Providing R Reporting Capabilities to a Web Application from a Version Controlled R Code Database

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or
Reusing R Code for Item Display and Reports

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Why?

- International Company
- Many people
- Lack of control
- Wasted effort
Benefits

• Use the same R code with different data
• Hide the R code from the end user
• Store results for later use
• Cope with changing code
• Automate report production
Item Definitions

• XML describing what the item is and how to generate it
  – Defines rules about data it needs
  – Provides descriptions of expected user arguments
  – The R code
Generating an Item

- Item definition from database
- Display fields
- Set variables
- Run the R code
- Audit and store new results for re-use
Report Production

- Define reports using item definitions
- Use the same process of item generation
- User arguments are provided as part of the report definition
- Output to a number of standard formats
- The report data is reusable

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In Summary

• Reusing versioned R code
• Quick comparison of data
• Faster item generation
• Faster report generation
• Quicker turnaround from data to final report