



IBM eServer™

z/OS® V1R8 Communications Server Overview - FTP and TN3270

@business on demand software

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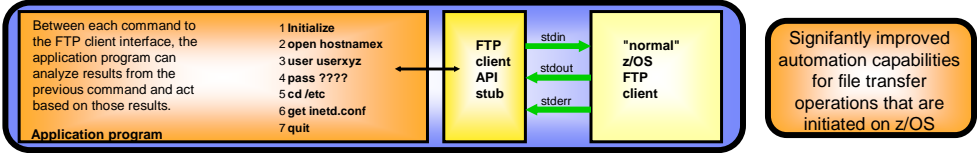
FTP and TN3270 - usability and management

FTP client API in REXX

- **z/OS V1R6 provided the initial callable FTP client programming interface**
 - This initial version was provided as a callable program interface to be used from Assembler, Cobol, or PL/I application programs
- **z/OS V1R7 extends that FTP client programming interface with a C library interface**
 - To be used by C or C++ application programmers
- **z/OS V1R8 will further extend the FTP client programming interface support by providing a REXX API**
 - To be used by REXX application

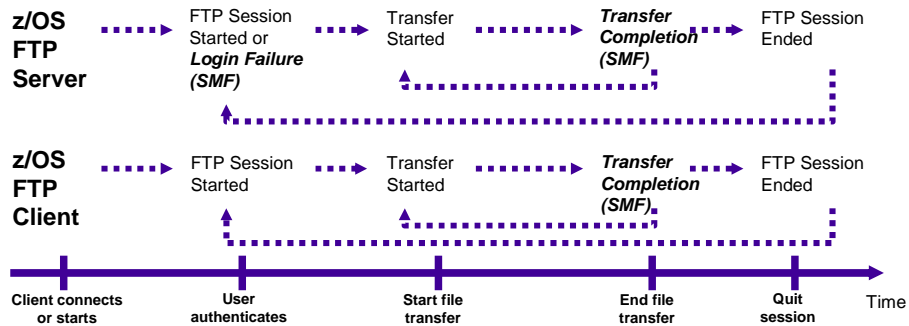
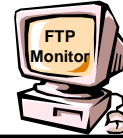
```

/* Create FTP client control information */
if ftp('create','fcai.', TRACEID) < 0 then do
  Say 'Unable to create the FCAI'
  exit
end
/* Enable trace */
if ftp('fcai.', 'set_trace', 'ON') < 0 then do
  call ftp_error 'fcai.'
end
/* Open a connection */
if ftp('fcai.', 'init', OPENSTRING, VAR1, VAR2) then do
  call ftp_error 'fcai.'
end
/* Send USER command */
if ftp('fcai.', 'scmd', USER_COMMAND, 'W') < 0 then do
  call ftp_error 'fcai.'
end
/* Send password */
if ftp('fcai.', 'scmd', PASS_COMMAND, 'W') < 0 then do
  call ftp_error 'fcai.'
end
  
