



Release Notes

Release 16.04.0

Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

Safety and Hazards

Do not operate the Sierra Wireless modem in areas where cellular modems are not advised without proper device certifications. These areas include environments where cellular radio can interfere such as explosive atmospheres, medical equipment, or any other equipment which may be susceptible to any form of radio interference. The Sierra Wireless modem can transmit signals that could interfere with this equipment. Do not operate the Sierra Wireless modem in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Sierra Wireless modem **MUST BE POWERED OFF**. When operating, the Sierra Wireless modem can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

Limitations of Liability

This manual is provided "as is". Sierra Wireless makes no warranties of any kind, either expressed or implied, including any implied warranties of merchantability, fitness for a particular purpose, or noninfringement. The recipient of the manual shall endorse all risks arising from its use.

The information in this manual is subject to change without notice and does not represent a commitment on the part of Sierra Wireless. SIERRA WIRELESS AND ITS AFFILIATES SPECIFICALLY DISCLAIM LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE OR ANTICIPATED PROFITS OR REVENUE ARISING OUT OF THE USE OR INABILITY TO USE ANY SIERRA WIRELESS PRODUCT, EVEN IF SIERRA WIRELESS AND/OR ITS AFFILIATES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE OR FOR CLAIMS BY ANY THIRD PARTY.

Notwithstanding the foregoing, in no event shall Sierra Wireless and/or its affiliates aggregate liability arising under or in connection with the Sierra Wireless product, regardless of the number of events, occurrences, or claims giving rise to liability, be in excess of the price paid by the purchaser for the Sierra Wireless product.

Customer understands that Sierra Wireless is not providing cellular or GPS (including A-GPS) services. These services are provided by a third party and should be purchased directly by the Customer.

SPECIFIC DISCLAIMERS OF LIABILITY: CUSTOMER RECOGNIZES AND ACKNOWLEDGES SIERRA WIRELESS IS NOT RESPONSIBLE FOR AND SHALL NOT BE HELD LIABLE FOR ANY DEFECT OR DEFICIENCY OF ANY KIND OF CELLULAR OR GPS (INCLUDING A-GPS) SERVICES.

Patents

This product may contain technology developed by or for Sierra Wireless Inc.

This product includes technology licensed from QUALCOMM®.

This product is manufactured or sold by Sierra Wireless Inc. or its affiliates under one or more patents licensed from InterDigital Group and MMP Portfolio Licensing.

Copyright

© 2016 Sierra Wireless. All rights reserved.

Trademarks

Legato™ is a trademark of Sierra Wireless®.

mangOH™ is a trademark of Sierra Wireless®.

Sierra Wireless®, AirPrime®, AirLink®, AirVantage®, WISMO® and the Sierra Wireless and Open AT logos are registered trademarks of Sierra Wireless, Inc. or one of its subsidiaries.

Windows® and Windows Vista® are registered trademarks of Microsoft Corporation.

Macintosh® and Mac OS X® are registered trademarks of Apple Inc., registered in the U.S. and other countries.

QUALCOMM® is a registered trademark of QUALCOMM Incorporated. Used under license.

Other trademarks are the property of their respective owners.

DOCUMENT HISTORY

Version	Date	Description
15.10.Beta	November 13, 2015	initial PDF version
16.01.02	February 16, 2016	16.01.02 version
16.04.0	June 9, 2016	16.04.0 version

Contents

- New Features..... 1
 - Java Support 1
 - Load kernel module from sandbox apps..... 1
 - UBI file system – R/O and R/W 1
 - AirVantage LWM2M 2
 - Observe and Read CallBack..... 2
 - Configuration APIs..... 2
 - Sandbox Persistent Files..... 2
 - API Enhancements..... 3
 - HTTP Server Sample App 3
 - Meta-WiFi layer 3
- Modifications 4
 - Development 4
 - Fixes..... 8
- Open Issues..... 12
- Documentation..... 13
 - Format..... 13
 - Content..... 13

NEW FEATURES

Java Support

One design goal since the beginning of Legato has been to allow you to develop in whatever language you know best. In this release, we're taking a big step toward that becoming reality by supporting application development in Java alongside C/C++.

