



Zigbee EmberZNet SDK 7.5 Rev 2 GA

Gecko SDK Suite 4.5.1

August 19, 2026

Silicon Labs is the vendor of choice for OEMs developing Zigbee networking into their products. The Silicon Labs Zigbee platform is the most integrated, complete, and feature-rich Zigbee solution available.

Silicon Labs EmberZNet SDK contains Silicon Labs' implementation of the Zigbee stack specification.

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At Silicon Labs, we're committed to delivering dependable, well-supported software for all actively supported hardware products.

The GSDK 4.5 LTS is a long-term support release tailored specifically for **Series 0 and Series 1 devices** that are **not compatible with the Simplicity SDK**. This release ensures ongoing maintenance and stability for devices that are still in active use (i.e., not marked as NRND or EOL).

For customers using **Series 2 or Series 3 devices**, all new features and updates will be provided through the **Simplicity SDK**. To take advantage of the latest innovations and continued support, we encourage you to adopt or migrate to the most recent Simplicity SDK release.

If you have questions about migration or need help choosing the right SDK for your product, our support team is here to help.

These release notes cover SDK version(s):

7.5 GA, Rev 2 released August 19, 2026
7.5 GA, Rev 1 released October 8, 2025
7.5 GA released February 26, 2025

Compatibility and Use Notices

For information about security updates and notices, see the Security chapter of the Gecko Platform Release notes installed with this SDK or on the TECH DOCS tab on <https://www.silabs.com/developers/zigbee-emberznet>. Silicon Labs also strongly recommends that you subscribe to Security Advisories for up-to-date information. For instructions, or if you are new to the Zigbee EmberZNet SDK, see [Using This Release](#).

Compatible Compilers:

IAR Embedded Workbench for ARM (IAR-EWARM) version 9.40.1.

- Using wine to build with the IarBuild.exe command line utility or IAR Embedded Workbench GUI on macOS or Linux could result in incorrect files being used due to collisions in wine's hashing algorithm for generating short file names.
- Customers on macOS or Linux are advised not to build with IAR outside of Simplicity Studio. Customers who do should carefully verify that the correct files are being used.

GCC (The GNU Compiler Collection) version 12.2.1, provided with Simplicity Studio.

The EZSP protocol version for this release is 0x0D.



KEY FEATURES

- The GSDK 4.5 LTS is a long-term support release tailored specifically for Series 0 and Series 1 devices that are not compatible with the Simplicity SDK. This release ensures ongoing maintenance and stability for devices that are still in active use (i.e., not marked as NRND or EOL).

Zigbee

- Limited support of GCC LTO
- Zigbee R23 compliance
- Zigbee Smart Energy 1.4a compliance - production
- Zigbee GP 1.1.2 compliance - Alpha
- MG27 support - production
- Improved support for Secure Vault parts
- Sleepy support on NCP SPI (non-CPC) applications - Alpha

Multiprotocol

- Concurrent Listening support (RCP) - MG21 and MG24
- Concurrent Multiprotocol (CMP) Zigbee NCP + OpenThread RCP - production
- Dynamic Multiprotocol Bluetooth + Concurrent Multiprotocol (CMP) Zigbee and OpenThread support on SoC

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1 New Items

The **GSDK 4.5 LTS** is a long-term support release tailored specifically for **Series 0 and Series 1 devices** that are **not compatible with the Simplicity SDK**. This release ensures ongoing maintenance and stability for devices that are still in active use (i.e., not marked as NRND or EOL).

For customers using **Series 2 or Series 3 devices**, all new features and updates will be provided through the **Simplicity SDK**. To take advantage of the latest innovations and continued support, we encourage you to adopt or migrate to the most recent Simplicity SDK release.

Note: EmberZNet 7.5 is a patch release and follows version 7.4.5.0, despite the minor version number increment. The minor version bump is due to the addition of optional Link Time Optimization (LTO) support in Zigbee. No EmberZNet API updates have been made in this release. For all previous release history, please refer to the 7.4.5.0 release notes.

