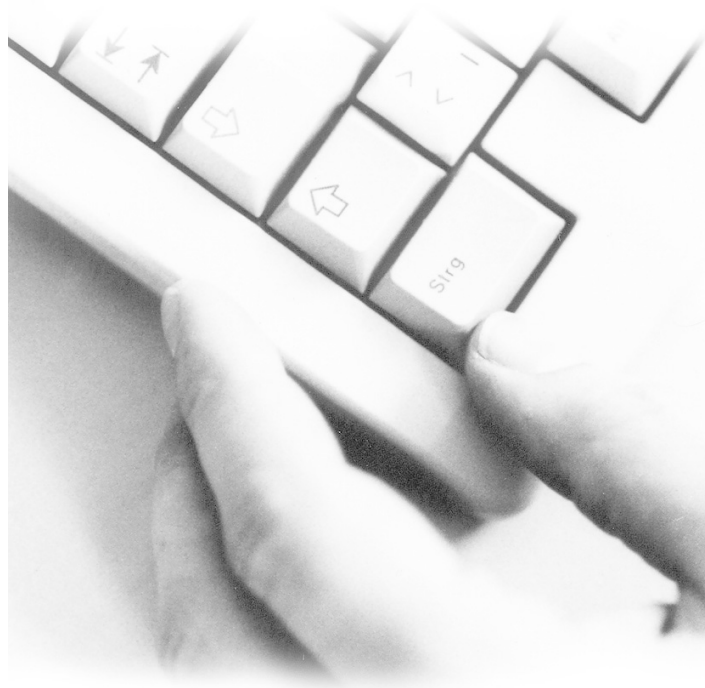


# OpenOffice/StarOffice – Migration, a methodology in a professional environment

Herzlich Willkommen.



OpenOffice.org Conference  
Berlin, 24.09.04, 15.15 h

Lothar K. Becker



## What you will see, and what you will not see ...

- You will see ...
  - how to handle a migration project,
  - which risk factors should be covered (out of experience),
  - with which process, tools or tasks
  - for companies with more than x00 employees (Office users)
- You will not see ...
  - technical issues in detail (how could I do this or that with SO/OOo)
  - a guaranty for successful migration (every migration is a risk) but a better chance for it
  - solutions but a roadmap to solutions (because they are individual)

# Lower TCO – the big chance of the migration, but ...

## Parameter

# Workplaces	500
Licenses	Euro
StarOffice	54
MS-Office Upgrade	190
MS-Office new License	340
Maint./Assurance	Euro
StarOffice	23
MS-Office	112
Personnel Costs	Euro
Employee	500
Consultant ext.	1000
Education	
Training MS-Office [day]	0,5
Training SO [day]	1,0
Employee to be trained	50%
Participant/Track	10
Trainer int./ext.	80%
PowerUser	5%
# Days Power User	5,0
Migration	Man day
new MS-Office-Version	20
StarOffice	50
StarOffice	150
StarOffice	300
Deployment/Roll-Out	Man day
MS-Office	15
StarOffice	15

Variants:	Buy+Ass. MS	SO 50	SO 150	SO 300
StarOffice-Migration	-	x	x	x
Purchase MS-O 1. year	x	-	-	-
Upgrade MS-O 1. year	-	-	-	-
Buy MS-O every N years	-	-	-	-
Software Assurance	x	x	x	x
Upgrade every N years	3	3	3	3

Costs Types:	Buy+Ass. MS	SO 50	SO 150	SO 300
Trainer	14.625	21.750	21.750	21.750
Training Employees	121.875	181.250	181.250	181.250
New License Fee	170.000	27.000	27.000	27.000
Upgrade MS-O 1. year	0	0	0	0
Renewal/Maintenance	56.100	11.500	11.500	11.500
Deployment	7.500	7.500	7.500	7.500
Migration	10.000	50.000	150.000	300.000

Costs / year:	Buy+Ass. MS	SO 50	SO 150	SO 300
2003	380.100	299.000	399.000	549.000
2004	56.100	11.500	11.500	11.500
2005	56.100	11.500	11.500	11.500
2006	210.100	165.500	165.500	165.500
2007	56.100	11.500	11.500	11.500
2008	56.100	11.500	11.500	11.500

