

# REXREP – A GREG & Replace Utility

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## No Good Deed Goes Unpunished

- ◆ In my 2017 "Get a GREG" presentation
  - Described MCP's Regular Expression library
  - Presented an example GREG-like utility using REs
    - Traverse a directory of MCP files
    - Report all matches to the RE
- ◆ In the 2017 IDKYCDT session
  - We solicited "I Wish I Could Do That" topics
  - Sanjay Altekar wished he could do "mass replacements across a directory of files"
- ◆ That got me thinking...

## It Seemed So Simple...

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- ◆ Turned out to be harder than I thought
  - GREP utility was read-only
  - Mass replacements can change lots of files
- ◆ Decided in-place updates were not a good idea
  - That meant copying files that had updates
  - In turn meant splitting and rejoining file names
  - Had to consider record overflow/truncation
  - Still had to do directory search, too
- ◆ In the end, cloned REXREP from PWB/COPY
  - Already had integrated directory search facility
  - Already had routines for file-name surgery

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## REXREP Utility

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- ◆ String parameter
  - Specifies a list of one or more <replace spec> pairs
    - Regular expression for matching
    - Plain text to replace the matches
    - Replaces all matches in a record
    - Multiple <replace specs> processed sequentially
  - Optionally specifies a set of FILEKINDs to filter files
    - Include/exclude specific FILEKINDS
    - Include/exclude on generic match of mnemonic
    - Predefined sets of files (**\*DATA**, **\*SYMBOL**)
      - **\*SYMBOL** - DCALGOL - DMALGOL + SEQDATA
    - Restricted to standard MCP source and data files
      - No codefiles, BD files, WRAP file, etc.

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## REXREP Utility, continued

### ◆ File equations

- **DIR** = source directory
- **NEWDIR** = destination directory for updated files
- **LINE** = printer file

### ◆ Task switches

- **SW1: TRUE** => case-insensitive matching
- **SW2: TRUE** => "non-greedy" matching
- **SW3:**
  - **TRUE** => Text overflow truncates updated record
  - **FALSE** =>
    - Text overflow reverts all changes to record
    - Original record is written to destination file

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## Example

```
RUN UTIL/PARADIGM/REXREP (
  "/PARAM/ PARAMETER, /HANG.*ROUND/ ""HA"" : COBOL");
FILE DIR = SRCE/WORKSPACE ON DEV;
FILE NEWDIR (TITLE=UPDATED/WORKSPACE ON PACK);
```

Paradigm Regular-Expression Scan & Replace Utility 2018-09-09 15:38

Source Directory: SRCE/WORKSHOP.  
New Directory: REPL/WORKSHOP.

PARAM: /PARAM/ PARAMETER , /HANG.\*ROUND/ "HA" : COBOL

```
(PAUL)SRCE/WORKSHOP/PARAM/COBOL74 ON OPS.
001200 PROGRAM-ID. WFL-PARAMETER-COBOL74.
300500 77 W-PARAM-LENGTH PIC 9(4) BINARY. <- Truncation reverted
300800 01 WPA-PARAMETER-AREA.
301000 05 WPA-PARAMETER-INPUT PIC X(80).
490400 01 L-PARAMETERETER.
490900 05 L-PARAMETER-TEXT PIC X(252).
500100 PROCEDURE DIVISION USING L-PARAMETERETER.
500860 MOVE 1 TO W-PARAMETER-LENGTH.
500900 UNSTRING L-PARAMETER-TEXT DELIMITED BY LOW-VALUE INTO
500950 WPA-PARAMETER-INPUT POINTER W-PARAMETER-LENGTH.
500970 SUBTRACT 2 FROM W-PARAMETER-LENGTH.
501100 DISPLAY "PARAMETER LENGTH=", W-PARAMETER-LENGTH.
501200 DISPLAY "PARAMETER TEXT= ", WPA-PARAMETER-INPUT.
501300 IF W-PARAMETER-LENGTH NOT > ZERO
REPL/WORKSHOP/PARAM/COBOL74 -- 13 lines changed
```

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## How to Get It

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- ◆ Current in beta test status
- ◆ Eventually part of the Paradigm Futilities project
  - <http://paradigmfutil.sourceforge.net/>
  - Download the ZIP file
  - Unzip SOURCE\UTIL\PARADIGM\REXREP.dca\_m
- ◆ Also on website:
  - <http://www.digm.com/UNITE/2018/>