

Tool Talk 3

Rex Swain
Independent Consultant
8 South Street
Washington, CT 06793
Tel 860-868-0131
Fax 860-868-9970
rex@rexswain.com

<http://www.rexswain.com>

APL2000 User Conference

November 2005

Notes

To add UCMSDREX.SF to your user command files path:

```
]UFILE [1.5] UCMSDREX
```

If you already have UCMSDREX.SF from a previous conference, just replace it with this one; the tools from 2003 and 2004 are all here too.

See UCMSDREX03.PDF and UCMSDREX04.PDF to learn about tools from the 2003 and 2004 conferences.

These tools *no longer* require)EVLEVEL 2

Help:

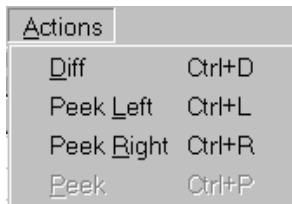
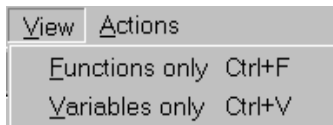
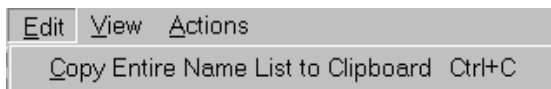
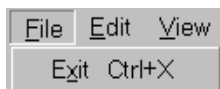
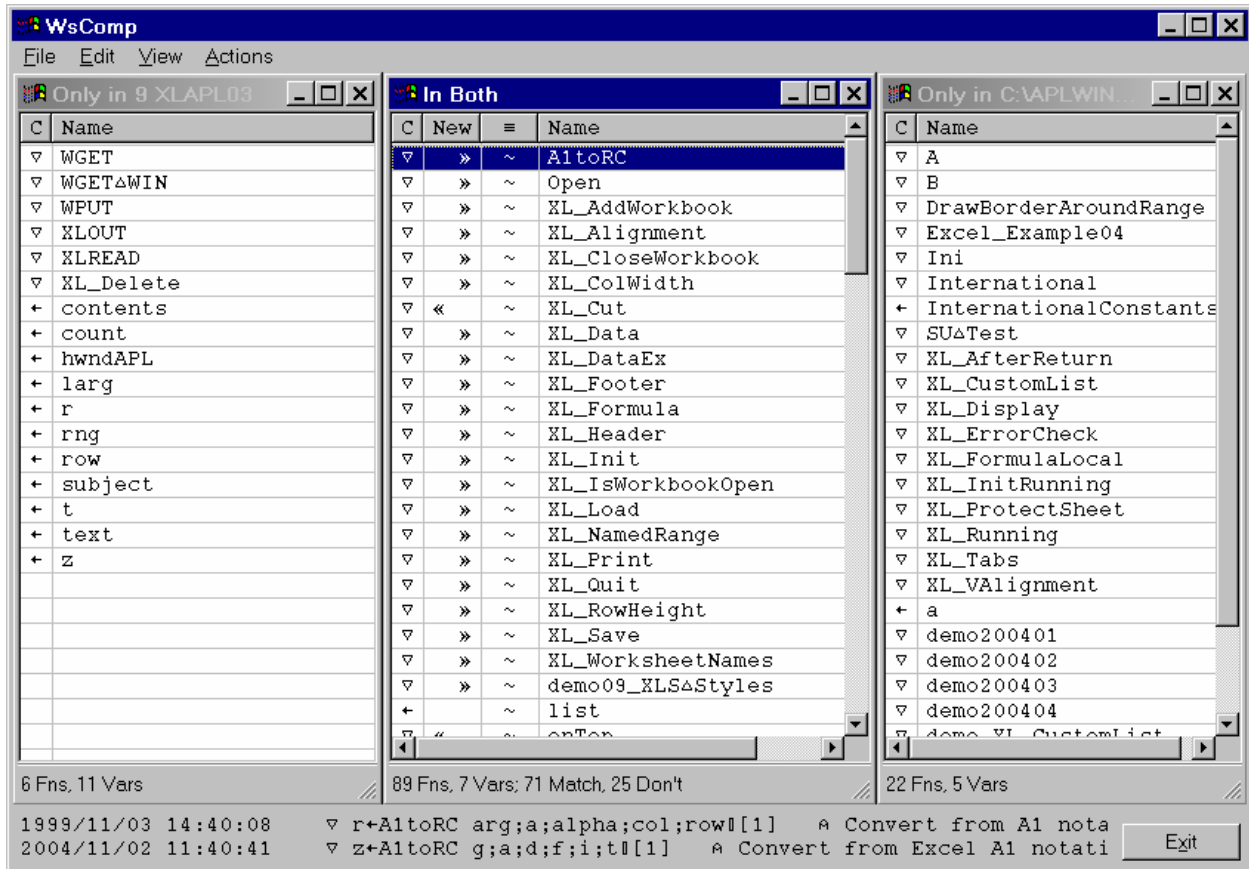
```
]foo ?
```

