

1. 前提条件

- informix 在 exBase 的连接用户需要有相应的权限
- 需要在目标库 PG/Atlasdb/Vastbase 创建增量相关表。见脚本 “informix_pg_正向 pg.sql”，可在同目录 sql 文件夹中获取。

informix_pg_正向 pg.sql 脚本:

```
drop table if exists public.kafkaoffset;  
create table public.kafkaoffset (  
    jobid varchar (128) primary key,  
    topic varchar (64),  
    lastoffset bigint,  
    lastsuboffset bigint,  
    last_scn_number bigint,  
    scnnumber bigint,  
    transaction_id text,  
    applytime timestamp,  
    updatetime timestamp,  
    commitposition text  
);
```

2. 开启 informix cdc

1、查看数据库是否存在 syscdcv1 库，如不存在，找到 syscdcv1.sql 文件，切换 informix 所在的用户执行它。执行完毕可看到库已经生成。

命令: dbaccess [随便一个已存在的库名] [syscdcv1.sql 文件]

```
[root@ad745aadd668 ~]# find / -name syscdcv1.sql  
/opt/informix/etc/syscdcv1.sql  
[root@ad745aadd668 ~]# su - informix  
Last login: Thu Sep 1 00:28:49 EDT 2022  
[informix@ad745aadd668 ~]$ dbaccess sysmaster /opt/informix/etc/syscdcv1.sql
```

如出现如下执行失败的情况，可检查该文件及其父文件夹是否归属于 informix 用户，更改属主后再执行即可成功。

```
[informix@localhost ~]$ dbaccess test_cdc /home/opt/informix/etc/syscdcv1.sql  
Database selected.  
  
802: Cannot open file for run.  
Database closed.
```

2、切换到 informix 用户，设置环境字符集

命令：export DB_LOCALE=zh_CN.GB18030-2000

export CLIENT_LOCALE=zh_CN.GB18030-2000

```
[root@localhost ~]# su - informix
Last login: Thu Sep 15 14:59:20 CST 2022 on pts/5
[informix@localhost ~]$ export DB_LOCALE=zh_CN.GB18030-2000
[informix@localhost ~]$ export CLIENT_LOCALE=zh_CN.GB18030-2000
[informix@localhost ~]$
```

3、开启 cdc 的数据库日志模式为 U

命令：ontape -s -U [库名]

需要开启 cdc 的数据库日志备份为 U 或 B，中途需选择备份级别

```
[informix@ad745aadd668 ~]$ ontape -s -U test_cdc
Please enter the level of archive to be performed (0, 1, or 2) 0
Please mount tape 1 on /dev/tapedev and press Return to continue ...
could not write archive tape.
```

如出现 could not write archive tape 异常，则需给上述报错中的文件赋 777 权限，并更改属主为 informix 所在用户，再次执行即可成功。

```
[informix@ad745aadd668 ~]$ exit
logout
[root@ad745aadd668 /]# find / -name tapedev
[root@ad745aadd668 /]# touch /dev/tapedev
[root@ad745aadd668 /]# chmod 777 /dev/tapedev
[root@ad745aadd668 /]# chown -R informix:informix /dev/tapedev
[root@ad745aadd668 /]# su - informix
Last login: Thu Sep 1 02:57:17 EDT 2022
[informix@ad745aadd668 ~]$ ontape -s -U test_cdc
Please enter the level of archive to be performed (0, 1, or 2) 0
Please mount tape 1 on /dev/tapedev and press Return to continue ...
10 percent done.
100 percent done.
Read/Write End Of Medium enabled: blocks = 605
Please label this tape as number 1 in the arc tape sequence.
This tape contains the following logical logs:
4
Program over.
[informix@ad745aadd668 ~]$
```

