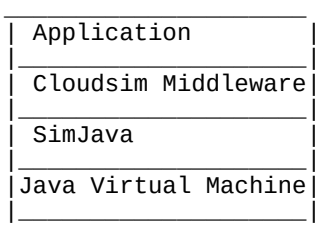
Oct 11, 2009

1. Cloudsim project consists of mainly four layer.



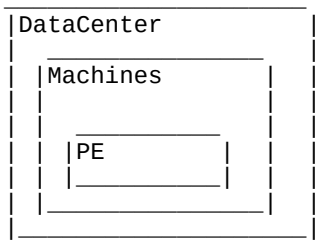
It needs JDK version >= 1.6.0

SimJava is one of the popular discrete-event infrastucture implementation, totally event-driven. Objects in the cloudsim like resources, broker, etc. are ecapulated and treated as individual entities, the bottom layer APIs facilitate cloudsim implementation, free from thread synchronization issues.

2. Cloudsim vs Gridsim

Cloudsim is based on Gridsim. Most of the classes are the same or alike. The main difference between them is about the virtualization. Broker not only submit the cloudlet (gridlet in Gridsim) but also should submit and schedule virtual machines according to different scheduling policies.

3. The hiberarchy the platform (models of physical resources)



A datacenter contains one or more machines (initiated using class Host) with one or more PEs.

4. DataCenterBroker

It takes the role of interacting with datacenter's GridInformationService about the available datacenters and schedule cloudlets into different VMs.
Core class for schedule algorithm that can be re-designed and modified, but needing re-compile the whole project.

5. The structure of a simulation demo

1) Initialize the Gridsim library
2) Create DataCenter (Including create PEs and machines...)
3) Create VMs
4) Submit cloudlets
5) Simulation starts