

使用 PRM 恢复受损的 Oracle 数据表的几个例子

实例 1 在无备份情况下，模拟一张 Table 的 Segment Header 在磁盘 Disk 上物理受损导致 ORACLE 无法读取：

```
SQL> create table prm_test tablespace users as select * from dba_objects;
```

Table created.

```
SQL> alter system checkpoint;
```

System altered.

```
SQL> select count(*) from prm_test;
```

```
      COUNT(*)
-----
          77940
```

```
SQL>
```

```
SQL> select header_file,header_block from dba_segments where segment_name='PRM_TEST';
```

```
HEADER_FILE HEADER_BLOCK
-----
              4          1298483
```

```
SQL> select name from v$datafile where file#=4;
```

```
NAME
-----
/s01/oradata/G10R25/datafile/o1_mf_users_8nx5srgb_.dbf
```

```
BBED> set mode edit
```

```
      MODE              Edit
```

```
BBED> set blocksize 8192
```

```
'/s01/oradata/G10R25/datafile/o1_mf_users_8nx5srgb_.dbf'
```

```
SQL> alter session set events '10231 trace name context forever ,level 10';
```

Session altered.

```
SQL> select count(*) from prm_test;
```

```
select count(*) from prm_test
```

```
*
```

ERROR at line 1:

ORA-01578: ORACLE data block corrupted (file # 4, block # 1298483)

ORA-01110: data file 4:

'/s01/oradata/G10R25/datafile/o1_mf_users_8nx5srgb_.dbf'

