N-Tier
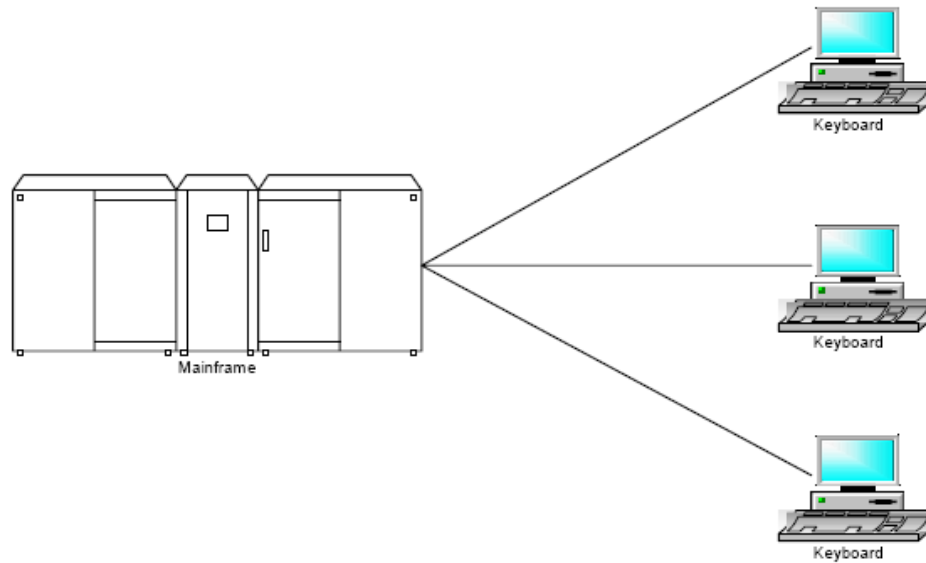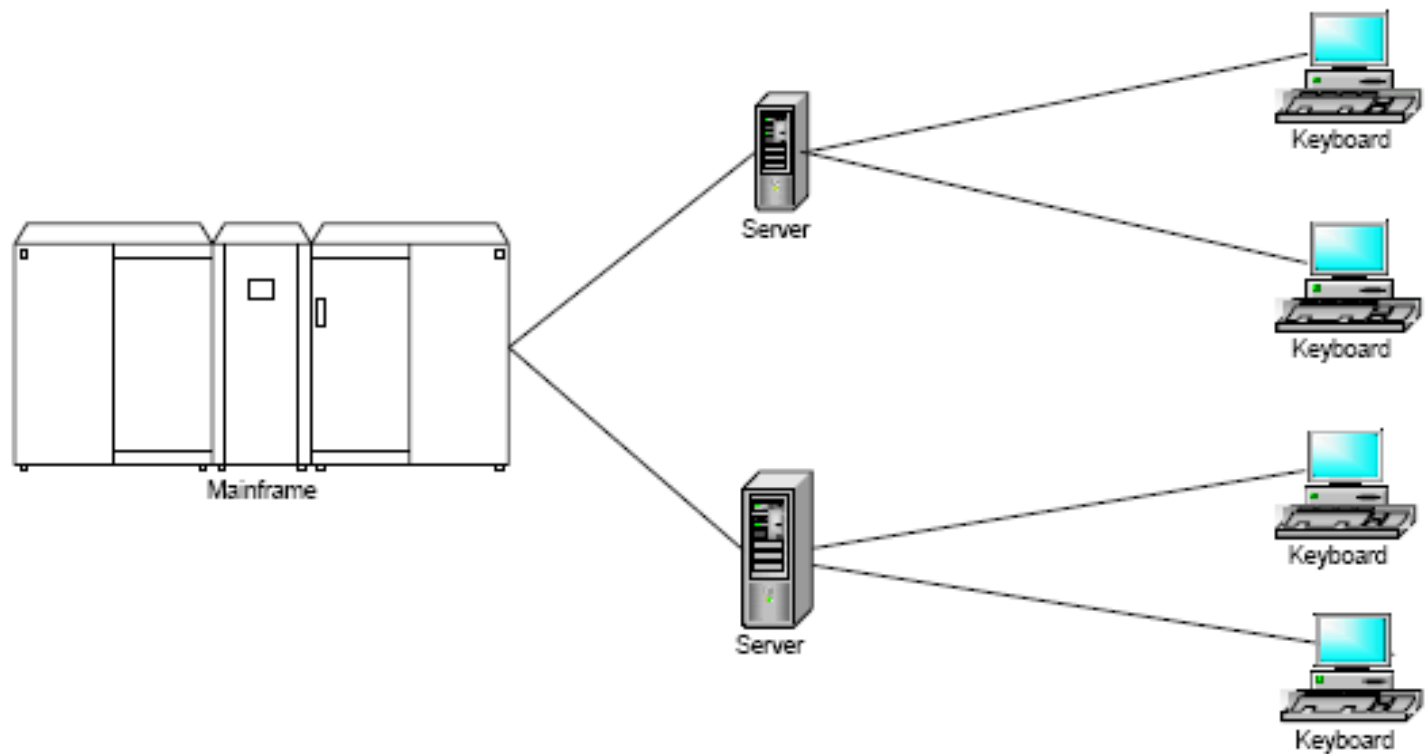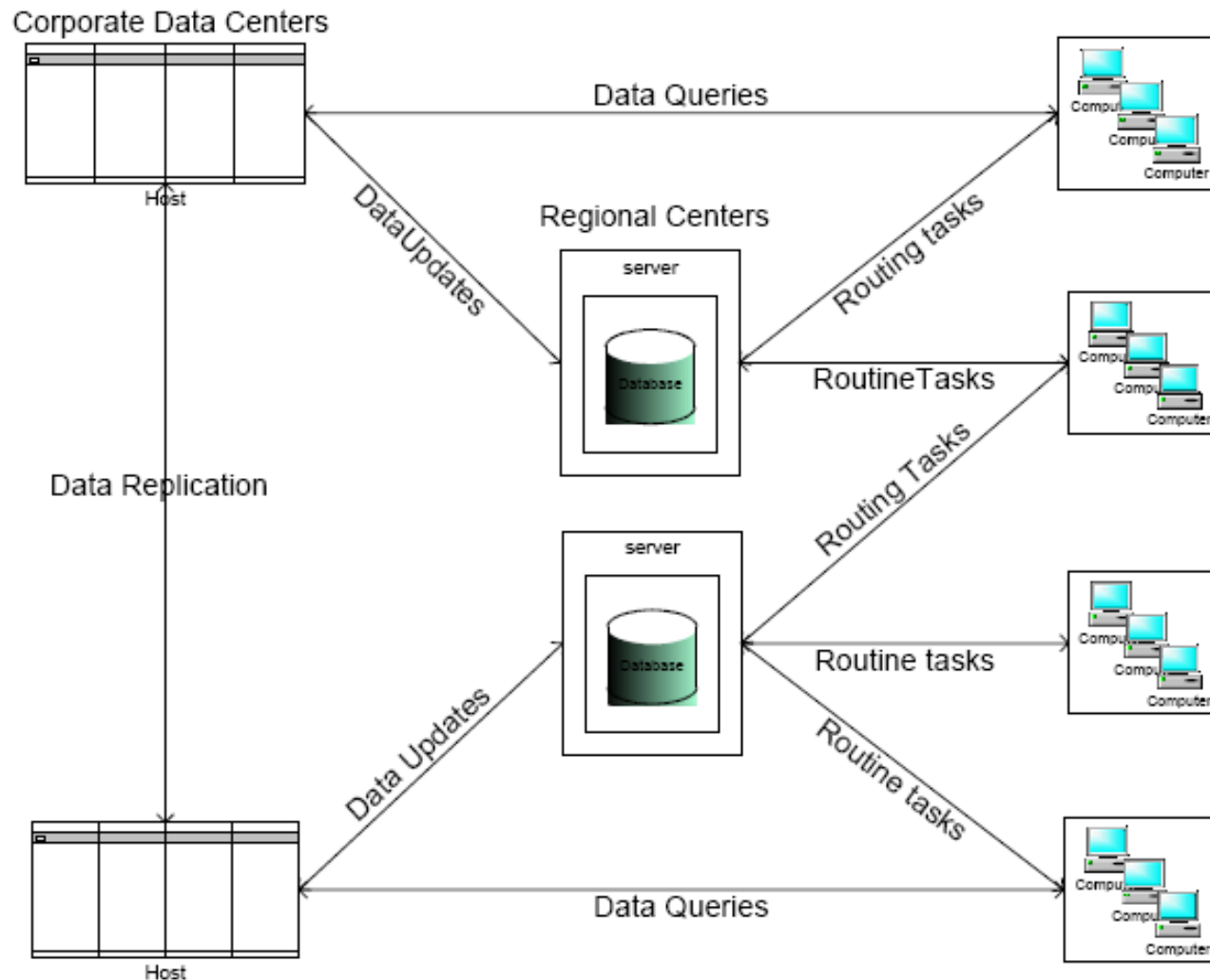
