

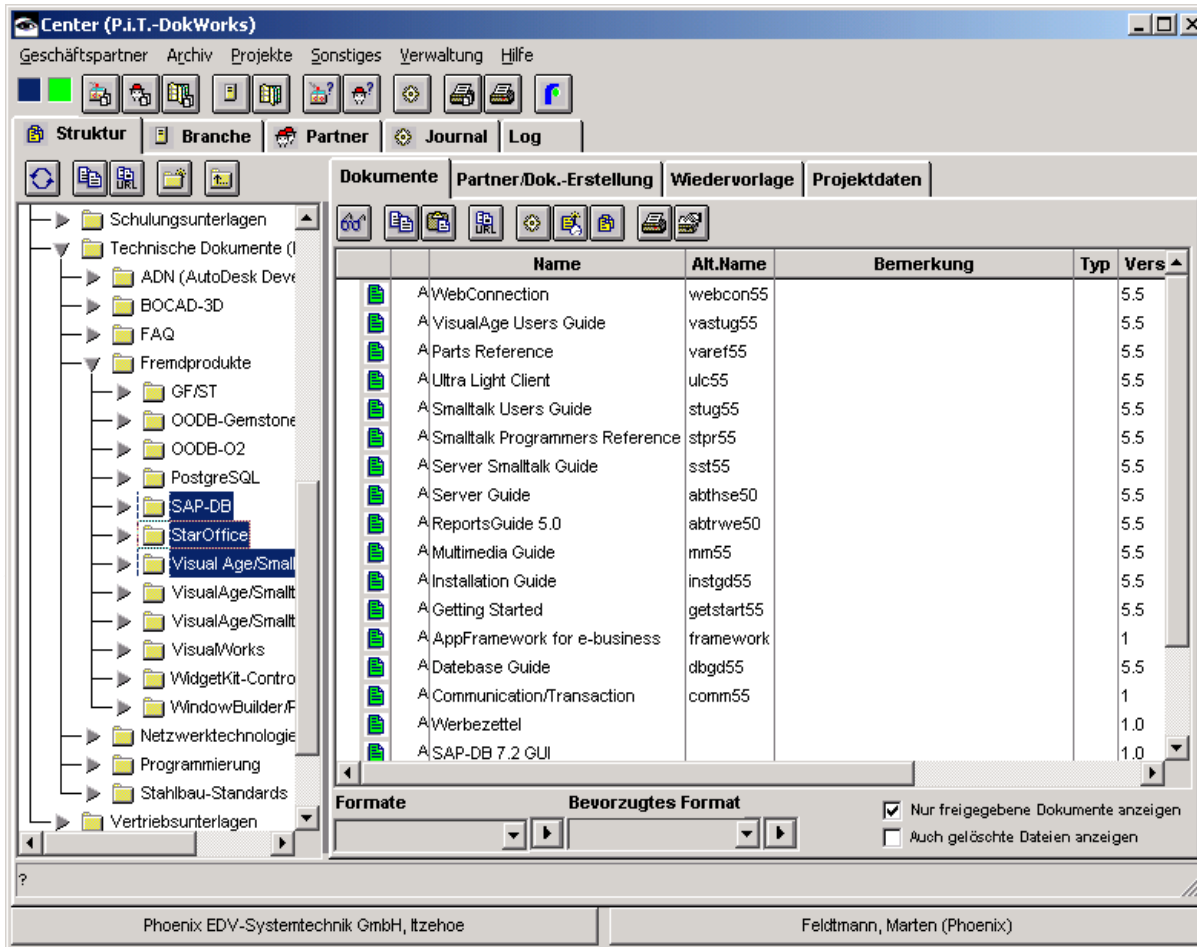


Development of a Document Management System (DMS) using IBM VisualAge Smalltalk 6.x and StarOffice + OpenOffice.org

