

1 Using FTP

It is possible to move files between the SCADA host nodes and the (2) connected PCs using FTP (File Transfer Protocol). This can be done while seated at a PC, or while logged into a SCADA host node.

When you "get" or "put" a file, FTP needs to know which of two kinds of file you are moving; TEXT or BINARY. A TEXT file is a file created by a word processor or by RDU or RDE with the (default) /TYPE=REPORT key. The defining characteristic of a text file is that it uses carriage return/line feeds. Any file that does not use carriage return/line feeds is a BINARY file.

1.1 Creating a text report from SCADA to the PC, stationed at the PC

Example 1: Creating and bringing (getting) a text type report from SCADA to a PC, while seated at the PC. This example assumes that the system is running on MANMVA (MANMVA online). The report created and imported will be DP01.

1.1.1 Creating the text report

1. Open an MS-DOS window on the PC.
2. Change the DOS working directory to the one that will hold the new file(s). While it is possible to change your local working directory once FTP is activated, it is easier to work within the directory which will hold the data file(s). Enter at the command prompt:

```
C:>cd c:\report  
C:\report>telnet 192.0.54.1
```

3. A login prompt for **MANMVA** will appear. Log in as a valid user with privilege to use RDE. Then, enter at the command prompt:

```
rde dp01 /chain/type=report/out=dp01
```

4. This will create the file [MAN.DATA]DP01.RPT on MANMVA. Subsequent pages of the report (DP02, etc.) will be appended to this file.
5. Log out of MANMVA by entering:

```
logout
```

1.1.2 Activating Text Report FTP

1. Activate FTP by entering the following at the DOS prompt:

```
ftp 192.0.54.1
```

2. Enter your account name and password when prompted. At FTP activation, you will be notified that you are now logged in, and the DOS prompt will change to the FTP (**FTP>**) prompt.

1.1.3 Transferring Text Report Files

Upon FTP activation, the default transfer mode is ASCII (text). This mode is to be used with all ASCII text file transfers. If the mode has been set to binary transfer mode (by use of the **bin** command), it must be reset to **ascii**.

1. Change to the desired directory. Type:

```
cd [man.data] (The square brackets are directory separators in VMS.)
```

2. Transfer the desired file. Type:

```
get dp01.rpt
```

Upon successful completion of this task, FTP will notify you that the transfer is complete and list the number of bytes transferred.

3. Close the FTP session. Type:

```
close
```

4. End the FTP session. Type:

```
bye
```

This will end the current FTP session and the standard DOS prompt will reappear.

5. The file DP01.RPT, containing information for all the DP* reports scheduled to chain together, is now filed on the PC in C:\Report.

1.2 Creating a DIF Report to the PC, stationed at the PC

Example 2: Creating a report in DIF (Data Interchange Format), and pulling this over to a PC, while seated at the PC. This time, CHAINing the report will create a new file for each succeeding page of the report. The example report will be DP01. Each succeeding chained report will create a higher VMS file version of DP01.RPT. We will rename the report files from DP01.rpt;* to dp*.rpt before moving the data to the PC.

1.2.1 Creating the DIF report.

1. In an MS-DOS window, enter:

```
cd c:\report
telnet 192.0.54.1
```

2. Log in to MANMVA.
3. In MANMVA, log onto the default directory. Type:

```
set default [man.data]
```

4. Delete the existing dp0.dif files. Type:

```
delete dp0*.dif;*
```

5. Generate the report. Type:

```
rde dp01 /chain/type=dif/out=dp01
```

6. Wait one minute and then rename the files. Type:

```
rename dp01.dif;21 dp21.dif/log
rename dp01.dif;20 dp20.dif/log
...
rename dp01.dif;2 dp02.dif/log
```

7. Logout of MANMVA by entering:

```
logout
```

8. The logout will return you to a DOS session on the PC.

1.2.2 Activating DIF Report FTP

1. Activate FTP by entering:

```
ftp 192.0.54.1
```

2. Enter your account name and password when prompted. At FTP activation, you will again be notified that you are now logged in, and the DOS prompt will change to the FTP (**FTP>**) prompt.

1.2.3 Transferring the DIF files

1. Change to the desired directory. Type:

```
cd [man.data]
```

2. Change to binary format for binary files to be transferred. Type:

```
bin
```

3. Begin the transfer of multiple files. Type:

```
mget dp*.dif
```

4. Close the FTP session. Type:

```
close
```

5. End the FTP session. Type:

```
bye
```

6. The reports should now be filed in C:\report\dp*.dif on the PC.

Note: If the system was running on MANMVB (MANMVB UP, ONLINE in USR), all Telnet and FTP sessions would be run on MANMVB, meaning that the IP address used would be **192.0.54.2**.

1.3 Creating a text report from SCADA to the PC, stationed at SCADA

Example 3: Moving a TEXT type report from SCADA to a PC while logged into SCADA. In this example, the ASCII report DP01 will be created and moved from MANMVA to MANPC2. The SCADA workstations are able to use host aliases, instead of IP addresses, so the command FTP MANPC2 can be used instead of FTP 192.0.54.14, although the latter would work also.

1.3.1 Creating the text report

1. Log into MANMVA.

2. Generate the report. Type:

```
rde dp01 /chain/out=dp01
set default [man.data]
```

1.3.2 Activating FTP

1. Wait a minute or so, then type:

```
ftp manpc2
```

2. Login onto MANPC2. Type in FTP username:

```
report
```

3. Type in password:

```
report
```

This should result in an **FTP>** prompt.

1.3.3 Transferring the Files

1. Transfer the files from MANMVA to MANPC2. Type:

```
put dp01.rpt
```

2. Close the FTP session. Type:

```
close
```

3. End the FTP session. Type:

```
Bye
```

4. The reports should now be filed in c:\report\dp01.rpt on MANPC2. Note that MANPC1 also accepts username REPORT and password REPORT.