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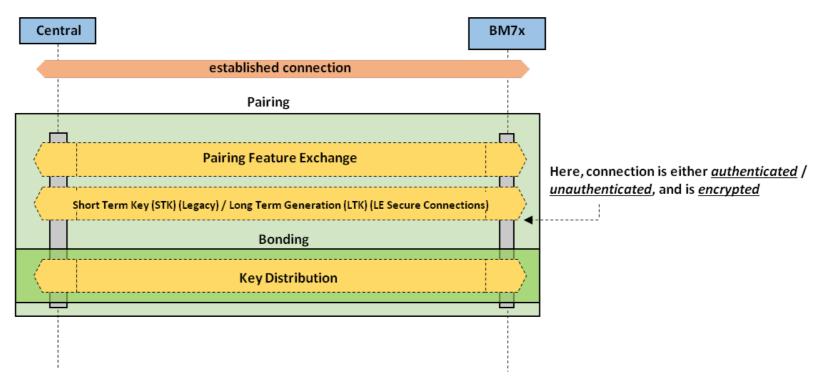
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"characteristic") on a peripheral device that requires authenticated access. Pairing involves authenticating the identity of two devices, encrypting the link using a Short-Term Key (STKs), and then distributing Long-Term Keys (LTKs) (for faster reconnection in the future, i.e., bonding) used for encryption, as shown:



The new security level of the connection is based on the method of pairing performed and this is selected based on the I/O capabilities of each device. The security level of any subsequent reconnections is based on the level achieved during the initial pairing.

The role each device plays is defined in the Security Manager (SM) portion of the BLE stack. They are:

- Initiator: Always corresponds to the Link Layer Master and therefore the GAP central.
- Responder: Always corresponds to the Link Layer Slave and therefore the GAP peripheral.

## **Security Modes/Levels of a Connection**