Performance and Reliability Issues in Client-Server Environments

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Overview

- The focus of the Saskatchewan work is the operating system and the services it provides to applications.

- The client-server environment
  - presents many exciting computational opportunities, but
  - presents new challenges for system design and system management.

  In particular, the client-server environment gives rise to new problems concerning performance and reliability.

Current Projects

1. System-level management policies for client-server systems.

2. Management tools for client-server environments.

3. System support for managing multimedia applications.

Topics Under Investigation

1. System-level management policies for client-server systems
   - Disk caching strategies for distributed file systems.
   - File system strategies for disconnected operation (mobile file systems).

2. Management tools for distributed environments
   - Monitoring service demands in client-server networks.
   - Developing system and workload models for system design and capacity planning studies.