

Database - Bug #3171

a natural join combined with the :: operator will cause an unexpected result

08/18/2016 12:30 PM - Greg Shah

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

History

#1 - 08/18/2016 12:32 PM - Greg Shah

The following testcase can be found in `uast/natural_joins_combine_with_colon_colon_with_surprising_result.p`:

```
DEFINE TEMP-TABLE tt
  FIELD af AS INTEGER.
CREATE tt.
tt.af = 11.

FOR EACH book, EACH tt WHERE tt.af <> book.book-id:
  DISPLAY book-id WITH FRAME f0 DOWN TITLE "Natural Join Only".
  DOWN WITH FRAME f0.
END.

FIND FIRST tt.

FOR EACH book WHERE BUFFER tt::af <> book.book-id:
  DISPLAY book-id WITH FRAME f1 DOWN TITLE ":: Reference" COLUMN 20.
  DOWN WITH FRAME f1.
END.

FOR EACH book, EACH tt WHERE BUFFER tt::af <> book.book-id:
  DISPLAY book-id WITH FRAME f2 DOWN TITLE "Natural Join and :: Reference" COLUMN 34.
  DOWN WITH FRAME f2.
END.

FIND FIRST tt.

FOR EACH book WHERE tt.af <> book.book-id:
  DISPLAY book-id WITH FRAME f3 DOWN TITLE "No Join, No :: Reference" COLUMN 65.
  DOWN WITH FRAME f3.
END.

/* results */

/*
Natural Join Only | :: Reference | Natural Join and :: Reference | No Join, No :: Reference
| Book ID        | | Book ID        | | Book ID        | | Book ID        |
|-----| |-----| |-----| |-----|
|00000001| |00000001| |00000001| |00000001|
|00000002| |00000002| |00000002| |00000002|
|00000003| |00000003| |00000003| |00000003|
|00000004| |00000004| |00000004| |00000004|
|00000005| |00000005| |00000005| |00000005|
|00000006| |00000006| |00000006| |00000006|
|00000007| |00000007| |00000007| |00000007|
|00000008| |00000008| |00000008| |00000008|
|00000009| |00000009| |00000009| |00000009|
|00000010| |00000010| |00000010| |00000010|
|00000012| |00000012| |00000011| |00000012|
|00000013| |00000013| |00000012| |00000013|
```

00099999	00099999	00000013 00099999	00099999
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Procedure complete. Press space bar to continue.
*/

Logically, all 4 FOR EACH loops should have the same results. But one of these things is not like the other. The combination of the multi-table query and the dynamic field reference (inside a static WHERE clause) somehow combines to include the bookid eq 11 record unexpectedly.