

Database Inspection

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Wellington PM

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- 1 The Problem
- 2 The Solution
- 3 The Better Solution
- 4 Questions

The Client

- We get a random question
- We have to write a bunch of SQL
- It's the same SQL we wrote last time

Example

Question

“Why is the results page for Meet 2 Race 4 showing incorrect place pool information?”

```
tab=> SELECT rc_meeting_id FROM rc_meeting
      WHERE date=current_date AND number=2;
      rc_meeting_id
-----
              32204
(1 row)
```

Example

Question

“Why is the results page for Meet 2 Race 4 showing incorrect place pool information?”

```
tab=> SELECT rc_race_id FROM rc_race
      WHERE rc_meeting_id = 32204 AND number = 4;
      rc_race_id
-----
          172812
(1 row)
```

Example

Question

“Why is the results page for Meet 2 Race 4 showing incorrect place pool information?”

```
tab=> SELECT rc_result_id FROM rc_result
      WHERE rc_race_id = 172812;
      rc_result_id
-----
              130869
(1 row)
```

Example

Question

“Why is the results page for Meet 2 Race 4 showing incorrect place pool information?”

```
tab=> SELECT * FROM rc_result_pool
      WHERE rc_result_id = 130869;
```

pool_id	rc_result_id	type	amount	order
4197906	130869	PLC	8.6	3
4197905	130869	PLC	1.3	2
4197904	130869	PLC	1.1	1
4197903	130869	WIN	2.8	1

(4 rows)

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Magical CLI tool

```
=> result('m2r4')
```

```
rc_result_id      : 130869  
rc_race_id        : 172812  
status            : Complete  
fullyresulted    : t  
winnerstime      : 1:12.08  
...
```

```
=> result_pools('m2r4')
```

```
...
```

A Slight Digression

- If I'm writing a shell to do this:
 - Why not use Perl?
 - "magic" is just Perl subs
- Behold **pii** (now released)
- `http://dollyfish.net.nz/projects/pii`

```
$ wget -Opii \  
  'http://git.dollyfish.net.nz/?p=pii;a=blob_plain;f=pii'  
$ chmod +x pii
```

The Idea Sucked ... Badly

- Too difficult to predict what “magic” I wanted on any given day
- Still had to type a bunch of stuff
- No easy way to move between related objects (tables)
- Had to *write* “magic” for each table in advance

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The New Plan

- Web interface, clicking is easy
- Steal window-type model from window “managers”
- Define each table to render a chunk of HTML
- Easy way to define links to other tables
- Each “window” represents a row in a table

The New Plan

- Web interface, clicking is easy
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- Each “window” represents a row in a table
- Still have to write code for each table

Standard Format

- Window title ([tablename]=[pkvalue])
- list of fields and values
- list of rows from other tables that FK to this row
- PGTools (from long long ago)
- automatically create HTML chunks

The UI

- jQuery
- Window plugins, found some, kinda sucked
- Wrote my own, kept it fairly simple and reusable
- Steal from google (as is the way)

The attempted demo

Improvements

- Aim for a best possible experience from zero-config
- Use an ini file to define any extra information as simply as possible
- Get a window placement algorithm working
- some way of defining "virtual" tables
- easy way to override the theming of table data

Sample ini file

```
[rc_meeting]
title          = M[% data.number %] ([% data.date %])
data title     = Meeting information
show fields    = number,name,venue
order by       = date, number
field.rc_track_id = fk.name
```

Questions?

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