

MCR10132

Fix Spurious Error Message on `ed_installation_parms` Startup

Revision 1.0

Eric Swenson

May 1, 2023

1 Problem Description

On first invocation of `ed_installation_parms` in a process, the program issues a spurious error message:

```
ed_installation_parms: Name duplication. rate_structure_0 >sc1>installation_parms.
```

This error message may confuse the person invoking the command into thinking that an error has occurred or that some action should be taken. In fact, the error message is harmless and due to an error in programming.

The issue is reported in this ticket: <https://multics-trac.swenson.org/ticket/209>.

2 Analysis

On startup, after argument processing, `ed_installation_parms` invokes the call `hcs.$make_seg` subroutine to initiate the `instalation_parms` segment, or create it if it doesn't exist. No error occurs if the segment doesn't already exist. However, if it does, there are two possibilities. The first is that the segment is already known to the process; and the second is when the segment is not known to the process. In the first case, `hcs.$make_seg` returns the error `error_table.$segknown`. This case is properly handled. In the second case, the error code `error_table.$namedup` is returned. This is the case that causes the spurious error message. There is nothing wrong with the entry already existing – in fact this is the normal case for a first invocation in a process on an already-setup system.

3 Proposed Fix

The proposed fix is a very simple one – to handle the `error_table.$namedup` error code from `hcs.$make_seg`, and simply treat this case as a successful initiation of the `instalation_parms` segment.

A compare_ascii output of ed_installation_parms.pl1 showing the proposed fix is below:

```
cpa [lpn ed_installation_parms.pl1] ==
```

Inserted in B:

```
B146      dcl  error_table_$namedup fixed bin (35) ext static;
```

Preceding:

```
A146      dcl  error_table_$segknown fixed bin (35) ext static;
```

Inserted in B:

```
B626                                     else if ec = error_table_$namedup then; /* segment already  
      exists, all is fine */
```

Preceding:

```
A625                                     else if ec ^= error_table_$segknown then do;
```

Comparison finished: 2 differences, 2 lines.

4 Documentation

No changes to documentation are necessary as there are no functional changes other than eliminating the spurious error message, which was never documented.

5 Test

Testing this change will involve running the new version under various situations – with no `instalation_parms` segment, with the segment, but with no `rate_structure_0` additional name, and in cases where the segment is known to the process and when it isn't.

6 Version History

2023-05-1	1.0	Initial version of the MCR.
-----------	-----	-----------------------------