The Etel Project

Solidor research group

IRISA / INRIA-Rennes

(`http://www.irisa.fr/solidor/work/etel`)

Industrial partners: Ouest-France, T&C Multimedia, O2-Technology

■ I R I S A

The Etel Newspaper Service

■ I R I S A
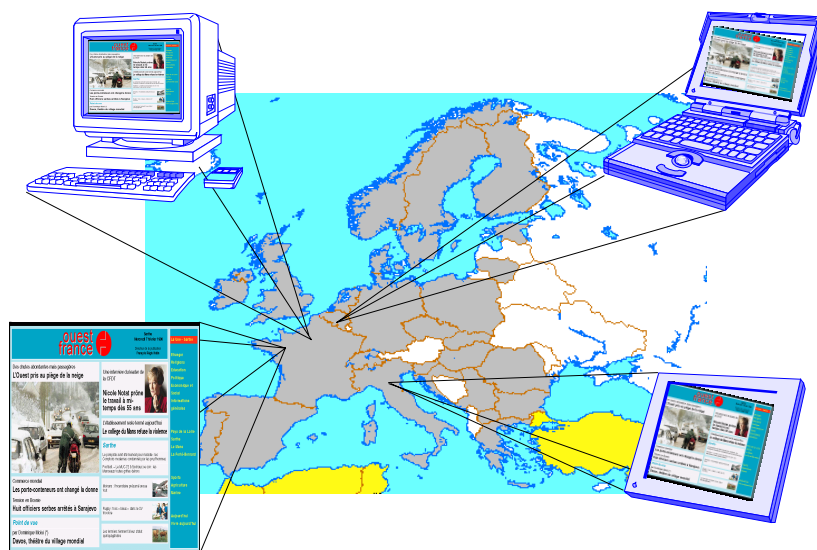
Quality of Service From the Client Perspective

❒ **Comparison with the paper version**

➠ Access quality
- Security
- Availability
- Responsiveness

➠ Content quality
- PDF Format
- Presentation close to the paper edition

Quality of Service From the Server Perspective

❒ **Security**
- Authentication
- Secure communication

❒ **Availability**
- Accessibility
- Fault-tolerance
➠ Replication, distribution, caching
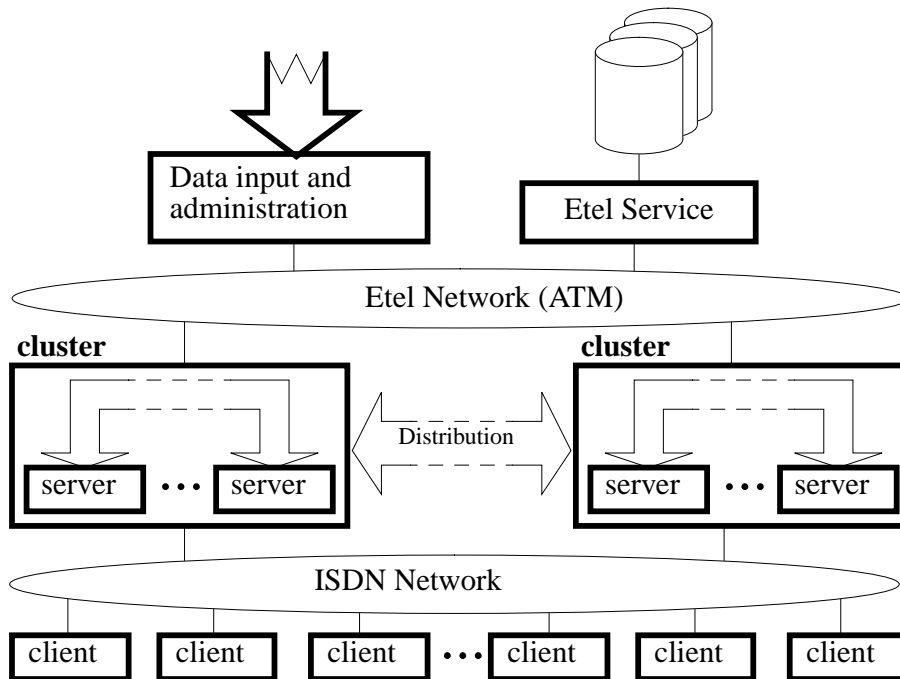
❒ **Responsiveness**
- Bounded response time

❒ **Scalability**
- Guaranteed QoS in the presence of a large number of users and of a large data base

The Etel Architecture

Data input and administration

Etel Service

Etel Network (ATM)

cluster

server • • • server

Distribution

cluster

server • • • server

ISDN Network

client   client   client • • • client   client   client

Dealing with Responsiveness and Scalability

Design and implementation of dedicated system mechanisms based on the **users' profiles** from the perspective of their access patterns

❑ Client site

- Profile-based predictive prefetching

➡ Responsiveness

❑ Server site

- Profile-based load balancing

➡ Responsiveness and scalability

The Etel Prototype

Current prototype

- ❐ Centralized version
- ❐ Automatic production of the electronic edition from the paper version

Dealing with quality of service

- ❐ Content quality
  - Edition customization
- ❐ Access quality
  - Integration of profile-based predictive prefetching
  - Integration of profile-based load balancing

The Etel Service and Internet

Using Etel as a distributed information system

- ❐ Content quality
  - Information content moderated by professional editors

- ❐ Access quality
  - Extension of profile-based mechanisms for ensuring responsiveness and scalability

Etel++

Enhancing Etel using the FollowMe Environment

❏ Distribution over the Internet

❏ Accessing the service from a variety of devices

❏ Dealing with user mobility

➡ Profile information not attached to the user's site

➡ Migration of the information according to the user's location

➡ Information customization based on the user's location (theatre programs, ...)

➡ These issues will be solved using the FollowMe environment (Agent technology, Location service, ...)

I R I S A