09:20:52 DEMOCMGR MZ390 STARTED USING z390 V1.4.01e ON J2SE 1.6.0 05

```
AZ390I Copyright 2008 Automated Software Tools Corporation
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AZ390I program = soa\demo\DEMOCMGR
AZ390I options = sysmac(w:\work\z390\mac+.)
syscpy(w:\work\z390\mac+.) SYSMAC(soa\maclib+mac)
External Symbol Definitions
ESD=0001 LOC=00000000 LEN=00000000 TYPE=CST NAME=$PRIVATE
ESD=0002 LOC=00000000 LEN=00000460 TYPE=CST NAME=DEMOCMGR
Assembler Listing
                      (1/2)1 SOACMGR CLIENT=DEMOCMGR,HOST=*,PORT=3900,SERVICES=((DEMOSUB1,-45,-45,45),(DEMOSUB2,-4,-4,4))
000000
                      000000
000000
                      (2/7)4+* Copyright 2006 Automated Software Tools Corporation
                      (2/8)5+* This source code is part of z390 assembler/emulator package
000000
                      (2/9)6+* The z390 package is distributed under GNU general public license *
000000
000000
                     (2/10)7+* Author - Don Higgins
                     (2/11)8+* Date - 12/26/06
000000
                     000000
000000
                     (2/13)10+* 12/28/06 RPI 523 GEN SOURCE CODE FOR SOA CLIENT MSG MANAGER
000000
                     (2/14)11+* 01/05/07 RPI 524 ADD MSGTIME FOR SOA CLIENT SERVER APPLICATIONS
000000
                     (2/15)12+* 01/22/07 RPI 542 CORRECT R1ADDR FROM GETMAIN FOR BUFFER
000000
                     (2/16)13+* 02/21/07 RPI 553 REMOVE TCPIO LMAX AND USE R5 VS R2 FOR LMSG CALC
000000
                     (2/17)14+*
                                 AND HANDLE VARIABLE LENGTH MSGS UP TO LMSG
                     000000
                     (2/20)16+* SOACMGR IS DYNAMICALLY CALLED FROM SOASTUB2 STUB WITH NAME/PARMS
000000
000000
                     (2/21)17+*
000000
                     (2/22)18+* INPUT PARMS
000000
                     (2/23)19+*
                              1 NAME OF SERVICE TO BE CALLED
000000
                     (2/24)20+* 2 PARAMETER LIST ADDRESS
                     (2/25)21+* ACTION
000000
000000
                     (2/26)22+* 1 BUILD MSG WITH LENGTH, NAME, AND PARM VALUES
                     (2/27)23+*
000000
                              2 SEND MSG TO SOA SERVER SOASMGR LISTENING FOR SOA MESSAGES
                     (2/28)24+*
                               3 RECEIVE RESPONSE MSG FROM SOASMGR
000000
000000
                     (2/29)25+*
                               4 MOVE UPDATED PARMS FROM MESSAGE TO ADDRESSES IN PARMLIST
000000
                     (2/30)26+*
                               5 RETURN TO CALLER
                     000000
                     (4/43)28 =
000000
                                PUSH PRINT
000000
                     (4/52)315=
                                POP PRINT
000000
                    (13/77)317+DEMOCMGR CSECT
000000 90ECD00C
                        (13/167)318+
                                     STM 14,12,12(13)
000004 45FF0068
                       (13/168)319+
                                     BAL 15,104(15)
```

```
(13/169)320+
                                           DC 18F'0'
000008 0000000000000000
000050 C4C5D4D6C3D4C7D9
                                (13/170)321+
                                              DC CL8'DEMOCMGR'
                              (13/171)322+
                                            DC CL8'05/27/08'
000058 F0F561F2F761F0F8
                                            DC CL8'09.20'
000060 F0F94BF2F0404040
                              (13/172)323+
                                        ST 15,8(13)
000068 50FD0008
                          (13/173)324+
                                        ST 13,4(15)
00006C 50DF0004
                          (13/174)325+
                                      LR 13,15
000070 18DF
                        (13/175)326+
                     (13/188)327+
                                    USING DEMOCMGR+8,13
000072
LISTUSE DEMOCMGR ESD=0002 LOC=00000008 LEN=01000 REG=D OFF=00000 LAB=
                                    LR R2,R1
000072 1821
                        (2/34)329+
                                                    SAVE PARM LIST FROM SOA STUB CALL
                                      LM R2,R3,0(R2)
000074 98232000
                          (2/36)330+
                                                        R2 = A(SVCNAME) R3 = A(SVCPLIST)
                                                     R3 = USER CALL PARMS FOR SERVICE
                          (2/37)331+
                                      L R3,0(R3)
000078 58330000
                                          L R9.LMAX
00007C 5890D448
                     000450 (2/38)332+
                                                           R9 = LENGTH OF MSG BUFFER
                                         L R4,AMSG
000080 5840D444
                     00044C (2/39)333+
                     000438
                            (8/43)335+
                                         CL R4,=A(0)
000084 5540D430
                                          BC 15-EO,ZSTR IF 1
000088 4770D0DC
                     0000E4 (8/46)336+
                                     LR 1,9
00008C 1819
                        (15/27)340+
                         (14/130)342+ LA 0,B'10'
00008E 41000002
