

## BlueRange Changelog

### Gateway Software & FruityMesh Firmware Releases

Fully released versions are marked **PROMOTED**. Other versions are beta only and not supported. The list of changes for a version number contains all changes included since the version with the next lower number in the list, i. e. if version numbers are missing, the list of changes of the next higher version contains all changes for the missing version numbers as well.

#### Version 1.166.0 (2020-11-05) PROMOTED

Component	Version
Gateway	1.197.0
FruityMesh	0.8.5200
FruityApi	1.242.0

#### Gateway

NEW	IOT-4563	Clean-up and code merges
NEW	IOT-4594	Exclude fixed assets from indoor computations; improve asset handling
NEW	IOT-0000	Change <i>MeshGateway</i> to <i>BlueRange Gateway</i>
FIX	IOT-4594	Cluster size incorrect for device tracking measurement source

#### FruityMesh

NEW	IOT-4414	Add eInk code for nRF52840
NEW	IOT-4499	Disable node ID check in enrollments
NEW	IOT-4524	Prepare chunked packet queue to use bytes instead of messages
NEW	IOT-4526	Add documentation
NEW	IOT-4568	Add check to code analyzer to prevent reuse of group IDs
NEW	IOT-0000	Increase size of queue origins array
FIX	IOT-0000	Incorrect condition in base connection code
FIX	IOT-0000	Misleading message printed for all data packets

## Version 1.165.0 (2020-10-29)

Component	Version
Gateway	1.195.0
FruityMesh	0.8.5120
FruityApi	1.238.0

## Gateway

NEW	IOT-4275	Add timeout for device tracking event handling
NEW	IOT-4323	Add BACnet device recovery
NEW	IOT-4398	Show connections, firmware updates, number of sent MQTT messages
NEW	IOT-4492	Request device capabilities when mesh node sends <i>DFU_DONE</i>
NEW	IOT-4508	Evaluate <i>StatusMessage</i> instead of <i>MeshNodeConnectedEvent</i>
NEW	IOT-0000	Check CRC computation of <i>CapabilityEntryMessage</i>
FIX	IOT-4525	Bean name conflict, JVM to mimic <i>ExitOnOutOfMemoryError</i>

## FruityMesh

NEW	IOT-4167	Add RTC handling and new group ID for media converter
NEW	IOT-4496	Add capability to show feature set
NEW	IOT-4497	Report same device version for status and capability report
NEW	IOT-4499	Let enrollment fail when coming from incorrect node ID
NEW	IOT-4563	Clean-up and code merges
NEW	IOT-0000	Check deserialization of <i>CapabilityEntryMessage</i>
FIX	IOT-4542	Integer is interpreted as a string for certain capabilities
FIX	IOT-0000	Links in documentation are broken

## Version 1.164.0 (2020-10-15)

Component	Version
Gateway	1.194.0
FruityMesh	0.8.5030
FruityApi	1.235.0

## Gateway

FIX	IOT-4462	Firmware updates stalls if mesh nodes don't react properly
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## FruityMesh

n/a

## Version 1.163.0 (2020-10-13)

Component	Version
Gateway	1.193.0
FruityMesh	0.8.5030
FruityApi	1.234.0

## Gateway

NEW IOT-4006 Align communication in and out log level to debug and use prefix *COM*

## FruityMesh

NEW	IOT-4281	Expand polling for modbus devices
NEW	IOT-4399	Introduce new type <i>MessageLength</i>
NEW	IOT-4425	Implement chunked packet queue
NEW	IOT-4431	Add logging of the amount of generated splits
NEW	IOT-4463	Implement <i>get_connections_verbose</i> command
NEW	IOT-4465	Apply directed acyclic graphs for Github pipeline
NEW	IOT-0000	Add feature set group IDs for customer

## Version 1.162.0 (2020-10-08)

Component	Version
Gateway	1.192.0
FruityMesh	0.8.4940
FruityApi	1.232.0

## Gateway

NEW	IOT-4006	Add RWIO prefix for easier identification of messages
NEW	IOT-4061	Use BlueRange buildbox instead of Relution buildbox
NEW	IOT-4392	Update relutionApiClient to 4.71.4-430-g8edf75a6@master for unknown enums

## FruityMesh

NEW	IOT-4061	Use BlueRange buildbox instead of Relution buildbox
NEW	IOT-4341	Implement connection queue memory allocator
NEW	IOT-4409	Add more capability stages to CLC
NEW	IOT-0000	Clarify UICR usage and Github defaults for feature sets
FIX	IOT-4464	Mesh access disconnect incorrectly disconnects non-MA connections
FIX	IOT-0000	Double occurrence of <i>except</i> parameter in pipelines

## Version 1.161.0 (2020-10-02) PROMOTED

Component	Version
Gateway	1.191.0
FruityMesh	0.8.4870
FruityApi	1.231.0

## Gateway

NEW	IOT-4321	Resample particle for INS
NEW	IOT-4396	Add logging of tracking metrics

## FruityMesh

NEW	IOT-3717	Extend module ID
NEW	IOT-4143	Host internal documentation on BlueRange website
NEW	IOT-4176	Add early validity check for message types and sizes
NEW	IOT-4350	Adapt FruityMesh repo to coding conventions
NEW	IOT-0000	Add eInk documentation
FIX	IOT-0000	Incorrect references and build errors in documentation
FIX	IOT-0000	Incorrect description of reset command in documentation

## Version 1.160.0 (2020-09-18)

Component	Version
Gateway	1.190.0
FruityMesh	0.8.4720
FruityApi	1.230.0

## Gateway

NEW	IOT-1499	Implement <i>raw_data_report_desired</i> functionality
NEW	IOT-4069	Use new <i>adv</i> messages instead of <i>set_config</i>
NEW	IOT-4266	Add multi-value Touch4Light actuator
NEW	IOT-4287	Minimize race condition when enrolling assets
FIX	IOT-4290	Incorrect BACnet CoV subscriptions
FIX	IOT-4292	Disabling the web server not implemented correctly
FIX	IOT-4319	Position tracking fails when dimensions of floorplan are not configured

## FruityMesh

NEW	IOT-1499	Implement <i>raw_data_report_desired</i> functionality
NEW	IOT-3997	Modify test requirements
NEW	IOT-4165	Add comments for <i>DataSentHandler</i>
NEW	IOT-4276	Evaluate given CRCs for simulator commands
NEW	IOT-4310	Rename <i>Types.h</i> to <i>FmTypes.h</i>
NEW	IOT-4311	Rename <i>AdvertisingModule</i> to <i>BeaconingModule</i>
NEW	IOT-0000	Reserve new <i>FeatureSetGroups</i> for customer
NEW	IOT-0000	Adapt KNX, BACnet, Touch4Light modules to match extended module ID
NEW	IOT-0000	Host internal documentation on BlueRange website
FIX	IOT-4301	Google tests
FIX	IOT-0000	Access violation when passed tag is too long

