Quotations From the Zurich Workshop

by Larry W. Allen

Bruce Lindsay, discussing the N x N problem of data conversion in interconnecting heterogeneous systems:

"You're better off implementing the N x N solution than waiting for the standards groups to agree."

Alfred Spector:

"What makes a distributed file system hard is *performance transparency.*"

David Cheriton:

"The whole concept of a homogeneous system is evil."

David Cheriton:

"We've learned two things about security:

1. Security is very expensive.

2. It's impossible."

John Fletcher of Lawrence Livermore, discussing the issue of reclaiming lost ojects in a file system permitting naming cycles:

"Our current view is that lost objects are killed off by not being paid for."

Jerry Saltzer, when asked about problems "computationally naive" users of Project Athena might have when dealing with backup:

"We don't expect our users to remain computationally naive for very long. We *are* giving them UNIX, after all."

Roger Needham:

"Quite a lot of what we do is a search for respectability."

David Cheriton:

"Broadcast is the communications equivalent of a computed goto."

David Gifford, discussing the Imagine system:

"Our machines typically don't have sophisticated operating features, like interrupts."

David Gifford:

"It does take roughly half the computational power of an IBM PC to throw information away."

Bruce Lindsay:

"If you squint your eyes right, everything's a Remote Procedure Call."

Alfred Spector:

"Our system is quite slow: three trivial write transactions per second."

Bruce Lindsay:

"Messages suck!"

Bruce Lindsay:

"Most software failures, like most hardware failures, are transient."

Andrew Birell, discussing the new programming environment being built at DEC SRC:

"We want our system to support *high-bandwidth cooperation.*"

John Brenner, of the ECMA standards group, stating his conclusions from the workshop:

"I come away with the conclusion that the distributed systems field is ripe for standardization."