

Database - Bug #2101

multi-buffer FOR loop with rowid and to-rowid functions in WHERE clause not converting properly

03/23/2013 06:34 PM - Eric Faulhaber

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Eugenie Lyzenko	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	Conversion Support for Server Features	case_num:	
billable:	No	version:	
vendor_id:	GCD		
Description			

History

#1 - 03/23/2013 06:50 PM - Eric Faulhaber

This issue was first reported in note 192 of #2068.

The following converts badly:

```
def temp-table ttl field f1 as char.  
  
for each ttl,  
  first person where rowid(person) = to-rowid(ttl.f1):  
end.
```

I think the FOR EACH, FIRST loop should convert to:

```
query0 = new CompoundQuery(false, false);  
query0.addComponent(new AdaptiveQuery(ttl, (String) null, null, "ttl.id asc"));  
RecordBuffer.prepare(person);  
query0.addComponent(new RandomAccessQuery(person, "person.id = toRowid(?)", null, "person.siteId asc, person.e  
mpNum asc", new Object[]  
{  
  new FieldReference(ttl, "f1")  
}), QueryConstants.FIRST);
```

Consider that:

```
def temp-table ttl field f1 as rowid.  
  
for each ttl,  
  first person where rowid(person) = ttl.f1:  
end.
```

already converts properly to:

```
query0 = new CompoundQuery(false, false);  
query0.addComponent(new AdaptiveQuery(ttl, (String) null, null, "ttl.id asc"));  
RecordBuffer.prepare(person);  
query0.addComponent(new RandomAccessQuery(person, "person.id = ?", null, "person.siteId asc, person.empNum asc  
", new Object[]
```

```
{
  new FieldReference(tt1, "f1")
}), QueryConstants.FIRST);
```

The difference between the two is the data type of tt1.f1 and the use of the to-rowid builtin function in the where clause. I believe the latter is driving us down the path of a client-side where clause when we don't need to go there.

#2 - 03/23/2013 08:23 PM - Eric Faulhaber

- File *ecf_upd20130323a.zip* added

Although I'm not the assignee, in having to think through the problem for the above post, I took a quick look at the related rules and made a fix candidate, which is attached. It is going through conversion regression testing now.

#3 - 03/23/2013 09:15 PM - Eric Faulhaber

- Project changed from *Liberty* to *Database*

#4 - 03/23/2013 09:46 PM - Eric Faulhaber

- % Done changed from *0* to *80*

- Status changed from *WIP* to *Review*

Update *ecf_upd20130323a.zip* has passed conversion regression testing and is committed to bzz rev. 10325.

#5 - 03/24/2013 05:33 PM - Eric Faulhaber

- % Done changed from *80* to *100*

- Status changed from *Review* to *Closed*

I've compared conversions of the customer's server project with and without this fix and it seems correct in all the locations which differ as a result of the fix. It simplifies the conversion of a number of cases similar to the originally reported problem, reducing the use of client-side where clauses considerably.

I am closing this issue accordingly.

#6 - 11/16/2016 11:06 AM - Greg Shah

- Target version changed from *Milestone 4* to *Conversion Support for Server Features*

Files

ecf_upd20130323a.zip	6.57 KB	03/24/2013	Eric Faulhaber
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