## Version 1.159.0 (2020-09-07)

Component	Version
Gateway	1.189.0
FruityMesh	0.8.4600
FruityApi	1.227.0

## Gateway

NEW	IOT-1624	Retain calibration when grid changes
NEW	IOT-3271	DFU for assets
NEW	IOT-3488	Implement site migration utilities
NEW	IOT-3694	Prevent double enrollments
NEW	IOT-3816	Base code on <i>module</i> instead of <i>moduleId</i>
NEW	IOT-3831	Stabilize standstill for INS
NEW	IOT-3868	Add GTest to verify <i>MeshAccessConnection</i>
NEW	IOT-3971	Allow sensor request with empty target device
NEW	IOT-4070	Deprecate tracked asset message
NEW	IOT-4093	Modify API for region estimates
NEW	IOT-4094	Improve region estimates
NEW	IOT-4095	Implement <i>ChangePolicyAction</i> for building automation devices
NEW	IOT-4101	Add null-safety for update of environment profiles
NEW	IOT-4110	Require base type for user and group objects
NEW	IOT-4119	Refactor gateway integration of INS
NEW	IOT-4144	Clean up default sensor configuration
NEW	IOT-4141	Test INS without RSSI
NEW	IOT-4156	Add <i>WithdrawActionProcedure</i> for <i>BuildingAutomation</i> devices
NEW	IOT-4159	Send last connection time stamp of building automation devices to server
NEW	IOT-4180	Exclude library from default build
NEW	IOT-4181	Expand floor height property
NEW	IOT-4201	Implement option to switch off webserver
NEW	IOT-4204	Avoid multiple BACnet initializations upon configuration change
NEW	IOT-4223	Match building automation devices by enrollment name
NEW	IOT-4253	Remove key constraints for DFU of older assets
NEW	IOT-4266	Add multi-field actuators for Touch4Light
NEW	IOT-4269	Refactor <i>RegionEstimator</i> buffer/caches to concurrent implementations
NEW	IOT-4275	Increase throttling factor in asset measurement preprocessing
NEW	IOT-0000	Support NOW in formula for sensors and actuators
NEW	IOT-0000	Synchronize with system test and use of mixins
NEW	IOT-0000	Use body payload instead of <i>enable-ssh-tunneling</i>
NEW	IOT-0000	Update Relution API client to version 4.68.2-40-g5eb43476@master
NEW	IOT-0000	Discontinue <i>/data/customize/config.json</i>
NEW	IOT-0000	Reply to MQTT ping with a pong even if no <i>deviceUuid</i> or <i>clientId</i> is given
FIX	IOT-3928	<i>BuildingAutomation</i> system test failing
FIX	IOT-4054	<i>nodeId</i> of communication beacon violates range defined in firmware
FIX	IOT-4158	NPE when time stamp of tracked INS assets is null
FIX	IOT-4201	Spring boot application fails to start due to dependency cycles
FIX	IOT-4216	Assertion errors
FIX	IOT-4250	UUID mismatches cause sink beacon update to fail

## FruityMesh

NEW	IOT-2511	Enable watchdog for assets
NEW	IOT-3159	Document <i>MeshAccessConnection</i> handshake
NEW	IOT-3271	Prepare DFU for assets
NEW	IOT-3492	Modify command arguments for simulator animation <i>add_keypoint</i>

NEW	IOT-3717	Introduce <i>VendorModuleIds</i>
NEW	IOT-3826	Implement flash support for Cypress
NEW	IOT-3921	Increase reporting of asset temperature to 1/10 degree
NEW	IOT-4017	Add device type of sender to mesh access advertisements
NEW	IOT-4038	Prevent assets from advertising old packets
NEW	IOT-4038	Rename <i>ASSET_V2</i> to <i>ASSET_LEGACY</i> and <i>ASSET_INS</i> to <i>ASSET</i>
NEW	IOT-4066	Allow outgoing traffic with organization and network key if not on blacklist
NEW	IOT-4068	Enable asset module for elnk
NEW	IOT-4069	Add new <i>Adv Fruity</i> API message
NEW	IOT-4070	Annotate <i>TrackedAssetsMessage</i> as deprecated
NEW	IOT-4076	Implement and test FruityHAL for Cypress
NEW	IOT-4098	Merge customer code
NEW	IOT-4099	Adapt translation of error codes for Cypress
NEW	IOT-4109	Merge latest customer changes
NEW	IOT-4111	Disconnect <i>meshAccessConnection</i> for EnOceanModules linked to a button
NEW	IOT-4133	Allow DFU data through mesh access connections with orga key for assets
NEW	IOT-4138	Add power profiler script
NEW	IOT-4148	Remove floating point numbers from RNG calculations
NEW	IOT-4149	Terminate old MA if new MA are opened for assets
NEW	IOT-4166	Ignore leading zeros in <i>StringTo</i> functions
NEW	IOT-4170	Prohibit replay of a log file that requires persistent flash storage; DFU additions
NEW	IOT-4182	Align memory layout usage between local and mesh enrollment
NEW	IOT-4185	Implement <i>adv set</i> command
NEW	IOT-4194	Adapt randomization of values for pressure and humidity in simulator
NEW	IOT-0000	Add missing parameter <i>--platform</i> to <i>build.sh</i>
NEW	IOT-0000	Update Relution API client to version 4.70.1-178-gd6e97687@master
NEW	IOT-0000	Remove ASCII art warning
NEW	IOT-0000	Update modbus module documentation with MQTT examples
NEW	IOT-0000	Add example JSON for devices and site
NEW	IOT-0000	Remove number of registers indicator from <i>component_act</i> payload
NEW	IOT-0000	Add links to serials
NEW	IOT-0000	Add elnk capabilities
FIX	IOT-3820	<i>ANonce</i> packet incorrectly encrypted if <i>SoftDevice</i> returns error
FIX	IOT-4089	Race condition when using Runner in <i>MeshGWCommunication</i> mode
FIX	IOT-4145	Simulator produces incorrect results when executed with FruityMap open
FIX	IOT-4158	Runtime errors
FIX	IOT-0000	Incorrect QR code documentation

## Version 1.156.0 (2020-07-21) PROMOTED

Component	Version
Gateway	1.183.0
FruityMesh	0.8.4150
FruityApi	1.213.0

## Gateway

NEW	IOT-3747	Simplify mesh node enrollment
NEW	IOT-3831	Reduce label noise for asset tracking
NEW	IOT-3879	Handle asset actions in various functions
NEW	IOT-3884	Get <i>MeshNode</i> by <i>nodeId</i> via <i>HashMap</i>
NEW	IOT-3925	Refactor and document code for region estimates
NEW	IOT-3914	Integrate BACnet
NEW	IOT-3961	Implement endpoints and actuators for building automation
NEW	IOT-4030	Add actuators for luminaire support in building automation
NEW	IOT-4032	Check for correct setup of <i>isPublicationAllowed</i> flag
NEW	IOT-0000	Restart <i>rsyslog</i> on <i>meshlog</i>
FIX	IOT-3844	Invalid sensor configuration causes Spring context to fail
FIX	IOT-4015	Environment profile causes assertion error
FIX	IOT-4063	BLE node policy causes <i>AssertionError</i>

