sbgCenter Application

Change-log v2.9.252-stable

1. Summary

This software release focuses on performance improvement, reliability and improved configuration interface to ease device configuration.

It also adds the support for latest products and firmware releases.

2. Import highlights from this release

- New hard & soft iron magnetic calibration algorithms
- Support for new ELLIPSE firmware v1.7 series
- Support for new QUANTA product line
- Support for NAVSIGHT rack & OEM versions
- Bug fixes and improvements

3. Upgrade Procedure

The latest sbgCenter version comes with an SDK release. Your sbgCenter should offer you to download the latest available SDK automatically or you can get it from SBG Systems support center.

4. Changes for release v2.9.252-stable

4.1. New Feature

- [SBGCTR-266] - Added support for NAVSIGHT OEM product codes
- [SBGCTR-267] - Added DVL support for ELLIPSE products
- [SBGCTR-268] - Add Air data support configuration and logs
- [SBGCTR-274] - Add CAN odometer configuration for ELLIPSE products
- [SBGCTR-276] - Add asynchronous IMU Short output log message
- [SBGCTR-279] - Add support for Quanta product line
- [SBGCTR-280] - Add support for new Ekinox hardware revision 3
- [SBGCTR-281] - Add support for new Apogee hardware revision 2
- [SBGCTR-283] - Add CAN output message with vehicle body velocity

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- [SBGCTR-284] - Add CAN output message with track, slip and curvature indications
- [SBGCTR-286] - Possibility to output data at 40Hz with the Ellipse
- [SBGCTR-287] - Add baseline length field in SBG_ECOM_LOG_GPS#_HDT log
- [SBGCTR-288] - Add INDYN NMEA like message output for marine applications
- [SBGCTR-289] - Add support for fixed lever arms mode for ELLIPSE products
- [SBGCTR-291] - Add compatibility support Crossbow AHRS500 series

4.2. Improvement

- [SBGCTR-272] - Renamed DVL standard deviation as quality indicator in DVL log structure
- [SBGCTR-277] - Improved magnetic calibration algorithms and quality reporting
- [SBGCTR-290] - Add support to GEMSYS For short log support
- [SBGCTR-292] - Improved for ELLIPSE configuration initial conditions layout

4.3. Bug fixes

- [SBGCTR-269] - sbgCenter not opening correctly the .sbg files which causes no access to configuration
- [SBGCTR-273] - Fix *.mag files filter issues in the Windows file picker dialog box
- [SBGCTR-275] - Fix invalid NAVSIGHT rack version product picture
- [SBGCTR-278] - Wrong description for Navsight system mentionning "Ekinox Series"
- [SBGCTR-293] - Fix ethernet products detection

5. Changes for release v2.8.62-stable

5.1. New Feature

- [SBGCTR-231] - Add support for GEMSYS IMU parsing and data viewing
- [SBGCTR-251] - Add Septentrio Internal GNSS model for new Ellipse D
- [SBGCTR-254] - Added support for Navsight solution
- [SBGCTR-257] - Added new asynchronous IMU short log used for post processing
- [SBGCTR-261] - Added Ship Motion status flags display

5.2. Improvement

- [SBGCTR-259] - Improved ELLIPSE plugin device detection to avoid listing Ekinox/Apogee/Navsight products
- [SBGCTR-263] - Better handle GNSS internal/external model selection for ELLIPSE series
- [SBGCTR-265] - Increased restart time out for ELLIPSE-D products

5.3. Bug Fixes

- [SBGCTR-206] - GPS Week Number not output correctly from sbgCenter txt Exporter
- [SBGCTR-225] - Fix wrong UTC/GPS date format in Text Exporter
- [SBGCTR-252] - Naming error on Altitude (MSL) graph window "EFK" vs "EKF"
- [SBGCTR-256] - Fixed clock/can/status color indicators that were not correctly updated
- [SBGCTR-260] - Fix wrong label on initial date that wasn't coherent with the control

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- [SBGCTR-262] - Fix an issue when retrieving legacy IG-500 configuration from an ELLIPSE

5.4. Removed Feature

- [SBGCTR-258] - Removed deprecated magnetometers support for Ekinox products
- [SBGCTR-264] - Removed deprecated IG-500 motion profiles

6. Changes for release v2.7.165-stable

6.1. Bug fixes

- [SBGCTR-227] - Fixed wrong date format label in Initial Position & Date depending on Windows local
- [SBGCTR-247] - Fixed GPS 1 Raw Data output that wasn't available for ELLIPSE-E
- [SBGCTR-250] - Fixed GNSS panel status color that wasn't correctly updated
- [SBGCTR-253] - Fixed GPS 1 True Heading output that wasn't available for ELLIPSE-E

