TABLE OF CONTENTS

INTRODUCTION

2 Tanenbaum, A.S. and Mullender, S.J.: "An Introduction to Amoeba"

OVERVIEW OF AMOEBA

10 Mullender, S.J., Rossum, G. van, Tanenbaum, A.S. Renesse, R. van, Staveren, H. van: "Amoeba—A Distributed Operating System for the 1990s," (To be published in *IEEE Computer Magazine*, May 1990).

27 Tanenbaum, A.S., Renesse, R. van, Staveren, H. van., Sharp, G.J., Mullender, S.J., Jansen, A.J., and Rossum, G. van: "Experiences with the Amoeba Distributed Operating System," Report IR-194, Dept of Mathematics and Computer Science, Vrije Universiteit, July 1989 (submitted for publication).

53 Mullender, S.J.: "Distributed Operating Systems: State-of-the-Art and Future Directions" Proc. of the EUTECO 88 Conf., R. Speth (ed.), North-Holland, Vienna, Austria, pp. 57−66, 1988

DESIGN ASPECTS

62 Tanenbaum, A.S., Mullender, S.J., and van Renesse, R.: "Using Sparse Capabilities in a Distributed Operating System" *Proc. Sixth International Conf. on Distr. Computer Systems*, IEEE, pp. 558-563, 1986.

72 Renesse, R. van, Tanenbaum, A.S., and Wilschut, A: "The Design of a High-Performance File Server" *Proc. Ninth Int'l Conf. on Distr. Comp. Systems*, IEEE, pp. 22-27, 1989.

82 Rossum, G. van: "AIL − A Class-Oriented Stub Generator for Amoeba" Proceedings of the Workshop on Experience with Distributed Systems, Springer Verlag, 1989

PERFORMANCE

92 Renesse, R. van, Staveren, H. van, and Tanenbaum, A.S.: "Performance of the Amoeba Distributed Operating System," *Software—Practice and Experience*, vol. 19, pp. 223-234, March 1989.

AMOEBA OVER WIDE-AREA NETWORKS

104 Renesse, R. van, Tanenbaum, A.S., Staveren, H., and Hall, J.: "Connecting RPC-Based Distributed Systems using Wide-Area Networks," *Proc. Seventh Int'l Conf. on Distr. Comp. Systems*, IEEE, pp. 28-34, 1987.

114 Renesse, R. van, and Staveren: "Wide-Area Communication under Amoeba," Report IR-117, Dept. of Mathematics and Computer Science, Vrije Universiteit, Dec. 1986.

MULTIPROCESSOR AMOEBA

128 Moergestel, L.J. van, Bal, H.E., Kaashoek, M.F., Renesse, R. van, Sharp, G.J., Staveren, H. van, Tanenbaum, A.S.: "Amoeba on a Multiprocessor," Report IR-206, Dept of Mathematics and Computer Science, Vrije Universiteit, Dec. 1989 (accepted for publication in *Force File*).

BROADCASTING

140 Kaashoek, M.F., Tanenbaum, A.S., Flynn Hummel, S., and Bal, H.E.: "An Efficient Reliable Broadcast Protocol," *Operating Systems Review*, vol. 23, pp. 5-19, Oct. 1989.

DISTRIBUTED PROGRAMMING

154 Bal, H.E., and Tanenbaum, A.S.: "Distributed Programming with Shared Data" *IEEE Conf. on Computer Languages*, IEEE, pp. 82-91, 1988.

176 Bal, H.E., Kaashoek, M.F., Tanenbaum, A.S., Jansen, J.: "Replication Techniques for Speeding up Parallel Applications on Distributed Systems," Report IR-202, Dept of Mathematics and Computer Science, Vrije Universiteit, Oct. 1989 (submitted for publication).

192 Bal, H.E., Tanenbaum, A.S., Kaashoek, M.F.: "Orca: A Language for Distributed Programming," Report IR-140, Dept of Mathematics and Computer Science, Vrije Universiteit, Dec. 1987 (submitted for publication).

200 Bal, H.E., Kaashoek, M.F., and Tanenbaum A.S.: "A Distributed Implementation of the Shared Data-object Model," *Proc. First USENIX/SERC Workshop on Experiences with Building Distributed and Multiprocessor Systems*, IEEE, pp. 1-19, Oct. 1989.

218 Bal, H.E., Kaashoek, M.F., and Tanenbaum, A.S.: "Experience with Distributed Programming in Orca," *Proc. Int'l Conf. on Comp. Languages '90*, IEEE, 1990.

APPLICATIONS

242 Baalbergen, E.H., Verstoep, K., and Tanenbaum, A.S.: "On the Design of the Amoeba Configuration Manager," *ACM SIGSOFT Software Engineering Notes*, vol. 17, Nov. 1989 (*Proc. 2nd Int'l Workshop on Software Configuration Management*) ACM, 1989.

253 Baalbergen, E.H.: "Parallel and Distributed Compilations in Loosely-Coupled Systems: A Case Study," *Proc. Workshop on Large Grain Parallelism*, 1986.

258 Baalbergen, E.H.: "Design and Implementation of Parallel Make," *Computing Systems* vol. 1, pp. 135-158, Spring 1988.

273 Bal, H.E., Renesse, R. van, and Tanenbaum, A.S.: "Implementing Distributed Algorithms using Remote Procedure Call," *Proc. National Computer Conference*, AFIPS, pp. 499-505, 1987.

THEORY

284 Renesse, R. van, and Tanenbaum, A.S.: "Voting with Ghosts," *Proc. Eighth International Conf. on Distr. Computer Systems*, IEEE, pp. 456-461, 1988.