

OGG 远程部署配置

一、 概要信息

1.1 文档简介

OGG 19C 远程部署方式（单台、非侵入式），最佳抽取方式。

1.2 安装环境

源数据库：

操作系统版本	Redhat 7.6
数据库版本	11.2.0.4.0
主机名	oradb80
IP 地址	192.168.0.80

目标数据库：

操作系统版本	Redhat 7.6
数据库版本	11.2.0.4.0
主机名	orallg
IP 地址	192.168.1.11

OGG 安装机器：

操作系统版本	Redhat 7.9
OGG 版本	ogg 191004
主机名	oggmc
IP 地址	192.168.1.22

二、 数据库配置

2.1 源端开启归档

```
startup mount
alter database archive;
```

PS:源端数据库没有开归档要开启归档，已经打开可以忽略。

2.2 源端开启强制日志

```
alter database force logging;
```

2.3 源端开启数据库最小附加日志

```
SQL> ALTER DATABASE ADD SUPPLEMENTAL LOG DATA;
```

Database altered.

```
SQL> SELECT supplemental_log_data_min, force_logging FROM v$database;
```

```
SUPPLEME FOR
```

```
-----
```

```
YES YES
```

2.4 源和目标端打开复制参数

```
--源和目标执行
```

```
alter system set enable_goldengate_replication=true;
```

note: 11.2.0.4 以上需要配置

2.5 源和目标端创建 OGG 用户

```
---表空间
```

```
create tablespace ggtbs datafile '+DATA' size 1g autoextend on;
```

```
---用户
```

```
create user ggadmin identified by ggadmin default tablespace ggtbs q  
uota unlimited on ggtbs;
```

```
---授权
```

```
grant connect,resource to ggadmin;  
grant alter session to ggadmin;  
grant select any dictionary to ggadmin;  
grant select any transaction to ggadmin;
```

```
grant select any table to ggadmin;  
grant flashback any table to ggadmin;  
grant alter any table to ggadmin;  
exec dbms_goldengate_auth.grant_admin_privilege('GGADMIN','*',TRUE)
```

note: 除了必要权限，其他权限可以根据实际情况而定。

目标端的 OGG 用户，还需要下列权限：

```
grant create session to ggadmin;  
grant resource to ggadmin;  
grant execute any type to ggadmin;  
grant create any table,create any sequence to ggadmin ;  
grant insert any table to ggadmin;  
grant update any table to ggadmin;  
grant delete any table to ggadmin;  
grant create any index to ggadmin;  
grant unlimited tablespace to ggadmin ;  
grant execute on dbms_flashback to ggadmin;  
grant comment any table to ggadmin;
```

三、 OGG 软件安装

--以下步骤都是在 OGG 单独部署机器上操作

3.1 创建用户和目录

```
--创建组和用户  
groupadd oinstall  
useradd -g oinstall oracle  
passwd oracle
```

--创建目录

```
mkdir /ogg/oraclient -p  
mkdir /ogg/ogg191  
mkdir /ogg/oraInventory  
chown oracle:oinstall -R /ogg  
chmod 775 -R /ogg
```

3.2 配置环境变量

```
vi /home/oracle/.bash_profile

export ORACLE_HOME=/ogg/oraclient/instantclient_11_2
export GG_HOME=/ogg/ogg191
export LD_LIBRARY_PATH=$ORACLE_HOME:$GG_HOME
export TNS_ADMIN=$ORACLE_HOME/network/admin
export PATH=$ORACLE_HOME:$GG_HOME:$PATH
alias ggsci='cd $GG_HOME; ggsci'

source /home/oracle/.bash_profile
```

