Improving and testing live migration for bhyve

Friday 16 September 2022 14:40 (20 minutes)

When managing a cluster or grid infrastructure, a system administrator uses live migration to move virtual machines that provide certain services from one host to another. The migration process should be fast and should not affect the service.

For bhyve, FreeBSD's hypervisor, we have added a live migration support. This paper presents the improvements we have added to the live migration feature such as cleaning the dirty bit after copying a page and extending the live migration support to support guests with more that 3GB of RAM. Moreover, this paper presents the testing procedure and scenarios we used to asset our live migration support in bhyve.

Authors: MIHAILESCU, Maria-Elena (University Politehnica of Bucharest); Mr MIHAI, Darius (University Politehnica of Bucharest); Mr CARABAS, Mihai (University Politehnica of Bucharest); Prof. TAPUS, Nicolae (University Politehnica of Bucharest)

Presenter: MIHAILESCU, Maria-Elena (University Politehnica of Bucharest)

Session Classification: Session 3A - Grid, Cloud & High Performance Computing

Track Classification: Grid, Cloud & High Performance Computing in Science