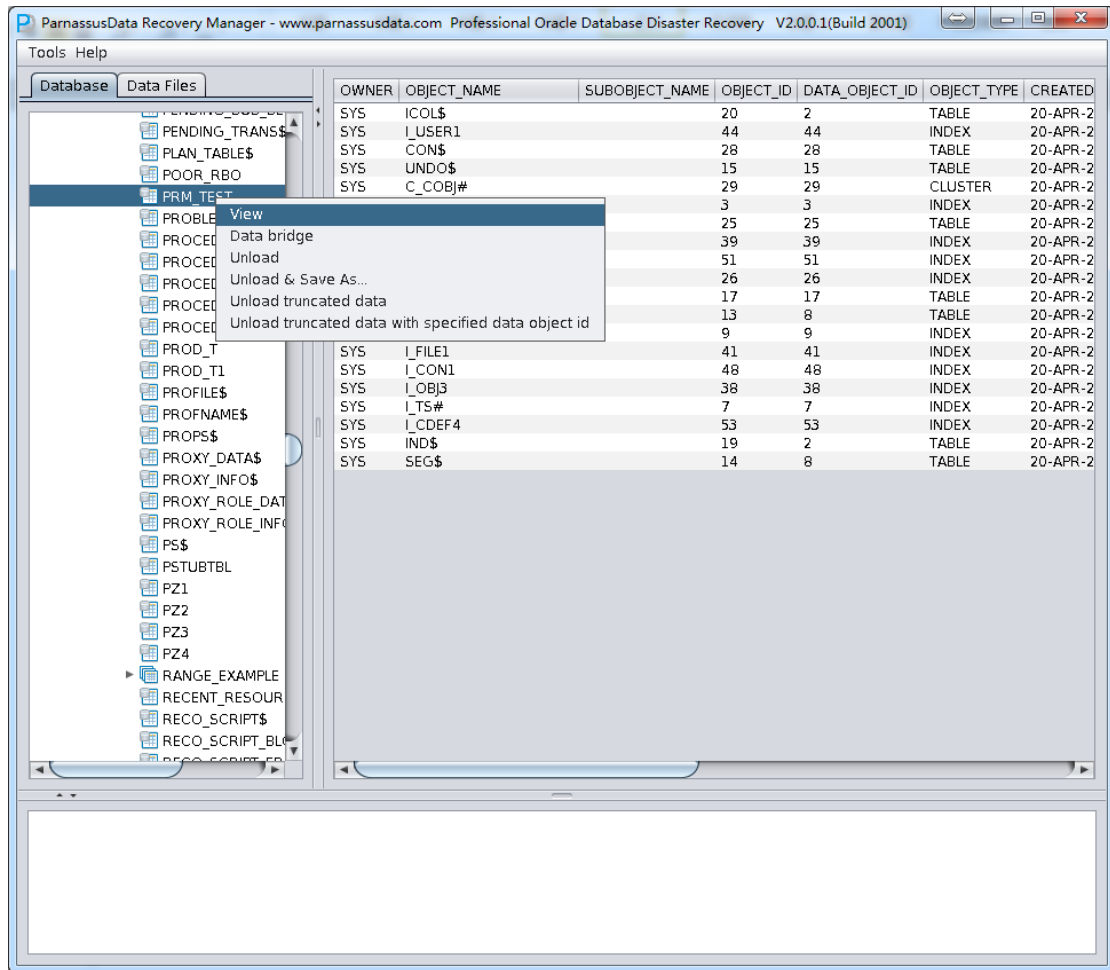
此时启动 PRM

```
./prm.sh
```

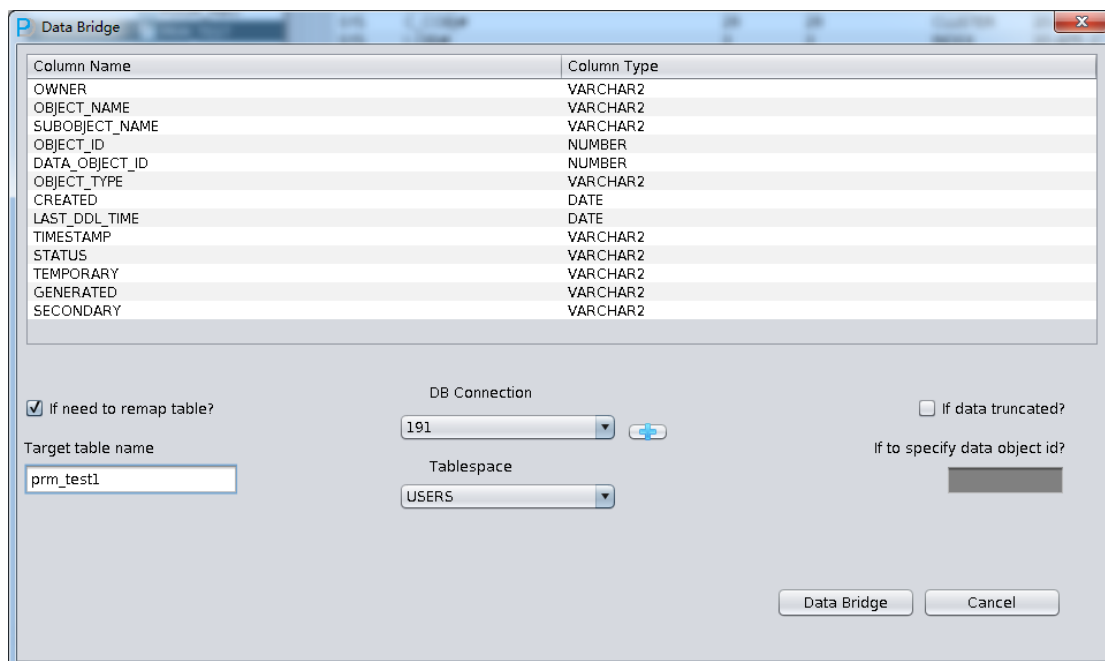
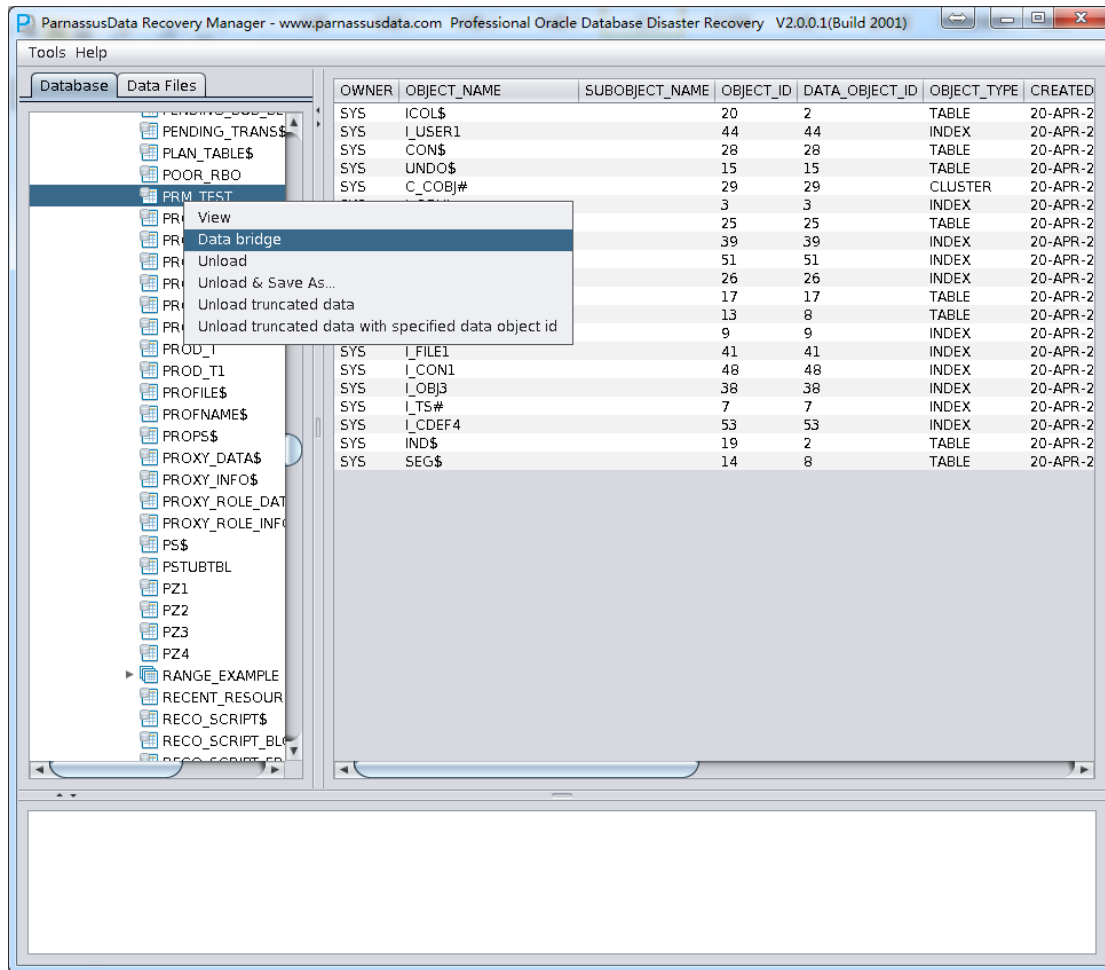
Recovery Wizard 恢复向导 => 字典模式 Dictionary Mode,如果是 ASM 存储则选择 