7. Changes for release v2.7.153-stable

7.1. New Feature

- [SBGCTR-242] - Add a heavy machinery motion profile for Ellipse series
- [SBGCTR-248] - Added support for ELLIPSE Micro M2 hardware

7.2. Bug fixes

- [SBGCTR-249] - Fixed FTDI latency auto configuration for ELLIPSE Micro Evaluation Board

8. Changes for release v2.6.115-stable

8.1. New Feature

- [SBGCTR-240] - Added change log display as a PDF from the help menu
- [SBGCTR-210] - Added support for new EKINOX2 product line
- [SBGCTR-221] - Add SBG_ECOM_CMD_VALIDITY_THRESHOLDS command for ELLIPSE
- [SBGCTR-223] - Added support for ELLIPSE micro hardware
- [SBGCTR-230] - Added support for aiding assignment on Port E for ELLIPSE-E and N
- [SBGCTR-233] - Added support to ELLIPSE-E to externally configure an Ublox receiver

8.2. Improvement

- [SBGCTR-214] - Improved error logging using new sbgCommonLib
- [SBGCTR-217] - Updated SBG Systems address
- [SBGCTR-235] - Reduced time needed to open the ELLIPSE interface configuration tab
- [SBGCTR-236] - Add a filter to only display internal GNSS models if the user has selected an internal port assignment

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8.3. Bug

- [SBGCTR-192] - Fix legacy output protocol configuration issues
- [SBGCTR-212] - Fixed missing direct PPS Sync Out option for ELLIPSE2-N products
- [SBGCTR-216] - Fixed CAN configuration that were not available for some ELLIPSE2-D products
- [SBGCTR-218] - Fix invalid product icon display for EKINOX
- [SBGCTR-224] - Rework product features handling for ELLIPSE series
- [SBGCTR-232] - Fixed flickering GNSS panel issue at each GNSS data update
- [SBGCTR-237] - Fix a crash when connecting to a device after having opened and then closed a recording
- [SBGCTR-239] - Fix invalid product label display for ELLIPSE2 and EKINOX2 in graphs and panels title

9. Changes for release v2.4.100-stable

9.1. Bug

- [SBGCTR-209] - Fixed magnetic calibration issues for Ekinox due to invalid UDP connection

10. Changes for release v2.4.96-stable

10.1. Bug

- [SBGCTR-205] - Removed New data output on RAW GNSS data message for ELLIPSE-N
- [SBGCTR-207] - Fix incorrect regex match that prevent some ELLIPSE-D to be connected

11. Changes for release v2.4.92-stable

11.1. New Feature

- [SBGCTR-201] - Add the uptime device information in general status panel
- [SBGCTR-197] - Added support for new product codes that include the GNSS option
- [SBGCTR-194] - Added support for ELLIPSE2 products
- [SBGCTR-185] - Added a unselect all logs button in the binary log importer
- [SBGCTR-182] - Automatically open Windows Firewall for Ekinox & Apogee devices
- [SBGCTR-181] - Added to Ellipse Series Rotary Wing UAV motion profile for low dynamic UAV applications
- [SBGCTR-179] - Added support for NMEA VTG output log on Ellipse series
- [SBGCTR-178] - Added a warning message if more than one Ekinox or Apogee is using the same output port
- [SBGCTR-170] - Added input and output Ethernet port information for Ekinox and Apogee

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11.2. Improvements

- [SBGCTR-203] - Only offer up to 50 Hz output rate for Ellipse magnetometer data output log
- [SBGCTR-196] - For ELLIPSE, the sync out duration is now entered in us instead of ns
- [SBGCTR-195] - Allow larger sync out pulse length than 4.5 ms
- [SBGCTR-193] - Use float instead of double for position rendering
- [SBGCTR-191] - Now, the auto update system is only using https connections for improved security
- [SBGCTR-190] - Better handling when a device is disconnected and reconnected during a recording
- [SBGCTR-186] - Improved export text preset management by selecting the latest edited or created one
- [SBGCTR-184] - Add new output log class for NMEA proprietary messages
- [SBGCTR-176] - Remove equipment / motion profile model version checks for ELLIPSE
- [SBGCTR-172] - Updated Bonjour compatibility check to support latest Bonjour revisions 3.1.0.1

