

Database - Bug #2548

buffer/tables names are too aggressively matched in preference to other names

04/10/2015 05:52 AM - Greg Shah

Status: New	Start date:
Priority: Normal	Due date:
Assignee:	% Done: 0%
Category:	Estimated time: 0.00 hour
Target version:	
billable: No	case_num:
vendor_id: GCD	
Description	
Related issues:	
Related to User Interface - Feature #1790: implement menu support Closed	

History

#1 - 04/10/2015 05:52 AM - Greg Shah

As reported in [#1790](#) note 275 by Vadim Gindin:

From time to time I'm facing with the following conversion problem. Look at the following procedure:

```
def button b.  
def frame f b.  
def var h as widget-handle.  
assign h = b:handle.
```

I'm getting the following error when trying to convert this procedure:

```
-----  
Code Conversion Annotations  
-----
```

```
Optional rule set [customer_specific_annotations_prep] not found.
```

```
./menu/but_handle.p
```

```
EXPRESSION EXECUTION ERROR:
```

```
-----  
throwException(sprintf(spec, bufname, reftype), this)
```

```
^ { Cannot find buffer named p2j_test.book_p2j_test.book for ref type 21! [FIELD_INT id <257698037802> 0:0] }
```

```
-----  
Elapsed job time: 23:00:00.810
```

```
ERROR:
```

```
java.lang.RuntimeException: ERROR! Active Rule:
```

```
-----  
RULE REPORT  
-----
```

```
Rule Type : WALK
```

```
Source AST: [ book-id ] BLOCK/STATEMENT/DEFINE_FRAME/Form_ITEM/FIELD_INT/ @0:0 {257698037802}
```

```
Copy AST : [ book-id ] BLOCK/STATEMENT/DEFINE_FRAME/Form_ITEM/FIELD_INT/ @0:0 {257698037802}
```

```
Condition : throwException(sprintf(spec, bufname, reftype), this)
```

```
Loop : false
```

```
--- END RULE REPORT ---
```

```
at com.goldencode.p2j.pattern.PatternEngine.run (PatternEngine.java:1006)
```

```
at com.goldencode.p2j.convert.ConversionDriver.processTrees (ConversionDriver.java:973)
```

```
at com.goldencode.p2j.convert.ConversionDriver.back (ConversionDriver.java:834)
```

```
at com.goldencode.p2j.convert.ConversionDriver.main (ConversionDriver.java:1799)
```

```
Caused by: com.goldencode.expr.ExpressionException: Expression execution error @1:1 [FIELD_INT id=257698037802  
]
```

```
at com.goldencode.p2j.pattern.AstWalker.walk (AstWalker.java:225)
```

```

at com.goldencode.p2j.pattern.AstWalker.walk(AstWalker.java:160)
at com.goldencode.p2j.pattern.PatternEngine.apply(PatternEngine.java:1515)
at com.goldencode.p2j.pattern.PatternEngine.processAst(PatternEngine.java:1413)
at com.goldencode.p2j.pattern.PatternEngine.processAst(PatternEngine.java:1361)
at com.goldencode.p2j.pattern.PatternEngine.run(PatternEngine.java:974)
... 3 more
Caused by: com.goldencode.expr.ExpressionException: Expression execution error @1:1
at com.goldencode.expr.Expression.execute(Expression.java:434)
at com.goldencode.p2j.pattern.Rule.apply(Rule.java:401)
at com.goldencode.p2j.pattern.Rule.executeActions(Rule.java:640)
at com.goldencode.p2j.pattern.Rule.coreProcessing(Rule.java:609)
at com.goldencode.p2j.pattern.Rule.apply(Rule.java:440)
at com.goldencode.p2j.pattern.Rule.executeActions(Rule.java:640)
at com.goldencode.p2j.pattern.Rule.coreProcessing(Rule.java:609)
at com.goldencode.p2j.pattern.Rule.apply(Rule.java:440)
at com.goldencode.p2j.pattern.Rule.executeActions(Rule.java:640)
at com.goldencode.p2j.pattern.Rule.coreProcessing(Rule.java:609)
at com.goldencode.p2j.pattern.Rule.apply(Rule.java:440)
at com.goldencode.p2j.pattern.Rule.executeActions(Rule.java:640)
at com.goldencode.p2j.pattern.Rule.coreProcessing(Rule.java:609)
at com.goldencode.p2j.pattern.Rule.apply(Rule.java:440)
at com.goldencode.p2j.pattern.RuleContainer.apply(RuleContainer.java:530)
at com.goldencode.p2j.pattern.RuleSet.apply(RuleSet.java:1)
at com.goldencode.p2j.pattern.AstWalker.walk(AstWalker.java:212)
... 8 more
Caused by: com.goldencode.p2j.pattern.CommonAstSupport$UserGeneratedException: Cannot find buffer named p2j_test.book_p2j_test.book for ref type 21! [FIELD_INT id <257698037802> 0:0]
at com.goldencode.p2j.pattern.CommonAstSupport$Library.throwException(CommonAstSupport.java:2227)
at com.goldencode.expr.CE3328.execute(Unknown Source)
at com.goldencode.expr.Expression.execute(Expression.java:341)
... 24 more