Dictionary Mode(ASM) => 输入数据文件至少要 SYSTEM.DBF 和数据存在的数据文件, 点击 Load

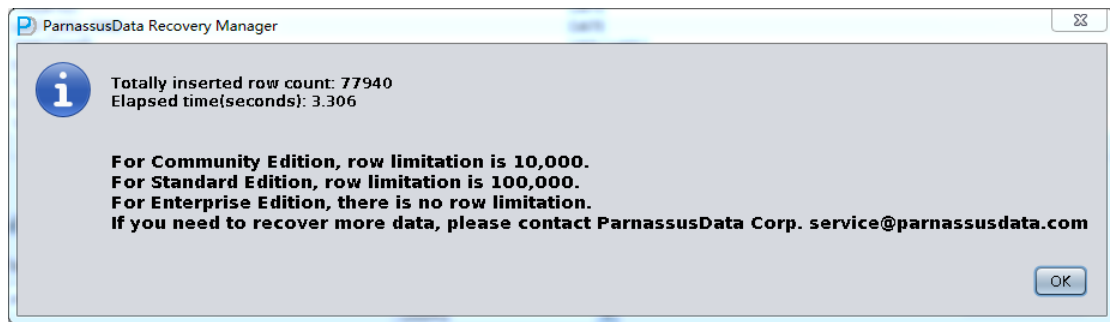
注意 AIX HPUX Sparc Solaris 等 Unix 平台要选择 Big Endian
而 Linux, Windows,X86 Solaris 要选择 Little Endian

