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09:21:29 DEMOSMGR  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\DEMOSMGR
AZ390I options = sysmac(w:\work\z390\mac+.)
  syscpy(w:\work\z390\mac+.) SYSMAC(soa\maclib+mac)
External Symbol Definitions
 ESD=0001 LOC=00000000 LEN=00000548 TYPE=CST NAME=DEMOSMGR
Assembler Listing
000000                 (1/2)1  SOASMGR SERVER=DEMOSMGR,HOST=DSH3,PORT=3900,SERVICES=((DEMOSUB1,-45,-45,45),(DEMOSUB2,-4,-4,4))
000000                 (2/7)3+*****************************************************************
000000                 (2/8)4+* Copyright 2007 Automated Software Tools Corporation        *
000000                 (2/9)5+* This source code is part of z390 assembler/emulator package *
000000                 (2/10)6+* The z390 package is distributed under GNU general public license *
000000                 (2/11)7+* Author - Don Higgins                                       *
000000                 (2/12)8+* Date   - 01/01/07                                          *
000000                 (2/13)9+*****************************************************************
000000                 (2/14)10+*  01/05/07 RPI 524 ADD MSGTIME FOR SOA CLIENT SERVER APPLICATIONS
000000                 (2/15)11+*  01/06/07 RPI 524 ADD SEND/RECEIVE TCPIO LMSG PARM
000000                 (2/16)12+*  01/22/07 RPI 542 CORRECT R1=ADDR FOR GETMAIN
000000                 (2/17)13+*  02/21/07 RPI 553 REMOVE LMAX FROM TCPIO OPEN AND USE R5 FOR LMSG
000000                 (2/18)14+*  02/26/07 RPI 553 ADD CONN= PARM FOR SERVER RESPONSE AND HANDLE
000000                 (2/19)15+*         VARIABLE LENGTH RECEIVE MSGS UP TO LMSG
000000                 (2/20)16+*****************************************************************
000000                 (2/21)17+* GENERATE AN SOA SERVER TO HANDLE SERVICES DEFINED USING HOST
000000                 (2/22)18+* AND PORT SPECIFIED.ERVICE REQUEST MESSAGE
000000                 (2/23)19+* 2. SOASPUT - PUT SERVICE RESPONSE MESSAGE
000000                 (2/24)20+*****************************************************************
000000                 (13/77)22+DEMOSMGR   CSECT
000000 90ECD00C        (13/167)23+      STM  14,12,12(13)
000004 45FF0068        (13/168)24+      BAL  15,104(15)
000008 0000000000000000 (13/169)25+     DC   18F'0'
000050 C4C5D4D6E2D4C7D9 (13/170)26+     DC   CL8'DEMOSMGR'
000058 F0F561F2F761F0F8 (13/171)27+     DC   CL8'05/27/08'
000060 F0F94BF2F1404040 (13/172)28+     DC   CL8'09.21'
000068 50FD0008         (13/173)29+     ST   15,8(13)
00006C 50DF0004         (13/174)30+     ST   13,4(15)
000070 18DF             (13/175)31+     LR   13,15
000072                  (13/188)32+     USING DEMOSMGR+8,13
LISTUSE DEMOSMGR ESD=0001 LOC=00000008 LEN=01000 REG=D OFF=00000 LAB=
000072 A715000C         00008A   (14/49)35+     BRAS 1,*+(WTO#0003_EOT-*+1)/2*2
000076 00140000C4C5D4D6     (14/50)36+     DC   AL2(WTO#0003_EOT-*,0),C'DEMOSMGR STARTED'
00008A           00008A     (14/51)37+WTO#0003_EOT EQU *
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00008A 0A23                    (14/52)38+        SVC   35
00008C                         (4/43)40=         PUSH PRINT
00008C                         (4/52)327=        POP  PRINT
00008C 41000001                (15/59)329+       LA  0,1         R0 = TCPIO OP OPEN SERVER PORT ON HOST
000090 41100F3C                (15/118)330+      LA  1,3900
000094 0A7C                    (15/123)331+      SVC  X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
000096 49F0D53C      000544    (8/43)334+        CH  R15,=H'0'
00009A 4780D0CE      0000D6    (8/46)335+        BC  15-NE,ZSTR_IF_1
00009E A7150019      0000D0    (14/49)339+       BRAS 1,*+(WTO#0006_EOT-*+1)/2*2
0000A2 002E0000E3C3D7C9        (14/50)340+       DC  AL2(WTO#0006_EOT-*,0),C'TCPIO ERROR DEMOSMGR OPEN PORT 3900 FAILED'
0000D0        0000D0           (14/51)342+WTO#0006_EOT EQU *
0000D0 0A23                    (14/52)343+       SVC   35
0000D2 47F0D2BC      0002C4    (2/31)345+        B  ABORT
0000D6        0000D6           (10/33)348+ZSTR_IF_1 EQU *
0000D6 5890D4F8      000500    (2/33)351+        L  R9,LMAX       R9 = LENGTH OF MSG BUFFER
0000DA 1819                    (17/27)354+       LR  1,9
0000DC 41000002                (16/130)356+      LA  0,B'10'
0000E0 0A04                    (16/131)357+      SVC  4 GMAIN R0=(X'02'=31B,X'01'=COND),R1=LEN OUT(R0=L,R1=A)
0000E2 1841                    (2/35)359+        LR  R4,R1         R4 = MAX MESSAGE BUFFER    RPI 542
0000E4                         (2/36)360+        USING IHAMSG,R4
LISTUSE DEMOSMGR ESD=0001 LOC=00000008 LEN=01000 REG=D OFF=00000 LAB=
LISTUSE IHAMSG   ESD=0003 LOC=00000000 LEN=01000 REG=4 OFF=00000 LAB=
