Base Language - Feature #6426

implement ERROR-STATUS:CLEAR()

05/26/2022 05:21 PM - Greg Shah

Status:	Closed		Start date:	
Priority:	Normal		Due date:	
Assignee:	Theodoros Theodorou		% Done:	100%
Category:			Estimated time:	0.00 hour
Target version:				
billable:	No		version:	
vendor_id:	GCD			

Description	

History

#1 - 05/26/2022 05:22 PM - Greg Shah

ERROR-STATUS:CLEAR() was found in customer code. It is undocumented. We need to figure out its behavior and implement it.

#2 - 02/16/2023 07:12 AM - Greg Shah

- Assignee set to Theodoros Theodorou

#3 - 02/16/2023 10:45 AM - Theodoros Theodorou

- Status changed from New to WIP

I read a bit about the error-status but I couldn't find anything online regarding error-status:clear(). I tried to write a small program to see the behaviour of this but I get a warning saying **Clear is not a queryable attribute for PSEUDO-WIDGET. (4052)

```
security-policy:symmetric-encryption-algorithm = 'test' no-error.

message error-status:error.
message error-status:num-messages.

error-status:clear().

message error-status:error.
message error-status:num-messages.
```

Is this a valid command?

#4 - 02/16/2023 11:28 AM - Constantin Asofiei

Greg, do you recall which OE version the customer's code was running?

#5 - 02/16/2023 01:40 PM - Greg Shah

I think it is 11.7.

Perhaps this is just broken code (at runtime) but it compiles. Or perhaps it is a newer (undocumented) feature.

#6 - 02/16/2023 01:44 PM - Constantin Asofiei

In OE 11.6.3 this attribute is not part of the ERROR-STATUS handle.

OE does not do any compile-time strong-type checks for any kind of handle (even for system handles like ERROR-STATUS). IMO, this should be fixed in the 4GL code for the customer's app; otherwise, if we start to pollute all FWD system handles (like ErrorManager class) with methods just to throw is not a queryable attribute for PSEUDO-WIDGET., this can get ugly.

#7 - 02/16/2023 01:54 PM - Greg Shah

True, though we will eventually be implementing a pure handle approach to everything. For example, I expect an ERROR-STATUS reference to convert to something like ErrorManager.getErrorStatus() which would return a handle. The result will be a simpler conversion, where right now we convert the use of system handles differently. It is messy, inconsistent and incomplete in our methods_attributes.rules as a result.

As you say, for now it would be harder to add this error handling in our current approach. In the future approach, I get it "for free" with the limit that we no longer have direct references to the system resources.

#8 - 02/17/2023 04:10 AM - Theodoros Theodorou

Do I need to do something more for this ticket now?

#9 - 02/17/2023 05:41 AM - Greg Shah

I need to discuss this with the customer.

FWD fails during conversion of this testcase, right?

#10 - 02/17/2023 06:05 AM - Theodoros Theodorou

No, FWD does not fail during conversion. FWD and OE both have the same output. The only difference is that OE pops up a warning window and FWD does not.

#11 - 02/17/2023 10:16 AM - Greg Shah

Hmm, we must have done something special for this case (or for ERROR-STATUS in general).

To confirm, the error in FWD happens at runtime. Correct?

#12 - 02/17/2023 11:58 AM - Theodoros Theodorou

Yes, the error occurs at runtime

```
security-policy:symmetric-encryption-algorithm = 'test' no-error. // This creates 2 runtime errors.

message error-status:error. // This prints 'yes'
message error-status:num-messages. // This prints '2'
```

```
error-status:clear(). // In FWD this line does nothing. In OE it pops up a warning window. When you close the
warning, the program continues.

message error-status:error. // This prints 'yes'
message error-status:num-messages. // This prints '2'
```

#13 - 02/17/2023 12:00 PM - Constantin Asofiei

I'm confused, how does FWD convert error-status:clear().?

#14 - 02/17/2023 12:53 PM - Theodoros Theodorou

- File screenshot.png added

I am not sure. I compiled and ran the app using the testcases project without any issues.

#15 - 02/17/2023 12:53 PM - Constantin Asofiei

Post here the .java file for your converted program.

#16 - 02/20/2023 08:35 AM - Theodoros Theodorou

- File TestEncryptionIv.java added

#17 - 02/20/2023 08:40 AM - Constantin Asofiei

There is nothing emitted by conversion in error-status:clear()., see the standalone ; char on a single line.

#18 - 02/20/2023 10:21 AM - Theodoros Theodorou

Yes, I noticed it. Do I need to make any changes (e.g. show a warning)?

#19 - 02/20/2023 12:12 PM - Constantin Asofiei

Greg, IMO, I think we are OK with 'doing nothing'. Otherwise, we can treat these cases of invalid attribute/method reference in a system handle via
i.e. ErrorManager.asHandle, and let this be the 'handle name'.

#20 - 02/20/2023 04:10 PM - Greg Shah

- Status changed from WIP to Closed

- % Done changed from 0 to 100

In the short term it is fine. In the longer term we will probably need to fix it.

Files

screenshot.png	5.61 KB	02/17/2023	Theodoros Theodorou
TestEncryptionIv.java	1.17 KB	02/20/2023	Theodoros Theodorou