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RCSL: 43-GL1512

AUTHOR: HKA

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MASTER

PROGRAM RC 36-00167.00

DUMP, 8 KB VERSION

KEYWORDS:

MUS, MUSIL, RC3600 UTILITY, LISTING.

ABSTRACT:

THIS RC3600 UTILITY PROGRAM IS INTENDED AS AN AID BY DEBUGGING OF MUS SYSTEM PROGRAMS. IT OFFERS THE POSSIBILITY TO DUMP STORAGE AREAS ADDRESSED ABSOLUTE OR RELATIVE TO THE START OF A PROGRAM OR A PROCESS DESCRIPTOR. THE DUMPED WORDS OR BYTES CAN BE DELIVERED IN SIX DIFFERENT FORMATS, THAT WILL BE HELPFULL FOR THE USER BY EXAMINATION OF THE STORAGE CONTENT. IN ADDITION, THE PROGRAM CAN BE USED TO INSERT SINGLE WORDS IN THE STORAGE. OUTPUT DEVICE IS SPECIFIED AT RUNTIME.

RCSL 43-GL1511: ASCII SOURCE TAPE.

RCSL 43-GL1513: BIN. REL. TTY OPERATED OBJECT TAPE.

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0067 TITLE: DUMP, RC36-00167.00
0068
0069 DATE: 76.01.20
0070
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0079 SERT SINGLE WORDS IN THE STORAGE.
0080 OUTPUT DEVICE IS SPECIFIED AT RUNTIME.
0081
0082 ENVIRONMENTS: SIZE: 8000 BYTES INCLUDING ONE 134 BYTES OUTPUT BUF-
0083 FER.
0084 NAMES: MUSIL INTERPRETER.
0085
0086 RUNTIME PARAMETERS:
0087
0088 SPECIFYING DUMPDEVICE:
0089 OUTPUT DEVICE DRIVERNAME
0090 CONVERSION TABLE PROCESS NAME
0091
0092 SPECIFYING OBJECT:
0093 DUMP OBJECT STORAGE/PROCESS
0094 OBJECT BASE PROGSTART/PROCDSCR
0095
0096 SPECIFYING OUTPUT FORMATS:
0097 DECIMAL +/-
0098 SIGNED DECIMAL +/-
0099 GRAFIC, ASCII CODE +/-
0100 DECIMAL BYTEVALUES +/-
0101 OCTAL +/-
0102 NOVA INSTRUCTION +/-
0103
0104 SPECIFYING OUTPUT LAYOUT:
0105 COLUMNS LINELENGTH <= 132
0106 LINES PR PAGE >= 0
0107 HEADTXT +/-
0108
0109 CODEPROCEDURES:
0110 RC SL 43-GL1516: GETPSTART.
0111 RC SL 43-GL1519: CHANGETABLE.
0112 1

0113 I
 0114
 0115 OPERATOR COMMUNICATION
 0116 -----

0117
 0118 THE ACTIVITIES OF THE DUMP PROGRAM ARE DIVIDED IN TWO PHASES:
 0119

0120	NAME:	DESCRIPTION:
0121		
0122	INITIALIZATION	SELECTION OF THE RUNTIME PARAMETERS.
0123		
0124	ACTIVE	WAITING FOR OPERATOR COMMANDS OR EXECUTING
0125		COMMANDS.

0126
 0127 INITIALIZATION PHASE
 0128 -----

0129
 0130 WHEN THE PROGRAM IS LOADED OR THE INIT COMMAND IS ISSUED, THE INITIA-
 0131 LIZATION PHASE IS ENTERED AND THE PROGRAM NAME, "DUMP" IS WRITTEN ON THE
 0132 CONSOLE.

0133 THEN THE OPERATOR HAS TO SPECIFY THE RUNTIME PARAMETERS ANSWERING THE
 0134 FOLLOWING QUESTIONS:

0135	QUESTIONS OUTPUT:	ANSWERS:	DEFAULT VALUES:
0136			
0137			
0138			
0139	SPECIFICATION	NAME OF OUTPUT	NO
0140	OF DUMP DEVI-	DRIVER.	
0141			
0142	CONVERSION TABLE?	NAME OF A PRO-	NO CONVERSION
0143		GRAM CONTAI-	
0144		NING THE TABLE.	
0145			
0146	SPECIFICATION	NAME OF A PRO-	NO
0147	OF DUMP OB-	CESS / STORAGE.	
0148	JECT		
0149	BASE?	PROG(RAM START)	PROGRAM START
0150		/ PROC(ESS DE-	
0151		SCRIPTOR).	
0152			
0153	SPECIFICATION	+/-	-
0154	OF FORMATS		
0155	SIGNED DECIMAL?	+/-	-
0156			
0157	ASCII GRAPHIC?	+/-	+
0158			
0159	DECIMAL BYTES?	+/-	+
0160			
0161	OCTAL?	+/-	+
0162			
0163	INSTRUCTION?	+/-	-
0164			
0165	SPECIFICATION	LINELENGTH<=	1
0166	OF OUTPUT LAY-	132.	
0167	OUT		
0168	LINES?	0 FOR CONTINUO-	NO
0169		US PRINTING	
0170		/ >0.	
0171			
0172	HEAD?	+/-	+

