Operating Systems and Security Project Report: Synchronization and Communication

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2nd Master of Science in Applied Sciences and Engineering:
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January 3, 2014

Abstract

Threads and processes are the bread and butter of a modern day operating system. To facilitate dealing with threads and processes, most operating systems have introduced useful constructs to allow processes to work in a shared environment.
In this paper, we present an overview of the available techniques that facilitate inter-thread and inter-process communication and synchronization on multiple real-time operating systems, namely Microsoft Windows and Mac OS X. To show the use of these techniques, we also introduce a few sample programs showcasing the use of inter-process communication.

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