3.3 Oracle 客户端静默安装

note: 最基础客户端包即可

```
[root@oggmc ogg]# su - oracle
[oracle@oggmc ~]$
[oracle@oggmc ~]$
[oracle@oggmc ~]$ cd /media/
[oracle@oggmc media]$ ls
191004_fbo_ggs_Linux_x64_shiphome.zip  instantclient-basic-linux.x64-11.2.0.4.0.zip
[oracle@oggmc media]$ unzip instantclient-basic-linux.x64-11.2.0.4.0.zip
zip -d /ogg/oraclient/
Archive:  instantclient-basic-linux.x64-11.2.0.4.0.zip
  inflating: /ogg/oraclient/instantclient_11_2/BASIC_README
  inflating: /ogg/oraclient/instantclient_11_2/adrci
  inflating: /ogg/oraclient/instantclient_11_2/genezi
  inflating: /ogg/oraclient/instantclient_11_2/libclntsh.so.11.1
  inflating: /ogg/oraclient/instantclient_11_2/libnnz11.so
  inflating: /ogg/oraclient/instantclient_11_2/libocci.so.11.1
  inflating: /ogg/oraclient/instantclient_11_2/libociei.so
  inflating: /ogg/oraclient/instantclient_11_2/libocijdbc11.so
  inflating: /ogg/oraclient/instantclient_11_2/ojdbc5.jar
  inflating: /ogg/oraclient/instantclient_11_2/ojdbc6.jar
  inflating: /ogg/oraclient/instantclient_11_2/uidrvci
  inflating: /ogg/oraclient/instantclient_11_2/xstreams.jar
```

3.4 OGG 静默安装

---解压

```
$ unzip 191004_fbo_ggs_Linux_x64_shiphome.zip
[oracle@oggmc media]$ cd fbo_ggs_Linux_x64_shiphome/
[oracle@oggmc fbo_ggs_Linux_x64_shiphome]$ cd Disk1/
[oracle@oggmc Disk1]$ ls
install response runInstaller stage
```

---编辑响应文件

```
vi /home/oracle/oggcore.rsp

oracle.install.responseFileVersion=/oracle/install/rspfmt_ogginstall_
response_schema_v19_1_0
INSTALL_OPTION=ORA11g
SOFTWARE_LOCATION=/ogg/ogg191
START_MANAGER=
MANAGER_PORT=
DATABASE_LOCATION=
INVENTORY_LOCATION=/ogg/oraInventory
UNIX_GROUP_NAME=oinstall
```

---静默安装

```
./runInstaller -silent -showProgress -responseFile /home/oracle/oggc
ore.rsp
```

Starting Oracle Universal Installer...

Checking Temp space: must be greater than 120 MB. Actual 24497 MB
Passed

Checking swap space: must be greater than 150 MB. Actual 3457 MB
Passed

Preparing to launch Oracle Universal Installer from /tmp/OraInstall2
023-01-01_10-14-22PM. Please wait ... [oracle@oggmc Disk1]\$ You can f
ind the log of this install session at:

/ogg/oraInventory/logs/installActions2023-01-01_10-14-22PM.log

Prepare in progress.

..... 10% Done.

Prepare successful.

Copy files in progress.

```

..... 36% Done.
..... 54% Done.
..... 77% Done.
..... 82% Done.
..... 88% Done.
.....
Copy files successful.

Link binaries in progress.
.....
Link binaries successful.

Setup files in progress.
..... 93% Done.
..... 95% Done.
..... 96% Done.
..... 98% Done.
..... 99% Done.

Setup files successful.

Setup Inventory in progress.

Setup Inventory successful.
..... 95% Done.
..... 100% Done.

Finish Setup successful.
The installation of Oracle GoldenGate Core was successful.
Please check '/ogg/oraInventory/logs/silentInstall2023-01-01_10-14-2
2PM.log' for more details.

As a root user, execute the following script(s):
    1. /ogg/oraInventory/orainstRoot.sh

Successfully Setup Software.

---以 root 用户执行以下脚本

[root@oggmc /]# /ogg/oraInventory/orainstRoot.sh
Changing permissions of /ogg/oraInventory.

