```
 Command  . . . . . . . . . . . . :   CRTBNDRPG
   Issued by  . . . . . . . . . . :     MAXJEN
 Program  . . . . . . . . . . . . :   ICONVTEST
   Library  . . . . . . . . . . . :     TEST
 Text 'description' . . . . . . . :   *SRCMBRTXT

 Source Member  . . . . . . . . . :   ICONVTEST
 Source File  . . . . . . . . . . :   QRPGLESRC
   Library  . . . . . . . . . . . :     TEST
   CCSID  . . . . . . . . . . . . :     277
 Text 'description' . . . . . . . :   Test of conversion from CCSID 277 to UTF-8.
 Last Change  . . . . . . . . . . :   16-11-10  11:51:04

 Generation severity level  . . . :   10
 Default activation group . . . . :   *YES
 Compiler options . . . . . . . . :   *XREF      *GEN       *NOSECLVL  *SHOWCPY
                                      *EXPDDS    *EXT       *NOSHOWSKP *NOSRCSTMT
                                      *DEBUGIO   *NOEVENTF
 Debugging views  . . . . . . . . :   *LIST
 Output . . . . . . . . . . . . . :   *PRINT
 Optimization level . . . . . . . :   *NONE
 Source listing indentation . . . :   *NONE
 Type conversion options  . . . . :   *NONE
 Sort sequence  . . . . . . . . . :   *HEX
 Language identifier  . . . . . . :   *JOBRUN
 Replace program  . . . . . . . . :   *YES
 User profile . . . . . . . . . . :   *USER
 Authority  . . . . . . . . . . . :   *LIBCRTAUT
 Truncate numeric . . . . . . . . :   *YES
 Fix numeric  . . . . . . . . . . :   *NONE
 Target release . . . . . . . . . :   *CURRENT
 Allow null values  . . . . . . . :   *NO
 Define condition names . . . . . :   *NONE
 Enable performance collection  . :   *PEP
 Profiling data . . . . . . . . . :   *NOCOL
 Licensed Internal Code options . :
 Generate program interface . . . :   *NO
 Include directory  . . . . . . . :
 Preprocessor options . . . . . . :   *NONE
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number

                     S o u r c e   L i s t i n g

     1 H DFTACTGRP(*NO) ACTGRP(*NEW) BNDDIR('HTTPAPI') DEBUG(*YES)                                          101111     000100
     2                                                                                                     101111     000200
     3 D/copy libhttp/qrpglesrc,httpapi_h                                                                  101111     000300
       *-------------------------------------------------------------------------------------------------*
       * RPG member name  . . . . . :  HTTPAPI_H                                                        *                1
       * External name  . . . . . . :  LIBHTTP/QRPGLESRC(HTTPAPI_H)                                      *                1
       * Last change  . . . . . . . :  16-11-10  10:31:07                                               *                1
       * Text 'description' . . . . :  HTTP-API header member                                           *                1
       *-------------------------------------------------------------------------------------------------*
     4+/*-                                                                +                               000000    1000100
     5+ * Copyright (c) 2001-2010 Scott C. Klement                        +                               100105    1000200
     6+ * All rights reserved.                                            +                               000000    1000300
     7+ *                                                                 +                               000000    1000400
     8+ * Redistribution and use in source and binary forms, with or without +                             000000    1000500
     9+ * modification, are permitted provided that the following conditions +                            000000    1000600
    10+ * are met:                                                        +                               000000    1000700
    11+ * 1. Redistributions of source code must retain the above copyright +                             000000    1000800
    12+ *    notice, this list of conditions and the following disclaimer. +                             000000    1000900
    13+ * 2. Redistributions in binary form must reproduce the above copyright +                           000000    1001000
    14+ *    notice, this list of conditions and the following disclaimer in the +                       000000    1001100
    15+ *    documentation and/or other materials provided with the distribution. +                      000000    1001200
    16+ *                                                                 +                               000000    1001300
    17+ * THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ''AS IS'' AND +                          070828    1001400
    18+ * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE +                           000000    1001500
    19+ * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE +                     000000    1001600
    20+ * ARE DISCLAIMED.  IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE +                        000000    1001700
    21+ * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL +                     000000    1001800
    22+ * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS +                        000000    1001900
    23+ * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) +                          000000    1002000
    24+ * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT +                     000000    1002100
    25+ * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY +                      000000    1002200
    26+ * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF +                        000000    1002300
    27+ * SUCH DAMAGE.                                                  +                               000000    1002400
    28+ *                                                                +                               000000    1002500
    29+ */                                                              +                               000000    1002600
    30+                                                                                                  000000    1002700
    31+ /if defined(HTTPAPI_H)                                                                           000000    1002800
            LINES EXCLUDED: 1
    32+ /endif                                                                                           000000    1003000
    33+                                                                                                  000000    1003100
       *-----------------------------------------------------------------*
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
       * Compiler Options in Effect:                                            *
       *-------------------------------------------------------------------------*
       *  Text 'description' . . . . . . . . :                                  *
       *                Test of conversion from CCSID 277 to UTF-8.              *
       *  Generation severity level  . . . :   10                               *
       *  Default activation group . . . . :   *NO                              *
       *  Compiler options . . . . . . . . :   *XREF      *GEN                  *
       *                                       *NOSECLVL  *SHOWCPY              *
       *                                       *EXPDDS    *EXT                  *
       *                                       *NOSHOWSKP *NOSRCSTMT            *
       *                                       *DEBUGIO   *NOEVENTF             *
       *  Optimization level . . . . . . . :   *NONE                            *
       *  Source listing indentation . . . :   *NONE                            *
       *  Type conversion options  . . . . :   *NONE                            *
       *  Sort sequence  . . . . . . . . . :   *HEX                             *
       *  Language identifier  . . . . . . :   *JOBRUN                          *
       *  User profile . . . . . . . . . . :   *USER                            *
       *  Authority  . . . . . . . . . . . :   *LIBCRTAUT                       *
       *  Truncate numeric . . . . . . . . :   *YES                             *
       *  Fix numeric  . . . . . . . . . . :   *NONE                            *
       *  Allow null values  . . . . . . . :   *NO                              *
       *  Binding directory from Command . :   *NONE                            *
       *  Binding directory from Source  . :   HTTPAPI                          *
       *    Library  . . . . . . . . . . . :     *LIBL                          *
       *  Activation group . . . . . . . . :   *NEW                             *
       *  Enable performance collection  . :   *PEP                             *
       *  Profiling data . . . . . . . . . :   *NOCOL                           *
       *-------------------------------------------------------------------------*


   34+D HTTPAPI_VERSION...                                                                  000000    1003200
   35+D                 C                   CONST('1.24beta11')                         100909    1003300
   36+D HTTPAPI_RELDATE...                                                                  000000    1003400
   37+D                 C                   CONST('2010-09-09')                         100909    1003500
   38+                                                                                      070628    1003600
   39+ /copy LIBHTTP/qrpglesrc,config_h                                                     100106    1003700
       *-------------------------------------------------------------------------------------*
       * RPG member name  . . . . . :  CONFIG_H                                            *                2
       * External name  . . . . . . :  LIBHTTP/QRPGLESRC(CONFIG_H)                         *                2
       * Last change  . . . . . . . :  16-11-10  10:31:06                                 *                2
       * Text 'description' . . . . :  HTTP-API compile-time configuration                 *                2
       *-------------------------------------------------------------------------------------*
   40+***  If you do not want SSL support, comment out the line below.                     011020    2000100
```

```
Line   <---------------------- Source Specifications ----------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
    41+***   (You _must_ do this if you're running V4R4 or earlier)                                              011020    2000200
    42+                                                                                                          011020    2000300
    43+D/undefine HAVE_SSLAPI                                                                                    021030    2000400
    44+                                                                                                          040303    2000500
    45+***  define this if your RPG compiler supports 64-bit integers                                            040303    2000600
    46+***  (they were introduced in V4R4)                                                                       040303    2000700
    47+***                                                                                                       040303    2000800
    48+                                                                                                          040303    2000900
    49+D/define HAVE_INT64                                                                                       040303    2001000
    50+                                                                                                          040303    2001100
    51+***  define this if your RPG compiler supports                                                            040303    2001200
    52+***  options(*SRCSTMT: *NODEBUGIO: *NOSHOWCPY)                                                           040303    2001300
    53+***  (they were introduced in V4R4, but can be enabled as far                                             040303    2001400
    54+***   back as V3R2 using PTFs)                                                                            040303    2001500
    55+                                                                                                          040303    2001600
    56+D/define HAVE_SRCSTMT_NODEBUGIO                                                                           040303    2001700
    57+                                                                                                          050622    2001800
    58+***  In V4R5 it's possible to enable GSKit for SSL via                                                    050622    2001900
    59+***    PTFs. However, some functionality wasn't yet available                                             050622    2002000
    60+***    in that release. Define this if you need SSL to be limited                                         050622    2002100
    61+***    to what's available on a V4R5 system. (This is ignored                                             050622    2002200
    62+***    when SSL is disabled.)                                                                             050622    2002300
    63+                                                                                                          050622    2002400
    64+D/undefine V4R5_GSKIT                                                                                     050622    2002500
    65+                                                                                                          011020    2002600
    66+***  This is the default timeout value (in seconds) that HTTPAPI                                          011020    2002700
    67+***  uses if a timeout value isn't specified by the calling                                               011020    2002800
    68+***  program:                                                                                             011020    2002900
    69+                                                                                                          011020    2003000
    70+D HTTP_TIMEOUT    C                   CONST(60)                                                        060327    2003100
    71+                                                                                                          011020    2003200
    72+***  This is the 'User-Agent' name that is reported by this API                                           011020    2003300
    73+***  to the web servers if you don't specify it explcitly when                                            011020    2003400
    74+***  calling the routines.                                                                                011020    2003500
    75+                                                                                                          011020    2003600
    76+D HTTP_USERAGENT  C                   CONST('http-api/1.24')                                           081007    2003700
    77+                                                                                                          011020    2003800
    78+***  This is the 'Content-Type' that is reported by this API                                              011020    2003900
    79+***  to the web servers if you don't specify it explcitly when                                            011020    2004000
    80+***  calling the POST routines.   (the GET routines, by default,                                          011020    2004100
    81+***  do not specify a content-type.)                                                                      011020    2004200
    82+                                                                                                          011020    2004300
    83+D HTTP_CONTTYPE   C                   CONST('text/xml')                                                031001    2004400
    84+                                                                                                          011020    2004500
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
    85+***  The original implementation of HTTPAPI used tables                                                    050623    2004600
    86+***  (*TBL objects) to translate from ASCII to EBCDIC. These can                                           050623    2004700
    87+***  be enabled/set by defining the HTTP_USE_TABLES condition,                                             050623    2004800
    88+***  and then setting the table names.  They can be overridden                                            050623    2004900
    89+***  at runtime by calling HTTP_setTables().                                                              050623    2005000
    90+***                                                                                                       050623    2005100
    91+***  In the current implementation, we prefer that you use CCSIDs                                         050623    2005200
    92+***  instead of tables. When HTTP_USE_TABLES is not defined,                                               050623    2005300
    93+***  the HTTP_EBCDIC and HTTP_ASCII constants represent the                                                050623    2005400
    94+***  default CCSIDs for ASCII<-->EBCDIC translation.  They can be                                          050623    2005500
    95+***  overridden at runtime by calling HTTP_setCCSIDs()                                                     050623    2005600
    96+***                                                                                                       050623    2005700
    97+                                                                                                         011020    2005800
    98+ /undefine HTTP_USE_TABLES                                                                              060923    2005900
    99+ /if defined(HTTP_USE_TABLES)                                                                           050623    2006000
           LINES EXCLUDED: 2
   100+ /else                                                                                                  050623    2006300
   101+D HTTP_EBCDIC     C                   CONST(0)                                                         050623    2006400
   102+D HTTP_ASCII      C                   CONST(819)                                                       060330    2006500
   103+ /endif                                                                                                 050623    2006600
   104+                                                                                                        011020    2006700
   105+***  This is the codepage or CCSID assigned to downloaded stream                                         050623    2006800
   106+***  files by default. (Note: HTTPAPI does not convert the file                                          050623    2006900
   107+***  to this CCSID, it just assigns this number to the file's                                           050623    2007000
   108+***  attributes.)                                                                                       050623    2007100
   109+***                                                                                                     050623    2007200
   110+***  Whether this is treated as a CCSID or a codepage depends on                                        050623    2007300
   111+***  the value of the HTTP USE CCSID condition, below.                                                  050623    2007400
   112+***                                                                                                     050623    2007500
   113+***  Can be overridden at runtime by calling HTTP_SetFileCCSID()                                        050623    2007600
   114+                                                                                                        011020    2007700
   115+D HTTP_CCSID      C                   CONST(819)                                                       061116    2007800
   116+                                                                                                        050623    2007900
   117+***  Starting in V5R1, a full CCSID is available in the IFS                                             050623    2008000
   118+***  instead of a codepage. When this is defined, CCSID support                                         050623    2008100
   119+***  will be used instead of codepages                                                                  050623    2008200
   120+                                                                                                        050623    2008300
   121+D/define HTTP_USE_CCSID                                                                                050623    2008400
   122+                                                                                                        011020    2008500
   123+***  This is the file mode used when creating files in the IFS.                                         011020    2008600
   124+***  (Caution: This mode is given in DECIMAL, not octal!)                                               011020    2008700
   125+***  Octal 666 = Decimal 438  (RW-RW-RW-)                                                               011020    2008800
   126+***  Octal 644 = Decimal 420  (RW-R--R--)                                                               011020    2008900
   127+***  Octal 777 = Decimal 511  (RWXRWXRWX)                                                               011020    2009000
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   128+***  Octal 755 = Decimal 493  (RWXR-XR-X)                                                                 011020    2009100
   129+                                                                                                          011020    2009200
   130+D HTTP_IFSMODE    C                   CONST(511)                                                          011020    2009300
   131+                                                                                                          030327    2009400
   132+***  HTTPAPI normally uses non-blocking sockets to ensure that                                            050630    2009500
   133+***  the session never "hangs".  However, during the connection                                           050630    2009600
   134+***  progress, this can mean that information gets lost.                                                  050630    2009700
   135+***                                                                                                       050630    2009800
   136+***  Define this to wait until after the connection is established                                        050630    2009900
   137+***  before switching the socket to non-blocking.                                                         050630    2010000
   138+D/define HTTP_BLOCK_ON_CONNECT                                                                           050630    2010100
   139+                                                                                                          060221    2010200
   140+***                                                                                                       060221    2010300
   141+*** This determines whether Cookies are turned *ON or *OFF                                               060221    2010400
   142+*** by default.                                                                                          060507    2010500
   143+***                                                                                                       060221    2010600
   144+DHTTP_COOKIE_DEFAULT...                                                                                  060221    2010700
   145+D                 C                   CONST(*ON)                                                          060507    2010800
   146+                                                                                                          050630    2010900
   147+***  This changes whether debugging is on or off by default.                                             041103    2011000
   148+***  You can override this at runtime by calling the http_debug()                                        041103    2011100
   149+***  procedure.                                                                                           041103    2011200
   150+D/undefine DEBUG                                                                                         060323    2011300
   151+DHTTP_DEBUG_FILE  s            500A   varying                                                           041103    2011400
   152+D                                     inz('/tmp/httpapi_debug.txt')                                       041103    2011500
   153+                                                                                                          070125    2011600
   154+***  This changes how memory is allocated.  If defined, HTTPAPI                                          070125    2011700
   155+***  will allocate memory in TERASPACE, thus allowing for very                                            070125    2011800
   156+***  large allocations.                                                                                   070828    2011900
   157+D/undefine USE_TS_MALLOC64                                                                               070828    2012000
   158+D/undefine USE_TS_MALLOC64                                                                               070828    2012100
   159+***  With both turned off (default) up to 16 MB per allocation.                                          070828    2012200
   160+***  WARNING: This is currently experimental!!  If you have                                              070828    2012300
   161+***           problems, make sure TERASPACE is undefined.                                                 070828    2012400
   162+D/undefine TERASPACE                                                                                     070426    2012500
   163+D/undefine USE_TS_MALLOC64                                                                               070828    2012600
   164+                                                                                                          071218    2012700
   165+***  This allows access to V5R3 (or higher) functions in the                                             071218    2012800
   166+***  SSL environment.  Only define this if HTTPAPI will be used                                          071218    2012900
   167+***  on V5R3 or later.                                                                                    071218    2013000
   168+D/undefine V5R3_GSKIT                                                                                    071218    2013100
   169+                                                                                                          000000    1003800
   170+ ***************************************************************                                          000000    1003900
   171+ **  procedure prototypes                                                                               000000    1004000
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   172+ ************************************************************************                                  000000    1004100
   173+                                                                                                          000000    1004200
   174+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                000000    1004300
   175+ *  http_get(): Retrieve an HTTP document                                                                 000000    1004400
   176+ *  http_url_get(): Retrieve an HTTP document                                                             000000    1004500
   177+ *                                                                                                        000000    1004600
   178+ *       peURL = url to grab  (i.e. http://www.blah.com/dir/file.txt)                                     000000    1004700
   179+ *  peFilename = filename in IFS to save response into                                                     000000    1004800
   180+ *  peTimeout  = (optional) give up if no data is received for                                            000000    1004900
   181+ *          this many seconds.                                                                            000000    1005000
   182+ *  peModTime  = (optional) only get file if it was changed since                                         000000    1005100
   183+ *          this timestamp.                                                                               000000    1005200
   184+ *  peContentType = (optional) content type to supply (mainly                                             000000    1005300
   185+ *          useful when talking to CGI scripts.) To supply the                                            000000    1005400
   186+ *          default value for this parm, you can supply the                                               000000    1005500
   187+ *          HTTP_CONTTYPE constant.                                                                       000000    1005600
   188+ *  peUserAgent = (optional) This specifies the name & version                                            000000    1005700
   189+ *          of your HTTP client to the server.  The server uses                                           000000    1005800
   190+ *          it for statistics and sometimes to restrict pages                                             000000    1005900
   191+ *          so that they're "only for Internet Explorer."                                                 000000    1006000
   192+ *  peSOAPAction = (optional) string used to specify the action                                           000000    1006100
   193+ *          taken by some SOAP applications.                                                              000000    1006200
   194+ *          - pass *blanks to send an empty SoapAction.                                                   080903    1006300
   195+ *          - pass *omit (or don't pass the parm at all) if                                               080903    1006400
   196+ *             you don't want a SoapAction header to be sent.                                             080903    1006500
   197+ *                                                                                                        000000    1006600
   198+ *  Returns  -1 = internal error (check HTTP_ERROR)                                                       000000    1006700
   199+ *            0 = timeout while receiving data or connecting                                              000000    1006800
   200+ *            1 = file retrieved successfully                                                             000000    1006900
   201+ *          > 1 = HTTP response code indicating server's error reply                                      000000    1007000
   202+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                000000    1007100
   203+D http_get        PR            10I 0 extproc('HTTP_URL_GET')                                             000000    1007200
   204+D  peURL                   32767A   varying const options(*varsize)                                      000000    1007300
   205+D  peFilename              32767A   varying const options(*varsize)                                      000000    1007400
   206+D  peTimeout                 10I 0 value options(*nopass)                                                000000    1007500
   207+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                       091030    1007600
          LINES EXCLUDED: 4
   208+ /else                                                                                                   090730    1008100
   209+D  peUserAgent             16384A   varying const                                                        091030    1008200
   210+D                                   options(*nopass:*omit)                                               091030    1008300
   211+D  peModTime                    Z   const options(*nopass:*omit)                                         091030    1008400
   212+D  peContentType           16384A   varying const                                                        091030    1008500
   213+D                                   options(*nopass:*omit)                                               091030    1008600
   214+D  peSOAPAction            16384A   varying const                                                        090730    1008700
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   215+D                                     options(*nopass:*omit)                                                 090730    1008800
   216+ /endif                                                                                                      090730    1008900
   217+D http_url_get    PR            10I 0                                                                        000000    1009000
   218+D  peURL                    32767A   varying const options(*varsize)                                       000000    1009100
   219+D  peFilename               32767A   varying const options(*varsize)                                       000000    1009200
   220+D  peTimeout                  10I 0 value options(*nopass)                                                 000000    1009300
   221+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                          091030    1009400
          LINES EXCLUDED: 4
   222+ /else                                                                                                      090730    1009900
   223+D  peUserAgent              16384A   varying const                                                         091030    1010000
   224+D                                    options(*nopass:*omit)                                                 091030    1010100
   225+D  peModTime                     Z   const options(*nopass:*omit)                                          091030    1010200
   226+D  peContentType            16384A   varying const                                                         091030    1010300
   227+D                                    options(*nopass:*omit)                                                 091030    1010400
   228+D  peSOAPAction             16384A   varying const                                                         090730    1010500
   229+D                                    options(*nopass:*omit)                                                 090730    1010600
   230+ /endif                                                                                                     090730    1010700
   231+                                                                                                           000000    1010800
   232+                                                                                                           000000    1010900
   233+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1011000
   234+ *  http_url_post(): Post data to CGI script and get document                                              000000    1011100
   235+ *                                                                                                         000000    1011200
   236+ *         peURL = url to post to (http://www.blah.com/cgi-bin/etc)                                        000000    1011300
   237+ *    pePostData = pointer to data to post to CGI script.                                                  000000    1011400
   238+ * pePostDataLen = length of data to post to CGI script.                                                  000000    1011500
   239+ *   peFileName  = Filename in IFS to save response into                                                   000000    1011600
   240+ *    peTimeout  = (optional) give up if no data is received for                                          000000    1011700
   241+ *              this many seconds.                                                                         000000    1011800
   242+ * peUserAgent = (optional) User-Agent string passed to the                                               000000    1011900
   243+ *              server.  Pass the named constant HTTP_USERAGENT                                            000000    1012000
   244+ *              if you want to get the default value.                                                      000000    1012100
   245+ * peContentType = (optional) content type to supply (mainly                                              000000    1012200
   246+ *              useful when talking to CGI scripts)                                                        000000    1012300
   247+ *  peSOAPAction = (optional) string used to specify the action                                           080903    1012400
   248+ *           taken by some SOAP applications.                                                            080903    1012500
   249+ *           - pass *blanks to send an empty SoapAction.                                                 080903    1012600
   250+ *           - pass *omit (or don't pass the parm at all) if                                             080903    1012700
   251+ *              you don't want a SoapAction header to be sent.                                           080903    1012800
   252+ *                                                                                                       000000    1012900
   253+ *  Returns  -1 = internal error (check HTTP_ERROR)                                                      000000    1013000
   254+ *            0 = timeout while receiving data or connecting                                             000000    1013100
   255+ *            1 = file retrieved successfully                                                            000000    1013200
   256+ *          > 1 = HTTP response code indicating server's error reply                                     000000    1013300
   257+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1013400
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   258+D http_post       PR            10I 0 EXTPROC('HTTP_URL_POST')                                              000000    1013500
   259+D  peURL                     32767A   varying const options(*varsize)                                      000000    1013600
   260+D  pePostData                     *   value                                                                 000000    1013700
   261+D  pePostDataLen                10I 0 value                                                               000000    1013800
   262+D  peFilename                32767A   varying const options(*varsize)                                      000000    1013900
   263+D  peTimeout                    10I 0 value options(*nopass)                                              000000    1014000
   264+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                         091030    1014100
          LINES EXCLUDED: 3
   265+ /else                                                                                                     090730    1014500
   266+D  peUserAgent               16384A   varying const                                                       091030    1014600
   267+D                                     options(*nopass:*omit)                                              091030    1014700
   268+D  peContentType             16384A   varying const                                                       091030    1014800
   269+D                                     options(*nopass:*omit)                                              091030    1014900
   270+D  peSOAPAction              16384A   varying const                                                       090730    1015000
   271+D                                     options(*nopass:*omit)                                              090730    1015100
   272+ /endif                                                                                                    090730    1015200
   273+D http_url_post   PR            10I 0                                                                     000000    1015300
   274+D  peURL                     32767A   varying const options(*varsize)                                      000000    1015400
   275+D  pePostData                     *   value                                                                 000000    1015500
   276+D  pePostDataLen                10I 0 value                                                               000000    1015600
   277+D  peFilename                32767A   varying const options(*varsize)                                      000000    1015700
   278+D  peTimeout                    10I 0 value options(*nopass)                                              000000    1015800
   279+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                         091030    1015900
          LINES EXCLUDED: 3
   280+ /else                                                                                                     090730    1016300
   281+D  peUserAgent               16384A   varying const                                                       091030    1016400
   282+D                                     options(*nopass:*omit)                                              091030    1016500
   283+D  peContentType             16384A   varying const                                                       091030    1016600
   284+D                                     options(*nopass:*omit)                                              091030    1016700
   285+D  peSOAPAction              16384A   varying const                                                       090730    1016800
   286+D                                     options(*nopass:*omit)                                              090730    1016900
   287+ /endif                                                                                                    090730    1017000
   288+                                                                                                          000000    1017100
   289+                                                                                                          000000    1017200
   290+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1017300
   291+ *  http_url_get_raw(): Retrieve an HTTP document (in raw mode)                                           000000    1017400
   292+ *                                                                                                       000000    1017500
   293+ *       peURL = url to grab  (i.e. http://www.blah.com/dir/file.txt)                                     000000    1017600
   294+ *       peFD  = FD to pass back to peProc                                                                000000    1017700
   295+ *     peProc  = procedure to call each time data is received.                                            000000    1017800
   296+ *  peTimeout  = (optional) give up if no data is received for                                           000000    1017900
   297+ *          this many seconds.                                                                           000000    1018000
   298+ * peUserAgent = (optional) User-Agent string passed to the                                              000000    1018100
   299+ *             server.  Pass the named constant HTTP_USERAGENT                                            000000    1018200
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   300+ *           if you want to get the default value.                                                      000000    1018300
   301+ *  peModTime  = (optiona) only get file if it was changed since                                       000000    1018400
