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## **Training**

# **ANSAwise - Course Roundup [to CORBA in Depth]**

**Chris Mayers**

### **Abstract**

This is the “goodbye speech” to the course “CORBA in Depth”. As well as a summary of the key points, it gives information for finding out more.

[Since different course presentations offer a choice of modules, this presentation may need to be adjusted to cover different key points.]

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APM.1539.02

**Approved**  
Briefing Note

27th November 1995

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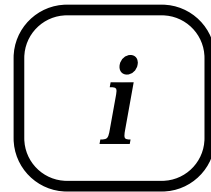




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# CORBA in Depth

## Course Roundup



**...and Learning More...**



## About this course

- *This course has presented an in-depth view of CORBA*
  - what other work is in progress relating to CORBA?
- *First, let us summarize some experiences from CORBA users*



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## Lessons learned from a typical project

- *Wrapping legacy systems does work*
- *It requires a detailed analysis to determine whether products are genuinely compatible*
  - even when they are specifically marketed as such
- *There is little support within products for system administration and application management*
  - few tools
  - few interfaces
- *Similarly, there is little support for testing distributed applications*



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## Tools and methods for CORBA

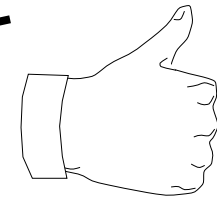
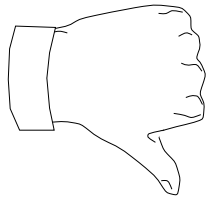
- *CORBA needs support throughout the development life-cycle...*
  - object analysis and design methods
  - development tools
  - performance and testing tools
  - applications management tools
- *... all conforming to open standards, allowing interoperability*



## Object analysis and design methods today

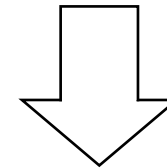
- *There are well over 20 object analysis and design methods...*
  - ...see survey reports produced by the Object Analysis and Design Special Interest Group of OMG
- *Many methods ignore distributed systems issues*

## Development tools today



- tools limit size of application
- communications libraries out-dated (DCE support emerging)
- no agreed way to describe interfaces
- no support for application properties
- browsing limited
- tools are (still) closed applications

- some complexities transparent
- late binding and early type checking



**Challenge**





## Performance and testing tools today

- *The database community takes performance very seriously...*
  - performance prediction and monitoring tools are improving all the time
- *...equivalent tools do not yet exist for CORBA*
- *The test department has always been ill-served with tools*
  - tools are appearing, but focus mainly on the user interface...
  - ...not on the server