                        (14/131)343+ SVC 4 GMAIN R0=(X'02'=31B,X'01'=COND),R1=LEN OUT(R0=L,R1=A)
000092 0A04
                        (2/42)345+
000094 1841
                                   LR R4,R1
                                                       R4 = ADDRESS MSG BUFFER RPI 542
000096
                      (2/43)346+
                                     USING IHAMSG,R4
LISTUSE DEMOCMGR ESD=0002 LOC=00000008 LEN=01000 REG=D OFF=00000 LAB=
LISTUSE IHAMSG ESD=0003 LOC=000000000 LEN=01000 REG=4 OFF=00000 LAB=
000096 5040D444
                     00044C (2/44)347+
                                             ST R4.AMSG
                                                              SAVE BUFFER FOR RE-ENTRY
                                                   R0 = TCPIO OP OPEN CLIENT PORT CONN7ECTION
00009A 41000002
                          (16/62)350+
                                       LA 0,2
                          (16/68)351+ LA 14,0
00009E 41E00000
                                                    R14= 0 FOR LOCAL HOST
                                      LA 1,3900
0000A2 41100F3C
                          (16/118)352+
                        (16/123)353+
                                       SVC X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
0000A6 0A7C
                     000448 (8/43)356+
                                          CH R15,=H'0'
0000A8 49F0D440
                                           BC 15-NE,ZSTR IF 2
                      0000E4 (8/46)357+
0000AC 4780D0DC
0000B0 A7150017
                     0000DE (17/49)361+
                                           BRAS 1,*+(WTO#0008 EOT-*+1)/2*2
0000B4 00290000C4C5D4D6
                               (17/50)362+ DC AL2(WTO#0008 EOT-*.0).C'DEMOCMGR OPEN FAILED HOST=* PORT=3900'
0000DD
              0000DD
                          (17/51)364+WTO#0008 EOT EQU *
                                      SVC 35
0000DE 0A23
                         (17/52)365+
                     000326 (2/48)367+
0000E0 47F0D31E
                                                B ABORT
0000E4
              0000E4
                         (10/33)370+ZSTR_IF_2 EQU *
                         (10/33)375+ZSTR IF 1 EOU *
              0000E4
0000E4
0000E4 41000008
                          (18/98)380+
                                     LA 0,8 NANOSECONDS - DOUBLE WORD BIT 63 NANO-SEC COUNTER
                     000004 (18/76)381+
                                          LA 1,MSGTIME
0000E8 41104004
0000EC 0A0B
                         (18/81)382+
                                      SVC 11 TIME AND DATE
0000EE D207D4504004 000458 000004 (2/52)384+
                                               MVC SAVETIME, MSGTIME SAVE MSGTIME FOR MATCHING SEND/RECV
                                (2/53)385+
0000F4 D207400C2000 00000C
                                            MVC MSGNAME.0(R2) MOVE SERVICE NAME TO MSG
                                                MVC MSGRC.=F'0'
0000FA D2034014D434 000014 00043C
                                   (2/54)386+
                                                                   ZERO RETURN CODE FIELD
```

```
000100 41604018
                  000018
                         (2/55)387+
                                   LA R6,MSGPARMS
                                                     R6 = ADDRESS FIRST PARM IN BUFFER
000104 A79AFFE8
                       (2/56)388+
                                  AHI R9.-(MSGPARMS-IHAMSG) R9 = REMAINING BYTES FOR PARMS
                   (2/57)389+********************************
000108
000108
                   (2/58)390+* TEST EACH SERVICE NAME AND IF FOUND,
000108
                   (2/59)391+* 1. BUILD SEND MESSAGE WITH NAME AND PARMS
000108
                   (2/60)392+* 2. WAIT FOR RECEIVED RESPONSE MESSAGE
000108
                   (2/61)393+* 3. UPDATE NON READ ONLY PARMS RETURNED
000108
                   (2/62)394+* 4. EXIT TO CALLER WITH RETURN CODE RETURNED
                   000108
                    000428
                                      CLC 0(8,R2),=CL8'DEMOSUB1'
000108 D5072000D420
                          (8/43)398+
                                     BC 15-EQ,ZSTR IF 3
00010E 4770D1EA
                   0001F2
                          (8/46)399+
                   000112
000112
                   (2/72)402+* BUILD SEND MESSAGE
                   000112
000112 58830000
                      (2/80)404+
                                                  R1=A(NEXT PARM)
                                   L R8,0(R3)
000116 5870D438
                  000440 (2/94)405+
                                      L R7,=F'45'
                                  MVCL R6,R8
00011A 0E68
                     (2/95)406+
                                                      MOVE SEND PARM
00011C 58830004
                       (2/80)407+
                                   L R8,4(R3)
                                                   R1=A(NEXT PARM)
000120 5870D438
                  000440 (2/94)408+
                                      L R7,=F'45'
000124 0E68
                     (2/95)409+
                                  MVCL R6,R8
                                                      MOVE SEND PARM
000126 58830008