## FruityMesh

NEW	IOT-3917	Refactor watchdog for individual timeouts
NEW	IOT-3807	Add connection supervision timeout to simulator
NEW	IOT-3866	Extend information used from <i>device.json</i>
NEW	IOT-3827	Add UART input to Cypress HAL
NEW	IOT-3865	Remove connection if <i>serial_connect</i> times out
NEW	IOT-3906	Implement new " <i>action [nodeId] adv add</i> " command
NEW	IOT-3920	Remove macros for code improvements, refactor watchdog
NEW	IOT-3981	Add libraries, flags for Cypress, add to cmake environment
NEW	IOT-3988	Allow Ninja as build system
NEW	IOT-3985	Provision node on startup if enrolled
NEW	IOT-3986	Persist SIG states
NEW	IOT-3987	Add customer specific changes
NEW	IOT-3989	Improve robustness against RNG changes
NEW	IOT-3990	Refactor <i>getPeerAddr</i>
NEW	IOT-4007	Add clustering median time checks
NEW	IOT-4009	Reformat code, prohibit tabs
NEW	IOT-4012	Change Modbus register payload to big endian
NEW	IOT-4018	Print correct errors for simulator commands
NEW	IOT-4024	Enhance usage of <i>NodeIndexSetter</i> for simulator
NEW	IOT-4030	Trigger profiles in luminaires
NEW	IOT-4034	Add <i>CodeAnalyzer.py</i> to partner source distribution
NEW	IOT-4047	Add logs and load additional JSONs for replay functionality
NEW	IOT-4067	Synchronize assets
NEW	IOT-0000	Add <i>cppcheck</i> template to source distribution
NEW	IOT-0000	Enable sink to send elnk messages
FIX	IOT-3920	POC pipeline broken
FIX	IOT-3991	Hops counted incorrectly
FIX	IOT-3998	Incorrect <i>TestSinkRouting</i> , <i>TestShortestPath</i>
FIX	IOT-4031	Node moved without custom pin set causes <i>nullptr</i> access
FIX	IOT-4056	Cluster may have two different <i>clusterId</i>

## Version 1.153.0 (2020-06-25) PROMOTED

Component	Version
Gateway	1.180.0
FruityMesh	0.8.3770
FruityApi	1.209.0

## Gateway

NEW	IOT-3659	Replace topic expressions; improve MQTT communication for assets
NEW	IOT-3659	Consider connection reuse when determining possible connection
NEW	IOT-3747	Set <i>SensorData.siteUuid</i> via constructor; remove platform filter
NEW	IOT-3789	Ensure <i>SiteUpdatedEvent.regionUuidHierarchies</i> is not null
NEW	IOT-3832	Retrieve device capabilities for assets
NEW	IOT-3835	Increase MQTT rate limit to 4000 per minute per gateway
NEW	IOT-3838	Extend MQTT API to <i>SensorData</i>
NEW	IOT-3851	Add multi-floor tracking
NEW	IOT-3856	Update device model name to match real hardware info
NEW	IOT-3861	Improve log analysis, message queue metrics, serial message queues
NEW	IOT-3864	Add time stamp check
NEW	IOT-3865	Take RSSI into account when establishing mesh access connections for assets
NEW	IOT-3865	Adjust timeout for loss of <i>serial_connect_response</i> ; fix assertion
NEW	IOT-3877	Add <i>sensorRequest</i> subscription for building and floor
NEW	IOT-3882	Publish sensor data 10x faster
NEW	IOT-3922	Remove <i>Collectors.toMap()</i>
NEW	IOT-3925	Simplify multi-floor diagnosis process
NEW	IOT-3933	Implement asset detection service
NEW	IOT-0000	Update MQTT service on server

## FruityMesh

NEW	IOT-1372	Create exception in CherrySim when logging with ERROR tag
NEW	IOT-1427	Refactor code
NEW	IOT-3357	Integrate static and orientation filters for INS
NEW	IOT-3547	Add SIG mesh access layer
NEW	IOT-3693	Add animations for node movements
NEW	IOT-3737	Support new vendor
NEW	IOT-3747	Rename "actor" to "actuator", add firmware module IDs for KNX and BACnet
NEW	IOT-3759	Set node ID in <i>FruitySimServer</i> to retrieve correct data
NEW	IOT-3784	Add <i>component_act</i> message to be answered by periodic <i>sense</i> messages
NEW	IOT-3785	Remove default feature sets from config
NEW	IOT-3800	Use new optimized <i>buildbox-fruitymesh</i>
NEW	IOT-3803	Prevent sending luminaire information if device is not a luminaire
NEW	IOT-3805	Set <i>InterestedInConnection</i> from all modules
NEW	IOT-3818	Document customer specific <i>component_sense</i> message
NEW	IOT-3823	Allow capabilities with mesh access connection when using orga key
NEW	IOT-3841	Exit CherrySim if not built with 32-bit
NEW	IOT-3849	Improve test run time performance
NEW	IOT-3850	Adapt code for licensing purposes; add version number to source distribution
NEW	IOT-3865	Increase time between air pressure messages from 1 to 2 minutes
NEW	IOT-3875	Add test
NEW	IOT-3895	Improve failure behavior of <i>SourceDistTester</i>
NEW	IOT-3896	Add new cmake flag to enable/disable sanitizer flags for gcc
NEW	IOT-3916	Use serial number of <i>standard_asset</i> advertisement for <i>serial_connect</i> message
NEW	IOT-4011	Build feature set for new vendor
NEW	IOT-0000	Use <i>dev</i> instead of <i>prod_sink</i> to debug mesh issues



NEW	IOT-0000	Improve reset reason processing
NEW	IOT-0000	Add pipeline debugging guide to debug a docker container
NEW	IOT-0000	Add <i>TO_BLE_NOTIFICATION</i> (0xC3)
NEW	IOT-0000	Disable <i>FORCE_CPPCHECK</i> by default
NEW	IOT-0000	Define periodic timer component message <i>StatusReporterModule</i> as a write
NEW	IOT-0000	Add sensor interface to source distribution
NEW	IOT-0000	Implement <i>TwRead</i>
NEW	IOT-0000	Replace static sized buffer for node entries by dynamic buffer
NEW	IOT-0000	Document parameter <i>inactiveValue</i> in sensor profile
FIX	IOT-3707	Simulated nodes cause crash if number of nodes is set to 0 or increased
FIX	IOT-3819	Assets have high power consumption
FIX	IOT-3875	Watchdog trigger causes update malfunction
FIX	IOT-3929	Not all disconnect reasons are reported
FIX	IOT-0000	Tensor flow alignment incorrect
FIX	IOT-0000	<i>Component_sense</i> messages limited to 50 bytes base64 string
FIX	IOT-0000	Incompatible usage of dynamic arrays related to C++ standard

