

Conversion Tools - Bug #3354

func_class return type not recognized

10/11/2017 10:21 AM - Greg Shah

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Greg Shah	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No	version:	
vendor_id:	GCD		
Description			
Related issues:			
Related to Conversion Tools - Bug #3353: lexer num_literal should support hex...			Closed

History

#1 - 10/11/2017 10:23 AM - Greg Shah

Submitted by Neil in a [forum post](#):

Walking the AST throws an error when it encounters a user-defined function that returns a CLASS:

```
FUNCTION newAppError RETURNS /*CLASS*/ Progress.Lang.AppError PRIVATE
  (INPUT ipcMessage AS CHARACTER) FORWARD.
```

results in the following errors thrown during the AST walk, which results in termination of the analysis at that point:

```
[java] EXPRESSION EXECUTION ERROR:
[java] -----
[java]   throwException(errmsg)
[java]   ^ { Unrecognized return type FUNC_CLASS [KW_FUNCT id <1451698947492> 356:1] }
[java] -----
[java] EXPRESSION EXECUTION ERROR:
[java] -----
[java]   cls = execLib("get_function_return_class", ftype)
[java]         ^ { Expression execution error @1:1 }
[java] -----
[java] ERROR:
[java] com.goldencode.p2j.pattern.TreeWalkException: ERROR! Active Rule:
[java] -----
[java]           RULE REPORT
[java] -----
[java] Rule Type :    WALK
[java] Source AST: [ FUNCTION ] BLOCK/FUNCTION/KW_FUNCT/ @356:1 {1451698947492}
[java] Copy AST  : [ FUNCTION ] BLOCK/FUNCTION/KW_FUNCT/ @356:1 {1451698947492}
[java] Condition :   throwException(errmsg)
[java] Loop      :   false
[java] --- END RULE REPORT ---
[java]
[java]
[java]   at com.goldencode.p2j.pattern.PatternEngine.run(PatternEngine.java:1068)
[java]   at com.goldencode.p2j.convert.ConversionDriver.processTrees(ConversionDriver.java:1128)
[java]   at com.goldencode.p2j.convert.ConversionDriver.front(ConversionDriver.java:382)
[java]   at com.goldencode.p2j.convert.ConversionDriver.main(ConversionDriver.java:2005)
[java] Caused by: com.goldencode.expr.ExpressionException: Expression execution error @1:7 [KW_FUNCT id=1
451698947492]
[java]   at com.goldencode.p2j.pattern.AstWalker.walk(AstWalker.java:274)
[java]   at com.goldencode.p2j.pattern.AstWalker.walk(AstWalker.java:209)
[java]   at com.goldencode.p2j.pattern.PatternEngine.apply(PatternEngine.java:1631)
[java]   at com.goldencode.p2j.pattern.PatternEngine.processAst(PatternEngine.java:1529)
```

```

[java] at com.goldencode.p2j.pattern.PatternEngine.processAst (PatternEngine.java:1477)
[java] at com.goldencode.p2j.pattern.PatternEngine.run (PatternEngine.java:1032)
[java] ... 3 more
[java] Caused by: com.goldencode.expr.ExpressionException: Expression execution error @1:7
[java] at com.goldencode.expr.Expression.execute (Expression.java:484)
[java] at com.goldencode.p2j.pattern.Rule.apply (Rule.java:491)
[java] at com.goldencode.p2j.pattern.Rule.executeActions (Rule.java:738)
[java] at com.goldencode.p2j.pattern.Rule.coreProcessing (Rule.java:707)
[java] at com.goldencode.p2j.pattern.Rule.apply (Rule.java:530)
[java] at com.goldencode.p2j.pattern.RuleContainer.apply (RuleContainer.java:583)
[java] at com.goldencode.p2j.pattern.RuleSet.apply (RuleSet.java:98)
[java] at com.goldencode.p2j.pattern.AstWalker.walk (AstWalker.java:261)
[java] ... 8 more
[java] Caused by: com.goldencode.expr.ExpressionException: Expression execution error @1:1
[java] at com.goldencode.expr.Expression.execute (Expression.java:484)
[java] at com.goldencode.p2j.pattern.Rule.apply (Rule.java:491)
[java] at com.goldencode.p2j.pattern.Rule.executeActions (Rule.java:738)
[java] at com.goldencode.p2j.pattern.Rule.coreProcessing (Rule.java:707)
[java] at com.goldencode.p2j.pattern.Rule.apply (Rule.java:530)
[java] at com.goldencode.p2j.pattern.NamedFunction.execute (NamedFunction.java:449)
[java] at com.goldencode.p2j.pattern.AstSymbolResolver.execute (AstSymbolResolver.java:709)
[java] at com.goldencode.p2j.pattern.CommonAstSupport$Library.execLib (CommonAstSupport.java:1262)
[java] at com.goldencode.expr.CE107.execute (Unknown Source)
[java] at com.goldencode.expr.Expression.execute (Expression.java:391)
[java] ... 15 more
[java] Caused by: com.goldencode.p2j.pattern.CommonAstSupport$UserGeneratedException: Unrecognized return
type FUNC_CLASS [KW_FUNCT id <1451698947492> 356:1]
[java] at com.goldencode.p2j.pattern.CommonAstSupport$Library.throwException (CommonAstSupport.java:25
28)
[java] at com.goldencode.p2j.pattern.CommonAstSupport$Library.throwException (CommonAstSupport.java:25
13)
[java] at com.goldencode.expr.CE126.execute (Unknown Source)
[java] at com.goldencode.expr.Expression.execute (Expression.java:391)
[java] ... 24 more

