seata 配合 nacos 使用

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原文链接：https://ld246.com/article/1635743975082
来源网站：链滴

1、seata

1.1、seata简介

seata官网：http://seata.io/zh-cn/docs/overview/what-is-seata.html

1.2、seata下载安装

seata下载地址 http://seata.io/zh-cn/blog/download.html，我下载的版本是1.3.0版本

下载完直接解压即可

1.3、服务端配置

进入conf文件里面有两个关键的配置文件，第一个是file.conf，第二个是registry.conf

1.3.1、file.conf

file.conf配置了seata运行时数据的存储位置，可选项有file，db，redis，将mode改为自己要配置的式，然后更改下面对应的配置即可，我使用了db，就更改db对应的配置

```
## transaction log store, only used in seata-server
store {
  ## store mode: file、db、redis
  mode = "db"

  ## file store property
  file {
```

```
    ## store location dir
    dir = "sessionStore"
    # branch session size , if exceeded first try compress lockkey, still exceeded throws excepti
ns
    maxBranchSessionSize = 16384
    # globe session size , if exceeded throws exceptions
    maxGlobalSessionSize = 512
    # file buffer size , if exceeded allocate new buffer
    fileWriteBufferCacheSize = 16384
    # when recover batch read size
    sessionReloadReadSize = 100
    # async, sync
    flushDiskMode = async
  }

  ## database store property
  db {
    ## the implement of javax.sql.DataSource, such as DruidDataSource(druid)/BasicDataSourc
(dbcp)/HikariDataSource(hikari) etc.
    datasource = "druid"
    ## mysql/oracle/postgresql/h2/oceanbase etc.
    dbType = "mysql"
    driverClassName = "com.mysql.jdbc.Driver"
    url = "jdbc:mysql://10.116.11.110:3306/seata"
    user = "root"
    password = "root"
    minConn = 5
    maxConn = 30
    globalTable = "global_table"
    branchTable = "branch_table"
    lockTable = "lock_table"
    queryLimit = 100
    maxWait = 5000
  }

  ## redis store property
  redis {
    host = "127.0.0.1"
    port = "6379"
    password = ""
    database = "0"
    minConn = 1
    maxConn = 10
    queryLimit = 100
  }

}
```

使用db模式，需要建立对应的数据库和表（不通版本的seata可能会略有差异，具体可以参考conf目下的README-zh.md文件）

```
CREATE DATABASE `seata` /*!40100 DEFAULT CHARACTER SET utf8 COLLATE utf8_bin */
```

```
-- ------------------------------ The script used when storeMode is 'db' ------------------------
-------
-- the table to store GlobalSession data
CREATE TABLE IF NOT EXISTS `global_table`
(
    `xid`                       VARCHAR(128) NOT NULL,
    `transaction_id`            BIGINT,
    `status`                    TINYINT      NOT NULL,
    `application_id`            VARCHAR(32),
    `transaction_service_group` VARCHAR(32),
    `transaction_name`          VARCHAR(128),
    `timeout`                   INT,
    `begin_time`                BIGINT,
    `application_data`          VARCHAR(2000),
    `gmt_create`                DATETIME,
    `gmt_modified`              DATETIME,
    PRIMARY KEY (`xid`),
    KEY `idx_gmt_modified_status` (`gmt_modified`, `status`),
    KEY `idx_transaction_id` (`transaction_id`)
) ENGINE = InnoDB
  DEFAULT CHARSET = utf8;

-- the table to store BranchSession data
CREATE TABLE IF NOT EXISTS `branch_table`
(
    `branch_id`         BIGINT       NOT NULL,
    `xid`               VARCHAR(128) NOT NULL,
    `transaction_id`    BIGINT,
    `resource_group_id` VARCHAR(32),
    `resource_id`       VARCHAR(256),
    `branch_type`       VARCHAR(8),
    `status`            TINYINT,
    `client_id`         VARCHAR(64),
    `application_data`  VARCHAR(2000),
    `gmt_create`        DATETIME(6),
    `gmt_modified`      DATETIME(6),
    PRIMARY KEY (`branch_id`),
    KEY `idx_xid` (`xid`)
) ENGINE = InnoDB
  DEFAULT CHARSET = utf8;

-- the table to store lock data
CREATE TABLE IF NOT EXISTS `lock_table`
(
    `row_key`        VARCHAR(128) NOT NULL,
    `xid`            VARCHAR(128),
    `transaction_id` BIGINT,
    `branch_id`      BIGINT       NOT NULL,
    `resource_id`    VARCHAR(256),
    `table_name`     VARCHAR(32),
    `pk`             VARCHAR(36),
    `gmt_create`     DATETIME,
    `gmt_modified`   DATETIME,
    PRIMARY KEY (`row_key`),
```

```
    KEY `idx_branch_id` (`branch_id`)
) ENGINE = InnoDB
  DEFAULT CHARSET = utf8;

CREATE TABLE IF NOT EXISTS `distributed_lock`
(
    `lock_key`       CHAR(20) NOT NULL,
    `lock_value`     VARCHAR(20) NOT NULL,
    `expire`         BIGINT,
    primary key (`lock_key`)
) ENGINE = InnoDB
  DEFAULT CHARSET = utf8mb4;

INSERT INTO `distributed_lock` (lock_key, lock_value, expire) VALUES ('AsyncCommitting', ' ', 0
;
INSERT INTO `distributed_lock` (lock_key, lock_value, expire) VALUES ('RetryCommitting', ' ', 0)

INSERT INTO `distributed_lock` (lock_key, lock_value, expire) VALUES ('RetryRollbacking', ' ', 0);
INSERT INTO `distributed_lock` (lock_key, lock_value, expire) VALUES ('TxTimeoutCheck', ' ', 0);
```

