Database - Feature #6721

calculate field lists at conversion time where possible

08/29/2022 06:54 AM - Greg Shah

Status:	New		**Start date:**	
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:				
billable:	No		**version:**	
vendor_id:	GCD			

Description

Related issues:	
Related to Database - Feature #2137: runtime support for FIELDS/EXCEPT record...	**New**
Related to Database - Bug #7185: H2 in-memory lazy hydration	**Test**
Related to Database - Feature #8067: investigate adding automatically adding ...	**WIP**

History

#1 - 08/29/2022 07:03 AM - Greg Shah

There are use cases of buffers in which it is not possible to statically calculate the exact fields used at runtime (even using call graph). Examples:

- buffers passed as a handle
- buffers passed as a parameter (table, table-handle, buffer) to code implemented with super-procedures
- dynamic database usage of a static buffer
- dynamic temp-tables

Even the cases that can be statically calculated, might require a call graph to fully calculate them if there is parameter usage.

OK, so this is **hard**. So what? Lots of things we do are hard. We should measure:

- the benefit of field lists (simulate cases where we use them and don't use them and compare)
- what percentage of cases can be calculated using static techniques
    - without call graph
    - with call graph

Given this, we can make some kind of estimate of the impact.

#2 - 08/29/2022 07:03 AM - Greg Shah

- Related to Feature #2137: runtime support for FIELDS/EXCEPT record phrase options added

#3 - 03/13/2023 07:38 AM - Alexandru Lungu

- Related to Bug #7185: H2 in-memory lazy hydration added

#4 - 11/21/2023 12:29 PM - Greg Shah

- Related to Feature #8067: investigate adding automatically adding a FIELDS clause for simple record blocks added