RexxLA Symposium 2016

ORXVER

Gets a

GUI

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Overview

- Presentation Goals
- Background and Rationale
- Designing the GUI
- A Look At The Added Code
- Demonstration
- Summary
Goals for this presentation

- Show how to add a GUI to a command line program
- Demonstrate the ORXVER tool for managing multiple ooRexx versions
- Highlight some possibly interesting coding techniques
Background and Rationale(1)

- “Can I have multiple ooRexx versions installed?”
  - Simple answer: No
  - More complete answer: Qualified Yes
- Mark Miesfeld described a procedure using Rename commands
  - CHGREXX was written to implement that process
Background and Rationale(2)

- CHGREXX only handled part of the job
  - User needed to copy the current installed version “manually”
  - No documentation or help available
- OREXVER written to incorporate missing pieces
  - CCV option added for the copy operation
  - DOC option added to display the program documentation
Background and Rationale(3)

• Functionality was now complete but the usability was poor
  - User needed to remember the syntax for the different options
  - User needed to run the program from an “elevated” command prompt when copying or renaming
  - A Help option - /?, ?, or help? - was added but a better interface was still needed
Background and Rationale(4)

- Time for a GUI!
  - The ooDialog framework on Windows can be used to add a GUI
Designing the GUI(1)

- Where to start?
  - Analyze the program inputs (options)
  - Decide on graphical elements to use
    - Buttons, Listbox, text areas, etc
- Program must validate the option selected but could, instead, provide a choice of valid options
  - Need to rearrange the program logic slightly
Designing the GUI(2)

- Number of valid options is variable
  - Depends on the “state” of the system
  - Listbox seems like a good choice for presenting those options
    - Each line will contain an ooRexx version
    - A line for Copy Current Version will be added if valid
    - If there are more options than space in the Listbox, scroll bars will be added automatically
Designing the GUI(3)

- Informational messages can be added with a static text “control”
  - This can be dynamic – content determined at run time
  - Use this to display the currently running version of ooRexx
Designing the GUI(4)

- Push Button Controls can be used to initiate action
  - Add OK button to return control to the program which can determine which option was chosen
  - Add Cancel button to cause the program to end without taking any action
  - Add a button that will display the Program Documentation rather than include it in the Listbox
Designing the GUI (5)

- Decide on the layout; i.e. what the dialog will look like
  - Usually a process of trial and error
  - Need to decide on the dialog title
  - Put the text control at the top of the dialog
  - Then place the Listbox in the center
  - Finally add the push buttons near the bottom
A Look At The Added Code

- Displaying the dialog
- Defining the dialog layout
- Initializing the dialog controls
- Processing the users actions
- Other code snippets
  - Automate the “elevated” command prompt
  - Embedding the help and documentation
Demonstration

- Install the program
- Run for the first time
  - Generate/display the documentation
- Copy the current (only) version
- Install a second ooRexx version
- Switch to the new version
- Switch back to the prior version
Summary

- Improve usability of command line programs by adding a GUI
  - Does not have to be a total rewrite
- Use ORXVER to manage multiple ooRexx versions on Windows
  - Caveat: no support for mixed 32- and 64-bit versions nor “beta” versions that have the same version number