   302+ *          this timestamp.                                                                            000000    1018500
   303+ *  peContentType = (optional) content type to supply (mainly                                          000000    1018600
   304+ *          useful when talking to CGI scripts)                                                        000000    1018700
   305+ *  peSOAPAction = (optional) string used to specify the action                                        080903    1018800
   306+ *          taken by some SOAP applications.                                                           080903    1018900
   307+ *          - pass *blanks to send an empty SoapAction.                                                080903    1019000
   308+ *          - pass *omit (or don't pass the parm at all) if                                            080903    1019100
   309+ *             you don't want a SoapAction header to be sent.                                          080903    1019200
   310+ *                                                                                                     000000    1019300
   311+ *  Returns  (same as http_url_get)                                                                    000000    1019400
   312+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1019500
   313+D http_url_get_raw...                                                                                 000000    1019600
   314+D                 PR            10I 0                                                               000000    1019700
   315+D  peURL                      32767A   varying const options(*varsize)                             000000    1019800
   316+D  peFD                          10I 0 value                                                       000000    1019900
   317+D  peProc                          *   value procptr                                                000000    1020000
   318+D  peTimeout                     10I 0 value options(*nopass)                                       000000    1020100
   319+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                   091030    1020200
        LINES EXCLUDED: 4
   320+ /else                                                                                               090730    1020700
   321+D  peUserAgent                16384A   varying const                                               091030    1020800
   322+D                                      options(*nopass:*omit)                                        091030    1020900
   323+D  peModTime                       Z   const options(*nopass:*omit)                                 091030    1021000
   324+D  peContentType              16384A   varying const                                               091030    1021100
   325+D                                      options(*nopass:*omit)                                        091030    1021200
   326+D  peSOAPAction               16384A   varying const                                               090730    1021300
   327+D                                      options(*nopass:*omit)                                        090730    1021400
   328+ /endif                                                                                              090730    1021500
   329+                                                                                                     000000    1021600
   330+                                                                                                     000000    1021700
   331+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1021800
   332+ *  http_url_post_raw(): Post data to CGI script and get document                                     000000    1021900
   333+ *                                                                                                    000000    1022000
   334+ *         peURL = url to post to (http://www.blah.com/cgi-bin/etc)                                   000000    1022100
   335+ *    pePostData = pointer to data to post to CGI script.                                             000000    1022200
   336+ * pePostDataLen = length of data to post to CGI script.                                             000000    1022300
   337+ *         peFD  = FD to pass back to peProc                                                          000000    1022400
   338+ *       peProc  = procedure to call each time data is received.                                      000000    1022500
   339+ *    peTimeout  = (optional) give up if no data is received for                                      000000    1022600
   340+ *            this many seconds.                                                                      000000    1022700
   341+ *  peUserAgent  = (optional) User-Agent string passed to the                                         000000    1022800
   342+ *            server.  Pass the named constant HTTP_USERAGENT                                         000000    1022900
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   343+ *           if you want to get the default value.                                                        000000    1023000
   344+ * peContentType = (optional) content type to supply (mainly                                             000000    1023100
   345+ *           useful when talking to CGI scripts)                                                        000000    1023200
   346+ *  peSOAPAction = (optional) string used to specify the action                                         080903    1023300
   347+ *          taken by some SOAP applications.                                                            080903    1023400
   348+ *          - pass *blanks to send an empty SoapAction.                                                 080903    1023500
   349+ *          - pass *omit (or don't pass the parm at all) if                                             080903    1023600
   350+ *             you don't want a SoapAction header to be sent.                                           080903    1023700
   351+ *                                                                                                      000000    1023800
   352+ *  Returns  (same as http_url_post)                                                                    000000    1023900
   353+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++  000000    1024000
   354+D http_url_post_raw...                                                                                 000000    1024100
   355+D                 PR            10I 0                                                                 000000    1024200
   356+D  peURL                    32767A   varying const options(*varsize)                                  000000    1024300
   357+D  pePostData                  *     value                                                            000000    1024400
   358+D  pePostDataLen               10I 0 value                                                            000000    1024500
   359+D  peFD                        10I 0 value                                                            000000    1024600
   360+D  peProc                        *   value procptr                                                    000000    1024700
   361+D  peTimeout                   10I 0 value options(*nopass)                                           000000    1024800
   362+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                     091030    1024900
        LINES EXCLUDED: 3
   363+ /else                                                                                                 090730    1025300
   364+D  peUserAgent              16384A   varying const                                                    091030    1025400
   365+D                                    options(*nopass:*omit)                                           091030    1025500
   366+D  peContentType            16384A   varying const                                                    091030    1025600
   367+D                                    options(*nopass:*omit)                                           091030    1025700
   368+D  peSOAPAction             16384A   varying const                                                    090730    1025800
   369+D                                    options(*nopass:*omit)                                           090730    1025900
   370+ /endif                                                                                                090730    1026000
   371+                                                                                                       000000    1026100
   372+                                                                                                       000000    1026200
   373+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++  000000    1026300
   374+ *  http_ParseURL(): Parse URL into it's component parts                                               000000    1026400
   375+ *                                                                                                     000000    1026500
   376+ *  Breaks a uniform resource locator (URL) into it's component                                        000000    1026600
   377+ *  pieces for use with the http: or https: protocols.  (would also                                    000000    1026700
   378+ *  work for FTP with minor tweaks)                                                                     000000    1026800
   379+ *                                                                                                     000000    1026900
   380+ *  peURL = URL that needs to be parsed.                                                               000000    1027000
   381+ *  peService = service name from URL (i.e. http or https)                                             000000    1027100
   382+ *  peUserName = user name given, or *blanks                                                           000000    1027200
   383+ *  pePassword = password given, or *blanks                                                            000000    1027300
   384+ *  peHost = hostname given in URL. (could be domain name or IP)                                       000000    1027400
   385+ *  pePort = port number to connect to, if specified, otherwise 0.                                     000000    1027500
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   386+ *  pePath = remaining path/request for server.                                                          000000    1027600
   387+ *                                                                                                     000000    1027700
   388+ *  returns -1 upon failure, or 0 upon success                                                         000000    1027800
   389+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1027900
   390+D http_ParseURL   PR            10I 0                                                                000000    1028000
   391+D  peURL                      256A   const                                                          000000    1028100
   392+D  peService                   32A                                                                   000000    1028200
   393+D  peUserName                  32A                                                                   000000    1028300
   394+D  pePassword                  32A                                                                   000000    1028400
   395+D  peHost                     256A                                                                   000000    1028500
   396+D  pePort                      10I 0                                                                000000    1028600
   397+D  pePath                     256A                                                                   000000    1028700
   398+                                                                                                      000000    1028800
   399+                                                                                                      000000    1028900
   400+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1029000
   401+ *  http_build_sockaddr():  Build a socket address structure for a host                               000000    1029100
   402+ *                                                                                                    000000    1029200
   403+ *        peHost = hostname to build sockaddr_in for                                                  000000    1029300
   404+ *     peService = service name (or port) to build sockaddr_in for                                    000000    1029400
   405+ *   peForcePort = numeric port to force entry to, overrides peService                                000000    1029500
   406+ *    peSockAddr = pointer to a location to place a sockaddr_in into.                                 000000    1029600
   407+ *              (if *NULL, memory will be allocated, otherwise it will                                000000    1029700
   408+ *                 be re-alloc'ed)                                                                    000000    1029800
   409+ *                                                                                                    000000    1029900
   410+ *   returns -1 upon failure, 0 upon success                                                          000000    1030000
   411+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1030100
   412+D http_build_sockaddr...                                                                             000000    1030200
   413+D                 PR            10I 0                                                                000000    1030300
   414+D   peHost                     256A   const                                                          000000    1030400
   415+D   peService                   32A   const                                                          000000    1030500
   416+D   peForcePort                 10I 0 value                                                          000000    1030600
   417+D   peSockAddr                    *                                                                  000000    1030700
   418+                                                                                                      000000    1030800
   419+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1030900
   420+ *  http_close(): close HTTP connection                                                              000000    1031000
   421+ *                                                                                                    000000    1031100
   422+ *         peSock = socket to close                                                                   000000    1031200
   423+ *         peComm = comm driver opened with http_select_commdriver()                                  000000    1031300
   424+ *                                                                                                    000000    1031400
   425+ *  returns -1 upon failure, or 0 upon success                                                        000000    1031500
   426+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1031600
   427+D http_close      PR            10I 0                                                                000000    1031700
   428+D  peSock                      10I 0 value                                                          000000    1031800
   429+D  peComm                        *   value                                                          000000    1031900
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   430+                                                                                                          000000    1032000
   431+                                                                                                          000000    1032100
   432+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1032200
   433+ *  http_error():   Return the last error that occurred.                                                  000000    1032300
   434+ *                                                                                                        000000    1032400
   435+ *     peErrorNo = (optional) error number that occurred.                                                 000000    1032500
   436+ *                                                                                                        000000    1032600
   437+ *  Returns the human-readable error message.                                                             000000    1032700
   438+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1032800
   439+D http_error      PR            80A                                                                     000000    1032900
   440+D   peErrorNo                   10I 0 options(*nopass:*omit)                                            000000    1033000
   441+                                                                                                          000000    1033100
   442+ /if defined(HAVE_SSLAPI)                                                                                000000    1033200
          LINES EXCLUDED: 84
   443+ /endif                                                                                                  000000    1041700
   444+                                                                                                          000000    1041800
   445+                                                                                                          000000    1041900
   446+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1042000
   447+ *  http_getauth():   Get HTTP Authentication Information                                                000000    1042100
   448+ *                                                                                                        000000    1042200
   449+ *   Call this proc after you receive a HTTP_NDAUTH error                                                000000    1042300
   450+ *   to determine the authentication credentials that are required                                       000000    1042400
   451+ *                                                                                                        000000    1042500
   452+ *  The following parms are returned to your program:                                                     000000    1042600
   453+ *                                                                                                        000000    1042700
   454+ *     peBasic = *ON if BASIC auth is allowed                                                             000000    1042800
   455+ *    peDigest = *ON if MD5 DIGEST auth is allowed                                                        000000    1042900
   456+ *     peRealm = Auth realm.  Present this to the user to identify                                        000000    1043000
   457+ *               which password you're looking for.  For example                                          000000    1043100
   458+ *               if peRealm is "secureserver.com" you might say                                           000000    1043200
   459+ *               "enter password for secureserver.com" to user.                                           000000    1043300
   460+ *                                                                                                        000000    1043400
   461+ *   After getting the userid & password from the user (or database)                                      000000    1043500
   462+ *   you'll need to call http_setauth()                                                                   000000    1043600
   463+ *                                                                                                        000000    1043700
   464+ *  Returns -1 upon error, or 0 if successful                                                             000000    1043800
   465+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1043900
   466+D http_getauth    PR            10I 0                                                                   000000    1044000
   467+D   peBasic                      1N                                                                     000000    1044100
   468+D   peDigest                     1N                                                                     000000    1044200
   469+D   peRealm                    124A                                                                     000000    1044300
   470+                                                                                                          000000    1044400
   471+                                                                                                          000000    1044500
   472+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1044600
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   473+ *  http_setauth():   Set HTTP Authentication Information                                          000000    1044700
   474+ *                                                                                                000000    1044800
   475+ *     peAuthType = Authentication Type (HTTP_AUTH_BASIC or                                       000000    1044900
   476+ *                  HTTP_AUTH_MD5_DIGEST)                                                         000000    1045000
   477+ *     peUsername = UserName to use                                                               000000    1045100
   478+ *     pePasswd   = Password to use                                                               000000    1045200
   479+ *                                                                                                000000    1045300
   480+ *  Returns -1 upon error, or 0 if successful                                                     000000    1045400
   481+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1045500
   482+D http_setauth    PR            10I 0                                                          000000    1045600
   483+D   peAuthType                   1A   const                                                    000000    1045700
   484+D   peUsername                   80A   const                                                   000000    1045800
   485+D   pePasswd                   1024A   const                                                   000000    1045900
   486+                                                                                               000000    1046000
   487+                                                                                               000000    1046100
   488+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1046200
   489+ *  http_setproxy():   Set HTTP Proxy Address                                                   000000    1046300
   490+ *                                                                                                000000    1046400
   491+ *     peHost = Proxy host name                                                                   000000    1046500
   492+ *     psPort = Proxy port                                                                        000000    1046600
   493+ *                                                                                                000000    1046700
   494+ *  Returns -1 upon error, or 0 if successful                                                     000000    1046800
   495+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1046900
   496+D http_setproxy   PR            10I 0                                                          000000    1047000
   497+D   peHost                     256A   const                                                    000000    1047100
   498+D   pePort                      10I 0 const                                                    000000    1047200
   499+                                                                                               000000    1047300
   500+                                                                                               000000    1047400
   501+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1047500
   502+ *  http_proxy_setauth():   Set HTTP Proxy Authentication Information                           000000    1047600
   503+ *                                                                                                000000    1047700
   504+ *     peAuthType = Authentication Type (HTTP_AUTH_NONE or                                        000000    1047800
   505+ *                  HTTP_AUTH_BASIC)                                                              000000    1047900
   506+ *     peUsername = UserName to use                                                               000000    1048000
   507+ *     pePasswd   = Password to use                                                               000000    1048100
   508+ *                                                                                                000000    1048200
   509+ *  Returns -1 upon error, or 0 if successful                                                     000000    1048300
   510+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1048400
   511+D http_proxy_setauth...                                                                        000000    1048500
   512+D                 PR            10I 0                                                          000000    1048600
   513+D   peAuthType                   1A   const                                                    000000    1048700
   514+D   peUsername                   80A   const                                                   000000    1048800
   515+D   pePasswd                   1024A   const                                                   000000    1048900
   516+                                                                                               000000    1049000
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   517+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1049100
   518+ *  http_proxy_getauth():   Get HTTP Proxy Authentication Information                                      000000    1049200
   519+ *                                                                                                       000000    1049300
   520+ *   Call this proc after you receive a HTTP_PXNDAUTH error                                              000000    1049400
   521+ *   to determine the authentication credentials that are required                                       000000    1049500
   522+ *                                                                                                       000000    1049600
   523+ *  The following parms are returned to your program:                                                    000000    1049700
   524+ *                                                                                                       000000    1049800
   525+ *     peBasic = *ON if BASIC auth is allowed                                                            000000    1049900
   526+ *     peRealm = Auth realm.  Present this to the user to identify                                       000000    1050000
   527+ *               which password you're looking for.  For example                                         000000    1050100
   528+ *               if peRealm is "secureproxy.com" you might say                                           000000    1050200
   529+ *               "enter password for secureproxy.com" to user.                                           000000    1050300
   530+ *                                                                                                       000000    1050400
   531+ *   After getting the userid & password from the user (or database)                                     000000    1050500
   532+ *   you'll need to call http_proxy_setauth()                                                            000000    1050600
   533+ *                                                                                                       000000    1050700
   534+ *  Returns -1 upon error, or 0 if successful                                                            000000    1050800
   535+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1050900
   536+D http_proxy_getauth...                                                                                 000000    1051000
   537+D                 PR            10I 0                                                                   000000    1051100
   538+D   peBasic                      1N                                                                     000000    1051200
   539+D   peRealm                    124A                                                                     000000    1051300
   540+                                                                                                        000000    1051400
   541+                                                                                                        000000    1051500
   542+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1051600
   543+ *  http_xproc():  Register a procedure to be called back at                                            000000    1051700
   544+ *                  a given exit point                                                                   000000    1051800
   545+ *                                                                                                       000000    1051900
   546+ *     peExitPoint = exit point.  Should be one of the constants                                         000000    1052000
   547+ *                 HTTP_POINT_XXX defined in the HTTPAPI_H member                                        000000    1052100
   548+ *          peProc = address of procedure to call for this                                              000000    1052200
   549+ *                 exit point. (pass *NULL to disable this point)                                        000000    1052300
   550+ *      peUserData = Pointer to user data. This will be passed                                           000000    1052400
   551+ *                 to your call-back procedure. You can set it to                                        000000    1052500
   552+ *                 *NULL if you don't need/want it.                                                      000000    1052600
   553+ *                                                                                                       000000    1052700
   554+ *  Returns -1 upon error, or 0 if successful                                                            000000    1052800
   555+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1052900
   556+D http_xproc      PR            10I 0                                                                   000000    1053000
   557+D  peExitPoint                  10I 0 value                                                             000000    1053100
   558+D  peProc                         *   procptr value                                                     000000    1053200
   559+D  peUserData                     *   value options(*nopass)                                            000000    1053300
   560+                                                                                                        000000    1053400
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   561+                                                                                                    000000    1053500
   562+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1053600
   563+ * http_redir_loc(): Retrieve location provided by a redirect                                       000000    1053700
   564+ *   request.                                                                                       000000    1053800
   565+ *                                                                                                 000000    1053900
   566+ *  returns redirect location, or '' if no redirect was given                                       000000    1054000
   567+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1054100
   568+D http_redir_loc  PR          1024A   varying                                                     000000    1054200
   569+                                                                                                    000000    1054300
   570+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1054400
   571+ * http_url_encoder_new():  Create a URL encoder.                                                  000000    1054500
   572+ *                                                                                                 000000    1054600
   573+ *   returns an (opaque) pointer to the new encoder                                                000000    1054700
   574+ *           or *NULL upon error.                                                                  000000    1054800
   575+ *                                                                                                 000000    1054900
   576+ * WARNING: To free the memory used by this routine, you MUST                                      000000    1055000
   577+ *          call http_url_encoder_free() after the data is sent.                                   000000    1055100
   578+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1055200
   579+D HTTP_URL_ENCODER...                                                                              000000    1055300
   580+D                 s                 *                                                           000000    1055400
   581+D http_url_encoder_new...                                                                          000000    1055500
   582+D                 PR                  like(HTTP_URL_ENCODER)                                      000000    1055600
   583+ /if defined(WEBFORMS)                                                                            070823    1055700
          LINES EXCLUDED: 3
   584+ /endif                                                                                           070823    1056100
   585+                                                                                                  000000    1056200
   586+                                                                                                  000000    1056300
   587+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1056400
   588+ * http_url_encoder_addvar():  Add a variable to what's stored                                     000000    1056500
   589+ *          a URL encoder.                                                                         000000    1056600
   590+ *                                                                                                 000000    1056700
   591+ *    peEncoder = pointer to encoder created by the                                               000000    1056800
   592+ *                  http_url_encoder_new() routine                                                000000    1056900
   593+ *   peVariable = variable name to add                                                            000000    1057000
   594+ *       peData = pointer to data to store in variable                                            000000    1057100
   595+ *   peDataSize = size of data to store in variable                                               000000    1057200
   596+ *                                                                                                 000000    1057300
   597+ * Returns *ON if successful, *OFF otherwise.                                                     000000    1057400
   598+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1057500
   599+D http_url_encoder_addvar...                                                                       000000    1057600
   600+D                 PR             1N                                                             000000    1057700
   601+D    peEncoder                       like(HTTP_URL_ENCODER) value                                 000000    1057800
   602+D    peVariable                50A   varying value                                                000000    1057900
   603+D    peData                     *    value                                                        000000    1058000
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   604+D    peDataSize                10I 0 value                                                                  000000    1058100
   605+ /if defined(WEBFORMS)                                                                                      070823    1058200
          LINES EXCLUDED: 6
   606+ /endif                                                                                                     070823    1058900
   607+                                                                                                            000000    1059000
   608+                                                                                                            000000    1059100
   609+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                     000000    1059200
   610+ * http_url_encoder_getptr(): Get a pointer to the encoded                                                  000000    1059300
   611+ *        data stored in a URL encoder                                                                     000000    1059400
   612+ *                                                                                                         000000    1059500
   613+ *     peEncoder = (input) pointer to encoder                                                              000000    1059600
   614+ *        peData = (output) pointer to encoded data                                                        000000    1059700
   615+ *        peSize = (output) size of encoded data                                                           000000    1059800
   616+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                     000000    1059900
   617+D http_url_encoder_getptr...                                                                              000000    1060000
   618+D                 PR                                                                                      000000    1060100
   619+D    peEncoder                        like(HTTP_URL_ENCODER) value                                         000000    1060200
   620+D    peData                      *                                                                        000000    1060300
   621+D    peSize                    10I 0                                                                      000000    1060400
   622+ /if defined(WEBFORMS)                                                                                      070823    1060500
          LINES EXCLUDED: 5
   623+ /endif                                                                                                     070823    1061100
   624+                                                                                                            000000    1061200
   625+                                                                                                            000000    1061300
   626+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                     000000    1061400
   627+ * http_url_encoder_getstr(): Get encoded data he encoded                                                  000000    1061500
   628+ *        data stored in a URL encoder as a string                                                         000000    1061600
   629+ *                                                                                                         000000    1061700
   630+ *     peEncoder = (input) pointer to encoder                                                              000000    1061800
   631+ *                                                                                                         000000    1061900
   632+ * NOTE: This routine is much slower than http_url_encoder_getptr()                                        000000    1062000
   633+ *       and is limited to a 32k return value.  It's suitable for                                          000000    1062100
   634+ *       use with data that's added to a URL, such as when                                                 000000    1062200
   635+ *       performing a GET request to a web server, but you should                                          000000    1062300
   636+ *       use http_url_encoder_getptr() for POST requests.                                                  000000    1062400
   637+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                     000000    1062500
   638+D http_url_encoder_getstr...                                                                              000000    1062600
   639+D                 PR         32767A   varying                                                            000000    1062700
   640+D    peEncoder                        like(HTTP_URL_ENCODER) value                                         000000    1062800
   641+ /if defined(WEBFORMS)                                                                                      070823    1062900
          LINES EXCLUDED: 4
   642+ /endif                                                                                                     070823    1063400
   643+                                                                                                            000000    1063500
   644+                                                                                                            000000    1063600
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   645+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                      000000    1063700
   646+ * http_url_encoder_free(): free resources allocated by both                                           000000    1063800
   647+ *        http_url_encoder_new() and http_url_encoder_addvar()                                        000000    1063900
   648+ *                                                                                                    000000    1064000
   649+ *     peEncoder = pointer to encoder to free                                                         000000    1064100
   650+ *                                                                                                    000000    1064200
   651+ * Returns *ON if successful, *OFF otherwise.                                                        000000    1064300
   652+ *                                                                                                    000000    1064400
   653+ * WARNING: After calling this, do not use the encoder or                                            000000    1064500
   654+ *          data returned by http_url_encoder_getptr() again.                                         000000    1064600
   655+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                      000000    1064700
   656+D http_url_encoder_free...                                                                           000000    1064800
   657+D                 PR             1N                                                                 000000    1064900
   658+D    peEncoder                        like(HTTP_URL_ENCODER) value                                   000000    1065000
   659+ /if defined(WEBFORMS)                                                                              070823    1065100
          LINES EXCLUDED: 3
   660+ /endif                                                                                             070823    1065500
   661+                                                                                                    000000    1065600
   662+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                      000000    1065700
   663+ * http_url_encoder_addvar_s():  Simplified (but limited)                                           000000    1065800