1.1 New Components

New in release 7.5

None.

1.2 New APIs

New in release 7.5

None.

1.3 New Platform Support

New in release 7.5

Limited support of GCC LTO

This release supports use of GCC link time optimization for a very specific set of applications, namely dynamic multi protocol light.

This is achieved by creating and packaging an additional set of LTO aware zigbee gcc libraries in this release. The LTO variant of the zigbee libraries get linked to the application project when the application installs platform utility component toolchain_gcc_lto to the above application project.

This is limited support with minimal testing.

1.4 New Documentation

New in release 7.5

None.

1.5 Intended Behavior

Users are reminded that Zigbee unsynchronized CSL transmissions are subject to protocol preemption at the radio scheduler. In the SleepyToSleepy applications, BLE can and will preempt a Zigbee CSL transmission, which will terminate the transmission. Scheduler preemption is more common for unsynchronized CSL, given that a potentially lengthy wake up frame sequence may be used. Users wishing to adjust transmission priorities may use the DMP Tuning and Testing component to do so. Users may also consult [UG305: Dynamic Multiprotocol User's Guide](#) for more information.

It has been reported that when using the `zigbee_af_print` and `zigbee_debug_print` together installed in an application leads to unwanted characters getting printed for some development boards. The reason for such behavior is understood to be missing an IOStream driver that is an optional choice to for the user to choose from list of available iostreams using USART or EUSART. Hence, it is recommended that to use both `CLI/zigbee_af_print` and `zigbee_debug_print` together, after installing `zigbee_debug_extended`, reinstall the recommended IOStream if the board supports either USART or EUSART.

2 Improvements

Changed in release 7.5

None.

Changed in Revision 1

- Improved packet failure status

Updated the message sent by handler callback to report the status in case of error with more granularity.

The following new status codes are introduced:

```
EMBER_ID_DISCOVERY_FAILED = 0xC8 // Node ID discovery failed.
EMBER_NO_APS_ACK = 0xC9 // Message was sent but no APS ACK received.
EMBER_APS_MESSAGE_CANCELED = 0xCA // APS message was canceled.
EMBER_ID_DISCOVERY_NOT_ENABLED = 0xCB // Node ID discovery not enabled.
EMBER_ID_DISCOVERY_UNDERWAY = 0xCC // Message was not sent, Node ID discovery is underway.
EMBER_SEND_UNICAST_ROUTE_DISCOVERY_UNDERWAY = 0xCD // The message was not sent because a route
discovery is currently underway. There is no route to the target until the route discovery com-
pletes.
EMBER_SEND_UNICAST_FAILURE = 0xCE // Radius is 0 or message has been dropped because route re-
quest failed or failed to submit message to tx queue.
EMBER_SEND_UNICAST_NO_ROUTE = 0xCF // No active route to the destination.
EMBER_BROADCAST_TO_SLEEPY_CHILDREN_TIMEOUT = 0xD0 // Broadcast message timeout while waiting for
sleepy children to poll.
EMBER_BROADCAST_RELAY_FAILED = 0xD1 // Expected a neighbor to relay the message, but none did.
EMBER_TRANSMIT_INCOMPLETE = 0xD2 // Transmit is incomplete.
```

These existing error codes are associated with the new status codes:

```
EMBER_SUCCESS
EMBER_MAC_NO_DATA
EMBER_PHY_TX_CCA_FAIL
EMBER_MAC_NO_ACK_RECEIVED
EMBER_MAC_INDIRECT_TIMEOUT
EMBER_DELIVERY_FAILED
EMBER_IEEE_ADDRESS_DISCOVERY_IN_PROGRESS
EMBER_APS_ENCRYPTION_ERROR
EMBER_KEY_NOT_AUTHORIZED
EMBER_NOT_FOUND
EMBER_NO_BUFFERS
EMBER_ERR_FATAL
```

- To match new command handler signatures while fixing a issue of missing ZCL_STOP_MOVE_STEP_COMMAND_ID command processing, the command handler API signature has been updated.

