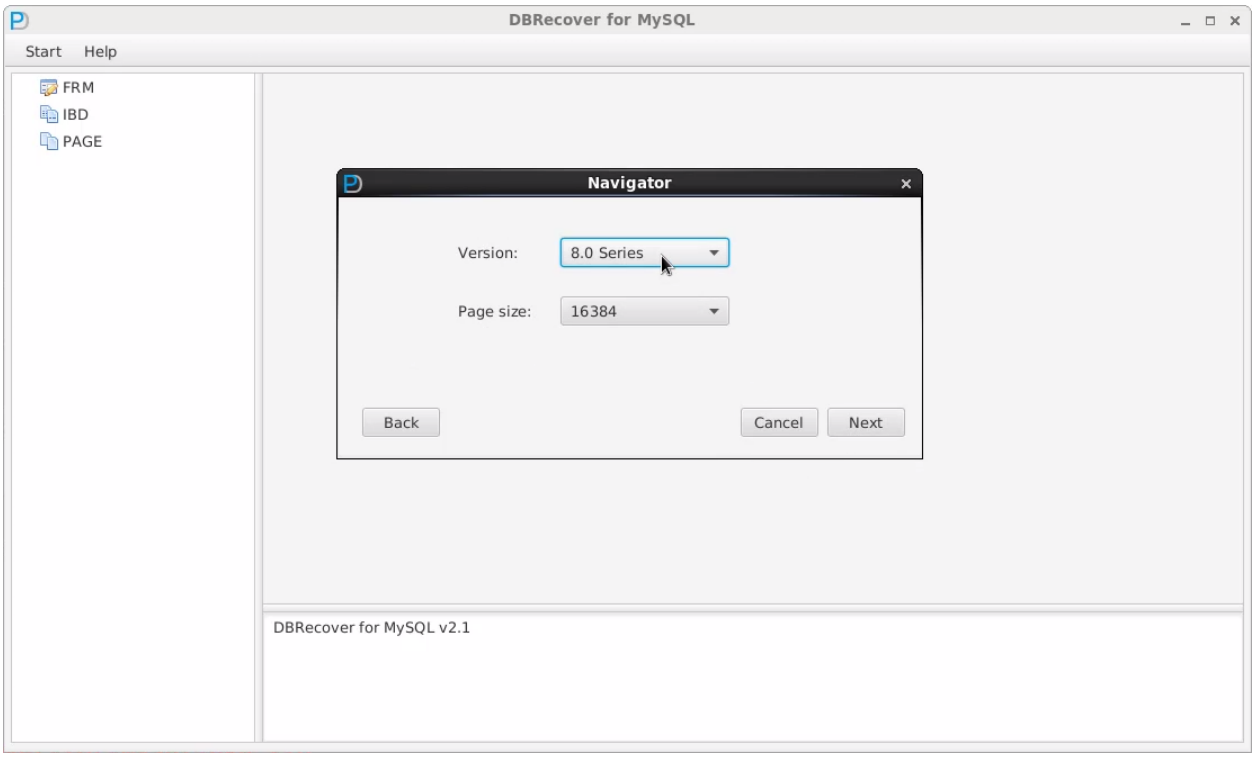
DBRECOVER FOR MYSQL User Guide

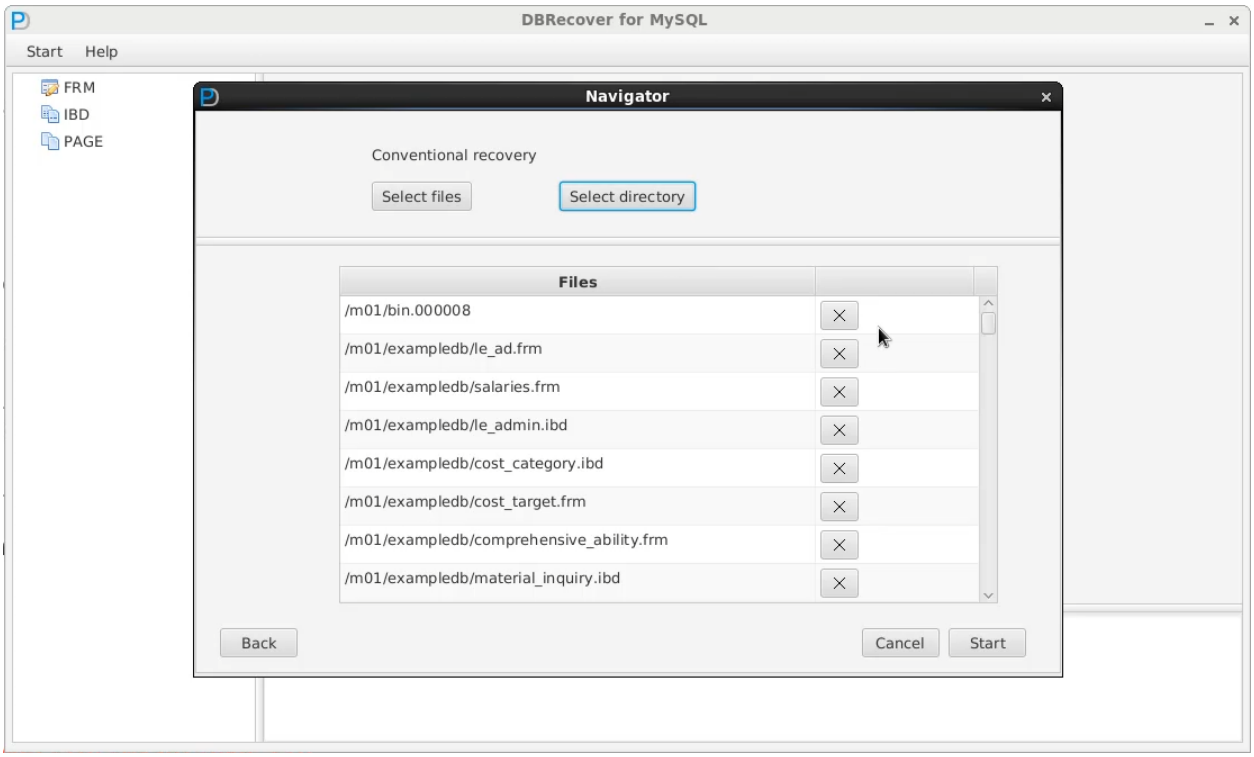
DBRECOVER FOR MYSQL is a MySQL database (InnoDB) recovery tool. It can recover database data in scenarios where there is no backup, such as instance crashes, corrupted InnoDB dictionaries preventing database startup, DROP DATABASE, DROP TABLE, TRUNCATE TABLE, DELETE TABLE, and disk or file system damage.

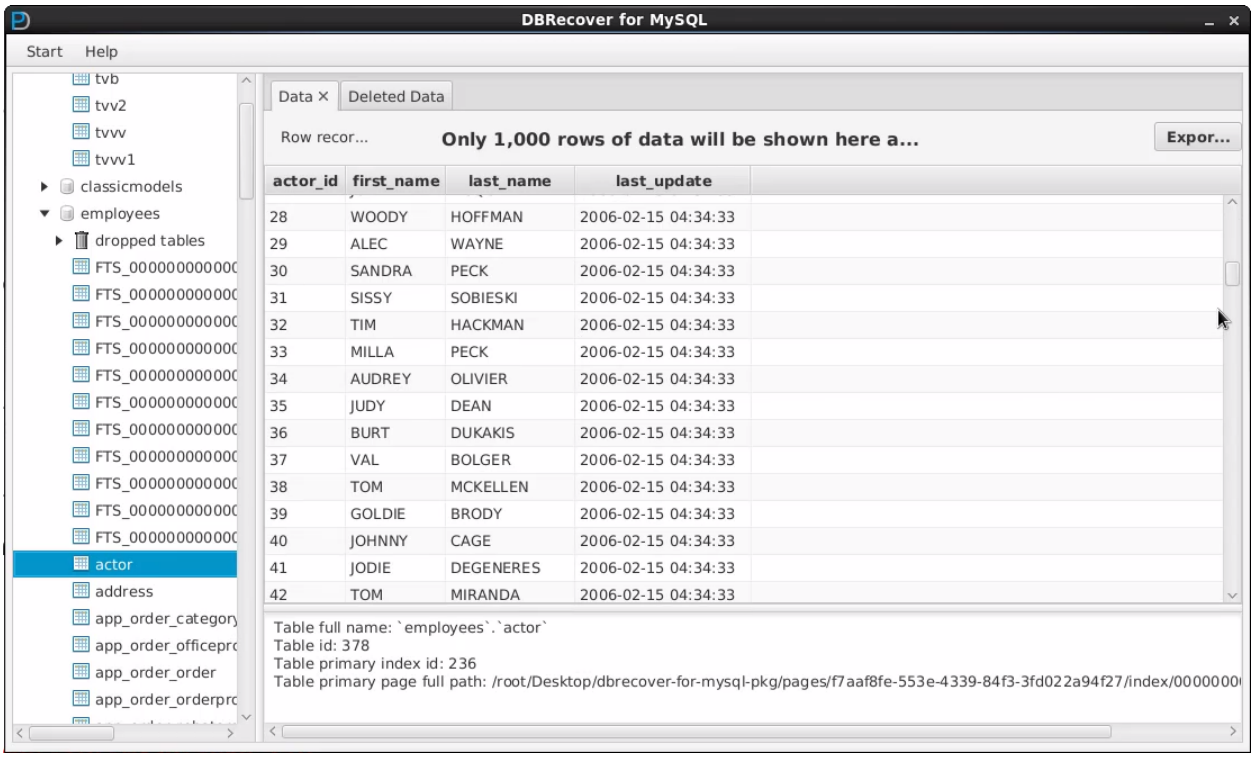
Features:

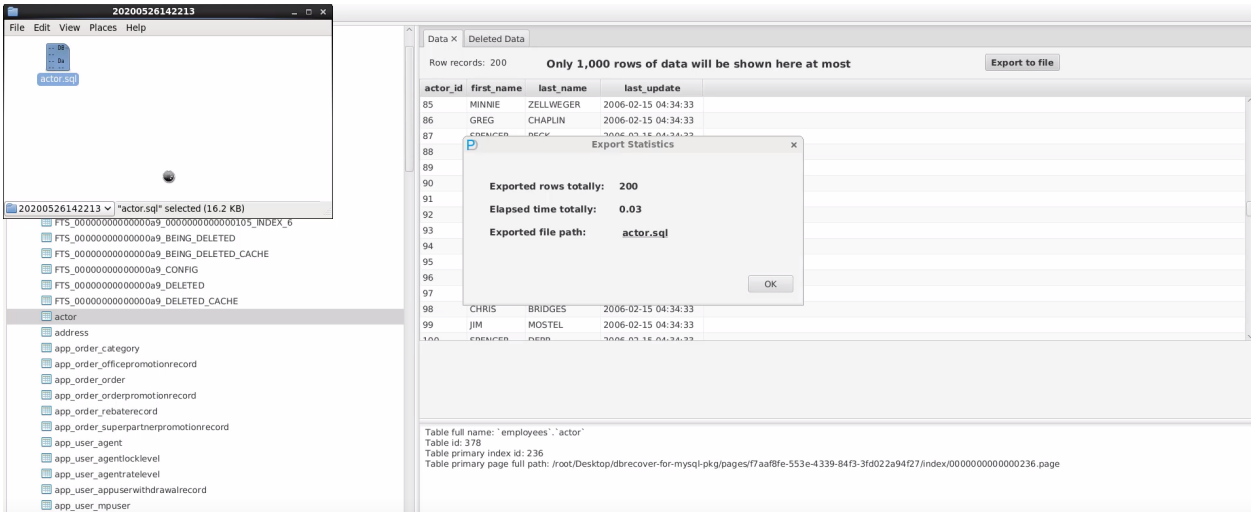
- Graphical user interface, no need to learn command line.
- Supports MySQL versions from 5.1 to 8.0, including the new data dictionary structure in MySQL 8.0.
- Supports INNODB storage engine.
- Capable of data recovery in various MySQL instance failure scenarios.
- Recovery results in MYSQLDUMP format SQL files.
- Supports recovery of rows deleted with the DELETE command.
- Supports table recovery from DROP TABLE and TRUNCATE TABLE commands.
- Supports database recovery from DROP DATABASE operations.
- Capable of recovery in cases of disk failure or file system damage.
- The free version allows extracting up to 1000 rows per table, and 100 rows of data deleted using the DELETE command.
- Developed in Java, supports operating systems like Windows, Redhat, Centos, Ubuntu.
- Supports recovery of FRM files by converting them into CREATE TABLE SQL statements.