Costs cumulated:	Buy+Ass. MS	SO 50	SO 150	SO 300
2003	380.100	299.000	399.000	549.000
2004	436.200	310.500	410.500	560.500
2005	492.300	322.000	422.000	572.000
2006	702.400	487.500	587.500	737.500
2007	758.500	499.000	599.000	749.000
2008	814.600	510.500	610.500	760.500

Extra Charge MS-Office:	0	304.100	204.100	54.100
Extra Charge / Year:	0	50.683	34.017	9.017

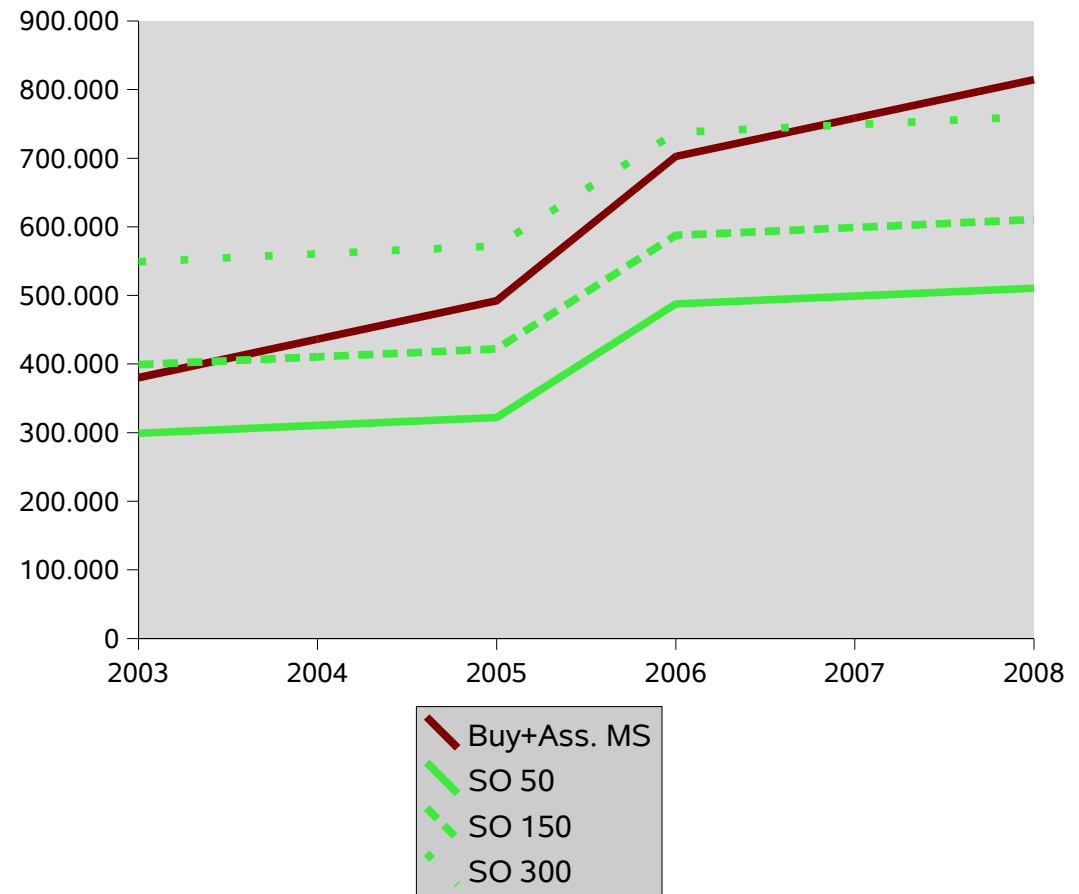
What, if ...?

# When do you want to gain from lower license fees?

## Parameter

# Workplaces	500
Licenses	Euro
StarOffice	54
MS-Office Upgrade	190
MS-Office new License	340
Maint./Assurance	Euro
StarOffice	23
MS-Office	112
Personnel Costs	Euro
Employee	500
Consultant ext.	1000
Education	
Training MS-Office [day]	0,5
Training SO [day]	1,0
Employee to be trained	50%
Participant/Track	10
Trainer int./ext.	80%
PowerUser	5%
# Days PowerUser	5,0
Migration	Man day
new MS-Office-Version	20
StarOffice	50
StarOffice	150
StarOffice	300
Deployment/Roll-Out	Man day
MS-Office	15
StarOffice	15