Non-Client-Server System
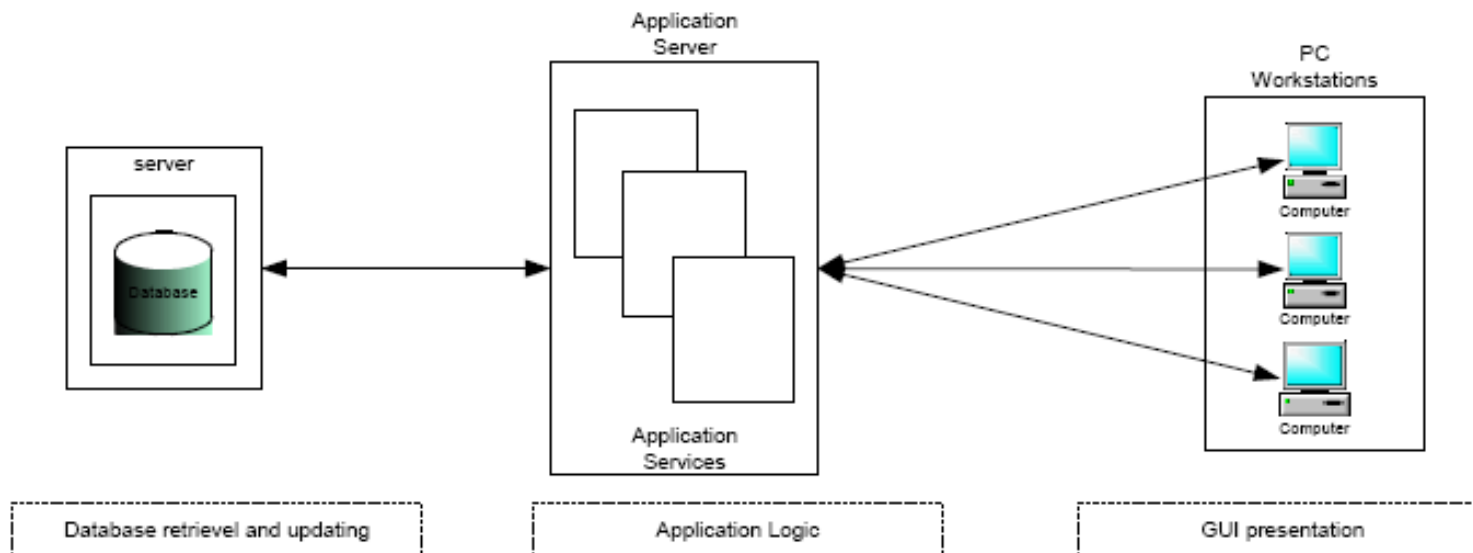
Traditional Host System with LAN

