



# AN1424: Bluetooth® Mesh 1.1 Network Performance



This version of AN1424 has been deprecated with the release of Simplicity SDK Suite 2025.12.0. For the latest version, see [docs.silabs.com](https://docs.silabs.com).

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This application note highlights performance metrics of new Bluetooth Mesh 1.1 features and provides a performance overview of Silicon Labs’s Bluetooth Mesh software and hardware.

This application note demonstrates how the Bluetooth Mesh network performs overall, with detailed results on the performance of Remote Provisioning and Over-the-Air Device Firmware Update (OTA DFU), both introduced in the 1.1 version of the Bluetooth Mesh specification. The test environment was a commercial office building with active Wi-Fi and Bluetooth Low Energy (LE) networks in range. Wireless test clusters were deployed in hallways, meeting rooms, offices, and open areas. The methodology for performing the benchmarking tests is defined so that others may run the same tests in their environment. These results are intended to provide guidance on design practices and principles as well as expected field performance results.

**KEY POINTS**

- Wireless test network in Silicon Labs Research and Development (R&D) office is described.
- Wireless conditions and environments are evaluated.
- Mesh 1.1 network performance including throughput, latency, and large network scalability is presented.