



## Lecture 9 – Groupware (Lotus Notes)

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# Objectives

- To understand the purpose of groupware
- To examine the facilities offered by Lotus Notes
- To consider the future of Office Suites and Groupware
- **Assignment & Test Arrangements**
- **Today's practical**
  - Advanced use of spreadsheets. Make sure you really understand the task, not just recognise the words!



# Review

- **We have looked at –**
  - Operating Systems, File Systems, Printers
  - E-mail, Internet
  - Word Processing
  - Document Management
  - Presentation Packages
  - Spreadsheets
- **Next Term we will look at**
  - Other Packages
  - The software selection process
  - Databases
  - Package Customisation / VBA programming



# Why Groupware?

- Most organisations (of any kind) require people to work *collaboratively*
- The COTS software that we have looked at so far (except e-mail) is about *individual use*
- It is possible to share information
  - E-mail to colleagues
  - E-mail attachments
  - Shared file store on servers
  - Information published on web servers
- But what is really required is Managed sharing



# Typical Groupware Facilities

- **Shared calendars / scheduling**
  - For people and resources (e.g. conference rooms)
- **Communication**
  - Managed E-mail (more on this later...)
  - Discussion Forums
  - Instant messaging
  - Broadcast events
- **Shared information**
  - Reference (standards, price lists etc.)
  - Databases (customers, sales etc.)



# Advanced Groupware Facilities

- **Online meetings**
  - Interactive, shared workspaces (new)
- **Workflow / Project Management**
  - Routed, tracked, e-mail
  - Managed tasks / activities
- **Global access**
  - Web access
  - Remote access



# Example Groupware – Lotus Notes

- **Very long history (for a COTS product)**
  - Originally a mainframe application for bug tracking in 1973
- **Developed by Lotus Notes, starting 1984**
- **First release 1989, aimed at large corporates**
  - Expectation was large no. of small workgroups
- **1993 PCs, networks increased capability**
  - new features added (full text search, Mac version)
  - scalability improved, 200 users per server (v3)
- **1996 Client & Server separated (v4.5)**
  - Domino document server
  - Web I/F or Notes client access
- **2003 Currently version 6**



# Notes E-mail

- **All typical e-mail program facilities**
  - Attachments
  - Folders
  - Signatures etc.
- **Additional features (if recipients use Notes)**
  - Digital signatures
  - Links to documents in Notes databases
  - Encryption
  - Priorities, read receipts etc. that work
  - Uncopyable mail
  - Outlining





# Notes Calendar

- **Usual calendar facilities**
  - Show availability / free time
  - Double booking
  - Repeated meetings
  - Anniversaries etc.
- **Advanced features**
  - Group calendars
  - Selective visibility
  - Automation (accepting meetings automatically)



# Notes Databases

- **The foundation of notes (everything is a database)**
- **Not a Relational Database (see next term!)**
  - Views (forms) allow users to create documents
  - Documents contain fields
  - Fields can be rich text, images etc.
  - Fields can be embedded objects (e.g. MS Office docs)
- **Databases can be shared (7 levels of access)**
- **Can be developed by users, stored locally**
- **Developed & stored centrally**
- **Object orientated, programmable through “Lotuscript” & other languages**



# Replication

- **The key to collaboration**
- **Replication between servers**
  - Geographical separation
  - Scalability (to 10's of 1000's of users)
  - Largely invisible to users
  - Flexible scheduling
- **Replication to mobile users**
  - Over internet / modem
  - Just mail or entire databases



# Inappropriate Applications

- **Access to real-time information**
  - The replication process is NOT instantaneous
  - May be “overnight”
- **Heavy “number crunching” / data processing**
  - Lotuscript is interpreted (slow)
  - The OO interface also slow (comparatively)
- **Query or Report based services**
  - No SQL support (not relational)
  - No report writer (flexible database structures)



# Other Groupware Applications

- **Microsoft Exchange Server / Outlook**
  - Similar features for e-mail and calendaring
- **Microsoft Sharepoint Server**
  - Windows Server 2003 Add-on
  - Managed sharing of documents
  - Integrates with the MS Office “Save” dialog
- **Wide range of web based collaboration tools**
  - Expect much consolidation



# Your Assignment

- You will be given a briefing document (also available on Blackboard)
- Your role is to act as a consultant
- You will need to make recommendations
  - Either specific suggestions
  - Or a process to determine an answer
- I require a written report
- And a presentation summarising the key points



# Assignment Arrangements

- The report and presentation slides & notes are to be handed during Week 10 of the Spring Term
  - Precise date and time to be advised
- The assignment will constitute 40% of your overall course mark
- A sample of students will be asked to give their presentations during the summer term
- Questions to [K.R.Wilcox@reading.ac.uk](mailto:K.R.Wilcox@reading.ac.uk) please, answers will be posted on Blackboard



# Test Organisation

- Tests will be given next week (week 10)
- They will be at the same time as the lecture 10:00AM
- It will be here (Nike LT) – Spread Out!
- You will have 30 minutes to complete the test
- **LET ME KNOW IF YOU ARE ALLOWED EXTRA TIME**
  - This test will be held in the Sullivan Room in CS
- There will be no lecture or practicals next week





# The Test

- This will be a written test
- There are 15-20 short questions, 1 longer one
- The test covers material from the practicals
  - Plus a small element from the lectures
- The test will count for up to 5% of your total coursemark
- There will be a further test at the end of the Spring Term, worth another 5%
  - Plus an assessment in the Spring Term
  - And an examination in the Summer Term



# Today's Practical

- **Advanced Excel Spreadsheets**
- **There is a lot of material to cover – you may NOT be familiar with all of it**
- **We will use some of the example spreadsheets downloaded from Blackboard last week**
- **REMEMBER TO SIGN OFF ON THE REGISTRATION SHEET!**