

IDKYCDT: Compiling From a Network Share

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The Problem

- ◆ Where do you store/edit your source code?
 - On the MCP? (edit with CANDE, PWB, etc)
 - On a PC (edit with PWB, VS Code, MultiEdit, etc)?
 - Do you maintain your source in a repo (e.g., Git)?
- ◆ Modern software development assumes
 - You can edit on the client (MCP : Yes)
 - You can compile on the client (MCP : No Way)
 - You can archive to a repo on the client (MCP : No)
- ◆ If source is outside the MCP, how to compile?
 - Transfer it each time as a separate step?
- ◆ *There is an alternate way*

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Introducing StreamIOH

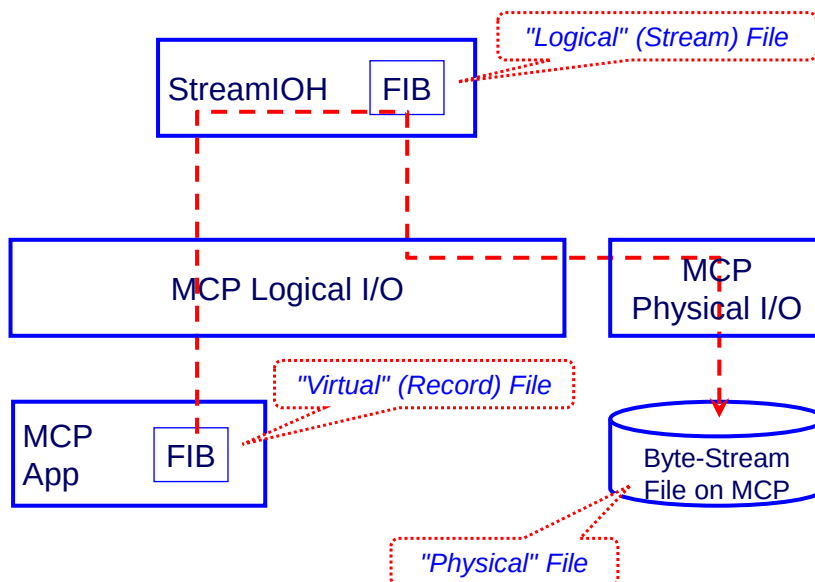
- ◆ Maps I/Os between traditional MCP record-oriented formats and line-oriented text formats
 - Allows an MCP application to read and write byte stream files *as if they were fixed-record files*
 - Mapping to/from record format is done on the fly
- ◆ **SL STREAMIOH**, available since MCP 7.0
 - A “virtual file” implementation (I/O Handler)
 - Use with MCP byte stream files
 - Use with files on remote servers via the Redirector
- ◆ **Invoked solely with file attributes!**
 - No program changes necessary
 - Can be implemented using only file equation

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Using StreamIOH with MCP Files



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IOHSTRING Conversion Parameters

- ◆ FILEKIND
- ◆ DATA
- ◆ EXTDELIMITER
- ◆ FORMFEEDISDELIMITER
- ◆ TABINTERVAL
- ◆ MARKID
- ◆ SEQBASE
- ◆ SEQINCREMENT
- ◆ TRIM
- ◆ FOLDING
- ◆ FOLDCHARACTER