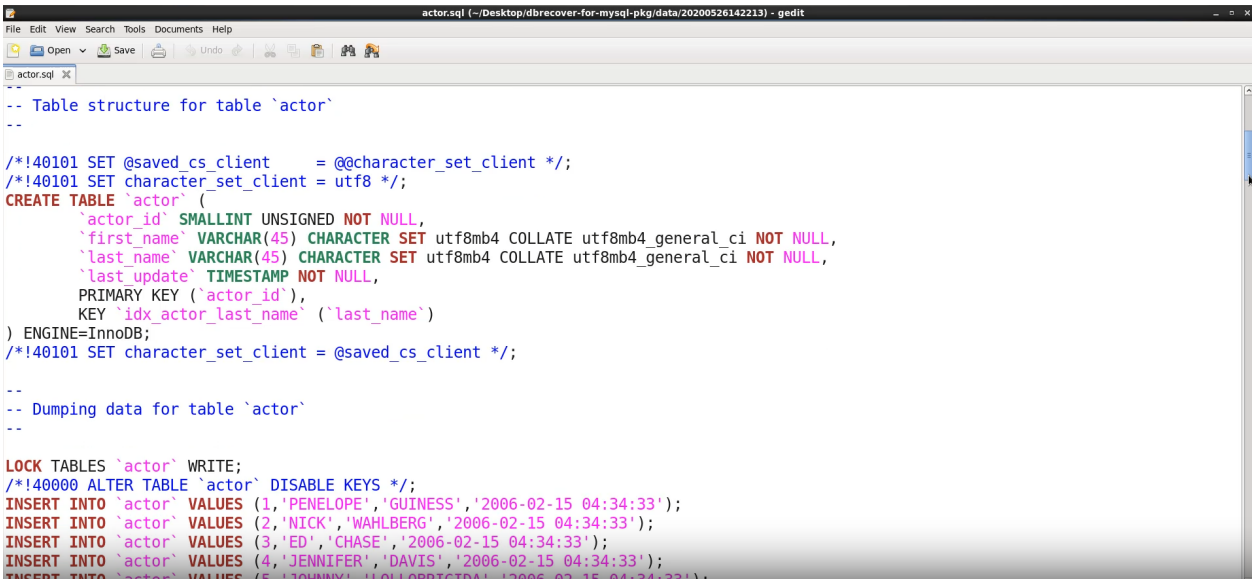
- Supports recovery of large objects like LOB/TEXT.


DBRecover for MySQL
Start
Help
FRM
IBD
PAGE
Navigator
Version:
8.0 Series
Page size:
16384
Back
Cancel
Next
DBRecover for MySQL v2.1


DBRecover for MySQL
Start
Help
FRM
IBD
PAGE
Navigator
Conventional recovery
Select files
Select directory
Files
/m01/bin.000008
/m01/exampledb/le_ad.frm
/m01/exampledb/salaries.frm
/m01/exampledb/le_admin.ibd
/m01/exampledb/cost_category.ibd
/m01/exampledb/cost_target.frm
/m01/exampledb/comprehensive_ability.frm
/m01/exampledb/material_inquiry.ibd
Back
Cancel
Start


DBRecover for MySQL
Start
Help
Data ×
Deleted Data
Row recor...
Only 1,000 rows of data will be shown here a...
Expor...
actor_id
first_name
last_name
last_update
28 WOODY HOFFMAN 2006-02-15 04:34:33
29 ALEC WAYNE 2006-02-15 04:34:33
30 SANDRA PECK 2006-02-15 04:34:33
31 SISSY SOBIESKI 2006-02-15 04:34:33
32 TIM HACKMAN 2006-02-15 04:34:33
33 MILLA PECK 2006-02-15 04:34:33
34 AUDREY OLIVIER 2006-02-15 04:34:33
35 JUDY DEAN 2006-02-15 04:34:33
36 BURT DUKAKIS 2006-02-15 04:34:33
37 VAL BOLGER 2006-02-15 04:34:33
38 TOM MCKELLEN 2006-02-15 04:34:33
39 GOLDIE BRODY 2006-02-15 04:34:33
40 JOHNNY CAGE 2006-02-15 04:34:33
41 JODIE DEGENERES 2006-02-15 04:34:33
42 TOM MIRANDA 2006-02-15 04:34:33
tvb
tvv2
tvvv
tvvv1
classicmodels
employees
dropped tables
actor
address
app_order_category
app_order_officepro
app_order_order
app_order_orderpro
Table full name: `employees`.`actor`
Table id: 378
Table primary index id: 236
Table primary page full path: /root/Desktop/dbrecover-for-mysql-pkg/pages/f7aaf8fe-553e-4339-84f3-3fd022a94f27/index/0000000


20200526142213
File Edit View Places Help
actor.sql
20200526142213 "actor.sql" selected (16.2 KB)
Data ×
Deleted Data
Row records: 200
Only 1,000 rows of data will be shown here at most
Export to file
actor_id
first_name
last_name
last_update
85 MINNIE ZELLWEGER 2006-02-15 04:34:33
86 GREG CHAPLIN 2006-02-15 04:34:33
98 CHRIS BRIDGES 2006-02-15 04:34:33
99 JIM MOSTEL 2006-02-15 04:34:33
Export Statistics
Exported rows totally: 200
Elapsed time totally: 0.03
Exported file path: actor.sql
OK
actor
address
app_order_category
app_order_officepromotionrecord
app_order_order
app_order_orderpromotionrecord
app_order_rebaterecord
app_order_superpartnerpromotionrecord
app_user_agent
app_user_agentlocklevel
app_user_agentratelevel
app_user_appuserwithdrawalrecord
app_user_mpuser
Table full name: `employees`.`actor`
Table id: 378
Table primary index id: 236
Table primary page full path: /root/Desktop/dbrecover-for-mysql-pkg/pages/f7aaf8fe-553e-4339-84f3-3fd022a94f27/index/0000000000000236.page




```
mysql -uroot -p < actor.sql
Enter password: ********
```

```
mysql -uroot -p
Enter password: ********
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.14 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use  employees;
Database changed

mysql> select count(*) from actor;
+----------+
| count(*) |
+----------+
|     200|
+----------+
1 row in set (0.00 sec)
```
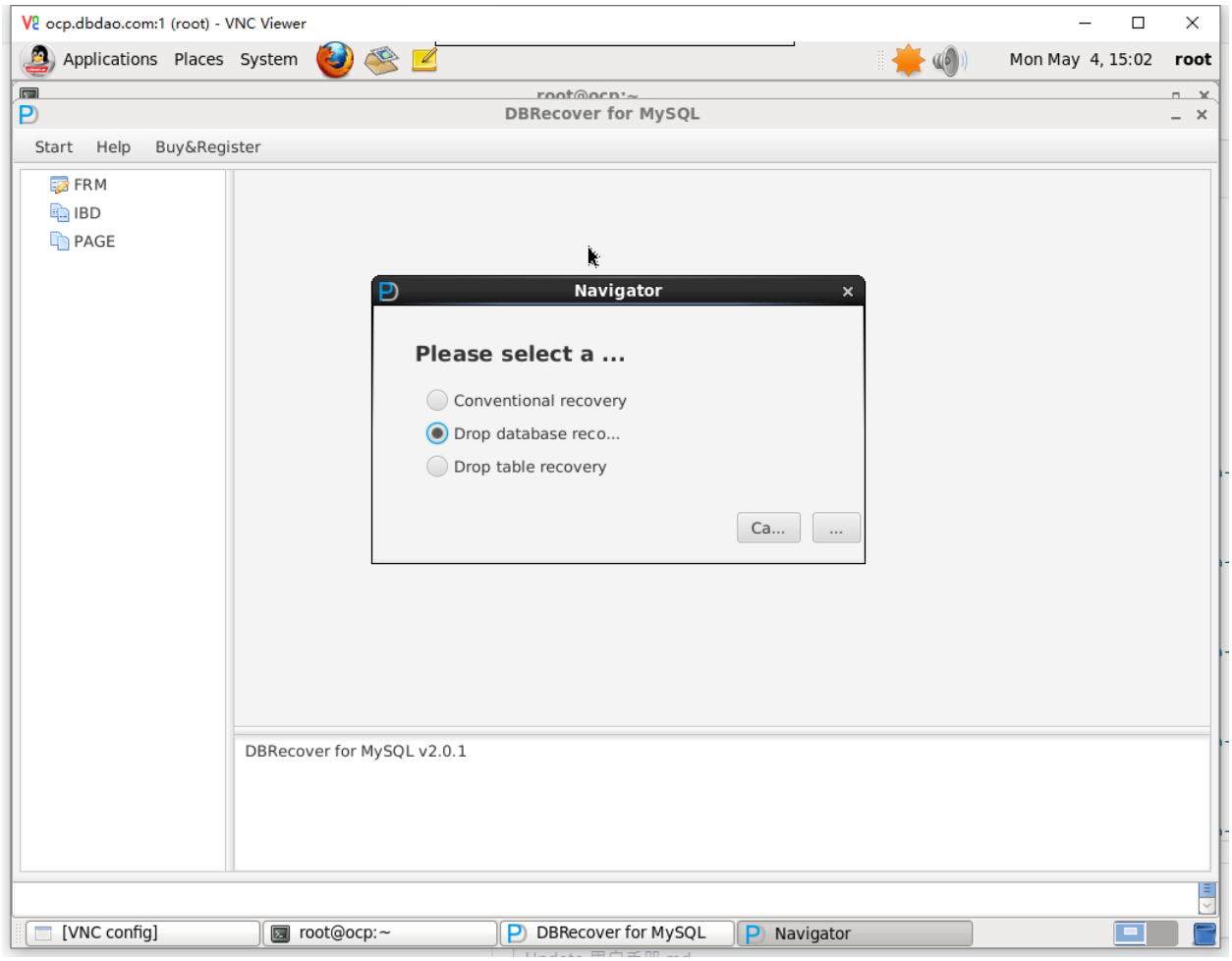
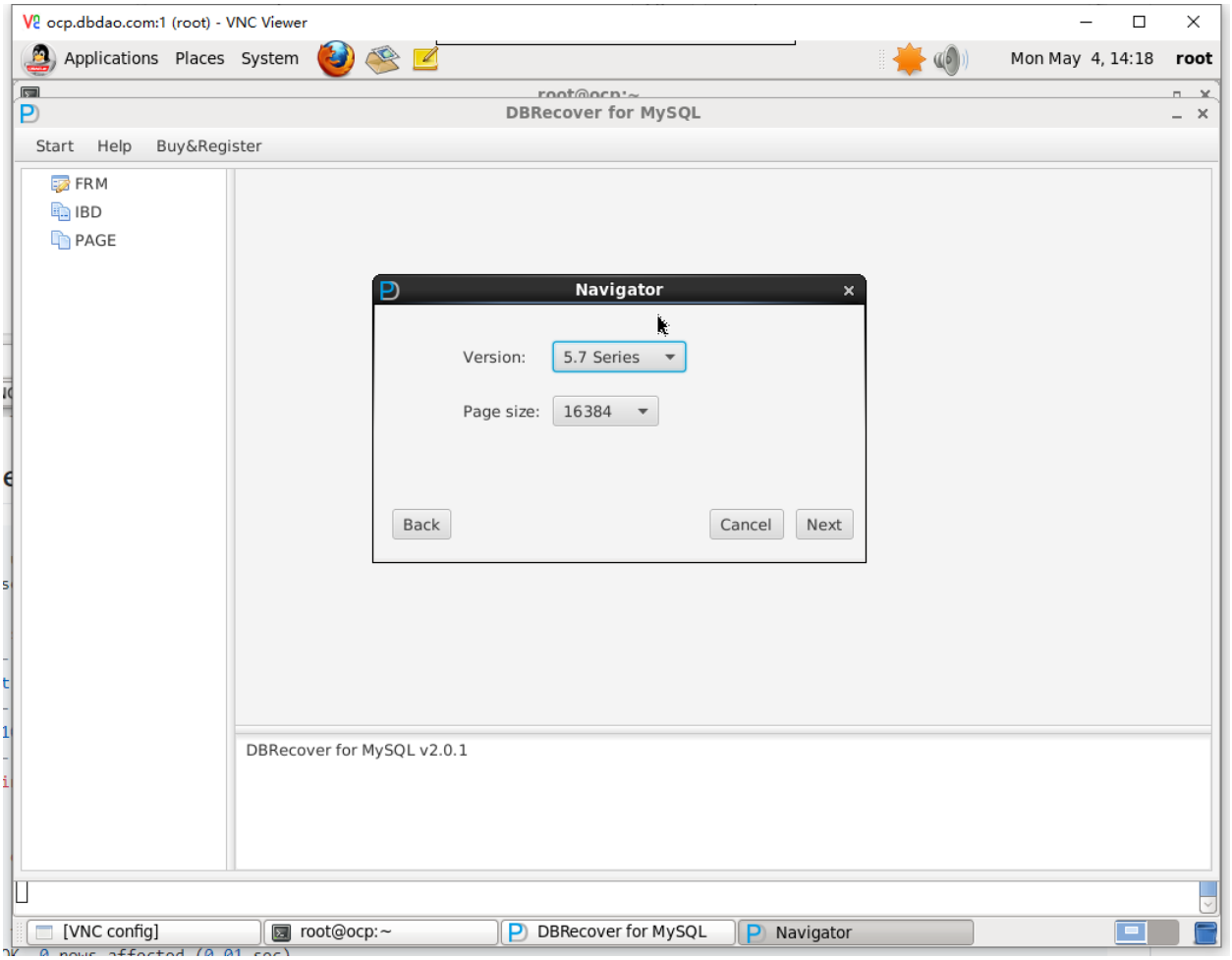

