



# Bluetooth® Mesh ADK 3.1.2.0

## September 8, 2021

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Bluetooth mesh is a new topology available for Bluetooth Low Energy (LE) devices that enables many-to-many (m:m) communication. It's optimized for creating large-scale device networks, and is ideally suited for building automation, sensor networks, and asset tracking. Our software and SDK for Bluetooth development supports Bluetooth Mesh and Bluetooth 5 functionality. Developers can add mesh networking communication to LE devices such as connected lights, home automation, and asset tracking systems. The software also supports Bluetooth beaconing, beacon scanning, and GATT connections so Bluetooth mesh can connect to smart phones, tablets, and other Bluetooth LE devices.

These release notes cover ADK version(s):

3.1.2.0 released on September 8, 2021  
3.1.1.0 released on July 21, 2021  
3.1.0.0 released on June 16, 2021



### KEY FEATURES

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- Application min SDK version changed to Android 28 and iOS 12
- Library min SDK version changed to Android 26 (no change to iOS)
- IOP tests added
- Simultaneous provisioning of multiple devices and simultaneous proxy sessions
- Performance and stability improvements

## Compatibility and Use Notices

Use the ADK version with the corresponding version of the Bluetooth Mesh SDK, for example use ADK version 3.1.0.0 with SDK version 2.1.0.0.

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# 1 Android

## 1.1 New Items

### Added in release 3.1.0.0

| ID # | Description                                                                         |
|------|-------------------------------------------------------------------------------------|
| 3811 | API: Simultaneous provisioning of multiple devices and simultaneous proxy sessions. |
| 4786 | APP: Added IOP tests.                                                               |

## 1.2 Improvements

### Changed in release 3.1.2.0

| ID # | Description                           |
|------|---------------------------------------|
| 5622 | APP: Improved IOP tests success rate. |

### Changed in release 3.1.0.0

| ID # | Description                                                                                                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3110 | API: Changed stack storage to use SQL.                                                                                                                                                                                                                        |
| 3965 | API APP: Change required min SDK version for APP to 28 and for API 26.                                                                                                                                                                                        |
| 4073 | API: Added more convenient public API for using OOB authentication data.                                                                                                                                                                                      |
| 4892 | API: Make ProxyConnection more user-friendly, return success callback on: <ul style="list-style-type: none"> <li>- connectToProxy() when the connection is already established</li> <li>- disconnect() when the connection is already disconnected</li> </ul> |

## 1.3 Fixed Issues

### Fixed in release 3.1.2.0

| ID # | Description                                                             |
|------|-------------------------------------------------------------------------|
| 3072 | API: Fixed error 12 when unbinding a net key from a node.               |
| 2592 | APP: Fixed issue related to group and functionality selection.          |
| 3876 | APP: Fixed wrong error message in Regulator Accuracy (Light LC Server). |

### Fixed in release 3.1.1.0

| ID # | Description                           |
|------|---------------------------------------|
| 5241 | APP: Fix random crashes in IOP tests. |

### Fixed in release 3.1.0.0

| ID # | Description                                                                          |
|------|--------------------------------------------------------------------------------------|
| 4173 | APP: Fix crash when sending dot to LC Property State.                                |
| 4845 | APP: Fix collecting logs in the release version.                                     |
| 4865 | API: Fixed crash when ProxyControl.allow called without any active Proxy Connection. |
| 4933 | API: Fixed a crash in ProxyControl when node identity is disabled.                   |
| 4941 | API: Fixed keep proxy connection if there is no configuration task.                  |

| ID # | Description                                                                                                                       |
|------|-----------------------------------------------------------------------------------------------------------------------------------|
| 5041 | APP: Remove node information from local storage (MeshNodeManager and the functionalities database) when removing a node from mesh |
| 5081 | API: Fixed a small memory leak when sending GATT data.                                                                            |

## 1.4 Known Issues in the Current Release

Issues in bold were added since the previous release.

