

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,
...

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?



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



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! ;)
```

