

Database - Feature #6507

cross-database joins

06/08/2022 10:35 PM - Eric Faulhaber

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:	Ovidiu Maxiniuc	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		version:	
billable:	No		
vendor_id:	GCD		
Description			
Related issues:			
Related to Database - Feature #6348: implement support for MariaDB			WIP

History

#1 - 06/08/2022 10:46 PM - Eric Faulhaber

Some customers have the need to join tables which exist in separate databases in queries outside of FWD, as in:

```
select
    db1.table1.field1, db2.tableA.fieldA
from
    db1.table1
join
    db2.tableA
on
    db1.table1.field1 = db2.tableA.fieldA
...
```

The immediate need is for queries outside of FWD, but a solution for this can be useful within FWD as well, to eliminate some instances of CompoundQuery, if the legacy query meets certain conditions (e.g., PRESELECT).

For PostgreSQL, there is the Foreign Data Wrapper (<https://www.crunchydata.com/blog/understanding-postgres-fdw>) extension", which probably is the best way to do this.

#2 - 07/04/2022 04:37 PM - Eric Faulhaber

- Related to Feature #6348: implement support for MariaDB added

#3 - 07/04/2022 04:40 PM - Eric Faulhaber

Initially, we need to support this for MariaDB, which essentially just means planning what database instances will look like when using MariaDB as the back end. Joining across databases on the same server essentially just looks like the example in [#6507-1](#). Apparently, there is no additional set up needed, like there is with PostgreSQL.

#4 - 07/05/2022 07:35 AM - Greg Shah

Is there a reason to implement this for a specific database backend?

#5 - 09/09/2022 12:23 AM - Eric Faulhaber

- Assignee set to Ovidiu Maxiniuc

Greg Shah wrote:

Is there a reason to implement this for a specific database backend?

Yes. Some databases (e.g., MariaDB) support the syntax in [#6507-1](#) "out-of-the-box" if the databases are on the same server. Others (e.g., PostgreSQL) do not; from what I understand, you have to install contributor technology that is not part of the base project (e.g., Foreign Data Wrapper: https://www.crunchydata.com/blog/understanding-postgres_fdw) and add configuration, even for database instances in the same server.

Ovidiu, initially, we just have to make sure we don't do anything to preclude hand-written JDBC from joining across databases, as in [#6507-1](#). Is there anything about the current MariaDB support that might cause a problem with this? As I understand it, we just generate DDL for each database, and it is up to the deployment to create and import databases that need to be joined this way on the same server. Is that correct?

Ultimately, we will want to integrate direct support for this in FWD, though I'm not exactly sure yet what that needs to look like.