TECHNICAL UPDATE ON WPA2/KRACK VULNERABILITY FOR DISCONTINUED LANTRONIX PRODUCTS

- Description of KRACK Common Vulnerabilities and Exposures (CVE) Classes
- Discontinued Lantronix Products Impacted and Recommended Replacement
- WPA2 KRACK Security Vulnerability Update and FAQs

Description of KRACK Common Vulnerabilities and Exposures (CVE) Classes

A security researcher publicly disclosed a serious vulnerability in the WPA2 encryption protocol used to establish a secure Wi-Fi connection between the Wi-Fi Client and the Access Point (AP). The vulnerability is related to the key handshake between the Wi-Fi Client (Supplicant) and the Access Point (Authenticator) that derives and installs sessions keys. An attacker can trick the Wi-Fi client to reinstall an already-in-use key by manipulating and replaying the handshake messages.

The CVEs associated with the KRACK attack can be categorized into three groups.

GROUP 1:

- CVE-2017-13077
- CVE-2017-13078
- CVE-2017-13079

These CVEs describe a vulnerability with the re-installation of the pairwise security keys between an Access Point (AP) and a particular station (client) device. If the vulnerability exists, it exists in code that implements the security supplicant as defined in the 802.11 specification.

GROUP 2:

- CVE-2017-13080
- CVE-2017-13081

These CVEs describe a vulnerability with the re-installation of group security keys used for multicast and broadcast packets. The risk is less than that of the first set of CVEs as the attack only allows for duplication of network packets that were already sent. The upper layer protocols (TCP, UDP) will generally not have an issue with these duplicated packets.

GROUP 3:

- CVE-2017-13082
- CVE-2017-13084
- CVE-2017-13086
- CVE-2017-13087
- CVE-2017-13088

CVE-2017-13082 describes a vulnerability in Aps that implement the FT association requests available with 802.11r specification. The other CVEs describe vulnerabilities in station devices that implement the *PeerKey* handshake and other specific wireless network management exchanges.

The following table includes information on what discontinued products are affected and recommended replacement options. It is recommended that customers with discontinued products contact an authorized Lantronix distributor/reseller or Lantronix sales person.

Lantronix Discontinued Product	Group 1	Group 2	Group 3	Recommended Replacement
MatchPort b/g	X	X	Not Affected	Contact your Lantronix sales person
MatchPort b/g Pro	х	х	Not Affected	xPico Wi-Fi PremierWave 2050
PremierWave XN	Х	Х	Not Affected	SGX 5150 (external)
WiBox	Х	Х	Not Affected	SGX 5150 (external)