Sistemas Distribuidos
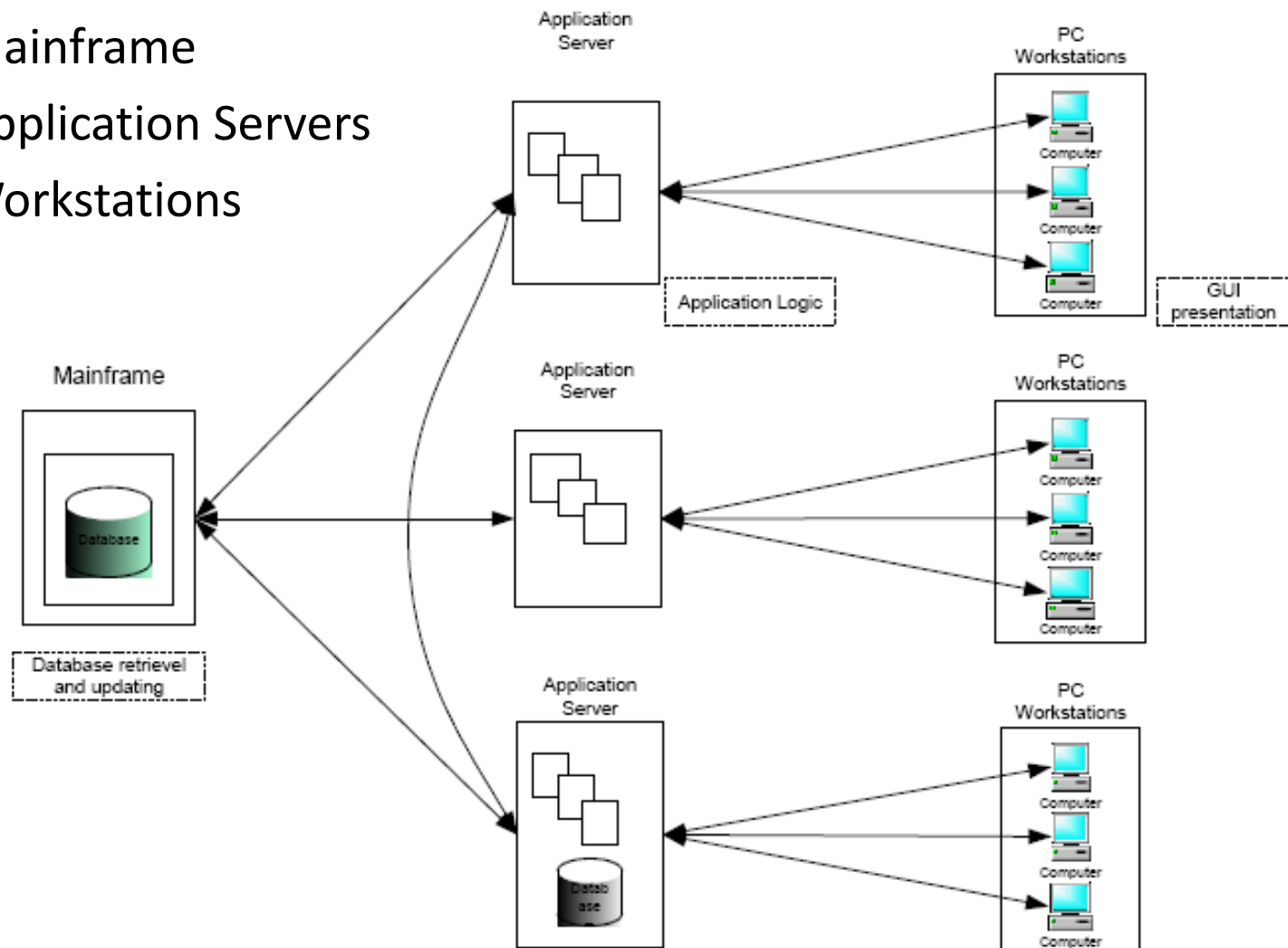
Distributed Data Centers