从树形图中找到你要的表, 双击或者右键后点击 View



可以看到 PRM 正确读取了表的数据，之后推荐使用数据搭桥模式将数据传送到你想要的地方，即右击 **DataBridge** 并填入必要的连接信息，之后点击 **DataBridge**





如上图所示成功捞取出全部的 77940 条数据。

实例 2 在非归档模式下，一个数据文件被 OFFLINE，且相关 redo log 均已经被切换覆盖，此时常规方法无论如何无法将数据文件 ONLINE 了，其中的数据也就被锁死了。

```
SQL> archive log list
Database log mode          No Archive Mode
Automatic archival         Disabled
Archive destination        /s01/arch
Oldest online log sequence 343
Current log sequence        348
```

```
SQL> select file_name,file_id from dba_data_files where tablespace_name='TBS5';
```

| FILE_NAME | FILE_ID |
|-----------------------------------|---------|
| /oracleasm/TBS5.256.844175363.dbf | 6 |

```
SQL> alter database datafile 6 offline drop;
```

Database altered.

```
SQL> alter system switch logfile;
```

System altered.

```
SQL> /
```

System altered.

SQL> /

System altered.

SQL> /

System altered.

SQL> /

System altered.

SQL> /

System altered.

SQL> recover datafile 6;

ORA-00279: change 34421776 generated at 04/19/2014 19:33:32 needed for thread 1

ORA-00289: suggestion : /s01/arch/1_354_831398352.dbf

ORA-00280: change 34421776 for thread 1 is in sequence #354

Specify log: {<RET>=suggested | filename | AUTO | CANCEL}

cancel

Media recovery cancelled.

[oracle@vrh8 ~]\$ rman target /

Recovery Manager: Release 10.2.0.5.0 - Production on Sat Apr 19 19:49:22 2014

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connected to target database: G10R25 (DBID=2696593743)

RMAN> recover datafile 6;

Starting recover at 19-APR-14

using target database control file instead of recovery catalog

allocated channel: ORA_DISK_1

channel ORA_DISK_1: sid=147 devtype=DISK

starting media recovery

unable to find archive log

archive log thread=1 sequence=354

RMAN-00571: =====

RMAN-00569: ===== ERROR MESSAGE STACK FOLLOWS =====

RMAN-00571: =====

RMAN-03002: failure of recover command at 04/19/2014 19:49:29

RMAN-06054: media recovery requesting unknown log: thread 1 seq 354 lowscn 34421776

此时可以利用 PRM 将无法 ONLINE 的数据文件中的数据全部恢复出来：

```
SQL> select OWNER,SEGMENT_NAME,SEGMENT_TYPE from dba_segments where  
tablespace_name='TBS5';
```

| OWNER | SEGMENT_NAME | SEGMENT_TYPE |
|-------|----------------------------------|--------------|
| SYS | VVVV | TABLE |
| SYS | AVE2 | TABLE |
| SYS | AVE | TABLE |
| SYS | ATEST1 | TABLE |
| SYS | BIN\$2KcAMnnvGg/gQKjAvwEbRg==\$0 | TABLE |
| 胡 | TAB1 | TABLE |

此时启动 PRM

./prm.sh

Recovery Wizard 恢复向导 => 字典模式 Dictionary Mode,如果是 ASM 存储则选择 Dictionary Mode(ASM) => 输入数据文件至少要 SYSTEM.DBF 和 DATAFILE 6(即 OFFLINE 后无法 ONLINE 的数据文件)，点击 Load

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