   664+ *       interface to http_url_encoder_addvar().                                                    000000    1065900
   665+ *                                                                                                    000000    1066000
   666+ *    peEncoder = (input) HTTP_url_encoder object                                                    000000    1066100
   667+ *   peVariable = (input) variable name to set                                                       000000    1066200
   668+ *      peValue = (input) value to set variable to                                                   000000    1066300
   669+ *                                                                                                    000000    1066400
   670+ * Returns *ON if successful, *OFF otherwise                                                         000000    1066500
   671+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                      000000    1066600
   672+D http_url_encoder_addvar_s...                                                                       000000    1066700
   673+D                 PR             1N                                                                 000000    1066800
   674+D    peEncoder                        like(HTTP_URL_ENCODER) value                                   000000    1066900
   675+D    peVariable                50A   varying value                                                  000000    1067000
   676+D    peValue                  256A   varying value                                                  000000    1067100
   677+ /if defined(WEBFORMS)                                                                              070823    1067200
          LINES EXCLUDED: 5
   678+ /endif                                                                                             070823    1067800
   679+                                                                                                    000000    1067900
   680+                                                                                                    000000    1068000
   681+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++      000000    1068100
   682+ *  http_long_ParseURL(): Parse URL into it's component parts                                        000000    1068200
   683+ *                                                                                                    000000    1068300
   684+ *  Breaks a uniform resource locator (URL) into it's component                                     000000    1068400
   685+ *  pieces for use with the http: or https: protocols.  (would also                                 000000    1068500
   686+ *  work for FTP with minor tweaks)                                                                 000000    1068600
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   687+ *                                                                                                      000000    1068700
   688+ *  peURL = URL that needs to be parsed.                                                                000000    1068800
   689+ *  peService = service name from URL (i.e. http or https)                                              000000    1068900
   690+ *  peUserName = user name given, or *blanks                                                            000000    1069000
   691+ *  pePassword = password given, or *blanks                                                             000000    1069100
   692+ *  peHost = hostname given in URL. (could be domain name or IP)                                        000000    1069200
   693+ *  pePort = port number to connect to, if specified, otherwise 0.                                      000000    1069300
   694+ *  pePath = remaining path/request for server.                                                         000000    1069400
   695+ *                                                                                                      000000    1069500
   696+ *  returns -1 upon failure, or 0 upon success                                                          000000    1069600
   697+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1069700
   698+d http_long_ParseURL...                                                                               000000    1069800
   699+D                 PR            10I 0                                                                 000000    1069900
   700+D  peURL                      32767A   varying const options(*varsize)                               000000    1070000
   701+D  peService                     32A                                                                  000000    1070100
   702+D  peUserName                    32A                                                                  000000    1070200
   703+D  pePassword                    32A                                                                  000000    1070300
   704+D  peHost                       256A                                                                  000000    1070400
   705+D  pePort                        10I 0                                                                000000    1070500
   706+D  pePath                     32767A   varying                                                        000000    1070600
   707+                                                                                                      000000    1070700
   708+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1070800
   709+ * http_select_commdriver():  Select & initialize communications                                      000000    1070900
   710+ *    driver.                                                                                         000000    1071000
   711+ *                                                                                                    000000    1071100
   712+ *      peCommType = (input) communications type (http/https)                                         000000    1071200
   713+ *                                                                                                    000000    1071300
   714+ * Returns pointer to comm driver, or *NULL upon failure                                             000000    1071400
   715+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1071500
   716+D http_select_commdriver...                                                                           000000    1071600
   717+D                 PR              *                                                                   000000    1071700
   718+D   peCommType                   32A   const                                                        000000    1071800
   719+                                                                                                      000000    1071900
   720+                                                                                                      000000    1072000
   721+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1072100
   722+ *  http_url_post_raw2(): Post data to CGI script and get document                                     000000    1072200
   723+ *                                                                                                    000000    1072300
   724+ *         peURL = url to post to (http://www.blah.com/cgi-bin/etc)                                   000000    1072400
   725+ *      pePostFD = descriptor number to pass to pePostProc                                            000000    1072500
   726+ *    pePostProc = procedure to call to get POST data.                                                000000    1072600
   727+ *     peDataLen = total length of data that will be sent.                                            000000    1072700
   728+ *      peSaveFD = FD to pass back to peSaveProc                                                      000000    1072800
   729+ *    peSaveProc = procedure to call each time data is received.                                      000000    1072900
   730+ *    peTimeout  = (optional) give up if no data is received for                                      000000    1073000
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   731+ *            this many seconds.                                                                    000000    1073100
   732+ * peUserAgent = (optional) User-Agent string passed to the                                         000000    1073200
   733+ *            server.  Pass the named constant HTTP_USERAGENT                                       000000    1073300
   734+ *            if you want to get the default value.                                                 000000    1073400
   735+ * peContentType = (optional) content type to supply (mainly                                       000000    1073500
   736+ *            useful when talking to CGI scripts)                                                   000000    1073600
   737+ *  peSOAPAction = (optional) string used to specify the action                                     080903    1073700
   738+ *          taken by some SOAP applications.                                                        080903    1073800
   739+ *          - pass *blanks to send an empty SoapAction.                                             080903    1073900
   740+ *          - pass *omit (or don't pass the parm at all) if                                         080903    1074000
   741+ *             you don't want a SoapAction header to be sent.                                       080903    1074100
   742+ *                                                                                                 000000    1074200
   743+ *  Returns  -1 upon failure, 0 upon timeout, or an HTTP response code                             000000    1074300
   744+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                           000000    1074400
   745+D http_url_post_raw2...                                                                           000000    1074500
   746+D                 PR            10I 0                                                           000000    1074600
   747+D  peURL                     32767A   varying const options(*varsize)                           000000    1074700
   748+D  pePostFD                     10I 0 value                                                      000000    1074800
   749+D  pePostProc                     *   procptr value                                              000000    1074900
   750+D  peDataLen                    10I 0 value                                                      000000    1075000
   751+D  peSaveFD                     10I 0 value                                                      000000    1075100
   752+D  peSaveProc                     *   value procptr                                              000000    1075200
   753+D  peTimeout                    10I 0 value options(*nopass)                                     000000    1075300
   754+ /if defined(HTTP_ORIG_SHORTFIELD)                                                               091030    1075400
          LINES EXCLUDED: 3
   755+ /else                                                                                           090730    1075800
   756+D  peUserAgent               16384A   varying const                                            091030    1075900
   757+D                                     options(*nopass:*omit)                                     091030    1076000
   758+D  peContentType             16384A   varying const                                            091030    1076100
   759+D                                     options(*nopass:*omit)                                     091030    1076200
   760+D  peSOAPAction              16384A   varying const                                            090730    1076300
   761+D                                     options(*nopass:*omit)                                     090730    1076400
   762+ /endif                                                                                          090730    1076500
   763+                                                                                                 000000    1076600
   764+                                                                                                 000000    1076700
   765+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                           000000    1076800
   766+ *  http_url_post_stmf(): Post data to CGI script from stream file                               000000    1076900
   767+ *                                                                                               000000    1077000
   768+ *         peURL = url to post to (http://www.blah.com/cgi-bin/etc)                              000000    1077100
   769+ *    pePostFile = Filename (in IFS) of file to send to http server                              000000    1077200
   770+ *    peRecvFile = Filename (in IFS) of stream file containing reply                             000000    1077300
   771+ *    peTimeout  = (optional) give up if no data is received for                                 000000    1077400
   772+ *            this many seconds.                                                                 000000    1077500
   773+ * peUserAgent = (optional) User-Agent string passed to the                                       000000    1077600
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   774+ *            server.  Pass the named constant HTTP_USERAGENT                                          000000    1077700
   775+ *            if you want to get the default value.                                                    000000    1077800
   776+ * peContentType = (optional) content type to supply (mainly                                          000000    1077900
   777+ *            useful when talking to CGI scripts)                                                    000000    1078000
   778+ *  peSOAPAction = (optional) string used to specify the action                                       080903    1078100
   779+ *           taken by some SOAP applications.                                                        080903    1078200
   780+ *           - pass *blanks to send an empty SoapAction.                                             080903    1078300
   781+ *           - pass *omit (or don't pass the parm at all) if                                         080903    1078400
   782+ *             you don't want a SoapAction header to be sent.                                        080903    1078500
   783+ *                                                                                                   000000    1078600
   784+ *  Returns  -1 upon failure, 0 upon timeout,                                                        000000    1078700
   785+ *           1 for success, or an HTTP response code                                                 000000    1078800
   786+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1078900
   787+D http_url_post_stmf...                                                                             000000    1079000
   788+D                 PR            10I 0                                                             000000    1079100
   789+D  peURL                    32767A   varying const options(*varsize)                               000000    1079200
   790+D  pePostFile               32767A   varying const options(*varsize)                               000000    1079300
   791+D  peRecvFile               32767A   varying const options(*varsize)                               000000    1079400
   792+D  peTimeout                  10I 0 value options(*nopass)                                         000000    1079500
   793+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                  091030    1079600
          LINES EXCLUDED: 3
   794+ /else                                                                                              090730    1080000
   795+D  peUserAgent              16384A   varying const                                                 091030    1080100
   796+D                                    options(*nopass:*omit)                                        091030    1080200
   797+D  peContentType            16384A   varying const                                                 091030    1080300
   798+D                                    options(*nopass:*omit)                                        091030    1080400
   799+D  peSOAPAction             16384A   varying const                                                 090730    1080500
   800+D                                    options(*nopass:*omit)                                        090730    1080600
   801+ /endif                                                                                             090730    1080700
   802+D http_post_stmf  PR          10I 0 extproc('HTTP_URL_POST_STMF')                                   000000    1080800
   803+D  peURL                    32767A   varying const options(*varsize)                               000000    1080900
   804+D  pePostFile               32767A   varying const options(*varsize)                               000000    1081000
   805+D  peRecvFile               32767A   varying const options(*varsize)                               000000    1081100
   806+D  peTimeout                  10I 0 value options(*nopass)                                         000000    1081200
   807+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                  091030    1081300
          LINES EXCLUDED: 3
   808+ /else                                                                                              090730    1081700
   809+D  peUserAgent              16384A   varying const                                                 091030    1081800
   810+D                                    options(*nopass:*omit)                                        091030    1081900
   811+D  peContentType            16384A   varying const                                                 091030    1082000
   812+D                                    options(*nopass:*omit)                                        091030    1082100
   813+D  peSOAPAction             16384A   varying const                                                 090730    1082200
   814+D                                    options(*nopass:*omit)                                        090730    1082300
   815+ /endif                                                                                             090730    1082400
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   816+                                                                                                          000000    1082500
   817+                                                                                                          000000    1082600
   818+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1082700
   819+ * http_get_xml();                                                                                       000000    1082800
   820+ * http_url_get_xml():  Send a GET request to an HTTP server and                                         000000    1082900
   821+ *     receive/parse an XML response.                                                                     000000    1083000
   822+ *                                                                                                       000000    1083100
   823+ *       peURL = (input) URL to perform GET request to                                                   000000    1083200
   824+ * peStartProc = (input) call-back procedure to call at the start                                        000000    1083300
   825+ *                       of each XML element received.                                                   000000    1083400
   826+ *   peEndProc = (input) call-back procedure to call at the end                                          000000    1083500
   827+ *                       of each XML element received.                                                   000000    1083600
   828+ *    peUsrDta = (input) user-defined data that will be passed to the                                    000000    1083700
   829+ *                       call-back routine                                                               000000    1083800
   830+ *                                                                                                       000000    1083900
   831+ * (other parms are identical to those in HTTP_url_get())                                               000000    1084000
   832+ *                                                                                                       000000    1084100
   833+ * peStartProc should point to a procedure with a procedure                                              000000    1084200
   834+ * interface that's compatable with the following:                                                       000000    1084300
   835+ *                                                                                                       000000    1084400
   836+ *  D StartProc       PR                                                                                 000000    1084500
   837+ *  D   userdata                      *   value                                                        000000    1084600
   838+ *  D   depth                      10I 0 value                                                         000000    1084700
   839+ *  D   name                     1024A   varying const                                                000000    1084800
   840+ *  D   path                    24576A   varying const                                                000000    1084900
   841+ *  D   attrs                         *   dim(32767)                                                   000000    1085000
   842+ *  D                                     const options(*varsize)                                      000000    1085100
   843+ *                                                                                                       000000    1085200
   844+ * peEndProc should point to a procedure with a procedure                                                000000    1085300
   845+ * interface that's compatable with the following:                                                       000000    1085400
   846+ *                                                                                                       000000    1085500
   847+ *  D EndProc         PR                                                                                 000000    1085600
   848+ *  D   userdata                      *   value                                                        000000    1085700
   849+ *  D   depth                      10I 0 value                                                         000000    1085800
   850+ *  D   name                     1024A   varying const                                                000000    1085900
   851+ *  D   path                    24576A   varying const                                                000000    1086000
   852+ *  D   value                   32767A   varying const                                                000000    1086100
   853+ *  D   attrs                         *   dim(32767)                                                   000000    1086200
   854+ *  D                                     const options(*varsize)                                      000000    1086300
   855+ *                                                                                                       000000    1086400
   856+ *  Returns 1 if successful, -1 upon error, 0 if timeout                                                000000    1086500
   857+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1086600
   858+D http_get_xml...                                                                                       000000    1086700
   859+D                 PR            10I 0 EXTPROC('HTTP_URL_GET_XML')                                       000000    1086800
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   860+D  peURL                    32767A   varying const options(*varsize)                                      000000    1086900
   861+D  peStartProc                   *   value procptr                                                         000000    1087000
   862+D  peEndProc                     *   value procptr                                                         000000    1087100
   863+D  peUsrDta                      *   value                                                                 000000    1087200
   864+D  peTimeout                  10I 0 value options(*nopass)                                                000000    1087300
   865+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                        091030    1087400
          LINES EXCLUDED: 4
   866+ /else                                                                                                    090730    1087900
   867+D  peUserAgent              16384A   varying const                                                        091030    1088000
   868+D                                    options(*nopass:*omit)                                               091030    1088100
   869+D  peModTime                     Z   const options(*nopass:*omit)                                         091030    1088200
   870+D  peContentType            16384A   varying const                                                        091030    1088300
   871+D                                    options(*nopass:*omit)                                               091030    1088400
   872+D  peSOAPAction             16384A   varying const                                                        090730    1088500
   873+D                                    options(*nopass:*omit)                                               090730    1088600
   874+ /endif                                                                                                   090730    1088700
   875+D http_url_get_xml...                                                                                     000000    1088800
   876+D                 PR            10I 0                                                                     000000    1088900
   877+D  peURL                    32767A   varying const options(*varsize)                                      000000    1089000
   878+D  peStartProc                   *   value procptr                                                         000000    1089100
   879+D  peEndProc                     *   value procptr                                                         000000    1089200
   880+D  peUsrDta                      *   value                                                                 000000    1089300
   881+D  peTimeout                  10I 0 value options(*nopass)                                                000000    1089400
   882+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                        091030    1089500
          LINES EXCLUDED: 4
   883+ /else                                                                                                    090730    1090000
   884+D  peUserAgent              16384A   varying const                                                        091030    1090100
   885+D                                    options(*nopass:*omit)                                               091030    1090200
   886+D  peModTime                     Z   const options(*nopass:*omit)                                         091030    1090300
   887+D  peContentType            16384A   varying const                                                        091030    1090400
   888+D                                    options(*nopass:*omit)                                               091030    1090500
   889+D  peSOAPAction             16384A   varying const                                                        090730    1090600
   890+D                                    options(*nopass:*omit)                                               090730    1090700
   891+ /endif                                                                                                   090730    1090800
   892+                                                                                                          000000    1090900
   893+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1091000
   894+ *  http_get_xmltf(): Request URL from server. Receive response                                           000000    1091100
   895+ *        to temporary file, then parse it.                                                               000000    1091200
   896+ *                                                                                                       000000    1091300
   897+ *       peURL = (input) URL to perform GET request to                                                   000000    1091400
   898+ * peStartProc = (input) call-back procedure to call at the start                                        000000    1091500
   899+ *                       of each XML element received.                                                   000000    1091600
   900+ *   peEndProc = (input) call-back procedure to call at the end                                          000000    1091700
   901+ *                       of each XML element received.                                                   000000    1091800
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   902+ *    peUsrDta = (input) user-defined data that will be passed to the                                    000000    1091900
   903+ *                       call-back routine                                                               000000    1092000
   904+ *                                                                                                       000000    1092100
   905+ * (other parms are identical to those in HTTP_url_get())                                              000000    1092200
   906+ *                                                                                                       000000    1092300
   907+ *  Returns 1 if successful, -1 upon error, 0 if timeout                                                000000    1092400
   908+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1092500
   909+D http_get_xmltf...                                                                                     000000    1092600
   910+D                 PR            10I 0                                                                 000000    1092700
   911+D  peURL                    32767A   varying const options(*varsize)                                   000000    1092800
   912+D  peStartProc                   *   value procptr                                                     000000    1092900
   913+D  peEndProc                     *   value procptr                                                     000000    1093000
   914+D  peUsrDta                      *   value                                                             000000    1093100
   915+D  peTimeout                10I 0 value options(*nopass)                                               000000    1093200
   916+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                      091030    1093300
          LINES EXCLUDED: 4
   917+ /else                                                                                                  090730    1093800
   918+D  peUserAgent              16384A   varying const                                                     091030    1093900
   919+D                                    options(*nopass:*omit)                                            091030    1094000
   920+D  peModTime                     Z   const options(*nopass:*omit)                                      091030    1094100
   921+D  peContentType            16384A   varying const                                                     091030    1094200
   922+D                                    options(*nopass:*omit)                                            091030    1094300
   923+D  peSOAPAction             16384A   varying const                                                     090730    1094400
   924+D                                    options(*nopass:*omit)                                            090730    1094500
   925+ /endif                                                                                                 090730    1094600
   926+                                                                                                        000000    1094700
   927+                                                                                                        000000    1094800
   928+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1094900
   929+ * http_post_xml();                                                                                    000000    1095000
   930+ * http_url_post_xml():  Send a POST request to an HTTP server and                                      000000    1095100
   931+ *     receive/parse an XML response.                                                                   000000    1095200
   932+ *                                                                                                      000000    1095300
   933+ *          peURL = (input) URL to perform GET request to                                              000000    1095400
   934+ *     pePostData = (input) data to POST to the web server                                             000000    1095500
   935+ *  pePostDataLen = (input) length of pePostData                                                       000000    1095600
   936+ * peStartProc = (input) call-back procedure to call at the start                                      000000    1095700
   937+ *                       of each XML element received.                                                 000000    1095800
   938+ *   peEndProc = (input) call-back procedure to call at the end                                        000000    1095900
   939+ *                       of each XML element received.                                                 000000    1096000
   940+ *       peUsrDta = (input) user-defined data that will be passed                                      000000    1096100
   941+ *                          to the call-back routine                                                   000000    1096200
   942+ *                                                                                                     000000    1096300
   943+ * (other parms are identical to those in HTTP_url_post())                                            000000    1096400
   944+ *                                                                                                     000000    1096500
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   945+ * peStartProc should point to a procedure with a procedure                                          000000    1096600
   946+ * interface that's compatable with the following:                                                  000000    1096700
   947+ *                                                                                                  000000    1096800
   948+ *  D StartProc       PR                                                                            000000    1096900
   949+ *  D   userdata                      *   value                                                     000000    1097000
   950+ *  D   depth                      10I 0 value                                                     000000    1097100
   951+ *  D   name                     1024A   varying const                                            000000    1097200
   952+ *  D   path                    24576A   varying const                                            000000    1097300
   953+ *  D   attrs                         *   dim(32767)                                              000000    1097400
   954+ *  D                                     const options(*varsize)                                 000000    1097500
   955+ *                                                                                                  000000    1097600
   956+ * peEndProc should point to a procedure with a procedure                                          000000    1097700
   957+ * interface that's compatable with the following:                                                  000000    1097800
   958+ *                                                                                                  000000    1097900
   959+ *  D EndProc         PR                                                                            000000    1098000
   960+ *  D   userdata                      *   value                                                     000000    1098100
   961+ *  D   depth                      10I 0 value                                                     000000    1098200
   962+ *  D   name                     1024A   varying const                                            000000    1098300
   963+ *  D   path                    24576A   varying const                                            000000    1098400
   964+ *  D   value                   32767A   varying const                                            000000    1098500
   965+ *  D   attrs                         *   dim(32767)                                              000000    1098600
   966+ *  D                                     const options(*varsize)                                 000000    1098700
   967+ *                                                                                                  000000    1098800
   968+ *  Returns 1 if successful, -1 upon error, 0 if timeout                                           000000    1098900
   969+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                          000000    1099000
   970+D http_post_xml...                                                                                 000000    1099100
   971+D                 PR            10I 0 EXTPROC('HTTP_URL_POST_XML')                               000000    1099200
   972+D  peURL                     32767A   varying const options(*varsize)                      1     070724    1099300
   973+D  pePostData                    *   value                                                 2     070724    1099400
   974+D  pePostDataLen              10I 0 value                                                 3     070724    1099500
   975+D  peStartProc                   *   value procptr                                         4     070724    1099600
   976+D  peEndProc                     *   value procptr                                         5     070724    1099700
   977+D  peUsrDta                      *   value                                                 6     070724    1099800
   978+D  peTimeout                  10I 0 value options(*nopass)                                7     070724    1099900
   979+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                 091030    1100000
          LINES EXCLUDED: 3
   980+ /else                                                                                             090730    1100400
   981+D  peUserAgent               16384A   varying const                                         8     091030    1100500
   982+D                                     options(*nopass:*omit)                                      091030    1100600
   983+D  peContentType             16384A   varying const                                         9     091030    1100700
   984+D                                     options(*nopass:*omit)                                      091030    1100800
   985+D  peSOAPAction              16384A   varying const                                               090730    1100900
   986+D                                     options(*nopass:*omit)                                      090730    1101000
   987+ /endif                                                                                            090730    1101100
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
   988+D http_url_post_xml...                                                                                    000000    1101200
   989+D                 PR            10I 0                                                                   000000    1101300
   990+D  peURL                    32767A   varying const options(*varsize)                                     000000    1101400
   991+D  pePostData                    *   value                                                               000000    1101500
   992+D  pePostDataLen               10I 0 value                                                               000000    1101600
   993+D  peStartProc                   *   value procptr                                                       000000    1101700
   994+D  peEndProc                     *   value procptr                                                       000000    1101800
   995+D  peUsrDta                      *   value                                                               000000    1101900
   996+D  peTimeout                   10I 0 value options(*nopass)                                              000000    1102000
   997+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                       091030    1102100
          LINES EXCLUDED: 3
   998+ /else                                                                                                   090730    1102500
   999+D  peUserAgent              16384A   varying const                                                       091030    1102600
  1000+D                                    options(*nopass:*omit)                                              091030    1102700
  1001+D  peContentType            16384A   varying const                                                       091030    1102800
  1002+D                                    options(*nopass:*omit)                                              091030    1102900
  1003+D  peSOAPAction             16384A   varying const                                                       090730    1103000
  1004+D                                    options(*nopass:*omit)                                              090730    1103100
  1005+ /endif                                                                                                 090730    1103200
  1006+                                                                                                        000000    1103300
  1007+                                                                                                        000000    1103400
  1008+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1103500
  1009+ *  http_post_xmltf(): Post data from memory. Receive                                                   000000    1103600
  1010+ *        response to temporary file, then parse it.                                                    000000    1103700
  1011+ *                                                                                                     000000    1103800
  1012+ *          peURL = (input) URL to perform GET request to                                              000000    1103900
  1013+ *     pePostData = (input) data to POST to the web server                                             000000    1104000
  1014+ *  pePostDataLen = (input) length of pePostData                                                       000000    1104100
  1015+ * peStartProc = (input) call-back procedure to call at the start                                      000000    1104200
  1016+ *                       of each XML element received.                                                 000000    1104300
  1017+ *   peEndProc = (input) call-back procedure to call at the end                                        000000    1104400
  1018+ *                       of each XML element received.                                                 000000    1104500
