

Performance improvements with primary key redesign

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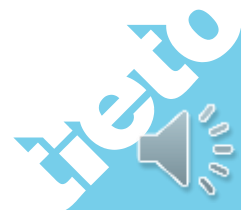
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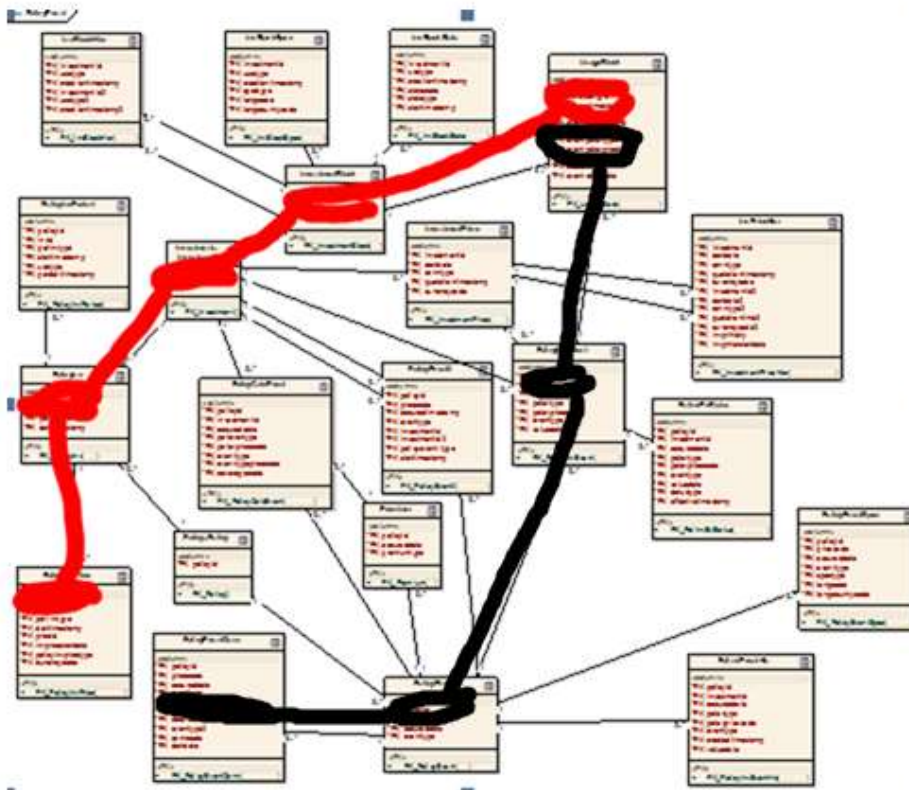


Surrogate key

- The surrogate is internally generated by the system and is invisible to the user or application.
- I'm not the biggest fan of surrogate keys, also I easily get a headache when developers explain that ORM framework and surrogate is fantastic..."it's so easy and fast to implement".



