

Operating Systems - Practical #6

Memory Management – part 2

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Introduction

This report is the result of the sixth practical project of the course Operating Systems taught at the University of Neuchâtel. The goal is to enhance the *Memory Management Unit* simulator that was developed in the last practical. We will add full virtual memory capabilities by implementing the paging mechanism. It will be tested against memory traces of real programs, and the number of reads and writes to the physical memory will be monitored.

Analysis of results

Unfortunately, there is a bug in my implementation of the paging mechanism. If the total wanted memory exceeds the size of the physical memory, the driver complains that it does not get what it wrote to the memory earlier. Despite looking at every part of the code dozens of time, I did not manage to locate and fix the cause of the bug. Therefore, I could not get any results to analyze.

Annex

- Source code of the simulator