[\\LNGSHAL-146\vm-solr](file:///\\LNGSHAL-146\vm-solr)

启动solr

1 定位文件夹 cd ../../solr/solr-7.3.1

2 启动 bin/solr start -p 8983

bin/solr start -c -p 8983 -s example/cloud/node1/solr -Dsolr.clustering.enabled=true -Dsolr.ltr.enabled=true

bin/solr start -c -p 8983 -s example/cloud/node1/solr -Dsolr.clustering.enabled=true -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 7574 -s example/cloud/node2/solr -z localhost:9983 -Dsolr.clustering.enabled=true -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 8983 -s example/cloud/node1/solr

bin/solr start -cloud -p 7574 -s example/cloud/node2/solr -z localhost:9983t

bin/solr start -p 8988 -e techproducts -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 8983 -s example/cloud/node1/solr -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 7574 -s example/cloud/node2/solr -z localhost:9983 -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 8989 -s example/cloud/node1/solr/JapanDocs -Dsolr.ltr.enabled=true

bin/solr start -p 8989 -e JapanDocs -Dsolr.ltr.enabled=true

bin/solr start -p 8989 -e example/cloud/node1/solr/JapanDocs\_shard1\_replica\_n1/ -Dsolr.ltr.enabled=true

bin/solr start -p 8988 -e JapanDocsLTR -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 8983 -s example/cloud/node1/solr -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 8983 -s example/cloud/node1/solr -Dsolr.ltr.enabled=true

bin/solr start -cloud -p 7574 -s example/cloud/node2/solr -z localhost:9983 -Dsolr.ltr.enabled=true

文件权限

sudo chmod 777 JapanDocModel.json

7.5

启动

cd /solr/test/solr-7.5.0

sudo bash install\_solr\_service\_existing\_folder.sh ../solr-7.5.0.tgz -s solr-Japan -d /solr/solr-Japan -p 8983 -i /solr/opt/node-8983

sudo bash install\_solr\_service\_existing\_folder.sh ../solr-7.5.0.tgz -s solr-Japan-2 -d /solr/solr-Japan-2 -p 8984 -i /solr/opt/node-8984

sudo bash install\_solr\_service\_existing\_folder.sh ../solr-7.5.0.tgz -s solr-Japan-3 -d /solr/solr-Japan-3 -p 8985 -i /solr/opt/node-8985

sudo bash install\_solr\_service\_existing\_folder.sh ../solr-7.5.0.tgz -s solr-Japan-4 -d /solr/solr-Japan-4 -p 8986 -i /solr/opt/node-8986

cd /etc/default/

sudo vim solr-Japan.in.sh

SOLR\_OPTS="$SOLR\_OPTS -Dsolr.ltr.enabled=true"

启动zooroot

cd /solr/zooroot

bin/zkServer.sh restart

重启服务：

service solr-Japan restart

service solr-Japan-2 restart

service solr-Japan-3 restart

service solr-Japan-4 restart

service solr-Japan status

service solr-Japan-2 status

service solr-Japan-3 status

service solr-Japan-4 status

[‎2019/‎5/‎15 18:04]  Wang, Tao (LNG-CON):

[http://10.212.42.232:8983](http://10.212.42.232:8983/)

sudo service solr-Japan restart    
sudo service solr-Japan-2 restart  
  bin/zkServer.sh restart

删除 feature-store和model-store

curl -XDELETE 'http://localhost:8983/solr/JapanDocs/schema/model-store/JapanDocModelBody'

curl -XDELETE 'http://localhost:8983/solr/JapanDocs/schema/feature-store/JapanDocFeatureStoreBody'