Surrogate key



Painful joins

Touches several tables

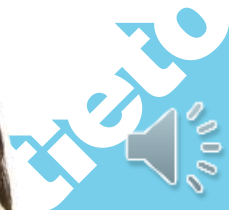


Natural key

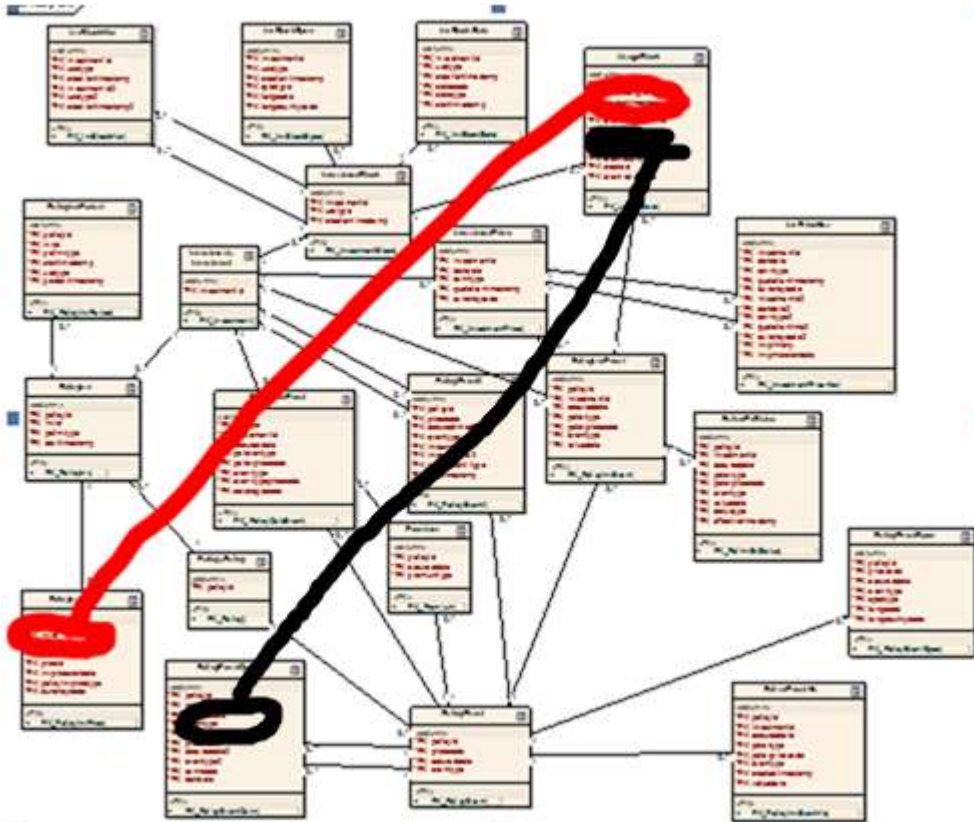
- Is formed of attributes that already exist
- Can avoid duplicates
- Fast access to tables
- Supports well batch processing and reporting
- I'am a natural key fan....