You can now develop Apps and Services using the same IDL as we use for C. Now, the bindings are generated in Java, and you can access other Legato Services without needing to know the language used in those Services.

This is our first Java release, so it will likely have some wrinkles, but we'd love to have you try it out and give use feedback on the Forum.

See [Java Install and Build](#) for info on how to install and build Java packages in Legato.

Load kernel module from sandbox apps

It's now possible to bundle custom-built kernel modules as `.ko` files in Legato systems. The kernel module will be automatically loaded when the system is started, and unloaded when the system is stopped. This allows you to add support for extra peripherals without having to rebuild and install a new kernel.

The kernel module introduces a new `.mdef` (kernel module definition file) that contains two sections:

- `prebuilt` - mandatory section pointing to `.ko` file loaded/unloaded using Linux `insmod` command.
- `params` - optional load parameters.

Kernel modules are built in the Yocto kernel build environment, preferably with Yocto cross-build tools.

[Kernel definition file info](#)

UBI file system – R/O and R/W

UBIFS support has now been added for read/open and read/write. The `mtd4 (USERRW)` partition now defaults to UBIFS if erased entirely. The partition is unaffected if not erased.

AirVantage LWM2M

These new features have been added in 16.04:

- LWM2M Observe and Read Callback support.
- Configuration support has been added through polling/timers functions.
- Register handler now supports variable fields.

Observe and Read Callback

Legato now supports Observe and Read Callback implementation based on the LWM2M [Open Mobile Alliance](#) specification, Section. 5.5.

Once enabled, Observe provides app/asset resource value updates automatically when changes occur. Read Callback features also provide for initiating read requests.

[Observe API info](#)

Configuration APIs

Polling and Timer features have been added to configure devices to initiate periodic connections to poll the server for pending jobs.

[Polling/Timer API info](#)

Sandbox Persistent Files

Sandboxes now support persistent file creation. Files created by an app anywhere outside `/tmp` are persistent. Temporary files should now be created in `/tmp`.

When an app accesses its files, either relative or absolute paths may be used. But relative paths are recommended because this approach is most portable and consistent (especially if you need to change from sandboxed to unsandboxed).

When directories are imported into an app, a snapshot of all files under that directory is imported into the sandbox when the app is started. Files created (in the directory) after the app has started won't be available to the app until it's restarted.

API Enhancements

C LANGUAGE SUPPORT

Stricter type checking, so native C types are no longer allowed, except for `le_result_t` and `le_onoff_t`.

Along with stricter type checking, additional built-in types are: `int` (same as `int32`), `uint` (same as `uint32`), `bool`, `char`, `double`, `size` (same as `size_t` in C)

CHANGED APIS

New client-side `TryConnectService()` function can now be used instead of the existing `ConnectService()` function.

Members of `ENUM` and `BITMASK` can now be given explicit values.

HTTP Server Sample App

A new HTTP Server sample app has been developed to provide a web front-end to control your Legato apps. The new app provides a sample web server with Diagnostics, Run Shell Commands, and Install Apps options.

Meta-WiFi layer

The meta-WiFi layer has been added to the Legato default build. The meta-WiFi layer provides API reference designs for a WiFi hot spot Access Point and a WiFi client. Documentation is included as a Plug-in available under Build Apps.

MODIFICATIONS

Development

- [AirVantage] Implement AvMS configuration APIs
- [AirVantage] Introduce per-target specific QCT headers
- [AirVantage] LWM2M Config session type and http status
- [AirVantage] LWM2M Observe and read call back
- [AirVantage] Observe cancel and observe reset
- [AirVantage] Support Float in AirVantage Data
- [AirVantage] Update avdata docs for float field support
- [AR7] Update QMI headers to 07.10.05.00 for Block transfer feature
- [Audio] Audio unit test intermittently fails
- [Audio] le_audio / cannot use different profiles
- [Audio] Use feature flags instead of device model comparison
- [C support] for assigning to ENUM/BITMASK members
- [cellnet] Add API to address cellnet config DB settings
- [cgroups] Use 'cpu,cpuacct' instead 'cpu'
- [CM] Enhancement of 'cm info'
- [CM] Fix CM tool to display "NOT AVAILABLE" on missing modem information
- [Def Files] Add buildVars section to .sdef files
- [Def Files] Add components section to .adef files
- [Def Files] Add interfaceSearch section to .sdef files
- [Def Files] Allow preloaded: in .sdef.
- [Def Files] Auto-set CURDIR env var in def files.
- [Def Files] Insert Legato-packaged kernel modules on start
- [Def Files] Package out-of-tree kernel modules
- [Def Files] Reworking for Java servers.
- [Def Files] Support variable expansion in mdef/preBuilt
- [Docs] "update --mark-bad" --help is misleading
- [Docs] Add docManagement project and conversion
- [Docs] Add info for LWM2M Observe/Read CallBack