                      (2/80)410+
                                   L R8,8(R3)
                                                  R1=A(NEXT PARM)
00012A 5870D438
                  000440 (2/94)411+
                                      L R7.=F'45'
00012E 0E68
                                  MVCL R6.R8
                                                      MOVE SEND PARM
                     (2/95)412+
000130 1B64
                     (2/100)413+
                                  SR R6,R4
                  000000 (2/101)414+
000132 50604000
                                      ST R6,MSGLEN
                                                           SET MSG LENGTH
                  000136
000136
                   (2/103)416+* SEND MESSAGE TO SOACMGR SERVER
                   000136
000136 41000004
                      (16/77)420+
                                            R0 = TCPIO OP SEND MSG VIA PORT CONNECTION
                                 LA 0,4
00013A 1B22
                     (16/92)421+
                                SR 2.2 (SVC WILL ISSUE ERROR IF SERVER PORT AND R2=-1)
00013C 0620
                     (16/93)422+
                                BCTR 2.0
00013E 18E4
                     (15/27)424+
                                LR 14,R4
                  000000 (16/108)426+ L 15,MSGLEN
000140 58F04000
                                  LA 1,3900
000144 41100F3C
                      (16/118)427+
000148 0A7C
                     (16/123)428+
                                 SVC X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
                         (8/43)431+
                                    CH R15,=H'0'
00014A 49F0D440
                  000448
00014E 4780D184
                  00018C
                         (8/46)432+
                                    BC 15-NE,ZSTR IF 4
                  000186
                        (17/49)436+
000152 A715001A
                                    BRAS 1,*+(WTO#0018_EOT-*+1)/2*2
000156 002F0000C4C5D4D6
                          (17/50)437+
                                      DC AL2(WTO#0018 EOT-*,0),C'DEMOCMGR ERROR ON TCPIO SEND MSG - ABORTING'
000185
           000185
                     (17/51)439+WTO#0018_EOT EQU *
000186 0A23
                     (17/52)440+
                                SVC 35
000188 47F0D31E
                  000326 (2/108)442+
                                         B ABORT
```

```
00018C
           00018C
                     (10/33)445+ZSTR IF 4 EQU *
                  00018C
00018C
                   (2/111)449+* RECEIVE RESPONSE MESSAGE FROM SOACMGR SERVER AND CLOSE PORT
                  00018C
00018C 1864
                    (2/113)451+
                                  LR R6,R4
                                      L R7,LMAX
00018E 5870D448
                  000450 (2/114)452+
000192 1B88
                    (2/115)453+
                                  SR R8,R8
                                 SR R9,R9
000194 1B99
                    (2/116)454+
000196 0E68
                    (2/117)455+
                                 MVCL R6.R8 CLEAR MESSAGE BUFFER
                                  LA R11.4
000198 41B00004
                     (2/118)456+
                                              R11 = LENGTH (4 BYTE RECORD LENGTH)
00019C 41E04000
                 000000 (2/119)457+
                                     LA R14.IHAMSG INTO MSG BUFFER
0001A0 45C0D330
                  000338 (2/120)458+
                                      BAL R12, READ VLR MSG
                                        CLC MSGNAME,=CL8'DEMOSUB1'
                 00000C 000428 (8/43)461+
0001A4 D507400CD420
0001AA 4780D1D4
                  0001DC
                         (8/46)462+
                                    BC 15-NE,ZSTR_IF_5
                  0001D6 (17/49)466+
                                    BRAS 1,*+(WTO#0022_EOT-*+1)/2*2
0001AE A7150014
                         (17/50)467+
                                    DC AL2(WTO#0022_EOT-*,0),C' INVALID TCPIO RECEIVE MSG NAME'
0001B2 0023000040C9D5E5
                     (17/51)468+WTO#0022_EOT EQU *
0001D5
           0001D5
                                SVC 35
0001D6 0A23
                    (17/52)469+
0001D8 47F0D31E
                  000326 (2/123)471+
                                         B ABORT
0001DC
            0001DC
                      (10/33)474+ZSTR IF 5 EQU *
                   0001DC
0001DC
                   (2/126)478+* UPDATE NON READ ONLY PARMS RETURNED
                   0001DC
0001DC 41804018
                  000018 (2/128)480+
                                      LA R8,MSGPARMS
0001E0 5890D448
                 000450 (2/129)481+
                                      L R9,LMAX
0001E4 58630008
                     (2/138)482+
                                   L R6,8(R3)
                                                R6=A(NEXT PARM)
0001E8 5870D438
                 000440 (2/139)483+
                                      L R7,=F'45'
0001EC 0E68
                    (2/140)484+
                                  MVCL R6,R8
                                                   RETURN UPDATED PARM
0001EE 47F0D30A
                                      B EXIT
                  000312 (2/145)485+
0001F2