## TCO cumulated

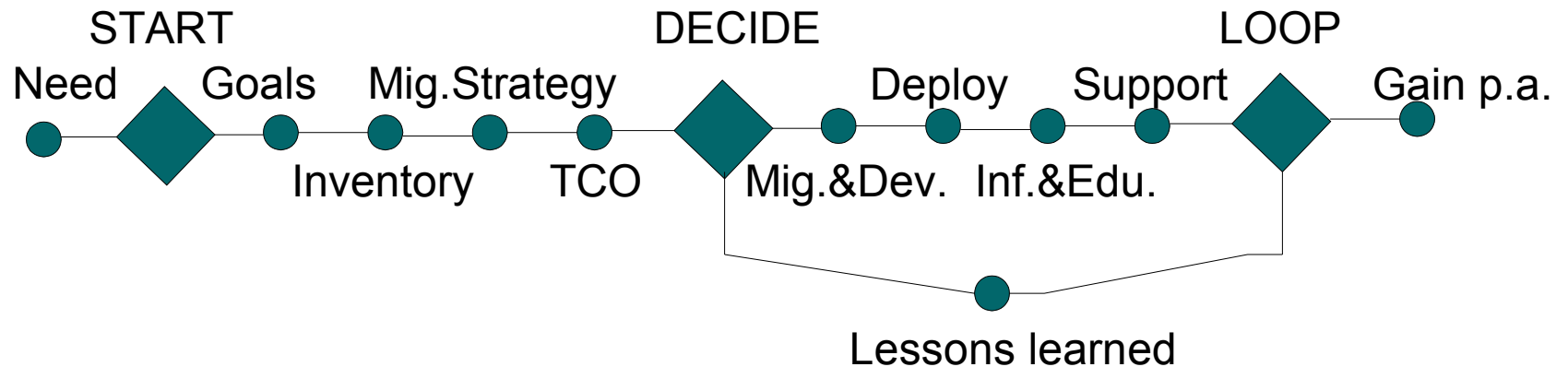


# The three migration risk areas (the three p's)



- People:
  - Management
  - Admin & support
  - Users
  - Partners & customers
- Processes:
  - Workflow impacts
  - Interdependencies
  - Exceptions & conflicts
- Products & Technology:
  - Feature set, concepts
  - User experience
  - 3<sup>rd</sup> party applications

# The Step-by-Step-.riess-Methodology



„It's not just the path, ..., but it's also the path“

# Define, what are your Goals of the migration

Give an answer for: Why should we touch a running system?

- Innovation
  - More Transparency in the file format, extend office features
  - Improve the independence of the Office suite
  - Reduce the license fees or administration costs
  - ... (individual Goals)
- Consolidation (constraints)
  - Consolidate your files and templates
  - Access to old documents must be guaranteed
  - Integration of new Office suite in established workflows (not v.v.)
- ... and not a one to one migration

# Inventory (1)

- Important: As-is Analysis for hardware and software -environment and documents
- Typical customer status:
  - just one Office product (e.g. M\$ Office)
  - a lot of old documents from different Office versions
  - a lot of old versions of the same document
  - a lot of related templates (e.g. a time sheet) for each team, group, project, ...
  - few documents, which are used permanent or less than 3 month ago (< 15% of all)
  - important documents are stored central and local
- Which changes in hardware and software are planned?



## Inventory (2)

- Identify amount of files, classify which are complex, medium or easy to migrate (Analysis wizard) and why
  - Amount of files vs amount of templates
  - Macro programming
  - Layout or format issues ...
- Workshop with representatives of user groups
  - Inform (differences, features, licenses, private use, ...)
  - Ask about workflows, document usage, 3<sup>rd</sup> party applications, “co-edit” workflows (sharing doc's)...
  - Get examples of templates (doc/dot, xls/xlt, ppt/pps)
- Migrate such example-documents and value the results

# Migration Toolkit

- Installation with self-running jar.
- Installed Tools:
  - Document Analysis Wizard
  - Macro Migration Wizard with **preparation tool**
- Light-Version for File-Analysis



MigrationToolkitInstalle  
r-0.1.0409.jar



Document Analysis  
Wizard



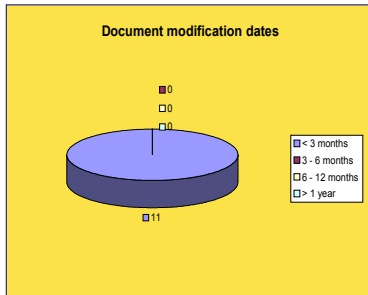
Macro Migration  
Wizard

# The results of the Analysis Wizard

StarOffice Marketing Analysis Wizard  
 29/06/2004 12:35:50  
 Created by: StarOffice Marketing Analysis Wizard 0.2.0426



