBRC address. This is only attempted if the xBRC address is not specified manually through the config file or if it’s not passed in through DHCP.
* Support for triggering events through GPIO lines (xTPra only).
* New REST call to change the xTP LED brightness.
* Change to “PUT /media/color” REST call to display solid colors with arbitrary RGB values.
* Media scripts now default to using relative (delay) vs. absolute timing.

# xTP Software Version 2.0.1 – August 17, 2012

Feature changes:

* LED brightness adjusted for ambient light level
* Added ability to post arbitrary events to the event queue
* Log size increased to 1MB
* Added new ‘xbio’ command to led scripts

Bug fixes:

4344 – POST /rfid/tap no longer accepts taps with no “sid” specified if “secure id” option is enabled.

4478 - Fixed invalid memory access when running on xTPra without he ‘disable lights’ option enabled

# xTP Software Version 2.0.0 – August 1st, 2012

* Initial release of the xTP2 reader software to support new hardware.

# Older releases for xTP software:

# xTP Software Version 1.0.1 – July 16, 2012

Application Bug Fixes:

* Fixed JSON parsing issue where the last character on the input was being truncated.
* 4167 – Gracefully handle exceptions thrown in the webserver callback and handlers.

# xTP Software Version 1.0.0 – June 18, 2012

Application Feature Changes:

* Mongoose web server options can now be specified in config file similar to xBR
* Added “HW type” field to reader/info
* Meaning of “next eno” in reader/info changed to be next available event number for a new event to match the xBR.

4093 – Added xBIO firmware to reader package and automatic upgrade when needed.

Application Bug Fixes:

* 4055 – Silenced ALSA broken pipe message in sound playback.
* 4120 – “No SAM installed” status will now auto-clear without need to restart if secure ID is disabled by xBRC.
* Added usage of “diversify” option for desfire.

# xTP Software Version 0.2.4.x – April 4, 2012

The primary reason for this release was that the 0.2.3 release included the wrong Kernel image. This only affected the image used for programming new devices in manufacturing and did not affect the package used for upgrading devices. There was one small bug fix in the package listed below.

Bug fixes:

* Eliminate innocuous error messages reporting inability to create some gpio files when program started with start-up script.

# xTP Software Version 0.2.3.x – April 4, 2012

Application Feature Changes:

* Added ability to disable public ID both via rfid/options URL and via config file.
* Added automatic retries on failure to read IDs.

Application Bug Fixes:

* A tap no longer turns off the exception lights
* Was outputting an event with only public ID when read of secure ID failed
* Removed ‘yellow’ status that popped up frequently from Sound library
* Sound volume restored on program exit if muted

# xTP Software Version 0.2.2.x – Mar 30, 2012

Application Feature Changes:

Sounds and lighting effects updated per instructions from Frog

Added “gxp\_success” and “gxp\_exception” lighting sequences

Lighting effects in config file now use names rather than numbers

RFID event no longer sent if xTP cannot read public ID (or secure ID if enabled)

Added “iin” to PUT rfid/tap options

Changed order of selecting xBRC URL so that value in config file now takes precedence over value set by DHCP server.

Application Bug Fixes:

3724 - Echo taps command no longer echos secure ID if secure ID disabled.

# xTP Software Version 0.2.1.x – Mar 7, 2012

Application Feature changes:

3716 – GET rfid/tap now works same as PUT rfid/tap

Added config file option that says whether an xbio is expected. Diagnostics reports a “red” status if this option is set and no xbio is detected.

Application Bug fixes:

3636 – No longer writing config.json file on startup if no changes.

3630 – dap-reader now shows usage if invalid parameter given

3626 – light comes on before secure ID read. Note that the UI surrounding taps will be changing soon per instructions from the Industrial Designers from Frog.

System Changes and Bug Fixes:

3707 - Fixed problem with loosing Ethernet connection when direct connected to a PC

3671 – Command history broke when software moved to NAND and is fixed in this version.

3524 – Number of core dumps in flash is limited with older core dumps erased if necessary.

# xTP Software Version 0.2.0.x – Feb 24, 2012

Feature changes:

* Reads public and secure IDs from both Ultralight C and Desfire cards.

# xTP Software version 0.1.3.x – Feb 22, 2012

Feature changes:

* Reads public and secure IDs from Ultralight C cards provisioned to the new standard.
* Added –c command line option to use alternative config file.

