



south
new and old

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djangocon.eu 2010

It's been almost 2 years.
Lots has happened.

Migrations? Eh?

A bit like a VCS, but for database schemas.

The Beginning



1-make_tables.sql
2-add_profile.sql

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2-add_profile.sql

**YOU ARE AT
VERSION**

2

- 1-make_tables.sql
- 2-add_profile.sql
- 3-remove_pony.sql

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- 4-add_postcode.sql

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Oracle

MySQL

PostgreSQL

SQLite

MSSQL

The Early Days

✓ Adding tables

✓ Deleting tables

✗ Everything else useful



1-make_tables.sql



2-add_profile.sql



3-remove_pony.sql



4-add_postcode.sql

Uh-oh, publicity

“

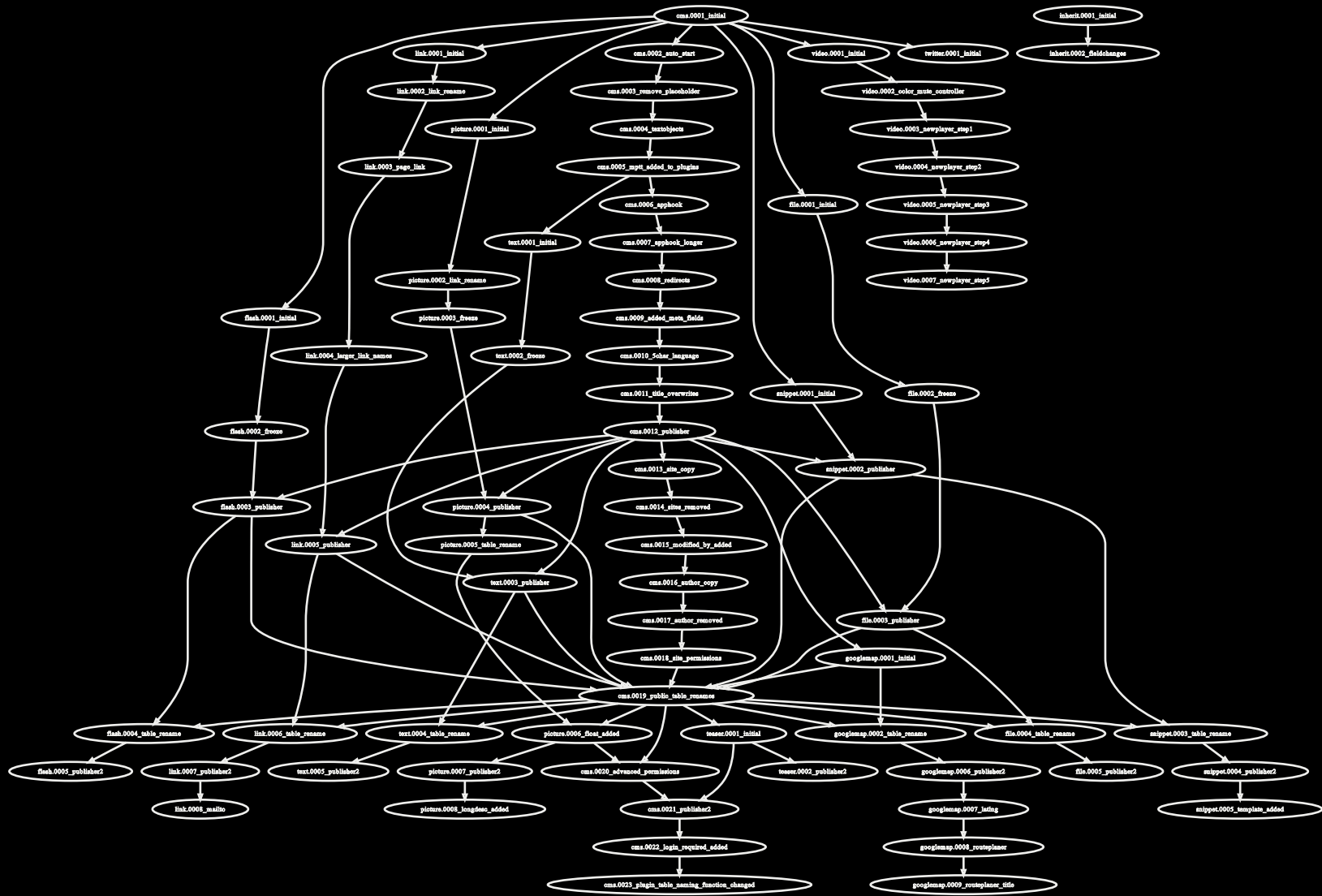
Closing this, as it's unlikely we'll write a model history tracker in the near future, and django-evolution does this well - no need to reinvent the wheel in that area.

”

Feature Creep

(of the good sort)


```
start_field_re = re.compile(r'\s*%s\s*=\s*(.*)' % field.name)
for line in source[0]:
    # if the field was found during a previous iteration,
    # we're here because the field spans across multiple lines
    # append the current line and try again
```



Model Freezing

Historical ORM access

Automatic change detection

‘Improved’ model parsing

Sanity Dawns

Introspection

- ✗ Magically supports custom fields
- ✓ Prevents hideous migration failure

SQLite

Make new table

Copy data from old table

Delete old table

Rename new table

Signals

Speed

Simplicity

1.0

MultiDB?

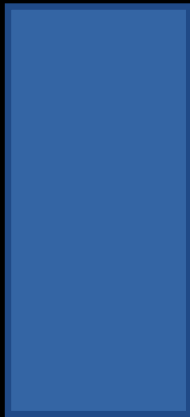
Non-relational?

Renames!

Organic Growth

But it's still cleanly separated

Database
Backend



Dependency/
Ordering
Engine



Migration
Runner



Auto-
detector



The Future

Database Backend Dependency/
Ordering Engine



???

Migration Runner

Auto-detector



South in future

south

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This is **South**, intelligent schema and data migrations for Django projects. ... Have a read about **South**, and see why we think you should use it. ...

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Biologically, the **South** is a vast, diverse region, having numerous climatic zones, including temperate, sub-tropical, tropical, and arid—though the **South** is ...

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The Ultimate Goal

Fin.

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