

Subject: MCR10115, Missing Data in library_descriptor Error Messages

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[Ticket #278](#) reports an incomplete error message from the library_descriptor (lds) active function. For example:

```
string [lds pathname foo fie foe fum]
library_descriptor: Invalid argument.
  Library descriptor 'multics_libraries_' does not define the
```

Error: Bad call to active function library_descriptor

When used as a command, the error message includes lines listing the unknown values:

```
lds pn foo fie foe fum
library_descriptor: Invalid argument.
  Library descriptor 'multics_libraries_' does not define the
  library names:      foo      fie
                   foe      fum
```

This change proposes a remedy for this problem.

Proposed Changes

The error is produced by lib_args_.pl1 using two statements to emit all lines of the message.

```
print [lpn lib_args_.pl1] -from 781 -for 4

  if bad_library.N > 0 then do;
    call arg_struct.put_error (error_table_$bad_arg, arg_struct.program, "
  Library descriptor '^a' does not define the", arg_struct.descriptor);
    call lib_error_list_ ("library name", addr(bad_library), arg_struct.program);
```

The correction is to use the lib_error_list_\$return_string entry point to produce the error message using a single statement.

```
pr lib_args_.pl1 -fm 784 -for 5 -nhe

  if bad_library.N > 0 then do;
    call arg_struct.put_error (error_table_$bad_arg, arg_struct.program, "
  Library descriptor '^a' does not define the^/^a",
    arg_struct.descriptor,
    lib_error_list_$return_string ("library name", addr(bad_library)) );
```

This correction permits the lds active function to return the full message:

```
string [lds pn foo fie foe fum]
library_descriptor: Invalid argument.
  Library descriptor 'multics_libraries_' does not define the
  library names:      foo      fie
                   foe      fum
```

Error: Bad call to active function library_descriptor

The build script describing this change is shown below.

Description:

- A) Repair error message generated for unknown library names in `-library NAME` to include the full list of unknown names when invoked as an active function. This repair affects all of the library descriptor-related tools.

Installation_directory: >udd>m>gd>w>lds_bug;

Build_script: lds_bug.mb;

Bound_obj: bound_library_tools_ IN: tools UPDATE;
source: lib_args_.pl1 REPLACE compiler: pl1 -ot;

Testing

The change was tested by given unknown library names to `library_descriptor` (and to `library_pathname`) active function, and observing complete error messages.

Another example is:

```
string [lpn bound_library_tools_ -lb foo -lb fie -lb foe]
library_pathname: Invalid argument.
Library descriptor 'multics_libraries_' does not define the
library names:      foo      fie
                  foe
```

Error: Bad call to active function `library_pathname`

Documentation

No user interface is changing, so no documentation needs to be modified.

Version History

Date	Revision	Author	Comment
2022-02-09	1.0	Gary Dixon	Initial draft of this proposal.