Word	Number of Documents Analyzed				Totals	
	Excel	PowerPoint	Word	PowerPoint	Word	PowerPoint
Documents (.doc)	2	4	2	2	8	
Templates (.dot)	1	1	1	3	3	
<b>Total</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>11</b>	



Last Modified	Number	%
< 3 months	11	100%
3 - 6 months	0	0%
6 - 12 months	0	0%
> 1 year	0	0%
<b>Total</b>	<b>11</b>	<b>100%</b>

**Legend**  
 < 3 months: Migrate to StarOffice.  
 3 - 6 Months: Careful review to see if they should be archived or migrated to StarOffice.  
 6 - 12 Months: Quick review, either archive or migrate to the read/write StarOffice XML file format.  
 > 1 Year: Older than 1 year, archive to read-only format such as PDF

Document with Macro Migration Issues

Type	Documents with Macro Migration Issues			
	Complex	Medium	Simple	None
Word	2	0	0	1
Excel	2	0	1	2
PowerPoint	0	0	2	1
<b>Total</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>4</b>

Migration Issues Analyzed		Hours Per MD = 7							
Application	Issue Category	Issue Type	Additional Weighting Factors	Cost per Issue or Factor (min)	Complex Issue	Issue Count	Prepared Issue Count	Factor Count	Costs (min)
Word	Changes And Reviewing								
	Content And Document Properties	Comment		0	False	0			0
		Document Custom Properties		2	False	1	8		16
		Document Parts Protection		0	False	0			0
		Document Summary Properties		1	False	8	8		8
		Invalid Password Entered		0	False	0			0
		Mail Merge Datasource		10	True	2			20
		Password Protection		1	False	2			2
	Controls								
	Fields	Appearance		0	False	2			0
		Form Field		5	True	5			30
		Mail Merge Field		0	True	10			0
		Table Of Authorities Field		0	False	6			0
		Table Of Contents		0	True	0			0
	Format	Custom Bullet List							
	Indexes And References	Table Of Authorities		0	False	1			0
		Table Of Contents		10	True	2			20
	Objects Graphics And Frames	Object In Header Footer		1	False	2	2		2
	Portability	Character References In Macro - Module, Class or UserForm	Number of Modules	0	True	2			0
		References	Number of External References	0				4	0
		Embedded OLE Object		0	True	2			0
		Linked OLE Object		10	True	2			20

# StarOffice Analyse-Toolset

Microsoft Excel - Analysis Results.xls

All Analysed Documents - Properties							
Document Name	Application	Issues	Pages Sheets Slides	Created	Modified	Accessed	Printed
descript.doc	Word 10.0	0	1	08-Mai-03 15:16	08-Mai-03 15:41	16. Okt 03	na
0206p2.doc	Word 10.0	1	6	11-Feb-02 16:48	27-Feb-02 18:53	16. Okt 03	11-Jan-02 10:07
macro_tutorial.doc	Word 10.0	1	3	02-Sep-01 15:15	08-Oct-01 18:42	16. Okt 03	08-Oct-01 17:04
Internet MCA Macro.doc	Word 10.0	1	1	17-Jan-02 13:27	17-Jan-02 13:27	16. Okt 03	16-Jan-02 13:24
Word Macro to Fix TMS4 non.doc	Word 10.0	0	4	18-Aug-02 18:19	18-Aug-02 18:29	16. Okt 03	na
MacroPyramid.doc	Word 10.0	1	3	20-Oct-99 10:06	20-Oct-99 10:06	16. Okt 03	27-Sep-99 12:04
macrotest1.doc	Word 10.0	0	1	22-Nov-99 23:23	23-Nov-99 21:56	16. Okt 03	na
macroflowchart.doc	Word 10.0	1	1	12-Mrz-02 08:51	12-Mrz-02 08:23	16. Okt 03	12-Mrz-02 09:11
diagram one.doc	Word 10.0	2	1	09-Mrz-01 11:18	09-Mrz-01 11:39	16. Okt 03	09-Mrz-01 11:39
mpta_analysis_macro_readme.doc	Word 10.0	6	3	16-Jun-00 08:20	16-Jun-00 08:25	16. Okt 03	15-Jun-00 20:08
Using a Macro in Word.doc	Word 10.0	1	1	03-Jun-98 08:58	11-Nov-98 11:16	16. Okt 03	11-Nov-98 11:16
turnlew-makrup.doc	Word 10.0	1	1	14-Mrz-98 11:52	14-Mrz-98 16:39	16. Okt 03	14-Mrz-98 16:31
1a lista macro1.doc	Word 10.0	0	3	08-Sep-03 20:11	08-Sep-03 20:11	16. Okt 03	na

