

# How to implement the full text search using only what PSQL offers

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# FT search

- \* Firebird does not support FT search
- \* 3rd party/hand made implementations
- \* Tokenizers, dictionaries, ...

# FT search

- \* 3rd party products
  - \* i.e. Lucene/Lucene.NET
    - \* Store in FB or outside FB
- \* UDFs
- \* (P)SQL
  - \* Aka „poor mans FT search“

# FT search

- \* WHERE name LIKE '%term%'
- \* Not really FT
- \* Cannot use index

# FT search

- \* Define the needs
  - \* Names, products, ...
  - \* Full words
  - \* Anywhere-ish – from/to word boundaries
- \* Tokenize
- \* Index
- \* Search

# FT search

- \* Step 1: Split the string on „spaces“
  - \* Tokenize
  - \* Regex to save us with `[[:ALNUM:]]` and collations
- \* Step 2: Process the pieces
  - \* LIKE 'term%' is index-searchable (prefix)
  - \* `?` we can do LIKE 'mret%' (suffix)
- \* Step 3: Build the inverted index
  - \* (term, ID)
  - \* Functional indices
- \* Step 4: Create SPs for searching (optional)

**DEMO**

# Q & A

