IEEE P1003.0 Draft 13 – September 1991

Copyright © 1991 by the
Institute of Electrical and Electronics Engineers, Inc.
345 East 47th Street
New York, NY 10017, USA
All rights reserved as an unpublished work.

This is an unapproved and unpublished IEEE Standards Draft, subject to change. The publication, distribution, or copying of this draft, as well as all derivative works based on this draft, is expressly prohibited except as set forth below.

Permission is hereby granted for IEEE Standards Committee participants to reproduce this document for purposes of IEEE standardization activities only, and subject to the restrictions contained herein.

Permission is hereby also granted for member bodies and technical committees of ISO and IEC to reproduce this document for purposes of developing a national position, subject to the restrictions contained herein.

Permission is hereby also granted to the preceding entities to make limited copies of this document in an electronic form only for the stated activities.

The following restrictions apply to reproducing or transmitting the document in any form: 1) all copies or portions thereof must identify the document's IEEE project number and draft number, and must be accompanied by this entire notice in a prominent location; 2) no portion of this document may be redistributed in any modified or abridged form without the prior approval of the IEEE Standards Department.

Other entities seeking permission to reproduce this document, or any portion thereof, for standardization or other activities, must contact the IEEE Standards Department for the appropriate license.

Use of information contained in this unapproved draft is at your own risk.

IEEE Standards Department
Copyright and Permissions
445 Hoes Lane, P.O. Box 1331
Piscataway, NJ 08855-1331, USA
+1 (908) 562-3800
+1 (908) 562-1571 [FAX]

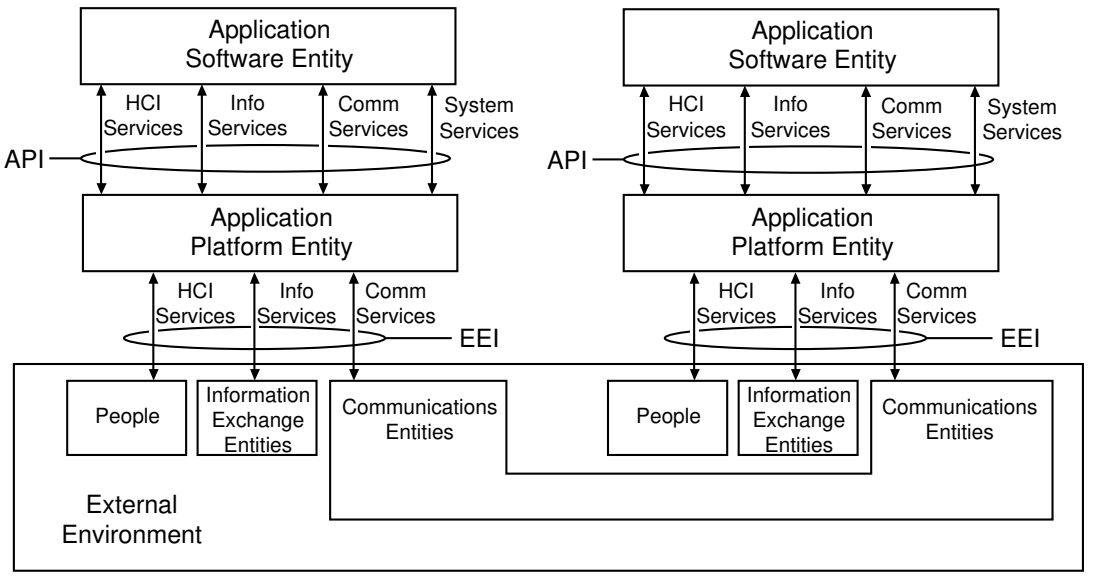

Figure 3-4 – POSIX OSE Reference Model — Distributed Systems

services via the network.

Distributed Systems are manifest in this model primarily through the use of the distributed system network services API. As can be seen in Figure 3-5, distributed systems are a refinement of the POSIX Network Environment Model shown in Figure 4-4. As such, a perceived Application Platform may in fact be comprised of several (or many) individual application platforms. However, in the distributed D
environment, they operate and are viewed as a single entity by the using applications. Within this extended application platform are the embedded network services necessary for the elements of a distributed environment to function.