ÅäÖÃÓ²ÅÌÔÚÏµÍ³Æô¶¯×Ô¶¯¹ÒÔØ¡£ÔÚÎÄ¼þ /etc/fstab ÖÐ¼ÓÈëÈçÏÂÅäÖÃ£º

#/devdata was on /dev/sdb

UUID=2e9bc758-55a5-4d15-91c5-7019356c7f2c /solr ext4 defaults 0 2

²é¿´´ÅÅÌ GUID

sudo blkid

sudo mount -t ext4 /dev/sdb /devdata

sudo bash install\_solr\_service.sh ../../solr-7.5.0.tgz -s solr-Japan -d /solr/solr-Japan

sudo rm -R /solr/opt/node-\*/\*

sudo rm /etc/init.d/solr\*

sudo rm /etc/default/solr\*

sudo rm -R /solr/solr\*

查看端口使用情况

netstat -ap|grep 8983

sudo lsof -i:8983 查询pid

删除端口号（1020为PID）

sudo kill -9 1020

{

"replace-field": {

"name": "lnacmreasoncodeplain",

"type":"string","multiValued":"false","indexed":"true","stored":"false"

}

}

|  |  |
| --- | --- |
| 3  4  5  6  7  8  9  10  11  12  13 | <update>    <doc>        <field name="id">i2007</field>        <field name="name">i2Sonics</field>        <field name="manu">i2Sonics Corp.</field>    </doc>    </update> |

<update>

<delete>

<query>\*:\*</query>

</delete>

<add>

<doc>

<field name="id">1</field>

<field name="name">item 1</field>

</doc>

<doc>

<field name="id">2</field>

<field name="name">item 2</field>

</doc>

<doc>

<field name="id">3</field>

<field name="name">item 3</field>

</doc>

</add>

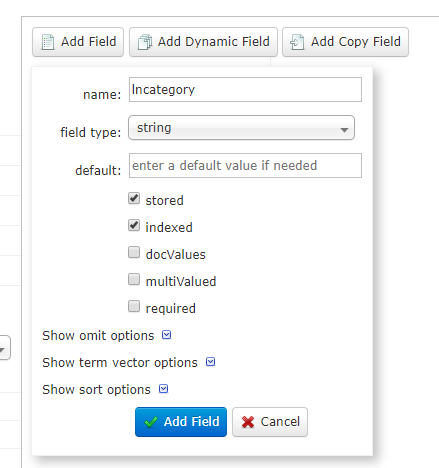
<commit/>

</update>

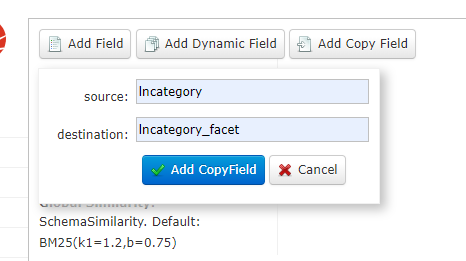
添加CopyField步骤

例 ： lncategory\_facet

1, add-field lncategory\_facet



2 add-copy-field



3 重新上传数据

reRankQuery:

http://localhost:8981/solr/JapanDocs/query?fl=id,score,[features store=JapanDocFeatureStoreBody efi.user\_query='人事院規則']&{{!ltr model=JapanDocModelBody efi.user\_query='人事院規則' reRankDocs=1000}}&rq={!rerank reRankQuery='人事院規則' reRankDocs=1000 reRankWeight=3}&q=content:'人事院規則'&sort=score desc

Collection管理

http://localhost:8981/solr/admin/collections?action=DELETE&name=JapanDocs&numShards=3&replicationFactor=4

http://localhost:8981/solr/admin/collections?action=DELETESHARD&shard=shard3&collection=JapanDocs

/admin/collections?action=MODIFYCOLLECTION&collection=<collection-name>&<attribute-name>=<attribute-value>&<another-attribute-name>=<another-value>

/admin/collections?action=MODIFYCOLLECTION&collection=JapanDocs&state=non-active

http://localhost:8981/solr/admin/collections?action=DELETEREPLICA&collection=JapanDocs&shard=shard1&replica=ccore\_node23

一、调试查询

debugQuery=true

demo ：

http://localhost:8983/solr/techproducts/select?q=price:{6.99%20TO%208]&debugQuery=true

二、条件检索：

大于等于:[ 大于：{ 小于等于：] 小于：}

只有一个条件的，TO 前或后使用\* 代替

>=6.99 and <=8

[http://localhost:8983/solr/techproducts/select?q=price:[6.99%20TO%208](http://localhost:8983/solr/techproducts/select?q=price:%5b6.99%20TO%208)]