- Dokworks – project orientated DMS
 - Definition of Document Management System (DMS)
 - Structural Overview
 - Technical Overview
- History of general development
- History of StarOffice/OpenOffice.org development
- Special Problems with StarOffice/OpenOffice.org
- Actual state of the project
- Pitfalls
- Marketing
- Conclusions

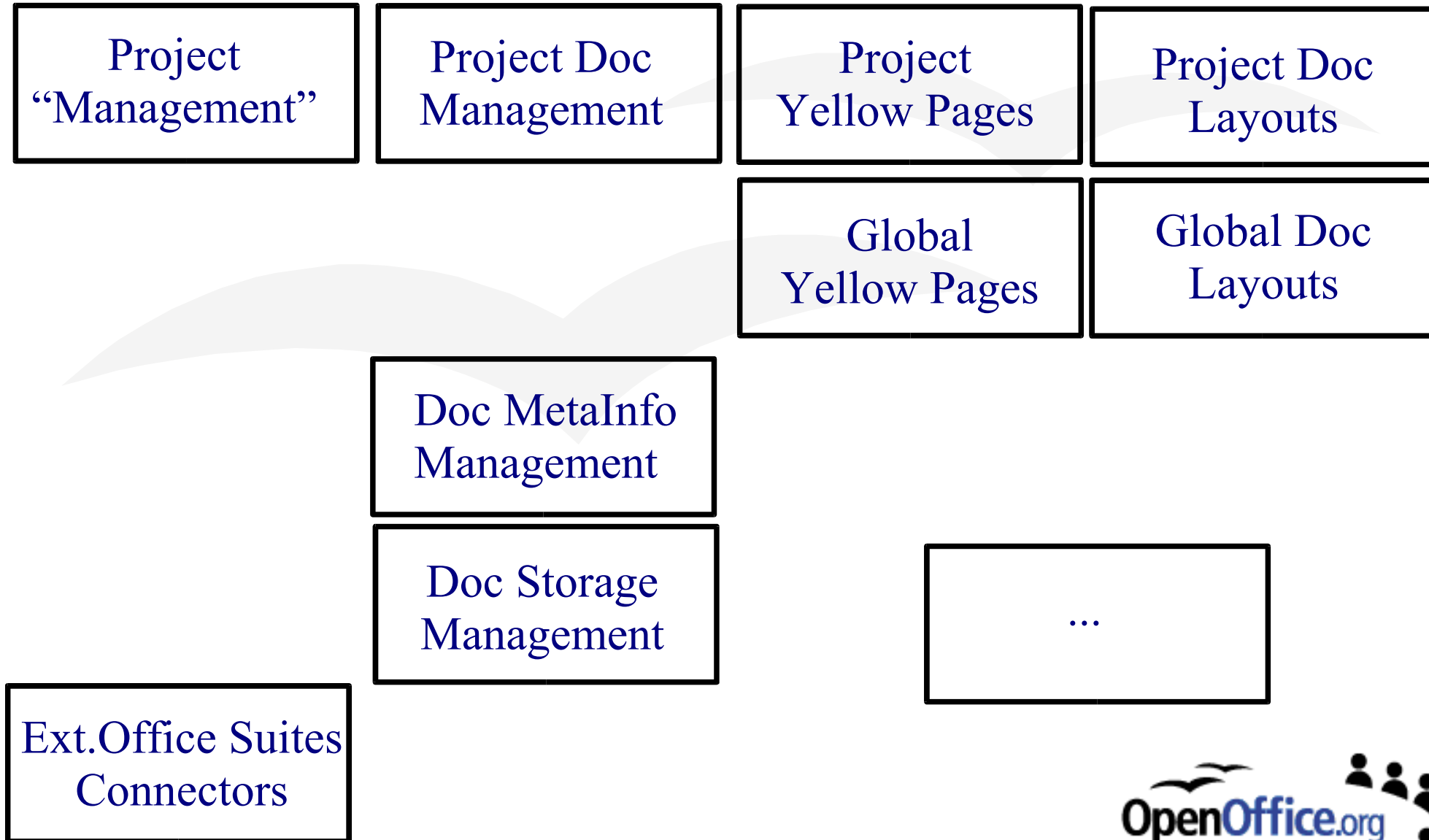
- Marten Feldtmann
 - marten@toppoint.de
- Developer
 - C, .NET, Smalltalk developer
 - Windows, Linux and Solaris
 - RDBMS and OODBMS experiences
- Main developer of a DMS system “Dokworks”
- Working for Butzkies Stahlbau
 - (www.butzkies.de) - feldtmann@butzkies.de
- Working for infratest-dimap
 - (www.dimap.de) - m.feldtmann@dimap.de