Font: You may edit in your APLW.INI file; the defaults are:

```
[UCMSDREX]  
FontName=APLFONT  
FontSize=11  
FontStyle=0  
FontCharset=default
```

Workspace Compare

lwscomp 9 xlapl03 ; C:\APLWin50\2004 Conf Disk\xlapl04



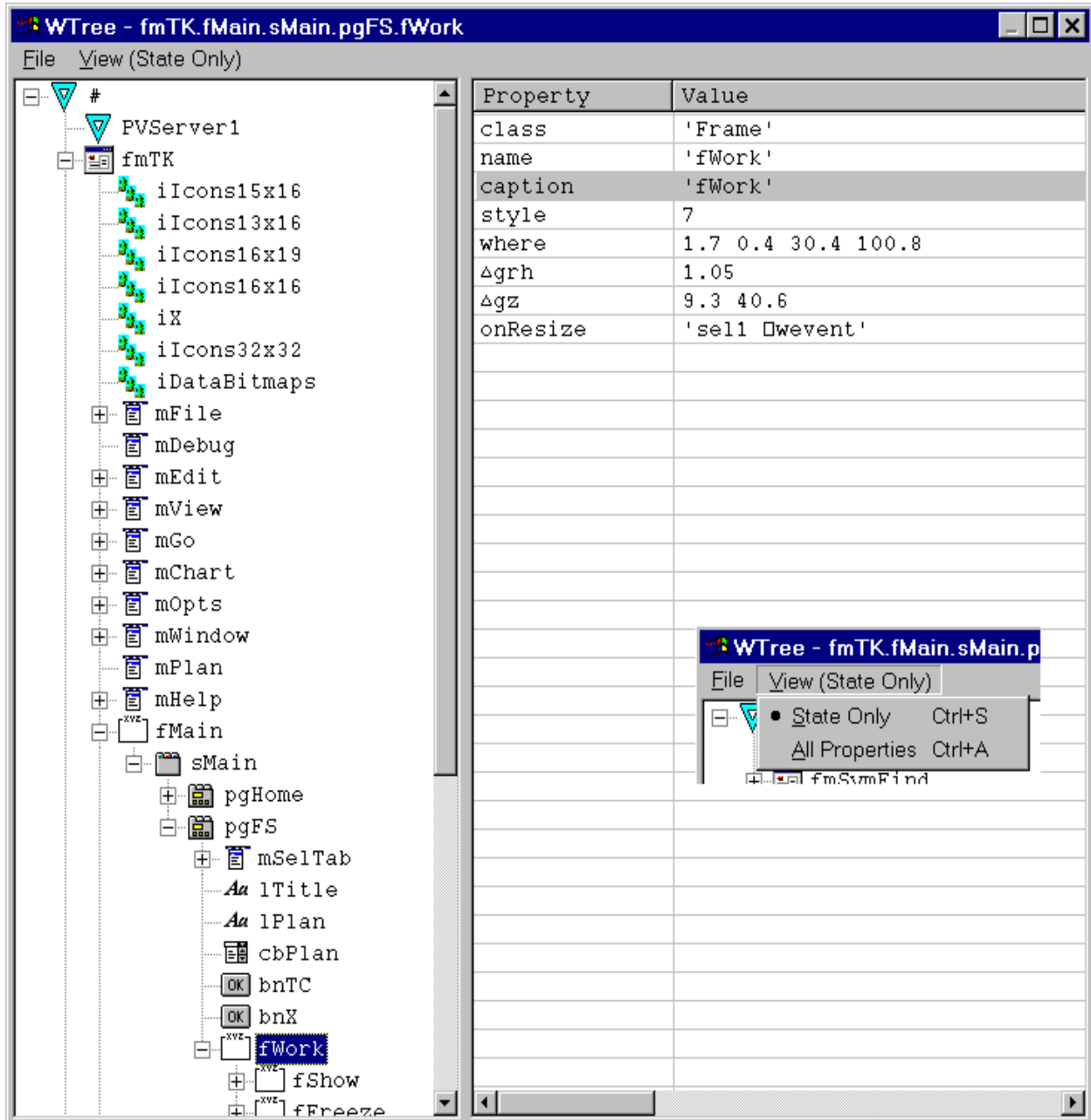
Try `lwscomp /regserver` if you have not already registered aplw as a server.