>6.99 and <=8

http://localhost:8983/solr/techproducts/select?q=price:{6.99%20TO%208]

<=7

[http://localhost:8983/solr/techproducts/select?q=price:[\*%20TO%207](http://localhost:8983/solr/techproducts/select?q=price:%5b*%20TO%207)]

>=6 and <=8 and id=0812550706

[http://localhost:8983/solr/techproducts/select?q=price:[6%20TO%208]%20AND%20id:0812550706](http://localhost:8983/solr/techproducts/select?q=price:%5b6%20TO%208%5d%20AND%20id:0812550706)

(>=6 and <=7 ) or id =0441385532

[http://localhost:8983/solr/techproducts/select?q=(price:[6%20TO%207]%20OR%20id:0441385532)&wt=json&rows=2](http://localhost:8983/solr/techproducts/select?q=(price:%5b6%20TO%207%5d%20OR%20id:0441385532)&wt=json&rows=2)

三、排序

3.1 单列排序（&sort=price%20desc）

http://localhost:8983/solr/techproducts/select?q=(price:[6%20TO%209]%20OR%20id:0441385532)&wt=json&sort=price%20desc

3.2 多列排序（&sort=price%20desc,name\_str%20asc）

[http://localhost:8983/solr/techproducts/select?q=(price:[6%20TO%209]%20OR%20id:0441385532)&wt=json&sort=price%20desc,name\_str%20asc](http://localhost:8983/solr/techproducts/select?q=(price:%5b6%20TO%209%5d%20OR%20id:0441385532)&wt=json&sort=price%20desc,name_str%20asc)

四、分页

4.1页数以0开始，返回前10条（&start=0&rows=10）

http://localhost:8983/solr/techproducts/select?q=(price:[6%20TO%20999]%20OR%20id:0441385532)&wt=json&sort=price%20desc,name\_str%20asc&start=0&rows=10

4.2 返回20-30条（&start=20&rows=10）

[http://localhost:8983/solr/techproducts/select?q=(price:[6%20TO%20999]%20OR%20id:0441385532)&wt=json&sort=price%20desc,name\_str%20asc&start=20&rows=10](http://localhost:8983/solr/techproducts/select?q=(price:%5b6%20TO%20999%5d%20OR%20id:0441385532)&wt=json&sort=price%20desc,name_str%20asc&start=20&rows=10)

五、模糊匹配

5.1 头固定（name:Nine\*）

[http://localhost:8983/solr/techproducts/select?q=name:Nine\*](http://localhost:8983/solr/techproducts/select?q=name:Nine*)

5.2 全匹配（cat:book）

<http://localhost:8983/solr/techproducts/select?q=cat:book>

六、查询关键字

查询条件 body:第一章 AND id:2216820736

方法1：

[http://localhost:8981/solr/JapanDocs/select?q=(body: 第一章%20AND%20id:2216820736)&wt=json](http://localhost:8981/solr/JapanDocs/select?q=(body:%E7%AC%AC%E4%B8%80%E7%AB%A0%20AND%20id:2216820736)&wt=json)

方法2：

[http://localhost:8981/solr/JapanDocs/select?fq=body: 第一章&fq=id:2216820736&q=\*:\*](http://localhost:8981/solr/JapanDocs/select?fq=body:%E7%AC%AC%E4%B8%80%E7%AB%A0&fq=id:2216820736&q=*:*)

七、高亮显示

http://localhost:8981/solr/JapanDocs/select? hl.fl=body&hl.simple.post</b>&hl.simple.pre=<b>&hl=on&q=body:’30005020070’&wt=json

八、Facet查询

1).facet.prefix

表示Facet字段值的前缀.比如facet.field=cpu&facet.prefix=Intel,那么对cpu字段进行Facet查询,返回的cpu都是以“Intel”开头的。

2).facet.sort

表示Facet字段值以哪种顺序返回.可接受的值为true(count)|false(index,lex). true(count)表示按照count降序； false(index,lex)表示按照字段值升序(字母,数字的顺序)排列.默认情况下为true(count).当facet.limit值为负数时,默认facet.sort= false(index,lex).