Client/Server Model

- 1. Database Server
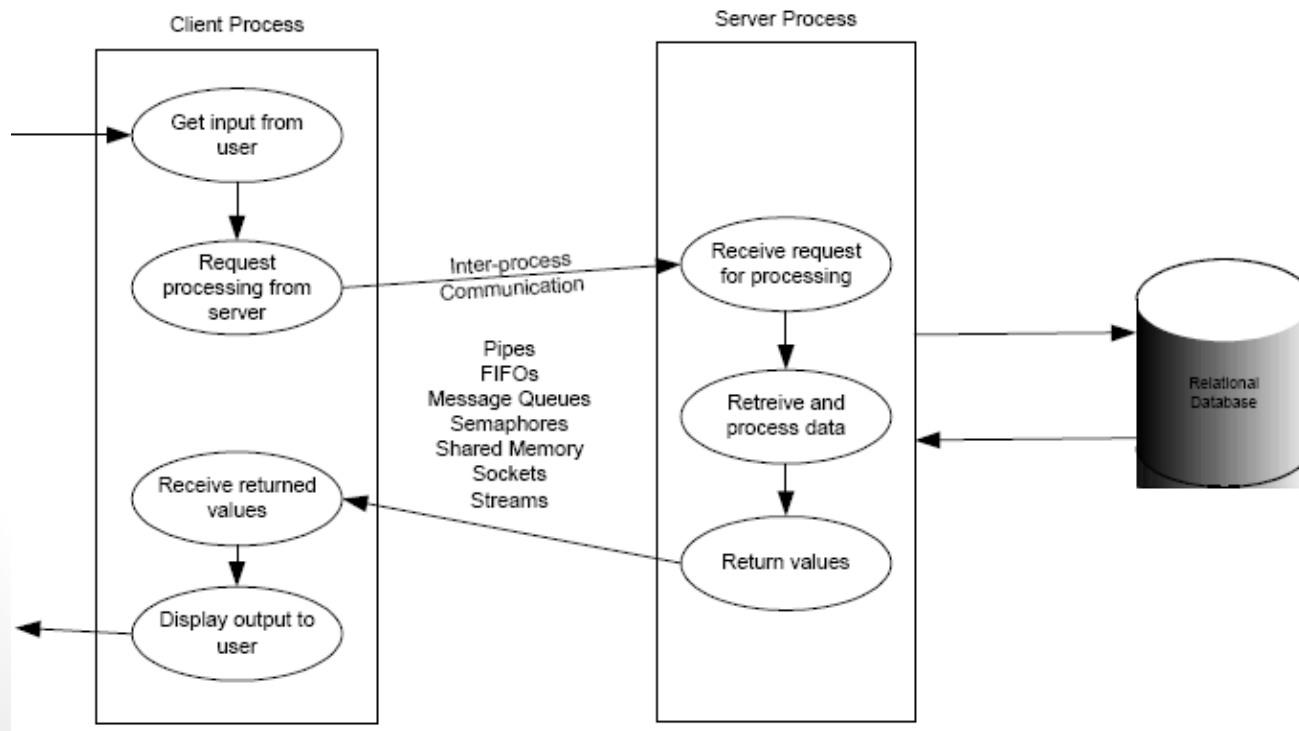- 2. Application Server
- 3. PC Workstation