```

```
Adding read,write permissions for group.
Removing read,write,execute permissions for world.

Changing groupname of /ogg/oraInventory to oinstall.
The execution of the script is complete.
```

四、 OGG 配置

note: 以下配置均为远程捕获和交付的方式，无需在数据库本地安装部署。

4.1 配置 TNSNAMES

创建目录

```
su - oracle
mkdir -p /ogg/oraclient/instantclient_11_2/network/admin
```

配置 tnsnames.ora

```
cd /ogg/oraclient/instantclient_11_2/network/admin
vi tnsnames.ora

###源端库
SOURCE=
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP) (HOST = XXXXXX) (PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = XXXXX)
  )
)

####目标库
TARGET =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP) (HOST = 192.168.1.11) (PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = ora11g)
  )
)
```

4.2 创建 ogg 目录

---登录 ogg 交互工具

```
ggsci
```

---创建目录

```
GGSCI (oggmc) 1> create subdirs
```

```
Creating subdirectories under current directory /ogg/ogg191
```

Parameter file	/ogg/ogg191/dirprm: created.
Report file	/ogg/ogg191/dirrpt: created.
Checkpoint file	/ogg/ogg191/dirchk: created.
Process status files	/ogg/ogg191/dirpcs: created.
SQL script files	/ogg/ogg191/dirsql: created.
Database definitions files	/ogg/ogg191/dirdef: created.
Extract data files	/ogg/ogg191/dirdat: created.
Temporary files	/ogg/ogg191/dirtmp: created.
Credential store files	/ogg/ogg191/dircrd: created.
Masterkey wallet files	/ogg/ogg191/dirwlt: created.
Dump files	/ogg/ogg191/dirdmp: created.

4.3 配置 MGR 进程

---编辑参数

```
edit param mgr
```

```
PORT 7809
```

```
DYNAMICPORTLIST 7810-7899
```

```
ACCESSRULE,PROG *,IPADDR 192.168.*.*,ALLOW
```

```
AUTORESTART ER *,RETRIES 5,WAITMINUTES 3
```

```
PURGEOLDEXTRACTS ./dirdat/*,usecheckpoints, minkeepdays 7
```

```
LAGREPORTHOURS 1
```

```
LAGINFOMINUTES 30
```

```
LAGCRITICALMINUTES 45
```



```

GGSCI (oggmc) 2> edit param mgr

PORT 7909
DYNAMICPORTLIST 7810-7899
AUTORESTART ER *,RETRIES 5,WAITMINUTES 3
PURGEOLDEXTRACTS ./dirdat/*,usecheckpoints, minkeepdays 7
LAGREPORTHOURS 1
LAGINFOMINUTES 30
LAGCRITICALMINUTES 45

~

```

---校验 mgr 参数

```
[oracle@oggmc ogg191]$ ./checkprm /ogg/ogg191/dirprm/mgr.prm -C mgr -V
```

Parameter file validation context:

```

component(s): MGR
mode(s)      : N/A
platform(s)  : Linux
database(s)  : Oracle 11g

```

/ogg/ogg191/dirprm/mgr.prm

```

port                                     : 7909
dynamicportlist                         : 7810-7899
accessrule                             : <enabled>
  prog                                  : *
  ipaddr                               : 192.168.*.*
  allow                                : <enabled>
autorestart                             : <enabled>
  er                                    : *
  retries                              : 15
  waitminutes                          : 1
purgeoldextracts                        : ./dirdat/*
  usecheckpoints                       : <enabled>
  minkeepdays                         : 7
lagreporthours                          : 1
laginfominutes                         : 30
lagcriticalminutes                      : 45

```

2023-01-30 14:22:43 INFO OGG-10183 Parameter file

```
/ogg/ogg191/dirprm/mgr.prm: Validity check: PASS.
```

```
Runtime parameter validation is not reflected in the above check.
```