           0001F2
                     (10/33)488+ZSTR IF 3 EQU *
                                     CLC 0(8,R2),=CL8'DEMOSUB2'
0001F2 D5072000D428
                   000430
                         (8/43)493+
0001F8 4770D2D4
                  0002DC
                         (8/46)494+
                                    BC 15-EQ,ZSTR IF 6
                   0001FC
0001FC
                   (2/72)497+* BUILD SEND MESSAGE
                   0001FC
0001FC 58830000
                      (2/80)499+
                                   L R8,0(R3)
                                                 R1=A(NEXT PARM)
000200 5870D43C
                  000444 (2/94)500+
                                     L R7,=F'4'
000204 0E68
                    (2/95)501+
                                 MVCL R6,R8
                                                    MOVE SEND PARM
000206 58830004
                      (2/80)502+
                                  L R8,4(R3)
                                                 R1=A(NEXT PARM)
                  000444 (2/94)503+
00020A 5870D43C
                                      L R7,=F'4'
                     (2/95)504+
                                 MVCL R6,R8
00020E 0E68
                                                    MOVE SEND PARM
000210 58830008
                      (2/80)505+
                                  L R8,8(R3)
                                                 R1=A(NEXT PARM)
000214 5870D43C
                  000444
                         (2/94)506+
                                     L R7,=F'4'
```

```
000218 0E68
                     (2/95)507+
                                  MVCL R6,R8
                                                      MOVE SEND PARM
00021A 1B64
                     (2/100)508+
                                   SR R6.R4
00021C 50604000
                  000000 (2/101)509+
                                      ST R6,MSGLEN
                                                           SET MSG LENGTH
                   000220
000220
                   (2/103)511+* SEND MESSAGE TO SOACMGR SERVER
                   000220
000220 41000004
                      (16/77)515+
                                 LA 0,4
                                           R0 = TCPIO OP SEND MSG VIA PORT CONNECTION
000224 1B22
                    (16/92)516+
                                SR 2.2 (SVC WILL ISSUE ERROR IF SERVER PORT AND R2=-1)
000226 0620
                    (16/93)517+
                                BCTR 2.0
000228 18E4
                    (15/27)519+
                                LR 14.R4
00022A 58F04000
                  000000 (16/108)521+
                                    L 15.MSGLEN
00022E 41100F3C
                      (16/118)522+
                                  LA 1.3900
000232 0A7C
                     (16/123)523+
                                 SVC X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
                                    CH R15,=H'0'
000234 49F0D440
                  000448
                        (8/43)526+
000238 4780D26E
                  000276
                         (8/46)527+
                                    BC 15-NE,ZSTR_IF_7
00023C A715001A
                  000270 (17/49)531+ BRAS 1,*+(WTO#0031 EOT-*+1)/2*2
000240 002F0000C4C5D4D6
                                      DC AL2(WTO#0031_EOT-*,0),C'DEMOCMGR ERROR ON TCPIO SEND MSG - ABORTING'
                          (17/50)532+
                     (17/51)534+WTO#0031 EOT EOU *
00026F
           00026F
000270 0A23
                     (17/52)535+
                                SVC 35
                  000326 (2/108)537+
000272 47F0D31E
                                         B ABORT
                     (10/33)540+ZSTR IF 7 EQU *
000276
           000276
                   000276
                   (2/111)544+* RECEIVE RESPONSE MESSAGE FROM SOACMGR SERVER AND CLOSE PORT
000276
                   000276
000276 1864
                    (2/113)546+
                                  LR R6,R4
000278 5870D448
                  000450 (2/114)547+
                                      L R7,LMAX
00027C 1B88
                     (2/115)548+
                                   SR R8,R8
00027E 1B99
                     (2/116)549+
                                   SR R9,R9
000280 0E68
                    (2/117)550+
                                  MVCL R6,R8 CLEAR MESSAGE BUFFER
000282 41B00004
                      (2/118)551+
                                  LA R11.4
                                               R11 = LENGTH (4 BYTE RECORD LENGTH)
000286 41E04000
                  000000 (2/119)552+
                                      LA R14.IHAMSG INTO MSG BUFFER
                  000338 (2/120)553+
00028A 45C0D330
                                       BAL R12,READ VLR MSG
00028E D507400CD428
                 00000C 000430 (8/43)556+
                                         CLC MSGNAME,=CL8'DEMOSUB2'
000294 4780D2BE
                  0002C6
                                    BC 15-NE,ZSTR IF 8
                          (8/46)557+
000298 A7150014
                  0002C0 (17/49)561+
                                    BRAS 1.*+(WTO#0035 EOT-*+1)/2*2
                          (17/50)562+
