MR1

**Task Tracker**

Client

Client

Client

**Job**

**Tracker**

Reduce Task

Map Task

Reduce Task

Map Task

Reduce Task

MR2

**Node Manager**

**Task Tracker**

Giraph task

MR AM

Map Task

MR Client

**Resource Manager**

**Node Manager**

Map task

Giraph AM

Giraph Client

**Node Manager**

Client

Giraph task

Map task

Reduce task

**Task Tracker**

**Task Tracker**

**Task Tracker**

**Task Tracker**