1.3.2、registry.conf

这个配置文件主要配置了seata服务的注册和配置的获取方式，这个配置文件中有两个模块，registry块设置要将服务注册到哪个注册中心，其中file就是不进行注册，再本地运行，我配置了nacos，就更registry下的nacos选项的配置，config模块配置了seata使用的配置中心，file标时使用上面配置的file conf作为配置文件，我这里也选择nacos作为我的配置中心，更改config模块下的nacos配置选项

```
registry {
  # file 、nacos 、eureka、redis、zk、consul、etcd3、sofa
  type = "nacos"

  nacos {
    application = "seata-server"
    serverAddr = "10.116.11.110:8848"
    group = "SEATA_GROUP"
    namespace = ""
    cluster = "default"
    username = ""
    password = ""
  }
  eureka {
    serviceUrl = "http://localhost:8761/eureka"
    application = "default"
    weight = "1"
  }
  redis {
    serverAddr = "localhost:6379"
    db = 0
    password = ""
    cluster = "default"
    timeout = 0
  }
  zk {
    cluster = "default"
```

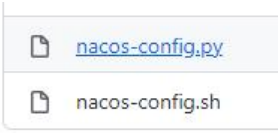
```
    serverAddr = "127.0.0.1:2181"
    sessionTimeout = 6000
    connectTimeout = 2000
    username = ""
    password = ""
  }
  consul {
    cluster = "default"
    serverAddr = "127.0.0.1:8500"
  }
  etcd3 {
    cluster = "default"
    serverAddr = "http://localhost:2379"
  }
  sofa {
    serverAddr = "127.0.0.1:9603"
    application = "default"
    region = "DEFAULT_ZONE"
    datacenter = "DefaultDataCenter"
    cluster = "default"
    group = "SEATA_GROUP"
    addressWaitTime = "3000"
  }
  file {
    name = "file.conf"
  }
}

config {
  # file、nacos 、apollo、zk、consul、etcd3
  type = "nacos"

  nacos {
    serverAddr = "10.116.11.110:8848"
    namespace = ""
    group = "SEATA_GROUP"
    username = ""
    password = ""
  }
  consul {
    serverAddr = "127.0.0.1:8500"
  }
  apollo {
    appId = "seata-server"
    apolloMeta = "http://192.168.1.204:8801"
    namespace = "application"
  }
  zk {
    serverAddr = "127.0.0.1:2181"
    sessionTimeout = 6000
    connectTimeout = 2000
    username = ""
    password = ""
  }
```

```
  etcd3 {
    serverAddr = "http://localhost:2379"
  }
  file {
    name = "file.conf"
  }
}
```

