# xBR Software Version 1.2.5 – Nov 14, 2012

Includes radio driver version 1.3.2

New Features:

* Added GET /log command to retrieve device log file.
* Device access through the console and ssh is protected by a password.

Bug Fixes:

* Fixed issue where the config file can be erased (zero length) under certain circumstances.

# xBR Software Version 1.2.4 – Oct 14, 2012

Includes radio driver version 1.3.2

New features:

* 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 grover application to run at a time.

# xBR Software Version 1.2.3 – Oct 10, 2012

Includes radio driver version 1.3.2

Bug Fixes:

* 5281 - Application restarted when a new network connection is detected. (This addresses a problem that was occurring where the application was unable to locate the xBRC because it had old DNS lookup information cached)

# xBR Software version 1.2.2 – Oct 2, 2012

Includes radio driver version 1.3.2

New features:

* Added “update stream” and “time” to the ‘hello’ message and to GET /reader/info.

# xBR Software version 1.2.1 – September 21, 2012

Includes radio driver version 1.3.2

Bug Fixes:

* Fixed json error in events sent to update stream when diagnostic events were included. (FogBugz: 4945).

# xBR Software Version 1.2.0 – September 18, 2012

Includes radio driver version 1.3.2

Bug Fixes:

* Fixed issue with the “GET /xband/beacon” command not returning the correct information (FogBugz: 4407).

New Features:

* Added firmware downgrade capability.
* Added “GET /xband/beacon” and “/xband/commands” for retrieving the reader’s TX state.
* Added diagnostic events and “GET /diagnostics” endpoint.
* 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.
* Changes to the logging of HTTP traffic.

Radio driver changes:

* Added timeouts to TX commands. The driver will now remove commands from its list after a defined timeout period. This period defaults to one hour and can be set through the REST call “/xband/options”.
* Miscellaneous bug fixes.

# xBR Software Version 1.1.1 – July 25, 2012

Includes radio firmware version 0.10E

Includes radio driver version 1.2.5-2088

Bug fixes:

* Radio firmware upgrade was broken in the previous version and is fixed.

Radio firmware changes highlights:

* Default frequency changed from 2483 MHz to 2482 MHz
* See radio firmware release notes for complete list of changes.

# xBR Software Version 1.1.0 – July 16, 2012

Includes radio firmware version 002s

Bug fixes:

4167 – Some JSON errors would cause unhandled exceptions.

4158 – Fixed typo in response to PUT /time.

Features:

4229 – Added GET /xband/commands and GET /xband/beacon

4189 – Added DELETE /xband/output as a way to remove both beacon and xband commands with a single command.

4122 – Added PUT /xbrc command to set the xBRC URL.

Radios are now reset when program starts and program no longer exits if a radio cannot be initialized.

# XBR Software Version 1.0.4 – June 20, 2012

Bug Fixes:

* 4186 – Fixed a resource leak caused by opening the radio driver device and not releasing the file descriptor.

# xBR Software Version 1.0.3 – June 11, 2012

Bug fixes:

4008 – Added some range checking on POST update\_stream parameters.

4116, 4150 – Added missing “events” section to ‘hello’ and GET /reader/info payload.

4152 – POST /application/reset fixed.

4149 – Sending POST /reader/name with missing ‘name’ parameter was clearing the reader name.

4151 – Added length limit on name provided by POST /reader/name

4153 – “next eno” value in ‘hello’ and GET /reader/info payloads was always 1.

# xBR Software Version 1.0.2 – June 7, 2012

Bug Fixes:

* Fixed a couple of bugs in the formatting of the events output to the update stream or in response to GET /events.

# xBR Software Version 1.0.1 – June 5, 2012

Feature Changes:

* Added “radio driver version” and “HW type” to /reader/info and to hello message.

Bug Fixes:

* The outside braes ({}) were left off of the events json payload to the GET /events service and when being pushed to the update stream.

# xBR Software Version 1.0.0 – May 31, 2012

Feature Changes:

3538 – Added PUT events and DELETE events service to allow testers to input events for the xBR to echo back.

4036 – Added receiver packet count to ping events

4042 – Added GET filter service

4034 – Added automatic radio firmware upgrades

3652, 3398 – The size of the event queue was reduced to 3000 events.

* Added DELET filter service
* Location of executables moved to /mayhem

Bug fixes:

4075 – xBR was sending hello message with the port value set to null if it wasn’t set in the config file.

4041 – Fixed GET time service

4021 – Events sent to update stream no longer lost if the service fails.