---启动

```
GGSCI (oggmc) 3> start mgr  
Manager started.
```

---查看

```
GGSCI (oggmc) 4> info all
```

Program	Status	Group	Lag at Chkpt	Time Since Chkpt
MANAGER	RUNNING			

4.4 配置用户凭证

---配置

```
add credentialstore  
alter credentialstore add user ggadmin@source, password ggadmin alias sdb  
alter credentialstore add user ggadmin@target, password ggadmin alias tdb
```

---验证

```
GGSCI (oggmc) 1> info credentialstore
```

Reading from credential store:

Default domain: OracleGoldenGate

```
GGSCI (oggmc) 8> dblogin useridalias sdb  
Successfully logged into database.
```

```
GGSCI (oggmc as ggadmin@bocpay) 9> dblogin useridalias tdb  
Successfully logged into database.
```

4.5 配置 extract 进程

4.5.1 经典模式(可选)

--添加附加日志

```
dblogin useridalias sdb
add trandata wyy.*
```

---配置参数

```
edit param extcsa

EXTRACT extcsa
SETENV (NLS_LANG=AMERICAN_AMERICA.ZHS16GBK)
USERIDALIAS sdb
TRANLOGOPTIONS dblogreader
LOGALLSUPCOLS
GETTRUNCATES
EXTTRAIL ./dirdat/wl
DISCARDFILE ./dirrpt/extcsa.dsc, APPEND, MEGABYTES 1024
WARNLONGTRANS 1H, CHECKINTERVAL 5M
CACHEMGR CACHESIZE 1024MB, CACHEDIRECTORY ./dirtmp
REPORTCOUNT EVERY 60 SECONDS, RATE
table wyy.lab_channel;
table wyy.qrtz_cron_triggers;
table wyy.qrtz_fired_triggers;
table wyy.qrtz_scheduler_state;
table wyy.qrtz_triggers;
table wyy.lab_bank_record;
```

Note: dblogreader 最低支持版本为 11.2.0.4, 通过数据字典的方式获取日志信息, 需要 select any transaction 权限

---校验 extract 参数

```
$ ./checkprm /ogg/ogg191/dirprm/extcsa.prm -C extract -V

2023-01-30 14:24:41 INFO OGG-02095 Successfully set environment variable
NLS_LANG=AMERICAN_AMERICA.ZHS16GBK.

Parameter file validation context:

component(s): EXTRACT
```

```

mode(s)      : N/A
platform(s)  : Linux
database(s)  : Oracle 11g

/ogg/ogg191/dirprm/extcsa.prm

extract      : extcsa
setenv       : (NLS_LANG=AMERICAN_AMERICA.ZHS16GBK)
useridalias  : sdb
tranlogoptions : <enabled>
  dblogreader : <enabled>
logallsupcols : <enabled>
gettruncates : <enabled>
exttrail     : ./dirdat/wl
discardfile  : ./dirrpt/extcsa.dsc
  append     : <enabled>
  megabytes  : 1024
warnlongtrans : 1 hour(s)
  checkinterval : 5 minute(s)
cachemgr     : <enabled>
  cachesize   : 1024 mb
  cachedirectory : ./dirtmp
reportcount  : <enabled>
  every       : 60 second(s)
  rate        : <enabled>
table        : wyy.lab_channel
table        : wyy.qrtz_cron_triggers
table        : wyy.qrtz_fired_triggers
table        : wyy.qrtz_scheduler_state
table        : wyy.qrtz_triggers
table        : wyy.lab_bank_record

2023-01-30 14:24:41 INFO OGG-10183 Parameter file
/ogg/ogg191/dirprm/extcsa.prm: Validity check: PASS.

Runtime parameter validation is not reflected in the above check.