Shadowing can be avoided by using a saved ws rather than the active ws.

JWTREE with argument

- A Enhanced to allow argument specifying object to start with
- A]WTREE fmFoo.fData.bnCancel A start with specified object
- A]WTREE . A start with []wself
- A Added View menu (All Properties/State Only)
- A Remembers window size and position

`]wtree fmTK.fMain.sMain.pgFS.fWork`



APL+Win Keys

]keys

| Keys | | | | | |
|-----------|---|---|-------------|-----|---|
| File Edit | | | | | |
| A | C | S | Shifts | Key | Default |
| | | | | F1 | Help |
| | | | | F2 | Jump to next bookmark |
| | C | | Ctrl+ | F2 | Bookmark toggle |
| | | S | Shift+ | F2 | Jump to previous bookmark |
| | C | S | Ctrl+Shift+ | F2 | Remove all bookmarks |
| | | | | F3 | Repeat find |
| | | S | Shift+ | F3 | Repeat find backward |
| | C | | Ctrl+ | F3 | Find current selection |
| | C | S | Ctrl+Shift+ | F3 | Find current selection backward |
| | A | | Alt+ | F3 | Find dialog (same as Ctrl+F) |
| | | | | F4 | |
| | A | | Alt+ | F4 | End APL session |
| | | | | F5 | Run [CW] |
| | C | | Ctrl+ | F5 | Set next statement [CW] |
| | | | | F6 | |
| | C | | Ctrl+ | F6 | Next window |
| | C | S | Ctrl+Shift+ | F6 | Previous window |
| | | | | F7 | |
| | C | | Ctrl+ | F7 | Run to cursor or below [CW] |
| | C | S | Ctrl+Shift+ | F7 | Run to cursor [CW] |
| | | | | F8 | |
| | | | | F9 | Recall previous line backward |
| | | S | Shift+ | F9 | Recall previous line forward |
| | C | | Ctrl+ | F9 | Recall line dialog |
| | A | | Alt+ | F9 | Jump to previous executed line |
| | A | S | Alt+Shift+ | F9 | Jump to next executed line |
| | | | | F10 | Step to next statement [CW] |
| | | S | Shift+ | F10 | Step to next line [CW] |
| | C | | Ctrl+ | F10 | Step over by primitive [CW] |
| | | | | F11 | Step into function [CW] |
| | | S | Shift+ | F11 | Step out of function [CW] |
| | C | | Ctrl+ | F11 | Step into by primitive [CW] |
| | | | | F12 | Copy code to APL session [CW] |
| | C | | Ctrl+ | F12 | Edit pending function |
| | C | | Ctrl+ | A | Select all |
| | C | S | Ctrl+Shift+ | A |)SAVE As dialog |
| | C | | Ctrl+ | C | Copy |
| | C | S | Ctrl+Shift+ | C |)COPY dialog |
| | C | S | Ctrl+Shift+ | D |)DROP dialog |
| | C | | Ctrl+ | E | End and save edit |
| | C | | Ctrl+ | F | Find dialog |
| | C | | Ctrl+ | G | Get (Fetch dialog) |
| | C | S | Ctrl+Shift+ | G | Gather selected executed lines to clipboard |
| | C | | Ctrl+ | J | Jump dialog |
| | C | S | Ctrl+Shift+ | J | Jump to column dialog |
| | C | | Ctrl+ | K | Show/hide Code Walker |
| | A | C | Alt+Ctrl+ | K | Show/hide code window [CW] |
| | C | S | Ctrl+Shift+ | K | Show/hide state indicator window [CW] |
| | C | | Ctrl+ | L | Localize toggle |
| | C | S | Ctrl+Shift+ | L |)LOAD dialog |