2013-03-02



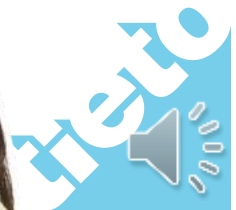
Natural key



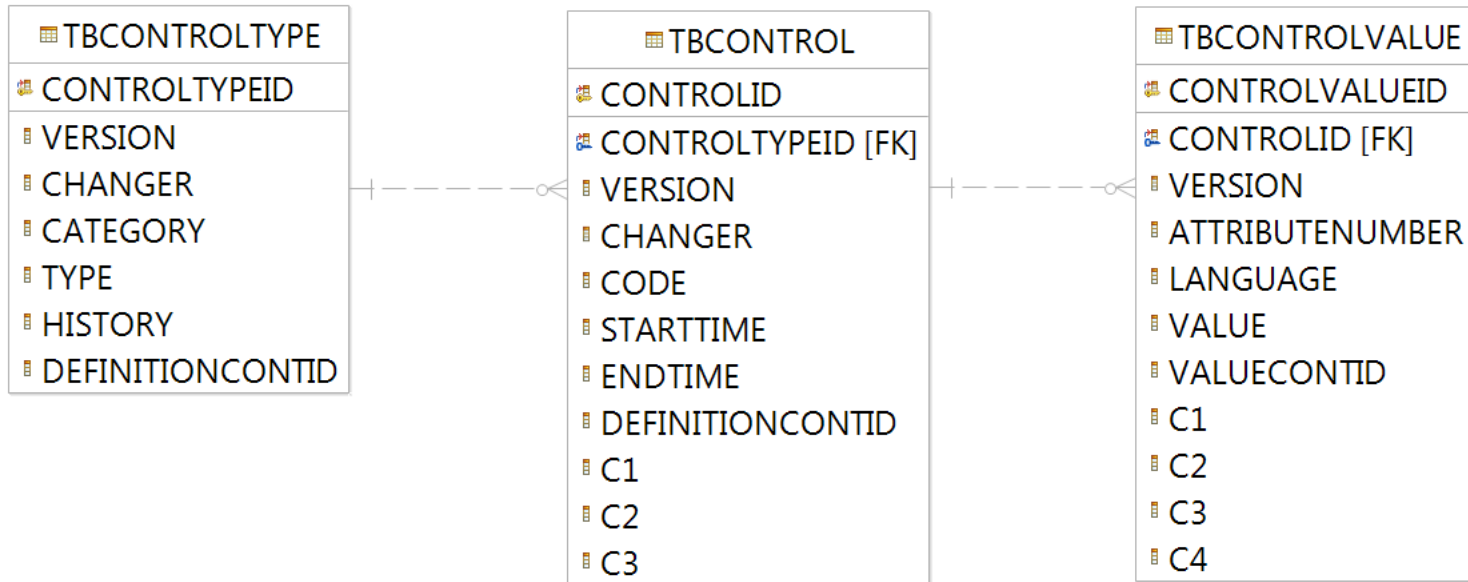
Effective queries

Batch processing!

Reporting!

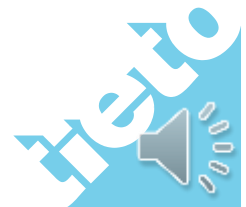


OLD STRUCTURE

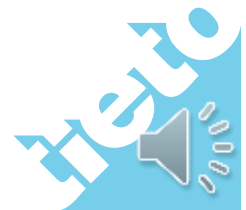
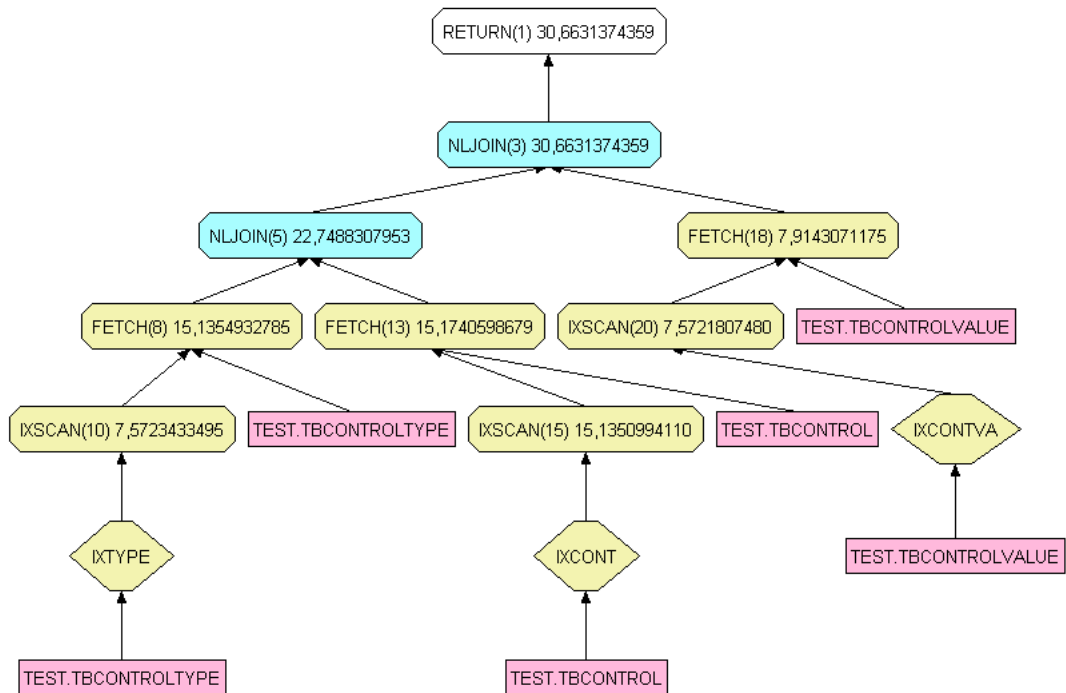