Distributed Client/Server Model

- 1. Mainframe
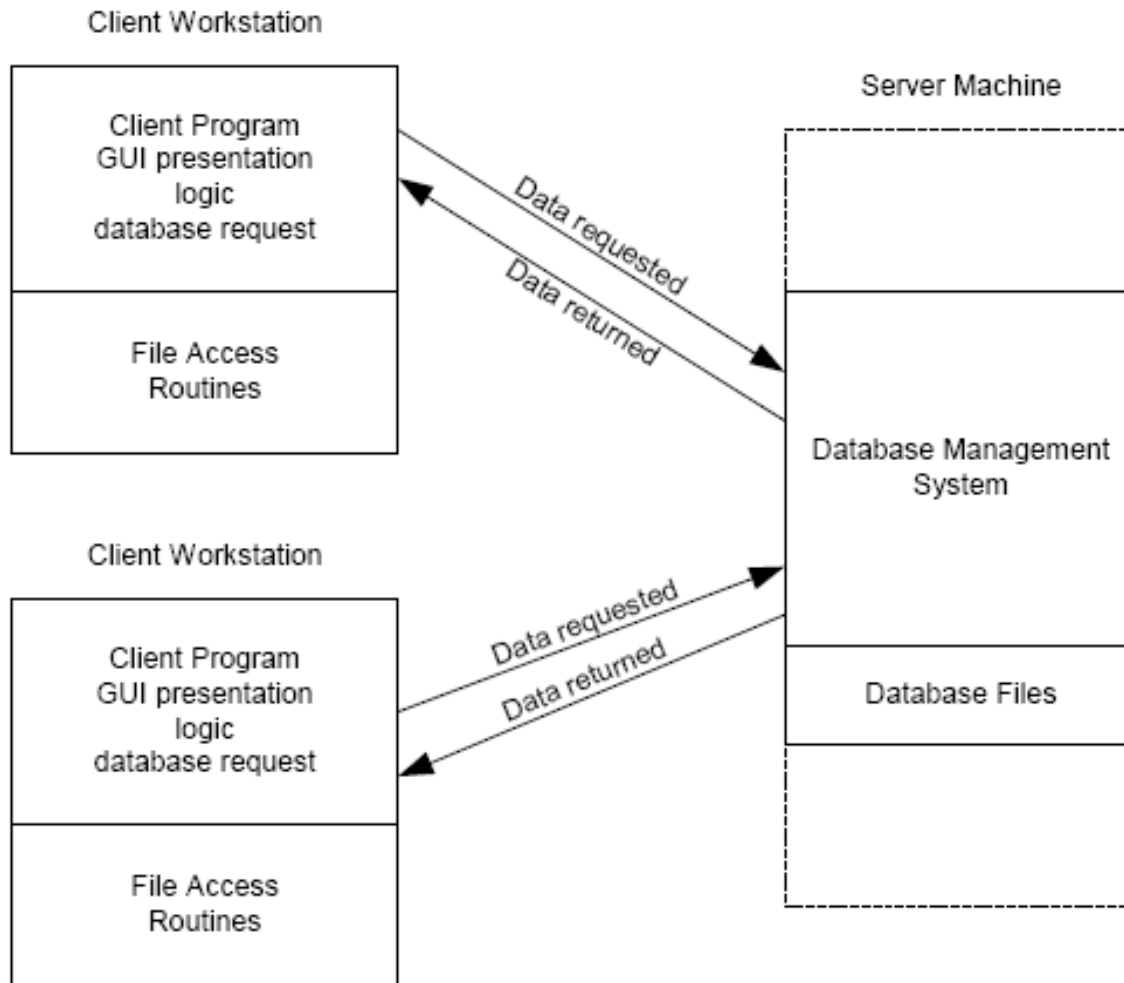- 2. Application Servers
- 3. Workstations
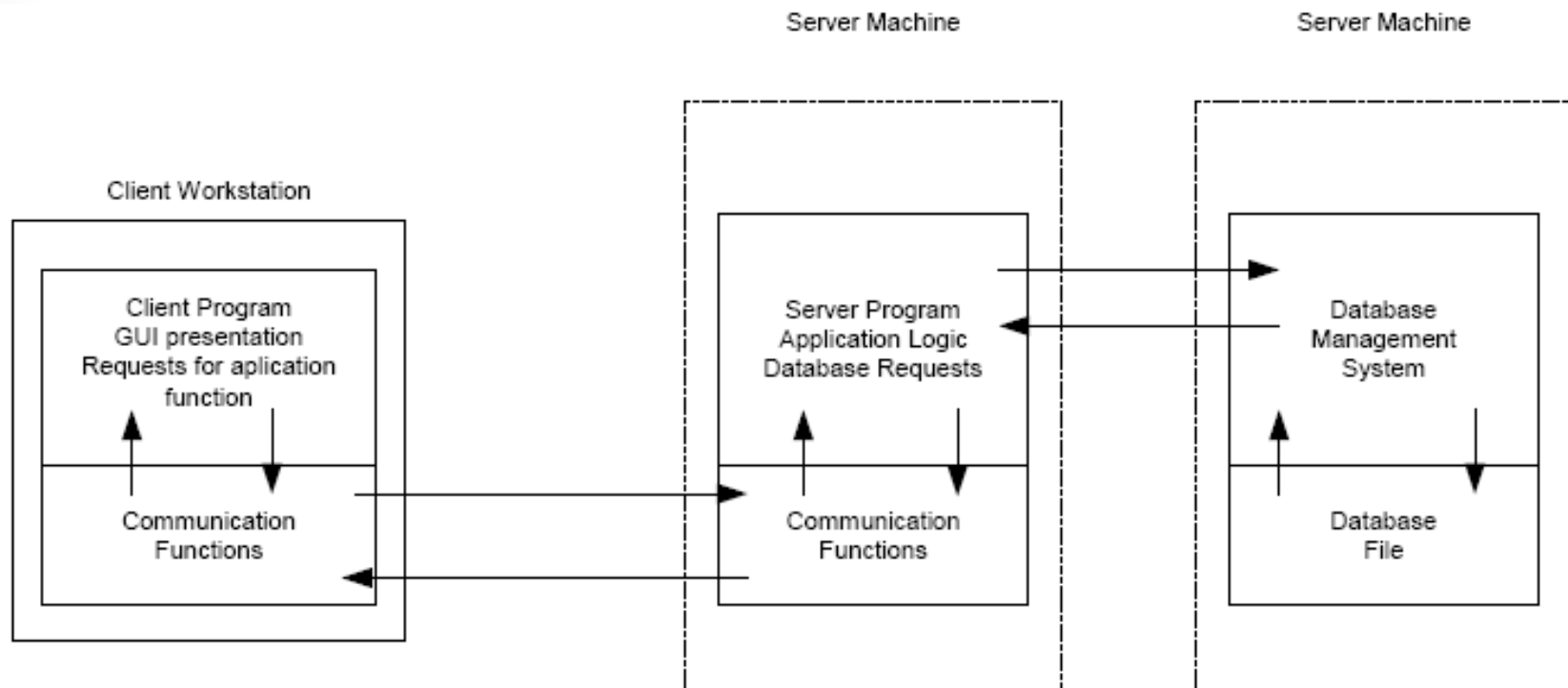
Inter-process Communication

