

DBX TALK

I N G . M A R I A N O M A R T I N E Z P E C K

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THANKS A LOT!!!



SummerTalk 2011

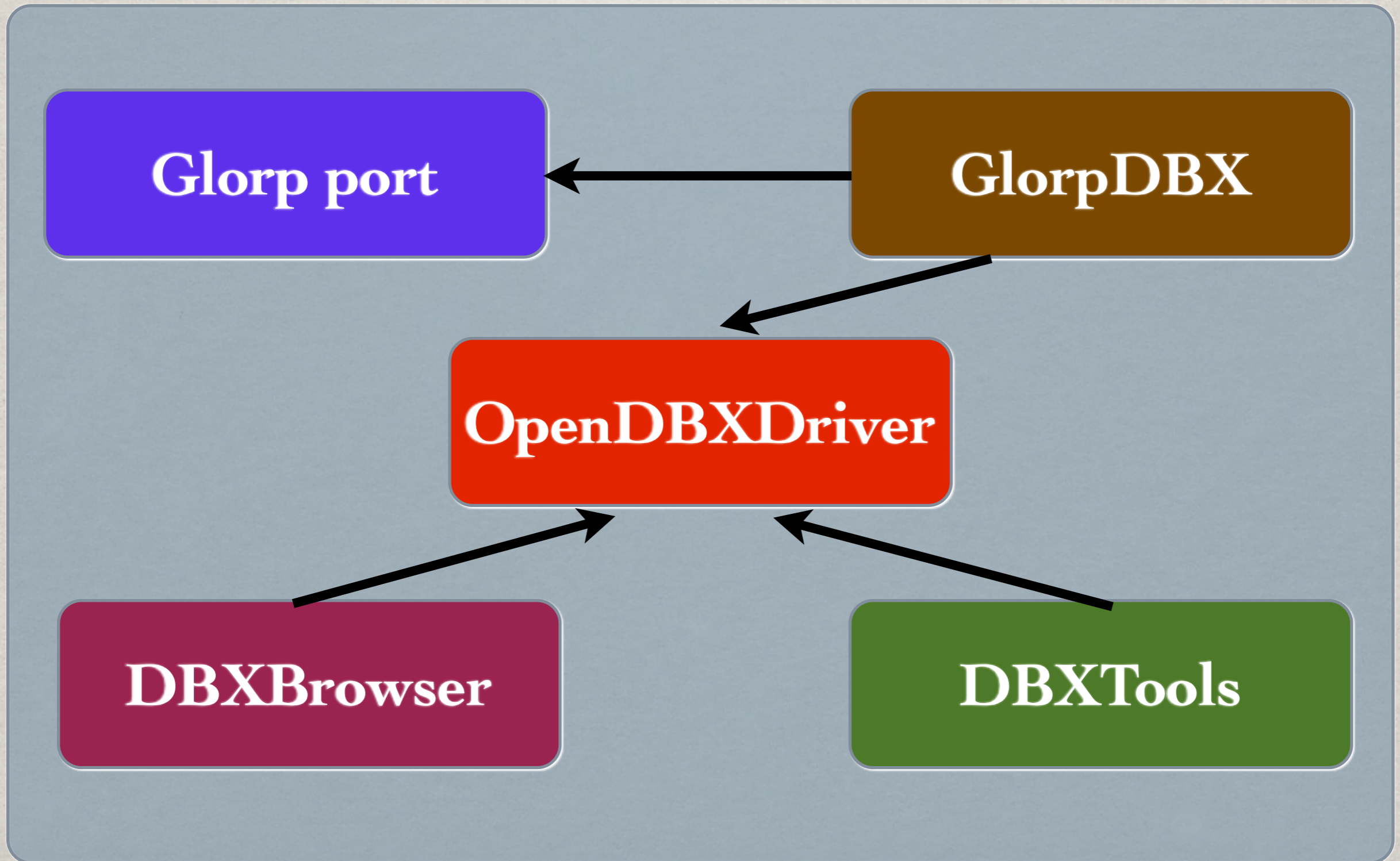
Students: Guillermo Polito, Santiago Bragagnolo and Gisela Decuzzi.