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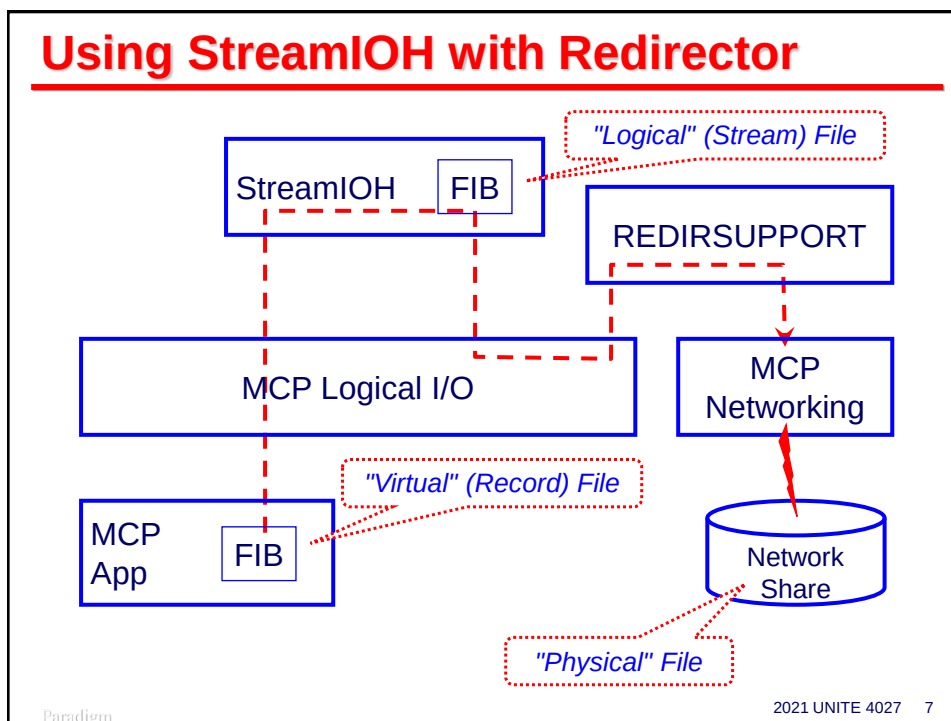
Using StreamIOH with Redirector

- ◆ StreamIOH can use Redirector to supply its "physical file"
- ◆ Allows MCP apps to access text files on remote shares as record-oriented files
- ◆ In StreamIOH's **IOHSTRING**:
 - Specify the **REDIRECTION** parameter
 - Specify the Redirector **IOHSTRING attribute** parameters in the StreamIOH **IOHSTRING parameter**
 - Specify StreamIOH's **FILENAME/TITLE** attribute as the absolute or relative UNC path to the remote file
 - Can use credentials and NXCONFIG files

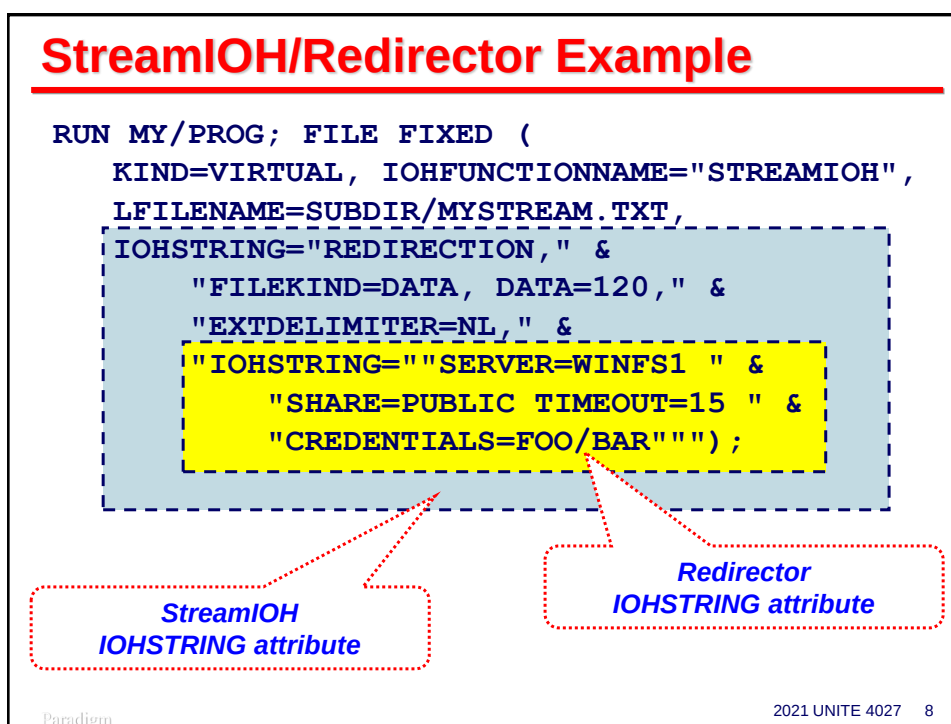
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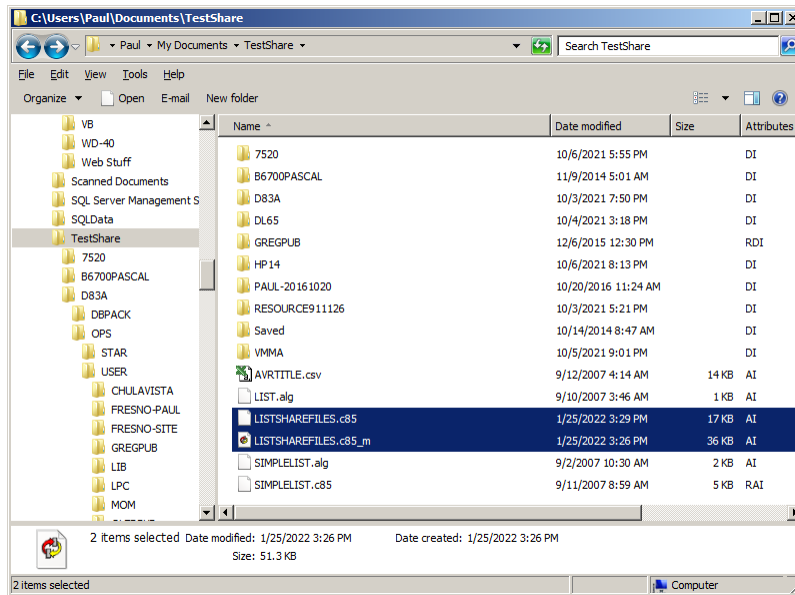