0000E4        0000E4           (2/37)361+SERVER_PROCESS_LOOP EQU  *    PROCESS MESSAGES UNTIL CANCELLED
0000E4                         (2/38)362+***********************************************************
0000E4                         (2/39)363+* GET NEXT SERVICE REQUEST MESSAGE
0000E4                         (2/40)364+***********************************************************
0000E4 58A0D530      000538    (2/41)365+        L  R10,=F'-1'   READ FROM ANY CONNECTION
0000E8 41E04000      000000    (2/42)366+        LA  R14,IHAMSG   INTO MSG BUFFER
0000EC 45C0D332      00033A    (2/43)367+        BAL  R12,READ_VLR_MSG READ VARIABLE LENGTH MSG
000518                         (2/51)368+SERVICES LOCTR
000518 00000000                (2/52)369+DEMOSUB1 DC A(0) ADDRESS OF LOADED SERVICE
0000F0                         (2/53)370+DEMOSMGR  CSECT
0000F0                         (2/54)371+***********************************************************
0000F0                         (2/55)372+* GEN SERVICE CALL AND RESPONSE FOR EACH SERVICE
0000F0                         (2/56)373+***********************************************************
0000F0 D507400CD518  00000C 000520 (8/43)375+   CLC  MSGNAME,=CL8'DEMOSUB1'
0000F6 4770D190      000198    (8/46)376+        BC  15-EQ,ZSTR_IF_2
0000FA BFFFD510      000518    (2/58)378+        ICM R15,15,DEMOSUB1
0000FE 49F0D53C      000544    (8/43)380+        CH  R15,=H'0'
000102 4770D140      000148    (8/46)381+        BC  15-EQ,ZSTR_IF_3
000106 4100D518      000520    (18/77)384+       LA  0,=CL8'DEMOSUB1'
00010A 1BFF                    (18/121)385+      SR   15,15 USE DEFAULT SYS390 SEARCH
00010C 0A08                    (18/123)386+      SVC  8 LOAD R0=A(NAME) R15=DDNAME/DSNAME ADDR OR 0
00010E 49F0D53C      000544    (8/43)389+        CH  R15,=H'0'
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000112 4770D116          00011E    (8/46)390+       BC    15-EQ,ZSTR_IF_4
000116 5000D510          000518    (2/62)392+            ST  R0,DEMOSUB1
00011A 47F0D140          000148    (10/25)394+      B    ZSTR_IF_5
00011E          00011E          (10/26)395+ZSTR_IF_4 EQU *
00011E A7150012          000142    (14/49)399+        BRAS  1,*+(WTO#0016_EOT-*+1)/2*2
000122 001F0000C4C5D4D6            (14/50)400+       DC    AL2(WTO#0016_EOT-*,0),C'DEMOSMGR LOAD ERROR ON (.1)'
000141          000141          (14/51)401+WTO#0016_EOT EQU *
000142 0A23              (14/52)402+      SVC   35
000144 47F0D2BC          0002C4    (2/65)404+            B  ABORT
000148          000148          (10/33)407+ZSTR_IF_5 EQU *
000148          000148          (10/33)412+ZSTR_IF_3 EQU *
000148                  (2/68)415+****************************************************************
000148                  (2/69)416+* BUILD SERVICE CALL PARAMETER ADDRESS LIST FROM MESSAGE VALUES
000148                  (2/70)417+****************************************************************
000148 4110D500          000508    (2/71)418+          LA   R1,SVCPLIST
00014C 41204018          000018    (2/72)419+          LA   R2,MSGPARMS
000150 50210000              (2/82)420+        ST  R2,0(R1)          R1=A(NEXT PARM)
000154 5A20D534          00053C    (2/96)421+          A   R2,=F'45'
000158 50210004              (2/82)422+        ST  R2,4(R1)          R1=A(NEXT PARM)
00015C 5A20D534          00053C    (2/96)423+          A   R2,=F'45'
000160 50210008              (2/82)424+        ST  R2,8(R1)          R1=A(NEXT PARM)
000164 5A20D534          00053C    (2/96)425+          A   R2,=F'45'
000168                  (2/101)426+****************************************************************
000168                  (2/102)427+* CALL THE SERVICE AND LOG RESPONSE TIME IN MICRO-SECONDS
000168                  (2/103)428+****************************************************************
000168 45C0D2F2          0002FA    (2/104)429+          BAL R12,START_TIME
00016C 58F0D510          000518    (2/105)430+          L   R15,DEMOSUB1
000170 4110D500          000508    (2/106)431+          LA  R1,SVCPLIST
000174                  (19/27)433+       CNOP  0,4
000174 05EF              (19/65)436+        BALR 14,15
000176 50F04014          000014    (2/108)438+          ST  R15,MSGRC   SET RETURN CODE IN MSG
00017A 45C0D2FE          000306    (2/109)439+          BAL R12,STOP_TIME
00017E                  (2/110)440+****************************************************************
00017E                  (2/111)441+* BUILD RESPONSE MESSAGE WITH UPDATED NON READ-ONLY PARMS
00017E                  (2/112)442+****************************************************************
00017E 41604018          000018    (2/113)443+          LA  R6,MSGPARMS
000182 5890D4F8          000500    (2/114)444+          L   R9,LMAX
