Training

ANSAwise - Exercise Slides: Intelligent Network Freephone [Bellcore]

Mark Madsen

Abstract

This is the slide presentation corresponding to the intelligent network freephone system exercise for Bellcore.
Exercise: Intelligent Network Freephone System
In this exercise

- Analyse an Intelligent Network Freephone System

- Commercial point of view
  - functions
  - charging/billing

- Architectural point of view
  - components
  - data/state
Exercise Outline

- The aim of this exercise is to model the IN Freephone system
  - described in the exercise briefing sheet
- Build model with integrated
  - call control
  - call charging
  - call billing
Targets

- Describe the service architecture
- Focus on service provided
- Decompose the service into smaller functional entities
- Describe the dynamic behaviour of the system
Remember

- There is no “correct” solution

- You do need to think clearly
  - to make positive decisions and simple choices
  - the idea is to learn from the exercise

- Tips
  - try to separate different areas of functionality
  - then join these together into larger functional units
Now Do It!

You have 60 minutes

...or to be precise, 1/24 of a day...
What Was Learned

- Key points of the object-oriented approach
  - state vs interface
  - static vs dynamic behaviour
  - aggregation vs association
Model Solution

• Ideal exercise should include
  - description of freephone service architecture
  - decomposition of service control point
  - calling process analysis
Summary

- **Object-oriented analysis makes complicated systems manageable**
  
  - Decompose complicated functions into smaller objects

- **Commercial processes define the design of systems**
More information?

- For more on object-oriented analysis

  - association versus aggregation, see *Object-Oriented Modeling and Design* by James Rumbaugh et al (Prentice Hall 1991)

  - on component functionality, see *Object-Oriented Software Construction* by Bertrand Meyer (Prentice Hall 1988)