- [Docs] Add links for 16.04 release docs
- [Docs] Added extra notes on Java APIs and class structure.
- [Docs] Build Platform How To list dist packages
- [Docs] C Timer API additional info
- [Docs] Change Def File topics headings to match sections
- [Docs] Changes for new get started through mangoh
- [Docs] Correct mdef code sample
- [Docs] fix cAPIs list so it's alphabetical
- [Docs] Fixes post publishing 16_01_2
- [Docs] Improve help message of createsdk
- [Docs] Improve Sample Apps topics
- [Docs] Include WiFi API headers
- [Docs] Kernel Module Definition file topics
- [Docs] le_mutex create recursive/non-recursive
- [Docs] Modify entry point for documentation, remove Get Started
- [Docs] move all Yocto content to Build Platform
- [Docs] Move WiFi Plugin topics under Build Apps
- [Docs] New How To Use Sandboxes topic
- [Docs] New topics on initial Java support
- [Docs] Remove word beta from version reference
- [Docs] Synch docs source with last publish changes
- [GNSS] timing information
- [GNSS] Add support for Galileo and Beidou constellations
- [GNSS] Adding a new Legato Assisted GNSS XTRA injection test
- [GNSS] Block synchronisation is needed during Ephemeris file injection.
- [GNSS] Sample code added to API documentation
- [GNSS] Satellites' information
- [GPIO] Add helpful information on how to use the GPIO service
- [GPIO] Remove unnecessary string copy
- [HEX] Improve le_hex_HexaToInteger
- [Make Tools] Moved Java component source root.
- [Make] Remove unused AUTOMOTIVE_TARGET flag
- [Make] Use 4K page size image as default image(Legato)

- [MCC] le_mcc_start() returns LE_BUSY if the call is already in progress
- [MDC] Add asynchronous functions for StartSession & StopSession
- [MDC] le_mdc_StartSession() doesn't provide the error cause in case of failure
- [MDC] Remove "verbose" name in MDC component variable naming
- [Modem Services] - Improve startup of PA
- [MRC] Add asynchronous functions
- [MRC] newAPI le_mrc_GetTrackingAreaCode to handle LTE TAC info
- [MRC] Retrieve the platform specific network registration errors
- [Multi-language support] [ifgen] Fix missing module reference
- [Multi-language support] [ifgen] Restructure code for multi-language support
- [Multi-language support] Add changes that got lost during rebase
- [Multi-language support] Add complete codeTypes support for 'Sample' lang
- [Multi-language support] Adding Java support to the build tools.
- [Multi-language support] Complete Java server side implementation.
- [Positioning] Sample code added to API doc
- [Power Management] Bux fixing and modification legato PM API
- [QMI] Embed QMI libraries to prevent dependencies
- [RasPi] Clean up AT manager
- [RasPi] Create a "raspi" target in the Makefile
- [RasPi] Implement MDC API on AT commands
- [RasPi] Implement missing INFO API on AT commands
- [RasPi] Implement missing MCC API on AT commands
- [RasPi] Implement missing SIM API on AT commands
- [RasPi] Optimize mklegatoimg
- [RasPi] Renaming functions of PA COMMON
- [RasPi] Use Raspbian toolchain
- [RasPi] Write the documentation about Raspi Target
- [Sample Apps] Add httpServer sample app
- [Sample Apps] Provide easy build of httpServer sample
- [Secure Storage] Create API and Tool to Dump the SecStore Meta File
- [Security] Give sandboxed apps access to persistent file system
- [SFS Data] Implement Backup Mechanism for SFS Data
- [SFS Data] Sfs Backup/Restore Doc Update

