OpenCloud

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Cloud for the people, by the people, of the people

1. Implementing IAAS
   Plan:
   1. There should be docker installed in all the host computers required to provide the service.
   2. A GUI / Web Interface for the MasterNode which will control all the requirements of the customers.
      1. For every instance request spin up a container inside docker for the providers. Need to provide load-balancing and fault tolerance too for the required customers.
      2. On termination of the instance from the customer kill the docker instance and clean-up.
   3. Customers can use the resources on a pay-as-you-go basis or community edition(free for research purposes)

Challenges and road-blocks:

☐ Need to configure load-balancing in the providers

☐ How to deal with node failures

☐ Need to use docker-swarm/kubernetes for efficient management

☐ How to entice customers in to be providers for this cloud

Reference Diagram:

Customer 1
Customer 2
Customer 3
Customer N

GUI

Master Node

DB

Provider 1
Provider 2
Provider 3
Provider 4

Docker Containers
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