

## Database - Bug #3026

### BUFFER-DELETE() method does not account for table-level delete validation

03/10/2016 12:39 PM - Eric Faulhaber

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Stanislav Lomany	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Cleanup and Stablization for Server Features	<b>case_num:</b>	
<b>billable:</b>	No		
<b>vendor_id:</b>	GCD		
<b>Description</b>			

#### History

##### #1 - 03/10/2016 12:40 PM - Eric Faulhaber

Our implementation of the BUFFER-DELETE() method is incomplete. If the table containing the target record has schema-level delete validation, the BUFFER-DELETE() method must fail with the error:

```
Table <table name> is defined with schema delete validation and may only be deleted by the DELETE statement. (7347)
```

##### #2 - 04/16/2016 01:35 PM - Eric Faulhaber

- Assignee set to Stanislav Lomany

##### #3 - 04/28/2016 05:39 PM - Stanislav Lomany

- Status changed from New to WIP

Eric, could you please clear something for me?

1. How do I define a schema delete validation - is that a correct definition?

```
ADD TABLE "Book"  
...  
VALEXP "book-title <> "Bogus Programming""  
VALMSG "Bogus Programming may not be deleted!!!"  
...
```

2. I can see that during conversion message text is missing - is something wrong with my configuration or is it a bug?

```
book.deleteRecord(new Validation0());  
...  
class Validation0  
extends BufferValidator  
{  
    public logical validateExpression()  
}
```

```

{
    return isNotEqual(book.getBookTitle(), "Bogus Programming");
}

public character validateMessage()
{
    return new character("");
}
}

```

3. Is information about presence of validation is recorded somewhere (e.g. in some xml file)?

#### #4 - 04/28/2016 11:11 PM - Eric Faulhaber

Stanislav Lomany wrote:

Eric, could you please clear something for me?

1. How do I define a schema delete validation - is that a correct definition?  
[...]

Yes, your example is correct.

2. I can see that during conversion message text is missing - is something wrong with my configuration or is it a bug?  
[...]

This is a bug. Please try it with the following patch:

```

=== modified file 'src/com/goldencode/p2j/uast/progress.g'
--- src/com/goldencode/p2j/uast/progress.g      2016-03-25 16:40:27 +0000
+++ src/com/goldencode/p2j/uast/progress.g      2016-04-29 03:09:52 +0000
@@ -1615,6 +1615,7 @@
**                                     parsing can fail (because it thinks it is seeing a widget instead
**                                     of an object instance).
** 316 EVK 20141212                       Properly handle terminal streams when specified as a string literal.
+** 317 ECF 20160428                       Fixed attachment of table-level validation message.
*/

header
@@ -4800,7 +4801,7 @@
    return;
}

- Aast valMsg = schemaRef.getImmediateChild(VALMSG, null);
+ Aast valMsg = props.getImmediateChild(VALMSG, null);
+ String schemaName = (String) recordRef.getAnnotation("schemaname");
+ String bufName = (String) recordRef.getAnnotation("bufname");

```

If that works for you, please include it with your task branch.

3. Is information about presence of validation is recorded somewhere (e.g. in some xml file)?

No, that is part of what needs to be done for this task. I think the best place for this is in the corresponding DMO, as a Java annotation. We can surface this via TableMapper at runtime to test whether a table has delete validation and disallow the BUFFER-DELETE accordingly. If we find this to be a performance problem, we can store this information directly in BufferImpl, but I don't think this will be necessary.

**#5 - 04/29/2016 10:38 AM - Stanislav Lomany**

I think the best place for this is in the corresponding DMO, as a Java annotation.

Should we extend LegacyTable like this?

```
@LegacyTable(name = "book", table = "book" hasDeleteValidation = true)
public class BookImpl
...

```

**#6 - 04/29/2016 12:44 PM - Eric Faulhaber**

Stanislav Lomany wrote:

I think the best place for this is in the corresponding DMO, as a Java annotation.

Should we extend LegacyTable like this?  
[...]

How about just hasValidation, since there is only one type of validation at the table level (delete is implicit)?