- [SIM] le_sim_SelectCard with dynamic sim ID
- [SIM] Need of API to access SIM EF files, to read and store data
- [SIM] Switch doesn't work with le_sim_SelectCard
- [SMS] Implement UCS2 management for SMS and SMS CB message
- [Start-up] Improve legato start-time
- [Start-up] Reworked the start program
- [Target Tools] Add IPC Inspector to the Inspect Tool
- [Target] App script warns when removing a non-existing application.
- [Tools] execlnApp Fix to resolve cgroup issue found in testing.
- [Tools] Make gdbCfg do nothing when the app is not sandboxed.
- [Tools] Support for command-line apps.
- [Tools] Support unsandboxed apps with execlnApp
- [Tools] Updating execlnApp to work with unsandboxed apps.
- [UBIFS] Add ubifs image generation
- [Update] Add generated TryConnectClient() function
- [Update] Add mark-good, mark-bad and defer to update tool
- [Update] Host side dies silently if framework not running
- [Update] Implement API for marking systems good, bad, etc.
- [Update] Package QMI static libraries along with QMI headers
- [Update] Provide SIGTERM handler for update
- [User Agreement] Enable user agreement after control app registers
- [Voice] vCheck voice call status before allowing le_voicecall_End()
- [WiFi] Add tag or commit ID revision into wifiService application
- [WiFi] Enable "make docs" in the Legato to include external project page in documentation
- [WiFi] Introduce build modules
- [WiFi] Move Wifi API files to Legato project.
- [WP85] Enable coap block mode and LWM2M observe features

Fixes

- [AirVantage] Fix modem activity timer and AVC notification
- [AirVantage] Fix read call back
- [AirVantage] update legato framework object
- [AirVantage]Thaw cgroup even when hard killing apps.
- [AirVantage] Delete app objects for upgrade
- [Antenna] le_antenna_GetStatus function wrongly returns LE_FAULT
- [appCtrl] Force usage of the system config tree
- [Audio] - Manage incorrect device model value
- [Audio] Cannot get mixer controler
- [Audio] Can't get Signal strength when radio is off
- [Audio] Delete pa_audio_IsCodecPresent() function
- [Audio] In multiple remote playback, le_audio_Pause is pausing both playback
- [Audio] recorder has to be connected before audio player
- [Audio] Repair framework target UTs
- [Audio] Synchronize stream audio lists and protect dtmf event report
- [Audio] unit test intermittently fails
- [Audio] Wrong audio mixage
- [C] Fix CM tool to display "NOT AVAILABLE" on missing modem information
- [CellNet] cellular network state event handler returns LE_CELLNET_RADIO_OFF
- [CellNet] le_cellnet_GetSimPinCode() can retrieve an unlocked sim pin code
- [CellNet] Provide better PIN code size management
- [Clean-up] Fix invalid types in API files
- [Clean-up] Fix tabs and whitespaces
- [Clean-up] Minor issues
- [CM] "cm data connect" can't start a data session
- [CM] Minor typo error in response of command "cm temp thresholds"
- [Config] Add check for zero length config file.
- [configEcm] Make dhcp range local to ecm/usb0 interface
- [configEcm] Make gateway and DNS options local to ECM
- [Data] Error while creating empty profile
- [Def Files] Fixed sdef level user bindings.