From:

```
bool zigbee_af_color_control_cluster_stop_move_step_cb(uint8_t optionsMask, uint8_t optionsOver-
ride)
```

To:

```
bool sl_zigbee_af_color_control_cluster_stop_move_step_cb(sl_zigbee_af_cluster_command_t *cmd)
```

Changed in Revision 2

Optional tunnel persistence for the Tunneling Server component. Enable Persist opened tunnels to token (EMBER_AF_PLUGIN_TUNNELING_SERVER_PERSIST_TUNNELS_TO_TOKEN) so opened client tunnels are stored in NVM/token and restored after reboot. The option defaults to disabled to preserve previous RAM-only behavior. Upgrading existing projects that include Tunneling Server adds the new configuration with the default value.

Introduced Token Creator/NVM3 Key Identifiers for tunneling server in a new app/framework/plugin/tunneling-server/tunneling-server-tokens.h

```
// Custom Application Tokens - persist opened tunnel entries across reboots.
// Unused entry: clientEndpoint == TUNNELING_SERVER_TOKEN_UNUSED_ENDPOINT (0xFF).
#define CREATOR_PLUGIN_TUNNELING_SERVER_TUNNELS (0x0030)
#define NVM3KEY_PLUGIN_TUNNELING_SERVER_TUNNELS (NVM3KEY_DOMAIN_USER | 0x0030)
```

Introduced following token datatype that is used to persist the active open tunnels in the token

```
// Persisted tunnel entry (token storage). Unused: clientEndpoint == 0xFF.
typedef struct {
    uint8_t eui64[EUI64_SIZE];
    uint8_t clientEndpoint;
    uint16_t manufacturerCode;
    uint8_t serverEndpoint;
    uint8_t protocolId;
    uint8_t flowControlSupport;
} EmberAfPluginTunnelingServerStoredTunnelEntry;
```

Following new configuration item introduced (default 0)

```
// Persist opened tunnels to token
// Default: FALSE
// When enabled, opened tunnels are stored in NVM/token and restored after reboot. Disable to
keep previous behavior (tunnels only in RAM).
#define EMBER_AF_PLUGIN_TUNNELING_SERVER_PERSIST_TUNNELS_TO_TOKEN 0
```

3 Fixed Issues

Fixed in release 7.5

ID #	Description
1350285	In rare cases, a packet may be passed to the Outgoing Packet Handoff Callback with a payload index parameter that exceeds the stated length of the packet buffer, leading to an assert in legacy-packet-buffer.c if the Packet Handoff component is enabled.
1372892	Addressed the problem that we define these SL_ZIGBEE_AF_HAS_SECURITY_PROFILE_xxx macros while only considering Primary network security type on multi-network setup. Other ref : 1357515
1378044	Fixed an issue that caused the network steering to call network_found infinitely when too many beacons are present. This was achieved by appropriately clearing the scan state. Other ref : 1340230
1385679	Fixed an issue in the attribute metadata that caused the access of Electrical Measurement attributes to be read-only instead of read-write, as per the ZCL Specification. Other ref : 1355154
1386044	Fixed a compiler warning in throughput.c Other ref : 1385996
1387545	Fixed an issue to remove the children immediately from the source route table of its parent after it left the network. Other ref : 1383925
1391005	Sub-GHz duty cycle calculations didn't properly account for 32-bit system timer rollover in timing bucket comparisons, which could result in a duty-cycle.c assert violation.
1391595	Fixed key establishment that could send a bind request with incorrect EUI64.
1391814	Fixed an issue that could pass an invalid mac layer packet to cause an assert. Other ref : 1312097
1391815	Fixed an issue where certain packets with invalid data regarding the APS frame size could trigger an assert if received. Other ref : 1312098
1391816	Fixed an issue that could pass an APS malformed packet to cause a bus fault. Other ref : 1312099
1392479	Allow users to configure Address Table Size (macro EMBER_ADDRESS_TABLE_SIZE) via zigbee_pro_stack component inside Simplicity Studio. Other ref : 1369186
1392557	Fixed several warnings in the framework code with IAR compiler. Other ref : 1363780
1393550	Increased GP_INCOMING_FC_IN_SINK_TOKEN_TIMEOUT upper limit, so customers can adjust to avoid the flash wearing out quickly.
1393796	Increased the GP_INCOMING_FC_TOKEN_TIMEOUT upper limit, so customers can adjust to avoid the flash wearing out quickly. Other ref : 1370016
1411844	Fixed an issue in sl_zigbee_token_factory_reset when resetting a large number of tokens to factory new. The iteration loop may take more time than the watchdog timeout, this fixes the issue by moving the watchdog refresh into the inner most iteration. Other ref : 1352533