## Version 1.151.0 (2020-05-29)

Component	Version
Gateway	1.173.0
FruityMesh	0.8.3300
FruityApi	1.205.0

## Gateway

NEW	IOT-2023	Add <i>RssiMeasurement.uniqueReceiverPosition</i>
NEW	IOT-2023	Remove deprecated floorplan access via site, use building structure instead
NEW	IOT-2023	Refactor indoor library for site migration, deprecate <i>AssetDeviceDetails.assetId</i>
NEW	IOT-3296	Prepare region update
NEW	IOT-3302	Treat all mesh nodes equally
NEW	IOT-3385	Limit sending commands to beacon to ensure turning on LEDs on all beacons
NEW	IOT-3511	Adaptations for asset tracking within buildings
NEW	IOT-3564	Add <i>DebugAction</i> with logger configurations
NEW	IOT-3641	Keep devices valid during reinitialization to minimize device lock-up failures
NEW	IOT-3655	Add detailed <i>publicationAllowed</i> logging for unexpected behavior
NEW	IOT-3659	Establish asset mesh connection for read/write to firmware modules
NEW	IOT-3662	Add exception message to MQTT on <i>ComponentSenseMessage.ActionType.ERR</i>
NEW	IOT-3673	Disable processing of blank incoming messages (space, newline only)
NEW	IOT-3678	Set <i>inactiveValue</i> =null
NEW	IOT-3702	Remove <i>regionEstimationDisabled</i> state in favor of dynamic evaluation
NEW	IOT-3703	Skip <i>RegionEstimation</i> in single floor setup or if asset tracking feature is disabled
NEW	IOT-3721	Add retry mechanism for UART waiting timeout on <i>writeMessage</i>
NEW	IOT-3780	Add math parser for sensor profiles
NEW	IOT-0000	Update Relution API client to version 4.64.2-234-g1f921eb0@master
NEW	IOT-0000	Change nexus URLs
FIX	IOT-1723	Invalid serial numbers
FIX	IOT-3385	Incorrect timeout processing sequence related to handlers
FIX	IOT-3781	Power interpolation off by one
FIX	IOT-0000	NPE if <i>configuration.details</i> is null
FIX	IOT-0000	Constant renamed in fruityAPI

## FruityMesh

NEW	IOT-1498	Add documentation for all classes in the header files
NEW	IOT-1723	Extend serial number range to support 7 characters
NEW	IOT-2268	Reenable sink routing
NEW	IOT-3193	Add watcher for stack overflows to report them as such instead of hard faults
NEW	IOT-3228	Improve CMake and simulator documentation, remove old flash simulator
NEW	IOT-3302	Implement <i>AssetsNoLongerPeriodicStatus</i>
NEW	IOT-3454	Replace <i>lis2dh12</i> driver with standard tm diver, refactor <i>AssetModule</i>
NEW	IOT-3454	Add interface for gyroscope BMG250 driver
NEW	IOT-3455	Add motion interrupt for INS to <i>dev_asset_ins_nrf52830</i> feature set
NEW	IOT-3468	Add <i>ConnectionHandles</i> as a security layer that checks if connection still exists
NEW	IOT-3496	Mock CLC component update in simulator
NEW	IOT-3516	Implement & document new commands <i>set_position_norm</i> , <i>add_position_norm</i>
NEW	IOT-3552	Add return value to <i>SendModuleActionMessage</i>
NEW	IOT-3581	Integrate CPPCheck in CMake
NEW	IOT-3582	Compile simulator with all warnings and WErr
NEW	IOT-3590	Assign all node configuration with <i>github_nrf52</i> feature set
NEW	IOT-3593	Remove include of <i>makefile.local</i> in fruityloader makefile, add brief description
NEW	IOT-3623	Add new module for modbus communication

NEW	IOT-3639	Cancel CMake generation if executed in-source.
NEW	IOT-3650	Allow query of <i>get_device_info</i> and <i>get_status</i> with organization key
NEW	IOT-3654	Refactor <i>getSensorPin</i> Function pointer to be more generic: <i>getCustomPinset</i>
NEW	IOT-3658	Remove periodical reporting of asset <i>StatusReporterModule</i> messages
NEW	IOT-3658	Run docker image in real time
NEW	IOT-3659	Add <i>component_act</i> for assets
NEW	IOT-3677	Add <i>nodiscard</i> attribute to <i>ErrorType</i>
NEW	IOT-3685	Prevent component updates from changing the faked DFU version
NEW	IOT-3705	Show header files in Visual Studio filters along their implementation files
NEW	IOT-3706	Start all simulator-only terminal args with "sim"
NEW	IOT-3712	Load <i>MeshGWConfiguration</i> via JSON; add replay feature to CherrySim
NEW	IOT-3715	Clean up terminal, remove <i>TerminalCommandListener</i> & simulator restrictions.
NEW	IOT-3726	Remove "ifdef" for board type of default boards
NEW	IOT-3727	Use requested FruityDeploy branch to build FruityMesh
NEW	IOT-3728	Document how to use cppcheck locally
NEW	IOT-3745	Disable address space layout randomization for VS projects to aid debugging
NEW	IOT-3750	Adjust increment of version number to avoid identical tags
NEW	IOT-3756	Use CPPCheck 2.0 instead of 1.90
NEW	IOT-3765	Build and run <i>cherrysim_tester</i> with clang, add documentation
NEW	IOT-3780	Document new <i>formula</i> field of <i>sensor.json</i>
NEW	IOT-3788	Report brightness and channel1 values as long integer
NEW	IOT-0000	Reserve most significant bit of <i>MessageType</i> for future use
NEW	IOT-0000	Allow parsing of <i>component_sense</i> messages with strings
NEW	IOT-0000	Update Relution API client to version 4.64.2-234-g1f921eb0@master
FIX	IOT-3577	Insufficient handling of RTC overflow
FIX	IOT-3757	Some mandatory parameters in <i>serial_connect</i> documentation marked as optional
FIX	IOT-3777	Migration of EnOcean switches failing from version 1 to version 2
FIX	IOT-3782	Gyroscope and accelerometer drop a lot of messages
FIX	IOT-0000	Inaccurate clock on some boards
FIX	IOT-0000	Some memory is not initialized
FIX	IOT-0000	Outdated link to documentation for GitHub users

## Version 1.150.0 (2020-04-22) PROMOTED

Component	Version
Gateway	1.172.0
FruityMesh	0.8.2590
FruityApi	1.195.0

## Gateway

NEW	IOT-3404	Implement unsupervised domain adaptation, add documentation
NEW	IOT-3263	Speed up capability retrieval process
NEW	IOT-3287	Increase throttling threshold for standstill situations, add test datasets
NEW	IOT-3296	Implement decision workflow for distributed region estimates
NEW	IOT-3404	Implement unsupervised domain adaptation, add documentation
NEW	IOT-3482	Update mesh gateway floorplan and tracking to use floor data
NEW	IOT-3556	Optimize publication rate of messages emitted when tracking assets
NEW	IOT-3526	Remove http fallback for MQTT
NEW	IOT-3224	Manage smart metering as a licensed feature
FIX	IOT-3630	Beacon enrollment exceeds time limit in system test