3).facet.limit

限制Facet字段返回的结果条数.默认值为100.如果此值为负数,表示不限制.

4).facet.offset

返回结果集的偏移量,默认为0.它与facet.limit配合使用可以达到分页的效果.

5).facet.mincount

限制了Facet字段值的最小count,默认为0.合理设置该参数可以将用户的关注点集中在少数比较热门的领域.相当于group by having

6).facet.missing

默认为””,如果设置为true或者on,那么将统计那些该Facet字段值为null的记录.

7).facet.method

取值为enum或fc,默认为fc.该字段表示了两种Facet的算法,与执行效率相关.

enum适用于字段值比较少的情况,比如字段类型为布尔型,或者字段表示中国的所有省份.Solr会遍历该字段的所有取值,并从filterCache里为每个值分配一个filter(这里要求solrconfig.xml里对filterCache的设置足够大).然后计算每个filter与主查询的交集.

fc(表示Field Cache)适用于字段取值比较多,但在每个文档里出现次数比较少的情况.Solr会遍历所有的文档,在每个文档内搜索Cache内的值,如果找到就将Cache内该值的count加1.

8).facet.enum.cache.minDf

当facet.method=enum时,此参数其作用,minDf表示minimum document frequency.也就是文档内出现某个关键字的最少次数.该参数默认值为0.设置该参数可以减少filterCache的内存消耗,但会增加总的查询时间(计算交集的时间增加了).如果设置该值的话,官方文档建议优先尝试25-50内的值.

8.1 分组查询

1、查询（price和genre\_s 分组）

http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet.query=price:[6%20TO%208]&facet=on&fl=\*&fq=cat:book&q=\*:\*&rows=20&start=0&wt=json

2、添加条件查询（genre\_s:scifi）

[http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet.query=price:[6%20TO%208]&facet=on&fl=\*&fq=cat:book&q=\*:\*&rows=20&start=0&wt=json&fq=genre\_s:scifi](http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre_s&facet.query=price:%5b6%20TO%208%5d&facet=on&fl=*&fq=cat:book&q=*:*&rows=20&start=0&wt=json&fq=genre_s:scifi)

8.2 Range查询

Price为0-3000，分每个200为1组

http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet.query=price:[0%20TO%203000]&facet=on&fl=\*&q=\*:\*&facet.range=price&f.price.facet.range.start=0&f.price.facet.range.end=3000&f.price.facet.range.gap=200

过滤小于1的（f.price.facet.mincount=1）

http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet.query=price:[0%20TO%203000]&facet=on&fl=\*&q=\*:\*&facet.range=price&f.price.facet.range.start=0&f.price.facet.range.end=3000&f.price.facet.range.gap=200&f.price.facet.mincount=1

8.3 Pivot查询

[http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet=on&fl=\*&q=\*:\*&facet.pivot=inStock,cat\_str](http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre_s&facet=on&fl=*&q=*:*&facet.pivot=inStock,cat_str)

8.4 tag/ex查询

查询价格在1-10直接的数据，并response只显示这些数据。.tag就是把一个filter标记起来,ex(exclude)是在Facet的时候把标记过的filter排除在外.

[http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet=on&fl=\*&q=\*:\*&&fq={!tag=aa}price:[1%20TO%2010](http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre_s&facet=on&fl=*&q=*:*&&fq=%7b!tag=aa%7dprice:%5b1%20TO%2010)]

[http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet=on&fl=\*&q=\*:\*&facet.field={!ex=aa}price](http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre_s&facet=on&fl=*&q=*:*&facet.field=%7b!ex=aa%7dprice)

8.5 Group分组

Group和Facet可以结合起来使用，但只能使用facet.field和facet.range，还不支持日期date和维度统计pivot

[http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre\_s&facet=on&fl=\*&q=\*:\*&group=true&group.field=genre\_s](http://127.0.0.1:8983/solr/techproducts/select?facet.field=price&facet.field=genre_s&facet=on&fl=*&q=*:*&group=true&group.field=genre_s)

