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