**#7 - 04/29/2016 01:13 PM - Stanislav Lomany**

The button in 4GL Data Dictionary interface which calls validation editor is called "Validation..." so let's call it just hasValidation!

**#8 - 04/29/2016 01:17 PM - Eric Faulhaber**

Agreed.

**#9 - 05/02/2016 07:15 AM - Stanislav Lomany**

Created task branch 3026a from P2J trunk revision 11019.

**#10 - 05/03/2016 06:09 PM - Stanislav Lomany**

I was wondering if delete validation can be applied to a temp-table. All I found is VALIDATE option for DEFINE TEMP-TABLE ... LIKE, but it doesn't copy table-level validation:

VALIDATE

The temp-table fields inherit, from the dictionary, validation expressions and validation messages from the database table.

Let me know if you aware of a way to define validation for a temp-table.

**#11 - 05/04/2016 12:23 PM - Eric Faulhaber**

I know of no way to define schema table-level validation for a temp-table. I would have guessed the only way would be with the LIKE option, but you've confirmed that doesn't inherit the validation. AFAIK, this is only an issue for permanent tables.

**#12 - 05/05/2016 09:14 AM - Stanislav Lomany**

Eric, the "Table <table name> is defined with schema delete validation..." error is displayed as a message box in GUI and in message area in ChUI. I think we don't want to add UI dependency to BufferImpl or ErrorManager, so as a solution I suggest to do the following:

1. Add chuiModal boolean parameter to ErrorManager.recordOrShowError which sets how message should be displayed in ChUI.
2. Add ErrorWriter.messageOrMessageBox(boolean modal, boolean chuiModal) method which conditionally calls message or messageBox.

Let me know if you have a better idea.

**#13 - 05/05/2016 06:04 PM - Eric Faulhaber**

Stanislav Lomany wrote:

Eric, the "Table <table name> is defined with schema delete validation..." error is displayed as a message box in GUI and in message area in ChUI. I think we don't want to add UI dependency to BufferImpl or ErrorManager, so as a solution I suggest to do the following:

1. Add chuiModal boolean parameter to ErrorManager.recordOrShowError which sets how message should be displayed in ChUI.
2. Add ErrorWriter.messageOrMessageBox(boolean modal, boolean chuiModal) method which conditionally calls message or messageBox.

Let me know if you have a better idea.

Greg, this one is more in your wheelhouse.

**#14 - 05/09/2016 04:48 PM - Greg Shah**

"Table <table name> is defined with schema delete validation..." error is displayed as a message box in GUI and in message area in ChUI.

Did you run the test from the procedure editor? Programs run that way in GUI will have their messages appear in an alert box instead of the message area. Running from the command line (with -p usually doesn't show the same behavior).

**#15 - 05/10/2016 10:46 AM - Stanislav Lomany**

You are correct, with -p key this message is in the message area in both ChUI and GUI.

Rebased task branch 3026a from P2J trunk revision 11024.

Please review revision 11026 of branch 3026a.

**#16 - 05/11/2016 01:50 AM - Eric Faulhaber**

Code review 3026a/11026:

Very nice! Please regression test.

**#17 - 05/11/2016 02:43 PM - Stanislav Lomany**

Rebased task branch 3026a from P2J trunk revision 11025.

**#18 - 05/13/2016 11:43 AM - Eric Faulhaber**

The ETF testing had some trouble for other reasons, but enough of the testing did well that I'm comfortable with this update. Please rebase to the latest trunk revision and then merge this update to trunk. Retesting after the rebase is not necessary, just a compile; there should be no conflicts.

**#19 - 05/14/2016 12:04 PM - Stanislav Lomany**

Rebased task branch 3026a from P2J trunk revision 11028.

**#20 - 05/14/2016 12:54 PM - Stanislav Lomany**

- Status changed from WIP to Review

Committed into the trunk as bzd revision 11029.

**#21 - 05/14/2016 01:26 PM - Eric Faulhaber**

- % Done changed from 0 to 100

- Status changed from Review to Closed

**#22 - 11/16/2016 12:06 PM - Greg Shah**

- Target version changed from Milestone 11 to Cleanup and Stabilization for Server Features