

# Symmetric Multiprocessor Support for bhyve on arm64

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In the years, ARM started to take its share of the personal computers and server markets. Their CPUs are known for their low power consumption and mobile market supremacy. In these new areas, virtualization is used to provide working machines in the cloud and create secure environments. The FreeBSD community started developing an ARM-based hypervisor, but it was not tested on real hardware and without some features that AMD64 has. Furthermore, nowadays, computers usually have more CPUs, to perform the task in parallel and increase the speed of the overall system. This paper presents the SMP (Symmetric Multiprocessor Support) added to bhyve on arm64. This feature allows the user to start a virtual machine when the host operating system has more than one cores and the ability to start a virtual machine with more virtual CPUs.

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