如出现如下图所示 archive to tape device '/dev/null'，代表备份失败，此时应切换回 root 用户，修改配置文件参数后再行尝试（如下图 2）。

```
[informix@localhost data]$ ontape -s -U test_incre2
Archive to tape device '/dev/null' is complete.
Program over.
[informix@localhost data]$
```

```
#####
# ontape Tape Device Configuration Parameters
#####
# TAPEDEV      - The tape device path for backups. To use standard
#                I/O instead of a device, set to STDIO.
# TAPEBLK      - The tape block size, in KB, for backups
# TAPESIZE     - The maximum amount of data to put on one backup
#                tape. Acceptable values are 0 (unlimited) or any
#                positive integral multiple of TAPEBLK.
#####
TAPEDEV /dev/null
#TAPEDEV /dev/tapedev
TAPEBLK 32
TAPESIZE 0
```

← 注释的要换回来

如出现如下图所示 could not fork server connection, 需重新执行步骤 2, 为环境指定字符集。

```
[informix@localhost ~]$ ontape -s -U test_zq
could not fork server connection, SQLCODE -23101
Program over.
```

如出现如下图所示 iserrno 107 错误, 需使数据库暂时脱机, 执行命令后再打开。

命令: onmode -u 清除连接 session, 进入 quiescent mode

命令: ontape -S -U test_zq 修改 test_zq 的日志模式为 U

命令: onmode-m 切回到联机模式

```
[informix@localhost ~]$ ontape -s -U test_zq
Please enter the level of archive to be performed (0, 1, or 2) 0
Archive failed - Error changing logging status - 'test_zq'. iserrno 107.
Program over.
```

4、酌情添加逻辑日志, 每次最多添加 1g, 图示为添加 5g, 即执行 5 次命令

命令: onparams -a -d logdbs -s [空间大小]

```
[informix@ad745aadd668 data]$ onparams -a -d logdbs -s 1000000
Log operation started. To monitor progress, use the onstat -l command.
Logical log successfully added.
[informix@ad745aadd668 data]$ ^C
[informix@ad745aadd668 data]$ onparams -a -d logdbs -s 1000000
Log operation started. To monitor progress, use the onstat -l command.
Logical log successfully added.
[informix@ad745aadd668 data]$ onparams -a -d logdbs -s 1000000
Log operation started. To monitor progress, use the onstat -l command.
Logical log successfully added.
[informix@ad745aadd668 data]$ onparams -a -d logdbs -s 1000000
Log operation started. To monitor progress, use the onstat -l command.
Logical log successfully added.
[informix@ad745aadd668 data]$ onparams -a -d logdbs -s 1000000
Log operation started. To monitor progress, use the onstat -l command.
Logical log successfully added.
[informix@ad745aadd668 data]$
```


执行 onstat -l 命令查看添加成功

```
[informix@ad745aadd668 data]$ onstat -l

IBM Informix Dynamic Server Version 11.70.UC8 -- On-Line -- Up 00:35:41 -- 152556 Kbytes

Physical Logging
Buffer bufused bufsize numpages numwrits pages/io
P-1 0 64 73 11 6.64
    phybegin physize phypos phyused %used
    1:263 25000 2247 0 0.00

Logical Logging
Buffer bufused bufsize numrecs numpages numwrits recs/pages pages/io
L-2 0 32 424 86 73 4.9 1.2
    Subsystem numrecs Log Space used
    OLDRSAM 409 62908
    HA 15 880

address number flags uniqid begin size used %used
4af93530 1 U---C-L 13 1:25263 5000 77 1.54
4af93578 2 U----- 8 1:30263 5000 15 0.30
4af935c0 3 U----- 9 1:35263 5000 1 0.02
4af93608 4 U----- 10 1:40263 5000 1 0.02
4af93650 5 U----- 11 1:45263 5000 1 0.02
4af93698 6 U----- 12 1:50263 5000 3 0.06
4ca4afd0 7 A----- 0 2:53 500000 0 0.00
4ca7cf68 8 A----- 0 2:500053 500000 0 0.00
4ca3ef50 9 A----- 0 2:1000053 500000 0 0.00
4ca7cfb0 10 A----- 0 2:1500053 500000 0 0.00
4ca3ef98 11 A----- 0 2:2000053 500000 0 0.00
11 active, 11 total
```