Resource State Tracker

(DC Tracker)

The Problem

- Deltacloud is stateless service
- each application which uses Deltacloud needs to track resource (e.g. instance state) changes itself
- there will be multiple components in Aeolus project which will have to track resource state - Heat, Winged Monkey, Conductor
- currently needed only in Conductor which uses Dbomatic

Dbomatic

- ruby script which periodically checks instances and realms state
- doesn't scale
- accesses directly conductor's DB (through AR)
- not efficient - uses Deltacloud API to fetch instance one by one
- not reusable in other components

Resource State Tracker

- a tool for tracking cloud resources state
(e.g. instance state, realm availability,...)
- started by Deltacloud folks, draft: http://people.apache.org/~lutter/deltacloud/tracker.html
- notifies clients about changes (no polling on client side)

Resource State Tracker (2)

- ideally it would be Deltacloud API extension
- Dbomatic replacement
- can be more efficient by using provider specific extensions (EC2: DescribeInstances, OpenStack: changed-since)

Future Steps

- credentials - tracker will have to keep cloud provider credentials for each registered callback
- callback system (registering, sending back) - same callback system should be used in all Aeolus components (whatever it will be), what about AMQP?