配置文件配置完成后，需要将配置推送到nacos，这里需要用到推送脚本，下载地址为

https://github.com/seata/seata/tree/develop/script/config-center

因为我们使用nacos，所以需要进入nacos目录，下载脚本，这个目录下有两个文件，一个.py，一个.s，.py文件使用python推送，.sh再linux下直接使用即可



下载nacos-config.sh，放到conf目录下，这个脚本执行的时候会在seata根目录下寻找config.txt文，将配置推送到nacos

config.txt文件中，有几个重要配置要特别关注，第一个是store.mode，相当于file.conf中的mode指定数据存储形式，我这里使用了db，数据库连接到1.3.1中创建的数据库，第二个需要注意的就是service.vgroupMapping.=default选项，这里的*对应客户端中的tx-service-group，有几个客户端就立几个，第三个是service.default.grouplist这个配置让他指向seata部署的地址即可，配置参考如下

```
nsport.type=TCP
transport.server=NIO
transport.heartbeat=true
transport.enableClientBatchSendRequest=false
transport.threadFactory.bossThreadPrefix=NettyBoss
transport.threadFactory.workerThreadPrefix=NettyServerNIOWorker
transport.threadFactory.serverExecutorThreadPrefix=NettyServerBizHandler
transport.threadFactory.shareBossWorker=false
transport.threadFactory.clientSelectorThreadPrefix=NettyClientSelector
transport.threadFactory.clientSelectorThreadSize=1
transport.threadFactory.clientWorkerThreadPrefix=NettyClientWorkerThread
transport.threadFactory.bossThreadSize=1
transport.threadFactory.workerThreadSize=default
transport.shutdown.wait=3
service.vgroupMapping.bank_group=default
service.vgroupMapping.order_group=defalult
service.vgroupMapping.product_group=default
service.default.grouplist=10.116.11.110:8091
service.enableDegrade=false
service.disableGlobalTransaction=false
client.rm.asyncCommitBufferLimit=10000
client.rm.lock.retryInterval=10
client.rm.lock.retryTimes=30
client.rm.lock.retryPolicyBranchRollbackOnConflict=true
client.rm.reportRetryCount=5
client.rm.tableMetaCheckEnable=false
```

```
client.rm.sqlParserType=druid
client.rm.reportSuccessEnable=false
client.rm.sagaBranchRegisterEnable=false
client.tm.commitRetryCount=5
client.tm.rollbackRetryCount=5
client.tm.degradeCheck=false
client.tm.degradeCheckAllowTimes=10
client.tm.degradeCheckPeriod=2000
store.mode=db
store.file.dir=file_store/data
store.file.maxBranchSessionSize=16384
store.file.maxGlobalSessionSize=512
store.file.fileWriteBufferCacheSize=16384
store.file.flushDiskMode=async
store.file.sessionReloadReadSize=100
store.db.datasource=druid
store.db.dbType=mysql
store.db.driverClassName=com.mysql.jdbc.Driver
store.db.url=jdbc:mysql://10.116.11.110:3306/seata?useUnicode=true
store.db.user=root
store.db.password=root
store.db.minConn=5
store.db.maxConn=30
store.db.globalTable=global_table
store.db.branchTable=branch_table
store.db.queryLimit=100
store.db.lockTable=lock_table
store.db.maxWait=5000
store.redis.host=127.0.0.1
store.redis.port=6379
store.redis.maxConn=10
store.redis.minConn=1
store.redis.database=0
store.redis.password=null
store.redis.queryLimit=100
server.recovery.committingRetryPeriod=1000
server.recovery.asynCommittingRetryPeriod=1000
server.recovery.rollbackingRetryPeriod=1000
server.recovery.timeoutRetryPeriod=1000
server.maxCommitRetryTimeout=-1
server.maxRollbackRetryTimeout=-1
server.rollbackRetryTimeoutUnlockEnable=false
client.undo.dataValidation=true
client.undo.logSerialization=jackson
client.undo.onlyCareUpdateColumns=true
server.undo.logSaveDays=7
server.undo.logDeletePeriod=86400000
client.undo.logTable=undo_log
client.log.exceptionRate=100
transport.serialization=seata
transport.compressor=none
metrics.enabled=false
metrics.registryType=compact
metrics.exporterList=prometheus
```

metrics.exporterPrometheusPort=9898

完成后在bin目录下执行nohup sh seata-server.sh &启动即可

然后在nacos的服务列表中，就可以看到seata服务