                                     DC AL2(WTO#0035_EOT-*,0),C' INVALID TCPIO RECEIVE MSG NAME'
00029C 0023000040C9D5E5
0002BF
            0002BF
                      (17/51)563+WTO#0035 EOT EOU *
                     (17/52)564+
                                SVC 35
0002C0 0A23
0002C2 47F0D31E
                  000326 (2/123)566+
                                          B ABORT
0002C6
            0002C6
                      (10/33)569+ZSTR_IF_8 EQU *
                   0002C6
0002C6
                   (2/126)573+* UPDATE NON READ ONLY PARMS RETURNED
```

```
0002C6
0002C6 41804018
                  000018 (2/128)575+
                                      LA R8.MSGPARMS
                  000450 (2/129)576+
0002CA 5890D448
                                       L R9,LMAX
0002CE 58630008
                      (2/138)577+
                                    L R6,8(R3)
                                                 R6=A(NEXT PARM)
0002D2 5870D43C
                                       L R7,=F'4'
                  000444 (2/139)578+
0002D6 0E68
                     (2/140)579+
                                   MVCL R6,R8
                                                     RETURN UPDATED PARM
0002D8 47F0D30A
                  000312 (2/145)580+
                                       B EXIT
0002DC
            0002DC
                      (10/33)583+ZSTR IF 6 EOU *
0002DC A7150018
                  00030C (17/49)588+
                                     BRAS 1,*+(WTO#0040 EOT-*+1)/2*2
0002E0 002C0000E2D6C1C3
                          (17/50)589+
                                      DC AL2(WTO#0040 EOT-*,0),C'SOACMGR SOA SERVICE NOT FOUND = ABORTING'
00030C
            00030C
                      (17/51)591+WTO#0040 EOT EOU *
00030C 0A23
                     (17/52)592+
                                SVC 35
00030E 47F0D31E
                  000326 (2/150)594+
                                    B ABORT
                  000312
000312
                   (2/152)596+* EXIT TO CALLER WITH RETURN CODE FROM SERVICE
                  000312
           000312
000312
                     (2/154)598+EXIT EQU *
000312 58F04014
                 000014 (2/155)599+
                                    L R15,MSGRC
000316 18FF
                    (15/27)602+
                                LR 15,(15)
000318 58D0D004
                      (19/50)604+
                                  L 13,4(,13)
00031C 58E0D00C
                                  L 14,12(,13)
                       (19/51)605+
000320 982CD01C
                                  LM 2,12,28(13)
                       (19/52)606+
000324 07FE
                    (19/53)607+
                               BR 14
000326
                  (19/29)610+ABORT DS 0H
000326 41F0000C
                      (19/33)611+
                                 LA 15,12
00032A 58D0D004
                       (19/50)612+
                                L 13,4(,13)
00032E 58E0D00C
                                  L 14,12(,13)
                       (19/51)613+
000332 982CD01C
                       (19/52)614+
                                  LM 2,12,28(13)
000336 07FE
                    (19/53)615+
                                BR 14
                  000338
000338
                   (2/159)618+* READ VARIABLE LENGTH MSG INTO BUFFER AT R14
000338
                   (2/160)619+* R14 = READ START ADDRESS
                  000338
000338
                   (2/162)621+READ VLR MSG DS 0H
000338 50C0D41C
                  000424 (2/163)622+
                                    ST R12,VLR SAVE
                                                    SAVE RETURN ACROSS READ_MSG
                                         XC READ_LEN, READ_LEN ZERO READ_LEN BYTES
00033C D703D418D418
                  000420 000420 (2/164)623+
000342 58B0D448
                  000450 (2/165)624+
                                    L R11,LMAX MAX LENGTH MESSAGE ALLOWED
000346 45C0D386
                  00038E (2/166)625+
                                    BAL R12,READ MSG
                                LR R10,R2 READ REST ENTIRE MSG FROM SAME CONN
00034A 18A2
                     (2/167)626+
00034C
            00034C
                      (5/44)628+ZSTR_DO_1_TEST EQU *
00034C D503D418D43C
                  000420 000444
                             (8/43)630+
                                         CLC READ LEN,=F'4'
                                    BC 15-LT,ZSTR_IF_9
000352 47B0D352
                  00035A
                         (8/46)631+
000356 47F0D356
                  00035E
                         (5/47)633+
                                      B ZSTR DO 1 CODE
```

```
00035A
             00035A
                        (10/33)636+ZSTR IF 9 EQU *
00035A 47F0D362
                    00036A
                           (5/49)639+
                                        B ZSTR_DO_1_END
00035E
             00035E
                        (5/50)640+ZSTR_DO_1_CODE EQU *
00035E 1BB1
                       (2/169)642+
                                      SR R11,R1 REDUCE REMAINING MAX
                       (2/170)643+
                                      AR R14,R1 UPDATE READ STARTING ADDR
000360 1AE1
000362 45C0D386
                    00038E (2/171)644+