8.6 日期格式分组

[http://localhost:8981/solr/JapanDocs/select?q=\*:\*&facet=on&facet.field=lndoctype&facet.field=docdatetime&facet.range={!tag=r1}docdatetime&f.docdatetime.facet.range.start=2009-1-1T0:0:0Z&f.docdatetime.facet.range.end=NOW&f.docdatetime.facet.range.gap=%2B1YEAR&f.docdatetime.facet.range.other=all](http://localhost:8981/solr/JapanDocs/select?q=*:*&facet=on&facet.field=lndoctype&facet.field=docdatetime&facet.range=%7b!tag=r1%7ddocdatetime&f.docdatetime.facet.range.start=2009-1-1T0:0:0Z&f.docdatetime.facet.range.end=NOW&f.docdatetime.facet.range.gap=%2B1YEAR&f.docdatetime.facet.range.other=all)

九 函数查询

9.1 Exists

[http://localhost:8983/solr/techproducts/select?q=exists(query({!v=%27price:7.99%27}))](http://localhost:8983/solr/techproducts/select?q=exists(query(%7b!v=%27price:7.99%27%7d)))

<http://localhost:8983/solr/techproducts/select?q=exists(query(price:7.99))>

9.2 NOT

查询价格不是7.99

<http://localhost:8983/solr/techproducts/select?q=NOT%20price:7.99>

9.3 AND

<http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20price:7.99>

<http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20(filter(price:7.99))>

9.4 AND NOT

<http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20NOT%20price:7.99>

<http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20NOT%20(filter(price:7.99))>

9.5 查询多个值

查询price等于7.99或6.99

http://localhost:8981/solr/techproducts/select?q=price:(7.99%206.99)

查询cat既包含hardcover又包含book

<http://localhost:8981/solr/techproducts/select?q=cat:(hardcover%20AND%20book)>

查询cat为book 并且 price在0-100中间 并且price不等于7.99

[http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20price:([0%20TO%20100]%20AND%20NOT%207.99)](http://localhost:8981/solr/techproducts/select?q=cat:book%20AND%20price:(%5b0%20TO%20100%5d%20AND%20NOT%207.99))

查询price在0-100中间 并且price不等于7.99

http://localhost:8981/solr/techproducts/select?q=price:([0%20TO%20100]%20AND%20NOT%207.99)

查询price在0-100中间 并且price不等于7.99并且不等于6.99

http://localhost:8981/solr/techproducts/select?q=price:([0%20TO%20100]%20AND%20NOT%207.99%20AND%20NOT%206.99)&rows=20

十、改变列名称

fl=id,sales\_price:price,secret\_sauce:prod(price,popularity),why\_score:[explain style=nl]

十一、日期格式查询

http://localhost:8981/solr/JapanDocs/select?q=lnenforcedate:[\*%20TO%202019-01-22T00:00:00Z]

十二 NEAR

http://localhost:8981/solr/JapanDocs/select?q=content:("平成29年" NEAR (金融法,千葉地方裁判所))

http://localhost:8981/solr/JapanDocs/select?q=content:("平成29" NEAR ("札幌地方裁判所","第1号",10))&wt=json

十三 score排序

http://localhost:8981/solr/JapanDocs/select? q=content:("平成29年度税制改正")&\_val\_:docdatetime(score,popularityrank)&fl=score&sort=score desc

十四 删除命令

http://localhost:8981/solr/admin/collections?action=DELETE&name=JapanDocs&numShards=3&replicationFactor=4

http://localhost:8981/solr/admin/collections?action=DELETESHARD&shard=shard3&collection=JapanDocs

/admin/collections?action=MODIFYCOLLECTION&collection=<collection-name>&<attribute-name>=<attribute-value>&<another-attribute-name>=<another-value>

/admin/collections?action=MODIFYCOLLECTION&collection=JapanDocs&state=non-active

http://localhost:8981/solr/admin/collections?action=DELETEREPLICA&collection=JapanDocs&shard=shard1&replica=ccore\_node23

十五  Suggester Search

schema.xml

<field name="text\_suggest" type="text\_suggest" indexed="false" stored="false" />

<fieldType name="text\_suggest" class="solr.TextField" positionIncrementGap="100">