000186 5B90D534          00053C    (2/135)445+          S   R9,=F'45'
00018A 5B90D534          00053C    (2/135)446+          S   R9,=F'45'
00018E 5880D508          000510    (2/124)447+          L   R8,SVCPLIST+8       R1=A(NEXT PARM)
000192 5870D534          00053C    (2/125)448+          L   R7,=F'45'
000196 0E68              (2/126)449+          MVCL R6,R8              MOVE UPDATED IF
000198          000198          (10/33)452+ZSTR_IF_2 EQU *
00051C                  (2/51)455+SERVICES LOCTR
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00051C 00000000              (2/52)456+DEMOSUB2 DC A(0) ADDRESS OF LOADED SERVICE
000198                    (2/53)457+DEMOSMGR  CSECT
000198                    (2/54)458+****************************************************************
000198                    (2/55)459+* GEN SERVICE CALL AND RESPONSE FOR EACH SERVICE
000198                    (2/56)460+****************************************************************
000198 D507400CD520    00000C 000528   (8/43)462+       CLC   MSGNAME,=CL8'DEMOSUB2'
00019E 4770D238           000240   (8/46)463+       BC    15-EQ,ZSTR_IF_6
0001A2 BFFFD514           00051C   (2/58)465+        ICM R15,15,DEMOSUB2
0001A6 49F0D53C           000544   (8/43)467+      CH  R15,=H'0'
0001AA 4770D1E8           0001F0   (8/46)468+       BC    15-EQ,ZSTR_IF_7
0001AE 4100D520           000528   (18/77)471+     LA   0,=CL8'DEMOSUB2'
0001B2 1BFF              (18/121)472+      SR   15,15 USE DEFAULT SYS390 SEARCH
0001B4 0A08              (18/123)473+       SVC  8 LOAD R0=A(NAME) R15=DDNAME/DSNAME ADDR OR 0
0001B6 49F0D53C           000544   (8/43)476+      CH  R15,=H'0'
0001BA 4770D1BE           0001C6   (8/46)477+       BC   15-EQ,ZSTR_IF_8
0001BE 5000D514           00051C   (2/62)479+            ST  R0,DEMOSUB2
0001C2 47F0D1E8           0001F0   (10/25)481+     B    ZSTR_IF_9
0001C6          0001C6    (10/26)482+ZSTR_IF_8 EQU *
0001C6 A7150012           0001EA   (14/49)486+       BRAS  1,*+(WTO#0030_EOT-*+1)/2*2
0001CA 001F0000C4C5D4D6        (14/50)487+      DC   AL2(WTO#0030_EOT-*,0),C'DEMOSMGR LOAD ERROR ON (.1)'
0001E9          0001E9    (14/51)488+WTO#0030_EOT EQU *
0001EA 0A23              (14/52)489+      SVC   35
0001EC 47F0D2BC           0002C4   (2/65)491+               B  ABORT
0001F0          0001F0    (10/33)494+ZSTR_IF_9 EQU *
0001F0          0001F0    (10/33)499+ZSTR_IF_7 EQU *
0001F0                    (2/68)502+****************************************************************
0001F0                    (2/69)503+* BUILD SERVICE CALL PARAMETER ADDRESS LIST FROM MESSAGE VALUES
0001F0                    (2/70)504+****************************************************************
0001F0 4110D500           000508   (2/71)505+        LA   R1,SVCPLIST
0001F4 41204018           000018   (2/72)506+        LA   R2,MSGPARMS
0001F8 50210000           (2/82)507+          ST  R2,0(R1)          R1=A(NEXT PARM)
0001FC 5A20D538           000540   (2/96)508+        A   R2,=F'4'
000200 50210004           (2/82)509+          ST  R2,4(R1)          R1=A(NEXT PARM)
000204 5A20D538           000540   (2/96)510+        A   R2,=F'4'
000208 50210008           (2/82)511+          ST  R2,8(R1)          R1=A(NEXT PARM)
00020C 5A20D538           000540   (2/96)512+        A   R2,=F'4'
000210                    (2/101)513+****************************************************************
000210                    (2/102)514+* CALL THE SERVICE AND LOG RESPONSE TIME IN MICRO-SECONDS
000210                    (2/103)515+****************************************************************
000210 45C0D2F2           0002FA   (2/104)516+         BAL  R12,START_TIME
000214 58F0D514           00051C   (2/105)517+         L   R15,DEMOSUB2
000218 4110D500           000508   (2/106)518+         LA  R1,SVCPLIST
00021C                    (19/27)520+       CNOP  0,4
00021C 05EF               (19/65)523+        BALR 14,15
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00021E 50F04014          000014    (2/108)525+          ST   R15,MSGRC    SET RETURN CODE IN MSG
000222 45C0D2FE          000306    (2/109)526+          BAL  R12,STOP_TIME
000226                             (2/110)527+*********************************************************************
000226                             (2/111)528+* BUILD RESPONSE MESSAGE WITH UPDATED NON READ-ONLY PARMS
000226                             (2/112)529+*********************************************************************
000226 41604018          000018    (2/113)530+          LA   R6,MSGPARMS
00022A 5890D4F8          000500    (2/114)531+          L    R9,LMAX
00022E 5B90D538          000540    (2/135)532+          S    R9,=F'4'
000232 5B90D538          000540    (2/135)533+          S    R9,=F'4'
