Tadpole VoyagerIIi-SPARC Power on the Move

By Robert J. Kohlhepp

If you take your computer with you to trade shows, customer demos and for off-site visits, you know that traveling can compromise your computer's integrity. And we all know that lugging server hardware through airports is a nightmare. At Network Computing we can attest to this, as shipping Sun machines between our various University of Wisconsin labs has been brutal on hardware and shipping expenses. So we were thrilled to come across Tadpole's VoyagerIIi workstation, which packs performance and expandability in a small, lightweight and portable box.

For Unix veterans the VoyagerIIi, an Ultra SPARC clone, can save your backside. When the VoyagerIIi arrived at our University of Wisconsin Real-World Labs®, we were impressed with its footprint; it didn't compromise performance or SPARC compatibility. We had no problem using the Voyager just like we would any of our Ultra 10 machines, working with the network attachment, compiling and running executables and using NIS (Network Information Service) directory data.

The VoyagerIIi uses IDE disks, has limited expandability and costs quite a bit more than a comparably equipped Sun Ultra 10. For that reason, we don't recommend this machine for product server environments. Designed to travel, this machine is meant for portabilty.

What's In a Box? Our 12.7"x10.2"x4" machine weighed only about 10 lbs., but packed a 300-MHz UltraSPARC IIi processor (512 KB of L2 cache), 1 GB of RAM, and 4-to 5-GB disks. Although VoyagerIIi is capable of being connected to a keyboard, mouse and monitor, we opted to hook up a dumb terminal to the console port and then configured the new machine. Within minutes we were up and running, connected to the network via full-duplex Fast Ethernet.

If that isn't impressive enough, expansion is available via on-board Fast-Wide SCSI, CardBus cards or a PCI slot. Though Fast Ethernet is on the VoyagerIIi's motherboard, you can easily add a second interface with a PCI card or a CardBus card. Our VoyagerIIi came equipped with a PCI video card to drive a VGA-type monitor.

With the VoyagerIIi, you don't have to be concerned about damage to disk drives during shipping. Its disks are mounted in packs of two 2.5-inch IDE drives that are easily inserted into the front of the machine. If you're still paranoid, ship the machine and stick the disk pack in your laptop bag.

Part of the Crew Participation in our lab's Unix infrastructure requires a few basic Unix services, such as DNS, NIS and NFS. Since the VoyagerIIi ships with a complete version of Solaris 2.6, it had all the features we needed. All our Sun machines make use of centralized resources, include NFS-mounted home directories (from a NetWare NFS server) and NIS directory information.

Using the standard Solaris configuration scripts, we entered the appropriate information for our NIS server. Once completed, any of our lab folks could log in to the machine using the centralized password file. In addition, all the usual information was available, such as mail aliases, automount tables and groups.

Although automounted file systems are not part of the installation scripts, we are extremely familiar with configuring them. As we did with our other Solaris machines, we configured the VoyagerIIi to mount users' home directories only when needed.

Software, Anyone? Tadpole claims that VoyagerIIi is completely SPARC-compatible, so we certainly wanted to test this claim. Preferring the T shell (/bin/tcsh) as our default shell, we FTP'd a copy from one of our lab machines. After logging in, our home directory was transparently automounted off of our NetWare NFS server. We were instantly able to use a familiar shell and browse our existing files.

Not satisfied with a simple transfer and excution of a single binary file, we configured the VoyagerIIi to mount our directory of precompiled Solaris binaries. From there, we could easily access Netscape, elm and a variety of GNU utilities, including the gcc compiler.

The recent release of DataFellow's SSH 2.0.12 was a perfect opportunity to look at compiling source code. So, I downloaded a copy of the SSH source code to the VoyagerIIi. The configure script for SSH automatically detected both the proper architecture and OS version of my SPARC clone. In a short while, we ran the make command and after a few minutes, we had a completely compiled version of SSH. The binaries worked fine on our VoyagerIIi, Ultra 10 and SPARC 20.

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