

DATA

db2batch - Benchmark Tool

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COMPLEXITY

Where is the
bottleneck in my SQL
DML ?

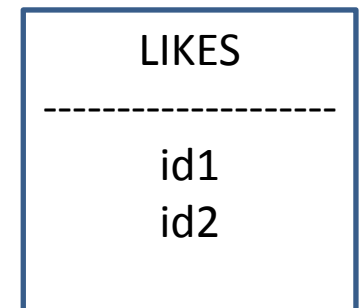
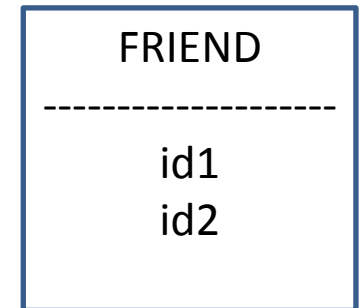
**db2batch can
measure the time
to answer all these
questions!**

Why is it so
slow today?

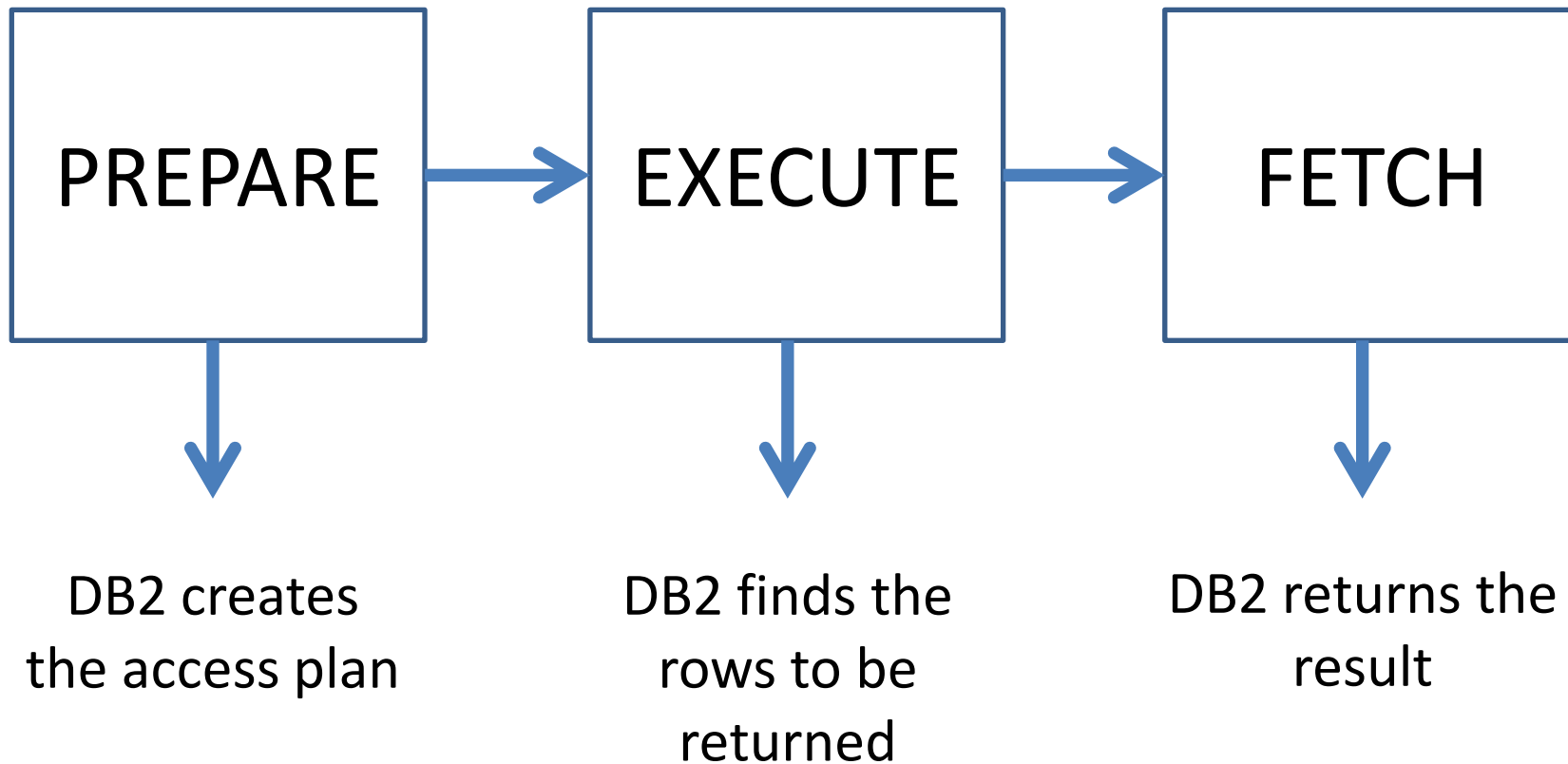
How long
does my SQL
take ?