000236 5880D508          000510    (2/124)534+          L    R8,SVCPLIST+8      R1=A(NEXT PARM)
00023A 5870D538          000540    (2/125)535+          L    R7,=F'4'
00023E 0E68                        (2/126)536+          MVCL R6,R8               MOVE UPDATED IF
000240          000240             (10/33)539+ZSTR_IF_6 EQU *
000240 1B64                        (2/143)542+          SR   R6,R4
000242 50604000          000000    (2/144)543+          ST   R6,MSGLEN
000246 41000004                    (15/77)546+          LA   0,4       R0 = TCPIO OP SEND MSG VIA PORT CONNECTION
00024A 182A                        (17/27)548+          LR   2,R10
00024C 18E4                        (17/27)551+          LR   14,R4
00024E 58F04000          000000    (15/108)553+         L    15,MSGLEN
000252 41100F3C                    (15/118)554+         LA   1,3900
000256 0A7C                        (15/123)555+         SVC  X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
000258 49F0D53C          000544    (8/43)558+           CH   R15,=H'0'
00025C 4780D286          00028E    (8/46)559+           BC   15-NE,ZSTR_IF_10
000260 A7150014          000288    (14/49)563+          BRAS 1,*+(WTO#0043_EOT-*+1)/2*2
000264 00240000E3C3D7C9            (14/50)564+          DC   AL2(WTO#0043_EOT-*,0),C'TCPIO ERROR DEMOSMGR SEND FAILED'
000288          000288             (14/51)566+WTO#0043_EOT EQU *
000288 0A23                        (14/52)567+          SVC  35
00028A 47F0D2BC          0002C4    (2/148)569+          B    ABORT
00028E          00028E             (10/33)572+ZSTR_IF_10 EQU *
00028E 47F0D0DC          0000E4    (2/150)575+          B    SERVER_PROCESS_LOOP
000292 A715000F          0002B0    (14/49)577+          BRAS 1,*+(WTO#0046_EOT-*+1)/2*2
000296 00190000C4C5D4D6            (14/50)578+          DC   AL2(WTO#0046_EOT-*,0),C'DEMOSMGR CLOSING DOWN'
0002AF          0002AF             (14/51)579+WTO#0046_EOT EQU *
0002B0 0A23                        (14/52)580+          SVC  35
0002B2 41F00000                    (20/33)583+          LA   15,0
0002B6 58D0D004                    (20/50)584+          L    13,4(,13)
0002BA 58E0D00C                    (20/51)585+          L    14,12(,13)
0002BE 982CD01C                    (20/52)586+          LM   2,12,28(13)
0002C2 07FE                        (20/53)587+          BR   14
0002C4                             (2/153)589+*********************************************************************
0002C4                             (2/154)590+* ABORT DUE TO ERROR
0002C4                             (2/155)591+*********************************************************************
0002C4                             (14/35)594+ABORT    DS   0H
0002C4 A7150017          0002F2    (14/49)595+          BRAS 1,*+(WTO#0048_EOT-*+1)/2*2
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0002C8 0029000040C1C2D6          (14/50)596+      DC    AL2(WTO#0048_EOT-*,0),C' ABORTING DUE TO TCPIO ERROR ON PORT '
0002F1          0002F1          (14/51)598+WTO#0048_EOT EQU *
0002F2 0A23                     (14/52)599+      SVC   35
0002F4 41100F3C                 (21/39)602+      LA   1,3900
0002F8 0A0D                     (21/47)603+      SVC   13 ABEND R1=COMP CODE AND HIGH BIT = DUMP PGM STORAGE
0002FA                          (2/158)605+*****************************************************************
0002FA                          (2/159)606+* SAVE TRANS START TIME
0002FA                          (2/160)607+*****************************************************************
0002FA                          (2/161)608+START_TIME DS 0H
0002FA 41000008                 (22/98)610+      LA   0,8 NANOSECONDS - DOUBLE WORD BIT 63 NANO-SEC COUNTER
0002FE 4110D4A8        0004B0   (22/76)611+      LA   1,NS_START
000302 0A0B                     (22/81)612+      SVC   11 TIME AND DATE
000304 07FC                     (2/163)614+      BR   R12
000306                          (2/164)615+*****************************************************************
000306                          (2/165)616+* DISPLAY SERVER TIME FOR TRANSACTION
000306                          (2/166)617+*****************************************************************
000306                          (2/167)618+STOP_TIME DS 0H  SHOW SRERVICE TIME IN MICRO-SECONDS
000306 41000008                 (22/98)620+      LA   0,8 NANOSECONDS - DOUBLE WORD BIT 63 NANO-SEC COUNTER
00030A 4110D4B0        0004B8   (22/76)621+      LA   1,NS_STOP
00030E 0A0B                     (22/81)622+      SVC   11 TIME AND DATE
000310 E310D4B00004    0004B8   (2/169)624+      LG   R1,NS_STOP
000316 E310D4A80009    0004B0   (2/170)625+      SG   R1,NS_START
00031C E300D528000D    000530   (2/171)626+      DSG  R0,=FD'1000'