```

Because of some reason b is treated as FIELD_INT. Lets look at corresponding AST:

```

<ast col="0" id="257698037767" line="0" text="statement" type="STATEMENT">
  <annotation datatype="java.lang.Boolean" key="reachable" value="true"/>
  <ast col="1" id="257698037768" line="3" text="def" type="DEFINE_FRAME">
    <annotation datatype="java.lang.Boolean" key="reachable" value="true"/>
    <ast col="11" id="257698037771" line="3" text="f" type="SYMBOL">
      <annotation datatype="java.lang.Boolean" key="reachable" value="true"/>
    </ast>
    <ast col="13" id="257698037774" line="3" text="b" type="TABLE">
      <annotation datatype="java.lang.String" key="schemaname" value="p2j_test.book"/>
      <annotation datatype="java.lang.String" key="bufname" value="p2j_test.book"/>
      <annotation datatype="java.lang.String" key="dbname" value="p2j_test"/>
      <annotation datatype="java.lang.Long" key="recordtype" value="12"/>
      <annotation datatype="java.lang.Boolean" key="reachable" value="true"/>
    </ast>
  </ast>
</ast>
</ast>

```

b ast node has type "TABLE"..

Here is the *.parser file:

```

block [BLOCK] @0:0
  statement [STATEMENT] @0:0
    def [DEFINE_BUTTON] @1:1
      b [SYMBOL] @1:12
  statement [STATEMENT] @0:0
    def [DEFINE_FRAME] @3:1
      f [SYMBOL] @3:11
      b [TABLE] @3:13
  statement [STATEMENT] @0:0
    def [DEFINE_VARIABLE] @5:1
      h [SYMBOL] @5:9
      as [KW_AS] @5:11
      widget-handle [KW_WID_HAND] @5:14
  statement [STATEMENT] @0:0

```

```
assign [KW_ASSIGN] @7:1
  = [ASSIGN] @7:10
    h [VAR_HANDLE] @7:8
      expression [EXPRESSION] @0:0
        : [COLON] @7:13
          b [WID_BUTTON] @7:12
            handle [ATTR_HANDLE] @7:14
```

b here has also type "TABLE". It looks like parser problem..

I faced with this error before with other procedures. Could you try to convert this procedure? Will you get the same error?

#2 - 04/10/2015 05:53 AM - Greg Shah

From [#1790](#) note 276 by Constantin Asofiei:

This is a problem with the name resolution: in 4GL, a table can be abbreviated using only the first letter, so a find first b. will find you the first book. I think P2J is too aggressive when resolving these names; looks like 4GL looks into table names only if the name is used in a context where a table name is needed (i.e. find first b.). The define button b. is not a context where a table can be used, so the button will be created in 4GL.

For now, go around this problem by renaming your button to something else (i.e define button btn.).