DokWorks – Project Oriented DMS

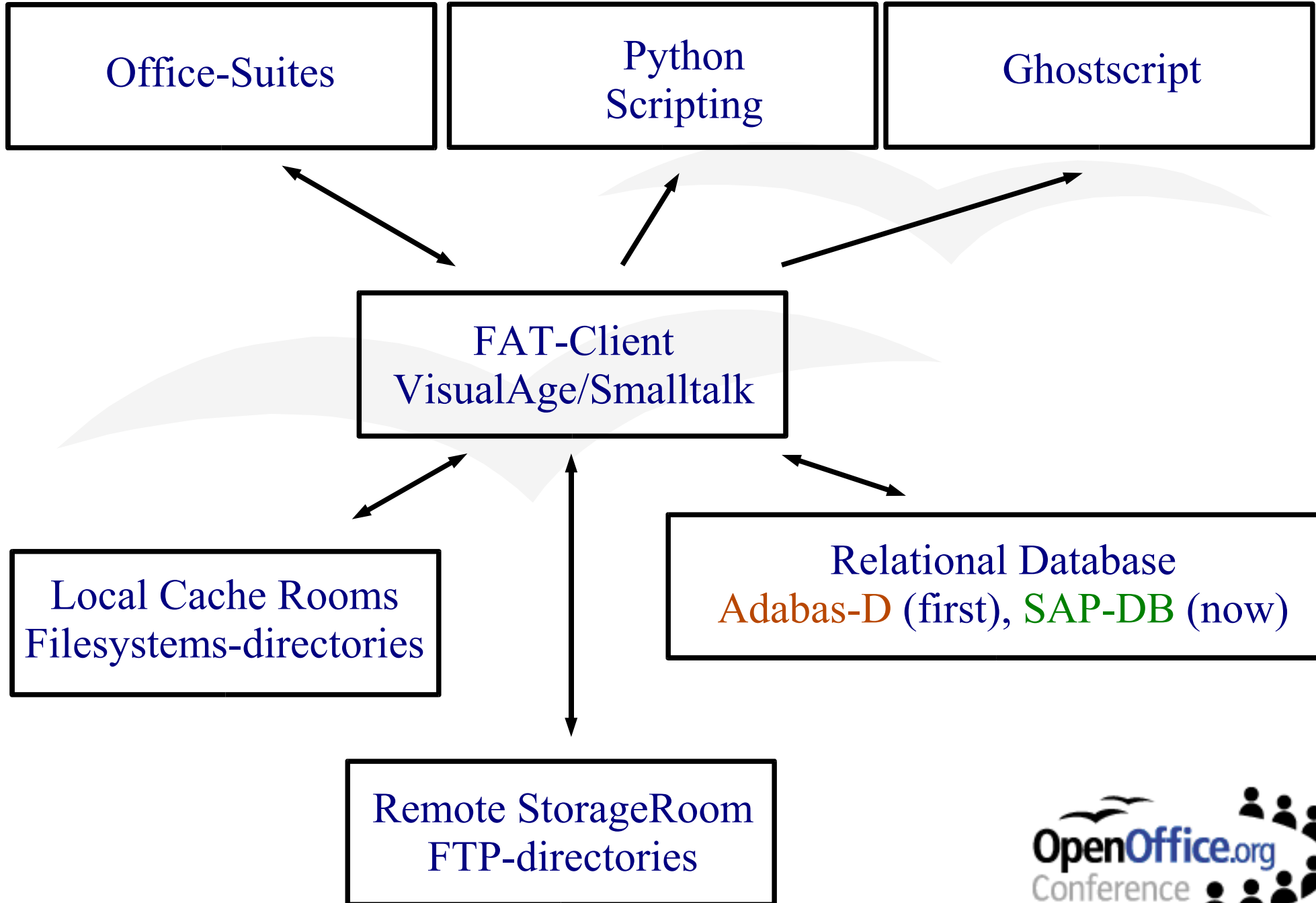


- ★ISO 10166
- ★DMS
 - ★ Multiple renderings
 - ★ Versioning
- ★Project Information
- ★General Yellow pages
- ★Project Yellow pages
- ★Document Creation
 - ★ OpenOffice.org
 - ★ StarOffice
 - ★ MS-Office
- ★E-Mail Archive
- ★Calendar Management
- ★Notes Management
- ★Plot management

Structural Overview



Technical Overview





Why StarOffice / OpenOffice.org ?

- “Mother” company wished this
 - Problems with different document versions in MS-Office
 - License fee problems (reduction wanted)
 - Considering the switch to Linux
- Started therefore with StarOffice 5.x (x=0,1)
 - Therefore some own solutions had to be created (PDF)
- Actual most of the users still use SO 5.2
- Now slowly migrating to OpenOffice.org
 - Mixed versions scenario (5.2, 6.0)

DokWorks <-> OpenOffice.org (IPC)

- Development of “Connectoren”
 - Three basic commands:
 - Controled loading of documents
 - Controled archiving and saving of documents
 - Document creation using lots of user bookmarks from DokWorks
- 1st generation
 - StarOffice 5.1 and 5.2
 - “StarOffice Connector” written in StarBasic
 - Work balancing between StarOffice and DokWorks
 - Usage of DDE under Windows
 - **not stable**
 - **slow**
- 2nd generation
 - StarOffice 5.2, OpenOffice.org 1.0 and StarOffice 6.0
 - Development of **one** base BASIC library for all dialects: “SOLib”
 - **Reduction of DDE traffic (by usage of an ASCII command file)**
 - **Extended supports for StarCalc**
 - Usage of IP under Unix/Linux (difficult- nothing is easy in OOo)

DokWorks <-> OpenOffice.org (IPC)

- DokWorks creates parameter file ...

[transaction]

cfgtemplate = value ="C:\DOKUME~1\fel\LOKALE~1\Temp\dkwtmp\19_03_2003_3561771_14622L____2____2__.sxw"

cfgtitle = value ="Allgemeines Anschreiben"

...

[bookmark]

ph_commissionentry = value="002 - Test 02"

