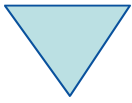


"Automating OpenOffice with ooRexx: ooRexx Nutshell Examples for Write and Calc and..."

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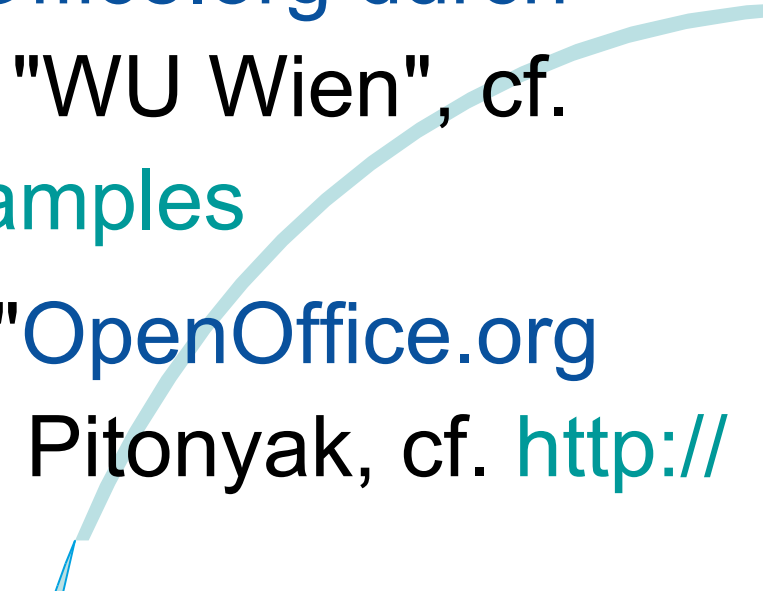


Agenda

- Overview
- Easing the interfacing with OOo
 - OOo.cls
 - Developed while at the symposium
 - Needs to be extended
 - Anyone is invited to do so and share the results!
- Roundup and Outlook



Sources of figures, examples and hints

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- From the excellent OOo "Developer's Guide", cf. <http://www.OpenOffice.org>
 - Mr. Augustin's paper "Erweiterung der Skriptfähigkeit von OpenOffice.org durch BSF und JSR-223" at the "WU Wien", cf. http://www.matt.at/oo_examples
 - From the excellent book, "OpenOffice.org Macros Explained" by Mr. Pitonyak, cf. <http://www.HetzenWerke.com>
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OpenOffice.org – An example

```
/* initialize connection to server, get its Desktop-service and XComponentLoader interface */
xComponentContext = .bsf~new("com.sun.star.comp.helper.Bootstrap") ~createInitialComponentContext(.nil)
xUrlResolver = xComponentContext~getServiceManager() ~createInstanceWithContext("com.sun.star.bridge.UnoUrlResolver", xComponentContext)

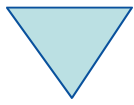
unoResolverName = .bsf4rexx~Class.class~forName("com.sun.star.bridge.XUnoUrlResolver")
unoRuntime = .bsf~new("com.sun.star.uno.UnoRuntime")
urlResolver = unoRuntime~queryInterface(unoResolverName, xUrlResolver)

unoUrl = "uno:socket,host=localhost,port=8100;urp;StarOffice.NamingService"
rInitialObject = urlResolver~resolve(unoUrl)
namingServiceName = .bsf4rexx~Class.class~forName("com.sun.star.uno.XNamingService")
rName = unoRuntime~queryInterface(namingServiceName, rInitialObject)

rXsmgr = rName~getRegisteredObject("StarOffice.ServiceManager")
msfName = .bsf4rexx~Class.class~forName("com.sun.star.lang.XMultiServiceFactory")
xMsf = unoRuntime~queryInterface(msfName, rXsmgr)

-- Retrieve the Desktop object, we need its XComponentLoader interface
-- to load a new document
aDesktop = xMsf~createInstance("com.sun.star.frame.Desktop")
xDesktop = .bsf4rexx~Class.class~forName("com.sun.star.frame.XDesktop")
oDesktop = unoRuntime~queryInterface(xDesktop, aDesktop)
xComponentLoaderName = .bsf4rexx~Class.class~forName("com.sun.star.frame.XComponentLoader")
xComponentLoader = unoRuntime~queryInterface(xComponentLoaderName, oDesktop)

/* Open a blank text document */
/* No properties needed */
propertyValueName = .bsf4rexx~Class.class~forName("com.sun.star.beans.PropertyValue")
loadProps = .bsf~createArray(propertyValueName, 0) /* 0=no elements, i.e. empty Java array */
/* load an empty text document */
xWriterComponent = xComponentLoader~loadComponentFromURL("private:factory/swriter", "_blank", 0, loadProps)
::requires "BSF.cls"
```



OpenOffice.org

OOo.cls

- Initializing OOo a recurrent issue
 - Load off the needed statements
- Support an OOo-proxy
 - Makes it easy to get XInterfaces from the objects
 - Works closely with BSF
 - Wraps up BSF proxies
- Eases coding of OOo considerably



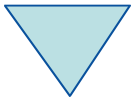
OpenOffice.org – An example

```
/* initialize connection to server, get its Desktop-service and XComponentLoader interface */
xMsf=ooo.connect() -- connect to server and retrieve remote multi server factory

-- Retrieve the Desktop object, we need its XComponentLoader interface
-- to load a new document
oDesktop      = xMsf~createInstance("com.sun.star.frame.Desktop")
xDesktop      = oDesktop~XDesktop      -- get desktop interface
xComponentLoader = xDesktop~XComponentLoader -- get componentLoader interface

/* load an empty text document */
xWriterComponent = xComponentLoader~loadComponentFromURL("private:factory/swriter", "_blank", 0, .OOo~noProps)

::requires "OOo.cls" -- get OOo support
```



Roundup and Outlook

- OOo
 - Needs BSF4Rexx
 - Full control over Open Office
- OOo.cls
 - Eases programming considerably
 - Making it easy to request interface objects
 - Needs enhancements
 - Please share yours!
- You can directly apply all OOo information
 - StarBasic documentation, books
 - UNO documentation, books for C++, Java
- With OOo v2.0
 - Will be possible to get ooRexx be used from within OOo, if someone adds the necessary bridging code (in Java)