



---

Poseidon House  
Castle Park  
Cambridge CB3 0RD  
United Kingdom

TELEPHONE:  
INTERNATIONAL:  
FAX:  
E-MAIL:

Cambridge (0223) 323010  
+44 223 323010  
+44 223 359779  
apm@ansa.co.uk

---

## ANSA Phase III

# ANSA & Commercial Information Services - Slides

Nigel Edwards

### Abstract

The ANSA Workshop on Commercial Information Services in Web Systems took place on Thursday May 12th 1994. The purpose of this workshop was to look at the problems and requirements of such systems.

This presentation summarizes the main issues which emerged from the workshop: remuneration; resource control; recovery mechanisms and auditing; naming; caching; agents and brokers; usability; security; legal and accounting issues; CommerceNet; The World Wide Web Consortium. The focus of this presentation is on those issues **which could benefit from having an ANSA approach applied to their solution.**

The material in this presentation is written up in more detail in APM.1220 and APM.1233.

---

APM.1240.00.03

Draft

25 April 1995

Request for Comments (confidential to ANSA consortium for 2 years)

---

Distribution:

Supersedes:

Superseded by:

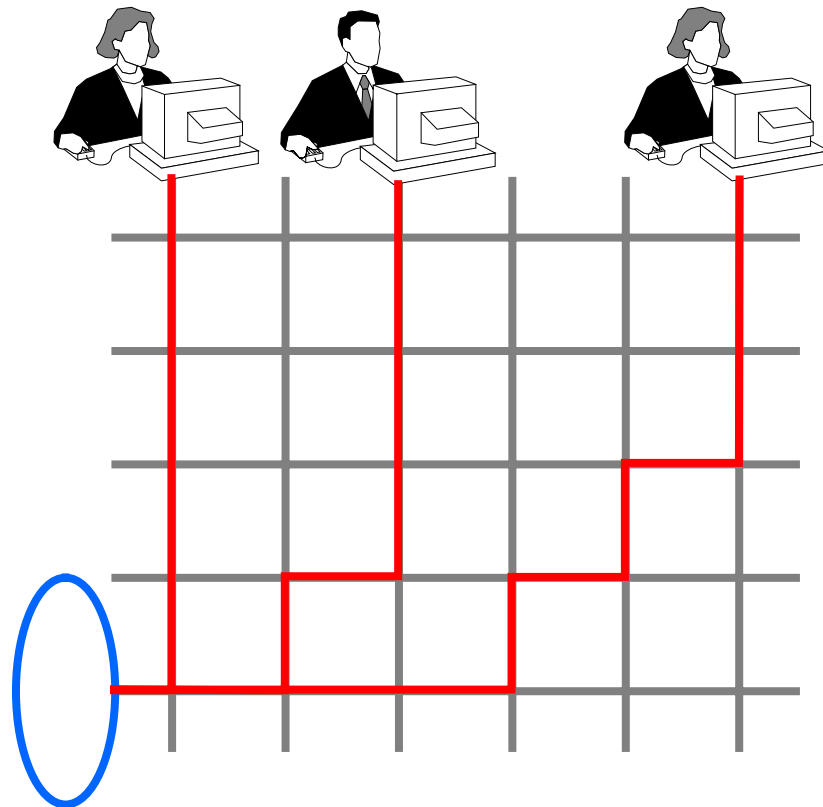




## Commercial Information Services — Introduction

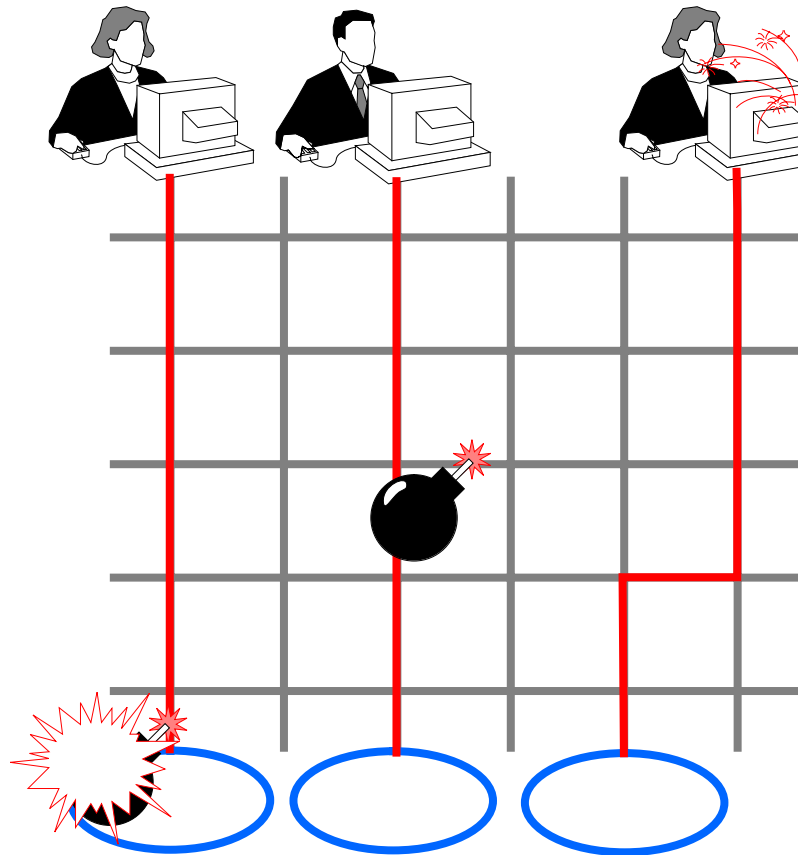
- In recent months there has been a dramatic take off of the WWW
  - Cheap connectivity + accessible user interface
- Growing interest in exploiting this technology for commercial purposes
- A driving force for new distributed applications **BUT.....**
  - Underlying platform and management technology very old
  - Difficult system integration issues arising when organisations try to collaborate
  - internet technology is only the start
- Many of the issues raised are problems ANSA has been studying for a number of years
- This an excellent application area to apply and develop the architecture
- Vehicles for delivery of results: WWWC, CommerceNet.....

## Resource control and caching



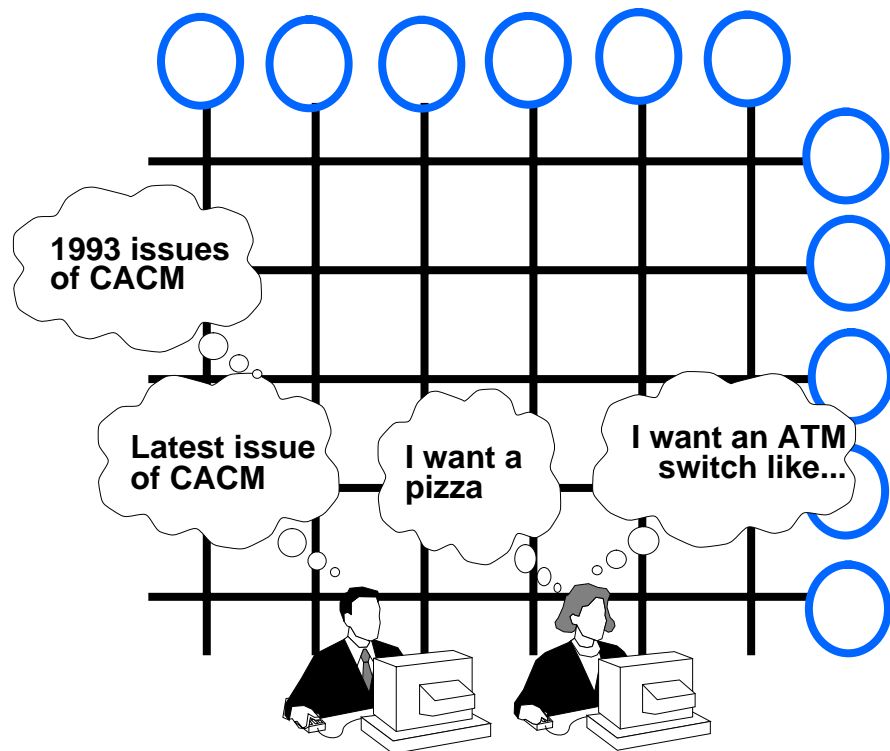
- Caching
- Delivering the right channel capacity
- Web trials for prediction
- The broadcast/multicast problem
- => High level orchestration of many entities
  - performance work
  - dependability management
  - replication....