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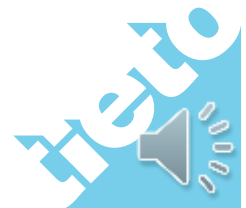
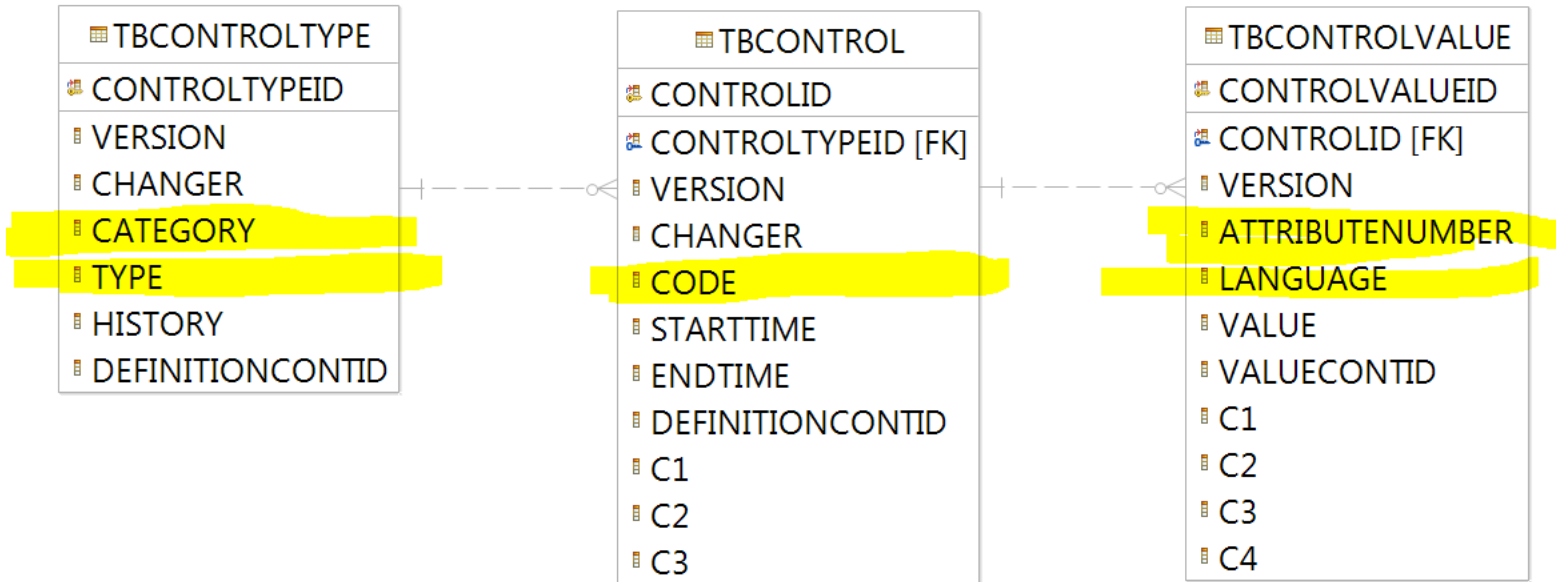
select value.value from test.tbcontroltype type
join test.TBCONTROL cont on cont.controltypeid = type.controltypeid and
cont.code = '404'
join test.TBCONTROLVALUE value on cont.controlid = value.controlid