  1019+ *       peUsrDta = (input) user-defined data that will be passed                                      000000    1104600
  1020+ *                          to the call-back routine                                                   000000    1104700
  1021+ *                                                                                                     000000    1104800
  1022+ * (other parms are identical to those in HTTP_url_post())                                            000000    1104900
  1023+ *                                                                                                     000000    1105000
  1024+ *  Returns 1 if successful, -1 upon error, 0 if timeout                                              000000    1105100
  1025+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1105200
  1026+D http_post_xmltf...                                                                                    000000    1105300
  1027+D                 PR            10I 0                                                                   000000    1105400
  1028+D  peURL                    32767A   varying const options(*varsize)                                     000000    1105500
  1029+D  pePostData                   *   value                                                               000000    1105600
  1030+D  pePostDataLen              10I 0 value                                                               000000    1105700
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1031+D  peStartProc                    *   value procptr                                                        000000    1105800
  1032+D  peEndProc                      *   value procptr                                                        000000    1105900
  1033+D  peUsrDta                       *   value                                                                000000    1106000
  1034+D  peTimeout                    10I 0 value options(*nopass)                                               000000    1106100
  1035+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                         091030    1106200
          LINES EXCLUDED: 3
  1036+ /else                                                                                                     090730    1106600
  1037+D  peUserAgent              16384A   varying const                                                        091030    1106700
  1038+D                                    options(*nopass:*omit)                                               091030    1106800
  1039+D  peContentType            16384A   varying const                                                        091030    1106900
  1040+D                                    options(*nopass:*omit)                                               091030    1107000
  1041+D  peSOAPAction             16384A   varying const                                                        090730    1107100
  1042+D                                    options(*nopass:*omit)                                               090730    1107200
  1043+ /endif                                                                                                    090730    1107300
  1044+                                                                                                           000000    1107400
  1045+                                                                                                           000000    1107500
  1046+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1107600
  1047+ *  http_post_stmf_xml();                                                                                 000000    1107700
  1048+ *  http_url_post_stmf_xml(): Post data to CGI script from stream file                                     000000    1107800
  1049+ *        and receive/parse an XML response                                                              000000    1107900
  1050+ *                                                                                                       000000    1108000
  1051+ *       peURL = (input) URL to post to                                                                  000000    1108100
  1052+ *  pePostFile = (input) File of stream file (in IFS) to post                                            000000    1108200
  1053+ * peStartProc = (input) call-back procedure to call at the start                                        000000    1108300
  1054+ *                       of each XML element received.                                                   000000    1108400
  1055+ *   peEndProc = (input) call-back procedure to call at the end                                          000000    1108500
  1056+ *                       of each XML element received.                                                   000000    1108600
  1057+ *    peUsrDta = (input) user-defined data that will be passed                                           000000    1108700
  1058+ *                          to the call-back routine                                                     000000    1108800
  1059+ *  peTimeout  = (optional) give up if no data is received for                                           000000    1108900
  1060+ *                       this many seconds.                                                              000000    1109000
  1061+ * peUserAgent = (optional) User-Agent string passed to the                                             000000    1109100
  1062+ *            server.  Pass the named constant HTTP_USERAGENT                                            000000    1109200
  1063+ *            if you want to get the default value.                                                      000000    1109300
  1064+ * peContentType = (optional) content type to supply (mainly                                            000000    1109400
  1065+ *                       useful when talking to CGI scripts)                                             000000    1109500
  1066+ *  peSOAPAction = (optional) string used to specify the action                                          080903    1109600
  1067+ *          taken by some SOAP applications.                                                             080903    1109700
  1068+ *          - pass *blanks to send an empty SoapAction.                                                  080903    1109800
  1069+ *          - pass *omit (or don't pass the parm at all) if                                              080903    1109900
  1070+ *             you don't want a SoapAction header to be sent.                                            080903    1110000
  1071+ *                                                                                                       000000    1110100
  1072+ *  Returns  -1 upon failure, 0 upon timeout,                                                            000000    1110200
  1073+ *            1 for success, or an HTTP response code                                                    000000    1110300
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1074+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1110400
  1075+D http_post_stmf_xml...                                                                                   000000    1110500
  1076+D                 PR            10I 0 extproc('HTTP_URL_POST_STMF_XML')                                   000000    1110600
  1077+D  peURL                    32767A   varying const options(*varsize)                                     000000    1110700
  1078+D  pePostFile               32767A   varying const options(*varsize)                                     000000    1110800
  1079+D  peStartProc                   *   value procptr                                                       000000    1110900
  1080+D  peEndProc                     *   value procptr                                                       000000    1111000
  1081+D  peUsrDta                      *   value                                                               000000    1111100
  1082+D  peTimeout                  10I 0 value options(*nopass)                                               000000    1111200
  1083+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                        091030    1111300
          LINES EXCLUDED: 3
  1084+ /else                                                                                                    090730    1111700
  1085+D  peUserAgent              16384A   varying const                                                       091030    1111800
  1086+D                                    options(*nopass:*omit)                                              091030    1111900
  1087+D  peContentType            16384A   varying const                                                       091030    1112000
  1088+D                                    options(*nopass:*omit)                                              091030    1112100
  1089+D  peSOAPAction             16384A   varying const                                                       090730    1112200
  1090+D                                    options(*nopass:*omit)                                              090730    1112300
  1091+ /endif                                                                                                   090730    1112400
  1092+D http_url_post_stmf_xml...                                                                               000000    1112500
  1093+D                 PR            10I 0                                                                     000000    1112600
  1094+D  peURL                    32767A   varying const options(*varsize)                                     000000    1112700
  1095+D  pePostFile               32767A   varying const options(*varsize)                                     000000    1112800
  1096+D  peStartProc                   *   value procptr                                                       000000    1112900
  1097+D  peEndProc                     *   value procptr                                                       000000    1113000
  1098+D  peUsrDta                      *   value                                                               000000    1113100
  1099+D  peTimeout                  10I 0 value options(*nopass)                                               000000    1113200
  1100+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                        091030    1113300
          LINES EXCLUDED: 3
  1101+ /else                                                                                                    090730    1113700
  1102+D  peUserAgent              16384A   varying const                                                       091030    1113800
  1103+D                                    options(*nopass:*omit)                                              091030    1113900
  1104+D  peContentType            16384A   varying const                                                       091030    1114000
  1105+D                                    options(*nopass:*omit)                                              091030    1114100
  1106+D  peSOAPAction             16384A   varying const                                                       090730    1114200
  1107+D                                    options(*nopass:*omit)                                              090730    1114300
  1108+ /endif                                                                                                   090730    1114400
  1109+                                                                                                          000000    1114500
  1110+                                                                                                          000000    1114600
  1111+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1114700
  1112+ *  http_post_stmf_xmltf(): Post data from stream file.  Receive                                          000000    1114800
  1113+ *        response to temporary file, then parse it.                                                      000000    1114900
  1114+ *                                                                                                       000000    1115000
  1115+ *       peURL = (input) URL to post to                                                                  000000    1115100
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1116+ *  pePostFile = (input) File of stream file (in IFS) to post                                              000000    1115200
  1117+ * peStartProc = (input) call-back procedure to call at the start                                         000000    1115300
  1118+ *                       of each XML element received.                                                    000000    1115400
  1119+ *   peEndProc = (input) call-back procedure to call at the end                                          000000    1115500
  1120+ *                       of each XML element received.                                                    000000    1115600
  1121+ *    peUsrDta = (input) user-defined data that will be passed                                          000000    1115700
  1122+ *                         to the call-back routine                                                       000000    1115800
  1123+ *  peTimeout  = (optional) give up if no data is received for                                          000000    1115900
  1124+ *                       this many seconds.                                                               000000    1116000
  1125+ * peContentType = (optional) content type to supply (mainly                                            000000    1116100
  1126+ *                       useful when talking to CGI scripts)                                              000000    1116200
  1127+ *  peSOAPAction = (optional) string used to specify the action                                         080903    1116300
  1128+ *          taken by some SOAP applications.                                                             080903    1116400
  1129+ *          - pass *blanks to send an empty SoapAction.                                                  080903    1116500
  1130+ *          - pass *omit (or don't pass the parm at all) if                                              080903    1116600
  1131+ *             you don't want a SoapAction header to be sent.                                            080903    1116700
  1132+ *                                                                                                       000000    1116800
  1133+ *  Returns  -1 upon failure, 0 upon timeout,                                                           000000    1116900
  1134+ *            1 for success, or an HTTP response code                                                    000000    1117000
  1135+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                000000    1117100
  1136+D http_post_stmf_xmltf...                                                                               000000    1117200
  1137+D                 PR            10I 0                                                                   000000    1117300
  1138+D  peURL                    32767A   varying const options(*varsize)                                    000000    1117400
  1139+D  pePostFile               32767A   varying const options(*varsize)                                    000000    1117500
  1140+D  peStartProc                   *   value procptr                                                      000000    1117600
  1141+D  peEndProc                     *   value procptr                                                      000000    1117700
  1142+D  peUsrDta                      *   value                                                              000000    1117800
  1143+D  peTimeout                  10I 0 value options(*nopass)                                              000000    1117900
  1144+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                      091030    1118000
          LINES EXCLUDED: 3
  1145+ /else                                                                                                  090730    1118400
  1146+D  peUserAgent              16384A   varying const                                                      091030    1118500
  1147+D                                    options(*nopass:*omit)                                             091030    1118600
  1148+D  peContentType            16384A   varying const                                                      091030    1118700
  1149+D                                    options(*nopass:*omit)                                             091030    1118800
  1150+D  peSOAPAction             16384A   varying const                                                      090730    1118900
  1151+D                                    options(*nopass:*omit)                                             090730    1119000
  1152+ /endif                                                                                                 090730    1119100
  1153+                                                                                                        000000    1119200
  1154+                                                                                                        000000    1119300
  1155+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                000000    1119400
  1156+ *  http_persist_open(): Open a persistent HTTP session                                                000000    1119500
  1157+ *                                                                                                      000000    1119600
  1158+ *       peURL = url to connect to                                                                      000000    1119700
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1159+ *  peTimeout  = (optional) give up if no data is received for                                          000000    1119800
  1160+ *           this many seconds.                                                                        000000    1119900
  1161+ *                                                                                                     000000    1120000
  1162+ *  Returns *NULL upon failure, or                                                                     000000    1120100
  1163+ *           pointer to HTTP communication session                                                     000000    1120200
  1164+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1120300
  1165+D http_persist_open...                                                                                000000    1120400
  1166+D                 PR              *                                                                   000000    1120500
  1167+D  peURL                     32767A   varying const options(*varsize)                                000000    1120600
  1168+D  peTimeout                    10I 0 value options(*nopass)                                         000000    1120700
  1169+                                                                                                      000000    1120800
  1170+                                                                                                      000000    1120900
  1171+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1121000
  1172+ *  http_persist_get(): Get a file using a persistent HTTP session                                    000000    1121100
  1173+ *                                                                                                    000000    1121200
  1174+ *         peComm = (input) pointer to persistent HTTP comm session                                   000000    1121300
  1175+ *          peURL = (input) URL to get from persistent HTTP                                           000000    1121400
  1176+ *           peFD = (input) FD to pass back to peProc                                                 000000    1121500
  1177+ *         peProc = (input) procedure to call each time data is                                       000000    1121600
  1178+ *                          received.                                                                 000000    1121700
  1179+ *      peTimeout = (input/optional) time-out when no data is received                                000000    1121800
  1180+ *                          for this many seconds.                                                    000000    1121900
  1181+ *    peUserAgent = (optional) User-Agent string passed to the                                        000000    1122000
  1182+ *                          server.  Pass the named constant called                                   000000    1122100
  1183+ *                          HTTP_USERAGENT if you want to get the                                     000000    1122200
  1184+ *                          default value.                                                            000000    1122300
  1185+ *      peModTime = (input/optional) only get file if it was changed                                  000000    1122400
  1186+ *                          since this timestamp.                                                     000000    1122500
  1187+ *  peContentType = (input/optional) content type to supply (mainly                                   000000    1122600
  1188+ *                          useful when talking to CGI scripts)                                       000000    1122700
  1189+ *  peSOAPAction = (optional) string used to specify the action                                       080903    1122800
  1190+ *                          taken by some SOAP applications.                                          080903    1122900
  1191+ *                - pass *blanks to send an empty SoapAction.                                         080903    1123000
  1192+ *                - pass *omit (or don't pass the parm at all) if                                     080903    1123100
  1193+ *                    you don't want a SoapAction header to be sent.                                  080903    1123200
  1194+ *                                                                                                    000000    1123300
  1195+ *  Returns  1 if successful,                                                                         000000    1123400
  1196+ *           0 if timed out                                                                           000000    1123500
  1197+ *          -1 if an internal error occurs                                                            000000    1123600
  1198+ *          or an HTTP response code if an error comes from the server                                000000    1123700
  1199+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1123800
  1200+D http_persist_get...                                                                                 000000    1123900
  1201+D                 PR            10I 0                                                               000000    1124000
  1202+D  peComm                         *   value                                                        000000    1124100
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1203+D  peURL                    32767A   varying const options(*varsize)                                      000000    1124200
  1204+D  peFD                        10I 0 value                                                                 000000    1124300
  1205+D  peProc                       *    value procptr                                                        000000    1124400
  1206+D  peTimeout                   10I 0 value options(*nopass)                                              000000    1124500
  1207+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                       091030    1124600
          LINES EXCLUDED: 4
  1208+ /else                                                                                                   090730    1125100
  1209+D  peUserAgent              16384A   varying const                                                       091030    1125200
  1210+D                                    options(*nopass:*omit)                                              091030    1125300
  1211+D  peModTime                     Z   const options(*nopass:*omit)                                        091030    1125400
  1212+D  peContentType            16384A   varying const                                                       091030    1125500
  1213+D                                    options(*nopass:*omit)                                              091030    1125600
  1214+D  peSOAPAction             16384A   varying const                                                       090730    1125700
  1215+D                                    options(*nopass:*omit)                                              090730    1125800
  1216+ /endif                                                                                                  090730    1125900
  1217+                                                                                                         000000    1126000
  1218+                                                                                                         000000    1126100
  1219+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1126200
  1220+ *  http_persist_post(): Post data to CGI script and get document                                        000000    1126300
  1221+ *                       using a persistent connection                                                   000000    1126400
  1222+ *                                                                                                       000000    1126500
  1223+ *         peComm = (input) pointer to persistent HTTP comm session                                      000000    1126600
  1224+ *          peURL = (input) URL to post to with persistent HTTP                                          000000    1126700
  1225+ * --------                                                                                             000000    1126800
  1226+ *       pePostFD = (input) Opaque integer to pass to pePostProc                                         000000    1126900
  1227+ *     pePostProc = (input) Pointer to call-back procedure for                                           000000    1127000
  1228+ *                          posting data to server.  If you pass                                         000000    1127100
  1229+ *                          *NULL for this, you should use pePostData                                    000000    1127200
  1230+ *                          instead.                                                                     000000    1127300
  1231+ * -- or --                                                                                            000000    1127400
  1232+ *     pePostData = (input) Pointer to data to post.  If you pass                                        000000    1127500
  1233+ *                          *NULL for this, you should use pePostProc                                    000000    1127600
  1234+ *                          instead.                                                                     000000    1127700
  1235+ * --------                                                                                             000000    1127800
  1236+ *  pePostDataLen = (input) Total length, in bytes, of post data.                                        000000    1127900
  1237+ *       peSaveFD = (input) Opaque integer passed to peSaveProc                                          000000    1128000
  1238+ *     peSaveProc = (input) Pointer to call-back procedure that is                                       000000    1128100
  1239+ *                          called when data is received from HTTP                                       000000    1128200
  1240+ *                          server.                                                                      000000    1128300
  1241+ *      peTimeout = (input/optional) time-out when no data is received                                   000000    1128400
  1242+ *                          for this many seconds.                                                       000000    1128500
  1243+ *    peUserAgent = (optional) User-Agent string passed to the                                           000000    1128600
  1244+ *                          server.  Pass the named constant called                                      000000    1128700
  1245+ *                          HTTP_USERAGENT if you want to get the                                        000000    1128800
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1246+ *                          default value.                                                                  000000    1128900
  1247+ *  peContentType = (input/optional) content type to supply (mainly                                        000000    1129000
  1248+ *                          useful when talking to CGI scripts)                                             000000    1129100
  1249+ *  peSOAPAction = (optional) string used to specify the action                                            080903    1129200
  1250+ *                          taken by some SOAP applications.                                                080903    1129300
  1251+ *                - pass *blanks to send an empty SoapAction.                                               080903    1129400
  1252+ *                - pass *omit (or don't pass the parm at all) if                                           080903    1129500
  1253+ *                    you don't want a SoapAction header to be sent.                                        080903    1129600
  1254+ *                                                                                                          000000    1129700
  1255+ *  Returns  1 if successful,                                                                              000000    1129800
  1256+ *           0 if timed out                                                                                 000000    1129900
  1257+ *          -1 if an internal error occurs                                                                  000000    1130000
  1258+ *          or an HTTP response code if an error comes from the server                                      000000    1130100
  1259+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1130200
  1260+D http_persist_post...                                                                                     000000    1130300
  1261+D                 PR            10I 0                                                                    000000    1130400
  1262+D  peComm                         *   value                                                             000000    1130500
  1263+D  peURL                       32767A   varying const options(*varsize)                                  000000    1130600
  1264+D  pePostFD                       10I 0 value                                                           000000    1130700
  1265+D  pePostProc                     *   value procptr                                                     000000    1130800
  1266+D  pePostData                     *   value                                                             000000    1130900
  1267+D  pePostDataLen                  10I 0 value                                                           000000    1131000
  1268+D  peSaveFD                       10I 0 value                                                           000000    1131100
  1269+D  peSaveProc                     *   value procptr                                                     000000    1131200
  1270+D  peTimeout                      10I 0 value options(*nopass)                                          000000    1131300
  1271+ /if defined(HTTP_ORIG_SHORTFIELD)                                                                       091030    1131400
          LINES EXCLUDED: 3
  1272+ /else                                                                                                   090730    1131800
  1273+D  peUserAgent                 16384A   varying const                                                   091030    1131900
  1274+D                                       options(*nopass:*omit)                                          091030    1132000
  1275+D  peContentType               16384A   varying const                                                   091030    1132100
  1276+D                                       options(*nopass:*omit)                                          091030    1132200
  1277+D  peSOAPAction                16384A   varying const                                                   090730    1132300
  1278+D                                       options(*nopass:*omit)                                          090730    1132400
  1279+ /endif                                                                                                  090730    1132500
  1280+                                                                                                         000000    1132600
  1281+                                                                                                         000000    1132700
  1282+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1132800
  1283+ *  http_persist_close(): End a persistent HTTP session                                                  000000    1132900
  1284+ *                                                                                                       000000    1133000
  1285+ *     peComm = (input) pointer to persistent HTTP comm session                                          000000    1133100
  1286+ *                                                                                                       000000    1133200
  1287+ *  returns 0 if successful, -1 otherwise                                                                000000    1133300
  1288+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1133400
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1289+D http_persist_close...                                                                                    000000    1133500
  1290+D                 PR           10I 0                                                                       000000    1133600
  1291+D  peComm                        *   value                                                               000000    1133700
  1292+                                                                                                          000000    1133800
  1293+                                                                                                          000000    1133900
  1294+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1134000
  1295+ * http_mfd_encoder_open(): Create a multipart/form-data encoder                                          000000    1134100
  1296+ *                                                                                                        000000    1134200
  1297+ * A multipart/form-data encoder will encode the variables                                               000000    1134300
  1298+ * and or stream files that you pass to it and store the results                                         000000    1134400
  1299+ * in a stream file.  You can later POST those results with the                                          000000    1134500
  1300+ * http_url_post_stmf() API.                                                                             000000    1134600
  1301+ *                                                                                                        000000    1134700
  1302+ *   peStmFile = (input) pathname to stream file to store                                                 000000    1134800
  1303+ *               encoded results.                                                                         000000    1134900
  1304+ *                                                                                                        000000    1135000
  1305+ *   returns an (opaque) pointer to the new encoder                                                       000000    1135100
  1306+ *           or *NULL upon error.                                                                         000000    1135200
  1307+ *                                                                                                        000000    1135300
  1308+ * WARNING: To free the memory used by this routine and close                                            000000    1135400
  1309+ *          the stream file, you MUST call http_mfd_encoder_close()                                       000000    1135500
  1310+ *          after the data is sent.                                                                       000000    1135600
  1311+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1135700
  1312+D http_mfd_encoder_open...                                                                               000000    1135800
  1313+D                 PR             *                                                                       000000    1135900
  1314+D  peStmFile                     *   value options(*string)                                              100106    1136000
  1315+D  peContType                   64A                                                                       000000    1136100
  1316+                                                                                                          000000    1136200
  1317+                                                                                                          000000    1136300
  1318+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1136400
  1319+ * http_mfd_encoder_addvar():  Add a variable to what's stored                                           000000    1136500
  1320+ *          a multipart/form-data encoder.                                                               000000    1136600
  1321+ *                                                                                                        000000    1136700
  1322+ *    peEncoder = pointer to encoder created by the                                                       000000    1136800
  1323+ *                  http_mfd_encoder_open() routine                                                       000000    1136900
  1324+ *   peVariable = variable name to add                                                                    000000    1137000
  1325+ *       peData = pointer to data to store in variable                                                    000000    1137100
  1326+ *   peDataSize = size of data to store in variable                                                       000000    1137200
  1327+ *                                                                                                        000000    1137300
  1328+ * Returns *ON if successful, *OFF otherwise.                                                            000000    1137400
  1329+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                   000000    1137500
  1330+D http_mfd_encoder_addvar...                                                                             000000    1137600
  1331+D                 PR             1N                                                                      000000    1137700
  1332+D   peEncoder                    *   value                                                               000000    1137800
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1333+D    peVariable                50A   varying value                                                        000000    1137900
  1334+D    peData                     *    value                                                                000000    1138000
  1335+D    peDataSize                10I 0 value                                                                000000    1138100
  1336+                                                                                                          000000    1138200
  1337+                                                                                                          000000    1138300
  1338+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1138400
  1339+ * http_mfd_encoder_addvar_s():  Simplified (but limited)                                                 000000    1138500
  1340+ *       interface to http_mfd_encoder_addvar().                                                          000000    1138600
  1341+ *                                                                                                        000000    1138700
  1342+ *    peEncoder = (input) HTTP_mfd_encoder object                                                         000000    1138800
  1343+ *   peVariable = (input) variable name to set                                                            000000    1138900
  1344+ *      peValue = (input) value to set variable to                                                        000000    1139000
  1345+ *                                                                                                        000000    1139100
  1346+ * Returns *ON if successful, *OFF otherwise                                                             000000    1139200
  1347+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1139300
  1348+D http_mfd_encoder_addvar_s...                                                                           000000    1139400
  1349+D                 PR             1N                                                                     000000    1139500
  1350+D    peEncoder                    *    value                                                             000000    1139600
  1351+D    peVariable                  50A   varying value                                                     000000    1139700
  1352+D    peValue                    256A   varying value                                                     000000    1139800
  1353+                                                                                                          000000    1139900
  1354+                                                                                                          000000    1140000
  1355+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1140100
  1356+ * http_mfd_encoder_addstmf(): Add a stream file to what's stored                                         000000    1140200
  1357+ *       in a multipart/form-data encoder.                                                                000000    1140300
  1358+ *                                                                                                        000000    1140400
  1359+ *    peEncoder = pointer to encoder created by the                                                       000000    1140500
  1360+ *                  http_mfd_encoder_open() routine                                                       000000    1140600
  1361+ *   peVariable = variable name to add                                                                    000000    1140700
  1362+ *   pePathName = Path name of stream file to add                                                         000000    1140800
  1363+ *   peContType = Content-type of stream file to add                                                      000000    1140900
  1364+ *                                                                                                        000000    1141000
  1365+ * Returns *ON if successful, *OFF otherwise.                                                            000000    1141100
  1366+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1141200
  1367+D http_mfd_encoder_addstmf...                                                                            000000    1141300
  1368+D                 PR             1N                                                                     000000    1141400
