



during the President's "State of the Union" address, we were about fifteen minutes behind having his entire speech on-line from when he was actually delivering it. That's the kind of turn-around we have and need. That system runs virtually unattended all of the time. Data is just piped into the system and our users get a dynamic view of the system whenever they access a given data base. At the point of their access to a data base, we give them a snapshot of the data. This prevents having some inconsistencies where they say they wish to search for the phrase "nuclear disarmament" and then we introduce new documents or replace existing document that would cause some of the search hits that they found initially to have gone away or new search hits to have been introduced.

To avoid confusion on the user's part where, because of dynamic updating, it could seem we are presenting an inconsistent view of the data, during his search session, we give him a consistent view. At the beginning of any search session we take a snapshot of the data base, insuring the user a complete and consistent view of the data. The next time he accesses the data base, he will see a new refreshed view. We found that is probably the easiest way to explain to our users what is going on. They really do not understand quite what it means to have a completely dynamic environment.

So we make it a static environment during any given search session.

**Q:** *This certainly has been an exciting story you have been sharing with us. Is there anything else you would like to share with us?*

**A:** One of the thing I would like to talk about is the future. Legi-Slate has been relatively successful using APL in building a business and delivering a service to its clients. One of the things that we need to ensure, is that there is a new set of APLers ready to help move the Legi-Slate system into the next century. This is of strategic concern and great importance—where are the next set of APL system analysts going to come from? At this point each one of us in the senior staff; have on the average about 17 years of APL experience. Our junior staff has on the order of 5 to 7 years of APL experience. One of the things we found great difficulty in is finding this young fresh talent. We would like to find someone who has a modicum of APL experience or at least "can spell A-P-L."

**Q:** *Are you telling me that if someone sent you a resume saying, 'I'm APL experienced,' that you would be interested in looking at it and consider them for employment?*

**A:** That is true. We are constantly looking for relatively junior-level people. That is the kind of thing that when STSC (now called Manugistics) and I. P. Sharp were in their consulting heyday and IBM was very active in school districts, we just had this wealth of kids coming out of high school and college that knew APL. I happen to be one of these. We have seen that the nature of the business has obviously changed and the nature of the APL industry has changed. We are having some difficulty finding that young talent. The other thing I would encourage, if there is someone out there that is building or growing young APLers, we should like to hear about it. We would love to hear from them.

*I am sure that would be good news to some of the educators. I hope through this interview we might spread the word some.*

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*Gentlemen, thank you, this has been a very exciting story. I am sure that the rest of the APL world will be very interested in reading it.* ■

## How to Become an APL/J Sysop ...and Why

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Advanced telecommunications are a powerful tool to bring the small number of widely scattered APL/J users together—to sharpen technical skills, to get current news and market intelligence, and to accelerate productivity in APL/J applications.

If you or your local SIG would like to exploit these timely, cheap, and practical advantages, *I've got an offer for you.*

But first, a little background: the BBS\APL is an electronic bulletin board that provides up-to-date files, e-mail, and other info for users of APL and J. Callers from 38 states, 6 Canadian Provinces, and 9 countries in Europe have used the BBS\APL over the past five years. The BBS\APL currently gets about 300 calls per month, many of them from non-APL/J curiosity seekers.

So, here's the offer: I'll provide a working copy of the BBS\APL to anyone, anywhere in the world, who agrees to run an APL/J BBS for at least one year. You'll get:

- All needed BBS software (Maximus, an Opus clone), with full on-disk documentation. At first, it'll work exactly like the BBS\APL. As you learn the software, you can change it to meet your design needs.
- Time-saving maintenance utilities, written in APL★PLUS (or possibly as .EXE files if you don't have APL★PLUS).
- A starter set of about 20 megs of public domain APL software for Manugistics, Iverson APL and J, IBM, Sharp, Dyalog, and I-APL.
- In five years of operation, I've never had a virus problem. Even so, I'll supply some parts of my anti-virus system.
- Technical assistance and support. I'll save you a lot of time getting started. You take it from there.

This BBS is FidoNet ready, and can also be connected to the Internet in ways that I have only partially explored.

What else is needed? Basically, to run a BBS\APL clone you need:

- A DOS computer, dedicated full-time to your BBS (or multi-tasked). It doesn't much matter what computer you use. An old 286 will do—a BBS is basically a serial port connected to a hard disk. A much better starting point is at least a 386SX with a 100-meg drive and a serial port with a 16550 UART chip. A tape backup is a very big plus.
- A fast modem: prices for 14,400-baud modems are plummeting, and modem manufacturers give attractive discounts to Sysops.
- A dedicated phone line. Use the cheapest service available. Unless you're networked, you won't make many outgoing calls on the BBS line.

How much of your time does it take? Running a BBS takes 3–6 hours/week. It may easily take much more, but you can schedule this time at your convenience. It takes a fair amount of work to configure a BBS the way you want it. It takes time to learn new software. I'm at least as busy as you are, and if I can do it, you can too—maybe better.

What does it cost to operate a BBS? Total costs for hardware, electricity, phone, software registration (e.g., ZMODEM, PKZIP), plus a lot of overhead, may add up to \$800–1200 a year. For the BBS\APL, these costs are covered by user subscriptions, and by fees for corporate services and ads. Your costs could be much lower. The cost of phone and electricity alone are about \$US300/year in my area. Your rates may be different. It's important to try to make your BBS financially self-sustaining.

How does this fit with the Internet? Not an easy question. There are several factors to consider: The Internet is free if your employer provides access, but it costs as much as \$10–35/month otherwise. APLers may fret that `comp.lang.apl` on the Internet currently concentrates mainly on J. Internet is superior for e-mail, because a BBS ordinarily has only a single phone line.

Internet users with FTP access will find that file transfer is about equally convenient on both systems. Lacking FTP access, binary APL file transfer via Internet e-mail requires encoding beyond UUENCODE because of its 7-bit design. J files present no such hassle. A BBS can be a “manual reflector” of `comp.lang.apl` e-mail (as the BBS\APL is) with varying degrees of automation, and it can make a FidoNet connection to the Internet (as the BBS\APL doesn't yet).

The BBS\APL and `watserv1@uwaterloo.ca` are increasing their inter-connectivity, to the extent that each now carries the other's table of file contents. Internet access will expand, as the Waterloo archives are expected to be mirrored soon in Vienna, Austria, at `wuvieai.wu-wien.ac.at` (137.208.15.20).

One size does not fit all. I use both the BBS\APL and the Internet, each for its own unique strengths.

Why do I make this offer to spawn the BBS\APL? My motives are selfish. I want new sources of files and info for the BBS\APL. I need technical assistance on networking.

On a personal note, I can tell you that the BBS\APL has been extremely rewarding: I've made new friends around the country and around the world, I've strengthened my skills in multiple APL dialects, and unexpectedly, improved my French by working with APL software authors in France and Switzerland.

What do you have to do to start a BBS? Send me \$US100 as a deposit for a BBS starter kit. I'll refund this deposit, minus my postage costs, when you return the 40+ megs of disks or, better, the QIC-40 tape, that I'll make and send to you. This deposit is my way of filtering those who aren't seriously committed to telecommunications for APL or J. For further information, contact Dick Holt. ■

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