To recover from a DROP DATABASE scenario

```
mysql> drop database employees;
Query OK, 14 rows affected (0.16 sec)

#sync
#sync
```

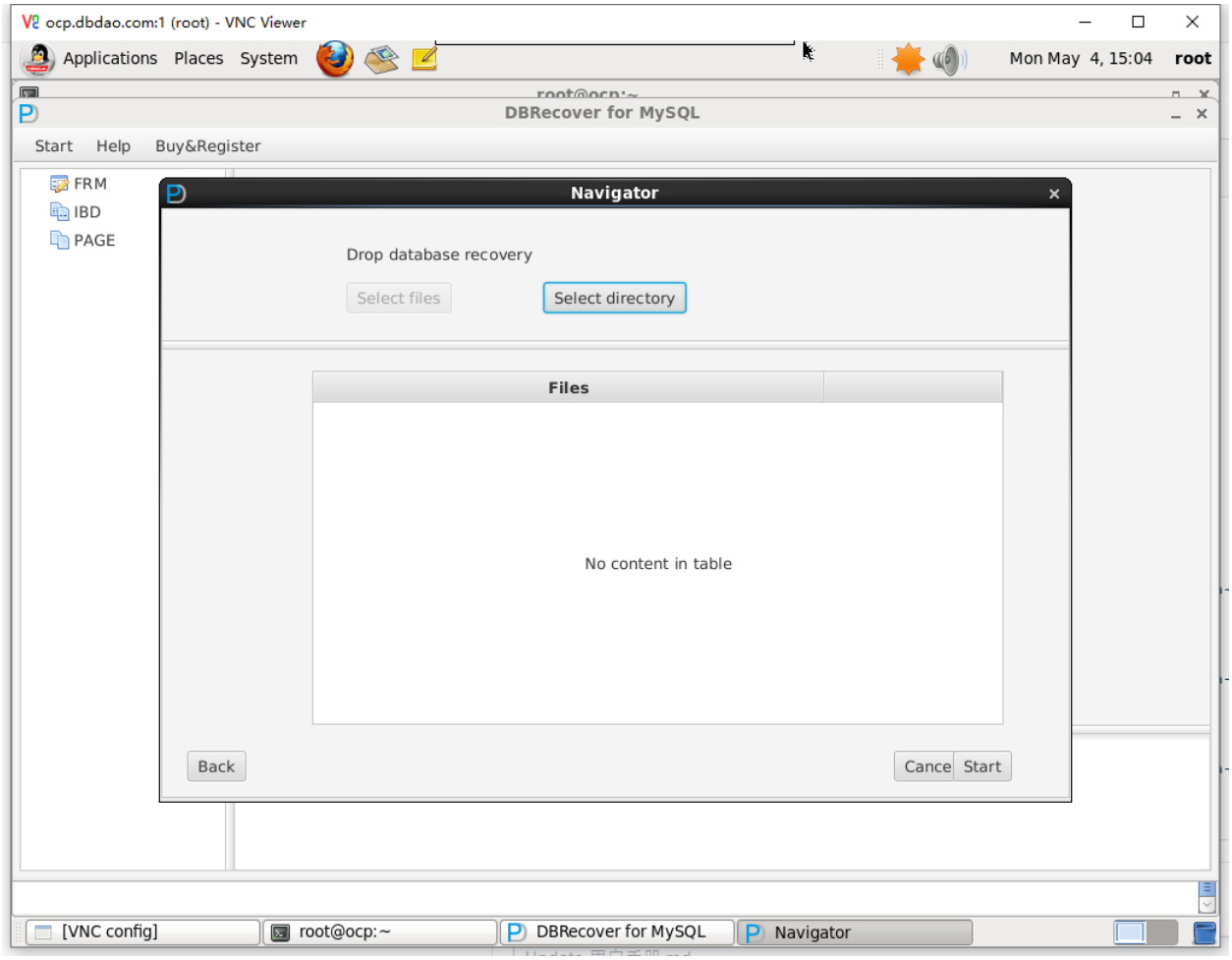
Start the DBRECOVER FOR MYSQL software and select the DROP DATABASE recovery scenario.



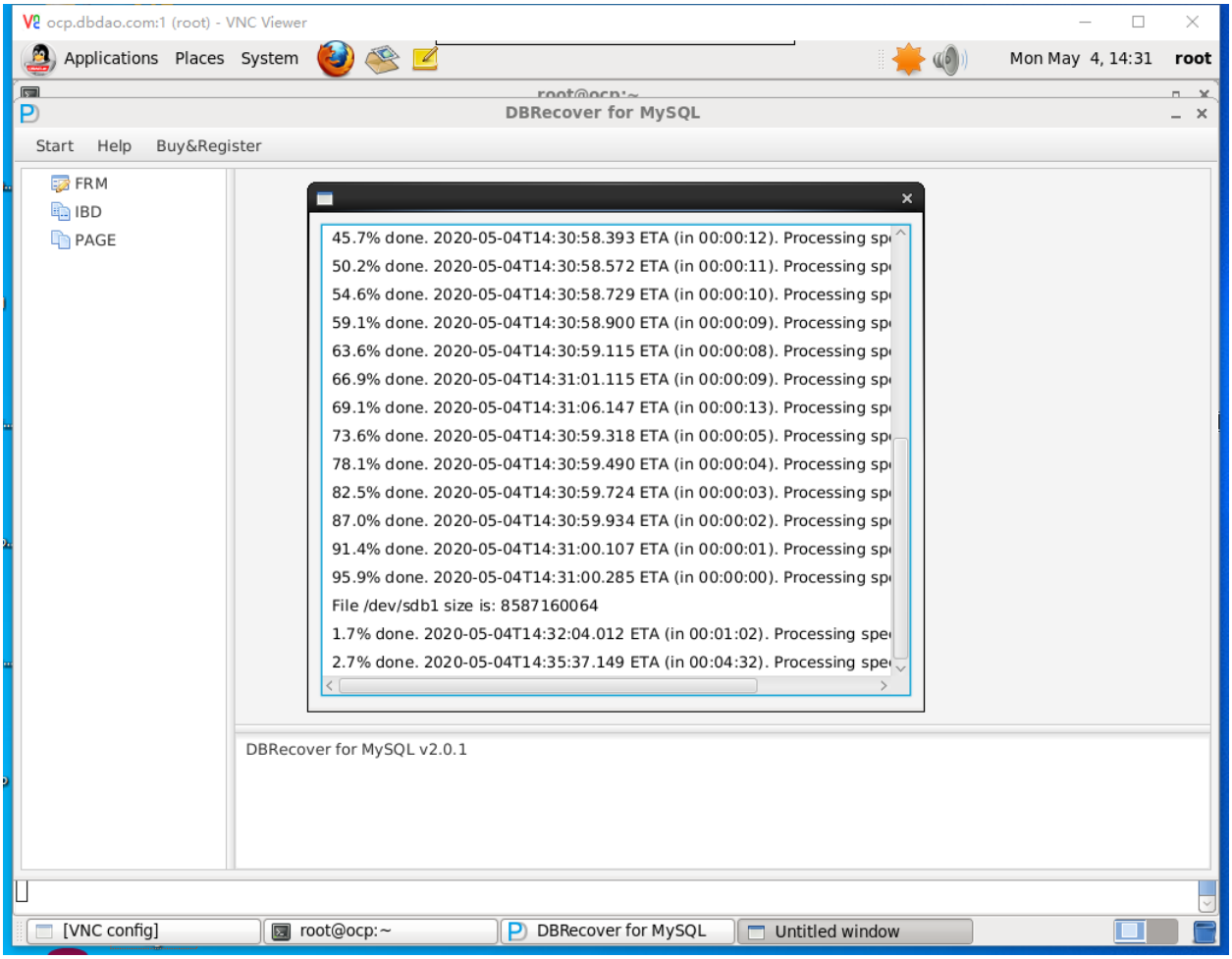
Choose the correct MySQL database version.



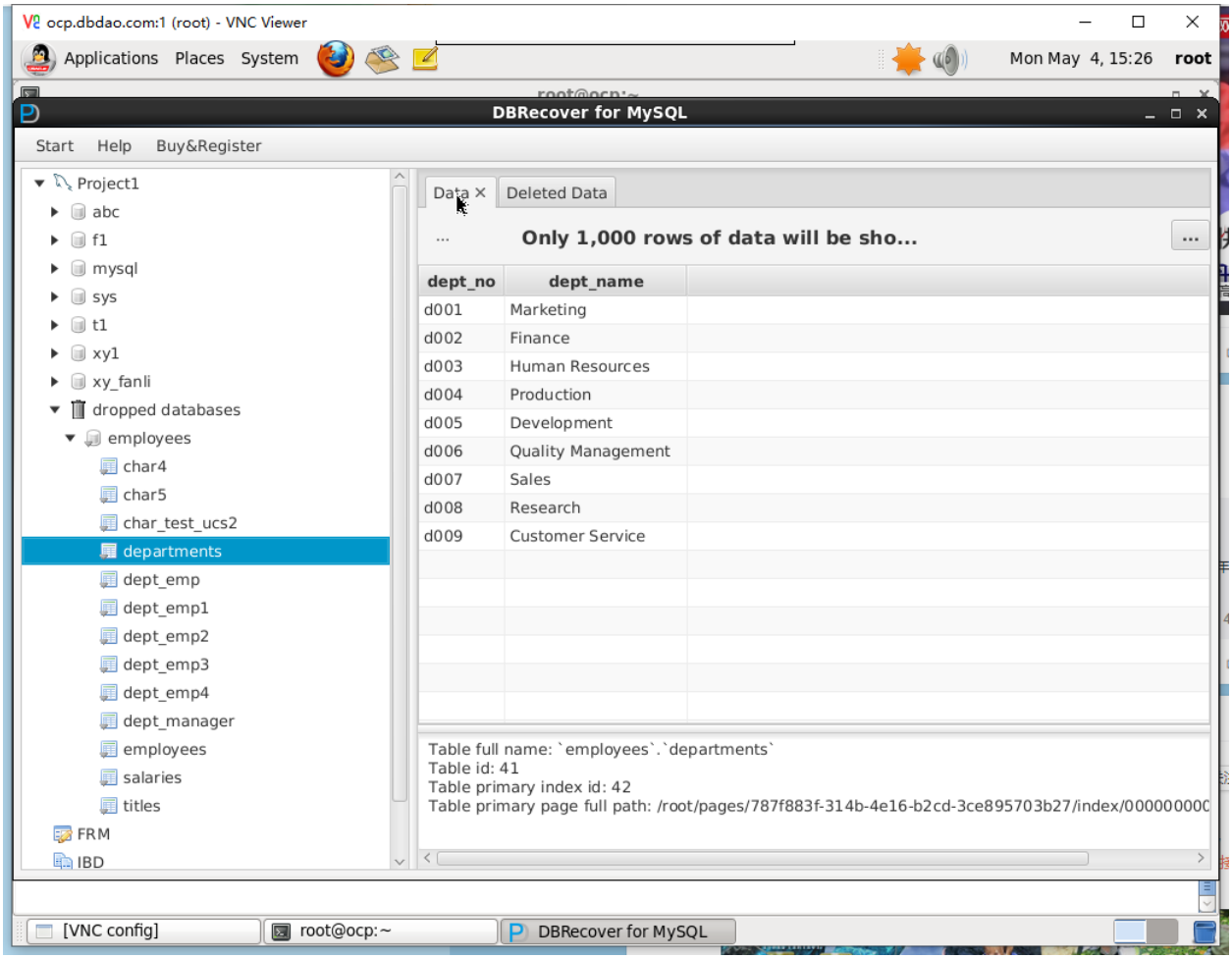
Choose SELECT DIRECTORY and enter the path to the @@datadir directory, then click start.