000322 4E10D4F0        0004F8   (2/172)627+      CVD  R1,PWORK
000326 D20BD4D7D4E3   0004DF 0004EB  (2/173)628+     MVC  DMICS,MICS_MASK
00032C DE0BD4D7D4F3   0004DF 0004FB  (2/174)629+     ED   DMICS,PWORK+3
000332 4110D4B8        0004C0   (14/61)631+      LA   1,SHOW_MSG
000336 0A23                     (14/66)632+      SVC   35
000338 07FC                     (2/176)634+      BR   R12
00033A                          (2/177)635+*****************************************************************
00033A                          (2/178)636+* READ VARIABLE LENGTH MSG INTO BUFFER AT R14
00033A                          (2/179)637+*  R10 = CONNECTION ID OR -1 FOR ANY
00033A                          (2/180)638+*  R14 = READ START ADDRESS
00033A                          (2/181)639+*****************************************************************
00033A                          (2/182)640+READ_VLR_MSG DS 0H
00033A 50C0D4A4        0004AC   (2/183)641+      ST   R12,VLR_SAVE    SAVE RETURN ACROSS READ_MSG
00033E D703D4A0D4A0   0004A8 0004A8  (2/184)642+     XC   READ_LEN,READ_LEN ZERO READ_LEN BYTES
000344 58B0D4F8        000500   (2/185)643+      L    R11,LMAX    MAX LENGTH MESSAGE ALLOWED
000348 45C0D3D2        0003DA   (2/186)644+      BAL  R12,READ_MSG
00034C 18A2                     (2/187)645+      LR   R10,R2    READ REST ENTIRE MSG FROM SAME CONN
00034E          00034E          (5/44)647+ZSTR_DO_1_TEST EQU   *
00034E D503D4A0D538   0004A8 000540  (8/43)649+     CLC  READ_LEN,=F'4'
000354 47B0D354        00035C   (8/46)650+      BC   15-LT,ZSTR_IF_11
000358 47F0D358        000360   (5/47)652+       B ZSTR_DO_1_CODE
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00035C              00035C            (10/33)655+ZSTR_IF_11 EQU *
00035C 47F0D364            00036C     (5/49)658+      B   ZSTR_DO_1_END
000360              000360            (5/50)659+ZSTR_DO_1_CODE EQU *
000360 1BB1                           (2/189)661+       SR  R11,R1   REDUCE REMAINING MAX
000362 1AE1                           (2/190)662+       AR  R14,R1    UPDATE READ STARTING ADDR
000364 45C0D3D2            0003DA     (2/191)663+       BAL R12,READ_MSG
000368 47F0D346            00034E     (5/58)666+      B   ZSTR_DO_1_TEST
00036C              00036C            (5/59)667+ZSTR_DO_1_END EQU *
00036C D5034000D530    000000 000538  (8/43)671+      CLC MSGLEN,=F'-1'
000372 4770D3AE            0003B6     (8/46)672+      BC  15-EQ,ZSTR_IF_12
000376 A7150016            0003A2     (14/49)676+     BRAS 1,*+(WTO#0060_EOT-*+1)/2*2
00037A 00280000C4C5D4D6               (14/50)677+     DC  AL2(WTO#0060_EOT-*,0),C'DEMOSMGR TERMINATING AT USER REQUEST'
0003A2              0003A2            (14/51)679+WTO#0060_EOT EQU *
0003A2 0A23                           (14/52)680+     SVC 35
0003A4 41F00000                       (20/33)683+     LA  15,0
0003A8 58D0D004                       (20/50)684+     L   13,4(,13)
0003AC 58E0D00C                       (20/51)685+     L   14,12(,13)
0003B0 982CD01C                       (20/52)686+     LM  2,12,28(13)
0003B4 07FE                           (20/53)687+     BR  14
0003B6              0003B6            (10/33)691+ZSTR_IF_12 EQU *
0003B6              0003B6            (5/44)695+ZSTR_DO_2_TEST EQU  *
0003B6 D503D4A04000    0004A8 000000  (8/43)697+      CLC READ_LEN,MSGLEN
0003BC 47B0D3BC            0003C4     (8/46)698+      BC  15-LT,ZSTR_IF_13
0003C0 47F0D3C0            0003C8     (5/47)700+       B  ZSTR_DO_2_CODE
0003C4              0003C4            (10/33)703+ZSTR_IF_13 EQU *
0003C4 47F0D3CC            0003D4     (5/49)706+      B   ZSTR_DO_2_END
0003C8              0003C8            (5/50)707+ZSTR_DO_2_CODE EQU *
0003C8 1BB1                           (2/198)709+       SR  R11,R1   REDUCE REMAINING MAX
0003CA 1AE1                           (2/199)710+       AR  R14,R1    UPDATE READ STARTING ADDR
0003CC 45C0D3D2            0003DA     (2/200)711+       BAL R12,READ_MSG
0003D0 47F0D3AE            0003B6     (5/58)714+      B   ZSTR_DO_2_TEST
0003D4              0003D4            (5/59)715+ZSTR_DO_2_END EQU *
0003D4 58C0D4A4            0004AC     (2/202)718+      L   R12,VLR_SAVE
0003D8 07FC                           (2/203)719+     BR  R12
0003DA                                (2/204)720+***********************************************************
0003DA                                (2/205)721+* READ THE NUMBER OF BYTES AVAILABLE UP TO R11 INTO BUFFER ELSE ABORT
0003DA                                (2/206)722+* R10 = CONNECTION ID OR -1 FOR ANY
0003DA                                (2/207)723+* R11 = MAX LENGTH TO READ
0003DA                                (2/208)724+* R14 = READ START ADDRESS
0003DA                                (2/209)725+* INCREMENT READ_LEN BY BYTES READ IN R1