Microsoft Excel - Analysis Results.xls

Word Documents with Issues - Issue Summary													
Word Document Name	Macros UserForms and OLE Objects	OLE Objects in Document	Table Of Contents	Nested Tables	Table Cells Spanning Pages	Table's of Authorities Fields	Table of Authorities	Comments	Document Properties	Document Parts Protection	Password Protection	Page Protection	Page Is
0206p2.doc													1
													1
													1
													1
													1
													1
													1
													1
													1
													1

Microsoft Excel - Analysis Results.xls

All Documents with Issues - Issue Details									
Document Name	Application	Issue Category	Issue Type	Location Type	Location	Line/ Row	Column	Issue Details	
0206p2.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: GlaxoSmithKline	
macro_tutorial.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: home	
Internet MCA Macro.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: Legislative Branch	
MacroPyramid.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: CHS	
macroflowchart.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value:	
diagram one.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: Newcastle CC	
diagram one.doc	Word 10.0	Header Footer	Graphic Frame	Page	Page Default	na	na	Location: Footer - Type: Frame	
mpta_analysis_macro_readme.doc	Word 10.0	Document Properties	Builtin Properties	Document	na	na	na	Name: Company - Value: UCL	
mpta_analysis_macro_readme.doc	Word 10.0	Ole Object	Embedded OLE Object	Page	2	47	1	Object type: Equation.2 - Associated application	
mpta_analysis_macro_readme.doc	Word 10.0	Ole Object	Embedded OLE Object	Page	?	50	1	Object type: Equation.2 - Associated application	

# Define the migration strategy out of the inventory

Estimation (% of documents, ) out of the inventory:

- Define the criteria of documents for: just archived % (PDF?), which must be migrated %, by which way and which one have do be created new
- Migration by Experts %  
(automatic, by hand)
- Migration by User %  
(load with SO/OOo, (correct), save)

|  
V

end of adhoc-Migration

|  
<---- Problems %

- After the adhoc-Migration for archived files there must be a Trouble Shooting: 1<sup>st</sup> Level internal experts  
2<sup>nd</sup> Level external experts
- Decide about the coexistence strategy, the support, how to handle MS-Access applications, what to do with the 3<sup>rd</sup> party applications ...

## TCO – Which cost driver must be covered?

- License fees (in different scenarios of coexistence) (per user)
- New hardware investments needed? (€)
- 2<sup>nd</sup> & 3<sup>rd</sup> level support costs (% of license fee)
- Training costs for different user groups (power user!) (Training with #days)
- **Migration costs** (there are also costs, if you just update the office version) (#days)
- Rollout and maintenance of one or two office products (#days)
- ... and a lot of individual cost drivers (3<sup>rd</sup> party app.s ...)

# Example for TCO/ROI: Insurance (500)

Parameter:

# Workplaces	<b>500</b>
Licenses	Euro
StarOffice	54
MS-Office Upgrade	190
MS-Office new License	350
Maint./Assurance	Euro
StarOffice	23
MS-Office	115
Personnel Costs	Euro
Employee	500
Consultant ext.	1000
Education	
Training MS-Office [day]	0,5
Training SO [day]	1,0
Employee to be trained	50%
Participant/Track	10
Trainer int./ext.	80%
PowerUser	5%
# Days PowerUser	5,0
Migration	Man day
new MS-Office-Version	<b>30</b>
StarOffice	<b>180</b>
Deployment/Roll-Out	Man day
MS-Office	15
StarOffice	15

Variants:	New Buy MS	Buy+Ass. MS	StarOffice
StarOffice-Migration	-	-	x
Purchase MS-O 1. year	x	x	-
Upgrade MS-O 1. year	-	-	-
Buy MS-O every N years	4	-	-
Software Assurance	-	x	x
Upgrade every N years	-	3	3