Fixed in Revision 1

ID #	Description
1404835	The setConfigurationValue set the CTUNE by calling underlying manufacturer library function mfglibSetCtune that has a return status different from the EZSP status. This attempted to convert the values into EZSP equivalent status. The EZSP User guide should consider this in relation to the status code for setting the CTUNE.
1413078	Fixed an issue that caused Time Server cluster implementation to miss certain upper and lower limit for following attributes. Time TimeZone DstStart DstEnd DstShift
1413451	Fixed an issue that caused an incorrect format in the GP Pairing Configuration packet.
1415014	Fixed an issue that caused redundant bytes after the Status field in the Routing table Response packet when it is not supported.
1435764	Fixed an issue of build failure of the mp-ncp-uart-hw application for brd4183a boards by adding it to the blacklist for the board brd4183a because it cannot support the resource needed for the application mp-ncp-uart-hw.
1453853	Fixed the offset of ZB_PSA_KEY_ID_GP_PROXY_TABLE_END and ZB_PSA_KEY_ID_GP_SINK_TABLE_END.
1464506	Fixed an issue that prevented coex counters incrementing as expected in Z3Gateway/zigbeed.
1470822	Fixed an issue where the coordinator may respond with Transport Key to an unencrypted Request Key command from a joining device instead of dropping the request.
1486202	Fixed the issue of missing ZCL_STOP_MOVE_STEP_COMMAND_ID command processing. The command handler API signature has been updated as part of this change to match the new command handler signatures. From: bool zigbee_af_color_control_cluster_stop_move_step_cb(uint8_t optionsMask, uint8_t optionsOverride) To: bool sl_zigbee_af_color_control_cluster_stop_move_step_cb(sl_zigbee_af_cluster_command_t *cmd),
1493892	Fixed potential stack memory corruption when calling sl_zigbee_ezsp_get_configuration_value API.
1494590	Fixed an issue where a router device may end up rejoining its old PANId (with its extended PANId) instead of the updated network when both the network beacons are present during a secure rejoin attempt. In order to reduce the possibility of such incorrect rejoin attempts, the PANId, along with the extended PANId, are taken into criteria during first rejoin attempt.
1495154	Fixed second RAIL handle of ncp-uart-hw-gp-multi-rail application failing to send pre-configured outgoing GPDF in response to an incoming bidirectional GPDF with its rx-after-tx bit set.
1499746	Fixed the issue that broadcast originator did not send the broadcast messages when using alias ID instead of node ID as source ID.

Fixed in Revision 2

ID #	Description
1766862	Replaced MAC-Like* TX retry of an HDR PHY Packet with scheduled tx of the HDR packet within the range of sli_high_datarate_min_backoff_period_us and sli_high_datarate_max_backoff_period_us.