| Keys | | | | | |
|-----------|---|---|-------------|-------|--|
| File Edit | | | | | |
| A | C | S | Shifts | Key | Default |
| | C | | Ctrl+ | M | Match paren/quote/bracket |
| | C | S | Ctrl+Shift+ | M | Match paren/quote/bracket and select |
| | C | | Ctrl+ | N | New edit |
| | C | | Ctrl+ | O | Open edit dialog |
| | C | S | Ctrl+Shift+ | O | Open edit session on object at caret |
| | C | | Ctrl+ | P | Print dialog |
| | C | S | Ctrl+Shift+ | P |)PCOPY dialog |
| | C | | Ctrl+ | Q | Quit edit |
| | C | | Ctrl+ | R | Replace dialog |
| | C | S | Ctrl+Shift+ | R |)CLEAR dialog |
| | C | | Ctrl+ | S | Save edit |
| | C | | Ctrl+ | T | Toggle edit and session |
| | C | | Ctrl+ | V | Paste |
| | C | | Ctrl+ | W | Watchpoints dialog |
| | C | | Ctrl+ | X | Cut |
| | C | | Ctrl+ | Z | Undo |
| | C | | Ctrl+ | ↓ | Scroll down without moving caret |
| | C | S | Ctrl+Shift+ | ↓ | Move the cursor line to the bottom of the page |
| | C | | Ctrl+ | ↑ | Scroll up without moving caret |
| | C | S | Ctrl+Shift+ | ↑ | Move the cursor line to the top of the page |
| | C | S | Ctrl+Shift+ | End | Select from caret to end |
| A | | S | Alt+Shift+ | End | Erase from caret to end of session log |
| | C | S | Ctrl+Shift+ | Home | Select from caret to beginning |
| | C | | Ctrl+ | PgDn | Scroll left |
| | C | | Ctrl+ | PgUp | Scroll right |
| | | | | Tab | Insert tab indent |
| | | S | Shift+ | Tab | Remove tab indent |
| | C | | Ctrl+ | Tab | Next window |
| | C | S | Ctrl+Shift+ | Tab | Previous window |
| A | | | Alt+ | Tab | Next application [XX] |
| | C | | Ctrl+ | Space | Insert space indent |
| | C | S | Ctrl+Shift+ | Space | Remove space indent |
| A | | | Alt+ | Bksp | Undo (same as Ctrl+Z) |
| | | S | Shift+ | Del | Cut (same as Ctrl+X) |
| | | S | Shift+ | Ins | Paste (same as Ctrl+V) |
| | C | | Ctrl+ | Ins | Copy (same as Ctrl+C) |
| | C | | Ctrl+ | Enter | Insert line in session (without execution) |
| | C | S | Ctrl+Shift+ | Enter | Move the cursor line to the middle of the page |
| | C | | Ctrl+ | / | Insert lamp |
| | C | S | Ctrl+Shift+ | / | Remove lamp |
| | C | | Ctrl+ | + | Increase font size |
| | C | S | Ctrl+Shift+ | + | Decrease font size |
| | C | | Ctrl+ | . | Stop toggle |
| | C | | Ctrl+ | , | Trace toggle |
| | C | S | Ctrl+Shift+ | . | Stop remove |
| | C | S | Ctrl+Shift+ | , | Trace remove |
| | C | | Ctrl+ | Num * | Top of stack [CW] |
| | C | | Ctrl+ | Num - | Up one stack level [CW] |
| | C | | Ctrl+ | Num + | Down one stack level [CW] |
| | C | | Ctrl+ | Num / | Bottom of stack [CW] |