## FruityMesh

NEW	IOT-1355	Resolve "fix me"s
NEW	IOT-1780	Implement simulation of GPIO interrupts
NEW	IOT-3224	Update Relution API client to version 4.63.1-443-g4fce90b7@master
NEW	IOT-3263	Retry capability on the next TimeEventHandler call if reported as not ready
NEW	IOT-3482	Migrate floor data
NEW	IOT-3509	Redirect user keys to network key for media converter
NEW	IOT-3514	Store <i>set_active</i> command changes in flash
NEW	IOT-3517	Remove unnecessary function pointer logic
NEW	IOT-3518	Add asset module to <i>dev_all_arm</i> target
NEW	IOT-3551	Add flash files & parameters to IoT packages for <i>prod_mesh_usb_nrf52840</i>
NEW	IOT-3554	Merge in latest customer code base
NEW	IOT-3557	Add documentation for customer feature setup
NEW	IOT-3560	Pass platform instead of family to <i>fruitydeploy</i> , remove deprecated arguments
NEW	IOT-3573	Use nRF52(SDK14) instead of nRF51(SDK11) in simulator
NEW	IOT-3583	Remove nRF51 builds from <i>build.sh</i> , simplify code
NEW	IOT-3629	Switch on a module after switching it off by using <i>set_active</i>
NEW	IOT-0000	Add new moduleId for customer in <i>PrimitiveTypes.h</i>
FIX	IOT-3362	<i>ConnectCancel</i> , <i>BleGap*</i> return incorrect error type
FIX	IOT-3461	Platform for <i>prod_sink_usb_nrf52840</i> feature set is not chosen correctly

## Version 1.149.0 (2020-03-25) PROMOTED

Component	Version
Gateway	1.170.0
FruityMesh	0.8.2220
FruityApi	1.189.0

## Gateway

NEW	IOT-3019	Add device type to BlueRange server
NEW	IOT-3184	Add MQTT service implementation
NEW	IOT-3302	Use <i>assetId</i> instead of <i>serialNumber</i> , provide firmware version of asset
NEW	IOT-3327	Improve logging for sensor data rejection of publication
NEW	IOT-3363	Reduce floorplan memory
NEW	IOT-3366	Use CRC checks for communication with sink beacon
NEW	IOT-3369	Allow setting <i>JVM_ARGS</i> externally by docker environment
NEW	IOT-3369	Allow limiting <i>SystemResource</i> to enrolled beacons by <i>enrolled=true</i> parameter
NEW	IOT-3371	Add CRC checks to serial communication
NEW	IOT-3424	Integrate uncertainty estimation to filter out unstable motion vectors
NEW	IOT-3505	Send CRC if version permits it
FIX	IOT-3242	Race condition when enrolling over BlueRange app with firmware being initialized
FIX	IOT-3302	Incorrect value of handle between gateway requests and firmware responses
FIX	IOT-3356	CI workflow not optimized
FIX	IOT-3470	Incorrect CRC handling

## FruityMesh

NEW	IOT-2697	Remove nRF dependencies from build system; add target to build without SDK
NEW	IOT-3019	Add <i>deviceType</i> to BlueRange server
NEW	IOT-3239	Retrieve data for INS from FIFO
NEW	IOT-3261	Asset flags: <i>hasFreeInConnection</i> , <i>interestedInConnection</i> , <i>hasSameNetworkId</i>
NEW	IOT-3302	Add mesh access response messages
NEW	IOT-3325	Const Correctness for <i>ble_evt_t</i>
NEW	IOT-3327	Virtual environment returns random sensor values
NEW	IOT-3366	Attribute HAL memory to each simulated
NEW	IOT-3366	Add message type to Fruity API to enable CRC checks, add version number
NEW	IOT-3371	Guard <i>CommBeacon</i> <-> <i>MeshGW</i> communication by CRC check, add UART errors
NEW	IOT-3371	Use designated <i>logjson</i> macros for JSON logs
NEW	IOT-3373	<i>dev_vslog</i> now in JSON mode, enable only wanted tags
NEW	IOT-3380	Allow meshing on Laird USB beacons using nRF52840
NEW	IOT-3393	Increase size of <i>packetStaBuffer</i> from 1024 to 2*1024
NEW	IOT-3395	Send out UART data via comm beacon only after UART data is received
NEW	IOT-3407	Add <i>serial_connect</i> message. <i>MeshAccessConnection</i> no longer filters for <i>nodeId</i> .
NEW	IOT-3411	CRC modifications
NEW	IOT-3419	Compile scanning module into customer module, inactive by default.
NEW	IOT-3462	Use Python Gitlab API instead of HTTP API to download job artifacts
NEW	IOT-3500	Add GPL license exception to root directory
NEW	IOT-3505	Sink uses CRC checks by default
NEW	IOT-3515	Increase <i>PacketBufferSize</i> in simulator by a factor of 10
NEW	IOT-0000	Copy LICENCE.txt from Github mirror to GitLab Repo
NEW	IOT-0000	Check validity of JSONs in simulator
FIX	IOT-3396	Timeout bug in HAL: SDK 15 takes 10ms as unit, previously seconds
FIX	IOT-3457	Fix to silence logging after power up
FIX	IOT-3458	Fix to restart advertising for SDK15
FIX	IOT-3462	Asset forgets its network ID

## Version 1.148.0 (2020-02-18)

Component	Version
Gateway	1.167.0
FruityMesh	0.8.1860
FruityApi	1.184.0

## Gateway

NEW	IOT-1027	Change systemctrl daemon-reload on rsyslog.conf
NEW	IOT-2959	Verify failure to unenroll beacon when <i>SerialCommunication</i> gets reset
NEW	IOT-3182	Subscribe dynamically to MQTT for multi-floor asset tracking, synchronize
NEW	IOT-3207	Increase serial queue size
NEW	IOT-3243	Add enrollment via app to system test
NEW	IOT-3262	Remove <i>DeviceTrackingService</i> dependency from <i>MeshEnrollmentService</i>
NEW	IOT-3263	Improve robustness of device capability handling when messages are lost
NEW	IOT-3266	Retry initialization of communication when an error occurs
NEW	IOT-3270	Use <i>TIMEOUT_READ_SEMI_BLOCKING</i> read mode for robustness
NEW	IOT-3277	Close debug port 8000
NEW	IOT-3301	Update node list to manage beacons and assets, remove <i>serialIndex</i> from nodes
FIX	IOT-3185	Unsupervised gyroscope calibration
FIX	IOT-3288	Mesh gateway system log not available

## FruityMesh

NEW	IOT-1644	Remove NRF dependencies to abstract FruityMesh from NRF
NEW	IOT-2415	Merge customer code
NEW	IOT-3055	Generalize time logic for customer component sense resend
NEW	IOT-3084	Separate <i>SensorPins</i> from <i>BoardPins</i>
NEW	IOT-3115	Add support of virtual COM port for nrf52840 based dongles
NEW	IOT-3205	Add new reboot reason "unknown, but successful reboot"
NEW	IOT-3221	Move types from <i>types.h</i> to <i>PrimitiveTypes.h</i>
NEW	IOT-3226	Enable building of feature sets with CMake
NEW	IOT-3233	Remove <i>prod_sink_nrf51</i> and <i>prod_clc_sink_nrf51</i>
NEW	IOT-3243	Accept special values by <i>raw_data_*</i> terminal arguments
NEW	IOT-3282	Replenish time in asset module to prevent disconnect during DFU messages
NEW	IOT-3285	Increase SPI interrupt priority
NEW	IOT-3289	Update fruityloader version and check script
NEW	IOT-3312	Add simulator commands for node positions in simulated environment
NEW	IOT-3322	Update <i>gpote</i> to support multiple pins, print inserted command if unknown
NEW	IOT-3323	Move HAL event logic to generic implementation
NEW	IOT-3326	Place simulated nodes in a 3D-environment, add interpolation to <i>AssetModule</i>
NEW	IOT-3329	Enable generation of a single feature set
NEW	IOT-3337	Remove unused license for open source distribution, modify <i>srcdist.sh</i>
NEW	IOT-3338	Add description of sync github to documentation
NEW	IOT-3340	Update license text from 2019 to 2020
NEW	IOT-3348	Remove endless timeout from all <i>CherrySim</i> commands, <i>SimulateForever()</i>
NEW	IOT-0000	Remove <i>dev_eink</i> from file
NEW	IOT-0000	Change MWAY logo
NEW	IOT-0000	Use same image for <i>build-fruitymesh-release</i> and <i>build-fruitymesh</i>
NEW	IOT-0000	Remove code coverage calculation for scheduled tasks

