Project Looking Glass

Edward de Bono, the man who coined the phrase *lateral thinking*, once said, "You cannot dig a hole in a different place by digging the same hole deeper." So if you want a new solution, first you have to get out and look around.

When Hideya Kawahara, a coder at Sun Microsystems, started toying around with ideas for a new interface, the first thing he did was climb out of the hole designers had been digging for the last 20 years. The ubiquitous two-dimensional desktop had icons, buttons, and the ability to open flat views that you could stack one atop the other. Hideya was thinking of adding another dimension.

He didn't have a good background in 3-D technology, but that, Hideya says, turned out to be an advantage. "Instead of bringing the desktop environment into the 3-D space, I took the opposite approach. I broke down 3-D ideas and tried to integrate them into the desktop, piece by piece."

The result of Kawahara's own excavation is Project Looking Glass—a 3-D desktop, written mainly in Java, for Linux and Sun Solaris X86 PCs. And Hideya is now a senior staff engineer with his photo on the Sun News webpage.

The Looking Glass interface is a translucent space with a glass shelf at the bottom. Resting there are rounded objects that open utilities along with miniatures of the apps and pages currently running. The larger pages in the space are more like plexi slabs than pages. They float, move, and rotate to reveal a reverse side on which you can "tack" notes to yourself. When you move the slabs to the edge, they rotate to reveal identifying text on their edges. When you open the jukebox function, your media (CDs or DVDs) appear with your titles, and you search/flip through them almost as you would their physical counterparts. There's a demo of the interface and more information at www.sun.com/software/looking_glass.

Sun hopes to expand research on Looking Glass later this year when they release a software developer's kit to the Open Source community. Linux already has two fairly advanced Windows-style interfaces called KDE and GNOME, but both are in conventional 2-D. Sun would eventually like to install Looking Glass on its own Linux-based Java Desktop System. ■