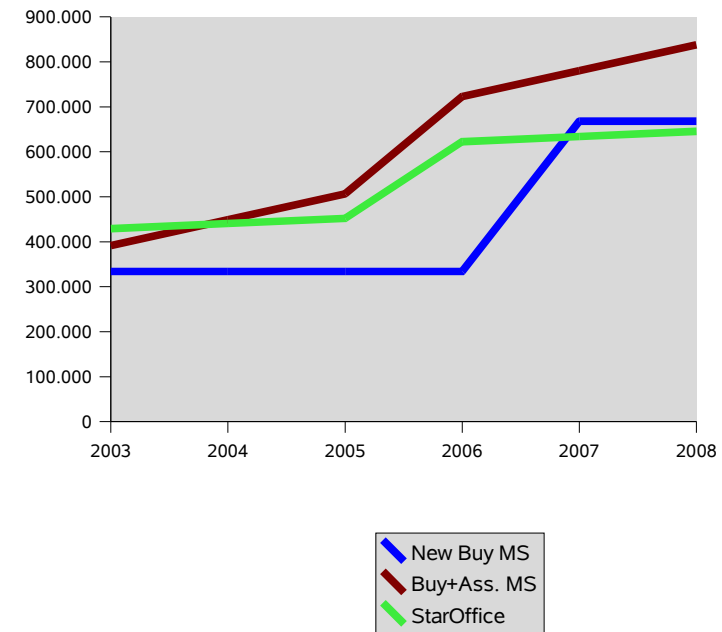
Costs Types:	New Buy MS	Buy+Ass. MS	StarOffice
Trainer	14.625	14.625	21.750
Training Employees	121.875	121.875	181.250
New License Fee	175.000	175.000	27.000
Upgrade MS-O 1. year	0	0	0
Renewal/Maintenance	0	57.500	11.500
Deployment	7.500	7.500	7.500
Migration	15.000	15.000	180.000

Costs / year:	New Buy MS	Buy+Ass. MS	StarOffice
2003	334.000	391.500	429.000
2004	0	57.500	11.500
2005	0	57.500	11.500
2006	0	216.500	170.500
2007	334.000	57.500	11.500
2008		57.500	11.500

Costs cumulated:	New Buy MS	Buy+Ass. MS	StarOffice
2003	334.000	391.500	429.000
2004	334.000	449.000	440.500
2005	334.000	506.500	452.000
2006	334.000	723.000	622.500
2007	668.000	780.500	634.000
2008	668.000	838.000	645.500

Extra Charge MS-Office:	<b>22.500</b>	<b>192.500</b>	<b>0</b>
Extra Charge / Year:	3.750	32.083	0

TCO cumulated



## Migration & Development (3)

- Project tailoring for migration and rollout
  - Integrate office in ERP, CRM, ...
  - Develop a toolset for different problems (like “data sources” solutions for Access-DBs)
  - Migrate & develop per branch/unit/user group...
  - Do a short As-is-analysis per branch/unit/user group... and validate your strategy (Risk: suddenly there are new road blockers like never seen 3<sup>rd</sup> party applications, databases ...)
- Migrate templates in different ways:
  - With Migration tool (batch) or by hand (adhoc, when used)
  - Complex templates could also be new developed (Chance for consolidation and new features)



# Migration Wizard (automated document & macro conversion)

**StarOffice Macro Migration Wizard**  
 Thu Aug 19 15:03:00 CEST 2004  
 Created by Macro Analysis & Migration Wizard Rev 0.1.0433



Document Summary			
Documents processed	Without Macros		9
	With Macros	Fully processed	5
		Processing issues (refer to Errors and Warnings)	1
	Document Errors	Migration Errors (see below)	1
<b>Total</b>			<b>16</b>