- Basis for client/server computing
- Client process communicates with server process
- Each process performs separate functions
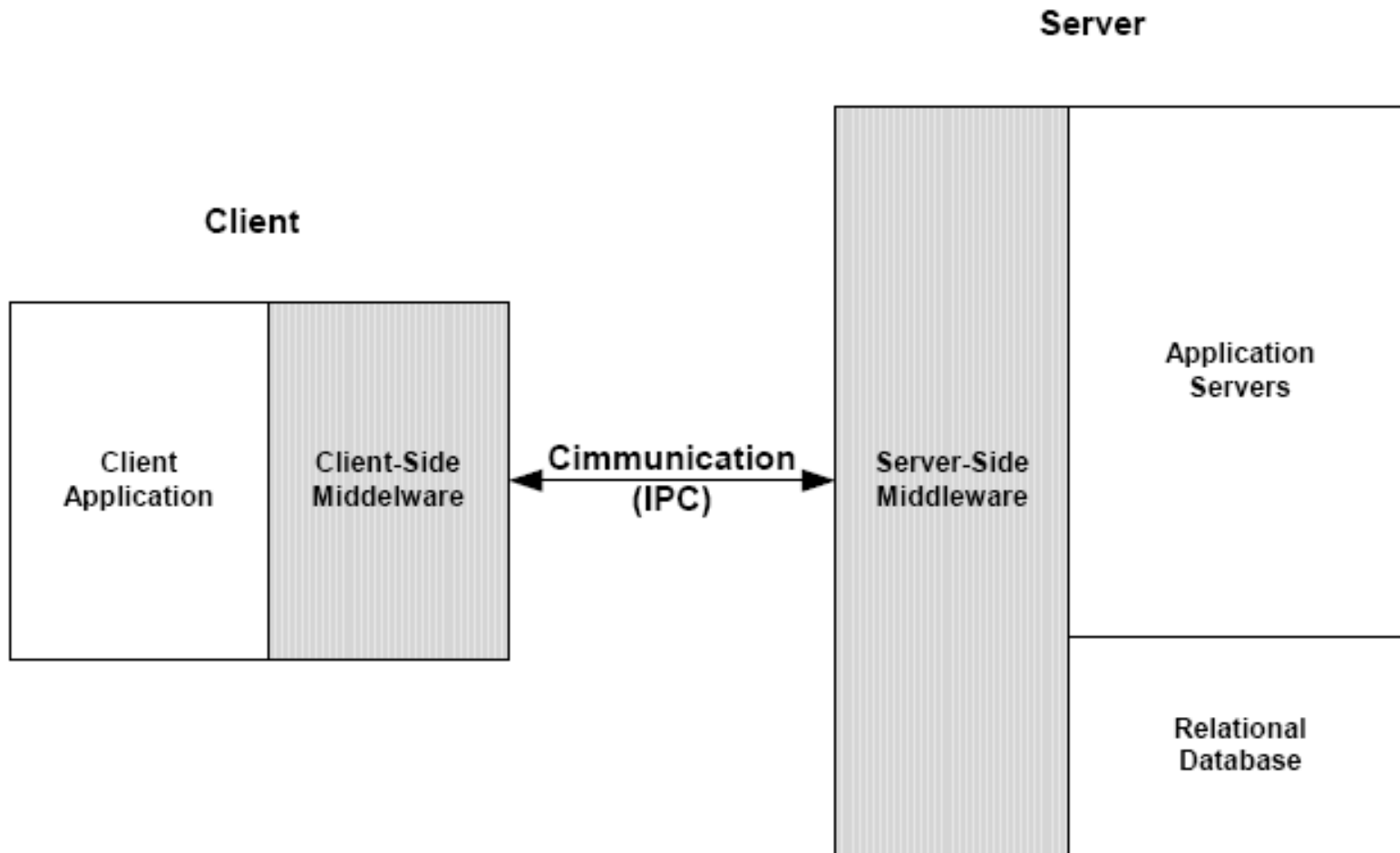- Data is passed between processes using IPC functions

