

# What are the relationships among 802.11i, WPA, WPA2, PSK, 802.1X, TKIP, CCMP, and AES?

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## Problem Description

**What are the relationships among 802.11i, WPA, WPA2, PSK, 802.1X, TKIP, CCMP, and AES?**

## Solution

**The 802.11i standard specifies security mechanisms for wireless networks.**

- WPA and WPA2 are two standards developed by the WiFi Alliance based on the draft of 802.11i before 802.11i was released.
- PSK and 802.1X are two authentication methods for wireless networks. PSK is simple and is intended for personal use. 802.1X is complex, more secure, and is intended for enterprise use.
- TKIP and CCMP are two encryption algorithms. AES is the core algorithm of CCMP and also the most secure encryption algorithm.