工银投资数据库部署任务

总体任务分解

1. 数据库迁移到新环境数据库
2. 脚本迁移（需修改部分内容）
3. 脚本添加crontab任务，用于linux定时调度

数据库迁移到新环境数据库

> 先决条件：
> 数据库服务器安装好数据库并建立masdb为sid的实例及icbcamcdw为sid的实例，端口号都为默认端口号

方案一：使用已有数据库dmp文件进行升级（目前可提供4月15日对应的的dmp文件）

dmp文件路径

数据库	dmp文件	服务器	路径
masdb	masdb.dmp	76.236.161.34	/oracle/masdb.dmp
icbcamcdw	masdb.dmp	76.236.161.34	/oracle/icbcamcdw.dmp

1. 使用sftp工具将dmp文件传输到对应需要进行部署的服务器下，在传输前检查对应的数据库服务器的硬盘挂载信息，将dmp文件放置在较大的目录下。

> exp:
>
> ```
> df -h
> sftp 76.236.161.34
> cd /oracle
> put file.dmp
> ```

2. 查看当前服务器对应的默认sid，若非要进行导入的sid的数据库，需修改oracle用户目录下的`.profile`文件，修改为正确的进行导入。

> 1. 显示当前系统sid:
>
> ```
> echo $ORACLE_SID
> ```

2. 若要调整为管会系统，请编辑oracle目录下的.profile文件中以下内容调整为对应的结果

```
export ORACLE_SID=masdb
export ORACLE_SID=icbcamcdw
```

3. 编辑完成后用source命令使配置生效

```
source .profile
```

3. 在导入前需要进行system用户的激活，用于用户创建及数据导入

若system用户未激活，则激活system用户
在服务器系统中使用最大的数据库管理权限登陆sqlplus工具进行修改,并重置密码

```
sqlplus / as sysdba
alter user system account unlock;
alter user system identified by system123;
```

4. 添加用户

管会系统

```
-- Create the user
create user MAADMIN identified by maadmin profile > DEFAULT;
-- Grant/Revoke object privileges
grant read, write on directory SYS.DPDATA1 to MAADMIN;
grant execute on SYS.SYS_PLSQL_EC6BF05F_637_1 to > MAADMIN with grant
option;
-- Grant/Revoke role privileges
grant connect to MAADMIN;
-- 创建用户语句
grant resource to MAADMIN;
-- Grant/Revoke system privileges
grant create database link to MAADMIN;
grant create procedure to MAADMIN;
grant create sequence to MAADMIN;
grant create session to MAADMIN;
grant create table to MAADMIN;
grant debug any procedure to MAADMIN;
grant debug connect session to MAADMIN;
grant select any table to MAADMIN;
grant unlimited tablespace to MAADMIN;

-- Create the user
```

```
create user MAETL  iendtified by maetl profile DEFAULT;
-- Grant/Revoke role privileges
grant connect to MAETL  ;
grant resource to MAETL  ;
-- Grant/Revoke system privileges
grant create database link to MAETL  ;
grant create procedure to MAETL  ;
grant create sequence to MAETL  ;
grant create session to MAETL  ;
grant create table to MAETL  ;
grant debug any procedure to MAETL  ;
grant debug connect session to MAETL  ;
grant select any table to MAETL  ;
grant unlimited tablespace to MAETL  ;
```

数仓系统

```
-- Create the user
create user ETL_CONTROL  identified by oracle
  default tablespace USERS
  temporary tablespace TEMP
  profile DEFAULT;
-- Grant/Revoke role privileges
grant connect to ETL_CONTROL;
grant dba to ETL_CONTROL;
grant resource to ETL_CONTROL;
-- Grant/Revoke system privileges
grant create procedure to ETL_CONTROL;
grant create sequence to ETL_CONTROL;
grant create session to ETL_CONTROL;
grant create table to ETL_CONTROL;
grant debug any procedure to ETL_CONTROL;
grant debug connect session to ETL_CONTROL;
grant execute any procedure to ETL_CONTROL;
grant select any table to ETL_CONTROL with admin > option;
grant unlimited tablespace to ETL_CONTROL;

-- Create the user
create user SRC_LAYER  identified by oracle
  default tablespace USERS
  temporary tablespace TEMP
  profile DEFAULT;
-- Grant/Revoke role privileges
grant connect to SRC_LAYER;
grant dba to SRC_LAYER;
grant resource to SRC_LAYER;
-- Grant/Revoke system privileges
grant create procedure to SRC_LAYER;
grant create sequence to SRC_LAYER;
grant create session to SRC_LAYER;
grant create table to SRC_LAYER;
```

```
grant debug any procedure to SRC_LAYER;
grant debug connect session to SRC_LAYER;
grant select any table to SRC_LAYER with admin option;
grant unlimited tablespace to SRC_LAYER;

-- Create the user
create user STD_LAYER  identified by oracle
  default tablespace USERS
  temporary tablespace TEMP
  profile DEFAULT;
-- Grant/Revoke role privileges
grant connect to STD_LAYER;
grant dba to STD_LAYER;
grant resource to STD_LAYER;
-- Grant/Revoke system privileges
grant create procedure to STD_LAYER;
grant create sequence to STD_LAYER;
grant create session to STD_LAYER;
grant create table to STD_LAYER;
grant debug any procedure to STD_LAYER;
grant debug connect session to STD_LAYER;
grant select any table to STD_LAYER with admin option;
grant unlimited tablespace to STD_LAYER;

-- Create the user
create user EXT_LAYER  identified by oracle
  default tablespace USERS
  temporary tablespace TEMP
  profile DEFAULT;
-- Grant/Revoke role privileges
grant connect to EXT_LAYER;
grant dba to EXT_LAYER;
grant resource to EXT_LAYER;
-- Grant/Revoke system privileges
grant create procedure to EXT_LAYER;
grant create sequence to EXT_LAYER;
grant create session to EXT_LAYER;
grant create table to EXT_LAYER;
grant debug any procedure to EXT_LAYER;
grant debug connect session to EXT_LAYER;
grant select any table to EXT_LAYER with admin option;
grant unlimited tablespace to EXT_LAYER;
```