Mentors: Mariano Martínez Peck, Esteban Lorenzano and Diogenes Moreira.

DBXTALK IS...

The complete and open-source solution to relational database access.

DBXTALK SUITE



OPENDBXDRIVER

- ✻ Formerly known as SqueakDBX.
- ✻ It is the database driver.
- ✻ It wraps the C library OpenDBX.



ORACLE



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Oracle
client
library



ORACLE

MySQL
client
library



MySQL

PostgreSQL
client
library



PostgreSQL

...

...

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MSSQL
client
library



Microsoft
SQL Server 2008

Oracle uses oci.h and libclntsh
It has N functions.
Examples: OCIHandleAlloc(), OCIAttachServer(),
OCISessionEnd(), etc.

Oracle
client
library



ORACLE

MySQL
client
library



MySQL

PostgreSQL
client
library



PostgreSQL

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...

...

MSSQL
client
library



Microsoft
SQL Server 2008

MySQL uses `mysql.h` and `libmysqlclient_r`
It has M functions.
Examples: `mysql_real_connect()`, `mysql_server_end()`,
`mysql_real_query()`, etc.

Oracle
client
library



MySQL
client
library



PostgreSQL
client
library



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MSSQL
client
library

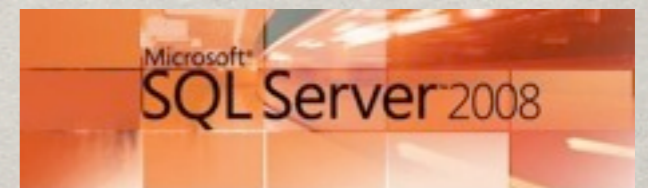


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ORACLE



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Oracle
client
library

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MySQL
client
library

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PostgreSQL
client
library

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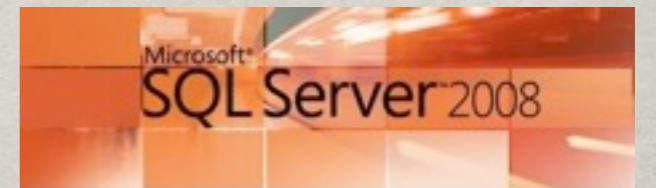
MSSQL
client
library



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Common API for all backends!

