Q8 Firmware - Release 1.2 – Release Notes - 20200814

BE660 - 2.128

- Fix rare bug causing intermittent failure of DPB <resume> search.

OS Release 1.2

- Additions for production process improvement. No user effect.

Q8 Firmware - Release 1.1 – Release Notes - 20200807

FE660 - 14.253

- Qualify 1PPS and NMEA stability before acceptance.
- Fix rare crash
- Fix rare gaps of integral msec
- Correct FIR delay for 250SPS in case both 500SPS and 250SPS outputs are selected.
- Turn on GPS if was off and new configuration is continuous.
- Delay turning on antenna power to at least 100ms after GPS engine is turned on.
- If engine type, int/ext antenna select, or boost setting changes cycle engine power for 2 seconds
- Sequence GPS power on.

BE660 - 2.126

- Prevent FE firmware update if power down pending.
- Improve recovery of packet buffer if sd660 terminates abnormally.
- Improve search for requested time before group of cache-only files
- improve out-of-cache file searching to work in resume mode with fragmented or partial file databases and bad data or missing data files.
- Queue writing on blockette files to minimize delay variance in FE-BE comms
- Fix rare bug that could cause garbage to be transmitted when a connection is accepted
- Prevent transmission of garbage and failure to re-register following a disconnect.
- "disabled" channels will remain in OCF sent to a client, but not data.
- "Not Ready" error returned during startup for more responsive retry of XDL connection.

LIB660

- Prevent string overflow on clock phase error
- Fix use of loc codes with "A*" channels
- FIx reading stale data after incomplete prior registration.
- Handle "Not Ready" error from BE660.
- add LIBMSG_NOTREADY & LIBMSG_PRILIMIT

Q660 UTIL

- remove DOUBLE_HYBRID_ENDIAN
- Structure changes

Q8TOORB – 1.99.0

- Fix null ptr error
- Limit uncompressed packet size to 2000 sample/channel, , above which stuff MGENC fails.
- Fix manageVector that caused entry duplication.
- Fix various pf/st for dlmon behavior. add number of server restarts.
- Adjust "clq", "gpss" and "gps" status to suit dlmon's taste.
- Manage gap vector based on data timetag, rather than running elapsed OS time.
- Change definition of the reboot counter & rebootb time to refer to FE reboots----
- Wait 5s in LIBSTATE_WAIT to allow for preferential reconnection
- Default verbosity to VERBOSE_CONNECTION

Q8TOMSEED – 1.4

- default verbosity to VERBOSE_CONNECTION
- add XDL cfg options, stream reject
- ignore seedlink SIGPIPE causing failure on datalink error.
- add acknowledge level for writes to ringserver:
- 0=none, 1=final flush (default), 2=all
- preserve packet queue count for possible later save/reload of "inflight" continuity.

SD660 - 118

- Send TERM not KILL to be660 on Global_Abort condition to preserve DPB.
- Prevent be660 restart when shutting down
- Do not drive ext4 fs to 0% free by circular space management.
- Relax criterion for OS clock reset to be sure that if the FE is producing plausibly time-stamped data, regardless of time quality, the OS time will be set. Necessary to generate current archival mseed file time stamps. Handles case of bad RTC or good RTC with dead battery.
- Modify is_exidl_running to deal with rare errno==10 from system() call.
- Inhibit extidl server retry once freeze/stop initiated.
- Include log tails from /tmp/persist/log/tailpack.tgz. failover to continuity message tail.
- 30s after soft_wd_expiration exceedance, try graceful shutdown.
- Add hysteresis in SLED_OK/SLED_NOTOK transition when clock Q < 20%.
- Reduce mandatory HW WD refresh interval from 180 to 60s to provide longer margin after last WD reset in case of arbitrary sd660 stoppage.
- Annunciate when CPU temp > HOT_CPUTEMP_ALARM (default 90).
- Add re-read XML file name
- Display RTC Status Register whenever a hwclock update is done to get BATT state.
- Add INCREASED_MESSAGE_QUEUE for increased LOG tail flow. throttle tail dumps.
- Report SS status in plain text.
- Changes to fuser calls on /tmp/cont so it does not kill procs that are using /tmp.

WS660 - 0.137

fix the last fix in the case of no channel yet defined

rationalized "decimate only", "no output", and "exclude from all clients" and associated help pages.

Fix expiration of icon.

fix too-short user message.

fix 4-character auto station name in status summary page

add ringserver earliest/latest to status page.

WEBUI – OS Release 1.1

- Add XML *Save As*
- Add advanced archival support
- Add ethernet link mode adjust with 100mbit default
- Add seedlink support
- Add orbserver support
- Add thermal failsafe monitoring
- Unique shipment password to comply with California SB-327 regulations
- Improve shutdown logic

Production Hardware changes accompanying software Release 1.1

- Handle reverse and forward power rolarity -32 to +32V
- Fix sensor power control
- Fix sensor current limit
- internal GPS antenna
- Thermail CPU shutdown
- Programmed shutdown on hardware watchdog expiration.

END OF DOCUMENT