Subject: Re: Adding Devices to PV~Wave/IDL
Posted by c1dje on Tue, 21 Jun 1994 22:52:24 GMT
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One can add new builtin functions, procedures, and graphics device drivers, to IDL (and I assume PV~WAVE as well). RSI has (had?) an IDL Internals guide which described exactly such functionality.
GIF, however, is an image file format, so writing a graphics device driver primarily requires duplication of all of the graphics primitives writing to an internal buffer (not just inserting images from TV calls, but drawing lines and text, color tables, magnification, etc.). The format only comes into play when closing the file -- applying GIF compression algorithm to the final state of the buffer and writing the data stream to a file.
IDL already provides a Z-buffer device which applies graphics commands to an internal memory buffer. Instead of duplicating all of the difficult graphics device driver functionality for an internal memory buffer, I would recommend simply reading the final image of the Z-buffer using TVRD and then writing that image to a file in GIF format, possibly using CALL_EXTERNAL function if the library read_gif and write_gif procedures do not fulfill your needs.

David

P.S. I wrote a device driver for the CELCO Film Recorder (based upon a device driver for the Polaroid Digital Palette written by Mark Rivers of Brookhaven) before IDL provided the Z-buffer. Once the Z-buffer was introduced, I converted to using TVRD and a special function to generate the CELCO-format files. I am much happier with the latter implementation as it has many more features and is much easier to maintain.

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"I'm not weird, I'm different." -- Frank Zappa
"It's only a dream away ..." -- from Time Bandits ending credits song