  1369+D    peEncoder                    *    value                                                             000000    1141500
  1370+D    peVariable                  50A   varying value                                                     000000    1141600
  1371+D    pePathName                   *    value options(*string)                                            100106    1141700
  1372+D    peContType                  64A   varying const                                                     000000    1141800
  1373+                                                                                                          000000    1141900
  1374+                                                                                                          000000    1142000
  1375+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  000000    1142100
  1376+ * http_mfd_encoder_close():  close an open multipart/form-data                                          000000    1142200
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1377+ *                           encoder.                                                                    000000    1142300
  1378+ *                                                                                                       000000    1142400
  1379+ *     peEncoder = (input) encoder to close                                                              000000    1142500
  1380+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1142600
  1381+D http_mfd_encoder_close...                                                                              000000    1142700
  1382+D                 PR                                                                                     000000    1142800
  1383+D  peEncoder                      *   value                                                             000000    1142900
  1384+                                                                                                         000000    1143000
  1385+                                                                                                         000000    1143100
  1386+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1143200
  1387+ * http_debug():  Turn debugging info *ON or *OFF                                                       000000    1143300
  1388+ *                                                                                                       000000    1143400
  1389+ *      peStatus = (input) status (either *ON or *OFF)                                                   000000    1143500
  1390+ *                                                                                                       000000    1143600
  1391+ *    peFilename = (input/optional) filename that debug info will be                                     000000    1143700
  1392+ *                   written to.  If not defined, the value from                                         000000    1143800
  1393+ *                   CONFIG_H is used.                                                                   000000    1143900
  1394+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1144000
  1395+D http_debug      PR                                                                                     000000    1144100
  1396+D   peStatus                    1N   const                                                             000000    1144200
  1397+D   peFilename                500A   varying const options(*nopass)                                    000000    1144300
  1398+                                                                                                         000000    1144400
  1399+                                                                                                         000000    1144500
  1400+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1144600
  1401+ * HTTP_SetCCSIDs():  Set the CCSIDs used for ASCII/EBCDIC                                              000000    1144700
  1402+ *                   translation                                                                         000000    1144800
  1403+ *                                                                                                       000000    1144900
  1404+ *     pePostRem = (input) Remote CCSID of POST data                                                     000000    1145000
  1405+ *     pePostLoc = (input) Local CCSID of POST data                                                      000000    1145100
  1406+ *     peProtRem = (input) Remote CCSID of Protocol data                                                 000000    1145200
  1407+ *     peProtLoc = (input) Local CCSID of Protocol data                                                  000000    1145300
  1408+ *                                                                                                       000000    1145400
  1409+ * Returns 0 if successful, -1 otherwise                                                               000000    1145500
  1410+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1145600
  1411+D HTTP_SetCCSIDs  PR            10I 0                                                                  000000    1145700
  1412+D   pePostRem                   10I 0 value                                                            000000    1145800
  1413+D   pePostLoc                   10I 0 value                                                            000000    1145900
  1414+D   peProtRem                   10I 0 value options(*nopass)                                           000000    1146000
  1415+D   peProtLoc                   10I 0 value options(*nopass)                                           000000    1146100
  1416+                                                                                                         000000    1146200
  1417+                                                                                                         000000    1146300
  1418+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 000000    1146400
  1419+ * HTTP_SetTables():  Set the translation tables used for                                              000000    1146500
  1420+ *                   ASCII/EBCDIC translation                                                            000000    1146600
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1421+ *                                                                                                      000000    1146700
  1422+ *     peASCII  = (input) Table for converting to ASCII                                                 000000    1146800
  1423+ *     peEBCDIC = (input) Table for converting to EBCDIC                                                000000    1146900
  1424+ *                                                                                                      000000    1147000
  1425+ * Returns 0 if successful, -1 otherwise                                                               000000    1147100
  1426+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1147200
  1427+D HTTP_SetTables  PR            10I 0                                                               000000    1147300
  1428+D   peASCII                     10A   const                                                         000000    1147400
  1429+D   peEBCDIC                    10A   const                                                         000000    1147500
  1430+                                                                                                      000000    1147600
  1431+                                                                                                      000000    1147700
  1432+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1147800
  1433+ * HTTP_SetFileCCSID(): Set the CCSID that downloaded stream                                          000000    1147900
  1434+ *                      files get tagged with                                                         000000    1148000
  1435+ *                                                                                                    000000    1148100
  1436+ *     peCCSID  = (input) New CCSID to assign                                                         000000    1148200
  1437+ *                                                                                                    000000    1148300
  1438+ * NOTE: HTTPAPI does not do *any* translation of downloaded                                          000000    1148400
  1439+ *       data. It only sets this number as part of the file's                                         000000    1148500
  1440+ *       attributes.  You can change it with the CHGATR CL                                            000000    1148600
  1441+ *       command.                                                                                     000000    1148700
  1442+ *                                                                                                    000000    1148800
  1443+ * NOTE: The IFS did not support CCSIDs in V4R5 and earlier.                                          000000    1148900
  1444+ *       On those releases, this API will be used to set the                                          000000    1149000
  1445+ *       codepage rather than the CCSID.                                                              000000    1149100
  1446+ *                                                                                                    000000    1149200
  1447+ * Returns 0 if successful, -1 otherwise                                                              000000    1149300
  1448+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1149400
  1449+D HTTP_SetfileCCSID...                                                                               000000    1149500
  1450+D                 PR                                                                                 000000    1149600
  1451+D   peCCSID                     10I 0 value                                                         000000    1149700
  1452+                                                                                                      000000    1149800
  1453+                                                                                                      000000    1149900
  1454+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1150000
  1455+ * HTTP_xlate():  Translate data from ASCII <--> EBCDIC                                              000000    1150100
  1456+ *                                                                                                    000000    1150200
  1457+ *       peSize = (input) Size of data to translate                                                   000000    1150300
  1458+ *       peData = (input) Data                                                                        000000    1150400
  1459+ *  peDirection = (input) can be set to the TO_ASCII or                                               000000    1150500
  1460+ *                         TO_EBCDIC constant.                                                        000000    1150600
  1461+ *                                                                                                    000000    1150700
  1462+ * Returns 0 if successful, -1 upon failure                                                           000000    1150800
  1463+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++000000    1150900
  1464+D HTTP_xlate      PR            10I 0                                                               000000    1151000
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1465+D   peSize                   10I 0 value                                                              000000    1151100
  1466+D   peData                 32766A   options(*varsize)                                                 000000    1151200
  1467+D   peDirection                1A   const                                                             000000    1151300
  1468+                                                                                                       000000    1151400
  1469+                                                                                                       000000    1151500
  1470+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                               000000    1151600
  1471+ * HTTP_xlatep(): Translate data from ASCII <--> EBCDIC                                               000000    1151700
  1472+ *                 (using a pointer instead of a variable)                                           000000    1151800
  1473+ *                                                                                                   000000    1151900
  1474+ *       peSize = (input) Size of data to translate                                                  000000    1152000
  1475+ *       peData = (input) Data                                                                       000000    1152100
  1476+ *  peDirection = (input) can be set to the TO_ASCII or                                              000000    1152200
  1477+ *                          TO_EBCDIC constant.                                                      000000    1152300
  1478+ *                                                                                                   000000    1152400
  1479+ * Returns 0 if successful, -1 upon failure                                                          000000    1152500
  1480+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                               000000    1152600
  1481+D HTTP_xlatep     PR            10I 0                                                                000000    1152700
  1482+D   peSize                      10I 0 value                                                          000000    1152800
  1483+D   peData                        *   value                                                         000000    1152900
  1484+D   peDirection                  1A   const                                                         000000    1153000
  1485+                                                                                                       000000    1153100
  1486+                                                                                                       000000    1153200
  1487+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                               000000    1153300
  1488+ * HTTP_xlatedyn: Translate data from ASCII <--> EBCDIC                                              000000    1153400
  1489+ *                 using a dynamically sized output buffer                                           000000    1153500
  1490+ *                                                                                                   000000    1153600
  1491+ *      peSize = (input) size of data to translate                                                   000000    1153700
  1492+ *      peData = (input) pointer to data to translate                                                000000    1153800
  1493+ * peDirection = (input) TO_ASCII or TO_EBCDIC                                                       000000    1153900
  1494+ *    peOutput = (output) address of newly allocated memory                                          000000    1154000
  1495+ *                                                                                                   000000    1154100
  1496+ * returns the length of the translated data or -1 upon failure                                      000000    1154200
  1497+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                               000000    1154300
  1498+D HTTP_xlatedyn   PR            10I 0                                                                000000    1154400
  1499+D   peSize                      10I 0 value                                                          000000    1154500
  1500+D   peData                        *   value                                                         000000    1154600
  1501+D   peDirection                  1A   const                                                         000000    1154700
  1502+D   peOutput                      *                                                                 000000    1154800
  1503+                                                                                                       000000    1154900
  1504+                                                                                                       000000    1155000
  1505+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1155100
  1506+ * http_set_100_timeout(): Set value for 100-continue timeouts.                                      000000    1155200
  1507+ *                                                                                                   000000    1155300
  1508+ * HTTP's POST/PUT operations have a feature to let you detect                                       090630    1155400
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1509+ * where your request URI is valid prior to uploading a document                                          090630    1155500
  1510+ * body (such as POST data or a file upload).                                                            090630    1155600
  1511+ *                                                                                                       090630    1155700
  1512+ * HTTPAPI can send "Expect: 100-continue" and the server should                                         090630    1155800
  1513+ * reply with status 100 to indicate that the upload should proceed                                     090630    1155900
  1514+ * or else provide an error message if the upload should not proceed.                                   090630    1156000
  1515+ *                                                                                                       090630    1156100
  1516+ * Despite being a part of the HTTP/1.1 protocol standard, many                                          090630    1156200
  1517+ * servers do not implement this properly.                                                              090630    1156300
  1518+ *                                                                                                       090630    1156400
  1519+ * Therefore:                                                                                           090630    1156500
  1520+ *    a) You may set the timeout to 0. HTTPAPI will not attempt                                          090630    1156600
  1521+ *         to use the 100-continue feature.                                                              090630    1156700
  1522+ *    b) You may set the timeout to a low value, so that HTTPAPI                                         090630    1156800
  1523+ *         will use the feature if possible, but will time                                               090630    1156900
  1524+ *         quickly if the feature isn't implemented                                                     090630    1157000
  1525+ *    c) You may set the timeout to a higher value if you want                                           090630    1157100
  1526+ *         to ensure that HTTPAPI always waits for it before                                            090630    1157200
  1527+ *         sending an upload.                                                                           090630    1157300
  1528+ *                                                                                                       090630    1157400
  1529+ * The timeout value is expressed in seconds, and may range                                             090630    1157500
  1530+ * from 0.001 (1 millisecond) to 9999999.999 (approx 116 days)                                          090630    1157600
  1531+ * or 0 = don't wait at all.                                                                           090630    1157700
  1532+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1157800
  1533+D http_set_100_timeout...                                                                               000000    1157900
  1534+D                 PR                                                                                    000000    1158000
  1535+D   peTimeout                     10P 3 value                                                           000000    1158100
  1536+                                                                                                        000000    1158200
  1537+                                                                                                        000000    1158300
  1538+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1158400
  1539+ * HTTP_xml_SetCCSIDs():  Set the CCSIDs used for ASCII/EBCDIC                                          000000    1158500
  1540+ *                      translation for XML documents                                                   000000    1158600
  1541+ *                                                                                                      000000    1158700
  1542+ *     peRemote = (input) remote CCSID                                                                  000000    1158800
  1543+ *     peLocal  = (input) local CCSID (can be 0 if you want                                             000000    1158900
  1544+ *                  to use the CCSID of the current job)                                                000000    1159000
  1545+ *                                                                                                      000000    1159100
  1546+ * Returns 0 if successful, -1 otherwise                                                               000000    1159200
  1547+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1159300
  1548+D HTTP_xml_SetCCSIDs...                                                                                 000000    1159400
  1549+D                 PR            10I 0                                                                 000000    1159500
  1550+D   peRemote                      10I 0 value                                                           000000    1159600
  1551+D   peLocal                       10I 0 value                                                           000000    1159700
  1552+                                                                                                        000000    1159800
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1553+                                                                                                          000000    1159900
  1554+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1160000
  1555+ *  http_parse_xml_stmf(): Parse XML data directly from a stream file                                      000000    1160100
  1556+ *                          (instead of downloading it from a server)                                     000000    1160200
  1557+ *                                                                                                        000000    1160300
  1558+ *      peFile = (input) Stream file (in IFS) to read data from                                           000000    1160400
  1559+ *     peCCSID = (input) CCSID of stream file,                                                            000000    1160500
  1560+ *                       or HTTP_XML_CALC to attempt to calculate it                                      000000    1160600
  1561+ *                          from the XML encoding                                                         000000    1160700
  1562+ *                       or HTTP_STMF_CALC to use the stream file's                                       000000    1160800
  1563+ *                          CCSID attribute.                                                              000000    1160900
  1564+ * peStartProc = (input) call-back procedure to call at the start                                         000000    1161000
  1565+ *                          of each XML element received.                                                 000000    1161100
  1566+ *   peEndProc = (input) call-back procedure to call at the end                                           000000    1161200
  1567+ *                          of each XML element received.                                                 000000    1161300
  1568+ *    peUsrDta = (input) user-defined data that will be passed                                            000000    1161400
  1569+ *                             to the call-back routine                                                   000000    1161500
  1570+ *                                                                                                        000000    1161600
  1571+ *  Returns  -1 upon failure, 0 if successful                                                             000000    1161700
  1572+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1161800
  1573+D http_parse_xml_stmf...                                                                                 000000    1161900
  1574+D                  PR            10I 0                                                                   000000    1162000
  1575+D  peFile                     32767A   varying const options(*varsize)                                   000000    1162100
  1576+D  peCCSID                       10I 0 value                                                             000000    1162200
  1577+D  peStartProc                     *   value procptr                                                     000000    1162300
  1578+D  peEndProc                       *   value procptr                                                     000000    1162400
  1579+D  peUsrDta                        *   value                                                             000000    1162500
  1580+                                                                                                         000000    1162600
  1581+D HTTP_XML_CALC   C                    -1                                                              000000    1162700
  1582+D HTTP_STMF_CALC  C                    -2                                                              000000    1162800
  1583+                                                                                                         000000    1162900
  1584+                                                                                                         000000    1163000
  1585+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1163100
  1586+ * http_header():  retrieve the value of an HTTP header                                                  000000    1163200
  1587+ *                                                                                                       000000    1163300
  1588+ *      name = (input) name of header to look for                                                        000000    1163400
  1589+ *       pos = (input/optional) position of header if there's                                            000000    1163500
  1590+ *                  more than one with the same name                                                     000000    1163600
  1591+ *                                                                                                       000000    1163700
  1592+ * returns the value of the HTTP header, or '' if not found                                             000000    1163800
  1593+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1163900
  1594+D http_header     PR         32500A   varying                                                           000000    1164000
  1595+D   name                       256A   varying const                                                     000000    1164100
  1596+D   pos                         10I 0 value options(*nopass)                                            000000    1164200
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1597+                                                                                                          000000    1164300
  1598+                                                                                                          000000    1164400
  1599+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1164500
  1600+ * http_use_cookies(): Turns on/off HTTPAPI's cookie parsing and                                           000000    1164600
  1601+ *                     caching routines.                                                                  000000    1164700
  1602+ *                                                                                                        000000    1164800
  1603+ *    peSetting = (input) *ON = HTTPAPI will read and send cookies                                        000000    1164900
  1604+ *                        *OFF = HTTPAPI will ignore cookies                                              000000    1165000
  1605+ *                               (has no affect on cookies supplied                                       000000    1165100
  1606+ *                                via an exit procedure)                                                  000000    1165200
  1607+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1165300
  1608+D http_use_cookies...                                                                                     000000    1165400
  1609+D                 PR                                                                                      000000    1165500
  1610+D   peSetting                    1N   const                                                             000000    1165600
  1611+                                                                                                          000000    1165700
  1612+                                                                                                          000000    1165800
  1613+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1165900
  1614+ * http_cookie_file():  Set the name of the file that HTTPAPI                                            000000    1166000
  1615+ *          will use to store cookies.                                                                    000000    1166100
  1616+ *                                                                                                        000000    1166200
  1617+ *    peFilename = (input) Filename (IFS path) to store cookie                                            000000    1166300
  1618+ *                  data into.                                                                            000000    1166400
  1619+ *     peSession = (input) include session cookies (temp cookies)                                         081014    1166500
  1620+ *                  in cookie file?  Default = *OFF                                                       081014    1166600
  1621+ *                                                                                                        000000    1166700
  1622+ *  If the filename is set to '', or if you do not call this API,                                         000000    1166800
  1623+ *  cookies will only be saved until the activation group is                                              000000    1166900
  1624+ *  reclaimed.                                                                                            000000    1167000
  1625+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1167100
  1626+D http_cookie_file...                                                                                     000000    1167200
  1627+D                 PR                                                                                      000000    1167300
  1628+D   peFilename                256A   varying const                                                      000000    1167400
  1629+D   peSession                   1n   const options(*nopass:*omit)                                       081014    1167500
  1630+                                                                                                          000000    1167600
  1631+                                                                                                          000000    1167700
  1632+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1167800
  1633+ * http_comp(): Send a completion message                                                                 080707    1167900
  1634+ *                                                                                                        000000    1168000
  1635+ *      peMessage = message to send.                                                                      000000    1168100
  1636+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ 000000    1168200
  1637+D http_comp       PR                                                                                      000000    1168300
  1638+D   peMessage                 256A   const                                                              000000    1168400
  1639+                                                                                                          000000    1168500
  1640+                                                                                                          000000    1168600
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1641+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1168700
  1642+ * http_diag(): Send a diagnostic message                                                                 000000    1168800
  1643+ *                                                                                                       000000    1168900
  1644+ *      peMessage = message to send.                                                                     000000    1169000
  1645+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1169100
  1646+D http_diag       PR                                                                                     000000    1169200
  1647+D   peMessage                 256A   const                                                             000000    1169300
  1648+                                                                                                        000000    1169400
  1649+                                                                                                        000000    1169500
  1650+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1169600
  1651+ * http_crash(): Send back an *ESCAPE message containing last                                            000000    1169700
  1652+ *                error found in HTTPAPI.                                                               000000    1169800
  1653+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1169900
  1654+D http_crash      PR                                                                                     000000    1170000
  1655+                                                                                                        000000    1170100
  1656+                                                                                                        000000    1170200
  1657+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1170300
  1658+ * http_tempfile():  Generate a unique temporary IFS file name                                          000000    1170400
  1659+ *                                                                                                      000000    1170500
  1660+ * returns the file name                                                                               000000    1170600
  1661+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                    000000    1170700
  1662+D http_tempfile   PR            40A   varying                                                         000000    1170800
  1663+                                                                                                        070329    1170900
  1664+                                                                                                        070329    1171000
  1665+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +                                  070329    1171100
  1666+ * http_xmlns():  Enable XML Namespace processing                                                      070329    1171200
  1667+ *                                                                                                      070329    1171300
  1668+ *     peEnable = (input) *ON to enable parsing, *OFF to disable.                                       070329    1171400
  1669+ *                        (it is disabled by default)                                                   070329    1171500
  1670+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +                                  070329    1171600
  1671+D http_xmlns      PR                                                                                    070329    1171700
  1672+D   peEnable                   1N   const                                                             070329    1171800
  1673+                                                                                                        070816    1171900
  1674+                                                                                                        070816    1172000
  1675+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +                                  070816    1172100
  1676+ * http_XmlReturnPtr(): XML End Element Handler should return a                                         070816    1172200
  1677+ *                       pointer to the full element value instead of                                   070816    1172300
  1678+ *                       returning a VARYING character string.                                          070816    1172400
  1679+ *                       (VARYING is limited to 64k)                                                    070816    1172500
  1680+ *                                                                                                      070816    1172600
  1681+ *     peEnable = (input) *ON to return a pointer, *OFF to return                                       070816    1172700
  1682+ *                        a VARYING string (*OFF = default)                                             070816    1172800
  1683+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +                                  070816    1172900
  1684+D http_XmlReturnPtr...                                                                                070816    1173000
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1685+D                 PR                                                                                      070816    1173100
  1686+D   peEnable                     1N   const                                                              070816    1173200
  1687+                                                                                                         070912    1173300
  1688+                                                                                                         070912    1173400
  1689+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +      070912    1173500
  1690+ * http_XmlStripCRLF(): Enable stripping of CRLF characters                                            070912    1173600
  1691+ *                                                                                                     070912    1173700
  1692+ *     peEnable = (input) *ON to strip, *OFF to leave them in.                                         070912    1173800
  1693+ *                        (they are stripped by default)                                               070912    1173900
  1694+ *                                                                                                     070912    1174000
  1695+ * Note: To simplify your XML string manipulations, HTTPAPI                                           070912    1174100
  1696+ *       strips CRLF characters from the response.  If you would                                       070912    1174200
  1697+ *       prefer that they are left in the response, call this                                          070912    1174300
  1698+ *       routine with a parameter of *OFF.                                                             070912    1174400
  1699+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +      070912    1174500
  1700+D http_XmlStripCRLF...                                                                               070912    1174600
  1701+D                 PR                                                                                 070912    1174700
  1702+D   peEnable                     1N   const                                                          070912    1174800
  1703+                                                                                                     071119    1174900
  1704+                                                                                                     071119    1175000
  1705+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++      071119    1175100
  1706+ * http_parser_switch_cb(): delegates element processing to another                                   071119    1175200
  1707+ *     set of start and end element callback procedures for the                                      071119    1175300
  1708+ *     current element and its children.                                                             071119    1175400
  1709+ *                                                                                                   071119    1175500
  1710+ *    peUsrDta = (input) user-defined data that will be passed to                                    071119    1175600
  1711+ *                       the call-back routine. usuallay only that                                   071119    1175700
  1712+ *                       portion of the curent user data is forwarded                                071119    1175800
  1713+ *                       to the new callback procedures that they are                                071119    1175900
  1714+ *                       responsible for.                                                            071119    1176000
  1715+ * peStartProc = (input) call-back procedure to call at the start                                    071119    1176100
  1716+ *                       of each XML element received.                                               071119    1176200
  1717+ *   peEndProc = (input) call-back procedure to call at the end                                      071119    1176300
  1718+ *                       of each XML element received.                                               071119    1176400
  1719+ *                                                                                                   071119    1176500
  1720+ *  Returns  -1 upon failure, 0 upon success                                                         071119    1176600
  1721+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++      071119    1176700
  1722+D http_parser_switch_cb...                                                                           071119    1176800
  1723+D                 PR            10I 0                                                              071119    1176900
  1724+D  peUsrDta                       *   value                                                         071119    1177000
  1725+D  peStartProc                    *   value procptr                                                 071119    1177100
  1726+D  peEndProc                      *   value procptr options(*nopass)                                071119    1177200
  1727+                                                                                                     080205    1177300
  1728+                                                                                                     080205    1177400
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1729+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1177500
  1730+ * http_parser_get_start_cb(): returns the procedure pointer of                                          080205    1177600
