

Using Pulsar with QMS JetScript

At the present date, there has been in excess of 500+ downloads of several versions of the Pulsar program with no noted anomalies except the following:

There has been single reported instance of a problem that has arisen when a user tried Pulsar (v2.0 Beta Release) with a JetScript board installed in his PC. The anomaly described was that the JetScript board's EPROM had been partially 'written-over' when Pulsar was used. The user stated that he had run Pulsar without configuring the program, selected 'several' of the program's options and then at some time later noted the anomaly.

Prior to v2.0, Pulsar was only programmed to send HP command strings to the user-selected printer port (LPT1 was used as a default). These printer command strings were sent using the following Visual BASIC syntax:

The following subroutine was created to send the printer command string to the printer port:

```
Sub SetPrint (Code$)
  If Port = "" Then
    FileNum% = FileOpener("LPT1", PRINTFILE)
  Else
    FileNum% = FileOpener(Port, PRINTFILE)
  End If
  Put #FileNum%, , Code$
  Close #FileNum%
End Sub
```

where,
PRINTFILE was globally defined to be equal to 3
Port was user settable

The following function was created to open a file and (in the case of sending strings to the printer) Binary (Case 3) was the output mode used:

```
Function FileOpener (FileName$, Mode%) As Integer
  FileNum% = FreeFile
  On Error GoTo OpenerError
  Select Case Mode
    Case 1
      Open FileName$ For Output As FileNum%
    Case 2
      Open FileName$ For Input As FileNum%
    Case 3
      Open FileName$ For Binary As FileNum%
    Case Else
      Exit Function
  End Select
  FileOpener = FileNum%
Exit Function
OpenerError:
Action% = FileErrors(Err)
Select Case Action%
  Case 0
```

```
Resume
Case Else
  FileOpener = 0 'File not opened
  Exit Function
End Select
End Function
```

The SetPrint subroutine would typically be called with the following syntax:

```
Code$ = ESC + "&l" + Copies$ + "X"
SetPrint Code$
```

where,
ESC is defined as follows:
Global ESC As String * 1
ESC = Chr\$(27)

Version 2.0 (Beta Release) introduced the capability to control switching between PostScript/PCL modes when using the Adobe PostScript cartridge. The Adobe cartridge requires a series of PostScript command language statements to be sent to the cartridge (via the printer port) in order to either activate the cartridge in the PostScript mode or turnover printer control to the LaserJet in its native PCL mode. This was accomplished by using the following Visual BASIC syntax and the appropriate command structures were derived directly from the Adobe PostScript cartridge owner's manual:

```
Code$ = "serverdict" + SP + "begin" + SP
Code$ = Code$ + "0" + SP + "exitserver" + CRLF
Code$ = Code$ + "statusdict" + SP + "begin" + SP
Code$ = Code$ + "1" + SP + "setsoftwareiomode" + CRLF
Code$ = Code$ + "end" + CRLF
```

Again, the Code\$ statement was sent to the printer port via a call to the SetPrint subroutine.

This is the only PostScript language command used by Pulsar. There has been no attempt, to date, to incorporate any other PostScript commands.

Since Pulsar simply sends HP-defined printer escape commands to the printer port (except in the case when the PostScript command button is selected with the Adobe PostScript cartridge configuration set, in which case, Pulsar will send a PostScript command string to the printer port) it is unlikely that these same commands could have written to the JetScript's EPROM. However, we wish to caution current JetScript users of this noted anomaly and to be aware of its single occurrence.

Tesseract Information Systems
Peter Grigonis
CIS 72247,1463