

FLOCX: Enabling marketplace at the bottom of the cloud.

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Abstract

The vision of MOC is to enable a marketplace where many stakeholders rather than just a single provider participate in standing up and operating the cloud. At the physical level, the MOC has developed multiple microservices (HIL, M2, BOLTED) that together support bare-metal users of the MOC and enable servers to be elastically moved between different services. This talk introduces FLOCX -- a marketplace approach for trading resources between multiple providers/tenants of bare-metal resources. We present different use-cases that incentivize anyone from a researcher that owns a single physical server to cloud scale enterprise to share their hardware using FLOCX. Using the simple use-case where provider and tenant are the same entity we will explain how FLOCX can be used by enterprises internally to encourage centralized sharing of resources.



Speaker Bio

Sahil Tikale is a Computer Engineering PhD student researcher working at MOC. His advisor is Prof. Orran Krieger. He is one of the core developers of HIL and also works on the BMI and SecureCloud projects. Sahil has a Masters degree from Nanyang Technological University and eight years of industry experience working in India and Singapore. He is broadly interested in cloud scale systems design with focus on bare-metal clouds. His focus is on developing novel methods to share bare-metal resources with end-users securely in a way that is as flexible as traditional clouds without the overhead of virtualization.