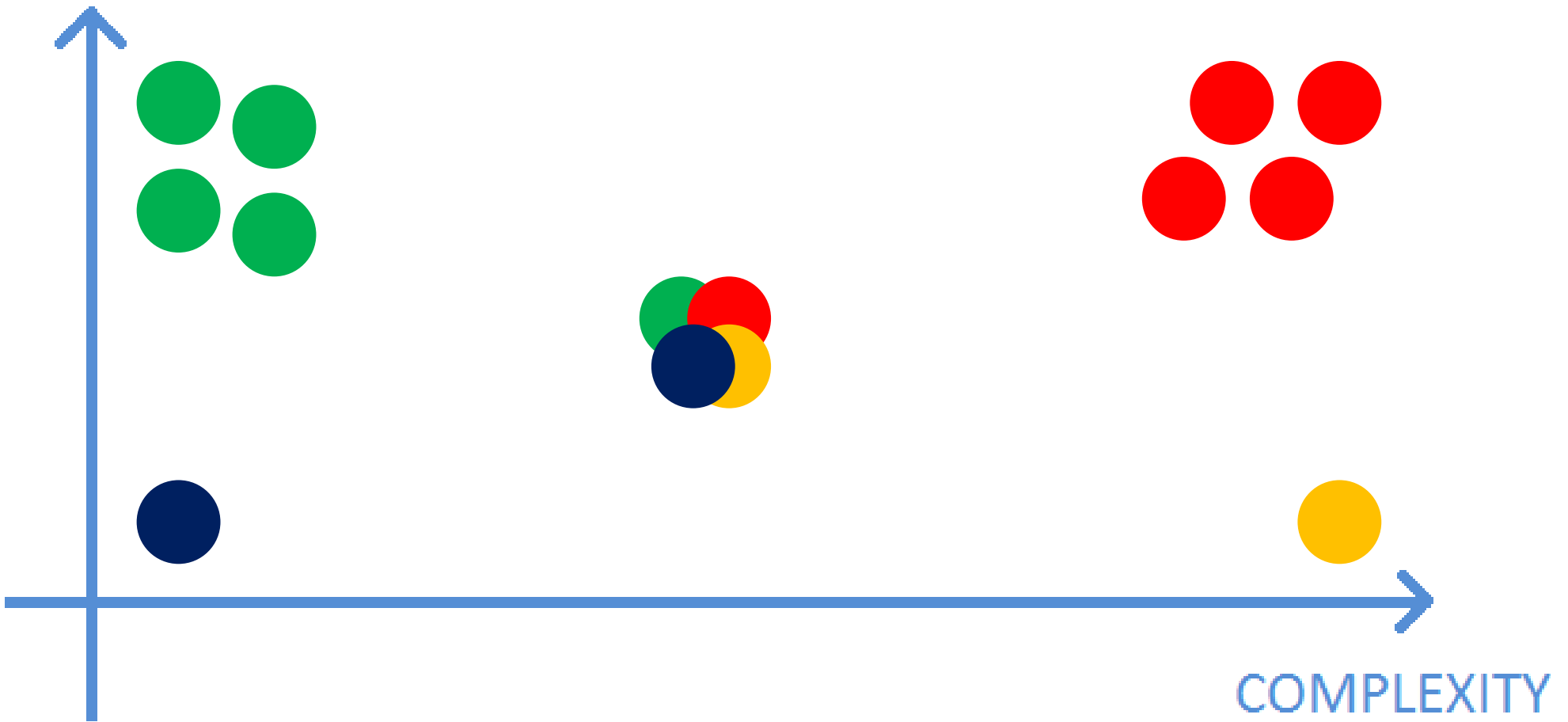
Social Media Example



Statements have 3 phases



DATA

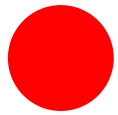


-  high prepare, execution and fetch
-  low prepare and execution high fetch
-  high prepare and execution low fetch
-  low prepare, execution and fetch

db2batch main options

- -d | database
- -f | file with the sql statements
- -iso | isolation level: CS
- -i | format of measured elapsed times: Complete
- -o | options
 - f – row fetch
 - r – rows out
 - p – perfil detail
 - o – query optimization class

Statements example



Find the names of all who are friends with someone named Gabriel.



Find the names who lives in US



Who has more friends worldwide ?



Find all the information about person who has the ID 5239306

Statements example



```
select name from person where id in (select id2 from person  
inner join friend on person.id=friend.id1 where name =  
'GABRIEL');
```



```
select name from person where country = 'US'
```



```
select max(n) from (select count(*) as n,id from (select p1.id  
from person p1,friend f1,person p2 where p1.id=f1.id1 and  
f1.id2=p2.id and exists (select * from person p3 where  
p3.country <> p2.country and p1.country=p2.country)) group  
by id)
```



```
select * from person where id = 5239306
```


