Base Language - Feature #3178

implement STREAM-HANDLE support

09/02/2016 02:25 PM - Igor Skornyakov

Status:	New	**Start date:**	
Priority:	Normal	**Due date:**	
Assignee:	Constantin Asofiei	**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			
billable:	No	**version:**	
vendor_id:	GCD		

Description

History

#1 - 09/02/2016 02:37 PM - Igor Skornyakov

- File stream-handle.p added

We have a number of issues with the STREAM-HANDLE support.

1. The conversion of the attached program (which runs on 4GL) fails with the ## No accessors generated for STATEMENT/KW_DISP/KW_STRM_HND (stream-handle)
2. if we comment display stream-handle ... statement then the conversion doesn't compile as there are no down(handle) and UnnamedStreams.closeOut(handle) methods in the corresponding interfaces/classes.
3. if we comment the corresponding statements then the application fails at run time at h.assign(rptStream); with java.lang.IllegalArgumentException: Invalid value type. exception

#2 - 04/16/2019 11:03 AM - Greg Shah

- Start date deleted (09/02/2016)

- Assignee set to Constantin Asofiei

- Subject changed from STREAM-HANDLE support issues to implement STREAM-HANDLE support

- Project changed from Bugs to Base Language

- Tracker changed from Bug to Feature

The original problem report is expected behavior because FWD does not yet have STREAM-HANDLE support. This task is meant to create that support.

#3 - 08/14/2019 05:58 PM - Greg Shah

Constantin: I know you provided some early support for this, but my impression was that it was not complete. Would you please post a summary of what was implemented (including 4GL + converted Java for the conversion part)? Then make a list of what work remains.

#4 - 09/16/2019 06:18 AM - Constantin Asofiei

The support in FWD was added for PUT, IMPORT, EXPORT, OUTPUT TO, INPUT FROM statements.

Any frame-related statements (like DISPLAY, UPDATE, etc) are not implemented to work with STREAM-HANDLE.

The solution was to 'hijack' the reference name and emit it as hStream.unwrapStream(), if STREAM-HANDLE is used - see get_stream_accessor in convert/input_output.rules. get_stream_accessor covers static stream access, too.

A more generic solution (to include the frame-related statements) was not easy to find, as the stream reference is emitted throughout the FWD conversion rules, and not in a single point.

For example, this code:

```
put stream-handle h unformatted "v".
```

will emit as:

```
        hStream.unwrapStream().putUnformatted(new FieldEntry[]
        {
           new PutField("v")
        });
```

#5 - 09/16/2019 08:14 AM - Greg Shah

As far as I can see, we have to review each location where kw_stream (case-insensitive) is being used in TRPL and for each one we must add processing for kw_strm_hnd. There are only 34 locations and some of them have already got support from your changes.

Is there anything else you can think of?

#6 - 10/10/2019 02:40 PM - Greg Shah

In 4069a, I'm changing the gap marking to partial for conversion and full for runtime. Is that OK?

#7 - 10/10/2019 05:31 PM - Constantin Asofiei

Greg Shah wrote:

> In 4069a, I'm changing the gap marking to partial for conversion and full for runtime. Is that OK?

Yes.

Files