

ORA-12899: value too large for column; NLS_LENGTH_SEMANTICS

- **Article Type:** General
- **Product:** Aleph
- **Product Version:** 18.01

Description:

When bib records are added/updated in abc01 in the GUI, ue_01 creates the correct z01, z02, z97, z98, etc. index updates, but, when p_manage_02 (or p_manage_01) is run, the result is zero z01/z02 (or z97/z98/z95) records.

I see the following errors in the abc01 \$data_scratch:

In abc01/scratch/z01_dmp_ora.log.nn:

Record 1: Rejected - Error on table ABC01.Z01, column Z01_REC_KEY.
ORA-12899: value too large for column "ABC01"."Z01"."Z01_REC_KEY" (actual: 240, maximum: 80)

and the same for z02:

In abc01/scratch/z02_dmp_ora.log.nn:

Record 1: Rejected - Error on table ABC01.Z02, column Z02_REC_KEY.
ORA-12899: value too large for column Z02_REC_KEY (actual: 27, maximum: 18)

<etc.>

(Note: the \$data_scratch p_manage_02_a_1.log and p_manage_02_a_2.log files don't indicate any error, nor does the main log in \$alephe_scratch.)

I submitted p_manage_02 on the usm01 data; I see the same problem there.

I ran p_manage_07 for abc30. That does not have this problem; it ran successfully.

Then I ran p_manage_01 for abc30. It *does* have the problem.

What p_manage_01 and p_manage_02 have in common is that they both use "FIX load_mode = DIRECT". I believe that our Oracle 11 is somehow not working correctly in the case of this DIRECT.

Resolution:

The following oddities have been noted in your v20:

```
SQL> desc z02  
Name Null? Type
```

```
-----  
Z02_REC_KEY NOT NULL CHAR(18 CHAR)
```

Z02_DOC_NUMBER NOT NULL CHAR(9 CHAR)

This *should* show "CHAR(18)" not "CHAR(18 CHAR)". And

```
SQL> select COLUMN_NAME name , data_type type, data_length from
2 user_tab_columns where TABLE_NAME='Z02';
```

```
NAME TYPE DATA_LENGTH
-----
```

```
Z02_REC_KEY CHAR 54
Z02_DOC_NUMBER CHAR 27
```

Which is *not* what is defined...

We believe that this is caused by this setting (which can be seen in util o/6/1):

```
NLS_LENGTH_SEMANTICS CHAR
```

It *should* be:

```
NLS_LENGTH_SEMANTICS BYTE
```

The problem can be corrected by the following command:

```
SQL> alter system set nls_length_semantics=byte;
```

[Later:] After doing the above "alter" command and restarting Oracle, the p_manage_01, p_manage_02, etc., jobs worked correctly.

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- **Article last edited:** 10/8/2013