* Corrected broadcast ID used by PUT xband/beacon.

# xBR Software Version 0.2.0.0 – May 9, 2012

Config file changes:

* Location changed to /var/mayhem/grover.conf
* Logging parameters changed to a single “log level” parameter
* Added “band id” that if included, will toss all events other than the specified id
* Added “tx frequency” parameter to set the frequency for the transmit radio
* Removed some unused parameters from the file
* See config file document included with release for more config file details.

HTTP Interface changes:

* Finished “POST filter” service that can be used to filter pings on band ID or signal strength or both.
* Added “POST xband/beacon” service for setting up ‘beacon’ commands. I.e. commands sent continuously, back to back.
* Modified “POST xband/commands” service. Now used only for commands sent in reply to individual pings. Parameters can be specified via URL encoding or Json payload.

Other feature changes:

* Default transmit frequency changed to 2482Mhz. Can be overridden by config file.
* Added the ping debug bytes to the ping events.
* Switched to persistent HTTP connections
* Frequency of hello message speeds up if an update stream push fails.

2964 – Implemented upgrade service.

3011 – Implemented PUT system/reset.

3395 – Implemented SIGHUP handler.

Bug fixes:

4018 – Handle missing values from config file.

4019 – Logging was failing on program restart.

4020 – Logging of multiple categories was not working.

# xBR Software Version 0.1.0.0 – April 26, 2012

Bug fixes:

* 3965, 3972 - Fixed deadlock that was causing the event output to stop
* Fixed bug causing "null" events element in output on some occassions when some pings fell below the minimum signal strength threshold.

# xBR Software Version 0.0.12.x – April 23, 2012

Feature changes:

* turn off logs; only "INFO" is on, and it goes to /var/log/grover-info.log.
* Added test program that can generate pings in the driver, for load testing.
* Added logging to give insight into how the xbrc-url is being used.

Bug fixes:

* fix "next eno" field in the hello message, was stuck at "1".

# xBR Software Version 0.0.11.x – April 22, 2012

Bug fixes:

* 3965, 3966 - Fix a mutex deadlock. See fogbugz for the fixed symptoms. Stream messages no longer deadlock. /stream requests must be non-persistent; intention is to restore persistentcy in near future.
* Created a recurring monitor thread for /stream requests.
* properly protect concurrent /stream request attempts (add mutex).
* Check for missing parameters in /update\_stream page service handling.

Feature changes:

* /xbands/commands page service is added, but is non-functional.
* Change logic to use 1.) parameter, 2.) config value, finally, all others missing, 3.) default value.
* url parameters now accepts negative numbers
* Add (unused) minimum signal strength (POST /filter)
* Add min-ss parameter to /stream service page, to filter on signal strength.
* Adjust the count of records based on the new filter
* Added logic to keep from sending empty stream packets.
* 3006 - Default web server port = 80, retrieve the port address from the config file.
* 3707 - Added DHCP exit hook to remove dhclient.leases file and replaced netplug with ifplug.
* monitor program checks for radio-driver & loads if needed.
* Kernel fixes; init. issue fixes
* Add /install page to web services.

# xBR Software Version 0.0.10.x – April 13, 2012

Bug fixes:

* Fixed bug: Hello message would be sent once to proper url ("http://<address:port>/hello"), but subsequently to ("http://<address:port>/stream").

# xBR Software Version 0.0.9.x – Feb 29, 2012

Feature changes:

* 3142, 3314 - Prepared files to switch to NAND based platform. script for creating UBI image has been added UBI added as an image type (arago-oe-dev). Some file locations changed. var/lib/dhcp/resolv.conf
* dhcp debug logging is OFF by default
* Now using custom linux kernel driver for communication with the radios. SPIDEV module removed from kernel build. Application uses a separate thread to handle incoming data from driver
* 3008 - new method for generating versions for the particular files. No longer creating /VERSIONS on the card.
* Application is monitored by a script, so that it is restarted on failure.
* MAC is able to be stored on eeprom
* setmac-eeprom eth[0|1] <MAC (xx:xx..)>
* openssl library added. curl and mongoose are now openssl capable
* nano editor added to the filesystem
* Stream turned on/off by availability of data to send
* 3009 - update stream page now pays attention to interval and max parameters
* 3010 - /application\_reset page implemented
* 3007 - /reader/info.json format is now in spec with ICD. Radio calibration values are added and extraneous software versions were deleted.
* DELETE stream added