## Version 1.147.0 (2020-01-24) PROMOTED

Component	Version
Gateway	1.166.0
FruityMesh	0.8.1510
FruityApi	1.182.0

## Gateway

NEW	IOT-1027	Expand logging capabilities
NEW	IOT-2106	Add static detector for IMU calibration
NEW	IOT-2775	Simplify node enrollment without usage of device key response
NEW	IOT-2932	Add log statements to track state at runtime
NEW	IOT-3091	Add deprecation mechanism for commands, mark <i>set_config</i> as deprecated
NEW	IOT-3120	Change asset policy
NEW	IOT-3139	Remove <i>ObjectMapper</i> in <i>SensorDataUpstreamingService</i>
NEW	IOT-3172	Implement task tuning power computation
NEW	IOT-3174	Refactor CMake
NEW	IOT-3175	Prevent <i>assetdevices</i> null pointer
NEW	IOT-3191	Enhance CherrySim and add documentation
NEW	IOT-3255	Add assets in status <i>ENROLLMENT_PENDING</i> to <i>SiteUpdatedEvent</i>
NEW	IOT-3256	Move troubleshooting section from README.md to system test documentation
NEW	IOT-0000	Consider assets as being in range if enrolled and position is unknown
NEW	IOT-0000	Update Spring components to current versions
FIX	IOT-3234	Broken communication between enrollment app and mesh gateway
FIX	IOT-0000	Path and module names

## FruityMesh

NEW	IOT-1730	Remove deprecated feature to fake node positions
NEW	IOT-2743	Prevent sending sink messages through mesh access connection
NEW	IOT-3093	Change timeout of enrollment scan job to 1 minute
NEW	IOT-3097	Prevent time setting without network key if time is already set
NEW	IOT-3109	Add GitHub release documentation
NEW	IOT-3112	Assign own type to <i>FmKeyId</i>
NEW	IOT-3118	Add stack overflow simulation
NEW	IOT-3170	Implement feature set simulation via maps for improved scaling
NEW	IOT-3172	Update Relution API client to version 4.57.2-116-g8d806a8a
NEW	IOT-3192	Add <i>prod_mesh/sink_nrf51/52</i> to vendor source distribution
NEW	IOT-3197	Add FIFO for gyroscope and accelerometer
NEW	IOT-3223	Remove <i>AppConnection</i> class
NEW	IOT-3249	Use cmake to generate FruityMesh
NEW	IOT-3252	Enable asset tracking for CLC beacons
NEW	IOT-0000	Add missing reboot reasons to FruityAPI
NEW	IOT-0000	Remove eInk debug module
NEW	IOT-0000	Update Spring components to current versions
FIX	IOT-3028	Node advertises incorrect serial number on <i>set_serial</i>
FIX	IOT-3118	Stack overflow in <i>pingpong</i> command
FIX	IOT-3214	Scanning resets device

## Version 1.146.0 (2019-12-19)

Component	Version
Gateway	1.165.0
FruityMesh	0.8.1240
FruityApi	1.179.0

## Gateway

n/a

## FruityMesh

NEW	IOT-2882	Enhance documentation
NEW	IOT-2983	Persist flash storage of nodes in file for simulator
NEW	IOT-3096	Expand srcdist.sh to write source distributions to ZIP
NEW	IOT-3109	Explicitly add <i>.gitignore</i> to source distributions

## Version 1.145.0 (2019-12-18)

Component	Version
Gateway	1.164.0
FruityMesh	0.8.1190
FruityApi	1.178.0

## Gateway

n/a

## FruityMesh

NEW	IOT-2538	Validate emergency disconnect with mesh access connection
NEW	IOT-3057	Implement media converter version 1
NEW	IOT-3040	Implement <i>request_proposals</i>

## Version 1.144.1 (2020-02-07) Hotfix of 1.144.0, Gateway only: modifications not carried forward

Component	Version
Gateway	1.163.1

## Gateway

NEW IOT-3315 Close debug port 8000

## FruityMesh

n/a



## Version 1.144.0 (2019-12-17)

Component	Version
Gateway	1.163.0
FruityMesh	0.8.1130
FruityApi	1.177.0

## Gateway

NEW	IOT-2106	Optionally disable usage of calibration models for offline or remote calibration
NEW	IOT-2926	Add isolated environment as a system test option
NEW	IOT-3018	Multi-floor asset tracking URL
NEW	IOT-3047	Resolve asset <i>nodeId</i> /UUID during calibration
NEW	IOT-3061	Enhance asset tracking integration test suite with additional data

## FruityMesh

NEW	IOT-2899	Rewrite HAL comments from Nordic to conform to coding convention
NEW	IOT-2902	Refactor makefiles for platform; increase RAM for SoftDevice 5.0.0
NEW	IOT-2926	Add new system test option with isolated environment
NEW	IOT-3048	Assets transmit component sense if <i>networkId</i> is 0
NEW	IOT-3062	Remove irrelevant code from release
FIX	IOT-3063	HAL timer issue

## Version 1.143.0 (2019-12-11)

Component	Version
Gateway	1.157.0
FruityMesh	0.8.1060
FruityApi	1.171.0

## Gateway

NEW	IOT-2106	INS integration test optimization measurements
NEW	IOT-2674	Complete changes from gradual to "fire-and-forget" update
NEW	IOT-3018	Remove map for <i>masterClient</i> initialization
FIX	IOT-3030	NPE after applying policy to asset

## FruityMesh

NEW	IOT-2958	Calculate correct amount of flood and counter messages for every possible input
FIX	IOT-3001	Error cases of the terminal command handler are distinguished better
FIX	IOT-3044	Enrollment only saved partially but reported as successful

## Version 1.142.0 (2019-12-10)

Component	Version
Gateway	1.156.0
FruityMesh	0.8.1030
FruityApi	1.170.0

## Gateway

N/A

## FruityMesh

NEW	IOT-2538	Add impossible connections to simulator to make two nodes unconnectable
NEW	IOT-3032	<i>AssetId</i> is now <i>NodeId</i> for modern assets; old assets use part of <i>serialNumberIndex</i>
FIX	IOT-1717	Use correct clock sources for all boards to improve stability and power efficiency
FIX	IOT-2973	Frequent connection timeouts and reestablishment issues
FIX	IOT-3044	Enrollment response was not received over MeshAccess connection

