Saxon/C - Support #4847

sotransformToString - Python

2020-12-02 16:26 - David Zabala

Status:	In Progress	**Start date:**	2020-12-02
Priority:	Normal	**Due date:**	
Assignee:	O'Neil Delpratt	**% Done:**	0%
Category:	C++ API	**Estimated time:**	0:00 hour
Sprint/Milestone:		**Spent time:**	0:00 hour
Found in version:	1.2.1		

Description

I am trying to get the xls messages (xsl:message) using the following code:

```
        xsltproc = proc.new_xslt30_processor()

        outputi = xsltproc.transform_to_string(source_file="source.xml", stylesheet_file="
style.xsl")

        print(outputi) #This Works

        msg = xsltproc.get_xsl_messages()
```

And I get the following error:

/usr/lib/libsaxonhec.sotransformToString not found

Related issues:

Has duplicate Saxon/C - Bug #4859: Jet Runtime Has detected Unrecoverable Err...	**AwaitingInfo**	**2020-12-17**

History

#1 - 2020-12-03 08:31 - O'Neil Delpratt

- Project changed from Saxon to Saxon/C

- Category changed from User error to Python Build

- Assignee set to O'Neil Delpratt

- Priority changed from Low to Normal

- Found in version set to 1.2.1

Thanks for reporting this issue. It looks like a bug in the JNI. Investigating it now

#2 - 2020-12-03 13:41 - O'Neil Delpratt

- File Xslt30Processor.cpp added

- Category changed from Python Build to C++ API

I managed to reproduce the error message and it is bug.

The problem is the return type used in the internal JNI method signature in the C++ code is wrong. The bug has been fixed in a redesign of the xsl:message mechanism to make it more usable. This will be available in the next release, but as I workaround see below.

In the method getXslMessage of the class file Xslt30Processor.cpp we currently have the following:

```
jmethodID mID =   (jmethodID) SaxonProcessor::sxn_environ->env->GetMethodID(cppClass,
                                        "getXslMessages",
                                        "()[Lnet/sf/saxon/s9api/XdmValue;");
```

Please replace it with the following:

```
jmethodID mID =   (jmethodID) SaxonProcessor::sxn_environ->env->GetMethodID(cppClass,
                                        "getXslMessages",
                                        "()[Lnet/sf/saxon/s9api/XdmNode;");
```

I have also attached the file to this bug with the patch so you can just drop and replace the file if that is easier. Then rebuild the Saxon/C python extension again.

What actually happens to the xsl:messages by default is to output messages to the standard output console, but this does not find its way to python. As mentioned in the bug issue #4147 to capture the messages you will have to call xsltproc.set_property('m', '') before you do the transformation. See example python code below which should work for you:

```
        xsltproc = proc.new_xslt30_processor()

        xsltproc.set_property('m', '')
#This flag creates a Message Listener which intercepts the messages to return `PyXdmNode` objects of the messa
ges

        outputi = xsltproc.transform_to_string(source_file="source.xml", stylesheet_file="style.xsl")

        print(outputi) #This Works

        messages = xsltproc.get_xsl_messages()
        if messages is not None:
            i = 0
            while i < messages.size:
                print(messages.item_at(i))
                i += 1
```

The get_xsl_message returns an PyXdmValue of the individual messages which are PyXdmNode objects.

The PyXdmValue should be iterable. I will create another bug issue for this.

#3 - 2020-12-03 21:09 - O'Neil Delpratt

- Status changed from New to AwaitingInfo

#4 - 2020-12-03 21:18 - David Zabala

It works perfectly now, thank you very much!

#5 - 2020-12-03 22:26 - O'Neil Delpratt

- Status changed from AwaitingInfo to In Progress

Bug fixed and committed to repository in the redesign. Unit tests required

#6 - 2020-12-18 11:12 - O'Neil Delpratt

- Has duplicate Bug #4859: Jet Runtime Has detected Unrecoverable Error-libsaxonhec.dll transformToString not found added

Files

Xslt30Processor.cpp	62.1 KB	2020-12-03	O'Neil Delpratt