ARG 1/

The Interface to the RTF Decoder

The interfacing of the RTF decoder both to the remainder of the TELESOFT filing system and to the outside world is described in these notes.

It has previously been described in:

"A Redefinable Telesoftware Format"
Document Version 1.2 (C.J.Oswald)

and in:

← changes in Red

"The BBC Microcomputer Teletext & Videotex User Interface"
4th Draft (A.R.Gordon)

These notes combine the information from both of the documents (with minor modifications) and supercede them on this subject.

After an initialisation of the decoder (CALL initall), interface is by means of tube-compatible operating system calls:

FILES	OSFIND	&4Ø	≡ CALL openordered
	OSFILE	&Ø5	≡ CALL getaddresses
	OSFILE	&Ø7	≡ CALL opendisordered
	OSBGET	&FB (DE)	≡ CALL getteletext
	OSBGET	&FD (DF)	} calls to the remainder of the TELESOFT filing system
OSWORD	OSWORD	&7A	}
	OSWORD	&7B	≡ CALL getinfo
*OPT	*OPT	&Ø1	≡ CALL messagelevel
	*OPT	&Ø4	≡ CALL resetchoice

Thus there are eight entry points to the decoder & the decoder makes two different types of calls itself (both with regard to the page buffer supervised by the remainder of the TELESOFT filing system).

The Interface to the RTF Decoder/cont.

FILES

When the TELESOFT filing system is selected, all file commands are routed to it. Five of these (one OSFIND two OSFILE and two OSBGET calls) concern the RTF decoder directly.

- OSFIND &40 (calls openordered) — OPEN FILE (ORDERED)

  On entry: A = &40
  XY points to the name of the file to be opened (terminated in &0D)

  On exit: Y = &FB (handle)

- OSFILE &05 (calls getaddresses) — TELESOFTWARE LOAD ADDRESSES

  On entry: A = &05

  On exit: XY points to a control block:

XY+0, XY+1	points to the title of the file (a string ending in hex &0D)
XY+2, XY+3, XY+4, XY+5	load address for next section of telesoftware
XY+6, XY+7, XY+8, XY+9	execution address of telesoftware file
XY+&A	=0 if execution address is known; <>0 otherwise

- OSFILE &07 (calls opendisordered) — OPEN FILE (DISORDERED)

  On entry: A = &07
  XY points to a control block:

XY+0, XY+1	points to the title of the file (a string ending in hex &0

(PTO)

The Interface to the RTF Decoder /cont.

OSFILE &Ø7 /cont.

XY +2
XY +3
XY +4
XY +5
} load address (forced)

XY +6 = Ø if load address is to be forced
<>Ø otherwise

On exit: A = &FB (handle)

- OSBGET&FB (calls gettelebyte) — DECODED TELESOFTWA

On entry: Y = &FB (handle)

On exit: C = Ø indicates successful acquisition of a decoded byte (passed in A)
C = 1 indicates some form of EOF condition
A contains the reason code:
A = &ØØ : the whole file has been loaded
A = &Ø1 : end of a section of a disordered file; new comment is available
A = &Ø2 : end of a section of a disordered file; no comment available.

- OSBGET &FD (calls ARG's code) — PAGE BUFFER

On entry: Y = &FD (handle)

On exit: C = Ø indicates successful acquisition of a byte from the page buffer (passed in A)
C = 1 indicates some form of EOF condition
A contains the reason code:
A = &ØØ : no more data available from source
A = &Ø1 : end of file marker has been passed
A = &Ø2 : end of block marker has been passed
A = &Ø3 : end of buffer has been passed (a call of OSWORD is needed to replenish it

The Interface to the RTF Decoder/cont.

OSWORD

The two OSWORD calls would logically be more suited to OSBYTE calls; however all OSBYTE calls have been allocated for MOS functions.

- **OSWORD &7A** (calls ARG's code) — PAGE BUFFER

On entry: A = &7A
XY points to control block:

SET TOP BIT i.e &80 to &89

XY+Ø = &ØØ Load next page into page buff
XY+Ø = &Ø1 Reload same page
XY+Ø = &Ø2 Mark start of block
XY+Ø = &Ø3 Return to start of block
XY+Ø = &Ø4 Move back one position
XY+Ø = &Ø5 Get absolute page specified from XY+1 onwards (terminated by &ØD)
XY+Ø = &Ø6 Get linked page specified at XY+1
XY+Ø = &Ø7 Get previous page
XY+Ø = &Ø8 Mark end of block
XY+Ø = &Ø9 Mark start of name.
= &ØA Get next start of chain
= &ØB returns XY+1 = Ø for page unlocked
&ØC — TELESOFTWARE INFORMATION

- **OSWORD &7B** (calls get info)

NOTE: X, Y ~~preserved~~ not A=Ø on exit.

On entry: A = &~~7B~~ >A
XY points to control block:

NB XY in &FØ

XY+Ø = &ØØ Request file title & version n
XY+Ø = &Ø1 Request new comment
XY+Ø = &Ø2 Request code to be sen to get next block
XY+Ø = &Ø3 Request code to be sent to get same block aga

(XY+Ø) in A

On exit: XY points to requested data
XY+Ø is length of data
XY+1 onwards is the data
X = Y = Ø if data requested is not available.

The Interface to the RTF Decoder/cont.

*OPT

where's Param?

- *OPT &01 (calls messagelevel) – MESSAGES

  *OPT 1, xx

  The level of comments decoded and made available for display (via OSASCI) is set to 255 by default. The *OPT command resets the level to the value passed by it (xx).

- *OPT &04 (calls resetchoice) – RESET

  *OPT 4, yy

  By default the decoder will reset itself at the end of a telesoftware file.
  The *OPT command with yy ≠ 0 will stop the decoder from resetting itself; with yy = 0 will make it reset itself (at the end of a telesoftware file).

Initialisation

- CALL initall – INITIALISATION

  A call of initall performs a power-up initialisation of the RTF decoder.

C.J.O.
23rd June '82.

subject to revision