Oracle client library

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MySQL client library

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PostgreSQL client library

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MSSQL client library



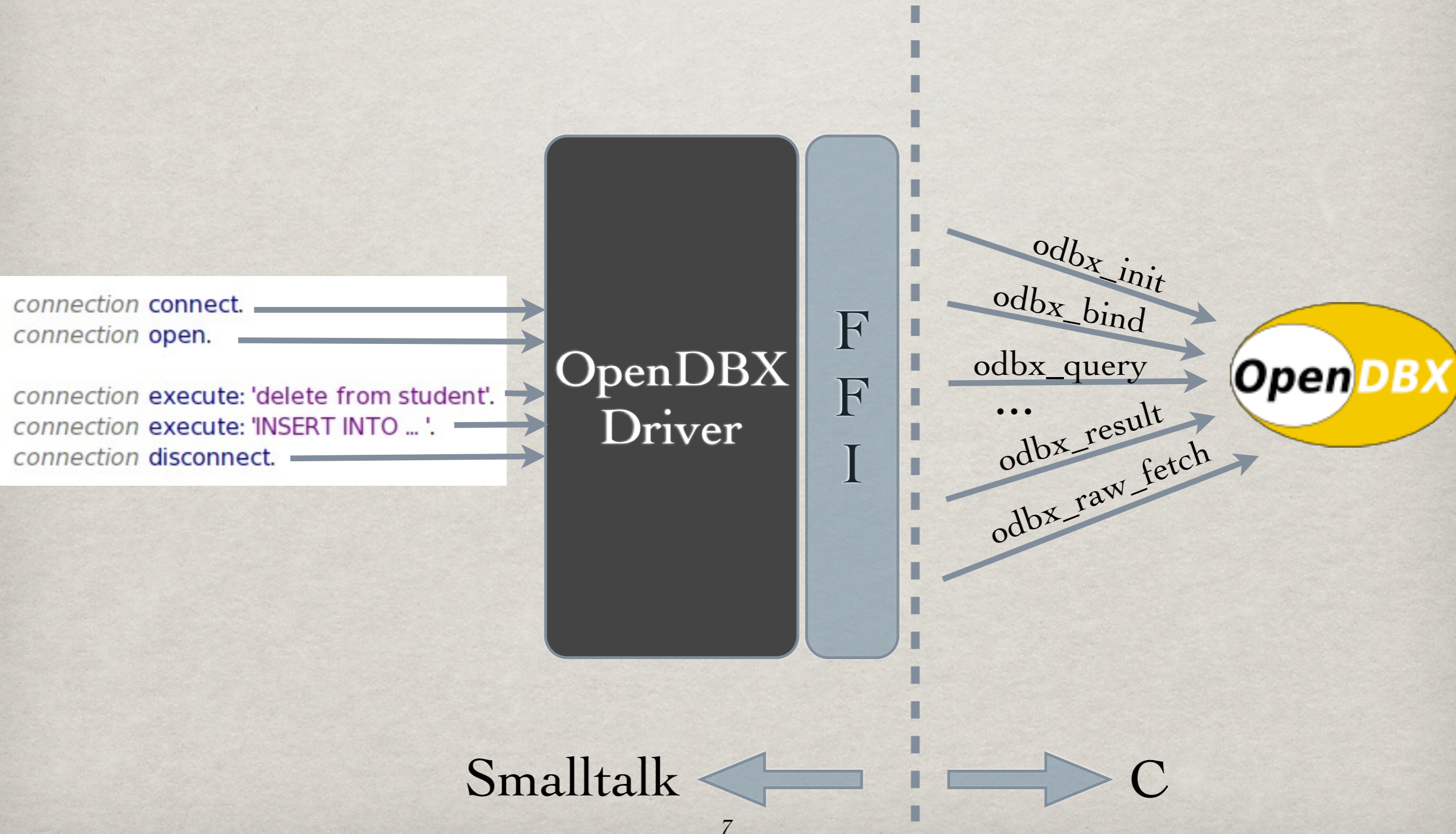
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