Trace Variable Changes

```

▽ foo;a;i
[1]   :for i :in 13
[2]     a←i
[3]   :end
▽

```

```

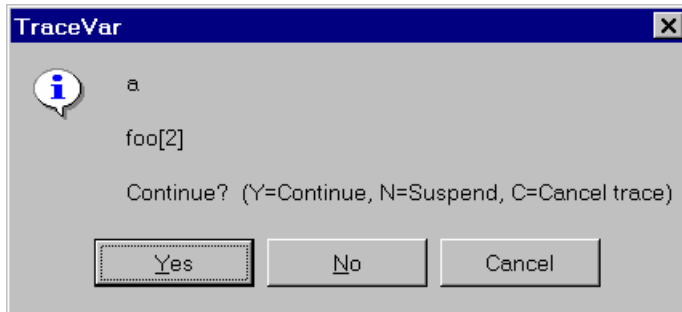
]tracevar a
foo
→→→ TraceVar: foo[2]
←←← TraceVar: a+1
→→→ TraceVar: foo[2]
←←← TraceVar: a+2
→→→ TraceVar: foo[2]
←←← TraceVar: a+3

```

```

]tracevar a /alert
foo
→→→ TraceVar: foo[2]
←←← TraceVar: a+1

```



```

]tracevar /off

```

```

]tracevar ?
]TraceVar foo ...           A trace changes to the named variable(s)
]TraceVar foo:2⇒foo         A display 2⇒foo when foo changes; just one var
]TraceVar ... /STOP         A sets stop on first change; suspends before next
]TraceVar ... /ALERT        A display MessageBox after change report

]TraceVar foo ... /OFF      A turn off tracing of the named variable(s)
]TraceVar /OFF              A turn off all tracing

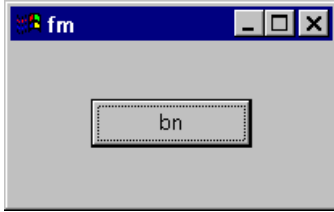
```

Trace Object Events and Actions

```

[]wself-'fm' []wi 'Create' 'Form' ('size' 5 20)
[]wself-'bn' []wi 'Create' 'Button'

```



]traceobj

TraceObj now tracing 31 events on fm.bn

TraceObj now tracing actions on fm.bn

```

  A cause an Action
  []wi 'where' 1 1
... TraceObj: fm.bn Action ('where' 1 1) <[fm.bn;where]
  A Alt+Tab to form
... TraceObj: fm.bn Focus (⊕)
... TraceObj: fm.bn Paint (⊕)
  A use mouse to click button and then click X to close form
  A trace display is: ... TraceObj: []wself []wevent ([]warg) []si
... TraceObj: fm.bn MouseEnter (1.1 9 0 0 0)
... TraceObj: fm.bn MouseMove (1.1 9 0 0 0)
... TraceObj: fm.bn MouseMove (0.8 8.8 0 0 0)
... TraceObj: fm.bnMouseDown (0.4 8.4 1 1 0)
... TraceObj: fm.bn MouseUp (0.4 8.4 1 0 0)
... TraceObj: fm.bn Click (⊕)
... TraceObj: fm.bn MouseMove (0.4 8.4 0 0 0)
... TraceObj: fm.bn MouseMove (0.4 8.2 0 0 0)
... TraceObj: fm.bn MouseMove (0.4 9 0 0 0)
... TraceObj: fm.bn MouseLeave (⊕)
... TraceObj: fm.bn Unfocus (⊕)
... TraceObj: fm.bn Destroy (⊕)
  A delete form (which causes button to be deleted)
  'fm' []wi 'Delete'
... TraceObj: fm.bn Delete (⊕) <[fm;Delete]

```

]traceobj ?