ID #	Description
1618477	Fixed status code for handling sink commissioning mode command. When the GPM address for security or GPM address for pairing is not 0xffff, or certain "involve GPM in pairing" option bits are set, the stack must reject GP Sink Commissioning Mode per Green Power spec §3.3.4.8.2. The plugin previously returned SL_ZIGBEE_ZCL_STATUS_INVALID_VALUE in that path; it now returns SL_ZIGBEE_ZCL_STATUS_INVALID_FIELD, matching the spec's expected default response status for this case. In-line comments were updated to match.
1570888	Added optional persistence of opened Tunneling Server tunnels across reboot via EMBER_AF_PLUGIN_TUNNELING_SERVER_PERSIST_TUNNELS_TO_TOKEN (disabled by default). When enabled, tunnel entries are stored in NVM/token and restored on init; closed or timed-out tunnels are cleared from the token. Ref above New Items/Improvement section for Revision 2
1692289	Fixed incorrect presentIf conditions for totalNumberOfReports, numberOfReports, and reportDescriptor in GpPairingConfiguration in green-power.xml template
1692290, 1760880	Fixed ZAP cluster command parser template generates out-of-bounds reads for truncated conditional and string fields

4 Known Issues in the Current Release

Issues in bold were added since the previous release. If you have missed a release, recent release notes are available on <https://www.silabs.com/developers/zigbee-emberznet> in the Tech Docs tab.

ID #	Description	Workaround
N/A	The following apps/component is not supported in this release: EM4 support.	Feature will be enabled in subsequent releases.
193492	emberAfFillCommandGlobalServerToClientConfigureReporting macro is broken. The filling of buffer creates incorrect command packet.	Use the "zcl global send-me-a-report" CLI command instead of the API.
278063	Smart Energy Tunneling plugins have conflicting treatment/usage of address table index.	No known workaround
289569	Network-creator component power level picklist doesn't offer full range of supported values for EFR32	Edit the range <-8..20> specified in the CMSIS comment for EMBER_AF_PLUGIN_NETWORK_CREATOR_RADIO_POWER in the <sdk>/protocol/zigbee/app/framework/plugin/network-creator/config/network-creator-config.h file. For example, change to <-26..20>.
295498	UART reception sometimes drops bytes under heavy load in Zigbee+BLE dynamic multiprotocol use case.	Use hardware flow control or lower the baud rate.
312291	EMHAL: The halCommonGetIntxxMillisecondTick functions on Linux hosts currently use the gettimeofday function, which is not guaranteed to be monotonic. If the system time changes, it can cause issues with stack timing.	Modify these functions to use clock_gettime with the CLOCK_MONOTONIC source instead.
338151	Initializing NCP with a low packet buffer count value may cause corrupt packets.	Use the 0xFF reserved value for packet buffer count to avoid the too-low default value
387750	Issue with Route Table Request formats on end device.	Under Investigation
400418	A touchlink initiator cannot link to a non-factory-new end-device target.	No known workaround.
424355	A non-factory-new sleepy end device touchlink target-capable initiator is not able to receive a device information response in certain circumstances.	Under Investigation
465180	The Coexistence Radio Blocker Optimization item "Enable Runtime Control" may block proper Zigbee operation.	Optional 'Wi-Fi Select' Control of Blocker Optimization should be left "Disabled".
480550	The OTA cluster has its own built-in fragmentation method, hence it should not use APS fragmentation. Although, in case APS encryption is enabled it grows the payload of the ImageBlockResponses to a size where the APS fragmentation is activated. This could lead to the OTA process failing.	No known workaround
481128	Detailed Reset Cause and crash details should be available by default via the Virtual UART (Serial 0) on NCP platforms when Diagnostics plugin and Virtual UART peripheral are enabled.	Since Serial 0 is already initialized in the NCP, customers can enable the emberAfNcpInitCallback in the Zigbee NCP Framework and call the appropriate diagnostic functions (halGetExtendedResetInfo, halGetExtendedResetString, halPrintCrashSummary, halPrintCrashDetails, and halPrintCrashData) in this callback to print this data to Serial 0 for viewing in the Network Analyzer capture log. For an example of how to use these functions, refer to the code included in af-main-soc.c's emberAfMainInit() when EXTENDED_RESET_INFO is defined.