and ATTRIBUTENUMBER = 5
where type.TYPE = 'ACTIVITY_CODE';
  
```



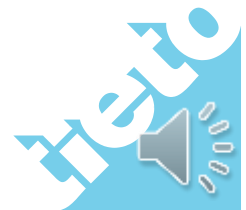
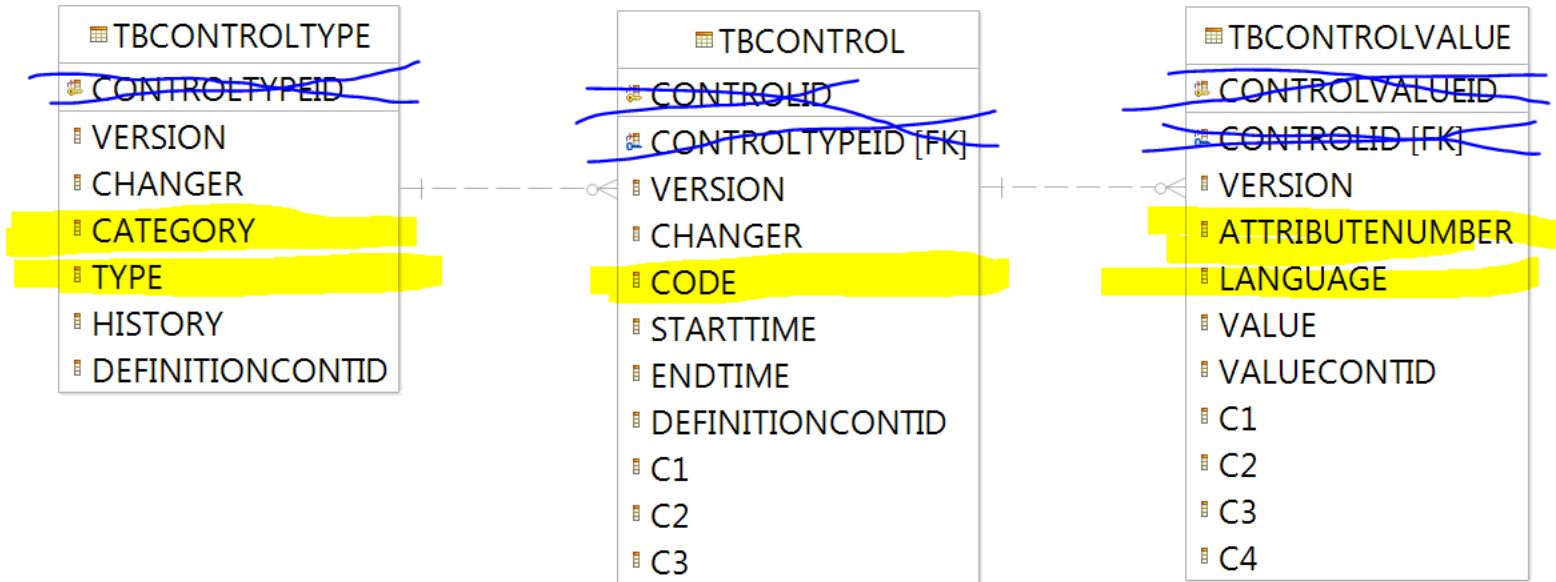
OLD STRUCTURE



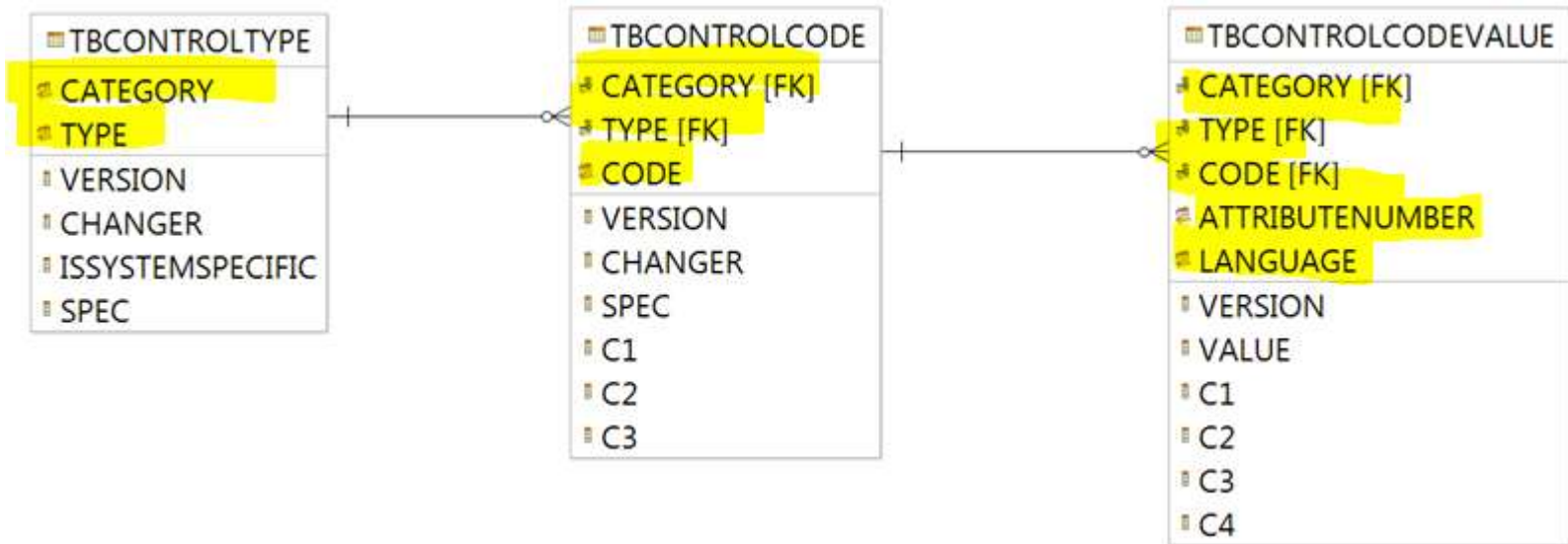
How to change PK structure



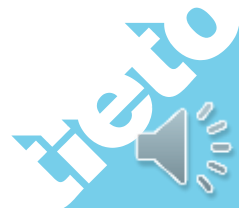
How to change PK structure