Trace activity on an APL GUI object

Syntax:]TraceObj [obj] [/A] [/E] [/OFF] [/X=...] [/I=...]

If object not specified, []wself is used

Use /A to trace just actions or /E to trace just events; default is both
 /X excludes (all but) actions/events matching substring -- e.g., /X=mouse
 /I includes (only) actions and events matching substring

Any trace on an object replaces any previous trace

Trace display is: ... TraceObj: []wself []wevent ([]warg) []si

For example, after: 'fm' []wi 'Create' 'Form' ('onResize' 'foo')

/A traces property changes: 'fm' []wi 'size' 10 20
 and methods: 'fm' []wi 'Show'

but it does NOT trace events (Resize is not traced if user resizes fm)

/E traces events such as Resize triggered if user resizes form

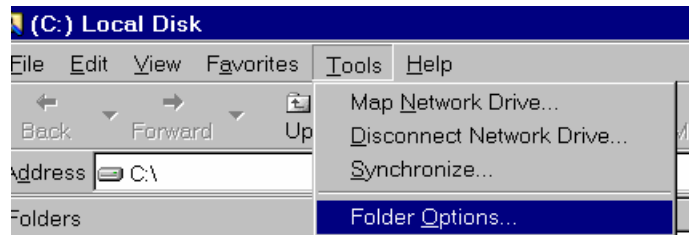
Associating JFileDoc with .SF Files

The following is for Windows 2000, and assumes your APL+Win executables are in directory C:\APLWIN52 ; adjust accordingly.

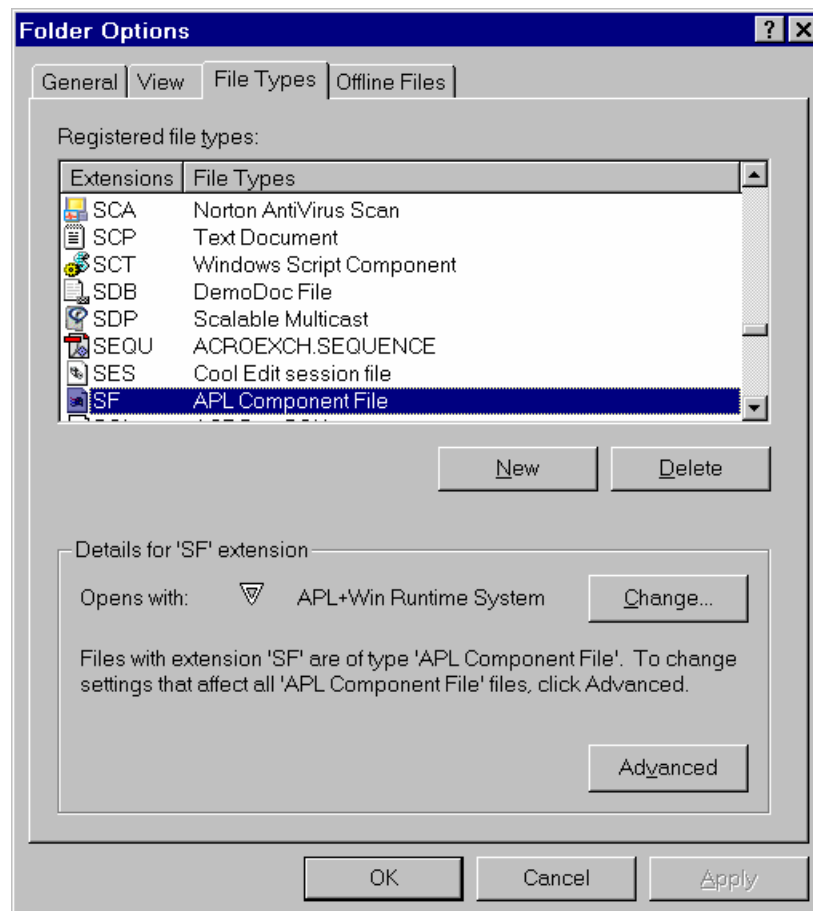
)LOAD the workspace FILEDOC and then)RSAVE it into C:\APLWIN52