- [Dev Host] Fixed USB ECM overriding default gateway
- [Dev Host] Move command line arg saving to main().
- [Docs] Update audio platform constraints page
- [Docs] Partial fix of blocks of code using @verbatim
- [Docs] Changes for new get started through mangoh
- [Docs] Clarify rollback behaviour when system is marked bad
- [Docs] configEcm default only for startup
- [Docs] Convert some mentions from Wifi to WiFi
- [Docs] Fix verbatim in coding rules
- [Docs] How to Port Legacy C topic
- [Docs] Improve Sample Apps topics
- [Docs] Tidy up Low-level Messaging C API
- [Docs] Update mangOH topics
- [Docs] Update Target Tool additional parameters
- [Docs] Wrap host tools docs with @verbatim
- [Docs] Yocto Install Notes had wrong instructions
- [eCall] End of redial event is transmitted twice
- [eCall] ERA-GLONASS- Unset OID fields when there is no optional data present
- [eCall] Make it possible to set N-1 and N-2 position in eCall MSD.
- [eCall] redial fixed after a normal hang-up
- [eCall] Redials performed after a ALACK-clear down
- [eCall] Some LE_INFO traces should be LE_DEBUG to not pollute trace log by default.
- [GNSS] le_gnss_GetTtff always return LE_BUSY even after first 3D fix
- [GNSS] Satellites information API doc update
- [GNSS] Satellites information API doc update
- [GPIO] Terminate client session when GPIO export fails
- [Make Tools] Add missing build dependency on app's root.cfg.
- [Make Tools] Add support for -X/--cflags in mksys
- [Make Tools] Add sysroot option in the build system
- [Make Tools] can't find dep for USETYPES
- [Make Tools] Check for leading slashes before stripping them.
- [Make Tools] Do not provide default sysroot arg to compiler
- [Make Tools] Ignore trailing slash on working dir path.

- [Make Tools] Package ifgen languages in the SDK
- [MCC] Call waiting supplementary service
- [MCC] le_mcc_start() returns LE_BUSY if the call is already in progress
- [MCC] le_mcc_Start() returns LE_OK
- [MDC] Added dns address buffer length check.
- [MDC] le_mdc_StartSession() doesn't work
- [MDC] Update the RMNET_DATA_PREFIX value
- [MDC] Use QMI platform define to determine interface prefix
- [mkTools] Do not provide default sysroot to clang
- [Modem Service] Fix faultAction for modemServices
- [MRC] Callback le_mrc_AddSi..thChangeHandler() not raised...
- [MRC] Can't get Signal Metrics on LTE network
- [MRC] le_mrc_GetPreferredOperatorsList returns NULL when user PLMN list is empty
- [MRC] pa_mrc_AddPreferredOperators shouldn't belong to PA
- [MRC] Replace le_mrc_PerformNetworkScan references
- [Multi-language support] Complete Java server side implementation.
- [Multi-language support] Fixed a code breakage on Ubuntu 12.04
- [Multi-language support] Java -Skip traversal of mounted directories for efficiency.
- [Power Management] Bux fixing and modification legato PM API
- [RI PIN] Fix time shift of RI Pin Pulse
- [Sample Apps] Bugfix and refactoring of textLoc sample app
- [Sandbox] Fix inclusion of symbolic links to directories into sandboxes.
- [Sandbox] Fix missing devices in sandbox.
- [Sandbox] Fix permission setting for legato sandboxed apps
- [Sandbox] Fix subdirectory creation in apps.
- [Sandbox] Give sandboxed apps access to persistent file system.
- [Sandbox] Remove symlinks when updating apps so unsandboxed device doesn't reboot
- [Sandbox] System reboots when updating an app.
- [secStore] secStore tool does not allow writing 0-byte files
- [Secure Storage] writing an item of size 0 should be gracefully handled
- [Security] Fix bad mode bits in /legato/systems/current/
- [Security] Set smack rules after smackfs start
- [SIM] Unable to select external sim

- [SMS] Cannot receive SMS Cell Broadcast
- [SMSInBox] Files attributes are added for smsInBox files
- [Start Target] Fixed xattr error in startupScript.
- [Start Target] Improve legato start time.
- [Start Target] Improve legato start-time.
- [Start Target] Remove empty function from startupScript
- [Supervisor] Allow whitespace in insmod parameters
- [Supervisor] Legato failed restart after newly installed system
- [System Clock] le_clk_Time_t changed to uint64 in le_gnss.api
- [System Clock] Remove hard-coded exception for le_clk_Time_t
- [System] Fix crash when recreating a messaging session.
- [System] Fix memory leak when stopping session
- [System] Reworked the start program.
- [Target Tools] Fix brackets in configEcm help message
- [Target Tools] Fix error messages when getting app info.
- [Target Tools] Fix the "interval" Option of the Inspect Tool
- [Temperature Service] Review Temperature API
- [Thread Control] Fix setting thread to non-real-time priority.
- [UBIFS] mklegatoimg: Fix limit in UBI partition
- [Update] Bad formatting of update --help
- [Update] Ctrl-C of update -d causes reboot
- [Update] Exit as failure when something wrong happens
- [Update] Fix Allow/Defer counting
- [Update] Fix bug in update of apps with writeable files.
- [Update] Fix QCT update.sh to download from get-legato
- [Update] Fix QCT update.sh unable to update headers from AMSS
- [Update] LockProbation() doesn't stop probation ending
- [Update] Modification of update tool for better verbosity
- [Update] Running "update -g" halts terminal
- [Update] vExit gracefully while installing an app with bad manifest
- [Watchdog] Add watchdog for framework daemon start.
- [WiFi] Include modules in release package
- [WP85] Support SIM selection for external UIM2