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Demo for Windows Share "TestShare"



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Compile Text-Only (No Sequence/ID)

```
BEGIN JOB COMP/STREAMIOH/COMPILE-NOSEQ;
NOJOBSUMMARYIO;
JOBSUMMARY = SUPPRESSED;
PRINTDEFAULTS = (PRINTDISPOSITION=EOJ, DESTINATION="PCTEXT");

COMPILE NEW/OBJECT/DEMO/LISTSHAREFILES WITH COBOL85 LIBRARY;
OPTION = (FAULT, ARRAY);
COMPILER FILE SOURCE (
    LFILENAME=LISTSHAREFILES.C85,
    KIND=VIRTUAL, IOHFUNCTIONNAME="STREAMIOH",
    IOHSTRING="REDIRECTION, " &
    "TABINTERVAL=8, MARKID="-DEMO-", SEQINCREMENT=20, " &
    "IOHSTRING="SERVER=DIGMD83A SHARE=TESTSHARE " &
    "TIMEOUT=5 IPADDRESS=192.168.16.2"");
COMPILER DATA
    $ SET MERGE LIST
?END JOB
```

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Compile PWB File (Sequence & ID)

```
BEGIN JOB COMP/STREAMIOH/COMPILE-PWB;
NOJOBSUMMARYIO;
JOBSUMMARY = SUPPRESSED;
PRINTDEFAULTS = (PRINTDISPOSITION=EOJ, DESTINATION="PCTEXT");

COMPILE NEW/OBJECT/DEMO/LISTSHAREFILES WITH COBOL85 LIBRARY;
OPTION = (FAULT, ARRAY);
COMPILER FILE SOURCE (
    LFILENAME=LISTSHAREFILES.C85_M,
    KIND=VIRTUAL, IOHFUNCTIONNAME="STREAMIOH",
    IOHSTRING="REDIRECTION, " &
    %-- no format attributes, since .c85_m defines them --
    "IOHSTRING="SERVER=DIGMD83A SHARE=TESTSHARE " &
    "TIMEOUT=5 IPADDRESS=192.168.16.2"");
COMPILER DATA
$ SET MERGE LIST
?END JOB
```

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References

- ◆ MCP I/O Subsystem Guide, Section 12
 - Using Virtual Files
 - Using the REDIRSUPPORT IOHANDLER Library
 - Using the STREAMIOH IOHANDLER Library
- ◆ MCP File Attributes Reference Manual
- ◆ "Using Stream Files, 2.0" UNITE presentation
 - <http://www.digm.com/UNITE/2016>

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END

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Network Share**