| ID #        | Description                                                  | Workaround     |
|-------------|--------------------------------------------------------------|----------------|
| 2573        | API: Missing mesh proxy service.                             |                |
| 3034        | APP: Android App keeps the network key after force-removing. |                |
| 3171        | APP: Provision button may not work when scanning.            | Stop scanning. |
| <b>5770</b> | <b>API: Infinite loop of writing to the characteristic.</b>  |                |

## 1.5 Deprecated Items

| ID # | Description                                                   | Reason                                                 |
|------|---------------------------------------------------------------|--------------------------------------------------------|
| 5251 | API: SubscriptionSettings (Node node) constructor.            | Should not be possible according to the specification. |
| 5251 | API: SubscriptionSettings(byte[] virtualAddress) constructor. | Should not be possible according to the specification. |

## 1.6 Removed Items

None

## 2 iOS

### 2.1 New Items

#### Added in release 3.1.2.0

| ID # | Description                                                                |
|------|----------------------------------------------------------------------------|
| 4943 | API: SBMProvisionerParameters initWithAddress:attentionTimer: initializer. |

#### Added in release 3.1.0.0

| ID # | Description                                                                         |
|------|-------------------------------------------------------------------------------------|
| 4785 | APP: Interoperability (IOP) tests –requires nodes with a specific setup to run.     |
| 3810 | API: Simultaneous provisioning of multiple devices and simultaneous proxy sessions. |

### 2.2 Improvements

#### Changed in release 3.1.0.0

| ID # | Description                                                                                                                                                                    |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3901 | APP: Change application target version to iOS 12. Library target version is not changed.                                                                                       |
| 4763 | API: Changed database to use CoreData.                                                                                                                                         |
| 4937 | API: Added support for multiple active proxy sessions.                                                                                                                         |
| 5002 | API: If device is already connected, calling connect will result in immediate success. If device is already disconnected, calling disconnect will result in immediate success. |

### 2.3 Fixed Issues

#### Fixed in release 3.1.2.0

| ID # | Description                                          |
|------|------------------------------------------------------|
| 5695 | API: Fixed memory leaks on import/export operations. |

#### Fixed in release 3.1.1.0

| ID # | Description                                                                     |
|------|---------------------------------------------------------------------------------|
| 4805 | API: Fix issue with handling of vendor model messages passed via group address. |

#### Fixed in release 3.1.0.0

| ID # | Description                                                                     |
|------|---------------------------------------------------------------------------------|
| 5194 | API: Fix group control not working after migration from ADK 2.5.4 to ADK 3.0.x. |

### 2.4 Known Issues in the Current Release

Issues in bold were added since the previous release.

| ID # | Description                                                             | Workaround    |
|------|-------------------------------------------------------------------------|---------------|
| 1792 | API: Handle notifications sent by sensor model.                         |               |
| 2469 | API: isSecuredNetworkBeacon in SBMNodeSecurity is not updated.          |               |
| 2357 | APP: Can't delete the node after factory reset.                         |               |
| 2635 | API: Provisioning fails and affects next attempts.                      |               |
| 5469 | APP: Rarely a node gets provisioned but it is not responsive afterwards | App reinstall |

## 2.5 Deprecated Items

### Deprecated in release 3.1.2.0

| ID # | Description                                                                         | Reason                                                  |
|------|-------------------------------------------------------------------------------------|---------------------------------------------------------|
| 4943 | API: SBMProvisionerParameters elements property.                                    | No usage.                                               |
| 4943 | API: SBMProvisionerParameters initWithAddress:elements:attentionTimer: initializer. | SBMProvisionerParameters elements property deprecation. |
| 5252 | API: SBMSubscriptionSettings initWithNode: initializer.                             | Should not be possible according to the specification.  |
| 5252 | API: SBMSubscriptionSettings initWithVirtualAddress: initializer.                   | Should not be possible according to the specification.  |

## 2.6 Removed Items

None

## 3 Using This Release

### 3.1 Installation and Use

See *AN1200.1: Bluetooth® Mesh 2.x for iOS and Android ADK* for information about required tools and compatible platforms.

### 3.2 Support

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

Contact Silicon Laboratories support at <http://www.silabs.com/support>.

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