Advanced Technologies for Distributed Systems

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Administrivia
- Course meeting time:
  - Mon-Fri 14:00-17:00 (21-25/Nov)
  - Mon-Fri 09:00-12:00 (28/Nov-2/Dec)
- URL:
  - www.exa.unicen.edu.ar/catedras/tecmod/
- Course materials:
  - slides available on Web site (as they become available)
  - papers will be posted on Web site
  - sites of manufacturers
  - on-line resources (e.g., eBizq, TMC, ...)

Motivation
- Real life applications are complex and rarely rely on a single technology
- The access methods, the capabilities, the goals, and the available technology is continuously changing
  - What can we learn that will remain valuable in the years to come?
  - We want to separate the buzzwords from the underlying technology and gain insight into architectural principles

Objectives
- What you should get out of this course
  - a basic understanding of large system architecture
  - an understanding of the technological building blocks used in the implementation of large, modern systems
  - an overview of the state of the art in C/S, and middleware for distributed applications

Business shifts
- Business
  - Globalization
  - Deregulation
  - Competition
- Technology
  - Power of the Web
  - Pervasive computing
  - Access Information
- Customers
  - more sophisticated
    - Complex transactions
    - more demanding
    - standards, performance,
    - 24x7
- Markets
  - Fragmented
  - Mass customization

Contents of the Course
- Client/Server
  - J2EE Platform
  - EJBs
- Web Services
  - WSDL, UDDI, SOAP, ...
  - Workflows (BPEL)
- EAI and B2B
  - strategies
  - Applications:
    - Barcodes, RFID
    - Auto-ID/EPCglobal
    - Physical- vs Digital-world