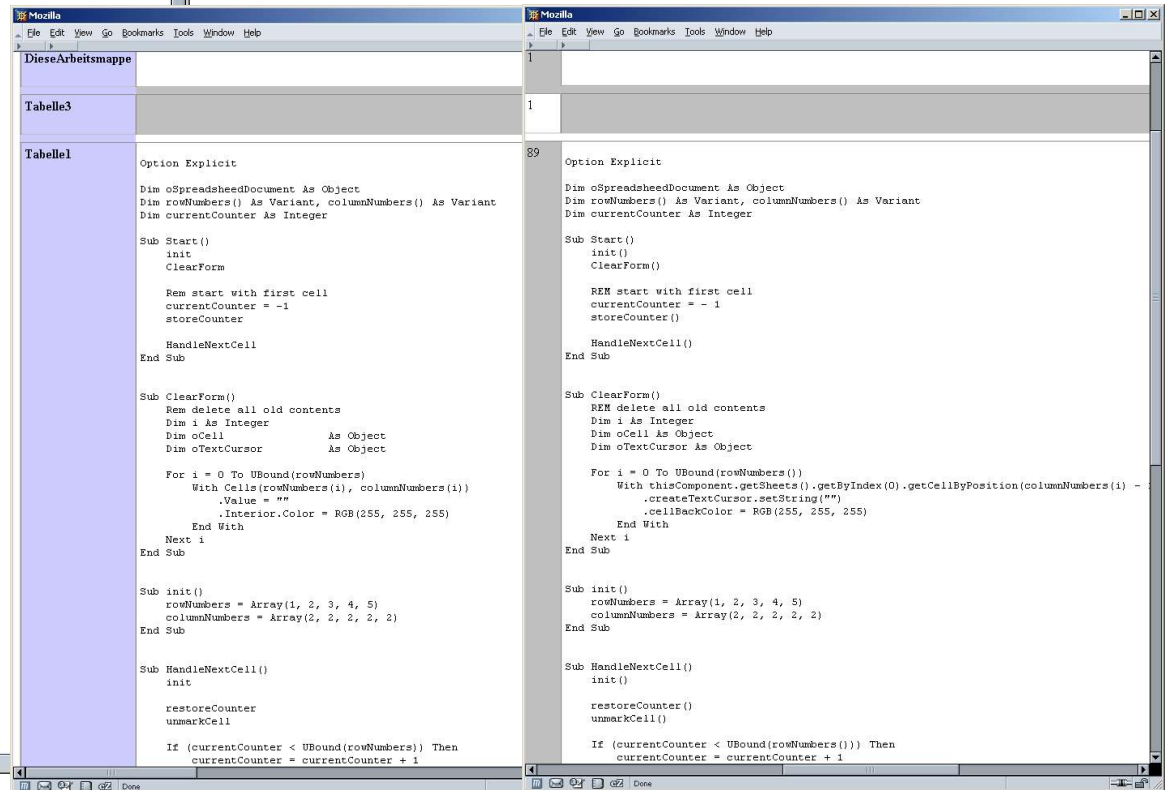
[View Original and Migrated Macro Code](#)

Overview						
Name	Library	Module	Line Count	Lines of Code	Number of Procedures	Path
S	Standard		24	1	0	C:\
S	Standard		354	152	13	C:\
T	n/a		0	0	0	C:\
r	Standard		22	13	3	C:\
r	Standard		192	127	2	C:\
r	Standard		130	94	8	C:\
r	Standard		38	25	6	C:\
r	Standard		20	12	3	C:\
r	Standard		33	21	7	C:\
r	Standard		11	8	1	C:\
r	Standard		198	150	3	C:\
r	Standard		46	34	9	C:\

# StarOffice Migration-Toolset

```

- <mapping library-identifier="Excel" library-name="Excel Cell Mapping" mapping-version="1.0"
  author="Volker Weidner" date-created="20030923">
  - <element type="property">
    - <source>
      <context kind="class">Range</context>
      <name default="true">_Default</name>
      <type>Cell</type>
    - <parameter-list>
      - <parameter optional="true">
        <type>Variant</type>
        <name>RowIndex</name>
      </parameter>
      - <parameter optional="true">
        <type>Variant</type>
        <name>ColumnIndex</name>
      </parameter>
    </parameter-list>
    </source>
  - <destination>
  - <inplace-code>
    - <name-code>
      thisComponent.getSheets().getByIndex(0).getCellByPosition
    </name-code>
    <parameter-code>'ColumnIndex'-1</parameter-code>
    <parameter-code>'RowIndex'-1</parameter-code>
    </inplace-code>
  </destination>
</element>
- <element type="property">
  - <source>
    <context kind="class">Cell</context>
    <name>Value</name>
    <type>Variant</type>
  </source>
  - <destination>
  - <property-access-code>
    - <getter-code>
      <context-code/>
      <name-code>createTextCursor.getString</name-code>
    </getter-code>
  </property-access-code>
  </destination>
  </element>
  