                                           BAL R12,READ MSG
                    00034C
000366 47F0D344
                            (5/58)647+
                                       B ZSTR DO 1 TEST
00036A
             00036A
                        (5/59)648+ZSTR DO 1 END EOU *
                        (5/44)652+ZSTR DO 2 TEST EQU *
00036A
             00036A
00036A D503D4184000 000420 000000 (8/43)654+
                                            CLC READ LEN, MSGLEN
                    000378
                                       BC 15-LT.ZSTR IF 10
000370 47B0D370
                           (8/46)655+
                            (5/47)657+
000374 47F0D374
                    00037C
                                          B ZSTR DO 2 CODE
                       (10/33)660+ZSTR IF 10 EQU *
000378
            000378
000378 47F0D380
                    000388
                           (5/49)663+
                                       B ZSTR DO 2 END
00037C
             00037C
                        (5/50)664+ZSTR_DO_2_CODE EQU *
00037C 1BB1
                       (2/174)666+
                                      SR R11,R1 REDUCE REMAINING MAX
00037E 1AE1
                       (2/175)667+
                                      AR R14,R1 UPDATE READ STARTING ADDR
000380 45C0D386
                    00038E (2/176)668+
                                           BAL R12,READ MSG
000384 47F0D362
                           (5/58)671+
                                        B ZSTR_DO_2_TEST
                   00036A
                        (5/59)672+ZSTR DO 2 END EQU *
000388
             000388
                    000424 (2/178)675+
000388 58C0D41C
                                       L R12.VLR SAVE
00038C 07FC
                       (2/179)676+
                                    BR R12
                     00038E
00038E
                     (2/181)678+* READ THE NUMBER OF BYTES AVAILABLE UP TO R11 INTO BUFFER ELSE ABORT
00038E
                     (2/182)679+*R11 = MAX LENGTH TO READ
00038E
                     (2/183)680+* R14 = READ START ADDRESS
                     (2/184)681+* INCREMENT READ_LEN BY BYTES READ IN R1
00038E
                     00038E
00038E
                     (2/186)683+READ_MSG DS 0H
00038E 41000005
                        (16/80)686+
                                    LA 0.5
                                                R0 = TCPIO OP RECV MSG VIA PORT CONNECTION
                                   SR 2,2 (SVC WILL ISSUE ERROR IF SERVER PORT AND R2=-1)
000392 1B22
                      (16/92)687+
000394 0620
                      (16/93)688+
                                   BCTR 2.0
                       (15/27)692+
                                   LR 15.R11
000396 18FB
000398 41100F3C
                        (16/118)694+
                                     LA 1,3900
00039C 0A7C
                       (16/123)695+
                                    SVC X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
                    000448 (8/43)698+
                                       CH R15,=H'0'
00039E 49F0D440
0003A2 4780D3CE
                    0003D6
                            (8/46)699+
                                        BC 15-NE,ZSTR IF 11
                    0003D0 (17/49)703+
                                        BRAS 1,*+(WTO#0060 EOT-*+1)/2*2
0003A6 A7150015
                                          DC AL2(WTO#0060_EOT-*,0),C'TCPIO ERROR DEMOCMGR RECEIVE RC NZ'
0003AA 00260000E3C3D7C9
                             (17/50)704+
                        (17/51)706+WTO#0060 EOT EOU *
0003D0
             0003D0
0003D0 0A23
                       (17/52)707+
                                    SVC 35
0003D2 47F0D31E
                    000326 (2/190)709+
                                           B ABORT
```

```
(10/33)712+ZSTR IF 11 EQU *
0003D6
              0003D6
0003D6 4910D440
                      000448
                               (8/43)716+
                                            CH R1.=H'0'
                       000414
                               (8/46)717+
                                            BC 15-LE,ZSTR_IF_12
0003DA 4720D40C
0003DE A7150018
                      00040E
                              (17/49)721+
                                            BRAS 1,*+(WTO#0064 EOT-*+1)/2*2
                                              DC AL2(WTO#0064_EOT-*,0),C'TCPIO ERROR DEMOCMGR RECEIVE LENGTH <= 0'
0003E2 002C0000E3C3D7C9
                                (17/50)722+
                          (17/51)724+WTO#0064 EOT EOU *
00040E
              00040E
                                       SVC 35
00040E 0A23
                         (17/52)725+
                      000326 (2/194)727+
000410 47F0D31E
                                               B ABORT
                         (10/33)730+ZSTR IF 12 EQU *
000414
              000414
000414 5800D418
                      000420 (2/196)733+
                                           L R0,READ LEN
                         (2/197)734+
                                       AR R0.R1
000418 1A01
                      000420 (2/198)735+
                                            ST RO, READ LEN
00041A 5000D418