Within the distributed environment, network access between the platforms that make up the ‘‘perceived’’ application platform are handled using the Distributed Systems Network Services APIs. Network services for access between ‘‘perceived’’ application platforms will use the Network Services EEI between the platforms.

3.3 POSIX Open System Environment Services

This guide defines a uniform set of standard services provided to users of application platforms in support of POSIX objectives of application portability and system interoperability. These services are available to users across specified interfaces keyed to the POSIX reference model defined in 3.2.

The POSIX OSE services are divided into categories described by the clauses in D
Section 4. Each category begins by defining a more detailed and specialized version of the OSE reference model (see 3.2) to provide context for service

Copyright © 1991 IEEE. All rights reserved.
This is an unapproved IEEE Standards Draft, subject to change.

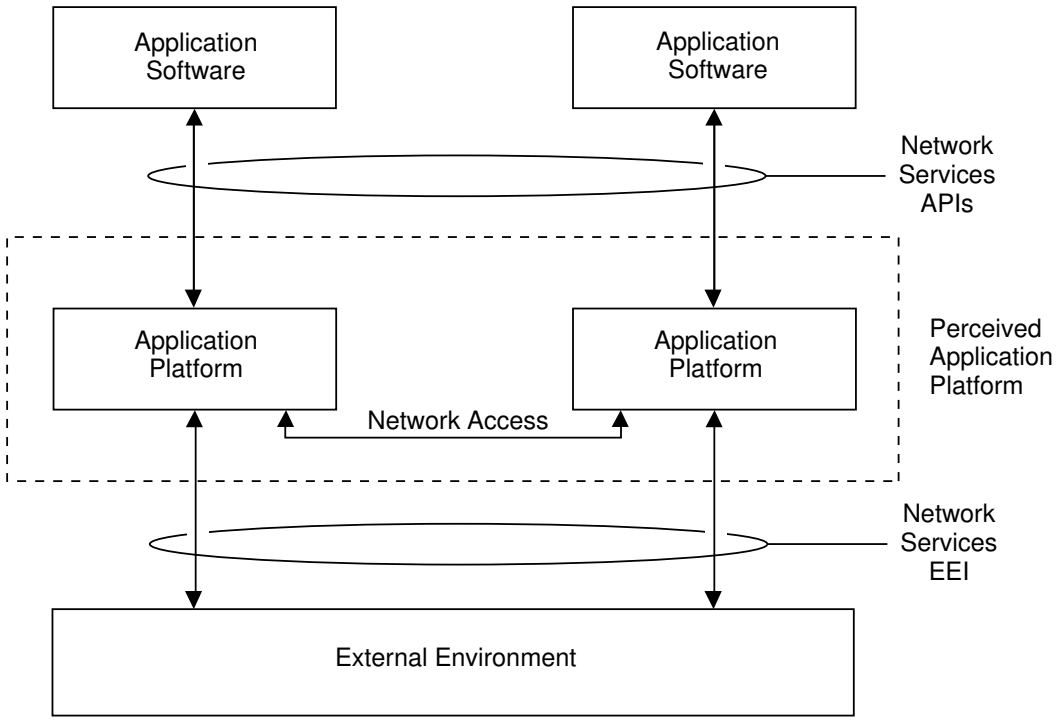

Figure 3-5 – Distributed System Environment Model

specification. Services and associated standards are then defined for each category. Finally, POSIX OSE Cross-Category Services affecting each category are discussed.

The service descriptions for each category are intended to be complete and not merely representative. Further refinement through successive releases of this document will lead to a complete specification.

3.4 POSIX Open System Environment Standards

The identification of a complete, consistent suite of standards for the POSIX OSE will, by necessity, draw from many forums. One of the criteria for judging completeness is the satisfaction of the full range of services required by the application platform user. The factors used to select standards will be described followed by the selection precedence.

Note that while the services are stated with a clear partitioning in mind, the standards reflect the current partitioning. These standards were created within disparate organizations and projects, which were in many cases carried out in isolation from the others. As a result, mapping of services to standards is not a simple relationship.

Copyright © 1991 IEEE. All rights reserved.
This is an unapproved IEEE Standards Draft, subject to change.