  1731+ *     the currently active start callback procedure.                                                  080205    1177700
  1732+ *                                                                                                     080205    1177800
  1733+ *  Returns procedure pointer of start callback procedure.                                             080205    1177900
  1734+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1178000
  1735+D http_parser_get_start_cb...                                                                         080205    1178100
  1736+D                 PR              *   procptr                                                         080205    1178200
  1737+                                                                                                      080205    1178300
  1738+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1178400
  1739+ * http_parser_get_end_cb(): returns the procedure pointer of                                           080205    1178500
  1740+ *     the currently active end callback procedure.                                                    080205    1178600
  1741+ *                                                                                                     080205    1178700
  1742+ *  Returns procedure pointer of end callback procedure.                                               080205    1178800
  1743+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1178900
  1744+D http_parser_get_end_cb...                                                                           080205    1179000
  1745+D                 PR              *   procptr                                                         080205    1179100
  1746+                                                                                                      080205    1179200
  1747+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1179300
  1748+ * http_parser_get_userdata(): returns the procedure pointer of                                        080205    1179400
  1749+ *     the currently active user data.                                                                 080205    1179500
  1750+ *                                                                                                     080205    1179600
  1751+ *  Returns procedure pointer of user data.                                                            080205    1179700
  1752+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080205    1179800
  1753+D http_parser_get_userdata...                                                                         080205    1179900
  1754+D                 PR              *                                                                   080205    1180000
  1755+                                                                                                      080331    1180100
  1756+                                                                                                      080331    1180200
  1757+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++ +                                080331    1180300
  1758+ * http_parse_xml_string():  Parse XML from an input string.                                          080331    1180400
  1759+ *                          (instead of downloading it from a server)                                  080331    1180500
  1760+ *                                                                                                     080331    1180600
  1761+ *    peString = (input) Pointer to string                                                            080331    1180700
  1762+ *       peLen = (input) Length of string to parse                                                    080331    1180800
  1763+ *     peCCSID = (input) CCSID of string to be parsed                                                 080331    1180900
  1764+ * peStartProc = (input) call-back procedure to call at the start                                     080331    1181000
  1765+ *                          of each XML element received.                                              080331    1181100
  1766+ *   peEndProc = (input) call-back procedure to call at the end                                       080331    1181200
  1767+ *                          of each XML element received.                                              080331    1181300
  1768+ *    peUsrDta = (input) user-defined data that will be passed                                        080331    1181400
  1769+ *                             to the call-back routine                                                080331    1181500
  1770+ *                                                                                                     080331    1181600
  1771+ *  Returns  -1 upon failure, 0 upon success                                                           080331    1181700
  1772+ *++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                  080331    1181800
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1773+D http_parse_xml_string...                                                                                 080331    1181900
  1774+D                 PR            10i 0                                                                    080331    1182000
  1775+D  peString                       *   value                                                            080331    1182100
  1776+D  peLen                         10I 0 value                                                            080331    1182200
  1777+D  peCCSID                       10I 0 value                                                            080331    1182300
  1778+D  peStartProc                    *   value procptr                                                     080331    1182400
  1779+D  peEndProc                      *   value procptr                                                     080331    1182500
  1780+D  peUsrDta                       *   value                                                             080331    1182600
  1781+                                                                                                         081125    1182700
  1782+                                                                                                         081125    1182800
  1783+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 081125    1182900
  1784+ * HTTP_nextXmlAttr():  Retrieve next XML attribute from attrs list                                      081125    1183000
  1785+ *                                                                                                       081125    1183100
  1786+ *      attrs = (input) attribute list to extract from                                                   081125    1183200
  1787+ *        num = (i/o)   position in attribute list.  On first                                            081125    1183300
  1788+ *                      call, set this to 1.  HTTPAPI will                                               081125    1183400
  1789+ *                      increment this as it moves through the list                                      081125    1183500
  1790+ *       name = (output) XML attribute name (from list)                                                  081125    1183600
  1791+ *        val = (output) XML attribute value (from list)                                                 081125    1183700
  1792+ *                                                                                                       081125    1183800
  1793+ * Returns *ON normally, *OFF if there's no more attributes to read                                      081125    1183900
  1794+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 081125    1184000
  1795+D HTTP_nextXmlAttr...                                                                                    081125    1184100
  1796+D                 PR             1N                                                                     081125    1184200
  1797+D   attrs                         *   dim(32767)                                                       081125    1184300
  1798+D                                     const options(*varsize)                                          081125    1184400
  1799+D   num                          10i 0                                                                  081125    1184500
  1800+D   name                       1024a   varying                                                          081125    1184600
  1801+D   val                       65535a   varying                                                          081125    1184700
  1802+                                                                                                         090528    1184800
  1803+                                                                                                         090528    1184900
  1804+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 090528    1185000
  1805+ * http_EscapeXml(): Escape any special characters used by XML                                          090528    1185100
  1806+ *                                                                                                       090528    1185200
  1807+ *     peString = (input) string to escape                                                               090528    1185300
  1808+ *                                                                                                       090528    1185400
  1809+ * Returns escaped string.                                                                             090528    1185500
  1810+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                                 090528    1185600
  1811+D http_EscapeXml  PR          4096a   varying                                                          090528    1185700
  1812+D  peString                   4096a   varying const                                                    090528    1185800
  1813+                                                                                                         090624    1185900
  1814+                                                                                                         090624    1186000
  1815+ /if defined(HTTP_WSDL2RPG_STUFF)                                                                        091007    1186100
           LINES EXCLUDED: 32
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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1816+ /endif                                                                                                  091007    1189400
  1817+                                                                                                         100528    1189500
  1818+                                                                                                         100528    1189600
  1819+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++100528    1189700
  1820+ * http_dwrite(): Write raw (binary) data to the HTTPAPI debug                                           100528    1189800
  1821+ *                log.                                                                                   100528    1189900
  1822+ *                                                                                                       100528    1190000
  1823+ *    peData = pointer to raw data to write                                                              100528    1190100
  1824+ *    peLen  = length of the data to write                                                               100528    1190200
  1825+ *                                                                                                       100528    1190300
  1826+ * NOTE: The debug log is opened the first time http_dwrite()                                           100528    1190400
  1827+ *       or http_dmsg() is called, and closed at the end of a                                            100528    1190500
  1828+ *       an HTTP transaction (such as GET or POST) If you attempt                                        100528    1190600
  1829+ *       to write after a transaction, the file will be re-opened                                        100528    1190700
  1830+ *       and not closed until the next transaction, or until                                             100528    1190800
  1831+ *       http_dclose() is called.                                                                        100528    1190900
  1832+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++100528    1191000
  1833+D http_dwrite     PR                                                                                     100528    1191100
  1834+D   peData                         *   value                                                          100528    1191200
  1835+D   peLen                       10I 0 value                                                          100528    1191300
  1836+                                                                                                         100528    1191400
  1837+                                                                                                         100528    1191500
  1838+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++100528    1191600
  1839+ * http_dmsg(): Write one line of text to the HTTPAPI debug log                                         100528    1191700
  1840+ *                                                                                                       100528    1191800
  1841+ *    peMsgTxt = one message (one line of text) to write to                                              100528    1191900
  1842+ *               the debug log.  CRLF will be added for you                                              100528    1192000
  1843+ *               and the data will be undergo EBCDIC->ASCII                                              100528    1192100
  1844+ *               translation as it's written.                                                            100528    1192200
  1845+ *                                                                                                       100528    1192300
  1846+ * NOTE: The debug log is opened the first time http_dwrite()                                           100528    1192400
  1847+ *       or http_dmsg() is called, and closed at the end of a                                            100528    1192500
  1848+ *       an HTTP transaction (such as GET or POST) If you attempt                                        100528    1192600
  1849+ *       to write after a transaction, the file will be re-opened                                        100528    1192700
  1850+ *       and not closed until the next transaction, or until                                             100528    1192800
  1851+ *       http_dclose() is called.                                                                        100528    1192900
  1852+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++100528    1193000
  1853+D http_dmsg       PR                                                                                     100528    1193100
  1854+D   peMsgTxt                   256A   const                                                          100528    1193200
  1855+                                                                                                         080205    1193300
  1856+                                                                                                         100528    1193400
  1857+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++100528    1193500
  1858+ * http_dclose():  Close the HTTPAPI debug log.                                                         100528    1193600
  1859+ *                                                                                                       100528    1193700
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1860+ * NOTE: Calling http_dmsg or http_dwrite will automatically                                          100528    1193800
  1861+ *       reopen the log. The log is automatically closed at                                           100528    1193900
  1862+ *       the end of an HTTP transaction (such as GET or POST)                                         100528    1194000
  1863+ *       If you want to close it at another time, call this                                           100528    1194100
  1864+ *       routine.                                                                                     100528    1194200
  1865+ *+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++                               100528    1194300
  1866+D http_dclose     PR                                                                                  100528    1194400
  1867+                                                                                                      071119    1194500
  1868+                                                                                                      100528    1194600
  1869+ ************************************************************************                             000000    1194700
  1870+ **  Error codes that HTTP API can return                                                            000000    1194800
  1871+ ************************************************************************                             000000    1194900
  1872+ ** Invalid URL format                                                                               000000    1195000
  1873+D HTTP_BADURL     C                   CONST(1)                                                      000000    1195100
  1874+ ** Host not found (not a valid IP address, or DNS lookup failed)                                     000000    1195200
  1875+D HTTP_HOSTNF     C                   CONST(2)                                                      000000    1195300
  1876+ ** Unable to create a new socket                                                                     000000    1195400
  1877+D HTTP_SOCERR     C                   CONST(4)                                                      000000    1195500
  1878+ ** Error when connecting to server                                                                   000000    1195600
  1879+D HTTP_BADCNN     C                   CONST(6)                                                      000000    1195700
  1880+ ** Timeout when connecting to server                                                                 000000    1195800
  1881+D HTTP_CNNTIMO    C                   CONST(7)                                                      000000    1195900
  1882+ ** HTTP response code logged (not an error, per se)                                                 000000    1196000
  1883+D HTTP_RESP       C                   CONST(13)                                                     000000    1196100
  1884+ ** Error calling user-specified procedure in the                                                    000000    1196200
  1885+ **   recvdoc() procedure.  (user proc must return full count)                                       000000    1196300
  1886+D HTTP_RDWERR     C                   CONST(16)                                                     000000    1196400
  1887+ ** Unsupported transfer-encoding value                                                              000000    1196500
  1888+D HTTP_XFRENC     C                   CONST(20)                                                     000000    1196600
  1889+ ** Error opening file to save data into.                                                            000000    1196700
  1890+D HTTP_FDOPEN     C                   CONST(22)                                                     000000    1196800
  1891+ ** Problem with the Application ID for the DCM                                                      000000    1196900
  1892+D HTTP_GSKAPPID   C                   CONST(23)                                                     000000    1197000
  1893+ ** Error setting auth type                                                                          000000    1197100
  1894+D HTTP_GSKATYP    C                   CONST(24)                                                     000000    1197200
  1895+ ** Error initializing GSKit environment                                                             000000    1197300
  1896+D HTTP_GSKENVI    C                   CONST(25)                                                     000000    1197400
  1897+ ** Error opening GSKit environment                                                                  000000    1197500
  1898+D HTTP_GSKENVO    C                   CONST(26)                                                     000000    1197600
  1899+ ** Error setting session type (client | server | server_auth)                                       000000    1197700
  1900+D HTTP_GSKSTYP    C                   CONST(27)                                                     000000    1197800
  1901+ ** Error registering application w/DCM                                                              000000    1197900
  1902+D HTTP_REGERR     C                   CONST(28)                                                     000000    1198000
  1903+ ** Error open secure socket                                                                         000000    1198100
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1904+D HTTP_SSOPEN     C                   CONST(29)                                                          000000    1198200
  1905+ ** Error setting SSL numeric file descriptor                                                            000000    1198300
  1906+D HTTP_SSSNFD     C                   CONST(30)                                                          000000    1198400
  1907+ ** Error setting SSL numeric timeout value                                                              000000    1198500
  1908+D HTTP_SSSNTO     C                   CONST(31)                                                          000000    1198600
  1909+ ** SSL handshake timed out                                                                              000000    1198700
  1910+D HTTP_SSTIMO     C                   CONST(32)                                                          000000    1198800
  1911+ ** This app is not registered with digital cert mgr                                                     000000    1198900
  1912+D HTTP_NOTREG     C                   CONST(35)                                                          000000    1199000
  1913+ ** This URI needs authorization (user/pass)                                                             000000    1199100
  1914+D HTTP_NDAUTH     C                   CONST(36)                                                          000000    1199200
  1915+ ** Invalid HTTP authentication type                                                                     000000    1199300
  1916+D HTTP_ATHTYP     C                   CONST(37)                                                          000000    1199400
  1917+ ** Error in value of an HTTP authentication string                                                      000000    1199500
  1918+D HTTP_ATHVAL     C                   CONST(38)                                                          000000    1199600
  1919+ ** Server didn't ask for authorizatin                                                                   000000    1199700
  1920+D HTTP_NOAUTH     C                   CONST(39)                                                          000000    1199800
  1921+ ** blockread() timed out waiting for more data                                                          000000    1199900
  1922+D HTTP_BRTIME     C                   CONST(43)                                                          000000    1200000
  1923+ ** blockread() error during recv() call                                                                 000000    1200100
  1924+D HTTP_BRRECV     C                   CONST(44)                                                          000000    1200200
  1925+ ** blockread() error during select() call                                                               000000    1200300
  1926+D HTTP_BRSELE     C                   CONST(45)                                                          000000    1200400
  1927+ ** recvchunk() did not get the trailing CRLF chars                                                      000000    1200500
  1928+D HTTP_RDCRLF     C                   CONST(46)                                                          000000    1200600
  1929+ ** Invalid exit point registered with HTTP_Xproc()                                                      000000    1200700
  1930+D HTTP_BADPNT     C                   CONST(47)                                                          000000    1200800
  1931+ ** Error retrieving SSL protocol                                                                        000000    1200900
  1932+D HTTP_SSPROT     C                   CONST(48)                                                          000000    1201000
  1933+ ** Unknown SSL protocol                                                                                 000000    1201100
  1934+D HTTP_SSPUNK     C                   CONST(49)                                                          000000    1201200
  1935+ ** Error setting SSL protocol                                                                           000000    1201300
  1936+D HTTP_SSPSET     C                   CONST(50)                                                          000000    1201400
  1937+ ** Out of memory                                                                                        000000    1201500
  1938+D HTTP_NOMEM      C                   CONST(51)                                                          000000    1201600
  1939+ ** Must give data in order to encode it                                                                 000000    1201700
  1940+D HTTP_NODATA     C                   CONST(52)                                                          000000    1201800
  1941+ ** Pointer is invalid or already freed                                                                  000000    1201900
  1942+D HTTP_INVPTR     C                   CONST(53)                                                          000000    1202000
  1943+ ** Not enough space to add encoded variable                                                             000000    1202100
  1944+D HTTP_NOSPAC     C                   CONST(54)                                                          000000    1202200
  1945+ ** Error calling send() API in BlockWrite()                                                             000000    1202300
  1946+D HTTP_BWSEND     C                   CONST(55)                                                          000000    1202400
  1947+ ** Error calling select() API in BlockWrite()                                                           000000    1202500
```

```
Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1948+D HTTP_BWSELE     C                   CONST(56)                                                          000000    1202600
  1949+ ** Timeout waiting to send in BlockWrite()                                                              000000    1202700
  1950+D HTTP_BWTIME     C                   CONST(57)                                                          000000    1202800
  1951+ ** Lineread() had problem with recv() API                                                               000000    1202900
  1952+D HTTP_LRRECV     C                   CONST(58)                                                          000000    1203000
  1953+ ** Lineread() had problem with select() API                                                             000000    1203100
  1954+D HTTP_LRSELE     C                   CONST(59)                                                          000000    1203200
  1955+ ** Lineread() had timeout                                                                               000000    1203300
  1956+D HTTP_LRTIME     C                   CONST(60)                                                          000000    1203400
  1957+ ** Procedure is no longer supported                                                                     000000    1203500
  1958+D HTTP_NOTSUPP    C                   CONST(61)                                                          000000    1203600
  1959+ ** No communication driver defined                                                                      000000    1203700
  1960+D HTTP_NOCDRIV    C                   CONST(62)                                                          000000    1203800
  1961+ ** Timeout sending data in blockwrite                                                                   000000    1203900
  1962+D HTTP_BWTIMO     C                   CONST(63)                                                          000000    1204000
  1963+ ** Timeout sending data in blockwrite                                                                   000000    1204100
  1964+D HTTP_SWCERR     C                   CONST(64)                                                          000000    1204200
  1965+ ** Timeout sending data in blockwrite                                                                   000000    1204300
  1966+D HTTP_FDSTAT     C                   CONST(65)                                                          000000    1204400
  1967+ ** Error parsing XML data                                                                               000000    1204500
  1968+D HTTP_XMLERR     C                   CONST(66)                                                          000000    1204600
  1969+ ** Error opening IFS file                                                                               000000    1204700
  1970+D HTTP_IFOPEN     C                   CONST(67)                                                          000000    1204800
  1971+ ** Error with SSL keyring                                                                               000000    1204900
  1972+D HTTP_GSKKEYF    C                   CONST(68)                                                          000000    1205000
  1973+ ** Must Use Table / Must not Use Table                                                                  000000    1205100
  1974+D HTTP_MUTABLE    C                   CONST(69)                                                          000000    1205200
  1975+ ** Cookie file cant be written                                                                          000000    1205300
  1976+D HTTP_CKDUMP     C                   CONST(70)                                                          000000    1205400
  1977+ ** Cookie file cant be read                                                                             000000    1205500
  1978+D HTTP_CKOPEN     C                   CONST(71)                                                          000000    1205600
  1979+ ** Can't get stats on cookie file                                                                       000000    1205700
  1980+D HTTP_CKSTAT     C                   CONST(72)                                                          000000    1205800
  1981+ ** Error converting CCSIDs                                                                              000000    1205900
  1982+D HTTP_CONVERR    C                   CONST(73)                                                          000000    1206000
  1983+ ** Error setting stream file CCSID                                                                      000000    1206100
  1984+D HTTP_SETATTR    C                   CONST(74)                                                          000000    1206200
  1985+ ** This Proxy server needs authorization (user/pass)                                                   000000    1206300
  1986+D HTTP_PXNDAUTH   C                   CONST(75)                                                          000000    1206400
  1987+ ** XML callback switched illegally                                                                      071119    1206500
  1988+D HTTP_ILLSWC     C                   CONST(76)                                                          071119    1206600
  1989+ ** Error getting certificate info                                                                       071218    1206700
  1990+D HTTP_SSLGCI     C                   CONST(77)                                                          071218    1206800
  1991+ ** Error from certificate validation callback                                                           071218    1206900
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  1992+D HTTP_SSLVAL     C                   CONST(78)                                                          071218     1207000
  1993+                                                                                                          000000     1207100
  1994+                                                                                                          000000     1207200
  1995+ ******************************************************************                                       000000     1207300
  1996+ *  HTTP WWW-Authentication types                                                                         000000     1207400
  1997+ ******************************************************************                                       000000     1207500
  1998+D HTTP_AUTH_NONE...                                                                                       000000     1207600
  1999+D                 C                   '0'                                                             000000     1207700
  2000+D HTTP_AUTH_BASIC...                                                                                      000000     1207800
  2001+D                 C                   '1'                                                             000000     1207900
  2002+D HTTP_AUTH_MD5_DIGEST...                                                                                 000000     1208000
  2003+D                 C                   '2'                                                             000000     1208100
  2004+                                                                                                          000000     1208200
  2005+                                                                                                          000000     1208300
  2006+ ******************************************************************                                       000000     1208400
  2007+ *  HTTPAPI Exit points                                                                                  000000     1208500
  2008+ ******************************************************************                                       000000     1208600
  2009+ ** Debug exit point:  This is called when ASCII stream data is to be                                     000000     1208700
  2010+ **                    to a log file.   Here's the prototype for a                                        000000     1208800
  2011+ **                    debug exit procedure:                                                             000000     1208900
  2012+ **                                                                                                      000000     1209000
  2013+ **  D debug_proto     PR                                                                                000000     1209100
  2014+ **  D   DataToLog                     *   value                                                         000000     1209200
  2015+ **  D   Length                     10I 0 value                                                         000000     1209300
  2016+ **                                                                                                      000000     1209400
  2017+D HTTP_POINT_DEBUG...                                                                                     000000     1209500
  2018+D                 C                    1                                                             000000     1209600
  2019+                                                                                                          000000     1209700
  2020+ ** Upload status exit point:  This is called periodically during an                                     000000     1209800
  2021+ **                            upload (POST) to an HTTP(S) server.                                       000000     1209900
  2022+ **                            Allows you to display progress to the                                     000000     1210000
  2023+ **                            user.                                                                     000000     1210100
  2024+ **                                                                                                      000000     1210200
  2025+ **  D upload_proto    PR                                                                                000000     1210300
  2026+ **  D   BytesSent                 10U 0 value                                                         000000     1210400
  2027+ **  D   BytesTotal                10U 0 value                                                         000000     1210500
  2028+ **                                                                                                      000000     1210600
  2029+D HTTP_POINT_UPLOAD_STATUS...                                                                             000000     1210700
  2030+D                 C                    2                                                             000000     1210800
  2031+                                                                                                          000000     1210900
  2032+ ** Download status exit point:  This is called periodically during a                                    000000     1211000
  2033+ **                              download (POST or GET) from an HTTP(S)                                  000000     1211100
  2034+ **                              server.  Allows you to display the                                      000000     1211200
  2035+ **                              progress to the user.                                                   000000     1211300
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  2036+ **                                                                                                      000000    1211400
  2037+ **  D download_proto  PR                                                                               000000    1211500
  2038+ **  D   BytesRecv                   10U 0 value                                                        000000    1211600
  2039+ **  D   BytesTotal                  10U 0 value                                                        000000    1211700
  2040+ **                                                                                                      000000    1211800
  2041+D HTTP_POINT_DOWNLOAD_STATUS...                                                                          000000    1211900
  2042+D                C                   3                                                               000000    1212000
  2043+                                                                                                         000000    1212100
  2044+ ** Additional Header fields exit point:                                                                 000000    1212200
  2045+ **    Allows you to supply additional header data to be added                                           000000    1212300
  2046+ **    to the HTTP request chain.  Data should be in EBCDIC with                                         000000    1212400
  2047+ **    x'0d25' after each header record.                                                                 000000    1212500
  2048+ **                                                                                                      000000    1212600
  2049+ **  D addl_hdrs_prot  PR                                                                              000000    1212700
  2050+ **  D   HeaderData               1024A   varying                                                      000000    1212800
  2051+ **                                                                                                      000000    1212900
  2052+D HTTP_POINT_ADDL_HEADER...                                                                              081014    1213000
  2053+D                C                   4                                                               081014    1213100
  2054+                                                                                                         081014    1213200
  2055+ ** Header parse exit point:                                                                             000000    1213300
  2056+ **    Allows you to examine the HTTP response chain received                                            000000    1213400
  2057+ **    from the HTTP server.                                                                             000000    1213500
  2058+ **                                                                                                      000000    1213600
  2059+ **  D parse_hdr_prot  PR                                                                              000000    1213700
  2060+ **  D   HeaderData               2048A   const                                                        000000    1213800
  2061+ **                                                                                                      000000    1213900
  2062+D HTTP_POINT_PARSE_HEADER...                                                                             000000    1214000
  2063+D                C                   5                                                               000000    1214100
  2064+                                                                                                         000000    1214200
  2065+ ** Header parse exit point:                                                                             000000    1214300
  2066+ **    Allows you to examine the HTTP response chain received                                            000000    1214400
  2067+ **    from the HTTP server. (allows longer headers)                                                     000000    1214500
  2068+ **                                                                                                      000000    1214600
  2069+ **  D parse_hdr_long  PR                                                                              000000    1214700
  2070+ **  D   HeaderData              32767A   const varying                                                000000    1214800
  2071+ **                                                                                                      000000    1214900
  2072+D HTTP_POINT_PARSE_HDR_LONG...                                                                           000000    1215000
  2073+D                C                   6                                                               000000    1215100
  2074+                                                                                                         071218    1215200
  2075+ ** SSL Certificate validation:                                                                          071218    1215300
  2076+ **    This will be called repeatedly for each field in each                                             071218    1215400
  2077+ **    certificate when parsed by HTTPAPI.                                                               071218    1215500
  2078+ **                                                                                                      071218    1215600
  2079+ **  D cert_valid      PR            10i 0                                                             071218    1215700
```

