

RF connection and communication issues with ILS wireless locks

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Symptom

ILS wireless locks are unable to join a properly configured and online Wireless Access Point (WAP).

ILS wireless locks, that have previously correctly joined a WAP, are experiencing periodic communication failures, or online/offline cycles.

Resolution

In order for an ILS wireless lock to reliably connect and remain connected to its associated WAP, two conditions must be maintained:

- 1) Adequate signal strength throughout the building, from the WAP to the lock, and from the lock to the WAP, must be achieved.
- 2) The 900 MHz band in which the lock and WAP operate must be generally free from interference. This means other equipment must not be using the same band.

If the lock is unable to join the WAP, follow the steps below.

- 1) Validate the correct configuration of the lock. The lock ID and site ID must be correct. This is done with the PDA.
- 2) Validate the correct configuration of the WAP. The WAP must be configured to connect with the desired lock ID. This is done from OnGuard.
- 3) Test signal propagation. You will need to relocate the WAP to the lock. Refer to the general distance guidelines provided in Chapter 4 of the *ILS Lock Operation User Guide*. If the WAP to lock distances are within the guidelines, and no apparent barriers are found, interference should be checked.
- 4) The physical area where the lock is located should be checked for interference using a spectrum analyzer. The 900 MHz band should be analyzed for interference. If a narrow band of interference is found, the lock and WAP may be programmed to use a channel outside of the affected 900 MHz sub band. If the 900 MHz band is found to be completely utilized, the lock will not be able to operate in this area, until the interference is removed. Refer to Chapter 4 of the *ILS Lock Operation User Guide*.

Applies To

Lenel ILS

OnGuard 2010 (6.4.500) or later

Additional Information

Chapter 4 of the *ILS Lock Operation User Guide* includes information on typical construction details that could adversely affect signal strength. It is recommended that anyone commissioning or troubleshooting an ILS RF system read this manual completely.