## Recovery mechanisms



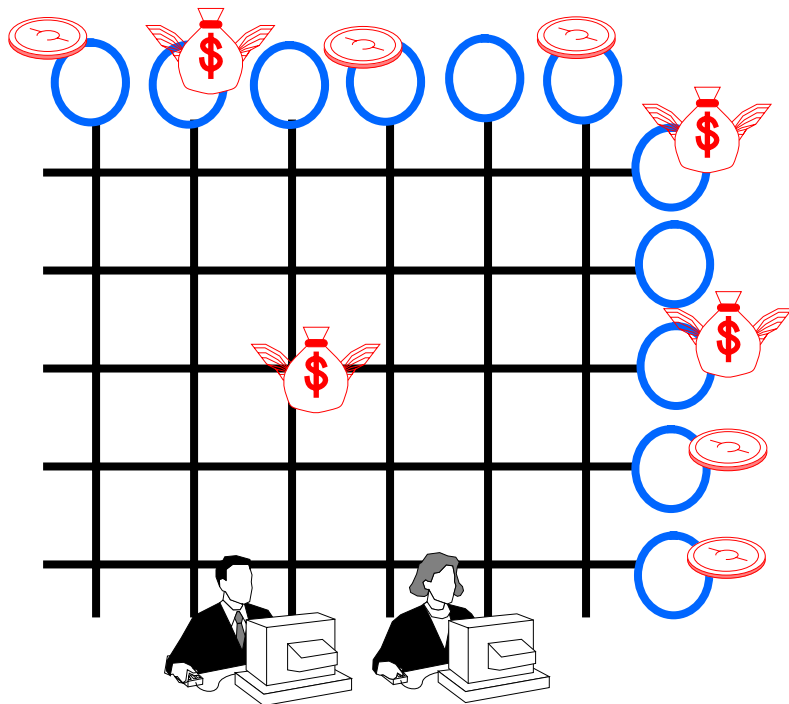
- Reliability, availability
- Actions need to be auditable and traceable
- Compensating services
  - Trademarks and associations
- Contracts and arbitration
- Multi-party transactions
- Current dependability work targeted at this
  - see other presentations

## Naming, Agents & Brokers



- Naming sets
- Naming attributes
- The importance of location
  - current problems with DCE
- $10^{15}$  objects
  - federation + scaling
- Drowning in information
  - brokers, agents
- Relevant ANSA work: Naming model, Remote database query, interface groups, trading.....
- The next thing to look at?

## Remuneration & security



- What's the model?
  - Many => federation
- One stop billing
- Lightweight billing
  - Payment granularity
- Service barring
- Certification, repudiation, auditing
  - scaling of these mechanisms
- Security
  - multi-party interactions, secure HTTP, copying
- Work on multi-party interactions & remuneration?



## Conclusion

**Web like systems are an excellent application area in which to test and develop the architecture.**

**But in addition to the above issues:**

- **Must be Useable**
  - Branding
  - Good style => Useability
  - Maintenance
- **Must be politically acceptable**
  - Develop technology using metaphors and paradigms lawyers, politicians and accountants understand
- **Must be consensus based:**
  - CommerceNet
  - WWW Consortium





## More information

- **APM.1220: a report on the issues discussed at the workshop**
- **APM.1233: a report on which of these issues could benefit from an ANSA approach and how.**