```

---添加进程

```
add extract extcsa, tranlog, begin now, threads 2 --节点数
```

```
add exttrail ./dirdat/wl, extract extcsa, MEGABYTES 1024
```

---启动

```
GGSCI (oggmc) 7> start extcsa
```

```
Sending START request to MANAGER ...  
EXTRACT EXTCSA starting
```

查看

```
GGSCI (oggmc) 8> info all
```

Program	Status	Group	Lag at Chkpt	Time Since Chkpt
MANAGER	RUNNING			
EXTRACT	RUNNING	EXTCSA	00:00:00	00:00:25

4.5.2 集成模式(可选)

note: 推荐集成模式，性能更好，原理是整合 logminer，多租户环境只能用集成模式

数据库 stream 参数调整，一个进程建议 1.25g

```
alter system set streams_pool_size=10g;
```

---添加附加日志

```
dblogin userid=alias sdb  
add trandata wyw.*
```

---添加进程

```
ADD EXTRACT ie_e INTEGRATED TRANLOG BEGIN NOW  
ADD EXTTRAIL ./dirdat/ie EXTRACT ie_e MEGABYTES 1024
```

注册进程

```
dblogin useridalias sdb
REGISTER EXTRACT ie_e DATABASE
```

编辑参数

```
edit param ie_e

EXTRACT ie_e
USERIDALIAS sdb
LOGALLSUPCOLS
NOCOMPRESSUPDATES
UPDATERECORDFORMAT FULL
DBOPTIONS ALLOWUNUSEDCOLUMN
FETCHOPTIONS NOUSESNAPSHOT
GETTRUNCATES
EXTTRAIL ./dirdat/ie
DISCARDFILE ./dirrpt/ie_e.dsc, PURGE, MEGABYTES 1024
WARNLONGTRANS 1H, CHECKINTERVAL 5M
CACHEMGR CACHESIZE 1024MB, CACHEDIRECTORY ./dirtmp
REPORTCOUNT EVERY 60 SECONDS, RATE
table wyy.lab_channel;
table wyy.qrtz_cron_triggers;
table wyy.qrtz_fired_triggers;
table wyy.qrtz_scheduler_state;
table wyy.qrtz_triggers;
table wyy.lab_bank_record;
```

Note: 因为通过 logminer 挖掘日志，日志参数无需指定，可以利用参数配置 logminer 的并发数和内存大小

启动

```
start ie_e
```

查看

```
info all
```

4.6 配置 pump 进程

##如果 OGG 的 replicat 进程和抽取进程都在同一台，可以不需要配置这个 pump 进程

---编辑参数

```
edit param dpecs

EXTRACT dpecs
DISCARDFILE ./dirrpt/dpecs.dsc, APPEND, MEGABYTES 1024
RMTHOST 192.168.3.132, MGRPORT 7809
RMTTRAIL /ogg/ogg191/dirdat/rt
PASSTHRU
table wyy.lab_channel;
table wyy.qrtz_cron_triggers;
table wyy.qrtz_fired_triggers;
table wyy.qrtz_scheduler_state;
table wyy.qrtz_triggers;
table wyy.lab_bank_record;
```

---添加进程

```
add extract dpecs EXTTRAILSOURCE ./dirdat/wl
add rmttrail /ogg/ogg191/dirdat/rt extract dpecs MEGABYTES 1024
```

---启动进程

```
start dpecs
```

查看

```
info all
```

4.7 配置 replicat 进程

--添加数据库检查点表

```
GGSCI (oggmc) 1> dblogin useridalias tdb
Successfully logged into database.
```

```
GGSCI (oggmc as ggadmin@orallg) 2> add checkpointtable ggadmin.checkpoint
```

```
Successfully created checkpoint table ggadmin.checkpoint.
```

