Preface to the Third (2000) Edition

A great deal has happened to Plan 9 in the five years since its last release. Although much of the system will seem familiar, hardly any aspect of it is unchanged. The kernel has been heavily reworked; the graphical environment completely rewritten; many commands added, deleted, or replaced; and the libraries greatly expanded. Underneath, though, the same approach to computing remains: a distributed system that uses file-like naming to access and control resources both local and remote.

Some of the changes are sweeping:

Alef is gone, a casualty of the cost of maintaining multiple languages, compilers, and libraries in a diverse world, but its model for processes, tasks, and communication lives on in a new thread library for C.

Support for color displays is much more general, building on a new alpha-blending graphical operator called draw that replaces the old bitblt. Plan 9 screens are now, discreetly, colorful.

A new mechanism called plumbing connects applications together in a variety of ways, most obviously in the support of multimedia.

The interfaces to the panoply of rotating storage devices have been unified and extended, while providing better support for having Plan 9 coexist with other operating systems on a single disk. Perhaps most important, this release of the system is being done under an open source agreement, providing cost-free source-level access to the software.

Plan 9 continues to be the work of many people. Besides those mentioned in the old preface, these people deserve particular note: Russ Cox did much of the work updating the graphics and creating the new disk and bootstrap model as well as providing a number of new commands; David Hogan ported Plan 9 to the Dec Alpha; and Sape Mullender wrote the new thread library.

Other new contributors include Bruce Ellis, Charles Forsyth, Eric Van Hensbergen, and Tad Hunt.

Bell Labs Computing Science Research Center Murray Hill NJ June, 2000

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