# Chapter 3: Using RTOS Threads in the WICED SDK

## Objective

After completing chapter 3 you will have a fundamental understanding of the role of the WICED RTOS in building WICED projects. You will be able to use the WICED RTOS abstraction layer to create and use threads, semaphores, mutex, queues, and timers.

## Time: 2 Hours

## Fundamentals

### WICED RTOS Abstraction Layer

### Co-operative multitasking

### Thread

### Mutex

### Semaphore

### Queue

### Timer

## Exercise(s)

### (thread) Create a blinking led thread

### (semaphore) Button press in main thread -> semaphore to lock led thread

### (mutex) make a function to lock printing

### (queues) send a message to say # of times to blink

### (timers) make a blinking led based on timer

### (debugging) ?