<analyzer>

<tokenizer class="solr.KeywordTokenizerFactory"/>

<filter class="solr.TurkishLowerCaseFilterFactory"/>

<filter class="solr.TrimFilterFactory"/>

</analyzer>

</fieldType>

Solrconfig.xml

<searchComponent class="solr.SpellCheckComponent" name="suggest">

<lst name="spellchecker">

<str name="name">suggest</str>

<str name="classname">org.apache.solr.spelling.suggest.Suggester</str>

<str name="lookupImpl">org.apache.solr.spelling.suggest.fst.AnalyzingInfixLookupFactory</str>

<str name="buildOnCommit">true</str>

<str name="suggestAnalyzerFieldType">text\_suggest</str>

<str name="sourceLocation">suggestionsFull.txt</str>

</lst>

<str name="queryAnalyzerFieldType">text\_suggest</str>

<!-- <queryConverter name="queryConverter" class="org.apache.solr.spelling.SuggestQueryConverter"/> -->

</searchComponent>

<requestHandler class="org.apache.solr.handler.component.SearchHandler" name="/suggest">

<lst name="defaults">

<str name="spellcheck">true</str>

<str name="spellcheck.dictionary">suggest</str>

<str name="spellcheck.onlyMorePopular">true</str>

<str name="spellcheck.count">5</str>

<str name="spellcheck.collate">false</str>

</lst>

<arr name="components">

<str>suggest</str>

</arr>

</requestHandler>

**<searchComponent** name="suggest" class="solr.SuggestComponent"**>**

**<lst** name="suggester"**>**

**<str** name="name"**>**mySuggester**</str>**

**<str** name="lookupImpl"**>**FuzzyLookupFactory**</str>**

**<str** name="dictionaryImpl"**>**DocumentDictionaryFactory**</str>**

**<str** name="field"**>**cat**</str>**

**<str** name="weightField"**>**price**</str>**

**<str** name="suggestAnalyzerFieldType"**>**string**</str>**

**</lst>**

**<lst** name="suggester"**>**

**<str** name="name"**>**altSuggester**</str>**

**<str** name="dictionaryImpl"**>**DocumentExpressionDictionaryFactory**</str>**

**<str** name="lookupImpl"**>**FuzzyLookupFactory**</str>**

**<str** name="field"**>**product\_name**</str>**

**<str** name="weightExpression"**>**((price \* 2) + ln(popularity))**</str>**

**<str** name="sortField"**>**weight**</str>**

**<str** name="sortField"**>**price**</str>**

**<str** name="storeDir"**>**suggest\_fuzzy\_doc\_expr\_dict**</str>**

**<str** name="suggestAnalyzerFieldType"**>**text\_en**</str>**

**</lst>**

**</searchComponent>**

<searchComponent name="suggest" class="solr.SuggestComponent">

<lst name="suggester">

<str name="name">mySuggester</str>

<str name="lookupImpl">FuzzyLookupFactory</str>

<str name="storeDir">suggester\_fuzzy\_dir</str>

<!-- Substitute these for the two above for another "flavor"

<str name="lookupImpl">AnalyzingInfixLookupFactory</str>

<str name=”indexPath”>suggester\_infix\_dir</str>

-->

<str name="dictionaryImpl">DocumentDictionaryFactory</str>

<str name="field">title</str>

<str name="suggestAnalyzerFieldType">suggestType</str>

<str name="buildOnStartup">false</str>

<str name="buildOnCommit">false</str>

</lst>

</searchComponent>

<requestHandler name="/suggesthandler" class="solr.SearchHandler" startup="lazy" >

<lst name="defaults">

<str name="suggest">true</str>

<str name="suggest.count">10</str>

<str name="suggest.dictionary">mySuggester</str>

</lst>

<arr name="components">

<str>suggest</str>

</arr>

</requestHandler>

<lst name="suggester">

<str name =“name”> FuzzySuggester </ str>

<str name =“lookupImpl”> FuzzyLookupFactory </ str>

<str name =“dictionaryImpl”> DocumentDictionaryFactory </ str>

<str name =“field”> title </ str>

<str name =“weightField”>价格</ str>

<str name =“suggestAnalyzerFieldType”> text\_en </ str>

</ LST>