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## **Training**

# **ANSAwise - Course Roundup [to Understanding Distributed Systems Architecture]**

**Chris Mayers**

### **Abstract**

This is the "goodbye speech" to the course "Understanding Distributed Systems Architecture". As well as a summary of the key points, it gives information for finding out more.

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

This session also covers commercial products briefly under 'finding out more'. This should be expanded as we build up experience, possibly into separate modules.]

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Briefing Note

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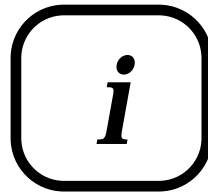




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# Understanding Distributed Systems Architecture

## Course Roundup



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



## About this course

- *This course has presented an overview of distributed processing and client/server systems*
- *Let us summarize the issues in planning such projects...*
- *... and the challenges you will encounter*



## Management issues

- *Ensure the whole organization is committed*
- *Involve end-users in defining requirements*
- *Start with high-payback, small, and simple projects*
- *Choose the right moment*
- *Monitor costs closely*



## Supplier issues

- *Investigate suppliers' credentials*
- *Evaluate products carefully*
- *Select suppliers you can work with*
- *Limit the number of products and suppliers you use*



## Development issues

- *Plan team staffing carefully*
- *Build on your existing technical expertise*
- *Integrate old and new development styles*
- *Select application templates with care*
- *Keep a close eye on system and network performance*
- *Always have a technical fall-back plan*



## Support issues

- *Form a consistent support strategy*
- *Budget for support*
- *Obtain the right mix of skills*
- *Devise focused training for your end-users*





## The practical challenges

- **Insufficient levels of integration**
- **Bugs in software**
- **Lack of client/server knowledge**
- **Very technical systems development**
- **User resistance to learning new skills**
- **Incompatibility of software**
- **Lack of open solutions**
- **Immaturity of software**
- **Little all-round expertise in the market**
- **Re-education of end-users**

Source: Rothwell/IDC



## Some thoughts

- *Flexibility is the typical business driver for client/server technology, rather than cost reduction*
- *The business challenges are more difficult to handle than the technical ones*
- *Project management is the key*



## 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 and Common Facilities***
  - see *CORBA services* and *CORBA facilities* 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)



## Books about CORBA?

- *The titles so far:*
  - *The Essential Distributed Objects Survival Guide*, by Orfali, Harkey and Edwards (Wiley)
  - *The Essential CORBA: Systems Integration Using Distributed Objects*, by Thomas Mowbray and Ron Zahavi (Wiley)
  - *Understanding CORBA*, by Randy Otte (Prentice Hall)
  - *CORBA: A Guide to Common Object Request Broker Architecture*, by Ron Ben-Natan (McGraw Hill)
  - *CORBA Principles and Programming*, by Jon Siegel (Wiley, forthcoming)



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## More about distributed systems?

- *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)*



## More about client-server systems?

- *If you want one introductory book on both business and technical issues...*
  - *Client/Server Strategies, by David Vaskevitch (IDG Books)*
- *... or see the magazines below*



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## Conferences and exhibitions?

- ***Object World UK***
  - organized by the Object Management Group
- ***ANSAworks***
  - the ANSA conference, organized by APM
- ***ICODP (International Conference on ODP)***
  - organized under the auspices of IFIP TC6
- ***Object Expo Europe***
  - organized by SIGS Conferences



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## 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**
  - **comp.soft-sys.dce**
  - **comp.dcom.net-management**





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## Latest distributed systems research?

- *Journals*
  - Distributed Systems Engineering
  - Internetworking Research and Experience
  - IEEE Network
  - IEEE Computer
  - IEEE Communications
  - ACM Communications
  - Distributed Computing
  - IEEE Parallel and Distributed Systems



## 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/>
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## Stay in touch with APM