The software will scan the ibdata1 or mysql.ibd files and the @@datadir disk.



Click on the dropped databases node to find and recover tables from the dropped databases.



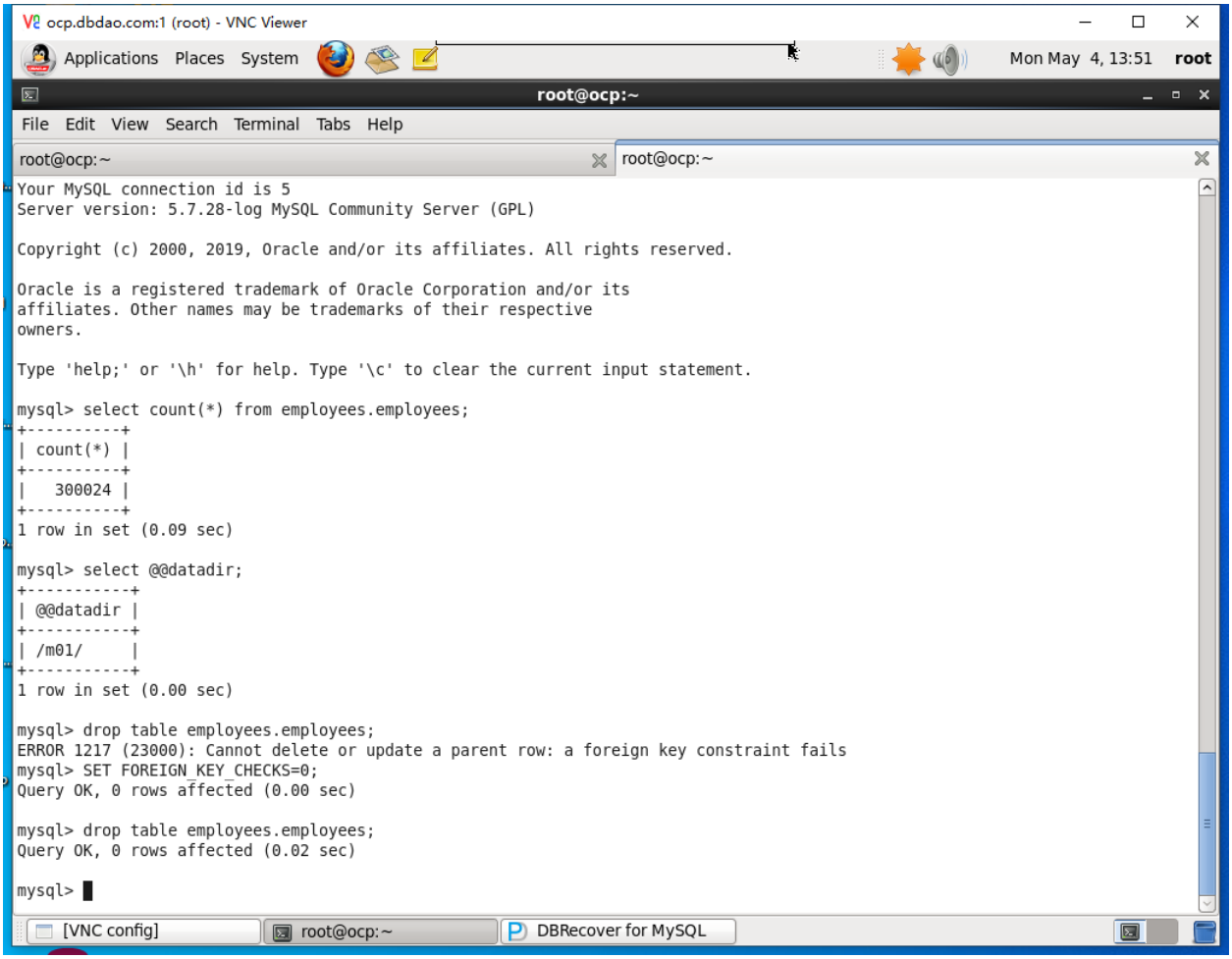
To recover from DROP TABLE and TRUNCATE TABLE scenarios

The recovery steps apply to both DROP TABLE and TRUNCATE TABLE scenarios.

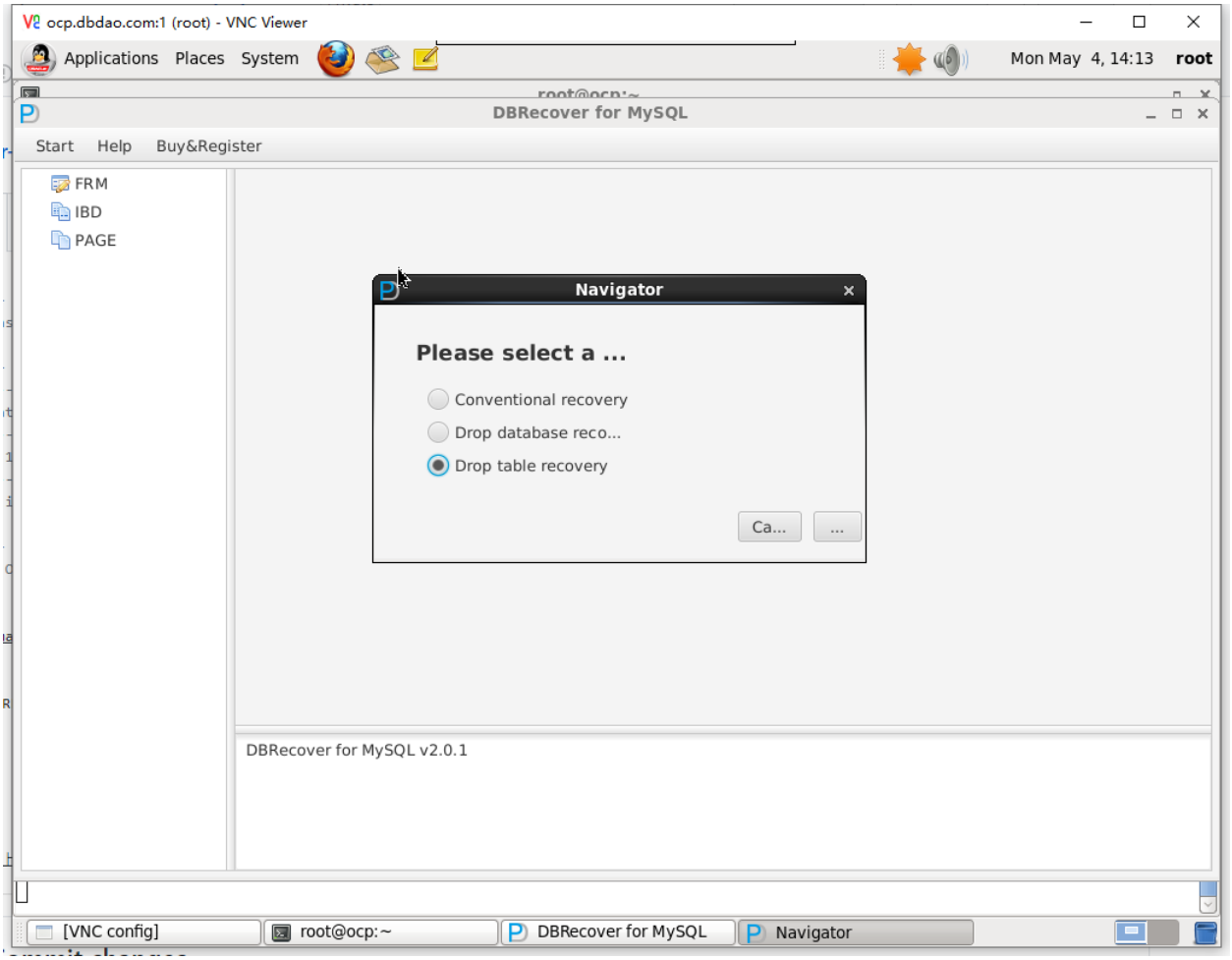
```
mysql> select count(*) from employees.employees;
```

```
+----------+
| count(*) |
+----------+
|   300024 |
```

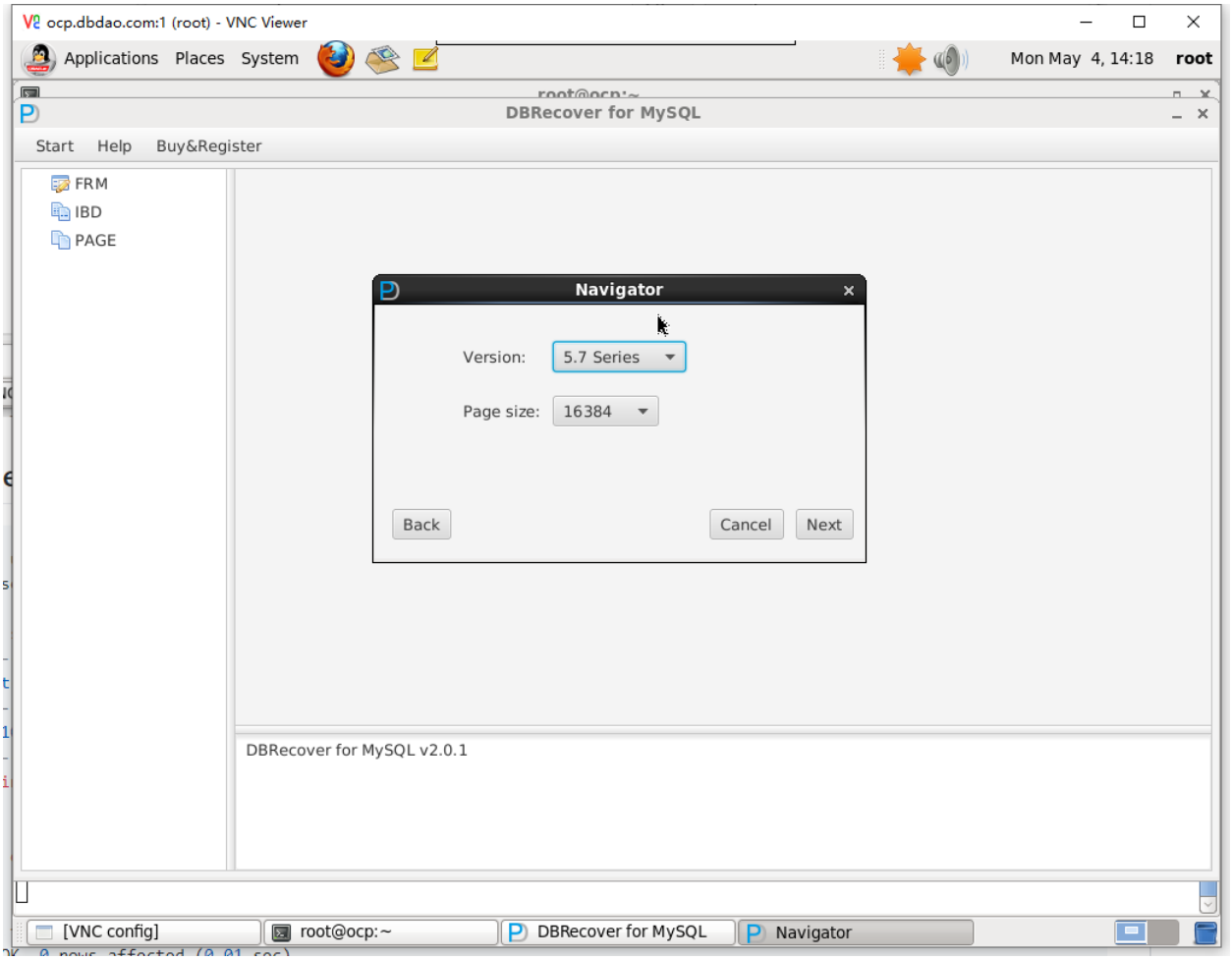
```
+----------+
1 row in set (0.09 sec)

mysql> select @@datadir;
+-----------+
| @@datadir |
+-----------+
| /m01/     |
+-----------+
1 row in set (0.00 sec)

mysql> drop table employees.employees;
ERROR 1217 (23000): Cannot delete or update a parent row: a foreign key constraint fails


mysql> SET FOREIGN_KEY_CHECKS=0;
Query OK, 0 rows affected (0.00 sec)

mysql> drop table employees.employees;
Query OK, 0 rows affected (0.02 sec)

mysql> ^DBye


#sync
#sync
```