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Line   <---------------------- Source Specifications ---------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  2080+ **  D   usrdta                          *   value                                                          071218    1215800
  2081+ **  D   id                                  like(CERT_DATA_ID) value                                       071218    1215900
  2082+ **  D   data                       32767a   varying const                                                  071218    1216000
  2083+ **  D   errmsg                        80a                                                                  071218    1216100
  2084+ **                                                                                                        071218    1216200
  2085+ **     id = certificate data id (see CERT_DATA_ID_T in GSKSSL_H)                                          071218    1216300
  2086+ **   data = certificate element data.  (For binary elements, this                                         071221    1216400
  2087+ **          is binary data. For others, it'll be EBCDIC data.)                                           071218    1216500
  2088+ ** errmsg = the callback can use this to return a reason why a                                           071218    1216600
  2089+ **          certificate wasn't valid.  (retrievable w/HTTP_error)                                        071218    1216700
  2090+ **                                                                                                        071218    1216800
  2091+ **  Return 0 if okay, -1 if you want to reject it.                                                        071218    1216900
  2092+ **                                                                                                        071218    1217000
  2093+D HTTP_POINT_CERT_VAL...                                                                                   071218    1217100
  2094+D                 C                   7                                                                  071218    1217200
  2095+                                                                                                         071218    1217300
  2096+ ** SSL Certificate validation (GSkit)                                                                   071221    1217400
  2097+ **    This sets the GSK_CERT_VALIDATION_CALLBACK callback proc                                           071218    1217500
  2098+ **    within GSKit.  The GSKit (not HTTPAPI) will call back                                              071218    1217600
  2099+ **    your procedure to validate a certificate.                                                          071218    1217700
  2100+ **                                                                                                       071218    1217800
  2101+ **    See the gsk_attribute_set_callback() API documentation                                             071218    1217900
  2102+ **    in the IBM Information Center for details.                                                         071218    1218000
  2103+ **                                                                                                       071218    1218100
  2104+ **    Note: The UserData parameter to http_xproc() will be                                               071218    1218200
  2105+ **          passed as the 3rd parameter to the                                                           071218    1218300
  2106+ **          gsk_attribute_set_callback() API -- the peProc                                               071218    1218400
  2107+ **          parameter to http_xproc() is ignored for this                                                071218    1218500
  2108+ **          exit point.                                                                                  071218    1218600
  2109+ **                                                                                                       071218    1218700
  2110+D HTTP_POINT_GSKIT_CERT_VAL...                                                                            071218    1218800
  2111+D                 C                   8                                                                  071218    1218900
  2112+                                                                                                         000000    1219000
  2113+                                                                                                         000000    1219100
  2114+ ***************************************************************                                         000000    1219200
  2115+ * Directions for HTTP_xlate() and HTTP_xlatep()                                                         000000    1219300
  2116+ ***************************************************************                                         000000    1219400
  2117+D TO_ASCII        C                   '1'                                                              000000    1219500
  2118+D TO_EBCDIC       C                   '2'                                                              000000    1219600
  2119 D Buffer          S             40A                                                                    101116     000400
  2120 D size            S             10I 0                                                                  101111     000500
  2121 D rc              S             10I 0                                                                  101111     000600
  2122                                                                                                        101111     000700
  2123  /Free                                                                                                 101111     000800
```

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Line   <---------------------- Source Specifications ----------------------------><---- Comments ----> Do  Page  Change Src Seq
Number ....1....+....2....+....3....+....4....+....5....+....6....+....7....+....8....+....9....+...10 Num Line  Date   Id  Number
  2124                                                                                                      101111     000900


  2125   http_debug(*ON); // Use default debug file...                                                      101116     001000
  2126                                                                                                      101116     001100
  2127   // Use UTF-8 character set - set up conversion from EBCDIC...                                      101111     001200
  2128                                                                                                      101111     001300
  2129   rc = http_SetCCSIDs(1208 : 277);                                                                  101112     001400
  2130   buffer = 'XYZÆØÅxyzæøå';                                                                          101111     001500
  2131   size = 20;                                                                                        101111     001600
  2132   dump;                                                                                             101116     001700
  2133   rc = http_xlate(size : buffer : TO_ASCII);                                                        101111     001800
  2134   if rc = 0;                                                                          B01           101111     001900
  2135     dump;                                                                              01           101111     002000
  2136   endif;                                                                              E01           101111     002100
  2137   *inlr = *on;                                                                                      101111     002200

       * * * * *   E N D   O F   S O U R C E   * * * * *
```