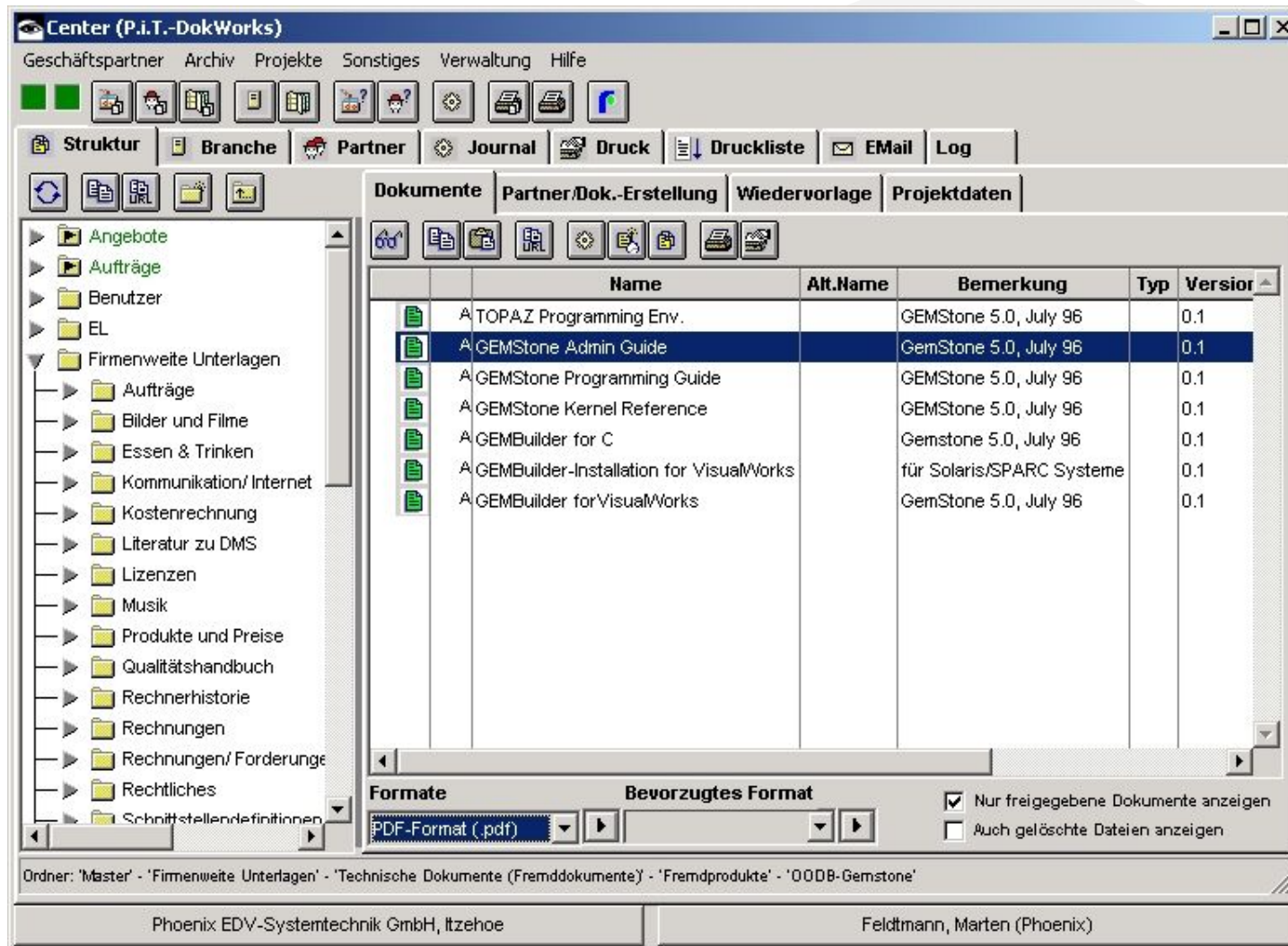
ph_writerlabel = value="Feldtmann, Marten"

ph_writergivenname = value="Marten"

