To effectively provide security to packets using TI/Chipcon CC2420 radios, we provided support in TinyOS 2.x to enable the CC2420 radio’s in-line security features. We use the CC2420 security features for the data transmitted in the MEDiSN project to protect packets that contain patient's physiological data. The code is included in the official distribution of TinyOS 2.1.1. Additional information on its usage can be found in the official TinyOS tutorial webpage.