Spock Syntax and Macro API

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- Old Spock Syntax vs Advanced Spock Syntax
- Extension of Advanced Spock Syntax
- Macro API

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Old Spock Syntax vs Advanced Spock Syntax

Old Spock Syntax:

- space as parameters separator
- repetition of parameters (ParamRepeat) allowed but not compatible with macros defining:
  - more that one ParamRepeat
  - ParamRepeat not as last parameter
  - nested ParamRepeat

Advanced Spock Syntax overcome Spock Syntax restrictions related to ParamRepeat

Old Spock Syntax vs Advanced Spock Syntax

Advanced Spock Syntax:

- space as parameters separator and brackets to enclose ParamRepeat elements, ex.
  mv [[mot1 5] [mot2 3]]
- mandatory to be used in cases affected by old syntax restrictions, ex.
  paramrepet_notatend [[1 2] [3 4]] 10
- compatible with old syntax in cases not affected by the old syntax restrictions, ex.
  mv mot1 5
  mv [[mot1 5]]
- old and advanced interfaces only possible to be mixed if ParamRepeat contains only one element: brackets can be supressed for the repetitions

Allows multiple ParamRepeat parameters at any position and even nested

Old Spock Syntax vs Advanced Spock Syntax

Example mixed interfaces:

- optional to use bracket enclosing each repetion in case this contains only one element, ex.

  paramrepeat_single [1 2 3]
  paramrepeat_single [[1] [2] [3]]

  In both cases [] means the use of the default value, if given, ex.

  paramrepeat_single [1 [] 3]
  paramrepeat_single [[1] [] [3]]

Extension of Advanced Spock Syntax

Simplifies the Spock Syntax if not repetions of ParamRepeat parameter

Use case:

- macro with ParamRepeat not in last position and with only one repetion:
  - advanced syntax has to be used:
    mymacro [[arg1 arg2]] arg3
  - extension allows:
    mymacro arg1 arg2 arg3
  - old syntax solution (change order of ParamRepeat and scalar parameter):
    mymacro arg3 arg1 arg2
    not desired if arg3 is optional

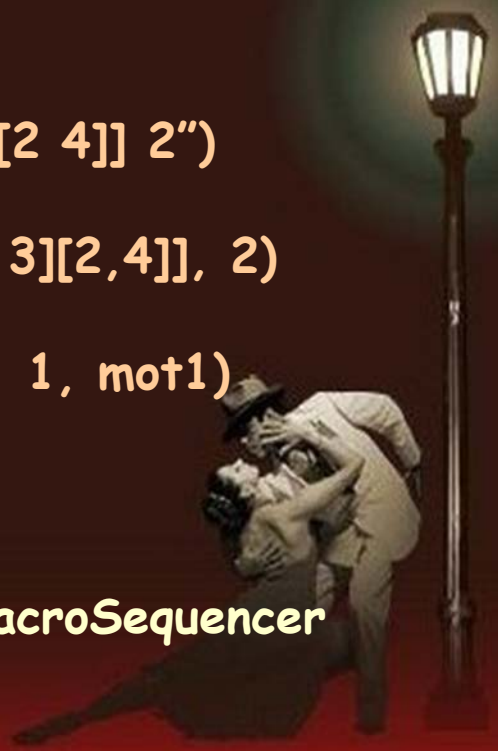
Additional feature: error thrown if wrong number of parameters is given

Macro API

Advanced spock syntax and its extension applies to the macro API

Argument of execMacro, runMacro, … given as lists, ex.:

- self.execMacro("mv [[mot1 1] [mot2 5]])
- self.execMacro("paramrepeat_multiple [[1 3][2 4]] 2")
- self.execMacro("paramrepeat_multiple", [[1, 3][2,4]], 2)
- self.execMacro("pt10", [1], mot1) ~ ("pt10", 1, mot1)



Important for running macros from MacroSequencer