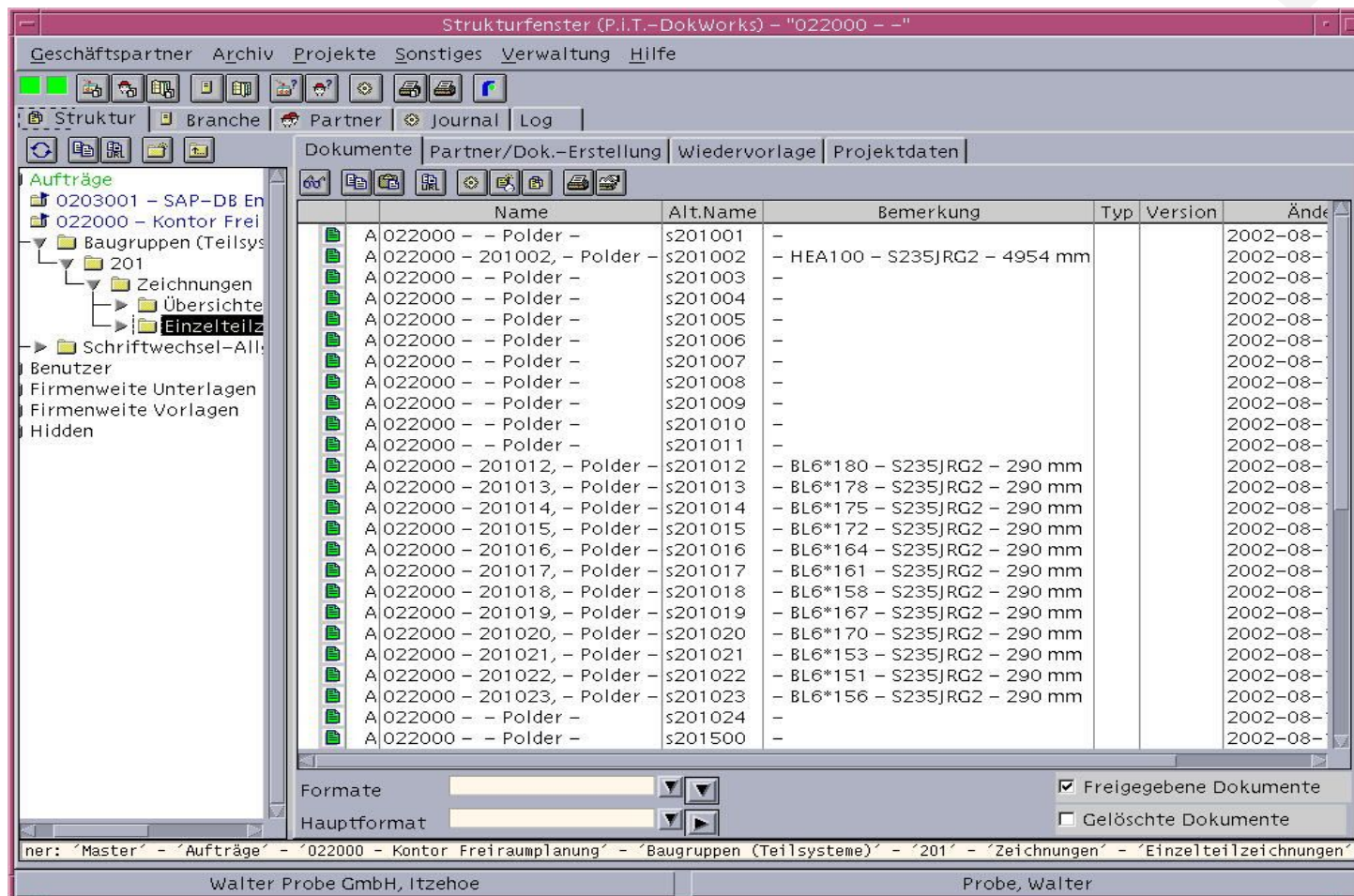
ph_r_label = value="Pfaffe EDV Vertrieb,Neumünster"

- DokWorks tells OOo via DDE (Windows) or via command line to execute a special macro.
- OOo executes this macro and catches the parameter files from special locations
- OOo does the works and signals DokWorks via DDE or IP, that works is done

- State: 12/2002
- Main platform – for several years



- Development: 10/2002
- Third platform (port done within seven days)
- Running in development mode
- OpenOffice.org interaction worked “more or less”



- Development: 12/2002
- Fourth platform (port done within one day)
- Running in development mode
- OpenOffice.org interaction worked “more or less”