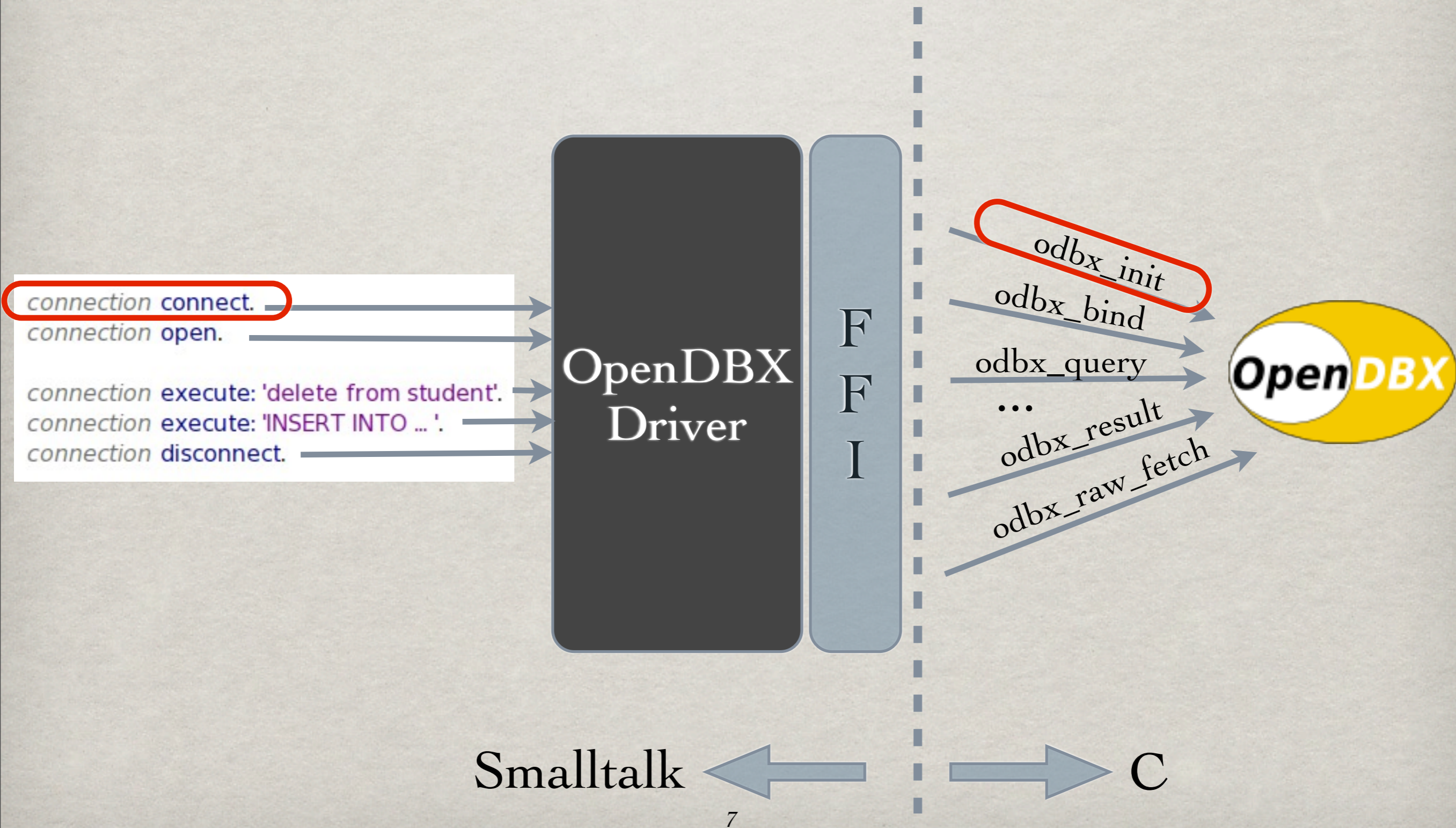
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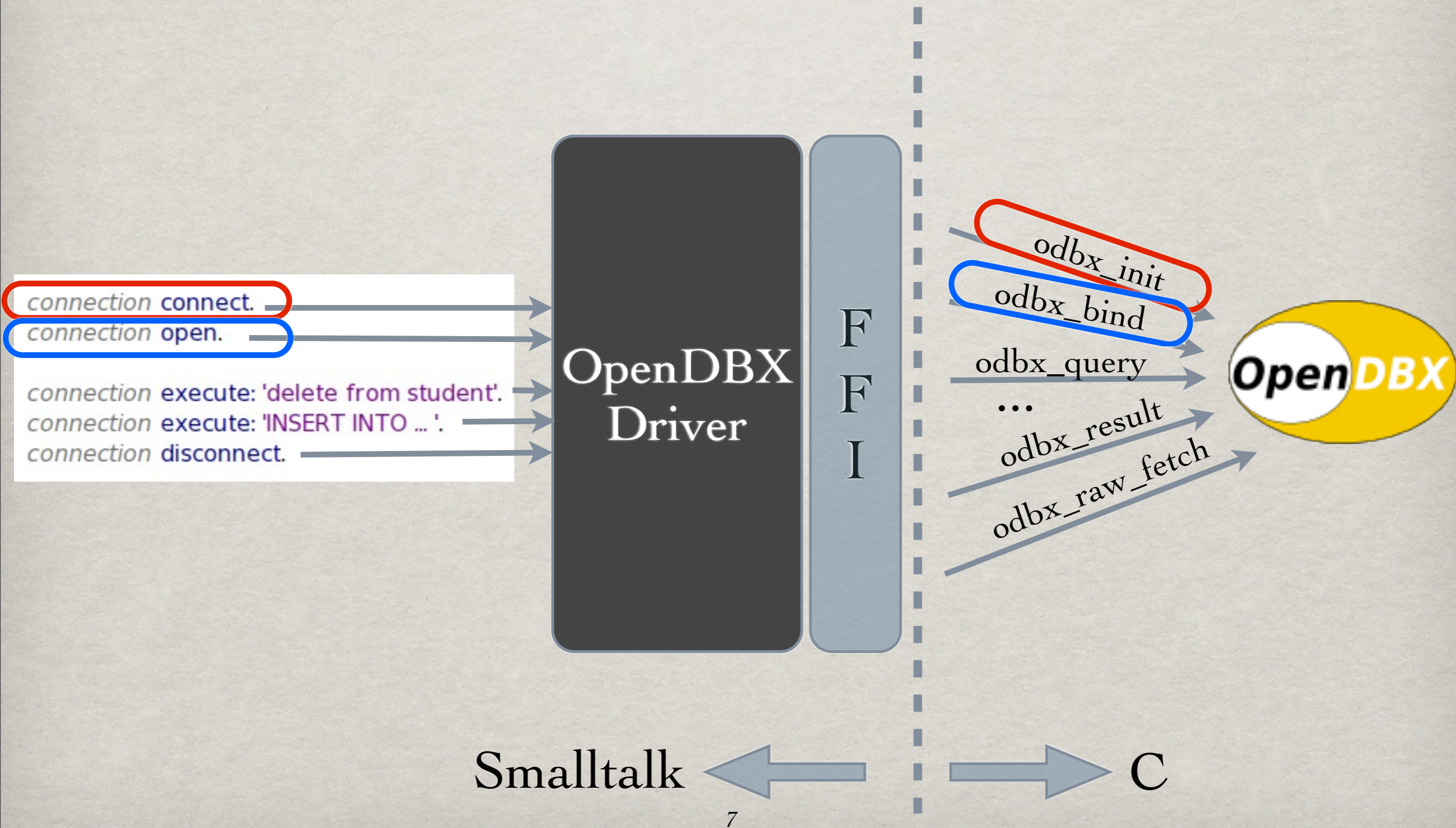
LAYERS



