

Yarn基于label的调度策略配置

1. 修改2个master的yarn-site.xml

```
<property>
  <name>yarn.resourcemanager.scheduler.class</name>
  <value>org.apache.hadoop.yarn.server.resourcemanager.scheduler.capacity.CapacityScheduler</value>
</property>
```

配置label重启恢复功能，添加

```
<property>
  <name>yarn.node-labels.enabled</name>
  <value>true</value>
</property>
<property>
  <name>yarn.node-labels.fs-store.root-dir</name>
  <value>hdfs://Ucluster/yarn/node-labels/</value>
</property>
<property>
  <name>yarn.node-labels.manager-class</name>
  <value>org.apache.hadoop.yarn.server.resourcemanager.nodelabels.RMNodeLabelsManager</value>
</property>
```

重启resourcemanager

2. 添加label normal和 highmem

```
yarn radmin -addToClusterNodeLabels normal,highmem
```

3. 为各个nodemanager节点分别添加label

```
yarn radmin -replaceLabelsOnNode "uhadoop-xxxx-core1,normal"
yarn radmin -replaceLabelsOnNode "uhadoop-xxxx-task1,highmem"
```

4. 配置/home/hadoop/conf/capacity-scheduler.xml

在原基础上添加

```
<property>
  <name>yarn.scheduler.capacity.spark.queues</name>
  <value>default</value>
  <description>
    The queues at the this level.
  </description>
</property>

<property>
  <name>yarn.scheduler.capacity.spark.default.capacity</name>
  <value>40</value>
  <description>Default queue target capacity.</description>
</property>

<property>
  <name>yarn.scheduler.capacity.spark.default.label</name>
  <value>highmem</value>
</property>
```

5. spark-submit 提交任务添加 --queue参数

```
spark-submit --master yarn --deploy-mode cluster --num-executors 2 --executor-cores 2 --queue  
root.spark /home/hadoop/spark/examples/src/main/python/pi.py 100
```