The screenshot shows the 'Strukturfenster (P.i.T.-DokWorks)' application window. The title bar reads 'Strukturfenster (P.i.T.-DokWorks) - "022000 - Kontor Freiraumplanung"'. The menu bar includes 'Geschäftspartner', 'Archiv', 'Projekte', 'Sonstiges', 'Verwaltung', and 'Hilfe'. The toolbar contains various icons for file operations and navigation. Below the toolbar, there are tabs for 'Struktur', 'Branche', 'Partner', 'Journal', and 'Log'. The main area is divided into two panes. The left pane shows a hierarchical tree structure with folders like 'Aufträge', 'Aufträge 2002', '02-2000-03 - Stre...', '0203001 - SAP-DB', '022000 - Kontor F...', 'Baugruppen (Te...', '201', 'Zeichnu...', 'Über...', 'Ein...', 'Schriftwechse...', 'Benutzer', 'Firmenweite Unterlagen', 'Firmenweite Vorlagen', and 'Projekte'. The right pane displays a table of documents with the following columns: Name, Alt.Name, Bemerkung, Typ, Version, and Änderun. The table contains 16 rows of data, including folders and documents with specific names and dimensions.

Name	Alt.Name	Bemerkung	Typ	Version	Änderun
A 022000 - - Polder -	s201001	-			15.08.2002
A 022000 - 201002, - Polder -	s201002	- HEA100 - S235JRG2 - 4954 mm			15.08.2002
A 022000 - - Polder -	s201003	-			15.08.2002
A 022000 - - Polder -	s201004	-			15.08.2002
A 022000 - - Polder -	s201005	-			15.08.2002
A 022000 - - Polder -	s201006	-			15.08.2002
A 022000 - - Polder -	s201007	-			15.08.2002
A 022000 - - Polder -	s201008	-			15.08.2002
A 022000 - - Polder -	s201009	-			15.08.2002
A 022000 - - Polder -	s201010	-			15.08.2002
A 022000 - - Polder -	s201011	-			15.08.2002
A 022000 - 201012, - Polder -	s201012	- BL6*180 - S235JRG2 - 290 mm			15.08.2002
A 022000 - 201013, - Polder -	s201013	- BL6*178 - S235JRG2 - 290 mm			15.08.2002
A 022000 - 201014, - Polder -	s201014	- BL6*175 - S235JRG2 - 290 mm			15.08.2002
A 022000 - 201015, - Polder -	s201015	- BL6*172 - S235JRG2 - 290 mm			15.08.2002
A 022000 - 201016, - Polder -	s201016	- BL6*164 - S235JRG2 - 290 mm			15.08.2002

At the bottom of the window, there are fields for 'Formate' and 'Hauptformat', and checkboxes for 'Freigegebene Dokumente' (checked) and 'Gelöschte Dokumente' (unchecked). The status bar at the very bottom shows the path: 'Ordner: 'Master' - 'Aufträge' - 'Aufträge 2002' - '022000 - Kontor Freiraumplanung' - 'Baugruppen (Teilsysteme)' - '201' - 'Zeichnungen' -' and the user information: 'Walter Probe GmbH, Itzehoe' and 'Probe, Walter'.

- Development: 2002
- Server platforms: Windows, Linux or Solaris
- No Frames, No Java, No Javascript – but CSS