5. 导入数据

> 说明

- 导入仅可对当期sid的数据库实例进行导入，若要导入其他的数据库实例则需重复之前的步骤切换默认sid
- 由于特定脚本在调用时使用的是管会系统的数据库实例，故在全部导入完成后需调整服务器默认sid为`masdb`

> 导入步骤

1. 进入之前通过sftp传输的dmp文件目录
2. 执行导入命令，将schema导入，以下是masdb的例子，导入maadmin,maetl
   example：

```
imp system/system123 fromuser=maadmin,maetl touser=maadmin,maetl
file=masdb.dmp log=imp.log
```

3. 以下是icbcamcdw的例子
   example：

```
imp system/system123 fromuser=ETL_CONTROL,SRC_LAYER,STD_LAYER,EXT_LAYER
touser=ETL_CONTROL,SRC_LAYER,STD_LAYER,EXT_LAYER file=icbcamcdw.dmp
log=impicbcamcdw.log
```

> 以上任务完成检查log无错误即完成数据库对应的迁移工作，若出现了导入问题，则删除用户再进行重新导入,以下为删除示例：
> **example：**

```
drop user ETL_CONTROL cascade;
drop user SRC_LAYER cascade;
drop user STD_LAYER cascade;
drop user EXT_LAYER cascade;
```

方案二：若需进行重新导入，于方案一前需进行源库的导出步骤，导出完成后按照方案一继续进行即可

导出步骤示例如下：
example：

```
exp system/manager@masdb owner=maadmin,maetl file=masdb.dmp log=log.log
```

```
exp system/oracle@icbcamcdw owner=ETL_CONTROL,SRC_LAYER,STD_LAYER,EXT_LAYER
file=icbcamcdw.dmp log=icbcamcdw.log
```

脚本迁移

将对应的根目录oracle文件夹下的dw-data，ma-data，ma-untility文件夹迁移到新环境下的对应oracle目录下，修改以下文件中的ip地址（已标注行号）

> 迁移脚本相关的文件

```
环境文件\dw-data\cron.sh:
  8: thisresult=`sqlplus etl_control/oracle@82.211.15.106:1521/ICBCAMCDW<<EOF

环境文件\dw-data\startDwDailyEtl.sh:
   8: thisresult=`sqlplus etl_control/oracle@82.211.15.106:1521/ICBCAMCDW<<EOF
  56: sqlplus etl_control/oracle@82.211.15.106:1521/ICBCAMCDW<<EOF
  64: sqlplus etl_control/oracle@82.211.15.106:1521/ICBCAMCDW<<EOF

环境文件\dw-data\startDwEtlOnDate.sh:
  6: dwip=82.211.15.106
  7: maip=82.211.15.106

环境文件\dw-data\test.sh:
  6: dwip=82.211.15.106
  7: maip=82.211.15.106

环境文件\ma-data\startMaEtl_Wind_onDate.sh:
  7: dwip=82.211.15.106
  9: maip=82.211.15.106

环境文件\ma-data\startMaEtl.sh:
  7: dwip=82.211.15.106
  9: maip=82.211.15.106

环境文件\ma-data\test.sh:
  7: dwip=82.211.15.106
  9: maip=82.211.15.106
```

脚本添加crontab任务，用于linux定时调度

> 使用命令对linux进行定时调度的调整

- 检查`crontab`任务

```
crontab -l
```

- 编辑`crontab`任务,编辑完成`wq`保存

```
crontab -e
```

- 需添加的定时调度任务

```
# 2 AM : Daily process for DW
0 2 * * * /bin/sh /oracle/dw-data/cron.sh > /oracle/dw-data/cron.log
# 3 AM : Daily ETL,Wind IRC to MA system
0 3 * * * /bin/sh /oracle/ma-data/startMaEtl_Wind_onDate.sh > /oracle/ma-
```

```
data/cron.sh
# 4 AM : Daily Batch process
0 4 * * * /bin/sh /oracle/ma_utility/execute_daily.sh >
/oracle/ma_utility/cron.log
```