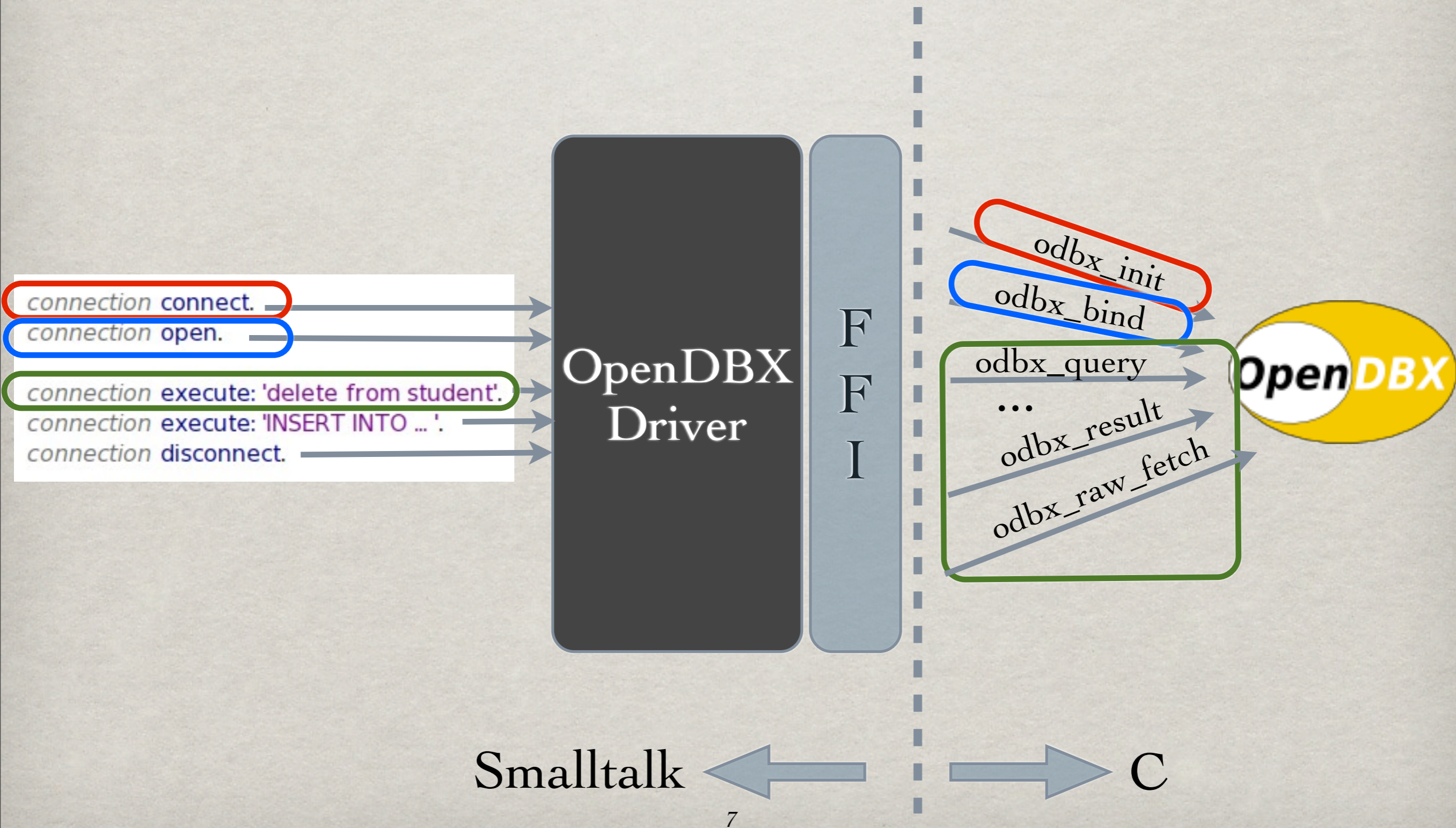
LAYERS



LAYERS



LAYERS



GLORP PORT

- ✻ Port latest Glorp from VisualWorks to Pharo.
- ✻ Try to automatize that task as much as possible.
- ✻ Document the process.

GLORPDBX

The “glue” (Glorp database driver) between
Glorp and OpenDBXDriver.

DBXTOOLS



- ✿ Scaffolding - Glorp -
- ✿ From tables -> automagic generation of classes, Glorp mappings and Magritte descriptions.

DBXBROWSER

- ✻ UI for scaffolding.
- ✻ Query database.
- ✻ Visualize database metadata.

DBXBROWSER

DBX Browser

Test SQL Query:

Object Explorer

- information_schema
- mysql
 - Tables
 - Views
 - Indexes
- sodbxtest
 - Tables
 - course
 - signature
 - student**
 - test_character_columns
 - test_datetime_columns
 - test_large_columns
 - test_numeric_columns
 - Views
 - Indexes
 - PRIMARY
 - PRIMARY
 - se_st_fk
 - PRIMARY
- test

Object Data:

id	username	pass	mail	name_surname	regular	age	aver
1	nil	nil	nil	Mariano Squeak	nil	23	nil
2	nil	nil	nil	Hernan Squeak	nil	23	nil
3	nil	nil	nil	German Squeak	nil	23	nil
4	nil	nil	nil	Alejandro Squeak	nil	30	nil
5	nil	nil	nil	Esteban Squeak	nil	42	nil



New DBXTalk chapter!!!

CURRENT STATE

- ✿ OpenDBXDriver version 1.0 released.
- ✿ OpenDBXDriver is working with most databases and in most OS.
- ✿ Glorp '7.7.1 - 19' (distributed with VW 7.7.1) ported to Pharo.
- ✿ GlorpDBX is working with MySQL, Oracle, PostgreSQL and SQLite3. Release: SOON.
- ✿ DBXTools and DBXBrowser still in development.

FUTURE WORK

- ✻ Continue developing DBXBrowser (port to Glamour) and DBXTools.
- ✻ Add more backends to GlorpDBX.
- ✻ New website, documentation, continue PBE chapter, etc.
- ✻ Port OpenDBXDriver to GLASS?
- ✻ Glorp ActiveRecord port?



SHOWTIME!

Thanks!

DBX TALK

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