Dokumente	Altname	Bemerkungen	Version	Änderungen	aktuelle Version	alle Versionen
022000 - 201002, - Polder -	s201002	- HEA100 - S235JRG2 - 4954 mm		2002-08-15-11.32.39.000000		
022000 - - Polder -	s201511	-		2002-08-15-11.32.44.000000		
022000 - 201019, - Polder -	s201019	- BL6*167 - S235JRG2 - 290 mm		2002-08-15-11.32.48.000000		
022000 - - Polder -	s201514	-		2002-08-15-11.32.52.000000		
022000 - - Polder -	s201008	-		2002-08-15-11.32.56.000000		
022000 - - Polder -	s201506	-		2002-08-15-11.33.00.000000		
022000 - - Polder -	s201505	-		2002-08-15-11.33.04.000000		
022000 - - Polder -	s201006	-		2002-08-15-11.33.08.000000		
022000 - - Polder -	s201004	-		2002-08-15-11.33.13.000000		
022000 - - Polder -	s201501	-		2002-08-15-11.33.17.000000		
022000 - 201013, - Polder -	s201013	- BL6*178 - S235JRG2 - 290 mm		2002-08-15-11.33.21.000000		
022000 - 201023, - Polder -	s201023	- BL6*156 - S235JRG2 - 290 mm		2002-08-15-11.33.25.000000		
022000 - - Polder -	s201009	-		2002-08-15-11.33.29.000000		
022000 - - Polder -	s201504	-		2002-08-15-11.33.33.000000		
022000 - - Polder -	s201510	-		2002-08-15-11.33.37.000000		
022000 - 201017, - Polder -	s201017	- BL6*161 - S235JRG2 - 290 mm		2002-08-15-11.33.41.000000		
022000 - - Polder -	s201011	-		2002-08-15-11.33.45.000000		
022000 - - Polder -	s201003	-		2002-08-15-11.33.49.000000		
022000 - 201021, - Polder -	s201021	- BL6*153 - S235JRG2 - 290 mm		2002-08-15-11.33.54.000000		
022000 - 201015, - Polder -	s201015	- BL6*172 - S235JRG2 - 290 mm		2002-08-15-11.33.58.000000		
022000 - - Polder -	s201500	-		2002-08-15-11.34.01.000000		
022000 - - Polder -	s201513	-		2002-08-15-11.34.05.000000		
022000 - 201519, - Polder -	s201519	- BL6*160 - S235JRG2 - 315 mm		2002-08-15-11.34.09.000000		
022000 - 201518, - Polder -	s201518	- BL6*148 - S235JRG2 - 290 mm		2002-08-15-11.34.13.000000		

- Some interests in StarOffice 5 in 1997 during the first hype of Linux – but no real customers and afraid about doing the switch from MS-Office.
- Dead end ? StarOffice 5.2 ?
- Some interests in OpenOffice.org 1.0 in 2001 (?) – but no customer with money
- Increasing interests in OpenOffice.org/StarOffice 6.0 at the end of 2002
 - Where is the money coming from ???????
- Desktop software (software in general?) does not fit well into Sun's world of computing
 - Especially when not written in Java

Conclusion – DokWorks

- FAT Clients were the right way to go
 - Special situations could be solved by a WWW-based client
 - Comparison of network traffic: HTML <-> SQL
- Classical Client-Server technology is difficult to maintain, to install and to configure
 - Installation of additional components
 - DokWorks is in general a network based installation
- Do not use too much external software
- Three-Tier architecture will reduce several problems
 - Network traffic will be reduced
 - Configuration might be much easier
 - It's much more difficult to develop
 - OpenOffice.org not ready for server usage
 - Not usable for single user



Conclusion – OpenOffice.org/StarOffice

- OpenOffice.org/StarOffice is good enough for most of the desktop work and more ...
- Always remember: it's free !!
- OpenOffice.org/StarOffice is not ready for the server
- OpenOffice.org/StarOffice documentation is strange
 - Reminds me when reading the first ISO standard. Abstract up to the way not to be understandable for a “normal” person.
- OpenOffice.org/StarOffice programming model is too difficult for the wide audience
 - One language approach is the wrong way
 - Everything can be done, but not in an easy way.
- StarBasic is very important for the success of OpenOffice.org
 - ... but the language (and it's IDE) has not been improved to support the new programming model since 5.2



Conclusion – OpenOffice/StarOffice

- OpenOffice.org/StarOffice is slow (especially under Unix)

