

Database - Bug #4994

NPE in AdaptiveQuery when loading null data for an outer join

11/04/2020 09:13 AM - Eric Faulhaber

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Ovidiu Maxiniuc	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No		
vendor_id:	GCD		
Description			

History

#1 - 11/04/2020 09:24 AM - Eric Faulhaber

When a CompoundQuery has a component using the OUTER JOIN option, we try to load data via the AdaptiveQuery.load(Object[], LockType, boolean) API. It is possible for the Object[] data parameter to contain null elements if no joining record was found for a row.

Recreate: choose the "T Rates" menu option in the Hotel ChUI sample application. Using 3821c/11787, this results in:

```
Caused by: java.lang.NullPointerException
    at com.goldencode.p2j.persist.AdaptiveQuery.load(AdaptiveQuery.java:2465)
    at com.goldencode.p2j.persist.CompoundQuery.loadByValues(CompoundQuery.java:2268)
    at com.goldencode.p2j.persist.CompoundQuery.next(CompoundQuery.java:1097)
    at com.goldencode.p2j.persist.CompoundQuery.next(CompoundQuery.java:997)
    at com.goldencode.p2j.persist.QueryWrapper.next(QueryWrapper.java:2094)
    at com.goldencode.p2j.ui.BrowseWidget.getRows(BrowseWidget.java:4503)
    at com.goldencode.p2j.ui.BrowseWidget.getRows(BrowseWidget.java:4319)
    at com.goldencode.p2j.ui.LogicalTerminal.getRows(LogicalTerminal.java:13481)
    ...
```

The problematic line is:

```
arr[i] = ((Record) data[i]).primaryKey();
```

If we prevent the NPE, however, we still have to make the subsequent call to

```
repositionByID(arr, true, false)
```

safe.

The last parameter to the AdaptiveQuery.load method is boolean silentIfNullId. It seems to have been introduced for this very purpose, and is used in several other places in this method, but somehow this case was missed.

#2 - 02/26/2021 05:42 PM - Ovidiu Maxiniuc

- *Status changed from New to WIP*

In case of OUTER JOIN tables when there is no matching record, data[i] is null. Rewriting the problematic line as:

```
arr[i] = (data[i] == null) ? null : ((Record) data[i]).primaryKey();
```

seems to be correctly handled downstream, no record being loaded into the respective buffer.

Committed revision 3821c/12070.

#4 - 02/07/2022 02:23 PM - Eric Faulhaber

- *Assignee set to Ovidiu Maxiniuc*

Ovidiu Maxiniuc wrote:

[...]
Committed revision 3821c/12070.

Can this be closed?

#5 - 02/07/2022 02:27 PM - Ovidiu Maxiniuc

- *% Done changed from 0 to 100*

Yes, I think so. I do not think I heard of any related issues or regressions because of this.

#6 - 02/07/2022 02:27 PM - Eric Faulhaber

- *Status changed from WIP to Closed*

Thanks.