A d d i t i o n a l D i a g n o s t i c M e s s a g e s

Msg id Sv Number Seq Message text

* * * * * E N D O F A D D I T I O N A L D I A G N O S T I C M E S S A G E S * * * * *

/ C o p y M e m b e r s

Line Number	Src Id	RPG name	Library	File	Member	CCSID	Date	Time
3	1	HTTPAPI_H	LIBHTTP	QRPGLESRC	HTTPAPI_H	277	16-11-10	10:31:07
39	2	CONFIG_H	LIBHTTP	QRPGLESRC	CONFIG_H	277	16-11-10	10:31:06

* * * * * E N D O F / C O P Y M E M B E R S * * * * *

C r o s s R e f e r e n c e

File and Record References:

File Record | Device | References (D=Defined)

No references in the source.

Global Field References:

```
   Field              Attributes          References (D=Defined M=Modified)
   *INLR              N(1)                  2137M
   BUFFER             A(40)                 2119D   2130M   2133
   HTTP_ASCII         CONST                  102D
   HTTP_ATHTYP        CONST                 1916D
   HTTP_ATHVAL        CONST                 1918D
   HTTP_AUTH_BASIC    CONST                 2001D
   HTTP_AUTH_MD5_DIGEST...
                      CONST                 2003D
   HTTP_AUTH_NONE     CONST                 1999D
   HTTP_BADCNN        CONST                 1879D
   HTTP_BADPNT        CONST                 1930D
   HTTP_BADURL        CONST                 1873D
   HTTP_BRRECV        CONST                 1924D
   HTTP_BRSELE        CONST                 1926D
   HTTP_BRTIME        CONST                 1922D
*RNF7031 HTTP_BUILD_SOCKADDR...
                      I(10,0)                413D
                      PROTOTYPE
   HTTP_BWSELE        CONST                 1948D
   HTTP_BWSEND        CONST                 1946D
   HTTP_BWTIME        CONST                 1950D
   HTTP_BWTIMO        CONST                 1962D
   HTTP_CCSID         CONST                  115D
   HTTP_CKDUMP        CONST                 1976D
   HTTP_CKOPEN        CONST                 1978D
   HTTP_CKSTAT        CONST                 1980D
*RNF7031 HTTP_CLOSE   I(10,0)                427D
                      PROTOTYPE
   HTTP_CNNTIMO       CONST                 1881D
*RNF7031 HTTP_COMP    PROTOTYPE             1637D
   HTTP_CONTTYPE      CONST                   83D
   HTTP_CONVERR       CONST                 1982D
   HTTP_COOKIE_DEFAULT...
                      CONST                  145D
```

```
*RNF7031 HTTP_COOKIE_FILE  PROTOTYPE            1627D
*RNF7031 HTTP_CRASH        PROTOTYPE            1654D
*RNF7031 HTTP_DCLOSE       PROTOTYPE            1866D
         HTTP_DEBUG        PROTOTYPE            1395D   2125M
*RNF7031 HTTP_DEBUG_FILE   A(500)                151D
                           VARYING
*RNF7031 HTTP_DIAG         PROTOTYPE            1646D
*RNF7031 HTTP_DMSG         PROTOTYPE            1853D
*RNF7031 HTTP_DWRITE       PROTOTYPE            1833D
         HTTP_EBCDIC       CONST                 101D
*RNF7031 HTTP_ERROR        A(80)                 439D
                           PROTOTYPE
*RNF7031 HTTP_ESCAPEXML    A(4096)              1811D
                           VARYING
                           PROTOTYPE
         HTTP_FDOPEN       CONST                1890D
         HTTP_FDSTAT       CONST                1966D
*RNF7031 HTTP_GET          I(10,0)               203D
                           PROTOTYPE
*RNF7031 HTTP_GET_XML      I(10,0)               859D
                           PROTOTYPE
*RNF7031 HTTP_GET_XMLTF    I(10,0)               910D
                           PROTOTYPE
*RNF7031 HTTP_GETAUTH      I(10,0)               466D
                           PROTOTYPE
         HTTP_GSKAPPID     CONST                1892D
         HTTP_GSKATYP      CONST                1894D
         HTTP_GSKENVI      CONST                1896D
         HTTP_GSKENVO      CONST                1898D
         HTTP_GSKKEYF      CONST                1972D
         HTTP_GSKSTYP      CONST                1900D
*RNF7031 HTTP_HEADER       A(32500)             1594D
                           VARYING
                           PROTOTYPE
         HTTP_HOSTNF       CONST                1875D
         HTTP_IFOPEN       CONST                1970D
         HTTP_IFSMODE      CONST                 130D
         HTTP_ILLSWC       CONST                1988D
         HTTP_INVPTR       CONST                1942D
*RNF7031 HTTP_LONG_PARSEURL...
                           I(10,0)               699D
                           PROTOTYPE
         HTTP_LRRECV       CONST                1952D
         HTTP_LRSELE       CONST                1954D
         HTTP_LRTIME       CONST                1956D
*RNF7031 HTTP_MFD_ENCODER_ADDSTMF...
```

```
                          N(1)                1368D
                          PROTOTYPE
*RNF7031 HTTP_MFD_ENCODER_ADDVAR...
                          N(1)                1331D
                          PROTOTYPE
*RNF7031 HTTP_MFD_ENCODER_ADDVAR_S...
                          N(1)                1349D
                          PROTOTYPE
*RNF7031 HTTP_MFD_ENCODER_CLOSE...
                          PROTOTYPE           1382D
*RNF7031 HTTP_MFD_ENCODER_OPEN...
                          *(16)               1313D
                          PROTOTYPE
         HTTP_MUTABLE     CONST               1974D
         HTTP_NDAUTH      CONST               1914D
*RNF7031 HTTP_NEXTXMLATTR  N(1)               1796D
                          PROTOTYPE
         HTTP_NOAUTH      CONST               1920D
         HTTP_NOCDRIV     CONST               1960D
         HTTP_NODATA      CONST               1940D
         HTTP_NOMEM       CONST               1938D
         HTTP_NOSPAC      CONST               1944D
         HTTP_NOTREG      CONST               1912D
         HTTP_NOTSUPP     CONST               1958D
*RNF7031 HTTP_PARSE_XML_STMF...
                          I(10,0)             1574D
                          PROTOTYPE
*RNF7031 HTTP_PARSE_XML_STRING...
                          I(10,0)             1774D
                          PROTOTYPE
*RNF7031 HTTP_PARSER_GET_END_CB...
                          *(16) PROCPTR       1745D
                          PROTOTYPE
*RNF7031 HTTP_PARSER_GET_START_CB...
                          *(16) PROCPTR       1736D
                          PROTOTYPE
*RNF7031 HTTP_PARSER_GET_USERDATA...
                          *(16)               1754D
                          PROTOTYPE
*RNF7031 HTTP_PARSER_SWITCH_CB...
                          I(10,0)             1723D
                          PROTOTYPE
*RNF7031 HTTP_PARSEURL    I(10,0)              390D
                          PROTOTYPE
*RNF7031 HTTP_PERSIST_CLOSE...
                          I(10,0)             1290D
```

```
                          PROTOTYPE
*RNF7031 HTTP_PERSIST_GET  I(10,0)              1201D
                          PROTOTYPE
*RNF7031 HTTP_PERSIST_OPEN *(16)                1166D
                          PROTOTYPE
*RNF7031 HTTP_PERSIST_POST I(10,0)              1261D
                          PROTOTYPE
         HTTP_POINT_ADDL_HEADER...
                          CONST                 2053D
         HTTP_POINT_CERT_VAL...
                          CONST                 2094D
         HTTP_POINT_DEBUG  CONST                2018D
         HTTP_POINT_DOWNLOAD_STATUS...
                          CONST                 2042D
         HTTP_POINT_GSKIT_CERT_VAL...
                          CONST                 2111D
         HTTP_POINT_PARSE_HDR_LONG...
                          CONST                 2073D
         HTTP_POINT_PARSE_HEADER...
                          CONST                 2063D
         HTTP_POINT_UPLOAD_STATUS...
                          CONST                 2030D
*RNF7031 HTTP_POST         I(10,0)               258D
                          PROTOTYPE
*RNF7031 HTTP_POST_STMF    I(10,0)               802D
                          PROTOTYPE
*RNF7031 HTTP_POST_STMF_XML...
                          I(10,0)              1076D
                          PROTOTYPE
*RNF7031 HTTP_POST_STMF_XMLTF...
                          I(10,0)              1137D
                          PROTOTYPE
*RNF7031 HTTP_POST_XML     I(10,0)               971D
                          PROTOTYPE
*RNF7031 HTTP_POST_XMLTF   I(10,0)              1027D
                          PROTOTYPE
*RNF7031 HTTP_PROXY_GETAUTH...
                          I(10,0)               537D
                          PROTOTYPE
*RNF7031 HTTP_PROXY_SETAUTH...
                          I(10,0)               512D
                          PROTOTYPE
         HTTP_PXNDAUTH     CONST                1986D
         HTTP_RDCRLF       CONST                1928D
         HTTP_RDWERR       CONST                1886D
*RNF7031 HTTP_REDIR_LOC    A(1024)               568D
```

```
                         VARYING
                         PROTOTYPE
           HTTP_REGERR   CONST                1902D
           HTTP_RESP     CONST                1883D
*RNF7031 HTTP_SELECT_COMMDRIVER...
                         *(16)                717D
                         PROTOTYPE
*RNF7031 HTTP_SET_100_TIMEOUT...
                         PROTOTYPE            1534D
           HTTP_SETATTR  CONST                1984D
*RNF7031 HTTP_SETAUTH    I(10,0)               482D
                         PROTOTYPE
           HTTP_SETCCSIDS I(10,0)             1411D   2129
                         PROTOTYPE
*RNF7031 HTTP_SETFILECCSID PROTOTYPE          1450D
*RNF7031 HTTP_SETPROXY   I(10,0)               496D
                         PROTOTYPE
*RNF7031 HTTP_SETTABLES  I(10,0)              1427D
                         PROTOTYPE
           HTTP_SOCERR   CONST                1877D
           HTTP_SSLGCI   CONST                1990D
           HTTP_SSLVAL   CONST                1992D
           HTTP_SSOPEN   CONST                1904D
           HTTP_SSPROT   CONST                1932D
           HTTP_SSPSET   CONST                1936D
           HTTP_SSPUNK   CONST                1934D
           HTTP_SSSNFD   CONST                1906D
           HTTP_SSSNTO   CONST                1908D
           HTTP_SSTIMO   CONST                1910D
           HTTP_STMF_CALC CONST               1582D
           HTTP_SWCERR   CONST                1964D
*RNF7031 HTTP_TEMPFILE   A(40)                1662D
                         VARYING
                         PROTOTYPE
           HTTP_TIMEOUT  CONST                 70D
*RNF7031 HTTP_URL_ENCODER *(16)                580D    582     601     619
                                               640     658     674
*RNF7031 HTTP_URL_ENCODER_ADDVAR...
                         N(1)                  600D
                         PROTOTYPE
*RNF7031 HTTP_URL_ENCODER_ADDVAR_S...
                         N(1)                  673D
                         PROTOTYPE
*RNF7031 HTTP_URL_ENCODER_FREE...
                         N(1)                  657D
                         PROTOTYPE
```

```
*RNF7031 HTTP_URL_ENCODER_GETPTR...
                         PROTOTYPE             618D
*RNF7031 HTTP_URL_ENCODER_GETSTR...
                         A(32767)              639D
                         VARYING
                         PROTOTYPE
*RNF7031 HTTP_URL_ENCODER_NEW...
                         *(16)                 582D
                         PROTOTYPE
*RNF7031 HTTP_URL_GET    I(10,0)               217D
                         PROTOTYPE
*RNF7031 HTTP_URL_GET_RAW I(10,0)              314D
                         PROTOTYPE
*RNF7031 HTTP_URL_GET_XML I(10,0)              876D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST   I(10,0)               273D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST_RAW I(10,0)             355D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST_RAW2...
                         I(10,0)               746D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST_STMF...
                         I(10,0)               788D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST_STMF_XML...
                         I(10,0)              1093D
                         PROTOTYPE
*RNF7031 HTTP_URL_POST_XML I(10,0)             989D
                         PROTOTYPE
*RNF7031 HTTP_USE_COOKIES PROTOTYPE            1609D
         HTTP_USERAGENT  CONST                  76D
         HTTP_XFRENC     CONST                1888D
         HTTP_XLATE      I(10,0)              1464D   2133
                         PROTOTYPE
*RNF7031 HTTP_XLATEDYN   I(10,0)              1498D
                         PROTOTYPE
*RNF7031 HTTP_XLATEP     I(10,0)              1481D
                         PROTOTYPE
         HTTP_XML_CALC   CONST                1581D
*RNF7031 HTTP_XML_SETCCSIDS...
                         I(10,0)              1549D
                         PROTOTYPE
         HTTP_XMLERR     CONST                1968D
*RNF7031 HTTP_XMLNS      PROTOTYPE            1671D
*RNF7031 HTTP_XMLRETURNPTR PROTOTYPE          1685D
```

```
*RNF7031 HTTP_XMLSTRIPCRLF PROTOTYPE            1701D
*RNF7031 HTTP_XPROC        I(10,0)               556D
                           PROTOTYPE
         HTTPAPI_RELDATE   CONST                  37D
         HTTPAPI_VERSION   CONST                  35D
         RC                I(10,0)             2121D   2129M   2133M   2134
         SIZE              I(10,0)             2120D   2131M   2133
         TO_ASCII          CONST               2117D   2133
         TO_EBCDIC         CONST               2118D

      Indicator References:

         Indicator                           References (D=Defined M=Modified)
         LR                                    2137M

       * * * * *  E N D  O F  C R O S S  R E F E R E N C E  * * * * *
```

External References

Statically bound procedures:

Procedure	References	
HTTP_COMP	1637	
HTTP_DIAG	1646	
HTTP_DMSG	1853	
HTTP_CLOSE	427	
HTTP_ERROR	439	
HTTP_XPROC	556	
HTTP_DEBUG	1395	2125
HTTP_XLATE	1464	2133
HTTP_CRASH	1654	
HTTP_XMLNS	1671	
HTTP_XLATEP	1481	
HTTP_HEADER	1594	
HTTP_DWRITE	1833	
HTTP_DCLOSE	1866	
HTTP_URL_GET	203	217
HTTP_GETAUTH	466	
HTTP_SETAUTH	482	
HTTP_URL_POST	258	273
HTTP_PARSEURL	390	
HTTP_SETPROXY	496	
HTTP_XLATEDYN	1498	
HTTP_TEMPFILE	1662	
HTTP_REDIR_LOC	568	
HTTP_GET_XMLTF	910	
HTTP_SETCCSIDS	1411	2129
HTTP_SETTABLES	1427	
HTTP_ESCAPEXML	1811	
HTTP_POST_XMLTF	1027	
HTTP_URL_GET_RAW	314	
HTTP_URL_GET_XML	859	876
HTTP_PERSIST_GET	1201	
HTTP_USE_COOKIES	1609	
HTTP_COOKIE_FILE	1627	
HTTP_NEXTXMLATTR	1796	
HTTP_URL_POST_RAW	355	
HTTP_URL_POST_XML	971	989
HTTP_PERSIST_OPEN	1166	
HTTP_PERSIST_POST	1261	
HTTP_SETFILECCSID	1450	
HTTP_XMLRETURNPTR	1685	
HTTP_XMLSTRIPCRLF	1701	
HTTP_PROXY_SETAUTH	512	

```
       HTTP_PROXY_GETAUTH                    537
       HTTP_LONG_PARSEURL                    699
       HTTP_URL_POST_RAW2                    746
       HTTP_URL_POST_STMF                    788     802
       HTTP_PERSIST_CLOSE                   1290
       HTTP_XML_SETCCSIDS                   1549
       HTTP_BUILD_SOCKADDR                   413
       HTTP_PARSE_XML_STMF                  1574
       HTTP_URL_ENCODER_NEW                  582
       HTTP_POST_STMF_XMLTF                 1137
       HTTP_SET_100_TIMEOUT                 1534
       HTTP_URL_ENCODER_FREE                 657
       HTTP_MFD_ENCODER_OPEN                1313
       HTTP_PARSER_SWITCH_CB                1723
       HTTP_PARSE_XML_STRING                1774
       HTTP_SELECT_COMMDRIVER                717
       HTTP_URL_POST_STMF_XML               1076    1093
       HTTP_MFD_ENCODER_CLOSE               1382
       HTTP_PARSER_GET_END_CB               1745
       HTTP_URL_ENCODER_ADDVAR               600
       HTTP_URL_ENCODER_GETPTR               618
       HTTP_URL_ENCODER_GETSTR               639
       HTTP_MFD_ENCODER_ADDVAR              1331
       HTTP_MFD_ENCODER_ADDSTMF             1368
       HTTP_PARSER_GET_START_CB             1736
       HTTP_PARSER_GET_USERDATA             1754
       HTTP_URL_ENCODER_ADDVAR_S             673
       HTTP_MFD_ENCODER_ADDVAR_S            1349

    Imported fields:
       Field            Attributes         Defined
       No references in the source.

    Exported fields:
       Field            Attributes         Defined
       No references in the source.

 * * * * *  E N D  O F  E X T E R N A L  R E F E R E N C E S  * * * * *
```

M e s s a g e S u m m a r y

Msg id	Sv	Number	Message text
*RNF7031	00	75	The name or indicator is not referenced.

* * * * * E N D O F M E S S A G E S U M M A R Y * * * * *

F i n a l S u m m a r y

Message Totals:

Information (00)	75
Warning (10)	0
Error (20)	0
Severe Error (30+)	0
Total	75

Source Totals:

Records	2137
Specifications	598
Data records	0
Comments	1257

* * * * * E N D O F F I N A L S U M M A R Y * * * * *

Program ICONVTEST placed in library TEST. 00 highest severity. Created on 16-11-10 at 11:51:44.

* * * * * E N D O F C O M P I L A T I O N * * * * *