--编辑参数

```
edit param repcs

REPLICAT repcs
USERIDALIAS tdb
--REPEROR (DEFAULT, ABEND)
DISCARDFILE ./dirrpt/repcs.dsc, PURGE, MEGABYTES 1024
GETTRUNCATES
ALLOWNOOPUPDATES
REPORTCOUNT EVERY 60 SECONDS, RATE
DBOPTIONS ENABLE_INSTANTIATION_FILTERING
DBOPTIONS SUPPRESSTRIGGERS
MAP wyy.lab_channel, TARGET wyy.lab_channel;
MAP wyy.qrtz_cron_triggers, TARGET wyy.qrtz_cron_triggers;
MAP wyy.qrtz_fired_triggers, TARGET wyy.qrtz_fired_triggers;
MAP wyy.qrtz_scheduler_state, TARGET wyy.qrtz_scheduler_state;
MAP wyy.qrtz_triggers, TARGET wyy.qrtz_triggers;
MAP wyy.lab_bank_record, TARGET wyy.lab_bank_record;
```

---添加进程

```
ADD REPLICAT repcs EXTTRAIL /ogg/ogg191/dirdat/wl checkpointtable gg
admin.checkpoint
```

---查看

```
GGSCI (oggmc as ggadmin@ora11g) 5> info all
```

Program	Status	Group	Lag at Chkpt	Time Since Chkpt
MANAGER	RUNNING			
EXTRACT	RUNNING	EXTCSA	00:00:01	00:00:07
REPLICAT	STOPPED	REPCS	00:00:00	00:00:05

五、 OGG 同步设置

5.1 数据导出导入

---源库创建数据泵目录

```
$ sqlplus / as sysdba
SQL> create or replace directory expogg as '/backup/expdir';
SQL> grant read,write on directory expogg to public;
col owner for a15
col directory_name for a15
col directory_path for a25
select * from dba_directories where directory_name='EXPOGG';
```

OWNER	DIRECTORY_NAME	DIRECTORY_PATH
SYS	EXPOGG	/backup/expdir

---源库获取数据库当前 SCN

---查看数据中的交易

```
select s.sid,t.start_time,osuser o, username u,sa.sql_text
from v$session s, v$transaction t, dba_rollback_segs r, v$sqlarea sa
where s.taddr=t.addr and t.xidusn=r.segment_id(+)
and s.sql_address=sa.address(+);
```

在使用 DATAPUMP 工具导出前，需要在生产库确保 GoldenGate 抽取进程启动的时间点前的事务已经结束。确认长事务情况，可通过下述命令实现：

```
alter session set nls_date_format='yyyy-mm-dd hh24:mi:ss';
col event for a30
col OSUSER for a10
col USERNAME for a10
col PROGRAM for a35
SELECT          s.sid,s.serial#, s.status, s.username, t.start_time, s.WAIT_TIME,
s.osuser,  s.sql_id,  s.program, START_DATE FROM gv$session s,gv$transaction t
WHERE s.INST_ID=t.INST_ID and s.saddr=t.ses_addr order by  t.start_time desc;
```

---确保数据库中事物启动时间晚于 capture 进程启动时间

```
select start_time from gv$transaction where to_date(start_time, 'yyyy-mm-dd
hh24:mi:ss')<to_date('抽取进程启动时间', 'yyyy-mm-dd hh24:mi:ss');
```

---确认没有事务后(返回无记录)，立即查找 scn:

```
SQL>col GET_SYSTEM_CHANGE_NUMBER for 9999999999999999
SQL>select dbms_flashback.get_system_change_number from dual;
```

GET_SYSTEM_CHANGE_NUMBER

123231017915

---源库基于 SCN 号导出数据

--如果不需要 procedure, trigger, ref_constraint, job, statistics, package 这些可以进行排除

```
expdp \"/ as sysdba\" directory=expogg dumpfile=spa%U.dmp parallel=4
filesize=10G flashback_scn=123231017915 logfile=expspa.log
tables=wyy.lab_channel,wyy.qrtz_cron_triggers,wyy.qrtz_fired_triggers,wyy.qrtz_scheduler_state,wyy.qrtz_triggers,wyy.lab_bank_record job_name=expspa
exclude=procedure, trigger, ref_constraint, job, statistics, package
```