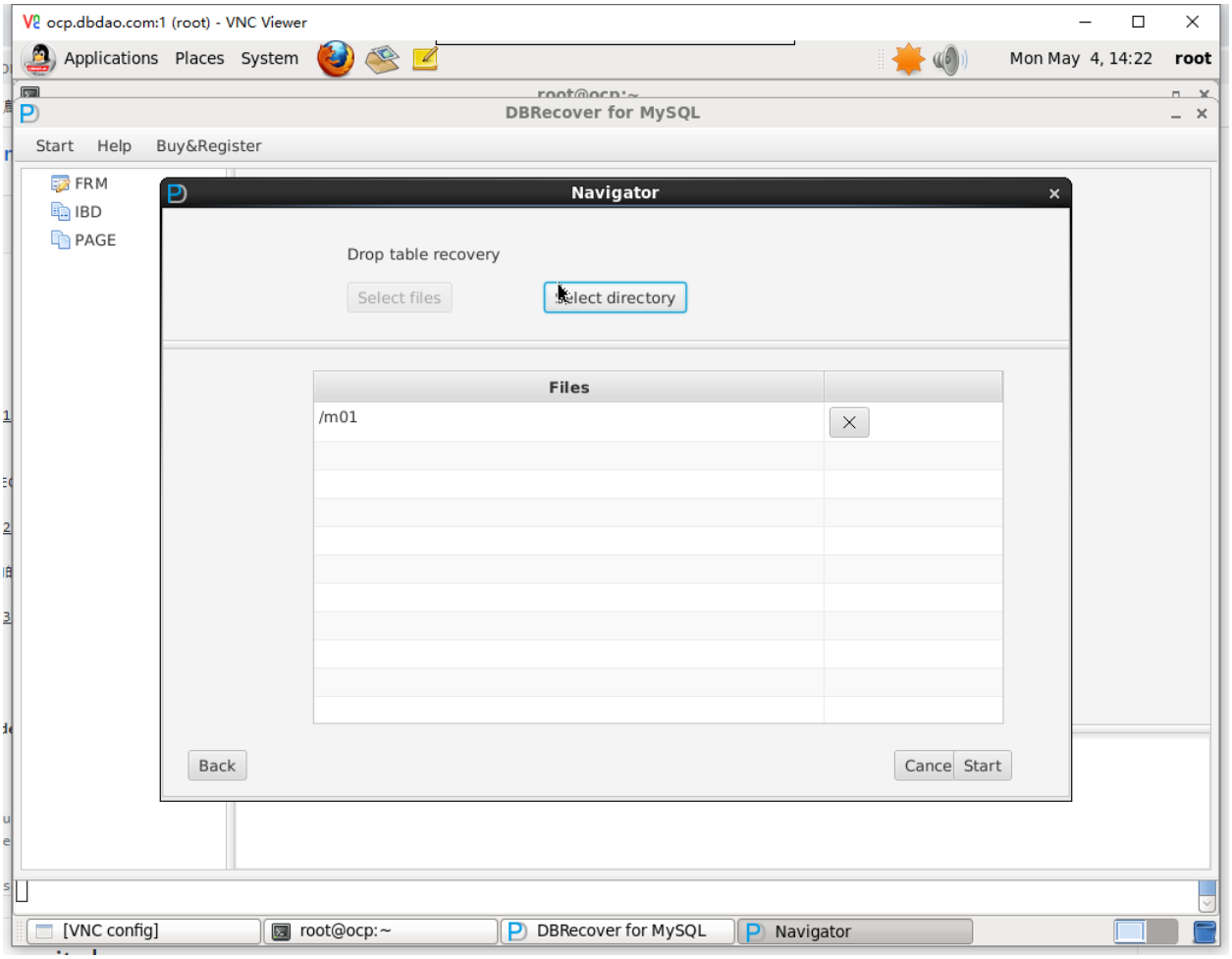
Start the software and select the DROP TABLE recovery scenario.



Choose the correct MySQL database version.

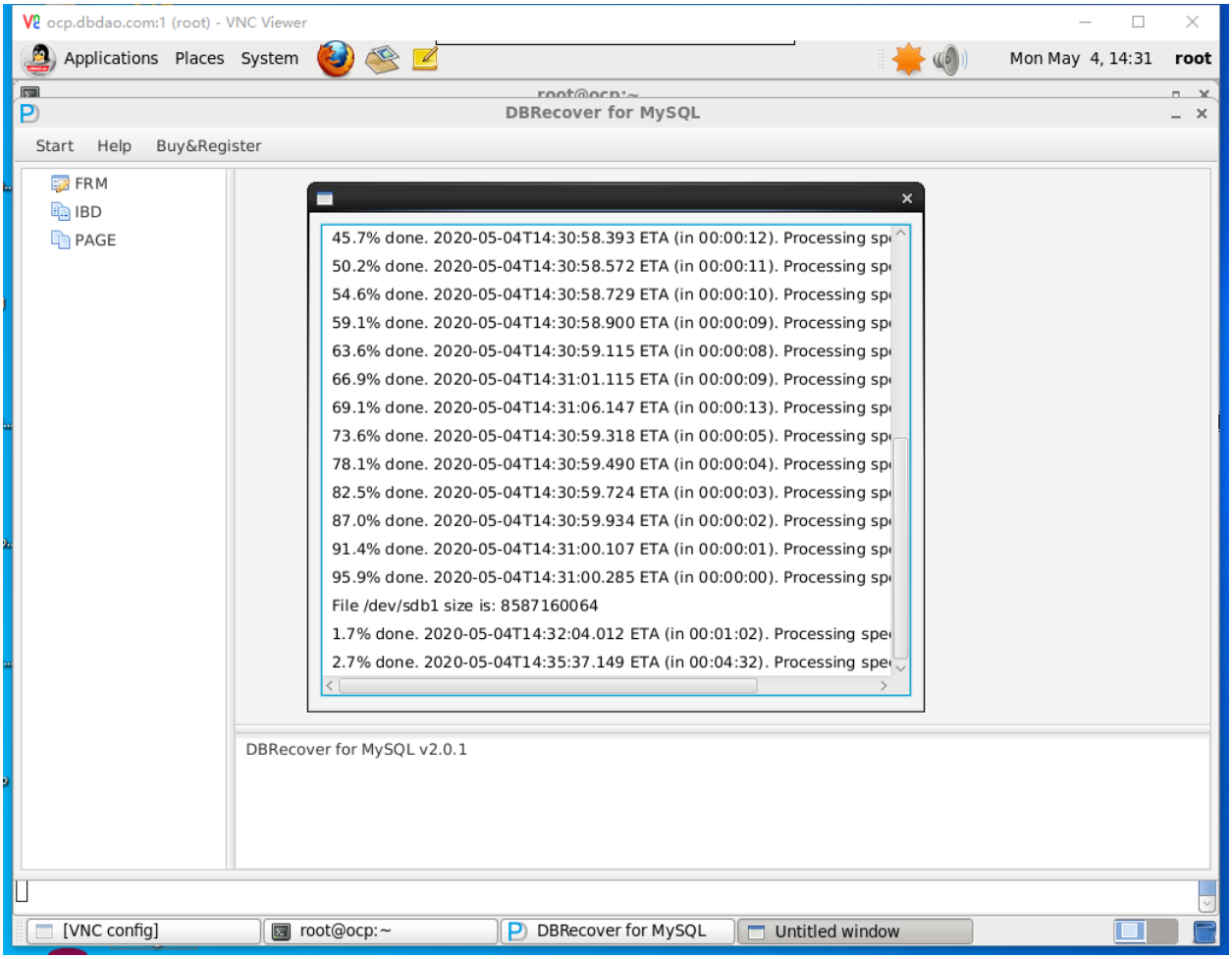


Select SELECT DIRECTORY, enter the path to the @@datadir directory, and click start.

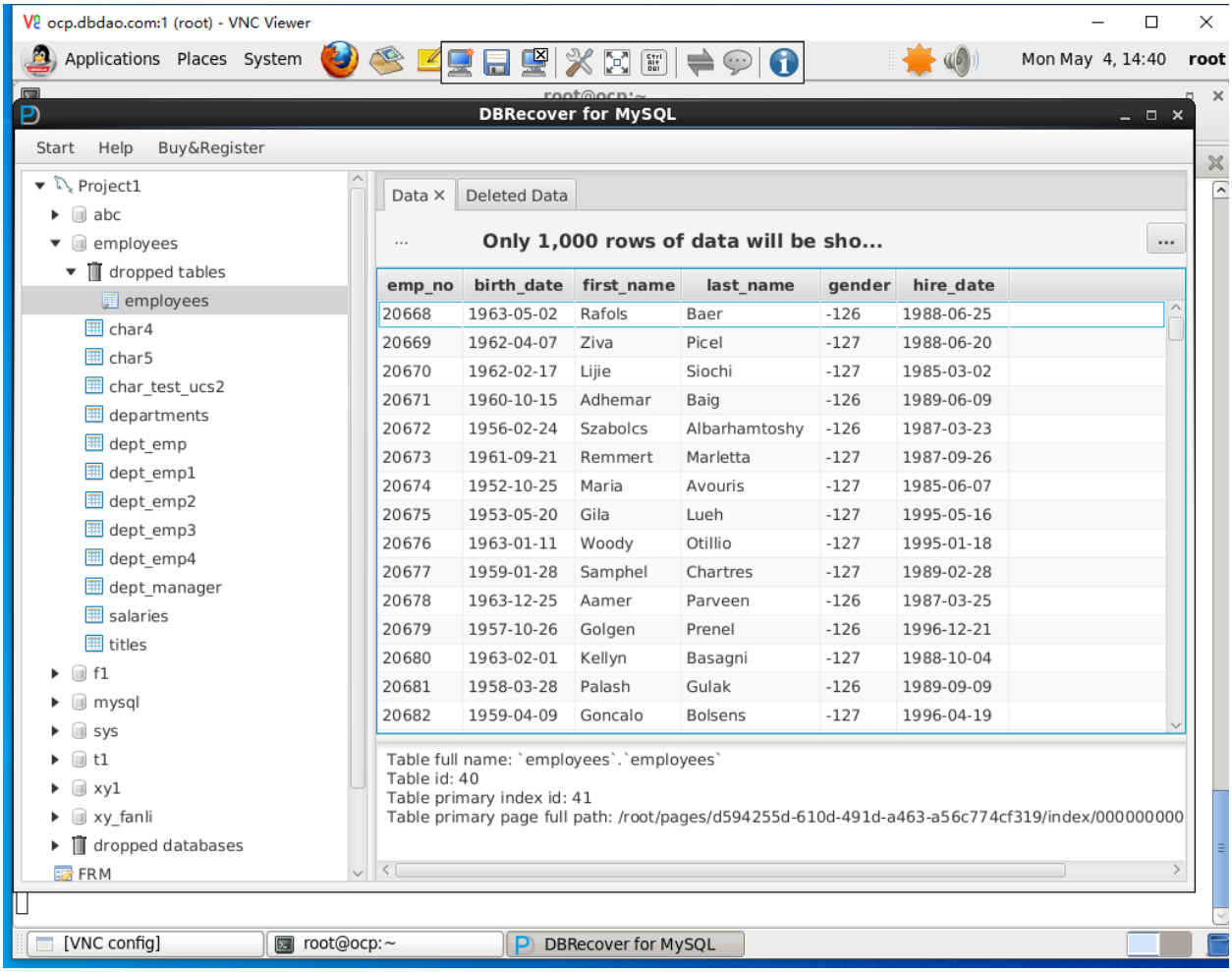


The software will scan ibdata1 or mysql.ibd and the disk where @@datadir is located.