Note!)RSAVE not)SAVE

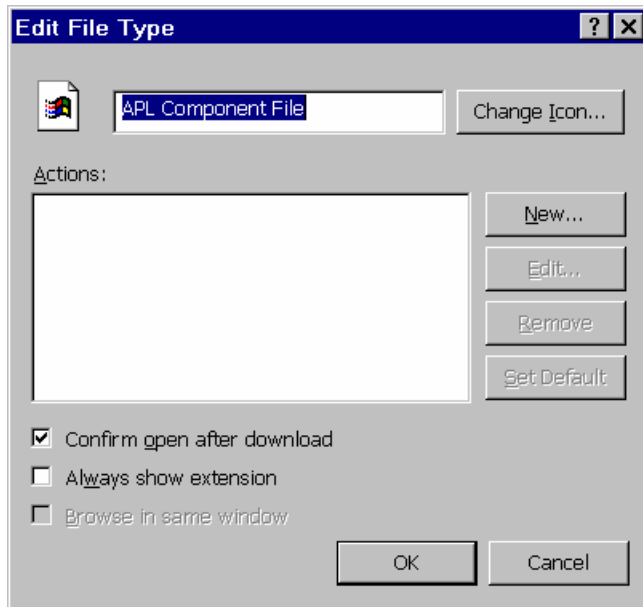
Start Windows Explorer, Tools menu, Folder Options