ID #	Description	Workaround
486369	If a DynamicMultiProtocolLightSoc forming a new network has child nodes remaining from a network it has left, emberAfGetChildTableSize returns a non-zero value in startIdentifyOnAllChildNodes, causing Tx 66 error messages when addressing the "ghost" children.	Mass-erase the part if possible before creating a new network or programmatically check the child table after leaving the network and delete all children using emberRemoveChild prior to forming a new network.
495563	Joining SPI NCP Sleepy End Device Sample App doesn't short poll, therefore the joining attempt fails at the state of Update TC Link Key.	The device that wishes to join should be in Short Poll mode before attempting to join. This mode can be forced by the End Device Support plugin.
497832	In Network Analyzer the Zigbee Application Support Command Breakdown for the Verify Key Request Frame mistakenly references the part of the payload that indicates the frame Source Address as the Destination Address.	No known workaround
519905 521782	SPI NCP may very rarely fail to start up bootloader communication using the 'bootload' CLI command of the ota-client plugin.	Restart the bootload process
620596	NCP SPI Example for BRD4181A (EFR32xGMG21) nWake default pin defined cannot be used as a wake-up pin.	Change the default pin for nWake from PD03 to a EM2/3 wake-up-enabled pin in the NCP-SPI Plugin.
631713	A Zigbee End Device will report address conflicts repeatedly if the plugin "Zigbee PRO Stack Library" is used instead of "Zigbee PRO Leaf Library".	Use the "Zigbee PRO Leaf Library" instead of the "Zigbee PRO Stack Library" plugin.
670702	Inefficiencies within the Reporting plugin can lead to significant latency based on data write frequency and table size, which may interfere with customer application code, including event timing.	If doing frequent writes, consider checking reporting conditions and sending reports manually rather than using the plugin.
708258	Uninitialized value in groups-server.c via addEntryToGroupTable() can create a spurious binding and cause groupcast reporting messages to be sent.	Add "binding.clusterId = EMBER_AF_INVALID_CLUSTER_ID;" after "binding.type = EMBER_MULTICAST_BINDING;"
757775	All EFR32 parts have a unique RSSI offset. In addition, board design, antennas and enclosure can impact RSSI.	When creating a new project, install the RAIL Utility, RSSI component. This feature includes the default RSSI Offset SiLabs has measured for each part. This offset can be modified if necessary after RF testing of your complete product.
758965	ZCL cluster components and ZCL command discovery table are not synchronized. Therefore, when enabling or disabling a ZCL cluster component, implemented commands will not be enabled/disabled in the corresponding ZCL Advanced Configurator command tab.	Manually enable/disable discovery for the desired ZCL commands in the ZCL Advanced Configurator.
765735	The OTA update fails on Sleepy End Device with enabled Page Request.	Use Block Request instead of Page Request.
845649	Removing CLI:Core component does not eliminate EEPROM cli calls to sl_cli.h.	Delete the eeprom-cli.c file that calls the sl_cli.h. Additionally, calls to sl_cli.h as well as sl_cli_command_arg_t in the ota-storage-simple-eeprom can be commented out.
857200	ias-zone-server.c allows for a binding to be created with a "0000000000000000" CIE address and posteriorly does not allow further bindings.	No known workaround
1019961	Generated Z3Gateway makefile hardcodes "gcc" as CC	No known workaround

ID #	Description	Workaround
1039767	Zigbee router network retry queue overflow issue in multi thread RTOS use case.	Zigbee Stack is not thread-safe. As a result, calling Zigbee stack APIs from another task is not supported in OS environment and may put the stack into "non-working" state. Refer to the following App note for more information and workaround using event handler. For more details see: Dynamic Multiprotocol Development with Bluetooth and Zigbee EmberZNet SDK 7.0 and Higher.
1064370	The Z3Switch sample application only enabled one button (instance : btn1) by default that leads to mismatch in button description in the project file.	Workaround: Install the btn0 instance manually during Z3Switch project creation.
1161063	Z3Light and potentially other applications report incorrect cluster revision values.	Manually update the cluster revision attribute to their appropriate revision.
1164768, 1171478, 1171479	ERROR: ezspErrorHandler 0x34 reported repeatedly during mfglib receive mode	To reduce the error messages printed, configure EMBER_AF_PLUGIN_GATEWAY_MAX_WAIT_FOR_EVENT_TIMEOUT_MS on the host app to 100, so the callback queue is freed more quickly.