```



```

DieseArbeitsmappe
1

Tabelle3
1

Tabelle1
89
Option Explicit
Dim oSpreadsheetDocument As Object
Dim rowNumbers() As Variant, columnNumbers() As Variant
Dim currentCounter As Integer

Sub Start()
  init()
  ClearForm

  Rem start with first cell
  currentCounter = - 1
  storeCounter()

  HandleNextCell()
End Sub

Sub ClearForm()
  Rem delete all old contents
  Dim i As Integer
  Dim oCell As Object
  Dim oTextCursor As Object

  For i = 0 To UBound(rowNumbers)
    With Cells(rowNumbers(i), columnNumbers(i))
      .Value = ""
      .Interior.Color = RGB(255, 255, 255)
    End With
  Next i
End Sub

Sub init()
  rowNumbers = Array(1, 2, 3, 4, 5)
  columnNumbers = Array(2, 2, 2, 2, 2)
End Sub

Sub HandleNextCell()
  init()

  restoreCounter()
  unmarkCell()

  If (currentCounter < UBound(rowNumbers)) Then
    currentCounter = currentCounter + 1
  End If
End Sub
  
```

# Gaining independence of the office suite with ...

- XML/standard based file format (vs. proprietary file format)
- Implement business logic out of office suite
  - via UNO API
  - and the Java UNO Wrapper for easier API programming



## JavaUNOWrapper

- Migration of Access-DBs to a standard DBMS (with stored procs & triggers) and usage of the OOo/SO data pilot functions for the user interface (n-tier applications)

## Beside the technical migration ...

- Risk factors beside the technical migration issues
  - Lack of competence in consolidation decisions
  - Technical issues are used for politics
  - No user time frame for migration tasks (daily business first)
  - Faults in the migration are used for a bad product image
  - No or bad reporting for project controlling

Need: Good project management and  
customer internal management support

# Inform & Educate

- Inform about ...
  - Why do we migrate? (Goals, costs)
  - Similarities and differences with the old office suite
  - Free availability of OOo for private usage (also with a business SO-license)
  - Successful migration of other units/groups/teams ...
- Training concepts
  - for different user groups different training (normal 1 day, power 3 days) -> often it's the first office course for normal users
  - Train the new macro/basic programming language
  - Train the trainer concept? (promote new experts)
  - make office suite documentation available

# Deployment & Rollout

- Migrated templates and files in the same directory structure
- Desktop or Server Installation ?
  - Desktop (CPU, RAM, OS)
  - Server (via Citrix-Metaframe, chance for reduced administration tasks)
  - User groups with both worlds (Linux desktop with vm-ware)
  - ...
- Software logistics (test it with logging and response information from the desktop)

# Support

- Different support level:
    - 1<sup>st</sup> level identified expert,
    - 2<sup>nd</sup> level it-department (motivation for the old support staff)
  - You will need a 3<sup>rd</sup> level support for mission critical office use:
    - a lot of professional companies,
    - SUN delivers the same SO-support for OOo for a fee
  - Deliver a maximum support during the first 3 month after the migration like a floor service (and you will gain 50% more convenient office user)
  - Deluxe: Support the power user with macro programming
- ... and you will gain the same flexibility for power user as with the old office suite

## For further information contact...

Lothar K. Becker

.riess applications gmbh  
Draisstraße 10  
76307 Karlsbad

Telefon: +49 7202 707 - 0

Email: [lothar.becker@riess.de](mailto:lothar.becker@riess.de)

Web: [www.riess.de](http://www.riess.de)

**...or in the exhibition area  
...or at 26<sup>th</sup> - 28<sup>th</sup> October in  
Frankfurt/M during the  
LinuxWorld (Hall 4.0 A06)**



# Java UNO Wrapper

The full version of the Java UNO Wrapper generates and compiles all required wrapper classes on the fly while programming against the UNO interface. Using these wrapper classes improves the Java programming of StarOffice / OpenOffice in a couple of ways:

- \* Simplified socket connection with StarOffice / OpenOffice
- \* Simplified access to ComponentFactory and Desktop
- \* Encapsulates access to slot commands and filters
- \* UNO services / objects directly accessible through wrapper classes, containing all services, Interfaces, methods, factories and properties.
- \* Methods for property access have strong typed signatures.
- \* Wrapper methods are completely documented using Javadoc and have readable namings by extracting all required informations from the IDL files, that are part of the OpenOffice SDK.

