

**This is the text of an email I sent and the one I received from Gary Shell of the early Digital Group software supplier, MicroWorks. Mr. Shell wanted me to stress that this is \*his\* version of the facts.**

Sent: Thursday, January 30, 2003 11:25 PM  
To: gshell(at)fuse.net  
Subject: Microworks Business Basic - Digital Group

Mr. Shell,

My name is Bryan. I found your resume online though a search on Microworks Business Basic. I did the search on the slim chance that I might find some documentation for version 1.0 somewhere on the web and was a little surprised to find the author! I just thought it would be fun to let you know I have a working copy running on my "vintage" Digital Group computer. I've had a Digital Group computer since 1977, I drag it out every now and then to show my kids what computing was like back in the stone age!

Regards,  
Bryan

### **Gary's answer:**

WOW! Knock me over with a feather! I am flabbergasted that THAT connection was ever made via your search. It's VERY cool to hear from a user well on all these years. I too still have a complete DG machine, in fact the original machine that Business Basic was written / hacked (in the TRUE meaning of that word in 1976) / born / hatched / documented etc. Unfortunately the machine is sitting there wasting away and hasn't seen AC power for ten years. I do think I have a printed copy of the documentation, somewhere... I archive such stuff but the where part is in question. <grin> I'm CC'ing the other two principles in the original Microworks triumvirate. MAYBE Peter has access to, or knows someone who might have an electronic copy somewhere.

There were two other key players in the development. Jamie Schrider was a "kid" at the time, but was the WIZARD who initially unraveled the original predecessor to Business Basic, its name escapes me. He literally read and wrote Z-80 machine code in hexadecimal. There was never a single byte of code written in an assembler. Jamie lived and breathed in a hex/ASCII editor view directly into memory. Consequently no source code exists (none EVER existed <big ole grin>) for Business Basic and, hmmm what was it, Woproc??? DAMN, my memory is fading. Peter, what was the word processor app called?

The other guy who spent a lot of time on Business Basic was Bill Kemmery. Bill was the most experienced programmer of the bunch. He and I hooked up in the mainframe world via a succession of RCA Spectra 70 machines and then Sperry Univac, I think. He helped architect, write, test, write some more, architect some more, test some more Business Basic into being. He, too, stood in awe of Jamie and mentored him on many aspects of what became Business Basic.

Peter was the genesis of the whole thing, he and I hooked up through Michael (so maybe MICHAEL is the true genesis). Peter was the one who had the guts / knowledge / contacts / electronics understanding / vision / and, at that time, enough programming experience to say something like "This 8080, Z80 machine is going to be a business tool. Let's start a company." That's of course a VERY abbreviated version but you get the idea. <grin>

Michael, unfortunately, after linking Peter and I up, went off to parts east plying his extensive economics skills in Washington DC and latter in San Francisco. So, consequently, he didn't get to play with us as much as any of us wanted. But he was none the less instrumental in the enterprise. We all have the long distance bills to prove it. <grin> Peter and I both looked to him for lots of decisions.

I was sort of at the center. Hey it's MY version of the story, I get to sit at the center. <big ole grin> I knew Peter thru Michael, Jamie and I hooked up when he was in junior high and/or high school when I originally worked at the board of education as a programmer around 1972-1974. And Bill and I, as I mentioned, met over a mainframe around 1969-1972. So when Peter's idea resonated, I did what I could to encourage Jamie and Bill into the mix. Beyond that, I did whatever needed done. I was the luckiest SOB who got to wear a lot of different hats. I learned more from those days than I can ever tell. I got to code with Bill and Jamie, build and debug hardware with Peter. Also from/with Peter I got the entrepreneur 101 lesson plan. I had no clue how to start or operate a business. I also learned the OTHER side of the trade show booth. Our business dealings in Chicago, Denver with Digital Group and client sites in San Francisco and Atlanta were all things I personally got to participate in. I inherited the entrepreneur gene from my Grandfather, but Peter AND Michael gave me the guts to leave the 9-5 world of working for the city, or the board of education etc. and enter the REAL world. Bill and Jamie gave me the first chance to work as a small team of programmers. The paradigm shift was profound. Thanks guys! (Wish I knew how to get this to Jamie or Bill.)

And to you too, Bryan, thanks! I just this minute got back from a week in Montreal, participating in the highest level planning meetings for the biggest company I've ever been involved with. Your letter appeared in my email and triggered thoughts back to how far I / we / these machines have come since then to what I participated in this past week. It also triggered fond thoughts of those four guys and chance to verbalize the contribution our "ancient" association has had on me.

Gary Shell  
CTO  
StreamlineSCM

**After I received this email, I sent Gary another email asking for some clarification on the MicroWorks / WOPROC connection, and received this from Gary:**

To answer your question on the site "Woproc....was there a link to Microworks?" Nope, just fault memory some 25 years hence. Woproc was the original Word Processor. We were all frustrated with it and Manuscriptor was an outgrowth from that frustration. Manuscriptor was the app I was thinking of when erroneously attributed WOPROC to Jamie Schrider. 'Twas Manuscriptor Jamie wrought with pure hexadecimal code. (Man oh man, it still baffles me to this day, how he wrote in hex.)

Thanks again for a great walk down memory lane.

Gary

P.S. And yes, before you ask, you may include this clarification on your web page. <grin>