0003DA                                (2/210)726+***********************************************************
0003DA                                (2/211)727+READ_MSG DS   0H
0003DA 41000005                       (15/80)730+     LA  0,5       R0 = TCPIO OP RECV MSG VIA PORT CONNECTION
0003DE 182A                           (17/27)732+     LR  2,R10
```

```
0003E0 18FB                    (17/27)737+      LR   15,R11
0003E2 41100F3C                (15/118)739+     LA   1,3900
0003E6 0A7C                    (15/123)740+     SVC  X'7C' R0=OP(1-5) R1=PORT R14=HOST/MSG R15=LMSG
0003E8 49F0D53C        000544  (8/43)743+       CH   R15,=H'0'
0003EC 4780D418        000420  (8/46)744+       BC   15-NE,ZSTR_IF_14
0003F0 A7150015        00041A  (14/49)748+      BRAS 1,*+(WTO#0075_EOT-*+1)/2*2
0003F4 00260000E3C3D7C9        (14/50)749+      DC   AL2(WTO#0075_EOT-*,0),C'TCPIO ERROR DEMOSMGR RECEIVE RC NZ'
00041A          00041A         (14/51)751+WTO#0075_EOT EQU *
00041A 0A23                    (14/52)752+      SVC  35
00041C 47F0D2BC        0002C4  (2/215)754+        B ABORT
000420          000420         (10/33)757+ZSTR_IF_14 EQU *
000420 4910D53C        000544  (8/43)761+       CH   R1,=H'0'
000424 4720D456        00045E  (8/46)762+       BC   15-LE,ZSTR_IF_15
000428 A7150018        000458  (14/49)766+      BRAS 1,*+(WTO#0079_EOT-*+1)/2*2
00042C 002C0000E3C3D7C9        (14/50)767+      DC   AL2(WTO#0079_EOT-*,0),C'TCPIO ERROR DEMOSMGR RECEIVE LENGTH <= 0'
000458          000458         (14/51)769+WTO#0079_EOT EQU *
000458 0A23                    (14/52)770+      SVC  35
00045A 47F0D2BC        0002C4  (2/219)772+        B ABORT
00045E          00045E         (10/33)775+ZSTR_IF_15 EQU *
00045E 4920D53C        000544  (8/43)779+       CH   R2,=H'0'
000462 47B0D492        00049A  (8/46)780+       BC   15-LT,ZSTR_IF_16
000466 A7150017        000494  (14/49)784+      BRAS 1,*+(WTO#0083_EOT-*+1)/2*2
00046A 00290000E3C3D7C9        (14/50)785+      DC   AL2(WTO#0083_EOT-*,0),C'TCPIO ERROR DEMOSMGR RECEIVE CONN < 0'
000493          000493         (14/51)787+WTO#0083_EOT EQU *
000494 0A23                    (14/52)788+      SVC  35
000496 47F0D2BC        0002C4  (2/223)790+        B ABORT
00049A          00049A         (10/33)793+ZSTR_IF_16 EQU *
00049A 5800D4A0        0004A8  (2/225)796+      L    R0,READ_LEN
00049E 1A01                    (2/226)797+      AR   R0,R1
0004A0 5000D4A0        0004A8  (2/227)798+      ST   R0,READ_LEN
0004A4 07FC                    (2/228)799+      BR   R12
0004A8 00000000                (2/229)800+READ_LEN DC   F'0' BYTES READ BY READ_MSG
0004AC 00000000                (2/230)801+VLR_SAVE DC   A(0)
0004B0 0000000000000000        (2/231)802+NS_START DC   D'0' START TOD IN NANO-SECONDS
0004B8 0000000000000000        (2/232)803+NS_STOP  DC   D'0' END   TOD IN NANO-SECONDS
0004C0 002B0000E2C5D9E5        (2/233)804+SHOW_MSG DC   AL2(SHOW_END-*,0),C'SERVICE TIME IN MIRCO-SEC ='
0004DF 40E9E9E96BE9E9E9        (2/234)805+DMICS    DC   C' ZZZ,ZZZ,ZZZ'
0004EB          0004EB         (2/235)806+SHOW_END EQU  *
0004EB 402020206B202020        (2/236)807+MICS_MASK DC  X'40202020',C',',X'202020',C',',X'202120'
0004F8 0000000000000000        (2/237)808+PWORK    DC   D'0'
000500 0000009F                (2/238)809+LMAX     DC   A(MSGPARMS-IHAMSG+135)
000504 0000001C                (2/239)810+LMIN     DC   A(MSGPARMS-IHAMSG+4)
000508 0000000000000000        (2/240)811+SVCPLIST DC   (4)A(0)
000518          000000         (23/36)813+R0 EQU  0
```

```
000518          000001      (23/36)814+R1  EQU   1
000518          000002      (23/36)815+R2  EQU   2
000518          000003      (23/36)816+R3  EQU   3
000518          000004      (23/36)817+R4  EQU   4
000518          000005      (23/36)818+R5  EQU   5
000518          000006      (23/36)819+R6  EQU   6
000518          000007      (23/36)820+R7  EQU   7
000518          000008      (23/36)821+R8  EQU   8
000518          000009      (23/36)822+R9  EQU   9
000518          00000A       (23/36)823+R10  EQU   10
000518          00000B       (23/36)824+R11  EQU   11
000518          00000C       (23/36)825+R12  EQU   12
000518          00000D       (23/36)826+R13  EQU   13
000518          00000E       (23/36)827+R14  EQU   14
000518          00000F       (23/36)828+R15  EQU   15
000518                   (24/3)831+*********************************************************************
000518                   (24/4)832+* Copyright 2007 Automated Software Tools Corporation          *
000518                   (24/5)833+* This source code is part of z390 assembler/emulator package     *
000518                   (24/6)834+* The z390 package is distributed under GNU general public license *