Important: Enter the original @@datadir directory, not a copied directory from after the issue occurred. The software needs to scan the file system of the @@datadir's mount point to find the dropped data.



Then click on the dropped tables node under the corresponding database to see if the dropped table exists.



For TRUNCATE TABLE, simply check the normal table nodes in the database tree to view and export data.

The data of the table can be observed on the right side of the interface, and the subsequent recovery follows the regular mode.

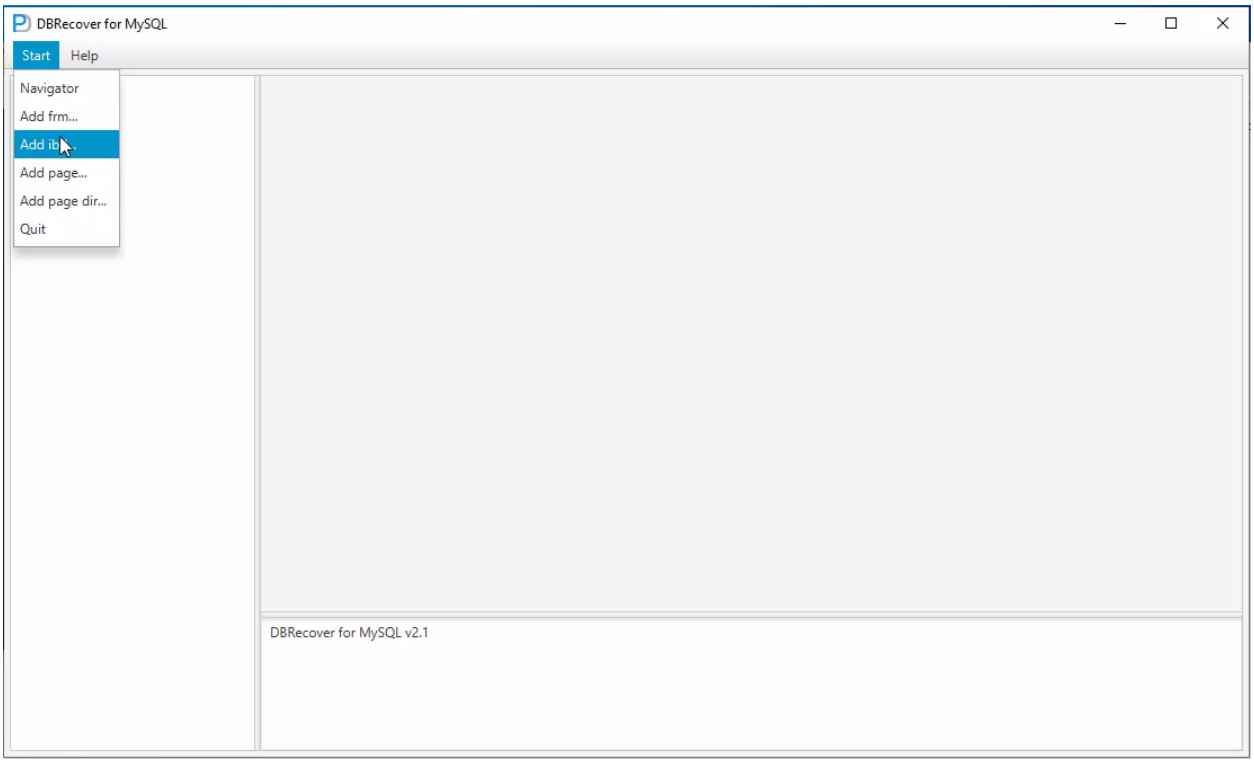
To recover from a DELETE TABLE scenario

```
mysql> use  employees;
Database changed

mysql> select count(*) from employees;
+----------+
| count(*) |
+----------+
|     1000 |
+----------+
1 row in set (0.00 sec)


mysql> delete from employees;


mysql> flush table employees with read lock;
Query OK, 0 rows affected (0.01 sec)
```

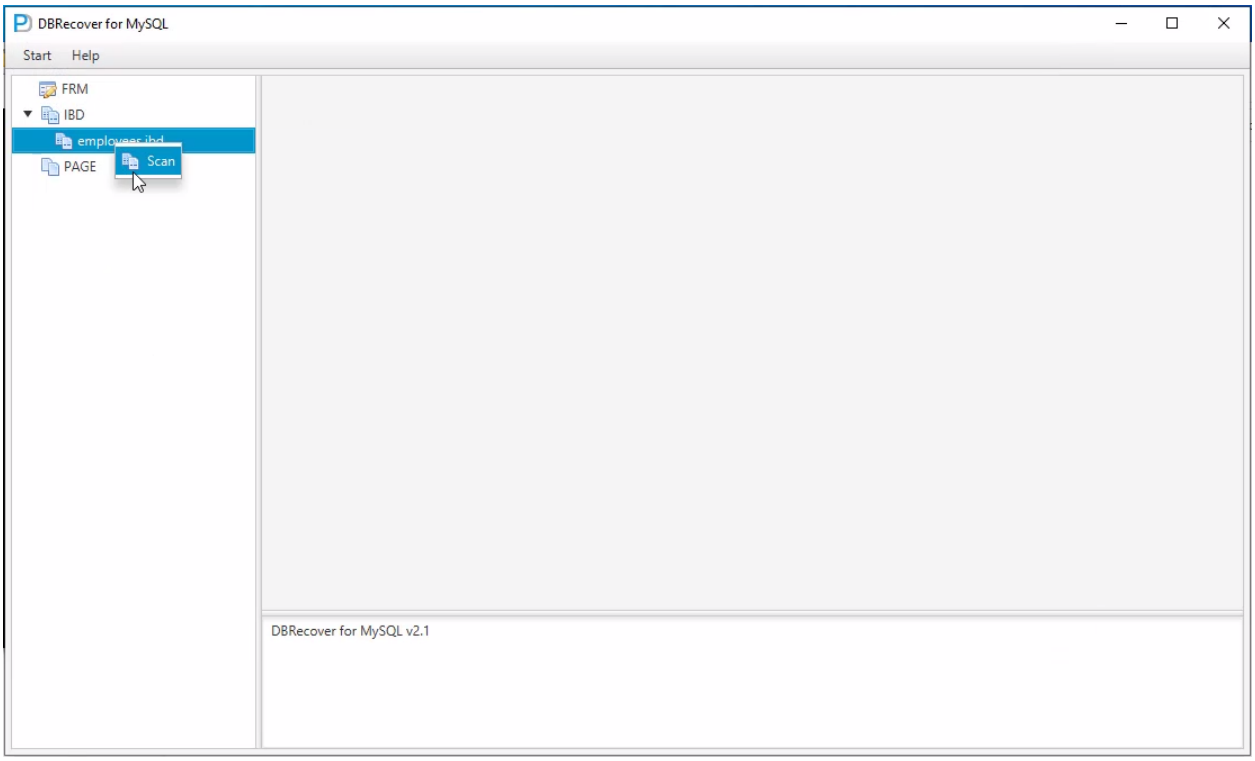
In scenarios where table records are accidentally deleted, they can be recovered using the undelete feature of DBRECOVER FOR MYSQL.

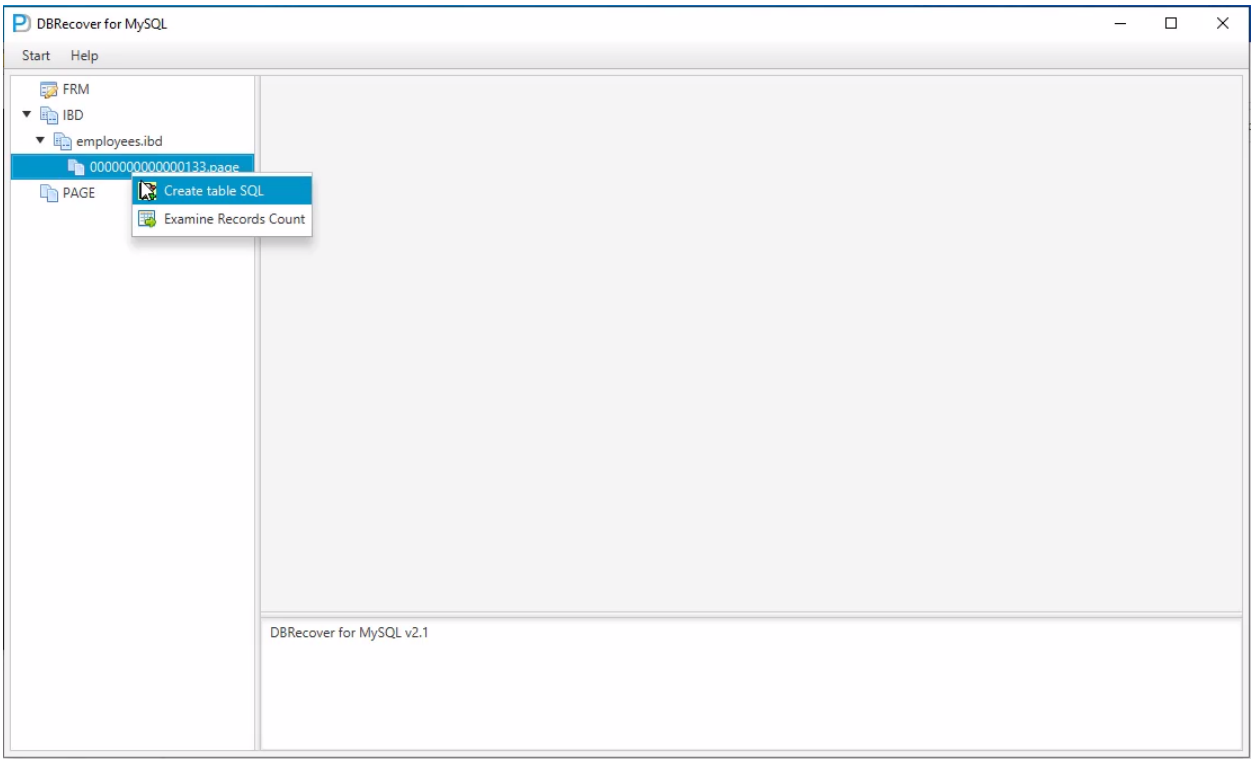
Locate the corresponding ibd file, like employees.ibd for the employees table.

Start DBRECOVER FOR MYSQL, select 'Add ibd file' from the start menu, and add the ibd file.