--在本地通过 dblink 去导出远程数据库

--本地库创建连接远程的 dblink

```
create public database link expnt connect to sysch identified by zhirongsu using
'bocpay' ;
```

```
select count(*) from dual@expnt;
```

```
COUNT(*)
```

```
-----
```

```
1
```

1 row selected.

```
$ expdp \"/ as sysdba\" directory=expogg dumpfile=bocpay%U.dmp job_name=expboc
logfile=expboc.log network_link=expnt
tables=wyy.lab_channel,wyy.qrtz_cron_triggers,wyy.qrtz_fired_triggers,wyy.qrtz_scheduler_state,wyy.qrtz_triggers,wyy.lab_bank_record compression=all
parallel=4 exclude=statistics, TRIGGER, REF_CONSTRAINT, QUEUE, package, procedure
```

5.2 目标库创建数据泵目录

```
SQL> create or replace directory impogg as '/backup/expdir' ;
```

```
SQL> grant read,write on directory impogg to public;
```

```
col owner for a15
```

```
col directory_name for a15
```

```
col directory_path for a25
```

```
select * from dba_directories where directory_name='IMPOGG' ;
```

5.3 目标库导入数据

-----一定要注意加 remap_schema, 指定要导入的 schemas

```
impdp \"/ as sysdba\" directory=impogg dumpfile=bocpay%U.dmp logfile=impogg.log  
parallel=4 job_name=impogg cluster=N
```

5.4 收集统计信息

```
[oracle@racdb1 backup]$ cat tjsxjogg.sh  
#!/bin/sh  
export ORACLE_SID=orallg  
export ORACLE_BASE=/u01/app/oracle/  
export ORACLE_HOME=/u01/app/oracle/product/11.2.0.4/dbhome_1  
$ORACLE_HOME/bin/sqlplus / as sysdba <<EOF > /backup/tjsxjogg.log  
SELECT TO_CHAR(SYSDATE, 'YYYY-MM-DD HH24:MI:SS') FROM DUAL;  
  
begin  
dbms_stats.gather_schema_stats(ownname=> 'WYY' ,  
cascade=> TRUE,  
estimate_percent=> null,  
degree=> 4,  
no_invalidate=> DBMS_STATS.AUTO_INVALIDATE,  
granularity=> 'AUTO',  
method_opt=> 'FOR ALL COLUMNS SIZE AUTO',  
options=> 'GATHER');  
end;  
/  
  
SELECT TO_CHAR(SYSDATE, 'YYYY-MM-DD HH24:MI:SS') FROM DUAL;  
exit;  
EOF
```

目标库匹配导入导出数据行数

```
[oracle@expdp]$ grep " rows" expogg0908.log |sort -n| awk '{print $4,$7,$8}'  
|awk -F "." '{print $2}'> /tmp/exp.a  
[oracle@expdp]$ grep " rows" impogg0908.log |sort -n| awk '{print  
$4,$7,$8}'|awk -F "." '{print $2}'> /tmp/imp.b  
[oracle@racdb1 expdp]$ diff /tmp/exp.a /tmp/imp.b #此时没有结果输出说明导  
入导出数据行数一致
```