Click the File Types tab, and scroll down to SF files



Click the Advanced button

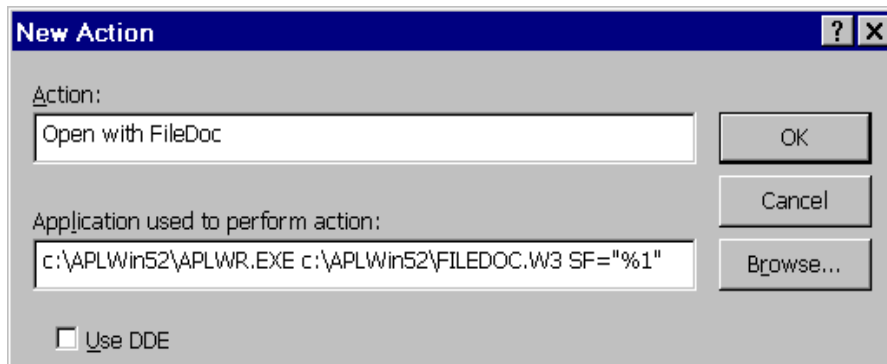


Click the **New** button

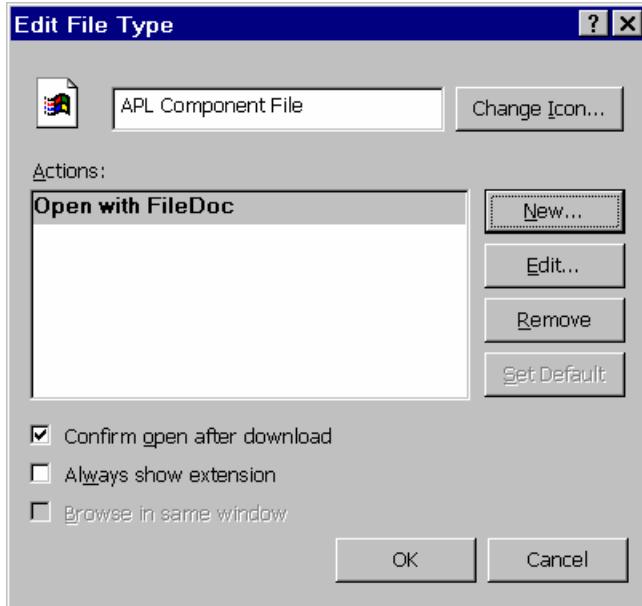
Type `Open with FileDoc`

and `C:\APLWIN52\APLWR.EXE C:\APLWIN52\FILEDOC.W3 SF="%1"`

Note! APLWR not APLW

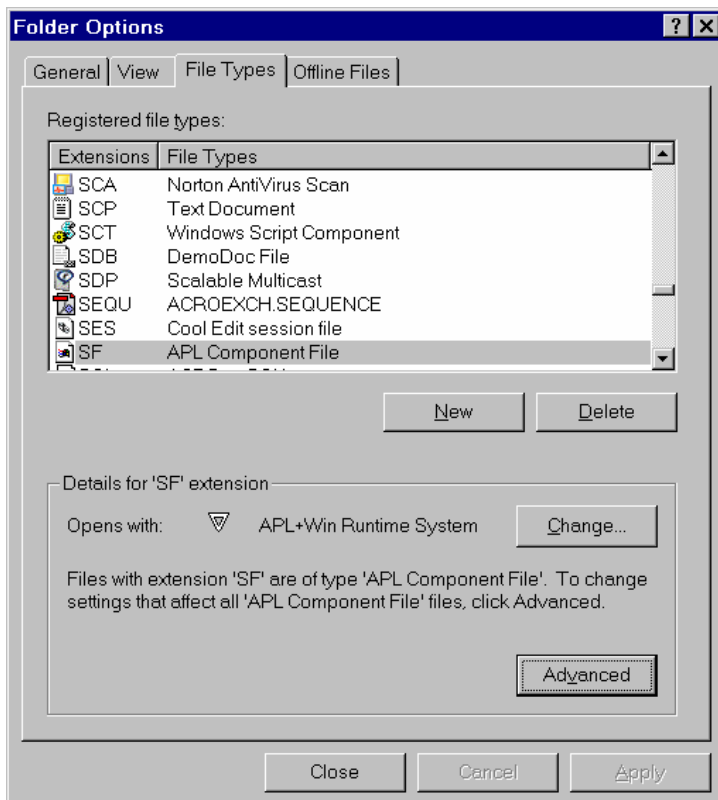


Click **OK**



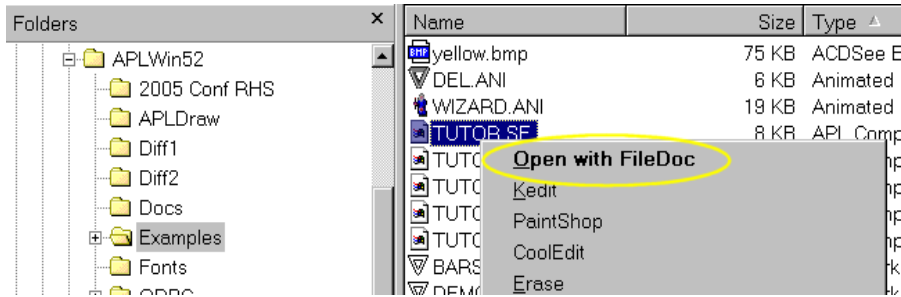
Note that **Open with FileDoc** is in bold face. That means it's the default action for the .SF file type.

Click OK.



Click Close.

Now if you right-click on an .SF file, you should see **Open with FileDoc** on the context menu.



If you choose that menu item, or just double-click on the file, FileDoc should come up. And if someone emails an SF file to you, you should be able to take a quick look at it just by double-clicking the attachment.



Note that since this runs the APL+Win runtime engine,)EDIT is not possible. So when you peek at a file component, an Edit box is used.