## Version 1.141.0 (2019-12-09)

Component	Version
Gateway	1.155.0
FruityMesh	0.8.980
FruityApi	1.169.0

## Gateway

NEW IOT-2006 Sensor fusion

## FruityMesh

NEW	IOT-2946	Add <i>readmem</i> command
NEW	IOT-3025	Enrollments now also work with early out if the keys are unspecified (all 0)
NEW	IOT-3032	<i>AssetId</i> equals <i>NodeId</i> for modern assets; Old assets use part of <i>serialNumberIndex</i>

## Version 1.140.0 (2019-12-05)

Component	Version
Gateway	1.154.0
FruityMesh	0.8.961
FruityApi	1.168.0

## Gateway

NEW IOT-2891 Improve asset node ID management

## FruityMesh

NEW	IOT-3014	Remove connections when timeout occurs, e.g. if one of the nodes is unenrolled
NEW	IOT-3016	Enable debug UART for <i>dev_vslog</i>
NEW	IOT-0000	Changes for accelerometer interrupt pin to work with SDK 15

## Version 1.138.0 (2019-12-02)

Component	Version
Gateway	1.152.0
FruityMesh	0.8.960
FruityApi	1.166.0

## Gateway

NEW	IOT-2916	Handle <i>DfuChunkDroppedMessages</i> , preserve order of chunks, improve logging
NEW	IOT-2945	Adjust events
NEW	IOT-0000	Improve pipeline handling of build jobs

## FruityMesh

NEW	IOT-2934	Refactor <i>TestConnectionRssiReporting</i>
NEW	IOT-2956	Avoid overwriting reboots by the node, always store the earliest occurrence
FIX	IOT-2946	Adjust decrypting a message with invalid key
FIX	IOT-2975	Removed job is returned as selected job

## Version 1.137.0 (2019-11-26)

Component	Version
Gateway	1.151.0
FruityMesh	0.8.940
FruityApi	1.162.0

## Gateway

NEW	IOT-2125	Switch to TensorFlow 2.0 for neural network training
NEW	IOT-2747	New <i>relationApiVersion</i> , ignore <i>bleNodeMacAddress</i>
NEW	IOT-2837	Update <i>ChipSet</i> enum definitions to match firmware
NEW	IOT-2862	Wait for initialization to finish before sending serial commands
NEW	IOT-2896	Feature/packet simulator
NEW	IOT-2887	Latency improvements for asset tracking
NEW	IOT-2896	Add test for INS asset packets
NEW	IOT-2900	Shorten calibration polling interval to 10s
NEW	IOT-2916	Decrease time between DFU chunks & sleep time, set <i>dfu_apply</i> time to 10s
NEW	IOT-2945	Apply sensor policy to beacons
NEW	IOT-2945	Add motion model for fusing PDF with RSS measurements

## FruityMesh

NEW	IOT-843	Enhance connection re-establishment, reduce connection time from 8 to 2 seconds
NEW	IOT-1646	Remove nRF dependencies from asset driver files
NEW	IOT-1647	Abstract <i>app_timer</i> API
NEW	IOT-2387	Add build artifacts for custom feature set
NEW	IOT-2741	Simulate customer component update
NEW	IOT-2906	Add specified integration test
NEW	IOT-2915	Add helper to translate <i>nodeId</i> terminal arguments
NEW	IOT-2916	Increase reliability and speed of DFU; add <i>DfuChunkDropped</i> to Fruity API Receiver of a <i>dfu_chunk</i> informs sender about a drop if a chunk was dropped because of flash errors.
NEW	IOT-2941	Handle <i>BLE_GAP_EVT_PHY_UPDATE_REQUEST</i> for old iOS devices
FIX	IOT-2853	Report Softdevice version instead of its size
FIX	IOT-2936	Remove code duplications
FIX	IOT-0000	Move <i>dev_vslog</i> to <i>flashing</i> instead of <i>pushupdates</i>

## Version 1.136.0 (2019-11-18)

Component	Version
Gateway	1.146.0
FruityMesh	0.8.910
FruityApi	1.157.0

## Gateway

NEW	IOT-2554	Manage inactive value for missing beacons
NEW	IOT-2848	Remove old enrollment methods
NEW	IOT-2862	Refactor communication classes
NEW	IOT-2898	Feature/calibration dataset adjustments
FIX	IOT-2848	<i>ClcModuleMessage (clcCmd)</i> discontinues
FIX	IOT-2892	Fix race condition for shutdown without full initialization

## FruityMesh

NEW	IOT-2705	Start and stop Clc periodic msg using <i>component_act</i> msg
NEW	IOT-2846	Increase MTU from 23 to 63 bytes
NEW	IOT-2862	Refactor serial communication
NEW	IOT-2885	Change <i>SensorActionMessage</i> of barometer message from type <i>BAROMETER_MEASUREMENT</i> to <i>UNSPECIFIED</i>
NEW	IOT-2893	Change connection tunnel type to receive barometer message
NEW	IOT-2897	Support new tracked asset packet structure
NEW	IOT-2906	<i>dev_vslog</i> now also allows board id 4
FIX	IOT-1563	Remove & prohibit usage of <i>atoi</i>
FIX	IOT-1645	UART bug fix
FIX	IOT-2848	<i>ClcModuleMessage (clcCmd)</i> discontinues
FIX	IOT-0000	Stack overflow after a connection re-establishment
FIX	IOT-0000	Sender of an enrollment is disconnected if connected through <i>MeshAccessConnection</i>
FIX	IOT-0000	<i>RecordStorageIsLockedDownException</i> can happen in case of an enrollment, followed by a <i>saverec</i>

## Version 1.135.0 (2019-11-11)

Component	Version
Gateway	1.144.0
FruityMesh	0.8.890
FruityApi	1.155.0

## Gateway

NEW	IOT-2554	Manage sensor configuration changes
FIX	IOT-2761	Drop commands sent immediately after initialization

## FruityMesh

NEW	IOT-1645	Move NRF specific terminal code to HAL
NEW	IOT-2835	Reduce bits for pressure in INS assets
NEW	IOT-2836	Inform sender of malformed packets during mesh access connection
NEW	IOT-2838	Perform a factory reset on enrollment
NEW	IOT-2864	Simplify <i>set_preferred_network</i> command
FIX	IOT-2881	Error conditions too strict

## Version 1.134.0 (2019-11-07)

Component	Version
Gateway	1.143.0
FruityMesh	0.8.890
FruityApi	1.154.0

## Gateway

NEW	IOT-2794	Add customer test configurations
FIX	IOT-2768	Adapt misleading log messages for environment profiles
FIX	IOT-2794	Issue with standard deviation estimate
FIX	IOT-2811	Avoid reset of MQTT broker connection when <i>MqttCallsite</i> fails
FIX	IOT-2838	Resend init sequence when beacon reports a reboot
FIX	IOT-2868	Profile activation is global and not device specific
FIX	IOT-0000	<i>RawDataSenderTask</i> passes enum names instead of codes

