### 1) Definitions

**Resource – Provisioning :**Identify adequate resources for a given workload based on QOS requirements described by consumers.

**Resource Discovery**: Identifies suitable physical resources in which the virtual machines are to be created matching user's request.

**Resource Selection:** Selecting the most appropriate resource from the practical set of resources (multi-criteria decision-making problem).

availability, trust, cost, responsiveness, reliability, and capability effects resource selection.

#### **Virtual Resource Pools Integration**

XenServer Pool: Allows resource provisioning over private Cloud.

**VMWare Pool:** Allows resource provisioning over private Cloud.

**Amazon EC2 Pool:** Allows resource provisioning over public Cloud.

**Resource Scheduling:** Mapping and execution consumer workloads on available VMs based on selected resources through provisioning.

**Resource Monitoring:** Referred to monitoring the performance of both physical and virtual infrastructure during the operation

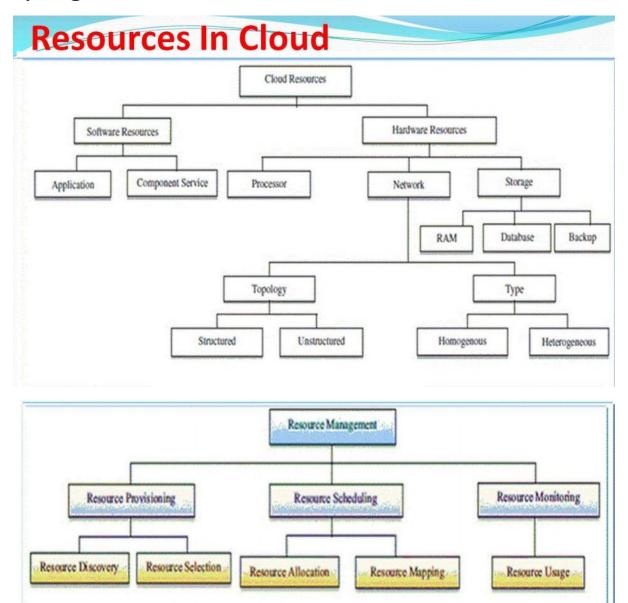
**Policy:** principles guiding decisions

Mechanisms: the mean to implement policies

<u>Allocation</u>: is the assignation or reservation of resources at the time of request.

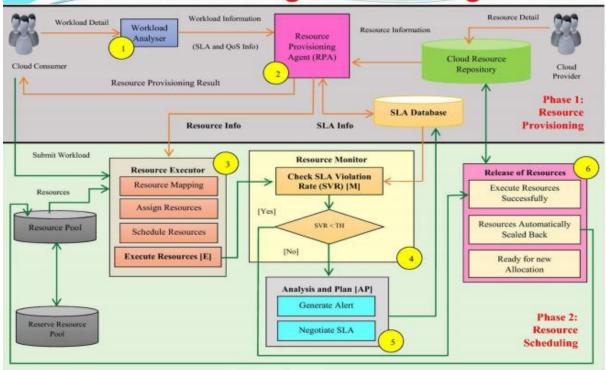
**Scheduling:** is a request for allocation of resources at a specific time or time period.

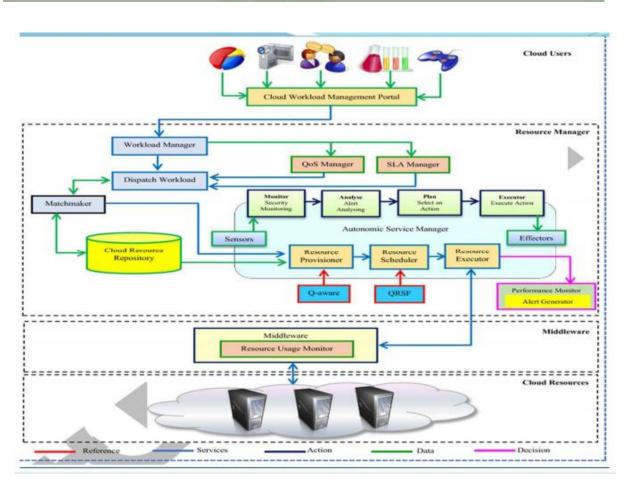
## 2)Diagrams



Taxonomy of resource management

# **Resource Provisioning & Scheduling in Cloud**





### 3)IMP SLIDES

# **SCHEDULING STEPS**

# 1. Resource Discovering and Filtering:

Data centre Broker discovers the resources present in the network system and collects status information related to them.

#### 2. Resource Selection:

Target resource is selected based on certain parameters of task and resource.

## 3. Task Submission:

Task is submitted to resource selected.