

Paint:
PA Instruction Set Interpreter ¹

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Abstract

This document describes **Paint**, an instruction set simulator based on Mint[3]. Paint interprets the PA-RISC instruction set, and has been extended to support the Avalanche Scalable Computing Project[2]. These extensions include a new process model that allows multiple programs to be run on each processor and the ability to model both kernel and user code on each processor. In addition, a new address space model more accurately detects when a program is accessing an illegal virtual address, allows a program's virtual address space to grow dynamically, and does lazy allocation of physical pages as programs need them.

Note that this document is intended to be an addendum to the original Mint technical report, which the reader should consult for an overview of the Mint simulation environment and terminology.

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