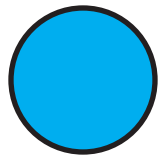


Notebook



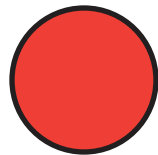
```
rc = cluster.map(f, xrange(10))
```



Map operation gives rise to a set of jobs identified by message id

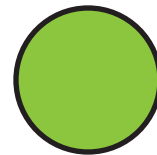
123-456-789 → (1, f)
456-827-157 → (2, f)
...

Controller



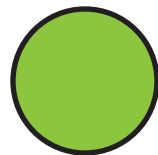
Jobs are sent to the cluster controller which distributes them to engines and waits for results

123-456-789 →
456-827-157 →
...



$f(1)$

Engines



$f(2)$

42

As results come in they are recorded against the corresponding message id

25
42
...

Completed results are shipped back the the client and returned to the blocked caller

