

# Converting 4GL Databases and Apps to a Relational Database

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## Reasons to Convert 4GL Apps

- Proprietary Data Formats
  - Segmented
  - Unusual Relational Formats
  - Flat Files
- Expensive Vendor Licensing
- Limited Internal Technology Expertise
- Nonstandard Software Solution

# Justifying the Cost of Replacement

- Demonstrate the Ease of the Solution
- Break Effort Into Bite Size Pieces
- Use Support Budget as Funding
- Cost of Supporting Nonstandard Solutions

# Develop a Plan for Data Extraction

- Revisit Business Requirements
- Update Nonfunctional Requirements
- Survey the User Community
- Plan for Export and Backup of Existing Data

# Exporting Data from Proprietary Source

- Determine Common Indexes
- Run Reports to Count Related Data Segments
- Design New Relational Tables and Relationships
- Run Exports

# Data Cleanup

- Review Exported Data for Format Errors
- Cleanup Missing Data and Invalid Columns
- Watch for Duplicate Rows in the Export Process
- Multiple Approaches to Correct Data Errors

# Relational Database Design

- Leverage Existing Resources if Possible
- Using Index Keys from 4GL Source Files
- Include Lookup Tables
- Consider All Interfaces in old 4GL Application

# Rebuilding the User Interface from 4GL

- Must Update Business Requirements
- Consider Multiple Approaches (BI tools, dev tools)
- Solution Fit into Technology Standards
- More Complex than Building Matching Entry Forms



# Testing the New Solution

- Start with Simple Reporting Against New Database
- Involve the End User Early in the Process
- Show Benefits of Change Up Front in Testing
- User Acceptance Testing with Management Signoff

# Implement

- Develop a Strong Backout Plan
- Involve the End User Early in the Process
- Show Benefits of Change Up Front in Testing
- User Acceptance Testing with Management Signoff

# Demonstration

- Export of IBI WebFOCUS Database
- Loading of Relational Database
- Replacing Existing User Interface

# Summary

# Questions?