000518                   (24/7)835+* Author - Don Higgins                              *
000518                   (24/8)836+* Date   - 01/01/07                                *
000000                   (24/13)837+IHAMSG   DSECT
000000                   (24/14)838+MSGLEN   DS   F    TOTAL LENGTH OF MSG = SUM OF PARMS + 24
000004                   (24/15)839+MSGTIME  DS   FL8  NS TIME STAMP
00000C                   (24/16)840+MSGNAME  DS   CL8  NAME OF SERVICE BEING CALLED
000014                   (24/17)841+MSGRC   DS   A    SERVICE RETURN CODE
000018          000018        (24/18)842+MSGPARMS EQU  *
000018                    (1/3)845 END
000520 C4C5D4D6E2E4C2F1 =CL8'DEMOSUB1'
000528 C4C5D4D6E2E4C2F2 =CL8'DEMOSUB2'
000530 00000000000003E8 =FD'1000'
000538 FFFFFFFF        =F'-1'
00053C 0000002D        =F'45'
000540 00000004        =F'4'
000544 0000          =H'0'
```

Symbol Table Listing

```
 SYM=ABORT    LOC=000002C4 LEN=00000002 ESD=0001 TYPE=REL  XREF=594 345 404 491 569
  754 772 790
 SYM=DEMOSMGR LOC=00000000 LEN=00000548 ESD=0001 TYPE=CST  XREF=22 32 370 457
 SYM=DEMOSUB1 LOC=00000518 LEN=00000004 ESD=0001 TYPE=REL  XREF=369 378 392 430
 SYM=DEMOSUB2 LOC=0000051C LEN=00000004 ESD=0001 TYPE=REL  XREF=456 465 479 517
 SYM=DMICS    LOC=000004DF LEN=0000000C ESD=0001 TYPE=REL  XREF=805 628 629
```

```
SYM=E       LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS  XREF=309
SYM=EQ      LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS  XREF=321 376 381 390 463
 468 477 672
SYM=GE      LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS  XREF=324
SYM=GT      LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS  XREF=322
SYM=H       LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS  XREF=307
SYM=IHAMSG   LOC=00000000 LEN=00000018 ESD=0003 TYPE=DST  XREF=837 360 366 809 810
SYM=L       LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS  XREF=308
SYM=LE      LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS  XREF=325 762
SYM=LMAX    LOC=00000500 LEN=00000004 ESD=0001 TYPE=REL  XREF=809 351 444 531 643
SYM=LMIN    LOC=00000504 LEN=00000004 ESD=0001 TYPE=REL  XREF=810
SYM=LT      LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS  XREF=323 650 698 780
SYM=M       LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS  XREF=315
SYM=MICS_MASK LOC=000004EB LEN=00000004 ESD=0001 TYPE=REL  XREF=807 628
SYM=MSGLEN   LOC=00000000 LEN=00000004 ESD=0003 TYPE=REL  XREF=838 543 553 671 697
SYM=MSGNAME  LOC=0000000C LEN=00000008 ESD=0003 TYPE=REL  XREF=840 375 462
SYM=MSGPARMS LOC=00000018 LEN=00000001 ESD=0003 TYPE=REL  XREF=842 419 443 506 530
 809 810
SYM=MSGRC   LOC=00000014 LEN=00000004 ESD=0003 TYPE=REL  XREF=841 438 525
SYM=MSGTIME  LOC=00000004 LEN=00000008 ESD=0003 TYPE=REL  XREF=839
SYM=NE      LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS  XREF=312 335 559 744
SYM=NH      LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS  XREF=310
SYM=NL      LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS  XREF=311
SYM=NM      LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS  XREF=318
SYM=NO      LOC=0000000E LEN=00000001 ESD=0000 TYPE=ABS  XREF=320
SYM=NP      LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS  XREF=317
SYM=NS_START LOC=000004B0 LEN=00000008 ESD=0001 TYPE=REL  XREF=802 611 625
SYM=NS_STOP  LOC=000004B8 LEN=00000008 ESD=0001 TYPE=REL  XREF=803 621 624
SYM=NZ      LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS  XREF=319
SYM=O       LOC=00000001 LEN=00000001 ESD=0000 TYPE=ABS  XREF=313
SYM=P       LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS  XREF=314
SYM=PWORK    LOC=000004F8 LEN=00000008 ESD=0001 TYPE=REL  XREF=808 627 629
SYM=R0      LOC=00000000 LEN=00000001 ESD=0000 TYPE=ABS  XREF=813 392 479 626 796
 797 798
SYM=R10     LOC=0000000A LEN=00000001 ESD=0000 TYPE=ABS  XREF=823 365 548 645 732
SYM=R1      LOC=00000001 LEN=00000001 ESD=0000 TYPE=ABS  XREF=814 359 418 420 422
 424 431 505 507 509 511 518 624 625 627 661 662 709 710 761 797
SYM=R11     LOC=0000000B LEN=00000001 ESD=0000 TYPE=ABS  XREF=824 643 661 709 737
SYM=R12     LOC=0000000C LEN=00000001 ESD=0000 TYPE=ABS  XREF=825 367 429 439 516
 526 614 634 641 644 663 711 718 719 799
SYM=R13     LOC=0000000D LEN=00000001 ESD=0000 TYPE=ABS  XREF=826
SYM=R14     LOC=0000000E LEN=00000001 ESD=0000 TYPE=ABS  XREF=827 366 662 710
SYM=R15     LOC=0000000F LEN=00000001 ESD=0000 TYPE=ABS  XREF=828 334 378 380 389
 430 438 465 467 476 517 525 558 743
```

```
SYM=R2      LOC=00000002 LEN=00000001 ESD=0000 TYPE=ABS  XREF=815 419 420 421 422
 423 424 425 506 507 508 509 510 511 512 645 779
SYM=R3      LOC=00000003 LEN=00000001 ESD=0000 TYPE=ABS  XREF=816
SYM=R4      LOC=00000004 LEN=00000001 ESD=0000 TYPE=ABS  XREF=817 359 360 542 551