禁用目标库约束

```
#参数 owner_list 里面的用户名请根据实际情况修改  
#禁用约束脚本如下：  
racdb1:/home/oracle/ogg$cat disable_cascade.sql  
  
set serveroutput on size 1000000  
spool /home/oracle/disable_cascade.log
```

```

define owner_list=" in ('WYY','OGGWS') "
declare
  cursor c is SELECT  A.OWNER, A.TABLE_NAME, A.CONSTRAINT_NAME, C.COLUMN_NAME,
A.STATUS, A.DELETE_RULE, B.TABLE_NAME REFER_TABLE
FROM    dba_CONSTRAINTS  A, dba_CONSTRAINTS  B, dba_CONS_COLUMNS  C
WHERE    A.R_CONSTRAINT_NAME=B.CONSTRAINT_NAME
AND      A.CONSTRAINT_NAME=C.CONSTRAINT_NAME
AND A.status ='ENABLED'
  AND A.delete_rule like '%CASCADE%'
  and A.owner &owner_list;
  temp varchar2(512);
begin
  dbms_output.put_line('-- BEGIN ALTER TABLE DISABBLE CASCADE --');
  dbms_output.put_line('-- WAIT FOR A MONENT --');
  dbms_output.put_line('--.....--');
  for x in c loop
    temp := 'ALTER TABLE "' || x.OWNER || '".' || x.TABLE_NAME || '"  DISABLE
CONSTRAINT "' || x.CONSTRAINT_NAME || '"';
    execute immediate temp;
    dbms_output.put_line('--DISABLE                                CONSTRAINT' ||
x.OWNER||'.' ||x.CONSTRAINT_NAME||' SUCCESSFUL--') ;
  end loop;
  dbms_output.put_line('-- END ALTER TABLE DISABBLE CASCADE --');
end;
/
spool off

```

禁用目标库触发器

#参数 owner_list 里面的用户名请根据实际情况修改

#禁用触发器脚本如下：

```
racdb1:/home/oracle/ogg$cat disable_trigger.sql
```

```
set serveroutput on size 1000000
```

```
spool /home/oracle/disable_trigger.log
```

```
define owner_list=" in ('WYY','OGGWS')"
```

```
declare
```

```
  cursor c is SELECT OWNER, TRIGGER_NAME FROM dba_triggers WHERE status ='ENABLED'
and owner &owner_list;
```

```
  temp varchar2(512);
```

```
begin
```

```
  dbms_output.put_line('-- BEGIN DISABBLE TRIGGERS --');
```

```
  dbms_output.put_line('-- WAIT FOR A MONENT --');
```

```
  dbms_output.put_line('--.....--');
```

```

for x in c loop
    temp := 'ALTER TRIGGER "' || x.OWNER || '"."' || x.TRIGGER_NAME || '" DISABLE';
    execute immediate temp;
    dbms_output.put_line('--DISABLE
TRIGGER' || x.OWNER || '."' || x.TRIGGER_NAME || '" SUCCESSFUL--') ;
end loop;
    dbms_output.put_line('-- END ALTER TABLE DISABBLE TRIGGERS --');
end;
/
spool off

```

禁用 job

```

conn oggsa/spaora
spool disable_job.sql
set pagesize 999;
select 'execute DBMS_IJOB.BROKEN(' || job || ',TRUE); commit;'
    from dba_jobs where BROKEN='N';
spool off

'EXECUTEDBMS_SCHEDULER.STOP_JOB(' || JOB_NAME || ');COMMIT;'
-----

execute DBMS_SCHEDULER.stop_job(QUEST_PPCM_JOB_PM_1); commit;
execute DBMS_SCHEDULER.stop_job(JOB_PLANDT_AUTOADD); commit;

```

--关闭 job

```

set echo off
set verify off
set feedback off
set pagesize 10000
set heading off
set lines 100
spool disable_job.sql
set pagesize 999;
set linesize 200;
set heading off;
select 'execute DBMS_IJOB.BROKEN(' || job || ',TRUE); commit;'
    from dba_jobs where BROKEN='N';
spool off
--关闭触发器
spool disable_triggers.sql
select 'alter trigger ' || owner || '."' || trigger_name || '" disable;'
    from dba_triggers where owner in ('WYY') and status='ENABLED'
    order by status,owner;
spool off

```

```
--禁用约束
spool disable_constraints1.sql
select  'alter    table    '||owner||'.'||table_name||'    disable    constraint
' ||constraint_name||';'
  from dba_constraints
      where constraint_type in ('R') and owner='WYY'
      order by status,owner;
spool off
```

5.5 开启同步

```
GGSCI (racdb1) 16>start repcs,aftercsn 123231017915

Sending START request to MANAGER ...
REPLICAT RPEE starting
```