



# What is old in PostgreSQL?

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Olá  
Lisboa!

# About me

- Who is this guy?
  - Using Red Hat (and then Fedora) since 1996.
  - Using PostgreSQL since 1998.
    - Cheers for 20<sup>th</sup> year!
  - Responsible for PostgreSQL YUM (RHEL, CentOS, Fedora) and Zypp (SLES) repositories.
  - Fedora and EPEL packager.
  - Working at EnterpriseDB since 2011.
  - Living in London, UK.
  - The Guy With The PostgreSQL Tattoo!

# Social Media

Please tweet:

#PostgreSQL

Please follow:

@PostgreSQL

@PGConfEU

# Alternative Hashtag and account

#BlameMagnus

@BlameMagnus

# Social Media

(Did you tweet? Thanks!)

# About this talk

It all started as a joke... **sigh**

# Before we actually start:

We need to define what is “old”?



# Not this:



because...

We are still young!

So, we really need to define “old”

# Special thanks

Heikki Linnakangas

Vik Fearing

Magnus Hagander

Dave Page

# Triggers functions!

```
CREATE OR REPLACE FUNCTION foo()  
  RETURNS trigger AS  
  $BODY$  
  BEGIN  
    IF NEW.c1 <> OLD.c1 THEN  
    .  
  END IF;  
  RETURN NEW;  
END;  
$BODY$
```

Maybe not... So, back to “old” days first!

# Let's see how old you are...

- `cd src; gmake; gmake install`
  - `configure`
  - `byacc`
  - `flex`

**OLD!**

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**OLD!**
- `Yummy!`
  - `yum/apt-get/zypper`



# I actually tried: (postgres95-1.08!)

```
/home/devrim/tmp/postgres95/src/backend/access/index/  
indexam.c:332:5: note: in expansion of macro  
'GET_SCAN_PROCEDURE'
```

```
    GET_SCAN_PROCEDURE(getnext,amgettuple);
```

```
    ^~~~~~
```

```
make[1]: *** [../mk/postgres.mk:145: obj/indexam.o] Error 1
```

```
make[1]: Leaving directory '/home/devrim/tmp/postgres95/src/  
backend'
```

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  - OLD!
- Native Windows Support in 8.0!

# Is Cygwin really old?

- <https://blog.dbi-services.com/postgresql-on-cygwin/>
- Still testers out there!

# Really old days:

- CREATEDB and DESTROYDB (QUEL Commands and binaries!)
- CHANGE ACL → REVOKE/GRANT :-)
- ...
- But, more is coming up!

# Really old days:

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  - range of e is employee retrieve (comp = e.salary/ (e.age - 18)) where e.name = "Jones"
- OLD!
- SQL!
  - SELECT (e.salary/ (e.age - 18)) AS comp FROM employee as e WHERE e.name = "Jones";

# Old days:

- `australian_timezones`
- `bgwriter_all_{percent,maxpages}`
- `stats_start_collector`
- `add_missing_from`
- `max_fsm_{pages,relations}`
- `unix_socket_directory`
- ...

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- `rtree`
- `NOTNULL, ISNULL`
  - `SELECT * FROM t1 WHERE c1 ISNULL;`

# Last year!

- xlog → wal
- clog → xact
- pg\_basebackup -x → -X fetch
- createlang, droplang
- sql\_inheritance parameter



# Last year!

- `--disable-integer-datetimes`
- Warnings about hash indexes
- version-0 func calling conventions
- Version numbering changes
  - `X.Y.Z` → `X.Y!`

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- 9.3 will be “old” soon.
- “Those were the days, my friend”
  - Materialized views
  - LATERAL
  - Writeable FDWs
  - Event Triggers
  - Reduced System V shared mem requirements
- Latest version that does not have logical decoding!

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No more using mixed cases in the command options:

- v10 :

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postgres=# ALTER TABLE t1 SET  
("AUTOVACUUM_EnAbLed"= true);
```

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ALTER TABLE
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- **OLD!**

- v11:

```
postgres=# ALTER TABLE t1 SET  
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```

```
ERROR: unrecognized parameter  
"AUTOVACUUM_EnAbLed"
```

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- “PostgreSQL differs quite significantly from other database systems , when it comes to stored procedures” **OLD!**
- No more emulation of stored procedures with stored functions.
- No more single-transaction functions

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# We sometimes remove things:

postgresql.conf:

- replacement\_sort\_tuples (Peter Geoghegan)

Functions:

- WITH clause in CREATE FUNCTION removed

Extensions:

- chkpass



# We sometimes remove things:

pg\_class

- relhaspkey column removed.
  - pg\_index

Adminpack:

- pg\_file\_read(), pg\_file\_length(), and pg\_logfile\_rotate() obsoleted in adminpack

# checksum

- Not using checksums? OLD!
- pg\_basebackup
  - --no-check-checksums
- Can you verify checksums in 10?
  - No → OLD!

# Questions, comments?



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