                                       BR R12
00041E 07FC
                         (2/199)736+
000420 00000000
                          (2/200)737+READ_LEN DC F'0' BYTES READ BY READ_MSG
000424 00000000
                          (2/201)738+VLR_SAVE DC A(0)
000428
                       (2/202)739+
                                     LTORG
000428 C4C5D4D6E2E4C2F1 =CL8'DEMOSUB1'
000430 C4C5D4D6E2E4C2F2 =CL8'DEMOSUB2'
000438 00000000
                  =A(0)
00043C 00000000
                  =F'0'
000440 0000002D
                  =F'45'
000444 00000004
                  =F'4'
000448 0000
                =H'0'
00044C 00000000
                           (2/206)740+AMSG DC A(0)
                                                                ADDRESS OF MSG BUFFER
000450 0000009F
                           (2/207)741+LMAX DC A(MSGPARMS-IHAMSG+135) MAXIMUM LENGTH OF MESSAGE
000454 0000001C
                           (2/208)742+LMIN DC A(MSGPARMS-IHAMSG+4) MINIMUM LENGTH OF MESSAGE
000458 00000000000000000
                              (2/209)743+SAVETIME DC XL8'0'
000460
              000000
                          (20/36)745+R0 EOU 0
000460
              000001
                          (20/36)746+R1 EOU 1
000460
              000002
                          (20/36)747+R2 EOU 2
000460
              000003
                          (20/36)748+R3 EQU 3
000460
              000004
                          (20/36)749+R4 EOU 4
000460
              000005
                          (20/36)750+R5 EQU 5
                          (20/36)751+R6 EQU 6
              000006
000460
                         (20/36)752+R7 EQU 7
000460
              000007
              000008
                         (20/36)753+R8 EQU 8
000460
000460
              000009
                          (20/36)754+R9 EOU 9
000460
              00000A
                          (20/36)755+R10 EQU 10
              00000B
000460
                          (20/36)756+R11 EOU 11
000460
              00000C
                          (20/36)757+R12 EOU 12
000460
              00000D
                          (20/36)758+R13 EQU 13
000460
              00000E
                          (20/36)759+R14 EOU 14
              00000F
000460
                          (20/36)760+R15 EQU 15
```

```
000460
000460
                        (21/4)764+* Copyright 2007 Automated Software Tools Corporation
000460
                        (21/5)765+* This source code is part of z390 assembler/emulator package
                        (21/6)766+* The z390 package is distributed under GNU general public license *
000460
                        (21/7)767+* Author - Don Higgins
000460
                                                                          *
000460
                        (21/8)768+* Date - 01/01/07
000000
                        (21/13)769+IHAMSG DSECT
000000
                        (21/14)770+MSGLEN DS F TOTAL LENGTH OF MSG = SUM OF PARMS + 24
000004
                        (21/15)771+MSGTIME DS FL8 NS TIME STAMP
00000C
                        (21/16)772+MSGNAME DS CL8 NAME OF SERVICE BEING CALLED
000014
                        (21/17)773+MSGRC DS A SERVICE RETURN CODE
000018
              000018
                           (21/18)774+MSGPARMS EQU *
000018
                         (1/3)777 END
```

```
Symbol Table Listing
SYM=$PRIVATE LOC=00000000 LEN=00000000 ESD=0001 TYPE=CST XREF=295
SYM=ABORT LOC=00000326 LEN=00000002 ESD=0002 TYPE=REL XREF=610 367 442 471 537
566 594 709 727
SYM=AMSG LOC=0000044C LEN=00000004 ESD=0002 TYPE=REL XREF=740 333 347
SYM=DEMOCMGR LOC=00000000 LEN=00000460 ESD=0002 TYPE=CST XREF=317 327
         LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS XREF=297
SYM=E
SYM=EO
          LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS XREF=309 336 399 494
SYM=EXIT LOC=00000312 LEN=00000001 ESD=0002 TYPE=REL XREF=598 485 580
SYM=GE
         LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS XREF=312
SYM=GT
          LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS XREF=310
SYM=H
          LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS XREF=295
SYM=IHAMSG LOC=00000000 LEN=00000018 ESD=0003 TYPE=DST XREF=769 346 388 457 552
741 742
SYM=L
         LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS XREF=296
SYM=LE
          LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS XREF=313 717
SYM=LMAX LOC=00000450 LEN=00000004 ESD=0002 TYPE=REL XREF=741 332 452 481 547
576 624
SYM=LMIN LOC=00000454 LEN=00000004 ESD=0002 TYPE=REL XREF=742
SYM=LT
          LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS XREF=311 631 655
SYM=M
          LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS XREF=303
SYM=MSGLEN LOC=00000000 LEN=00000004 ESD=0003 TYPE=REL XREF=770 414 426 509 521
654
SYM=MSGNAME LOC=0000000C LEN=00000008 ESD=0003 TYPE=REL XREF=772 385 461 556
SYM=MSGPARMS LOC=00000018 LEN=00000001 ESD=0003 TYPE=REL XREF=774 387 388 480 575
741 742
SYM=MSGRC LOC=00000014 LEN=00000004 ESD=0003 TYPE=REL XREF=773 386 599
```

- SYM=MSGTIME LOC=00000004 LEN=00000008 ESD=0003 TYPE=REL XREF=771 381 384
- SYM=NE LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS XREF=300 357 432 462 527 557 699
- SYM=NH LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS XREF=298
