

JACKIE'S Forum

Automated Data Movement - FTP

There are many excellent software solutions in the marketplace that assist in data movement from one system to another. Surprisingly, to some people, the most common technique to transfer data across all platforms remains FTP.



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Worked with a customer recently who wanted to automate retrieving and then reformatting data from a PC to input into their iSeries data warehouse. In previous articles we have discussed using the CPYFRMIMPF (Copy From Import File) command to transform data from PC ASCII files to DB2/400 tables. Today we will look at automating the actual transfer of data from the PC using FTP. This will be controlled from the iSeries.

In batch mode the FTP command implicitly looks for a file called INPUT and a file called OUTPUT. INPUT contains the FTP script that you want to run and OUTPUT contains the output log of the FTP session.

INPUT will normally contain a login userid and password for FTP to use. It will also have the FTP PUT or GET commands that you wish to execute. It will close off with a simple QUIT.

A very basic INPUT file might look like **Figure 1**:

```
userid password
GET BOOKS.CSV QGPL/BOOKSCSV (REPLACE
QUIT
```

Figure 1

This directs FTP to log on the specified userid and then retrieve the file called BOOKS.CSV in the current PC directory. This file will be stored in a temporary table defined as having one column on the iSeries. The CL program to control this data movement and transformation would look like **Figure 2**:

```
/* This program will override the FTP INPUT file to point to the source member containing the FTP script. FTPLLOG will contain the log of this FTP session. */
+
+
/* After completion of the FTP command the new file BOOKSCSV, still in PC format ,will be converted to DB2/400 via the CPYFRMIMPF command. */
+
+
PGM
OVRDBF FILE(INPUT) TOFILE(QGPL/QFTPSRC) MBR(FTPGET)
OVRDBF FILE(OUTPUT) TOFILE(QGPL/QFTPSRC) MBR(FTPLLOG)
FTP RMTSYS('9.1.12.123')
CPYFRMIMPF FROMFILE(QGPL/BOOKSCSV) +
TOFILE(QGPL/BOOKSTABLE) +
MBROPT(*REPLACE) RCDDL(*CRLF)
ENDPGM
```

Figure 2

The log file looks like **Figure 3**:

```
Output redirected to a file.
Input read from specified override file.
Connecting to remote host 9.1.12.123 using port.
220 Please enter your user name.
Enter login ID (username):
331 User name okay, Need password.
230 User logged in.
Enter an FTP subcommand.
> GET BOOKS.CSV QGPL/BOOKSCSV (REPLACE
125 Entering Passive Mode (9,1,12,123,15,194)
125 Using existing ASCII mode data connection for BOOKS.CSV (59018 byte
226 Transfer complete. 59018 bytes in 0.26 sec. (217.490 Kb/s)
59018 bytes transferred in 0.267 seconds. Transfer rate 221.372 KB/sec
Enter an FTP subcommand.
> QUIT
21 Goodbye. Control connection closed.
```

Figure 3

This is a simple approach to automating the movement of a limited number of tables to or from the iSeries. There are many excellent data movement and transformation tools available.

As the number of tables you need to transfer grows, the requirement for data extraction, transformation, and movement solutions increases. I would encourage you to investigate a few of them and select the ones that best suit your needs.



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