Bug fixes:

* Fixed potential crash problem in 0.1.2 when a zero length reply was received reading a Desfire.

Known Problems:

* Does not yet read secure ID from Desfire cards.

# xTP Software version 0.1.2.60 – Feb 13, 2012

Feature changes:

* SSL supported (lightly tested)
* Changed formatting of secure ID and IIN in RFID event to match updated spec.

# xFP Software version 0.1.1.194 – Feb 3, 2012

Only the major bug fixes and changes are listed for this version. The version numbering has been changed from 3 numbers to 4, with the 4th number now used as a build number, though it is actually the number of git commits since the last tag.

Major bug fixes

* Fixed bug in “PUT time” where time was periodically jumping 2 seconds.

HTTP Interface changes

* Added PUT and GET tap/options command
* Added “DELETE update\_stream” command
* Added “PUT rfid/tap” command for testing
* Implemented “PUT install” command to install software packages
* Added PUT and Get rfid/options and biometric/options commands.
* Added “PUT system/reset” command
* Added “PUT application/reset” command
* Added “PUT light” command to control light effects

Other major changes

* Reads public and secure ID from DESFire cards
* Added status (green, yellow, red) and status messages to diagnostic events
* Added max temperature to diagnostic event
* Added dap-reader monitor that restarts dap-reader on crash
* Added debounce of taps
* Added –v command line option
* Reversed byte order of RFID tag
* Code runs from NAND or MMC card
* Xbrc URL can be acquired from DHCP server
* Added many config file options including ability to set light thresholds and levels, and a “rfid loop” option.
* Light output levels adjusted by ambient light levels

# xFP Software version 0.1.9 – Nov 7, 2011

Bug Fixes

* Fixed a bug where xbio would appear to hang after a retry.

# xFP Software version 0.1.8 – Nov 3, 2011

Bug Fixes

* Fixed a memory problem that caused xFP to crash after ~250 reads in test mode.

Feature Changes

* “tap” sounds and lights now displayed at start of scan instead of at tap
* Retry sequence changed to a single beep and blue light followed by “tap” sound and light sequence.
* “tap” sound and lights played after first timeout, and scan event sent to xBRC after second timeout.
* Scan event sent to xBRC after maximum number of retries or time outs (xBRC can then instruct xFP to play exception sequence if desired)
* Added new double blink of Mickey for cast log in.

# xFP Software (dap-reader) version 0.1.7 – Nov 2, 2011

Bug Fixes

* Fixed problem with sounds being clipped due to too high a volume setting
* Improved handling of wav files and fixed bug where some of the meta-data in the wav file was being played, causing short static burst.
* Fixed bug where a cancelling a read after a timeout could cause xbio to crash

Feature Changes

* Implemented xbio retries on premature finger lift off
* Implemented new sounds and lighting effects
* Implemented system test mode that accepts the same RFID card without having to remove it from the field between reads.
* Implemented temperature cut off for lights
* Changed ambient light sensing software to not read ambient light when LEDs are on
* Sped up encoding of xbio test data

# Installation Instructions

Normally the xTP software is upgraded through the xBRC. Following are instructions for installing the software manually. They assume you have the ability to SSH to the target, and also a method such as SCP for copying files to the target. You will also need the dap-reader release package. This can be found at in the directory

[\\cypress\projects\Disney\Gonzo\SW\releases\xTP2\<version>\repos](file:///\\cypress\projects\Disney\Gonzo\SW\releases\xTP2\%3cversion%3e\repos).

The dap-reader package is the file that starts with “Synapse-dap-reader\_<version>”. There is another file that starts with “Synapse-dap-reader-**dbg**\_<version>”. Do NOT pick this file, it is the non-dbg file that you need. For example, the file name for version 2.0.0 of the dap-reader is synapse-xtp-reader\_2.0.0-1234-r14.6\_armv7a.pik. Once you have what you need, follow these steps:

1. SSH to the xFP
2. Stop the dap-reader program

/etc/init.d/reader stop

1. Remount the root file system for writing with the following two commands:

/etc/init.d/rootfs-rw

1. Copy the install package to the /var/tmp directory on the target device (using SCP or other means)
2. Install the package with the commands

opkg install /var/tmp/<package name>

sync

1. Remount the root file system as read only

/etc/init.d/rootfs-ro

1. Restart the reader app

/etc/init.d/dap-reader start