## FruityMesh

NEW	IOT-2105	INS Integrate synchronization
NEW	IOT-2125	Add support for <i>TrackedAssetsInsMessage</i> packets in FruityApi
NEW	IOT-2134	INS Convert raw sensor measurement to required unit
NEW	IOT-2521	Improve mesh throughput
NEW	IOT-2561	Improve clustering times
NEW	IOT-2761	Add extra reboot reason for removing an enrollment
NEW	IOT-2773	Add NRF52840 bootloader and update capability
NEW	IOT-2791	Refactor <i>types.h</i>
NEW	IOT-2831	Clean-up of INS/PDR
NEW	IOT-2840	Add fail safe to protects against accidental bootloader change

## Version 1.133.0 (2019-10-29)

Component	Version
Gateway	1.142.0
FruityMesh	0.8.880
FruityApi	1.152.0

## Gateway

NEW	IOT-2794	Add default configuration of signal propagation model for Minew beacons
NEW	IOT-2823	Code review and small fixed for INS/PDR implementation
FIX	IOT-2794	Threshold in <i>AssetTrackingStandstillStabilityTest</i>

## FruityMesh

NEW	IOT-1840	Improve trigger for docs
NEW	IOT-2758	Implement INS usage into firmware except gyroscope
NEW	IOT-2761	Set reboot reason in fault handlers
NEW	IOT-2813	Generate mock values for sensors in simulator
NEW	IOT-2822	Add INS/PDR tests to simulator

## Version 1.132.0 (2019-10-23)

Component	Version
Gateway	1.141.0
FruityMesh	0.8.880
FruityApi	1.151.0

## Gateway

NEW IOT-2793 Improve logging

## FruityMesh

NEW	IOT-1771	Introduce generic error codes for HAL
NEW	IOT-1772	Wrap softdevice functionality with FruityHAL
NEW	IOT-2629	Add messages for tracking assets with INS
NEW	IOT-2713	Remove Mattermost notification
NEW	IOT-2749	Change uniqueConnectionId from u16 to u32
NEW	IOT-2754	Add INS to simulator

## Version 1.131.0 (2019-10-18)

Component	Version
Gateway	1.140.0
FruityMesh	0.8.850
FruityApi	1.150.0

## Gateway

NEW	IOT-2586	Improve robustness of INS
NEW	IOT-2714	Filter out Vossloh beacons for tracking
NEW	IOT-2723	Restrict calibration RSSI measurements to time window
FIX	IOT-2780	DeviceTrackingService

## FruityMesh

NEW	IOT-1808	Move config files to proper SDK directories
NEW	IOT-2551	Send CheckFirmwareCompatibility on every start
NEW	IOT-2723	Update Relution API client to version 4.52.3
NEW	IOT-2737	Refactor flash storage

## Version 1.130.0 (2019-10-10)

Component	Version
Gateway	1.139.0
FruityMesh	0.8.830
FruityApi	1.149.0

## Gateway

FIX IOT-2730 Violation status for illegal Cron expression

## FruityMesh

NEW	IOT-1641	Remove nRF ifdefs from FruityMesh code
NEW	IOT-2729	Change extra value of <i>WARN_RX_WRONG_DATA</i> to msg length
NEW	IOT-2731	Update example code and documentation
NEW	IOT-2737	Remove ICCARM support
NEW	IOT-2737	Refactor DFU module
NEW	IOT-2737	Flash storage improvements
NEW	IOT-2761	Remove "early out" for already set reboot reason
NEW	IOT-0000	Update Softdevice path for all platforms

## Version 1.129.0 (2019-10-01)

Component	Version
Gateway	1.138.0
FruityMesh	0.8.770
FruityApi	1.148.0

## Gateway

NEW	IOT-1316	Add integration test for calibration
NEW	IOT-1855	Add <i>proxyserver</i> and <i>connmanctl</i> config parameters
NEW	IOT-2674	Allow gradual update when feature group has no beacon
NEW	IOT-2704	Add alternative on-demand OS Mender update server
FIX	IOT-2625	Calibration
FIX	IOT-2647	Gradual update fails in second component update

## FruityMesh

NEW	IOT-1840	Remove document duplicate
NEW	IOT-1855	Add <i>proxyserver</i> and <i>connmanctl</i> config parameters
NEW	IOT-2424	Add missing documentation
NEW	IOT-2574	Send temperature reading to node as <i>component_sense</i> message
NEW	IOT-2649	Support TWI and SPI interface for lis2dh12 driver
NEW	IOT-2672	Add <i>generate_load</i> command
NEW	IOT-2699	Enable node module for all feature sets
NEW	IOT-2704	Update dependencies
NEW	IOT-2726	Improve <i>CODESIZE</i> and <i>CODEPAGESIZE</i> simulations
FIX	IOT-2729	Splits are dropped

## Version 1.128.0 (2019-09-20)

Component	Version
Gateway	1.135.0
FruityMesh	0.8.710
FruityApi	1.144.0

## Gateway

NEW	IOT-2450	Firmware size reduction
NEW	IOT-2541	Assume update is canceled when update status file is missing
NEW	IOT-2541	Modify debug output for DFU <i>status.json</i> file
NEW	IOT-2566	Beacon height projection
NEW	IOT-2586	Code size reduction
NEW	IOT-2604	Polygon geofence calculation
NEW	IOT-2604	Improve geofence asset location
NEW	IOT-2638	Calibration model accuracy
NEW	IOT-2642	UI for setting SSL certificates
NEW	IOT-0000	Enable http gzip compression
FIX	IOT-2596	Mesh gateway unenrollment incomplete
FIX	IOT-2643	DFU running issue
FIX	IOT-2661	Incorrect CO processing

## FruityMesh

NEW	IOT-2097	Add <i>FruitySimServer</i> to Linux compilation of Tester and Runner
NEW	IOT-2268	Automatically fix number of hops to sink
NEW	IOT-2268	Enable sink routing
NEW	IOT-2467	Remove trigger system from repository
NEW	IOT-2499	Use averaged RSSI measurements for asset tracking
NEW	IOT-2545	Improve HAL for BLE advertising
NEW	IOT-2546	Simulate nodes
NEW	IOT-2557	Add connectable flag to <i>MeshAccessModule</i>
NEW	IOT-2565	Call different wait function
NEW	IOT-2586	Use latest <i>tflite</i> micro version
NEW	IOT-2646	Generic ping command for every node
NEW	IOT-0000	Print bootloader version on reboot
NEW	IOT-0000	Change to high discovery mode 30 sec after a disconnect
NEW	IOT-0000	Change <i>NODE_ID_RESERVED</i> to 40001
NEW	IOT-0000	Set <i>NODE_ID_CLC_SPECIFIC</i> to 40000
NEW	IOT-0000	Add disconnect reason to <i>MeshAccessConnection</i> destructor log
FIX	IOT-2484	Simulator reports incorrect group ID
FIX	IOT-2541	DFU done message not sent
FIX	IOT-2644	<i>StatusReporterModule</i> messages ignore request handle
FIX	IOT-2676	Capability retrieval process stuck on capabilities
FIX	IOT-2677	Bug in CherrySim causing crashes
FIX	IOT-2693	Null pointer access when keep alive message is sent
FIX	IOT-0000	Revert enabling sink routing as cause of failures
FIX	IOT-0000	<i>TestDiscoveryState</i> missing definition of dev configurations
FIX	IOT-0000	Update documentation