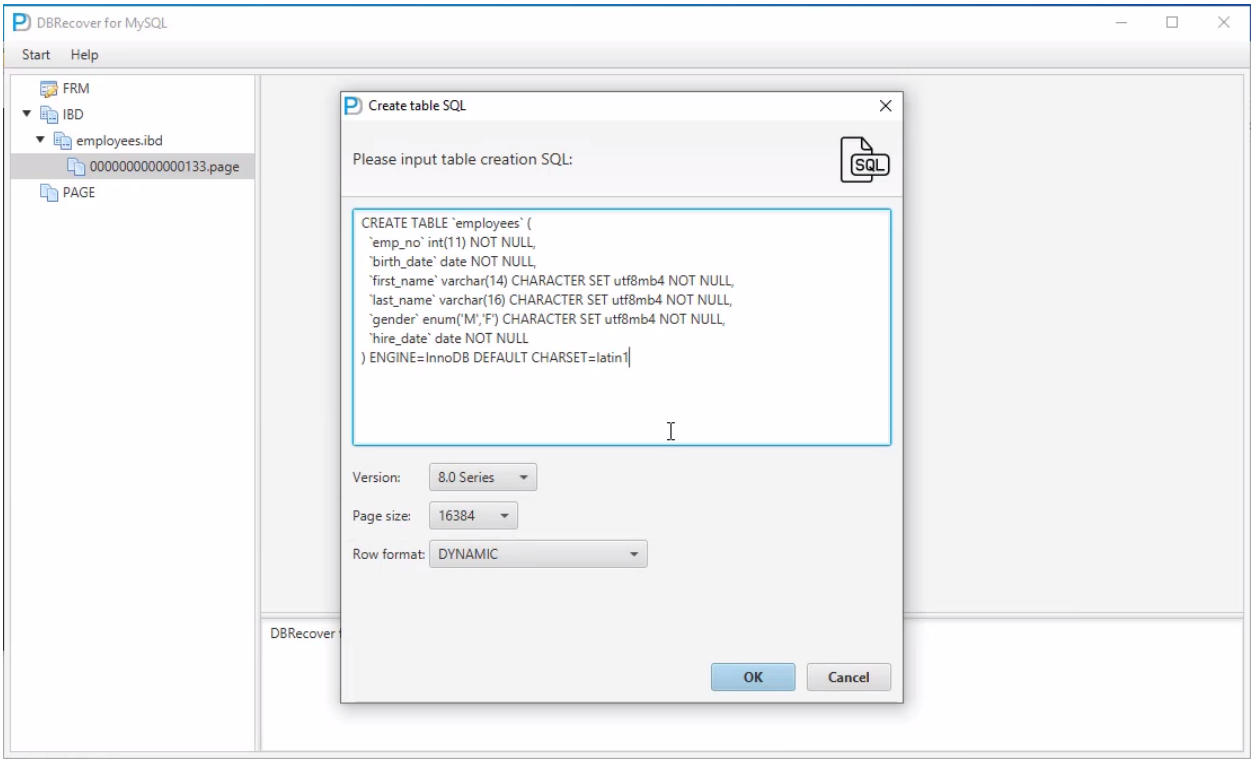
Right-click on the ibd file and choose scan. After scanning, corresponding page files appear.


DBRecover for MySQL
Start
Help
FRM
IBD
employees.ibd
PAGE
Scan
DBRecover for MySQL v2.1

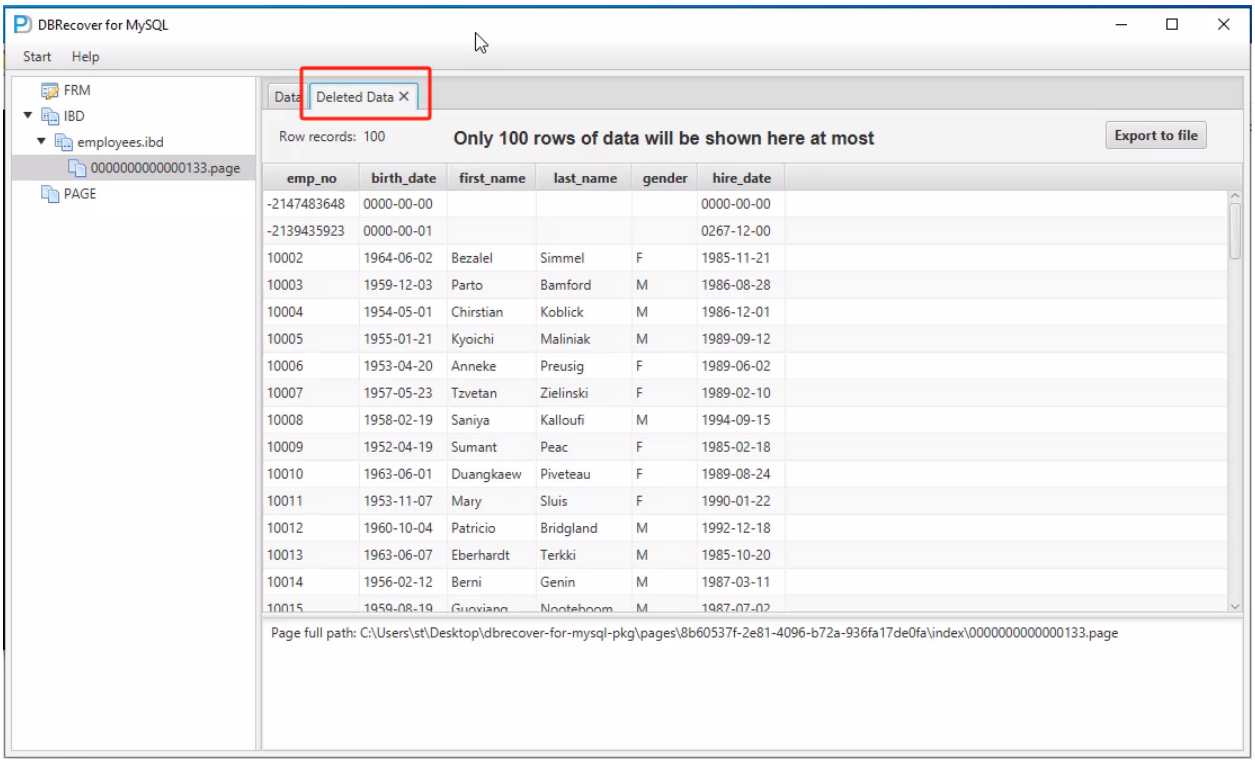

DBRecover for MySQL
Start
Help
FRM
IBD
employees.ibd
0000000000000133.page
PAGE
Create table SQL
Examine Records Count
DBRecover for MySQL v2.1

Right-click and enter the SQL statement for creating the table, obtainable via the 'show create table' command in MySQL.

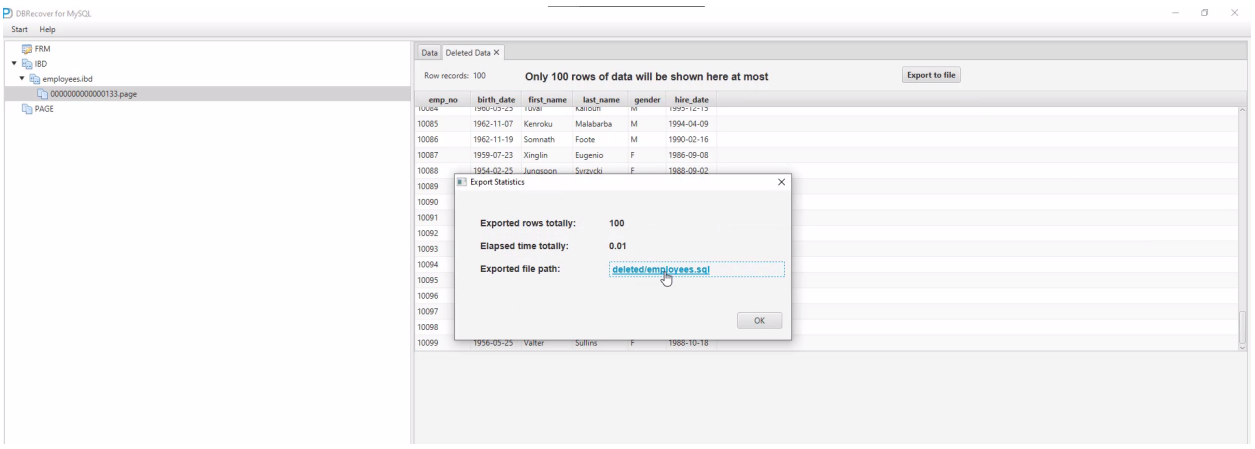
```
mysql> show create table employees;
+-----------+-------------------
```



After clicking confirm, table information appears on the right. Click on 'deleted data'.

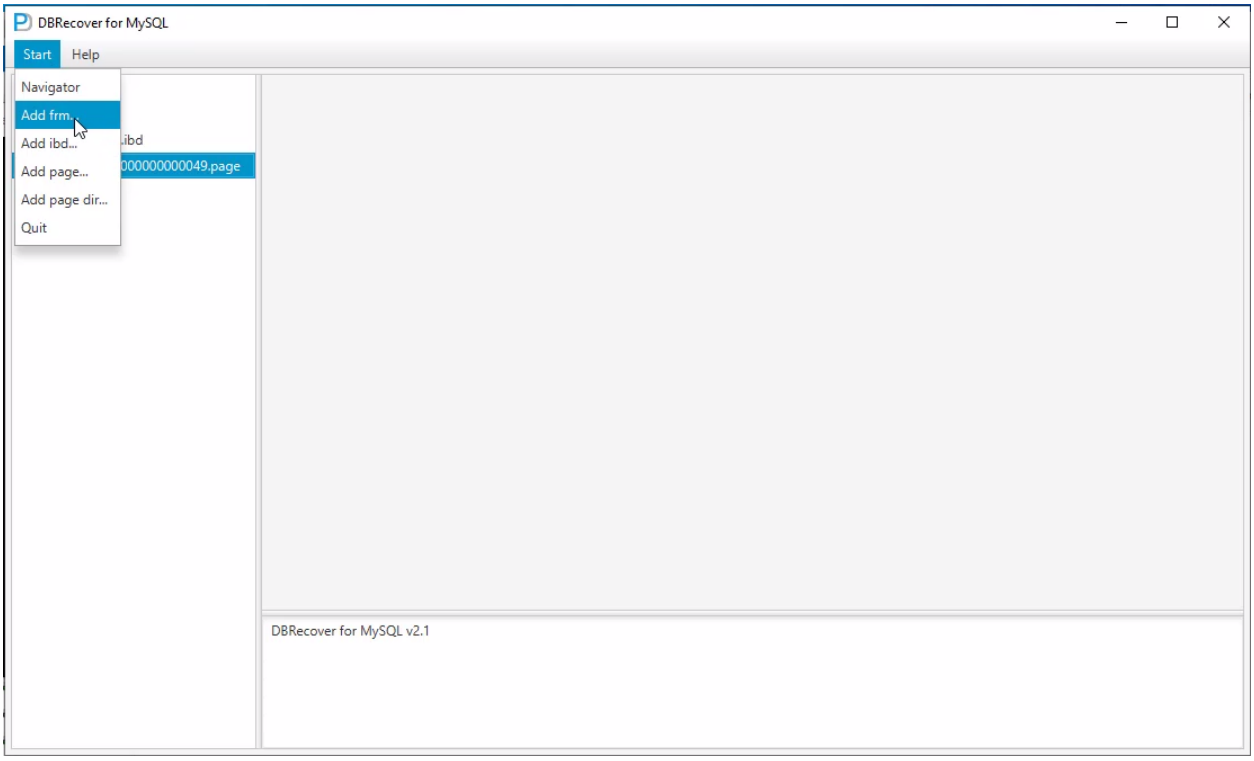


Click 'Export to file' to recover the deleted data as MYSQLDUMP format INSERT statements.