SYM=R5      LOC=00000005 LEN=00000001 ESD=0000 TYPE=ABS  XREF=818
SYM=R6      LOC=00000006 LEN=00000001 ESD=0000 TYPE=ABS  XREF=819 443 449 530 536
 542 543
SYM=R7      LOC=00000007 LEN=00000001 ESD=0000 TYPE=ABS  XREF=820 448 535
SYM=R8      LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS  XREF=821 447 449 534 536
SYM=R9      LOC=00000009 LEN=00000001 ESD=0000 TYPE=ABS  XREF=822 351 444 445 446
 531 532 533
SYM=READ_LEN LOC=000004A8 LEN=00000004 ESD=0001 TYPE=REL  XREF=800 642 649 697 796
 798
SYM=READ_MSG LOC=000003DA LEN=00000002 ESD=0001 TYPE=REL  XREF=727 644 663 711
SYM=READ_VLR_MSG LOC=0000033A LEN=00000002 ESD=0001 TYPE=REL  XREF=640 367
SYM=SERVER_PROCESS_LOOP LOC=000000E4 LEN=00000001 ESD=0001 TYPE=REL  XREF=361 575
SYM=SERVICES LOC=00000518 LEN=0000002E ESD=0001 TYPE=CST  XREF=368 455
SYM=SHOW_END LOC=000004EB LEN=00000001 ESD=0001 TYPE=REL  XREF=806 804
SYM=SHOW_MSG LOC=000004C0 LEN=00000002 ESD=0001 TYPE=REL  XREF=804 631
SYM=START_TIME LOC=000002FA LEN=00000002 ESD=0001 TYPE=REL  XREF=608 429 516
SYM=STOP_TIME LOC=00000306 LEN=00000002 ESD=0001 TYPE=REL  XREF=618 439 526
SYM=SVCPLIST LOC=00000508 LEN=00000004 ESD=0001 TYPE=REL  XREF=811 418 431 447 505
 518 534
SYM=VLR_SAVE LOC=000004AC LEN=00000004 ESD=0001 TYPE=REL  XREF=801 641 718
SYM=WTO#0003_EOT LOC=0000008A LEN=00000001 ESD=0001 TYPE=REL  XREF=37 35 36
SYM=WTO#0006_EOT LOC=000000D0 LEN=00000001 ESD=0001 TYPE=REL  XREF=342 339 340
SYM=WTO#0016_EOT LOC=00000141 LEN=00000001 ESD=0001 TYPE=REL  XREF=401 399 400
SYM=WTO#0030_EOT LOC=000001E9 LEN=00000001 ESD=0001 TYPE=REL  XREF=488 486 487
SYM=WTO#0043_EOT LOC=00000288 LEN=00000001 ESD=0001 TYPE=REL  XREF=566 563 564
SYM=WTO#0046_EOT LOC=000002AF LEN=00000001 ESD=0001 TYPE=REL  XREF=579 577 578
SYM=WTO#0048_EOT LOC=000002F1 LEN=00000001 ESD=0001 TYPE=REL  XREF=598 595 596
SYM=WTO#0060_EOT LOC=000003A2 LEN=00000001 ESD=0001 TYPE=REL  XREF=679 676 677
SYM=WTO#0075_EOT LOC=0000041A LEN=00000001 ESD=0001 TYPE=REL  XREF=751 748 749
SYM=WTO#0079_EOT LOC=00000458 LEN=00000001 ESD=0001 TYPE=REL  XREF=769 766 767
SYM=WTO#0083_EOT LOC=00000493 LEN=00000001 ESD=0001 TYPE=REL  XREF=787 784 785
SYM=Z       LOC=00000008 LEN=00000001 ESD=0000 TYPE=ABS  XREF=316
SYM=ZSTR_DO_1_CODE LOC=00000360 LEN=00000001 ESD=0001 TYPE=REL  XREF=659 652
SYM=ZSTR_DO_1_END LOC=0000036C LEN=00000001 ESD=0001 TYPE=REL  XREF=667 658
SYM=ZSTR_DO_1_TEST LOC=0000034E LEN=00000001 ESD=0001 TYPE=REL  XREF=647 666
SYM=ZSTR_DO_2_CODE LOC=000003C8 LEN=00000001 ESD=0001 TYPE=REL  XREF=707 700
SYM=ZSTR_DO_2_END LOC=000003D4 LEN=00000001 ESD=0001 TYPE=REL  XREF=715 706
SYM=ZSTR_DO_2_TEST LOC=000003B6 LEN=00000001 ESD=0001 TYPE=REL  XREF=695 714
SYM=ZSTR_IF_10 LOC=0000028E LEN=00000001 ESD=0001 TYPE=REL  XREF=572 559
SYM=ZSTR_IF_1 LOC=000000D6 LEN=00000001 ESD=0001 TYPE=REL  XREF=348 335
```

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SYM=ZSTR_IF_11 LOC=0000035C LEN=00000001 ESD=0001 TYPE=REL  XREF=655 650
SYM=ZSTR_IF_12 LOC=000003B6 LEN=00000001 ESD=0001 TYPE=REL  XREF=691 672
SYM=ZSTR_IF_13 LOC=000003C4 LEN=00000001 ESD=0001 TYPE=REL  XREF=703 698
SYM=ZSTR_IF_14 LOC=00000420 LEN=00000001 ESD=0001 TYPE=REL  XREF=757 744
SYM=ZSTR_IF_15 LOC=0000045E LEN=00000001 ESD=0001 TYPE=REL  XREF=775 762
SYM=ZSTR_IF_16 LOC=0000049A LEN=00000001 ESD=0001 TYPE=REL  XREF=793 780
SYM=ZSTR_IF_2 LOC=00000198 LEN=00000001 ESD=0001 TYPE=REL  XREF=452 376
SYM=ZSTR_IF_3 LOC=00000148 LEN=00000001 ESD=0001 TYPE=REL  XREF=412 381
SYM=ZSTR_IF_4 LOC=0000011E LEN=00000001 ESD=0001 TYPE=REL  XREF=395 390
SYM=ZSTR_IF_5 LOC=00000148 LEN=00000001 ESD=0001 TYPE=REL  XREF=407 394
SYM=ZSTR_IF_6 LOC=00000240 LEN=00000001 ESD=0001 TYPE=REL  XREF=539 463
SYM=ZSTR_IF_7 LOC=000001F0 LEN=00000001 ESD=0001 TYPE=REL  XREF=499 468
SYM=ZSTR_IF_8 LOC=000001C6 LEN=00000001 ESD=0001 TYPE=REL  XREF=482 477
SYM=ZSTR_IF_9 LOC=000001F0 LEN=00000001 ESD=0001 TYPE=REL  XREF=494 481


 Literal Table Listing

 LIT=CL8'DEMOSUB1' LOC=00000520 LEN=00000008 ESD=0001 POOL=0001 XREF=375 384
 LIT=CL8'DEMOSUB2' LOC=00000528 LEN=00000008 ESD=0001 POOL=0001 XREF=462 471
 LIT=F'-1'   LOC=00000538 LEN=00000004 ESD=0001 POOL=0001 XREF=365 671
 LIT=F'4'    LOC=00000540 LEN=00000004 ESD=0001 POOL=0001 XREF=508 510 512 532 533
  535 649
 LIT=F'45'   LOC=0000053C LEN=00000004 ESD=0001 POOL=0001 XREF=421 423 425 445 446
  448
 LIT=FD'1000' LOC=00000530 LEN=00000008 ESD=0001 POOL=0001 XREF=626
 LIT=H'0'    LOC=00000544 LEN=00000002 ESD=0001 POOL=0001 XREF=334 380 389 467 476
  558 743 761 779


 AZ390I total mnote warnings = 0
 AZ390I total mnote errors   = 0
 AZ390I max   mnote level    = 0
 AZ390I total mz390 errors   = 0
 AZ390I total az390 errors   = 0
 09:21:30 DEMOSMGR  MZ390 ENDED   RC= 0 SEC= 0 MEM(MB)= 41 IO=2436
```