## Development tools tomorrow

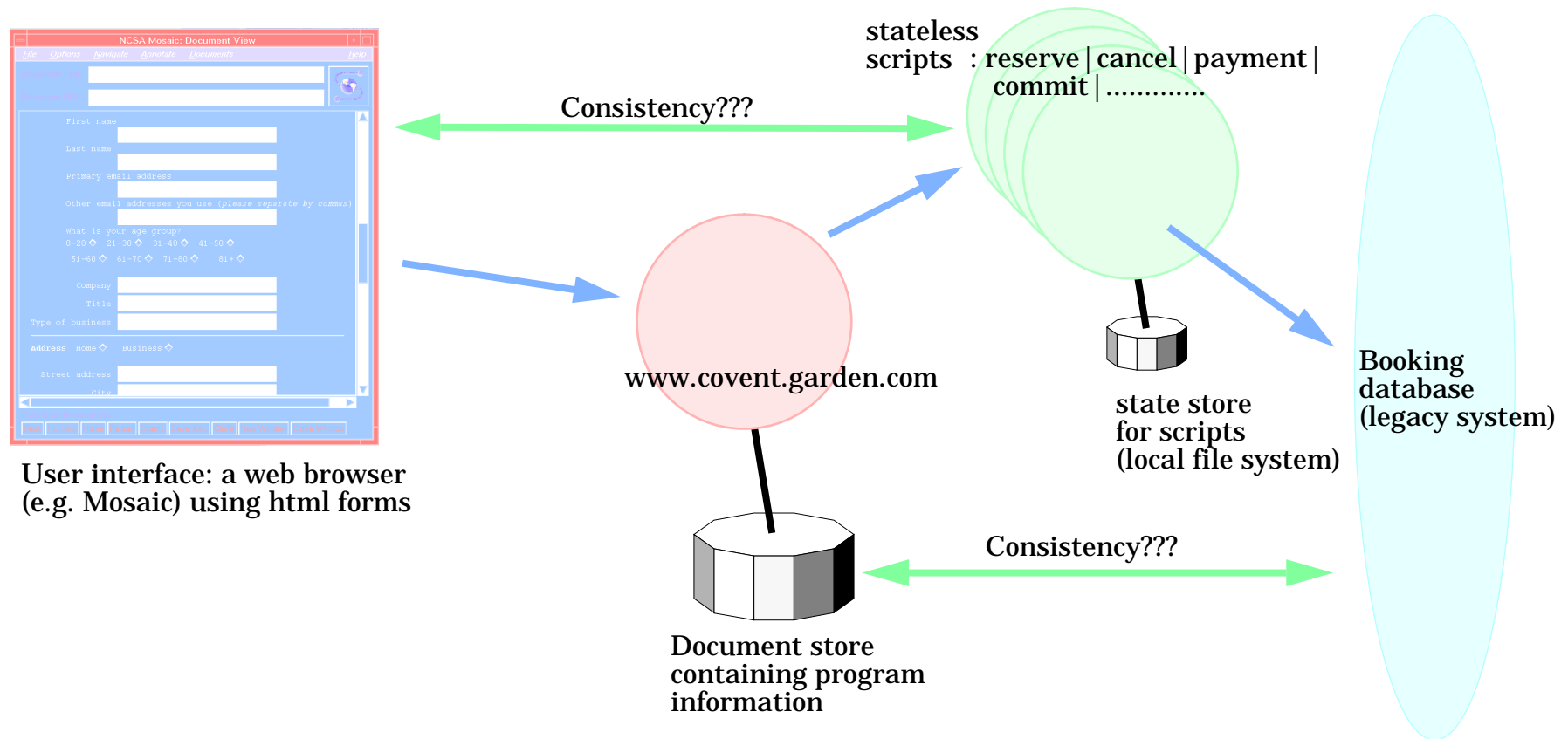
- *The situation is improving*
  - keep watching for product announcements
  - consider striking up an early relationship, and evaluating one or more tools in depth
  - monitor the **OMG Object Analysis and Design Task Force**



## CORBA and the World Wide Web

- *The World Wide Web is ubiquitous*
  - accessing information is easy
- *The World Wide Web is difficult to program*
  - to manage information
  - to add new information services - essential for service differentiation
- *CORBA technology can help solve this problem*
  - exploiting encapsulation and distributed objects

# Entertainment booking application



User interface: a web browser (e.g. Mosaic) using html forms



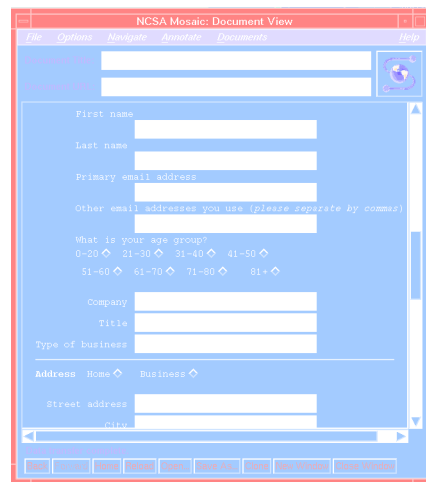
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## Supporting the entertainment booking application