Client/Server 2-Tier Architecture

Client Workstation

Client Program GUI presentation logic database request
File Access Routines

Client Workstation

Client Program GUI presentation logic database request
File Access Routines

Server Machine

Database Management System
Database Files

Data requested
Data returned

Data requested
Data returned

Typical 3 – Tier Architecture

Server Machine

Server Machine

Client Workstation

Client Program
GUI presentation
Requests for aplication
function

Communication
Functions

Server Program
Application Logic
Database Requests

Communication
Functions

Database
Management
System

Database
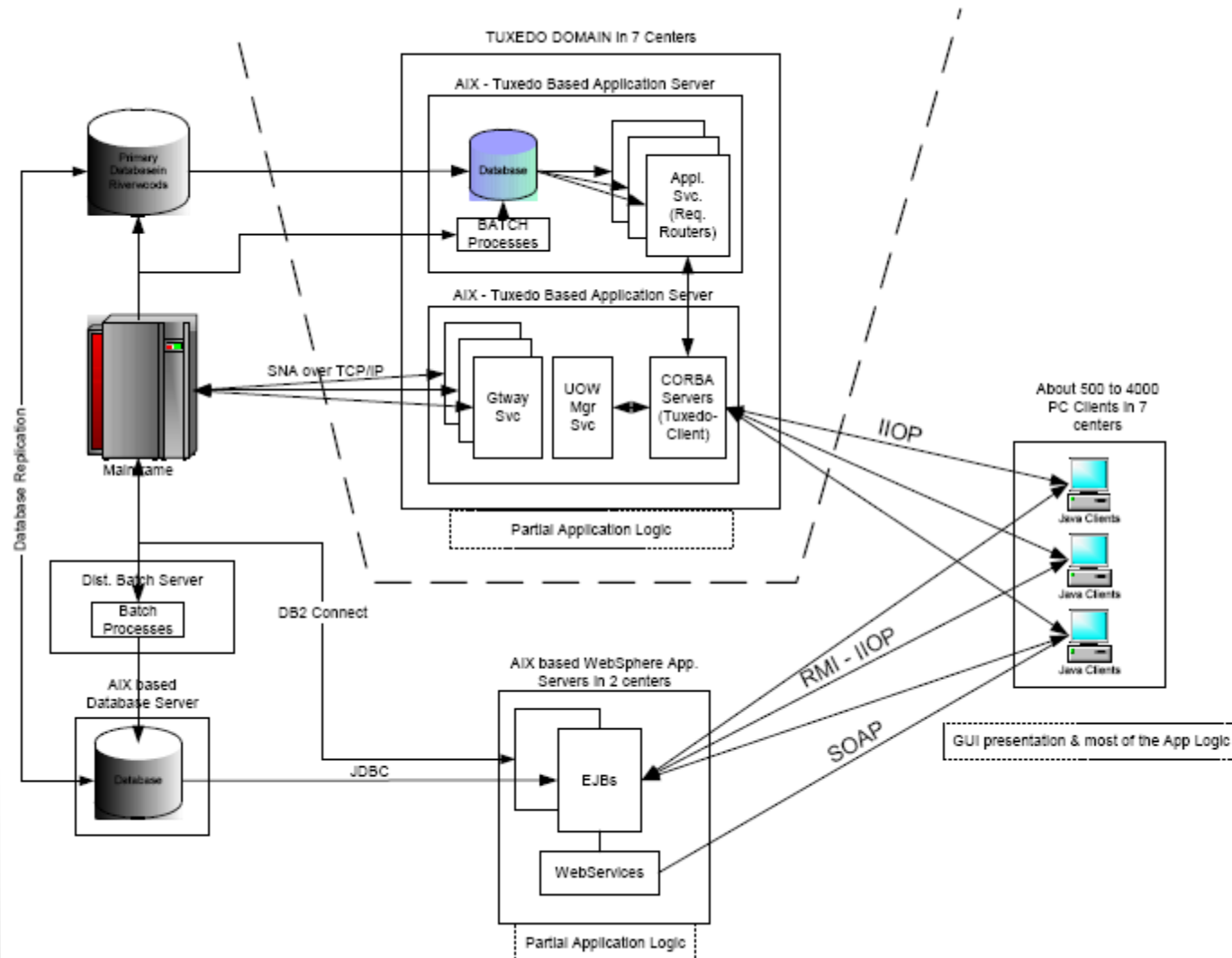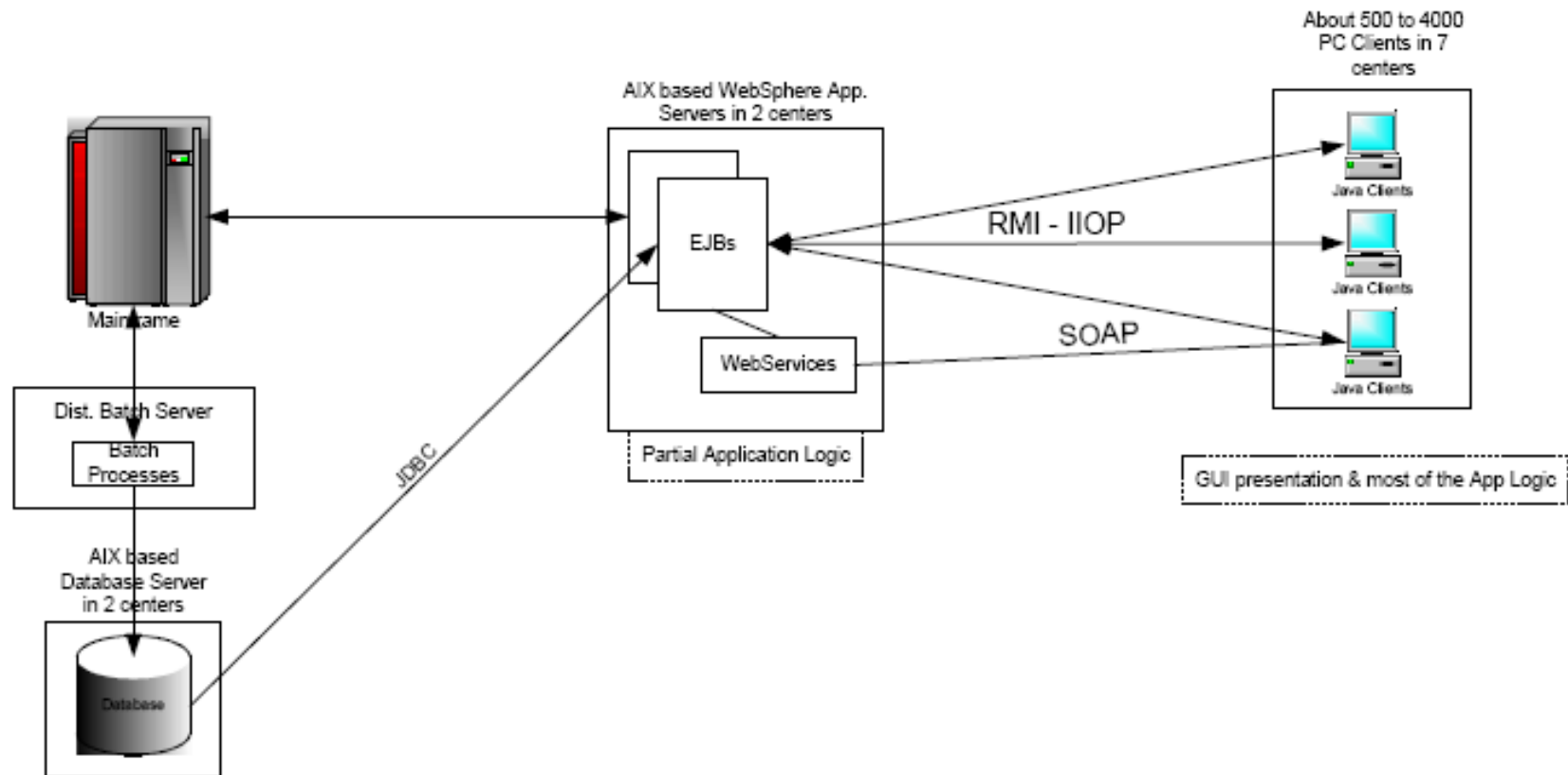File