```

#2 - 10/11/2017 10:29 AM - Greg Shah

During what phase of the ConversionDriver was this reported?

I ask because we do support OO 4GL for the purposes of parsing and for Code Analytics. But we don't yet support OO 4GL for conversion to Java. If

this was reported during Annotations or Core Conversion, then it would be expected.

#3 - 10/11/2017 10:35 AM - Neil Treeby

- File *cvt_f2_20171011_091816.log* added

I've attached a log where I ran `ant convert.front.list` for a single program that throws this error. Is there a way to get more detailed log output?

#4 - 10/11/2017 12:11 PM - Greg Shah

No additional logging is needed. It is clear this is during "Post Parse Fixups" which is part of the front-end. It should work, so this is a bug to fix.

#5 - 10/14/2017 05:56 PM - Greg Shah

Revision 11178 of branch 3353a contains the fix to this bug. The problem is resolved for the front end. General OO support is not there yet for conversion or runtime.

#6 - 10/18/2017 01:39 PM - Greg Shah

- Related to Bug #3353: *lexer num_literal* should support hexadecimal literals added

#7 - 10/19/2017 11:07 AM - Greg Shah

- Status changed from *New* to *Test*

- % Done changed from 0 to 100

- Assignee set to *Greg Shah*

#8 - 10/20/2017 07:50 AM - Greg Shah

- File *3353a_20171013a.patch* added

- File *3353a_20171014a.patch* added

I'm attaching the patches needed to fix this issue. Both patches need to be applied and FWD rebuilt.

#9 - 10/30/2017 09:43 PM - Greg Shah

Branch 3353a was merged to trunk as revision 11187. It will soon be available publicly as FWD v3.2.

#10 - 08/21/2018 01:07 PM - Greg Shah

- Status changed from *Test* to *Closed*

[FWD v3.2.0](#) has been released. This issue is being closed accordingly.

Files

<i>cvt_f2_20171011_091816.log</i>	8.02 KB	10/11/2017	Neil Treeby
<i>3353a_20171013a.patch</i>	1.16 KB	10/20/2017	Greg Shah
<i>3353a_20171014a.patch</i>	498 Bytes	10/20/2017	Greg Shah