- *For browsing forthcoming attractions, it is straightforward*
- *For booking tickets, it is much harder*
- *Managing the marketing material is also difficult*



## Using the ANSA CORBA CGI IDL compiler

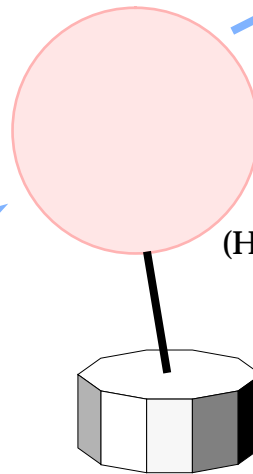


HTML forms automatically generated from IDL for script by stub compiler

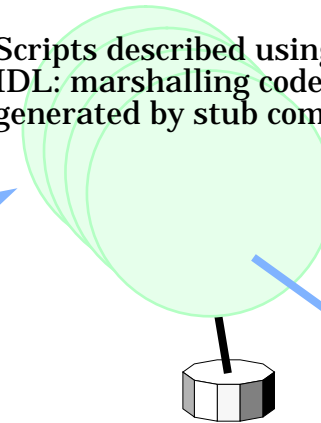
Scripts described using IDL: marshalling code generated by stub compiler



Bespoke user interface  
Stubs generated from IDL by stub compiler



(HTTP server)



(booking database)



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## ANSA Phase 3 and the World Wide Web

- *The World Wide Web uses its own HyperText Transfer Protocol (HTTP)*
  - built on TCP/IP
- *ANSA is building protocol gateways for both directions*
  - IIOp to HTTP: enables CORBA applications to access information on the World Wide Web
  - HTTP to IIOp: enables CORBA applications to be accessed directly from the World Wide Web
- *ANSA is also building a World Wide Web browser that uses IIOp as a native protocol*



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## More about CORBA?

- *For a general overview*
  - see *Object Management Architecture Guide* by the Object Management Group
- *For a technical overview*
  - see *CORBA* by the Object Management Group
- *For Object Services*
  - see *CORBAservices* by the Object Management Group
- *For a survey of object analysis and design methods*
  - see *Object Analysis and Design: Description of Methods* and *Object Analysis and Design: Comparison of Methods* ed. Andrew Hutt (OMG/Wiley)





## More about distributed systems?

- *If you want one introductory book on both business and technical issues:*
  - *Client/Server Strategies, by David Vaskevitch (IDG Books)*
- *If you want one introductory book on both technical issues and products:*
  - *Distributed Computing: A Practical Synthesis, by Amjad Umar (Prentice Hall)*
- *If you want one introductory book on the technical issues only:*
  - *Distributed Systems Concepts and Design, by Coulouris, Dollimore, and Kindberg (Addison-Wesley)*
- *If you prefer a more theoretical approach:*
  - *Distributed Systems, edited by Sape Mullender (Addison-Wesley)*



## Conferences and exhibitions?

- ***Object World UK***
  - organized by the **Object Management Group**
- ***ANSAworks***
  - the ANSA conference, organized by **APM**
- ***Object Expo Europe***
  - organized by **SIGS Conferences**



## Latest state of play?

- ***Magazines***
  - ***First Class*** from the Object Management Group (OMG)
  - ***Software Futures*** from APT Data Services
  - ...and the general computer press
- ***Internet newsgroups***
  - **comp.client-server**
  - **comp.object**
- ***Internet ftp sites***
  - **ftp.omg.org**



## How we can help

- ***ANSAware***
  - **technical support**
- ***ANSAworks***
  - **the ANSA conference**
- ***ANSAwise***
  - **training in distributed systems**
- ***ANSAweb***
  - **consultancy and advice**



## Contacting APM

- *We are online on the World Wide Web!*
  - our URL is <http://www.ansa.co.uk/>
  - ... note the final /
- *E-mail address is [apm@ansa.co.uk](mailto:apm@ansa.co.uk)*

## Stay in touch with APM