```

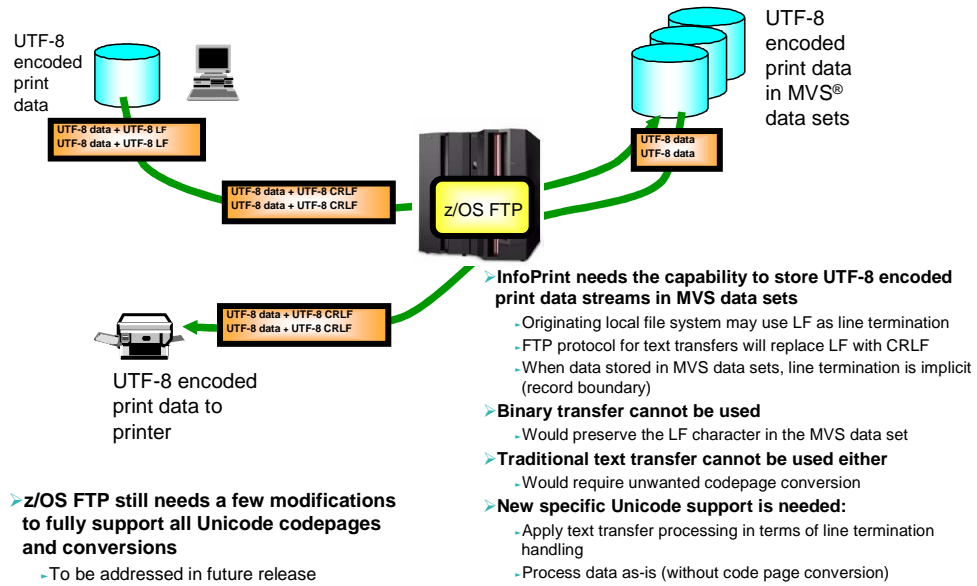


Enhanced FTP management capabilities through new NMI application event reporting

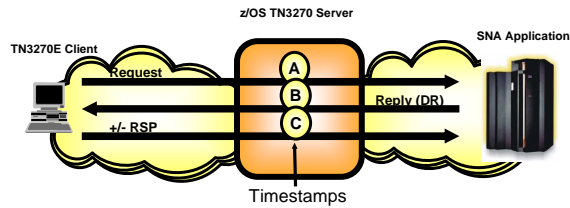
- Which FTP client or server sessions are currently active?
- Which FTP server sessions did USERXYZ have during the last two hours?
- Which file transfers did not complete successfully since last night?
- For active file transfers, status monitoring is possible by combining information from other NMI real-time interfaces to query transfer progress



FTP support of UTF-8 encoded InfoPrint print data sets



TN3270 response time monitor results via the NMI interface and via SMF recording



Response times

```

Round-trip time = Time C - Time A
IP time         = Time C - Time B
SNA time       = Round trip time -
                IP time
    
```

Life-of-connection data for life-of-connection averages

- Transaction count
- Round trip & IP response time totals
- Averages for round trip, IP, and SNA response times

Life-of-SNA session data for life-of-SNA session averages (to be added in z/OS V1R8)

- Transaction count
- Round trip & IP response time totals
- Averages for round trip, IP, and SNA response times

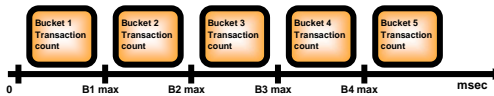
Sliding window data for sliding window averages

- Period transaction count
- Period round trip & IP response time totals
- Sliding window transaction count
- Sliding window round trip & IP response time totals

Sum of squares for variance and standard deviation

- Round trip, IP, and SNA sum of squares

Round trip response time counts by time bucket



Reporting:

-z/OS V1R5

- Reporting via SNMP MIB data
- Reporting via MVS console display commands

-z/OS V1R8 to add

- Real-time reporting via the Network Management Interface
 - * SNA session termination event
- Reporting via TN3270 server SMF records
 - * SNA session termination record (subtype 21)

TN3270 server enhancements

➤ Improved recovery when a client is running multiple TN3270 sessions

- If the z/OS CS Telnet server receives a new connection from a client IP address that already has one or more existing connections, the server will "poke" the existing connections to make sure they are still up.
- If not, they will be cleaned up immediately
- This improves the case where a client has telnet sessions which go down, so he starts a new session and reconnects.
 - helps avoid the "connect connect, already connected" error scenario

➤ Support for MVS system symbolics in the USS message table

- for example, would enable the USS logon screen to report which LPAR is serving the client.

➤ Allow the LU Exit to specify the USS table and/or Interpret table names

➤ Support removed for obsolete statements:

- QUEUESESSION statement no longer supported
 - Use QSESSion parameter on the RESTRICTAPPL or ALLOWAPPL statement instead
- LUSESSIONPEND, MSG07, TELNETDEVICE statements no longer supported in the BEGINVTAM block
 - Code statement in TelnetGlobals, TelnetParms, or ParmsGroup instead

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MVS z/OS

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