Abstract

In traditional monolithic operating systems the constraints of working within the kernel have limited the sophistication of the schemes used to manage executable program images. By implementing an executable image loader as a persistent user-space program, we can extend system program loading capabilities. In this paper we present OMOS, an Object/Meta-Object Server which provides program loading facilities as a special case of generic object instantiation. We discuss the architecture of OMOS, the extensible nature of that architecture, and its application to the problem of dynamic program monitoring and optimization. We present several optimization strategies and the results of applying these strategies.[1]