- SYM=NL LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS XREF=299
- SYM=NM LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS XREF=306
- SYM=NO LOC=0000000E LEN=00000001 ESD=0000 TYPE=ABS XREF=308
- SYM=NP LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS XREF=305
- SYM=NZ LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS XREF=307
- SYM=O LOC=00000001 LEN=00000001 ESD=0000 TYPE=ABS XREF=301
- SYM=P LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS XREF=302
- SYM=R0 LOC=00000000 LEN=00000001 ESD=0000 TYPE=ABS XREF=745 733 734 735
- SYM=R10 LOC=00000000A LEN=00000001 ESD=0000 TYPE=ABS XREF=755 626
- SYM=R1 LOC=00000001 LEN=00000001 ESD=0000 TYPE=ABS XREF=746 329 345 642 643 666 667 716 734
- SYM=R11 LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS XREF=756 456 551 624 642 666 692
- SYM=R12 LOC=0000000C LEN=00000001 ESD=0000 TYPE=ABS XREF=757 458 553 622 625 644 668 675 676 736
- SYM=R13 LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS XREF=758
- SYM=R14 LOC=0000000E LEN=00000001 ESD=0000 TYPE=ABS XREF=759 457 552 643 667
- SYM=R15 LOC=0000000F LEN=00000001 ESD=0000 TYPE=ABS XREF=760 356 431 526 599 698
- SYM=R2 LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS XREF=747 329 330 385 398 493 626
- SYM=R3 LOC=00000003 LEN=00000001 ESD=0000 TYPE=ABS XREF=748 330 331 404 407 410 482 499 502 505 577
- SYM=R4 LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS XREF=749 333 335 345 346 347 413 424 451 508 519 546
- SYM=R5 LOC=00000005 LEN=00000001 ESD=0000 TYPE=ABS XREF=750
- SYM=R6 LOC=00000006 LEN=00000001 ESD=0000 TYPE=ABS XREF=751 387 406 409 412 413 414 451 455 482 484 501 504 507 508 509 546 550 577 579
- SYM=R7 LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS XREF=752 405 408 411 452 483 500 503 506 547 578
- SYM=R8 LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS XREF=753 404 406 407 409 410 412 453 455 480 484 499 501 502 504 505 507 548 550 575 579
- SYM=R9 LOC=00000009 LEN=00000001 ESD=0000 TYPE=ABS XREF=754 332 388 454 481 549 576
- SYM=READ\_LEN LOC=00000420 LEN=00000004 ESD=0002 TYPE=REL XREF=737 623 630 654 733 735
- SYM=READ\_MSG LOC=0000038E LEN=00000002 ESD=0002 TYPE=REL XREF=683 625 644 668
- SYM=READ\_VLR\_MSG LOC=00000338 LEN=000000002 ESD=0002 TYPE=REL XREF=621 458 553
- SYM=SAVETIME LOC=00000458 LEN=00000008 ESD=0002 TYPE=REL XREF=743 384

SYM=VLR SAVE LOC=00000424 LEN=00000004 ESD=0002 TYPE=REL XREF=738 622 675 SYM=WTO#0008 EOT LOC=000000DD LEN=00000001 ESD=0002 TYPE=REL XREF=364 361 362 SYM=WTO#0018\_EOT LOC=00000185 LEN=00000001 ESD=0002 TYPE=REL XREF=439 436 437 SYM=WTO#0022 EOT LOC=000001D5 LEN=00000001 ESD=0002 TYPE=REL XREF=468 466 467 SYM=WTO#0031 EOT LOC=0000026F LEN=00000001 ESD=0002 TYPE=REL XREF=534 531 532 SYM=WTO#0035 EOT LOC=000002BF LEN=00000001 ESD=0002 TYPE=REL XREF=563 561 562 SYM=WTO#0040 EOT LOC=0000030C LEN=00000001 ESD=0002 TYPE=REL XREF=591 588 589 SYM=WTO#0060 EOT LOC=000003D0 LEN=00000001 ESD=0002 TYPE=REL XREF=706 703 704 SYM=WTO#0064 EOT LOC=0000040E LEN=00000001 ESD=0002 TYPE=REL XREF=724 721 722 LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS XREF=304 SYM=ZSYM=ZSTR DO 1 CODE LOC=0000035E LEN=00000001 ESD=0002 TYPE=REL XREF=640 633 SYM=ZSTR DO 1 END LOC=0000036A LEN=00000001 ESD=0002 TYPE=REL XREF=648 639 SYM=ZSTR DO 1 TEST LOC=0000034C LEN=00000001 ESD=0002 TYPE=REL XREF=628 647 SYM=ZSTR\_DO\_2\_CODE LOC=0000037C LEN=00000001 ESD=0002 TYPE=REL XREF=664 657 SYM=ZSTR\_DO\_2\_END LOC=00000388 LEN=00000001 ESD=0002 TYPE=REL XREF=672 663 SYM=ZSTR\_DO\_2\_TEST LOC=0000036A LEN=00000001 ESD=0002 TYPE=REL XREF=652 671 SYM=ZSTR\_IF\_10 LOC=00000378 LEN=00000001 ESD=0002 TYPE=REL XREF=660 655 SYM=ZSTR IF 1 LOC=000000E4 LEN=00000001 ESD=0002 TYPE=REL XREF=375 336 SYM=ZSTR\_IF\_11 LOC=000003D6 LEN=00000001 ESD=0002 TYPE=REL XREF=712 699 SYM=ZSTR IF 12 LOC=00000414 LEN=00000001 ESD=0002 TYPE=REL XREF=730 717 SYM=ZSTR IF 2 LOC=000000E4 LEN=00000001 ESD=0002 TYPE=REL XREF=370 357 SYM=ZSTR IF 3 LOC=000001F2 LEN=00000001 ESD=0002 TYPE=REL XREF=488 399 SYM=ZSTR IF 4 LOC=0000018C LEN=00000001 ESD=0002 TYPE=REL XREF=445 432 SYM=ZSTR IF 5 LOC=000001DC LEN=00000001 ESD=0002 TYPE=REL XREF=474 462 SYM=ZSTR IF 6 LOC=000002DC LEN=00000001 ESD=0002 TYPE=REL XREF=583 494 SYM=ZSTR\_IF\_7 LOC=00000276 LEN=00000001 ESD=0002 TYPE=REL XREF=540 527 SYM=ZSTR IF 8 LOC=000002C6 LEN=00000001 ESD=0002 TYPE=REL XREF=569 557 SYM=ZSTR\_IF\_9 LOC=0000035A LEN=00000001 ESD=0002 TYPE=REL XREF=636 631

## Literal Table Listing

LIT=A(0) LOC=00000438 LEN=00000004 ESD=0002 POOL=0001 XREF=335
LIT=CL8'DEMOSUB1' LOC=00000428 LEN=00000008 ESD=0002 POOL=0001 XREF=398 461
LIT=CL8'DEMOSUB2' LOC=00000430 LEN=00000008 ESD=0002 POOL=0001 XREF=493 556
LIT=F'0' LOC=0000043C LEN=00000004 ESD=0002 POOL=0001 XREF=386
LIT=F'4' LOC=00000444 LEN=00000004 ESD=0002 POOL=0001 XREF=500 503 506 578 630
LIT=F'45' LOC=00000440 LEN=00000004 ESD=0002 POOL=0001 XREF=405 408 411 483
LIT=H'0' LOC=00000448 LEN=000000002 ESD=0002 POOL=0001 XREF=356 431 526 698 716

AZ390I total mnote warnings = 0AZ390I total mnote errors = 0AZ390I max mnote level = 0 file:///W|/work/z390/soa/demo/DEMOCMGR.PRN

AZ390I total mz390 errors = 0

AZ390I total az390 errors = 0

09:20:52 DEMOCMGR MZ390 ENDED RC= 0 SEC= 0 MEM(MB)= 40 IO=2037