OPEN ISSUES

SANDBOX PERSISTENT FILES

Support for persistent file creation has created a security hole where all of flash can be consumed by a malicious app. This hole will be patched when disk quotas are completed. However, disk quotas is only planned for ubifs not for yaffs2.

Persistent file creation is not fully supported in yaffs2 due to a lack of extended attribute support in yaffs2. Behaviour: persistent files can be created but once the file is closed, access permission is denied to that file.

GENERAL ISSUES

[ADC] Unable to read value using `le_adc_ReadValue`

[Audio] No sound when using I2S or PCM audio streams

[Bindings] Conflict between application name length and node name length

[eCall] `LE_ECALL_STATE_MSD_TX_FAILED` is received when pulling a new MSD

[GPIO] CF3 API callback initialization fires off one unexpected edge transistion

[IPV4] Can't ping IPV4 address when data connection is in "IPV4V6" mode

[MDM] MDM should not into low power mode while any update(firmware, app, legato etc) is in progress

[Sandbox] Configured with `gdbCfg` can't be started if the app's processes are turned off (`gdbCfg testApp testProc`) which may result in more than one process instance running.

[Target] WPx5 - enabling ECM breaks USB audio

[Target] WPx5 audio - external PCM configuration needs reset to take effect

[Tools] `le_arg` config tool cannot set negative node values

[uSD Card] can't be detected on run-time

[uSD Card] certain uSD cards are not detected by WP85/mangoh

[WiFi] Can't use WiFi client API from Java

[WiFi] WP SD detection does not work after TI WiFi support is added due to SDIO conflict

[WP85] Inconsistent stack when debugging on WP85

DOCUMENTATION

Format

The officially published [Legato documentation](#) has been completely updated along with [legato.io](#).

Change highlights include:

- *updated look*: we've extended our Doxygen layout so our docs have a rebranded, crisp look that improves readability.
- *new search*: we've implemented a search engine so there is now full search capability.
- *reorganized content*: to improve access to needed info, we've divided the docs into developer-specific sections: Build Apps, Build Platforms. We moved About Docs under the new hamburger menu.

Content

The Legato docs were reorganized to better suit users.

LEGATO.IO

Our Legato landing page [legato.io](#) has been completely redesigned with improved menus and quick link options.

BUILD APPS

Topics under Build Apps are for developers who just want to develop apps. These topic sections are available:

- **Concepts**: Legato basic concepts
- **API Guides**: Service and C Library API reference
- **Tools**: Target, Host, and Build tools' info
- **WiFi Plugin**: WiFi plugin docs

BUILD PLATFORM

Topics under Build Platform contains platform-specific info for developers who are modifying platform features.

These topic sections are available:

- **Platform Constraints**: any constraints applicable to specific platforms, devices, etc.
- **Yocto Info**: Yocto dist info:
 - **How To Legato Yocto** details on how to build Legato in the Yocto dist
 - **Legato Yocto Build Overview** info about the Legato Yocto dist
 - **Legato Yocto Install Notes** handy notes for working with the Legato Yocto dist

- [Customize Legato Yocto USB](#) customize USB behaviour of Legato Yocto dist

GITHUB

Our Legato Framework source code is available on [GitHub](#) for anyone wanting to clone our project.

ABOUT

Info about the docs has been moved to the new hamburger menu (left top menu bar). Info includes:

- [Legato](#): About Legato
- [Release Info](#): release and upgrade notes - current and previous versions
- [Licenses](#): Legato and Open Source Licenses
- [Docs Versions](#): access other docs' versions