db2batch file example

```
--#SET ROWS_OUT 0
--#SET PERF_DETAIL 1
select name from person where id in (select id2 from person inner join
friend on person.id=friend.id1 where name = 'GABRIEL');

select name from person where country = 'US';

select max(n) from (select count(*) as n,id from (select p1.id from person
p1,friend f1,person p2 where p1.id=f1.id1 and f1.id2=p2.id and exists
(select * from person p3 where p3.country <> p2.country and
p1.country=p2.country)) group by id);

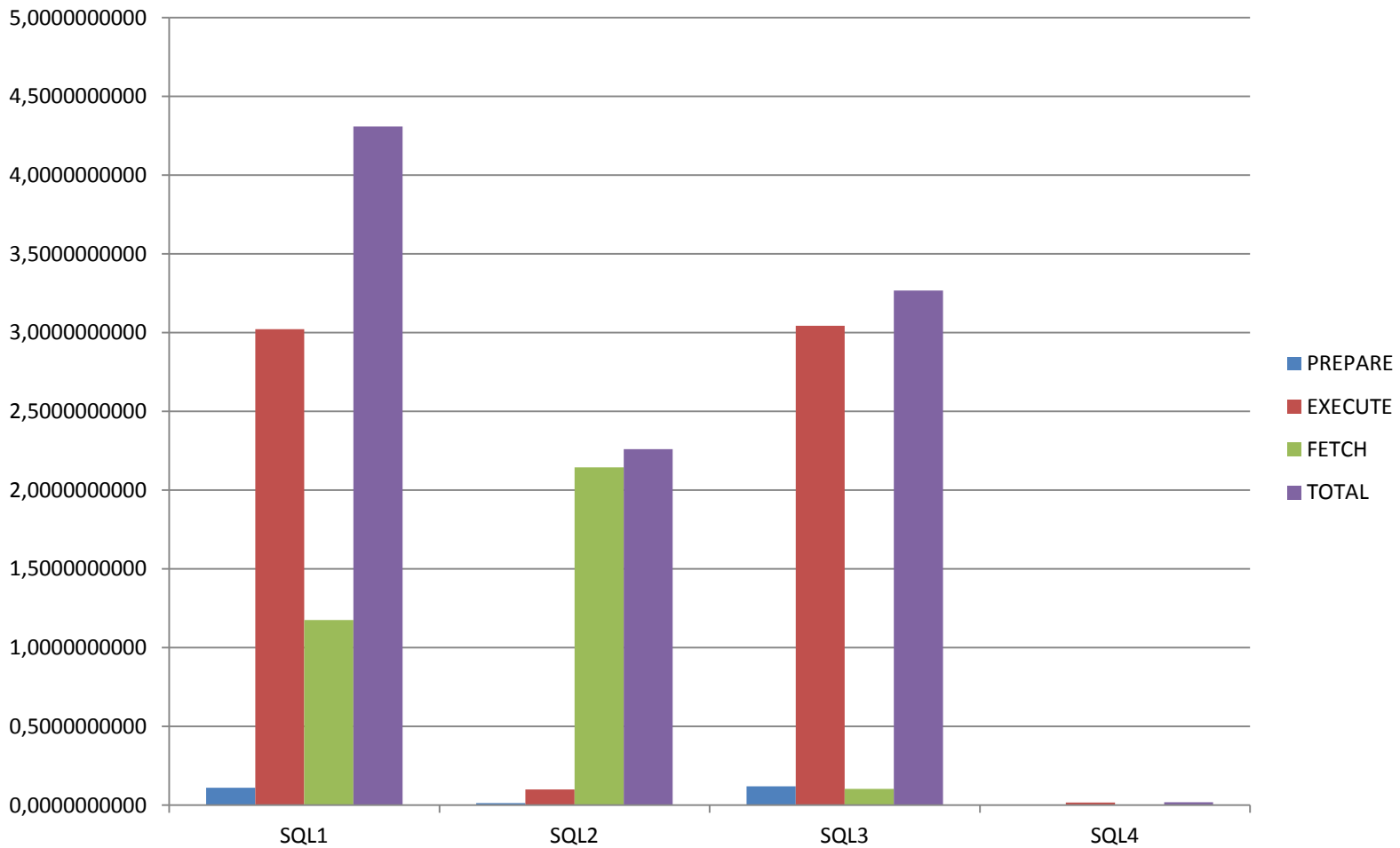
select * from person where id = 5239306;
```

```
$ db2batch -d social -f social.sql -iso CS -i complete -o o 9
```

db2batch output

```
db2hadr@server1:~
* Timestamp: Thu Mar 07 2013 23:12:03 BRT
-----
--#SET ROWS_OUT 0
-----
--#SET PERF_DETAIL 1
-----
* SQL Statement Number 1:
select name from person where id in (select id2 from person inner join friend on p
NAME
-----
* 5541 row(s) fetched, 0 row(s) output.
* Prepare Time is:      0.110081 seconds
* Execute Time is:     3.013481 seconds
* Fetch Time is:       1.179951 seconds
* Elapsed Time is:     4.303513 seconds (complete)
```

Output Graphic



When can you use db2batch?

- Answer precision time of SQL
- Show to the users if the bottleneck is on database or not
- Attack the right SQL phase to tune your SQL



If you enjoyed and learned!!
vote Éric !! 😊
Thank you!

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