

Porting the EOS from X86 (Intel) to aarch64 (ARM) architecture

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With the advancement of many large HEP experiments, the amount of data that needs to be processed and stored has increased significantly, so we must upgrade computing resources and improve the performance of storage software. This article discusses porting the EOS software from the x86_64 architecture to the aarch64 architecture, with the aim of finding a more cost-effective storage solution. In the process of porting, the biggest challenge is that many dependent packages do not have aarch64 version and need to be compiled by ourselves, and the assembly part of the software code also needs to be adjusted accordingly. Despite these challenges, we have successfully ported the EOS code to the aarch64. This article discusses the current status and plans for the software port as well as performance testing after porting.

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