5 Deprecated Items

Deprecated in release 7.5

None.

6 Removed Items

Removed in release 7.5

None.

7 Multiprotocol Gateway and RCP

7.1 New Items

Added in release 7.5

None.

7.2 Improvements

Changed in release 7.5

None.

7.3 Fixed Issues

Fixed in release 7.5

ID #	Description
1275378	Fixed an issue where calling emberRadioSetSchedulerPriorities() prior to emberInit() could result in a crash (Other ref: 1381882).
1361436	Fixed an issue that caused dmp_gp_proxy app (with CLI added) to fail to join a network on time.
1363050	Zigbee stack initialization no longer activates the radio (or RCP for host stacks) prior to stack APIs being called by the application. This prevents unwanted multi-PAN operation on Channel 11 (the default channel) when using a multi-PAN-capable RCP configuration.
1365665	Fixed an issue where the host would report receiving a packet with an invalid checksum on end-point 12. (Other ref: 1366154)
1392787	Fixed an issue that caused Zigbeed not restart when performing a Trust Center Backup and Restore Reset Node action.
1405226	Fixed project migration issue and included OT project upgrade rule to reflect newer SDK changes. Note that when customers upgrade their Multiprotocol project, files like app.c will need to be manually ported to reflect newer SDK changes.

Fixed in Revision 1

ID #	Description
1375724	Fixed a race condition on the multipan RCP that resulted in a transmit complete message not being returned to the host, causing a 5 second pause in further transmissions prior to recovering. (Other ref: 1454200)

Fixed in Revision 2

ID #	Description
1524505	Fixed an issue that could pass an invalid mac layer packet to cause an assert. (Other ref: 1592232)

7.4 Known Issues in the Current Release

Issues in bold were added since the previous release. If you have missed a release, recent release notes are available on <https://www.silabs.com/developers/gecko-software-development-kit>.

ID #	Description	Workaround
937562	Bluetoothctl 'advertise on' command fails with rcp-uart-802154-blehci app on Raspberry Pi OS 11.	Use btmgmt app instead of bluetoothctl.
1074205	The CMP RCP does not support two networks on the same PAN id.	Use different PAN ids for each network. Support is planned in a future release.
1122723	In a busy environment, the CLI may become unresponsive in the z3-light_ot-ftd_soc app.	No known workaround.
1124140	z3-light_ot-ftd_soc sample app is not able to form the Zigbee network if the OT network is up already.	Start the Zigbee network first and the OT network after.
1170052	CMP Zigbee NCP + OT RCP and DMP Zigbee NCP + BLE NCP may not fit on 64KB and lower RAM parts in this current release. (Other ref: 1393057)	64KB RAM parts are not recommended for NCP + RCP apps.
1209958	The ZB/OT/BLE RCP on MG24 can stop working after a few minutes when running all three protocols.	Will be addressed in a future release.
1221299	Mfglib RSSI readings differ between RCP and NCP.	Will be addressed in a future release.
1334477	Starting and stopping the BLE stack several times might result in the BLE stack not able to restart advertisement again on low RAM (64kB) Series 1 EFR devices in the DMP Zigbee-BLE sample application.	N/A

7.5 Deprecated Items

None

7.6 Removed Items

None.

8 Using This Release

This release contains the following:

- Zigbee stack
- Zigbee Application Framework
- Zigbee Sample Applications

For more information about Zigbee and the EmberZNet SDK see [Zigbee Fundamentals](#).

