Procedural and Object-oriented Programming 6

ooRexx Runtime Environment and Resolving Environment Symbols

Business Programming 1 | **Business Programming 2**

Basics, Parsing	Commands, APIs	Window-Automatisation, Web-Scripting	Security, Debugging	Graphical User Interfaces (GUI), Sockets, ...

Prof. Rony G. Flatscher

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Environment Symbols

- Definition of an environment symbol
  - Starts with a dot
  - Followed by a Rexx symbol
  - Some examples for environment symbols with their resolved values:

```
say .true    -- yields: 1 (environment constant)
say .false   -- yields: 0 (environment constant)
say .nil     -- yields: The NIL object (environment constant)
say .he.ho   -- yields: .HE.HO (not found, environment symbol in uppercase)
say .bag     -- yields: The Bag class (from REXX package, also .environment)
say .output  -- yields: The OUTPUT monitor (from .local)
.context~package~local~my.test="This is a test" -- add an entry to package's local
say .my.test -- yields: This is a test
```

- How does ooRexx arrive at these values?

Cf. rexxref.pdf (1.13.6. Environment Symbols)

Resolving Environment Symbols, 1

1. First resolving the constants
   - **`.true`** (*1*), **`.false`** (*0*) or **`.nil`** (*The NIL object*)
2. Next removing the leading dot, remaining symbol used for lookup
   1) Resolving classes
      (1) Classes defined in the current program/package
      (2) Public Classes of required programs
      (3) ooRexx classes (REXX package) which also get stored in the **`.environment`** directory
   2) Resolving entries by looking up the following environment directories one by one
      (1) The `local` package directory of the current program (i.e.: `.context~package~local`)
      (2) The ooRexx **`.local`** environment directory (each ooRexx interpreter has a different one)
      (3) The ooRexx global **`.environment`** directory (all ooRexx interpreters share this one)
      (4) The ooRexx (unnamed) system directory

Cf. rexxref.pdf (1.13.6. Environment Symbols)

Resolving Environment Symbols, 2

3. Next resolving the ooRexx runtime environment symbols
   - **.CONTEXT**, **.LINE**, **.METHODS**, **.RESOURCES**, **.ROUTINES**, or **.RS**
4. Finally, if not found returning the environment symbol in uppercase

➔ *Note:* ooRexx reserves symbols without a dot for itself

- Hence, if you store entries in the package `local`, **.local** or global **.environment** directories then make sure that the *index value* (name without leading dot) you use contains at least one dot!

  Example:

```
.local~my.secret="None of your business! ;)" -- store in .local directory
say ".my.secret:" .my.secret -- displays: .my.secret: None of your business! ;)
```


Cf. rexxref.pdf (1.13.6. Environment Symbols)