Middleware

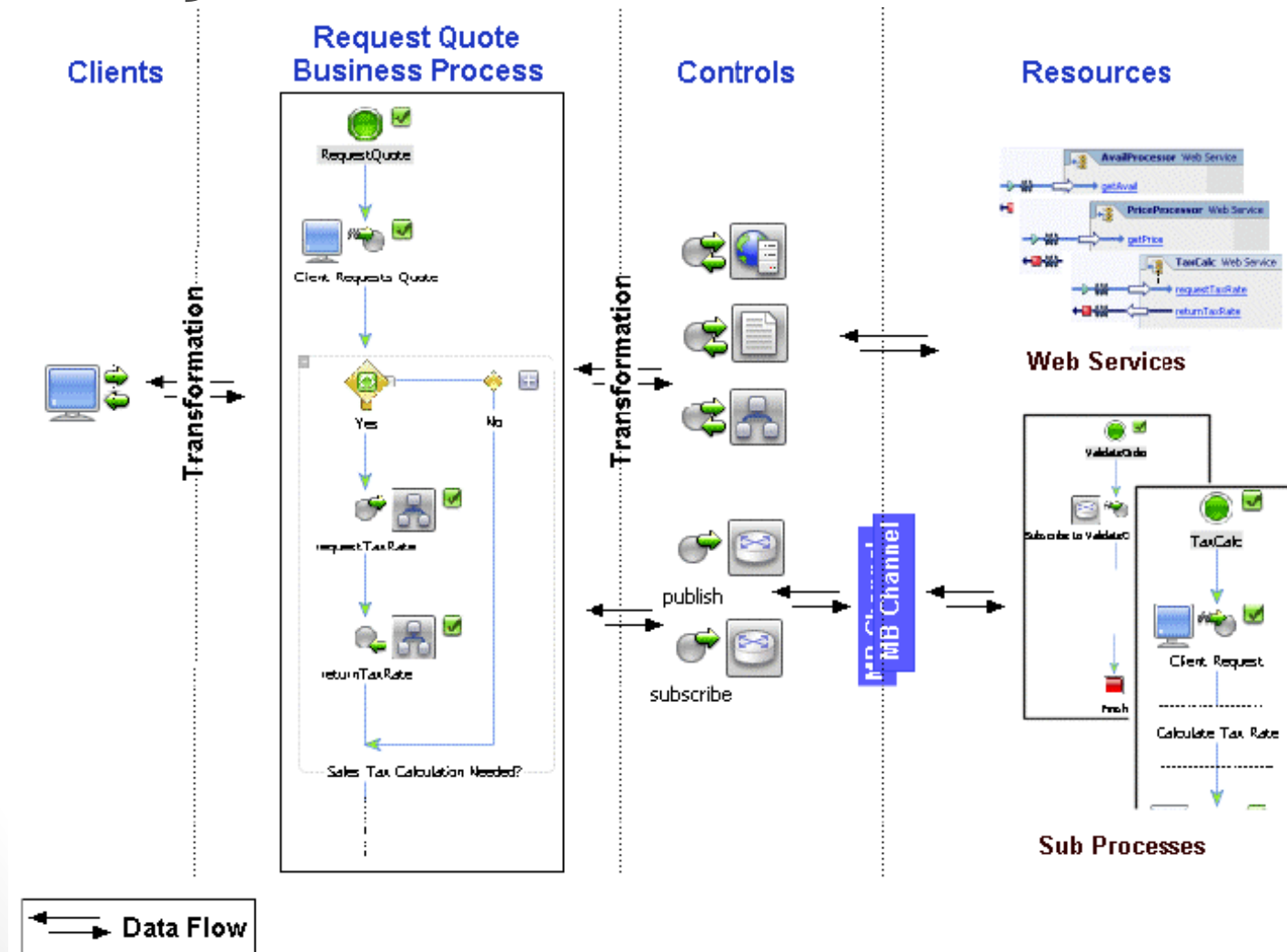# Example: Architectures in Discover Financial Services
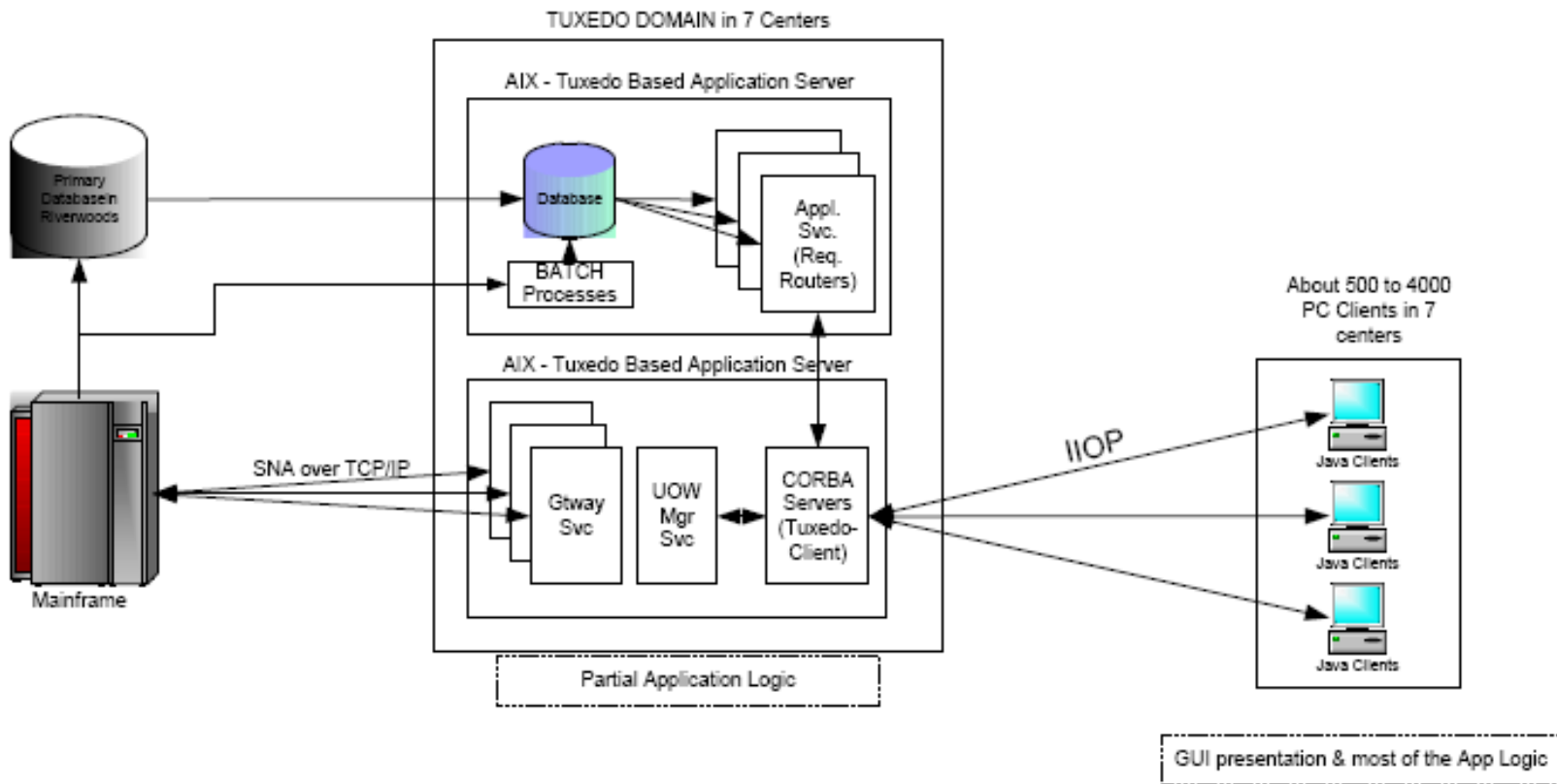
Migration from DAS- Tuxedo to WebSphere based system

Future WebSphere Based 3-Tier Architecture

Business Process Management (BPM)

Fuente: Channu Kambalyal