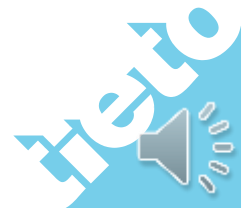
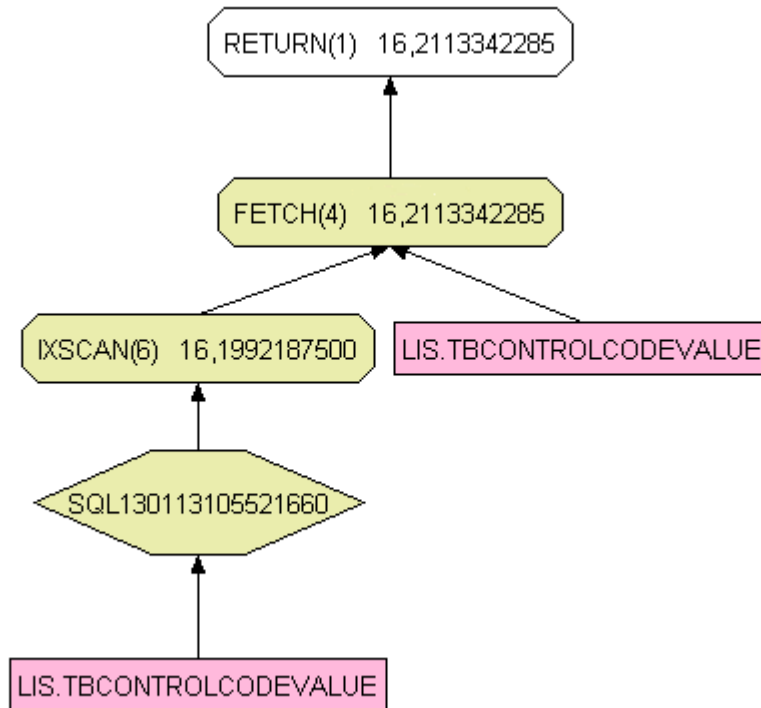
New PK structure



select value from lis.tbcontrolcodevalue
 where TYPE = 'ACTIVITY_CODE'
 and code = '404'
 and ATTRIBUTENUMBER = 5



New PK structure



**Knowledge.
Passion.
Results.**

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