



July 4, 2018

Cobol Parameter

### COBOL Parameter Analysis

One of the new enforcements of COBOL 5, and 6 is that the passed parameters fields between program must have the same size between CALLING program and CALLED program.

For example, if program-A calls program-B and passes a TABLE with 8,000 characters in the table, both record defined sizes must match, or an error is generated.

Sometimes in older COBOL, it made sense to define a TABLE size that would invariably change over time as the correct 8,000 characters in the main program and then if program-B does not access the table itself, but instead passes the record to program-C that does access the table, then program-B and other in-between programs could have a record length of 1 character or other size, and only program-A and the program that actually uses the record (e.g. program-C) need to be modified when the table size changes.

Not so, for COBOL 5 and beyond. All record lengths for the same field (usually record) need to be the same.

One way to handle correction is go through each program and built a list of record sizes, number of arguments or parameters passed and very carefully chart and verify there are no differences. This always takes time and sometimes an error happens in verification and some of the differences are not found.

Note – When correcting the problem, both parameter size and the number of arguments passed need to be looked at.

Control/DCD has a CALL/Parameter report which does this checking on all COBOL programs at once and with one simple report, complete verification is done for each correcting of this problem. See below.

CALL Parameter reporting for Program ( TRENTR1 )

Procedure Division	USING for program TRENTR1	Length	
1	WS-FIRST-FIELD	200	@00323
2	WS-2ND-PARAMETER	400	@00296

From: "TMCALLN" ENTRY at compile nbr 000646

ENTRY TRENTR1 USING	Length	
1 WS-MATCHES-FIRST-FIELD	200	@00243
<b>** ERROR **</b> LENGTH does not match P-D USING # 2		
2 WS-DOES-NOT-MATCH-2ND-PARAM	<b>402</b>	@00124

```

** ERROR ** PARAMETER # 00003 NOT USED in P-D USING
3 WS-EXTRA-PARAMETER 99 @00075

From: "TMCALLN" ENTRY at compile nbr 000857
ENTRY TRENTR1 USING Length
1 WS-MATCHES-FIRST-FIELD 200 @00582
2 - - ( parameter missing ) - -
** ERROR ** Parameter MISSING for corresponding USING # 2

A B C D E F G

```

### Report Fields

- A** - Line with Procedure Division or From: "programe"
- B** - ENTRY or CALL with shown name
- C** - **\*\* ERROR \*\*** message line
- D** - Parameter number
- E** - Parameter name
- F** - Length of parameter
- G** - Sequence of this field

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