11.3. Bug

- [SBGCTR-204] - Fix a bug that incorreclty detected changed settings for ELLIPSE devices
- [SBGCTR-200] - Fixed gyroscope rotation speed limited to +/- 180 °/s when exported in a text file
- [SBGCTR-198] - Fixed incorrect decimal handling when exporting UTC time in HH:MM:SS.SSS
- [SBGCTR-188] - Fixed a crash when a binary log was imported following a cancelled import
- [SBGCTR-187] - Fixed missing On Event In D output mode for ELLIPSE-D devices
- [SBGCTR-183] - Fixed missing PORT E configuration for ELLIPSE-N B1 versions
- [SBGCTR-177] - Fixed PORT C output configuration for ELLIPSE-D
- [SBGCTR-175] - GPS time (seconds) not output correctly with the text exporter
- [SBGCTR-173] - Fixed auto update downloading issues

11.4. Removed Feature

- [SBGCTR-189] - Removed deprecated "course" from the GNSS configurable aiding sources

12. Changes for release v2.2.183-stable

12.1. New Feature

- [SBGCTR-167] - Added proprietary NMEA message PASHR for roll, pitch, heading, heave
- [SBGCTR-162] - Added velocity expressed in the body reference (IMU frame) to the text exporter
- [SBGCTR-160] - Automatically reconfigure misconfigured FTDI devices
- [SBGCTR-158] - Added support for Apogee SubSea units
- [SBGCTR-157] - Added raw GPS altitude display time series
- [SBGCTR-152] - Added INS alignment status display
- [SBGCTR-151] - Added CPU headroom status display
- [SBGCTR-148] - Added undulation curve in altitude graph
- [SBGCTR-142] - Added direct PPS from internal GNSS Sync Output (SBG_ECOM_CMD_SYNC_OUT_CONF)

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- [SBGCTR-141] - Added SBF (Septentrio) protocol support on Ellipse-E
- [SBGCTR-140] - Added feature to import multiple log easily
- [SBGCTR-128] - Added KVH third party output format in Ellipse Configuration
- [SBGCTR-112] - Added RAW GNSS data export fields for the textExportPlugin

12.2. Improvements

- [SBGCTR-169] - Only offer up to 50 Hz output rate for Ellipse ShipMotion data
- [SBGCTR-166] - The panel used to open a new graph doesn't close automatically anymore
- [SBGCTR-165] - Updated raw GNSS display to indicate if no data has been received for too long time
- [SBGCTR-164] - Fixed display issues for computer using high DPI
- [SBGCTR-161] - Only offer up to 50 Hz output rate for Ellipse magnetometer calibration data output log
- [SBGCTR-155] - Now, the sbgCenter will accept to configure Ellipse with a more recent firmware
- [SBGCTR-138] - The 2D calibration can find a solution with fewer points.
- [SBGCTR-137] - Improved iron calibration quality reporting
- [SBGCTR-136] - Better status support when importing Ekinox log recorded with firmware 1.2.4.4 and earlier
- [SBGCTR-132] - Improved Bonjour browsing error checking
- [SBGCTR-126] - Improved update checking system for new SDK

12.3. Bug

- [SBGCTR-163] - Fix timing issue and roll over when importing some sbgECom logs
- [SBGCTR-159] - Fixed a bug during multiple logs import if the files were not ordered correctly
- [SBGCTR-154] - Fixed various "used in solution" status display
- [SBGCTR-153] - Fixed incorrect graph display for large recordings
- [SBGCTR-147] - Fixed incorrect altitude above ellipsoid display on altitude graphs
- [SBGCTR-134] - Fixed incorrect product thumbnail display for OEM Ellipse devices
- [SBGCTR-133] - Fixed access to PORT E features on Ellipse OEM variants
- [SBGCTR-131] - Improved export text plugin speed
- [SBGCTR-130] - Fixed improper GPS Time of Week roll over for the text export plugin
- [SBGCTR-129] - Fixed device scanning issue in case of partial failure
- [SBGCTR-127] - Fixed Quaternion export
- [SBGCTR-125] - Fixed export issue when UTC is not available at the begining of the log
- [SBGCTR-121] - Improved quaternion interpolation that could lead to incorrect exported euler angles
- [SBGCTR-8] - Fixed a bug that causes the sbgCenter to crash or report inexistant devices when an unconnected serial port was scanned

12.4. Removed Feature

- [SBGCTR-150] - Removed deported ship motion 1 to 3 to comply with new monitoring point concepts
- [SBGCTR-149] - Removed GPS 1/2 course solution status

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