

Hi,

when I test the built-in pool, I found a database crash appearance:

### 1.pool setting

```
session_pool_size=2
session_pool_ports=1
```

### 2.start-up two identical backend

sessionA:

```
postgres@ubuntu:/home/hk/builtinpool/bin$ ./psql -d temp -p 5433
psql (11devel)
Type "help" for help.

temp=# select pg_backend_pid();
 pg_backend_pid 
-----
              42710
(1 row)
```

sessionB

```
postgres@ubuntu:/home/hk/builtinpool/bin$ ./psql -d temp -p 5433
psql (11devel)
Type "help" for help.

temp=# select pg_backend_pid();
 pg_backend_pid 
-----
              42716
(1 row)
```

### 3.If I disconnection sessionA

```

postgres@ubuntu:/home/hk/builtinpool/bin$ ./psql -d temp -p 5433
psql (11devel)
Type "help" for help.

temp=# select pg_backend_pid();
 pg_backend_pid
-----
          42710
(1 row)

temp=# \q

```

4.subsequently,I try to connection other database

```

postgres@ubuntu:/home/hk/builtinpool/bin$ ./psql -d temp1 -p 5433
psql: FATAL:  Failed to open session (dbname=temp1 user=postgres) in backend 42710 (dbname=temp
user=postgres)
postgres@ubuntu:/home/hk/builtinpool/bin$

```

5.the log information,system was recovery,the pool crash

```

2018-07-28 21:24:59.144 PDT postgres temp1 [local] 5b5d4022.a6d6 5 [42710] FATAL:  Failed to
open session (dbname=temp1 user=postgres) in backend 42710 (dbname=temp user=postgres)
2018-07-28 21:24:59.145 PDT      5b5d4011.a6cc 8 LOG:   server process (PID 42710) exited with exit
code 1
2018-07-28 21:24:59.145 PDT      5b5d4011.a6cc 9 DETAIL:  Failed process was running: select
pg_backend_pid();
2018-07-28 21:24:59.145 PDT      5b5d4011.a6cc 10 LOG:  terminating any other active server
processes
2018-07-28 21:24:59.145 PDT postgres temp [local] 5b5d4058.a6dc 4 [42716] WARNING:  terminating
connection because of crash of another server process
2018-07-28 21:24:59.145 PDT postgres temp [local] 5b5d4058.a6dc 5 [42716] DETAIL:  The
postmaster has commanded this server process to roll back the current transaction and exit,
because another server process exited abnormally and possibly corrupted shared memory.
2018-07-28 21:24:59.145 PDT postgres temp [local] 5b5d4058.a6dc 6 [42716] HINT:  In a moment
you should be able to reconnect to the database and repeat your command.
2018-07-28 21:24:59.149 PDT      5b5d4012.a6d2 1 WARNING:  terminating connection because of crash
of another server process
2018-07-28 21:24:59.149 PDT      5b5d4012.a6d2 2 DETAIL:  The postmaster has commanded this server
process to roll back the current transaction and exit, because another server process exited
abnormally and possibly corrupted shared memory.
2018-07-28 21:24:59.149 PDT      5b5d4012.a6d2 3 HINT:  In a moment you should be able to
reconnect to the database and repeat your command.
2018-07-28 21:24:59.150 PDT      5b5d4011.a6cc 11 LOG:  all server processes terminated;
reinitializing
2018-07-28 21:24:59.188 PDT      5b5d419b.a6ef 1 LOG:  database system was interrupted; last known
up at 2018-07-28 21:18:26 PDT
2018-07-28 21:24:59.218 PDT      5b5d419b.a6ef 2 LOG:  database system was not properly shut down;

```

```

automatic recovery in progress
2018-07-28 21:24:59.220 PDT      5b5d419b.a6ef 3 LOG:  redo starts at 0/161C700
2018-07-28 21:24:59.220 PDT      5b5d419b.a6ef 4 LOG:  invalid record length at 0/161C738: wanted
24, got 0
2018-07-28 21:24:59.220 PDT      5b5d419b.a6ef 5 LOG:  redo done at 0/161C700
2018-07-28 21:24:59.229 PDT      5b5d4011.a6cc 12 LOG:  database system is ready to accept
connections
2018-07-28 21:26:36.766 PDT [unknown] [unknown] [local] 5b5d41fc.a6f9 1  [42745] LOG:
connection received: host=[local]
2018-07-28 21:26:36.767 PDT postgres temp [local] 5b5d41fc.a6f9 2  [42745] LOG:  connection
authorized: user=postgres database=temp

```

6.I made some small attempts ,May conflict with your idea it's limited to the pool is full and the backend inside is identical

```

if (strcmp(port->database_name, BackendPort->database_name) ||
    strcmp(port->user_name, BackendPort->user_name))
{
    elog(WARNING/*FATAL*/, "Failed to open session (dbname=%s user=%s) in
backend %d (dbname=%s user=%s)",
        port->database_name, port->user_name,
        MyProcPid, BackendPort->database_name, BackendPort->user_name);

    closesocket(sock); //append

    goto ChooseSession; //append
}

```