If you are a first-time user, see [QSG180: Zigbee EmberZNet Quick-Start Guide for SDK 7.0 and Higher](#), for instructions on configuring your development environment, building and flashing a sample application, and documentation references pointing to next steps.

8.1 Installation and Use

The Zigbee EmberZNet SDK is provided as part of the Gecko SDK (GSDK), the suite of Silicon Labs SDKs. To quickly get started with the GSDK, install [Simplicity Studio 5](#), which will set up your development environment and walk you through GSDK installation. Simplicity Studio 5 includes everything needed for IoT product development with Silicon Labs devices, including a resource and project launcher, software configuration tools, full IDE with GNU toolchain, and analysis tools. Installation instructions are provided in the online [Simplicity Studio 5 User's Guide](#).

Alternatively, Gecko SDK may be installed manually by downloading or cloning the latest from GitHub. See https://github.com/SiliconLabs/gecko_sdk for more information.

Simplicity Studio installs the GSDK by default in:

- (Windows): C:\Users\<NAME>\SimplicityStudio\SDKs\gecko_sdk
- (MacOS): /Users/<NAME>/SimplicityStudio/SDKs/gecko_sdk

Documentation specific to the SDK version is installed with the SDK. Additional information can often be found in the [knowledge base articles \(KBAs\)](#). API references and other information about this and earlier releases is available on <https://docs.silabs.com/>.

8.2 Security Information

Secure Vault Integration

For applications that choose to store keys securely using the Secure Key Storage component on Secure Vault-High parts, the following table shows the protected keys and their storage protection characteristics that the Zigbee Security Manager component manages.

Wrapped Key	Exportable / Non-Exportable	Notes
Network Key	Exportable	
Trust Center Link Key	Exportable	
Transient Link Key	Exportable	Indexed key table, stored as volatile key
Application Link Key	Exportable	Indexed key table
Secure EZSP Key	Exportable	
ZLL Encryption Key	Exportable	
ZLL Preconfigured Key	Exportable	
GPD Proxy Key	Exportable	Indexed key table
GPD Sink Key	Exportable	Indexed key table
Internal/Placeholder Key	Exportable	Internal key for use by Zigbee Security Manager

Wrapped keys that are marked as “Non-Exportable” can be used but cannot be viewed or shared at runtime.

Wrapped keys that are marked as “Exportable” can be used or shared at runtime but remain encrypted while stored in flash.

User applications never need to interact with the majority of these keys. Existing APIs to manage Link Key Table keys or Transient Keys are still available to the user application and now route through the Zigbee Security Manager component.

Some of these keys may become non-exportable to the user application in the future. User applications are encouraged to not rely on the exporting of keys unless absolutely necessary.

For more information on Secure Vault Key Management functionality, see [Secure Key Storage](#).

Security Advisories

To subscribe to Security Advisories, log in to the Silicon Labs customer portal, then select **Account Home**. Click **HOME** to go to the portal home page and then click the **Manage Notifications** tile. Make sure that 'Software/Security Advisory Notices & Product Change Notices (PCNs)' is checked, and that you are subscribed at minimum for your platform and protocol. Click **Save** to save any changes.

The following figure is an example of:

8.3 Support

Development Kit customers are eligible for training and technical support. Use the [Silicon Laboratories Zigbee web page](#) to obtain information about all Silicon Labs Zigbee products and services, and to sign up for product support.

You can contact Silicon Laboratories support at <http://www.silabs.com/support>.

8.4 SDK Release and Maintenance Policy

For details, see [SDK Release and Maintenance Policy](#).

8.5 Zigbee Certification

The Ember ZNet 7.5 release has been qualified for Zigbee Compliant Platform for SoC, NCP and RCP architectures. For ZCP certification ID tied to this release, please check the CSA website here: https://csa-iot.org/csa-iot_products/.

Please note that the ZCP certification is filed after the release and takes a few weeks before getting reflected on the CSA website. For any further queries, please contact Silicon Laboratories support at <http://www.silabs.com/support>.



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