0173 I

0174 1
 0175
 0176 THE ANSWERS SHOULD BE TERMINATED BY PRESSING THE RETURN BUTTON. IF
 0177 A QUESTION IS ANSWERED WITH THE "INIT" COMMAND, THE INITIALIZATION PHA-
 0178 SE WILL BE RESTARTED. OTHER ANSWERS WILL CAUSE THE QUESTION REPEATED,
 0179 OR THE DEFAULT VALUE OF THE RUNTIME PARAMETER WILL BE TAKEN.

0180
 0181
 0182 ACTIVE PHASE
 0183 -----

0184
 0185 AFTER THE INITIALIZATION PHASE AN ASTERIX, *, WILL BE OUT-
 0186 PUT ON THE CONSOLE. THE PROGRAM IS THEN IN THE ACTIVE PHASE,
 0187 AND IS ABLE TO EXECUTE FOLLOWING COMMANDS:

0188	COMMAND:	ACTION:
0189		
0190		
0191	STOP	RESTARTING THE ACTIVE PHASE.
0192		
0193	INIT	RESTARTING THE INITIALIZATION PHASE.
0194		
0195	W(ORDS) FF...F(LL...L)	
0196		DUMPING THE STORAGE WORDS BETWEEN THE OCTAL
0197		WORDADDRESSES FF...F, FIRST ADDRESS, AND
0198		LL...L, LAST ADDRESS, BOTH INCLUDED. THE AD-
0199		DRESSES ARE RELATIVE TO TO THE START OF THE
0200		SPECIFIED DUMP OBJECT. IF ONLY THE FIRST
0201		ADDRESS IS GIVEN, A SINGLE WORD WILL BE OUT-
0202		PUT.
0203		
0204	B(YTES) FF...F(LL...L)	
0205		DUMPING THE STORAGE BYTES BETWEEN THE OCTAL
0206		BYTEADDRESSES FF...F AND LL...L. THE ADDRES-
0207		SES WILL BE HANDLED RELATIVE TO THE START
0208		OF THE DUMP OBJECT AS FOR THE DUMPING OF
0209		WORDS.
0210		
0211	DEP(OSIT THE VALUE) VV...V(AT THE ADDRESS) AA...A	
0212		THE VALUE OF THE OCTAL NUMBER VV...V WILL BE
0213		INSERTED AS A WHOLE WORD AT THE ABSOLUTE OCTAL
0214		WORDADDRESS AA...A.
0215		
0216	D(EVICE REDEFINE)	THE OPERATOR CAN REDEFINE THE OUTPUT DEVICE.
0217		
0218	O(BJECT REDEFINE)	THE OPERATOR CAN REDEFINE THE DUMP OBJECT.
0219		
0220	F(ORMAT REDEFINE)	THE OPERATOR CAN REDEFINE OUTPUT FORMATS.
0221		
0222	L(AYOUT REDEFINE)	THE OPERATOR CAN REDEFINE THE LAYOUT OF THE
0223		OUTPUT.
0224		

0225 THE PARTS OF THE COMMANDS ENCLOSED BY PARANTHESES ARE OPTIONAL.
 0226
 0227 !

0228 !
0229
0230 EXECUTION OF THE DUMP COMMANDS (THE "W" OR THE "B" COMMANDS) CAN
0231 BE STOPPED BY ISSUING THE "STOP" OR THE "INIT" COMMAND. NO OTHER COM-
0232 MANDS ARE ALLOWED DURING THE EXECUTION.
0233 WHEN A COMMAND IS EXECUTED, OR EXECUTION STOPPED BY THE "STOP" COM-
0234 MAND, THE ACTIVE PHASE WILL BE RESTARTED, AN ASTERIX, *, IS OUTPUT,
0235 AND ALL COMMANDS ARE ALLOWED AGAIN.
0236
0237
0238 ERROR AT THE OUTPUT DEVICE
0239 -----
0240
0241 IF AN ERROR OCCURES AT THE OUTPUT DEVICE, EXECUTION WILL BE STOPPED
0242 AND THE STATUSWORD DESCRIBING THE ERROR WILL BE OUTPUT ON THE CON-
0243 SOLE IN OCTAL FORM. THE TWO PHASES OF THE PROGRAM CAN THEN BE RESTARTED
0244 BY THE "INIT" OR THE "STOP" COMMAND. ALL OTHER MESSAGES FROM THE OPERE-
0245 TOR WILL CAUSE THE PROGRAM TO REPEAT THE LAST OUTPUT OPERATION.
0246
0247 !