## Playing With "Matches" ... and More: Recent Changes to Create Lists

Presentation for IUG 2020, April 15-18, Minneapolis Richard V. Jackson, Huntington Library

This presentation is an update of one I've given at IUG several times over the years. The need for a fresh look was triggered by the adoption, in Sierra 4.1, of the POSIX standard for its regex engine, replacing the previous egrep-based standard. While much remains unchanged, taking full advantage of regular expressions now requires understanding two different "flavors" of regex: Basic Regular Expressions (BRE) and Extended Regular Expressions (ERE). In addition, the possibility of case-sensitive searches (in Sierra 5.0+) using the "matches (exact)" operator has implications for how regexes are constructed. Most of these changes have not been covered in the online Sierra documentation.

## Outline of the presentation

- O What are regular expressions?
- o A brief history of regular expressions in Create Lists
- The POSIX standard
  - Basic regular expressions (BRE)
  - Extended regular expressions (ERE)
- o A digression: case-sensitive searches in Create Lists
- Overview of RE syntax
  - Character classes
  - Quantifiers
  - Grouping
  - Position indicators
  - "Escaping" metacharacters
  - Alternation
  - POSIX character classes
- How MARC data appears to Create Lists queries
- Further examples
- Conclusion

More program materials, including a detailed handout and the presentation slides, will be made available prior to the conference.