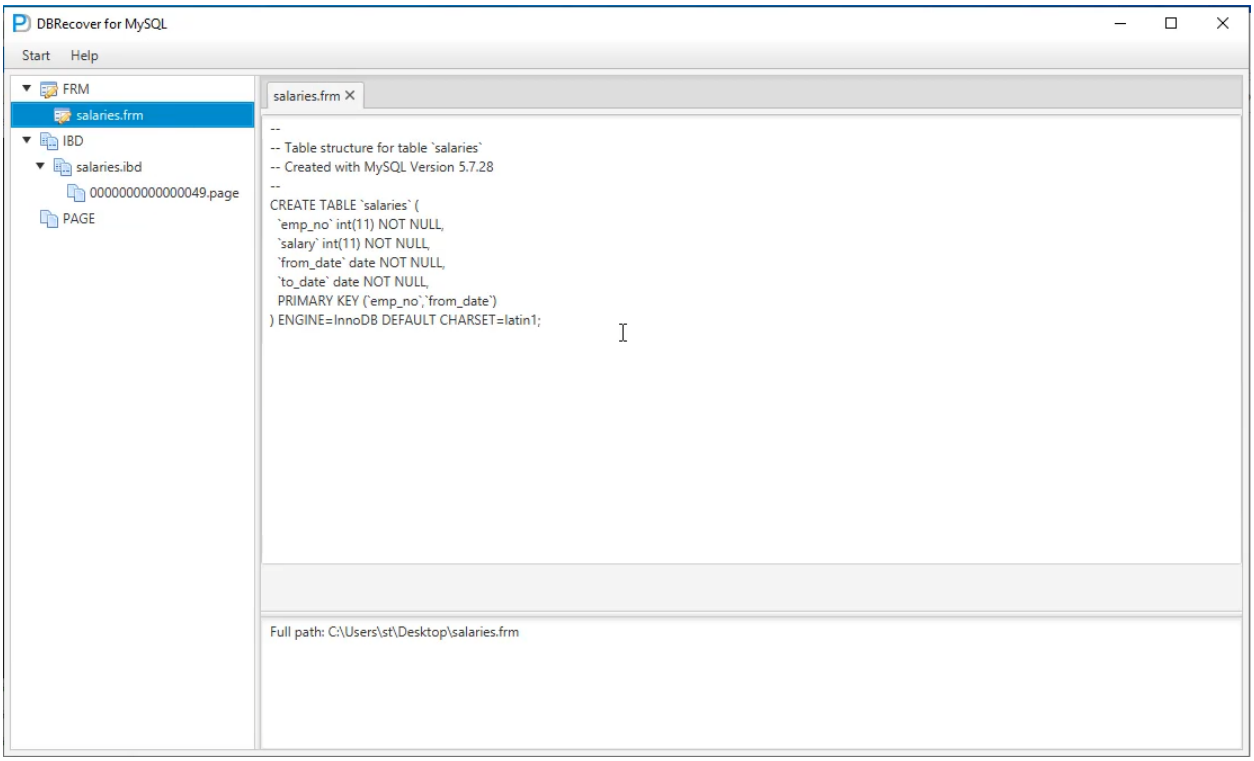
FRM FILES TO CREATE TABLE SQL

DBRECOVER FOR MYSQL offers free functionality for reading and recovering FRM files. To use this feature:



Select 'Add frm file' on the main interface of the software.

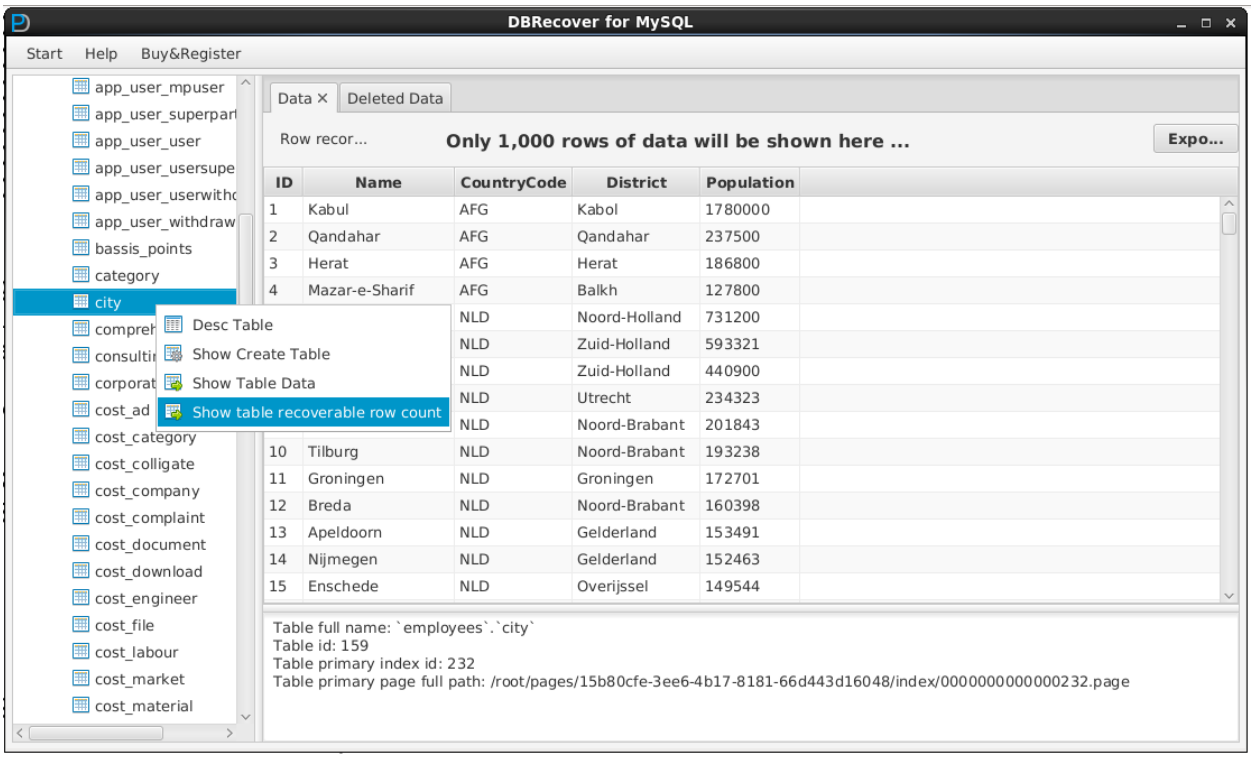
Double-click on the added frm file or right-click to view it. The corresponding CREATE TABLE statement will be displayed on the right side of the interface, which users can copy.

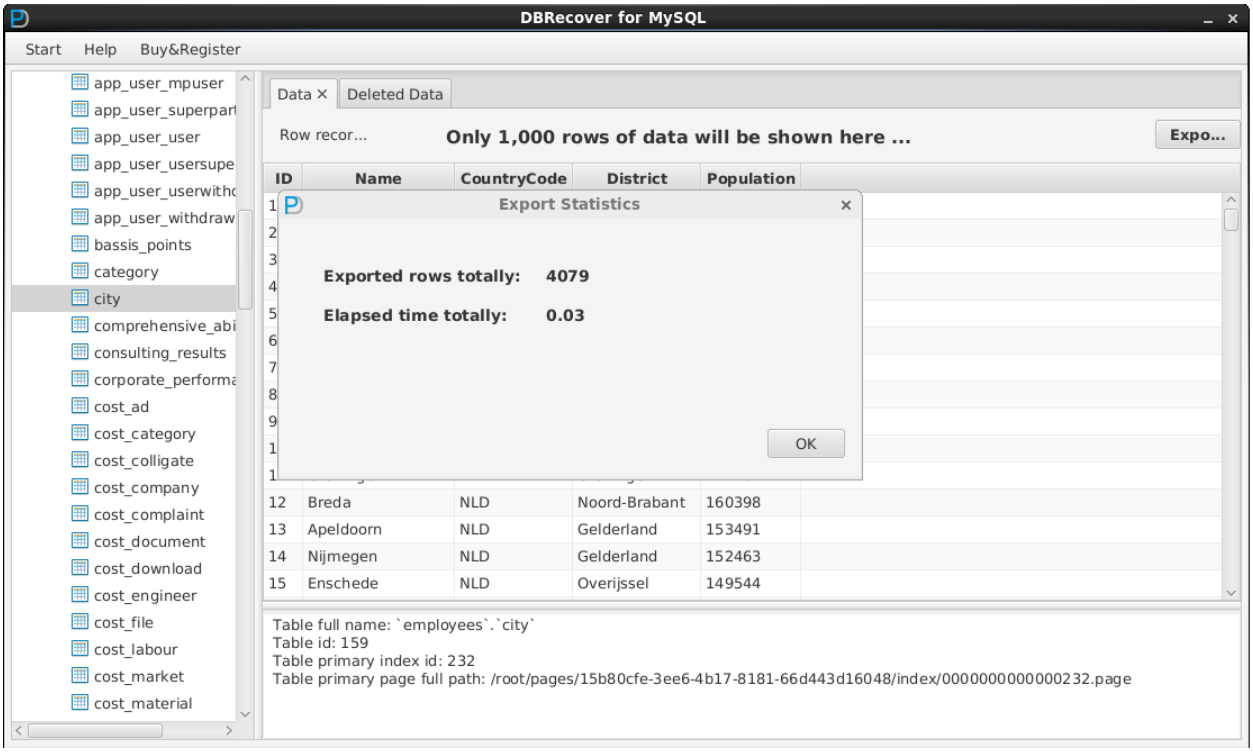


Checking Recoverable Row Count on Data Tables

In recovery scenarios, this feature allows users to understand the number of records that can be recovered from a table.

Simply right-click on the data table and select 'Show Table Recoverable Row Count'.


DBRecover for MySQL
Start
Help
Buy&Register
app_user_mpuser
app_user_superpart
app_user_user
app_user_usersupe
app_user_userwitho
app_user_withdraw
bassis_points
category
city
comprehensive_abi
consulting_results
corporate_performa
cost_ad
cost_category
cost_colligate
cost_company
cost_complaint
cost_document
cost_download
cost_engineer
cost_file
cost_labour
cost_market
cost_material
Desc Table
Show Create Table
Show Table Data
Show table recoverable row count
Data
Deleted Data
Row recor...
Only 1,000 rows of data will be shown here ...
Expo...
ID
Name
CountryCode
District
Population
1 Kabul AFG Kabol 1780000
2 Qandahar AFG Qandahar 237500
3 Herat AFG Herat 186800
4 Mazar-e-Sharif AFG Balkh 127800
NLD Noord-Holland 731200
NLD Zuid-Holland 593321
NLD Zuid-Holland 440900
NLD Utrecht 234323
NLD Noord-Brabant 201843
10 Tilburg NLD Noord-Brabant 193238
11 Groningen NLD Groningen 172701
12 Breda NLD Noord-Brabant 160398
13 Apeldoorn NLD Gelderland 153491
14 Nijmegen NLD Gelderland 152463
15 Enschede NLD Overijssel 149544
Table full name: `employees`.`city`
Table id: 159
Table primary index id: 232
Table primary page full path: /root/pages/15b80cfe-3ee6-4b17-8181-66d443d16048/index/0000000000000232.page


DBRecover for MySQL
Start
Help
Buy&Register
app_user_mpuser
app_user_superpart
app_user_user
app_user_usersupe
app_user_userwitho
app_user_withdraw
bassis_points
category
city
comprehensive_abi
consulting_results
corporate_performa
cost_ad
cost_category
cost_colligate
cost_company
cost_complaint
cost_document
cost_download
cost_engineer
cost_file
cost_labour
cost_market
cost_material
Data
Deleted Data
Row recor...
Only 1,000 rows of data will be shown here ...
Expo...
ID
Name
CountryCode
District
Population
Export Statistics
Exported rows totally: 4079
Elapsed time totally: 0.03
OK
12 Breda NLD Noord-Brabant 160398
13 Apeldoorn NLD Gelderland 153491
14 Nijmegen NLD Gelderland 152463
15 Enschede NLD Overijssel 149544
Table full name: `employees`.`city`
Table id: 159
Table primary index id: 232
Table primary page full path: /root/pages/15b80cfe-3ee6-4b17-8181-66d443d16048/index/0000000000000232.page