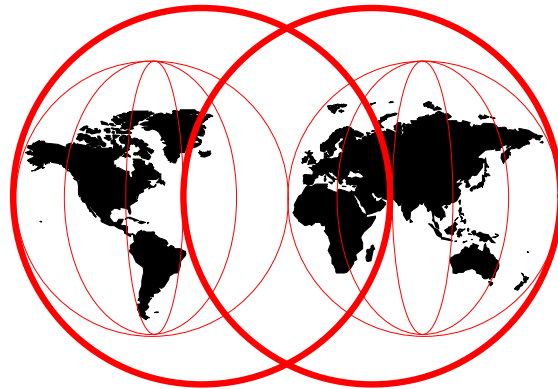
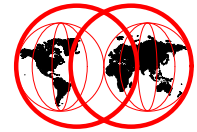


# **IBM Redbook: Upgrading OfficeVision/400-based Applications to Notes/Domino.**

Litrik De Roy, Inventive Designers  
Redbook Joint Author

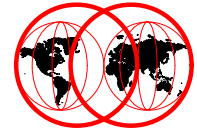


# Conference Session Abstract



**Thousands of AS/400 applications use the OfficeVision/400 function. When IBM OV/400 support is withdrawn, these applications must be modernized or replaced. This session presents a high-level approach to selecting the best approach, including Notes/Domino where appropriate. It is based on an ITSO Redbook and is presented by one of the authors.**

# Agenda



**Introduction**

**What is OfficeVision/400?**

**OfficeVision/400 'End of Life' & IBM Plans**

**CL Commands, APIs & User Exits**

**Implications for Applications**

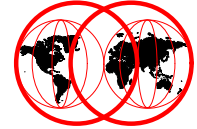
**OV/400 Functions & Alternatives**

**Redbook Samples**

**Actions**

**Ordering Redbooks & more Information**

# What is a Redbook?



## Redbooks

- International Technical Support Organization (ITSO)
- Intended Audience

## Residency

- ITSO Rochester
- Volunteers
- Benefits

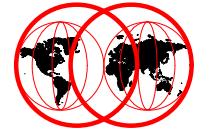
## Redpieces

- pre-release version, free download

## Feedback

- via Web

# This Redbook



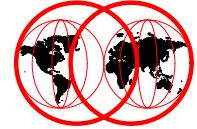
## Title

- How to Replace OfficeVision/400 in Your Applications: Looking at Domino for AS/400 and AS/400 Alternatives

## The Team

- Robert Boutault, IBM Rochester, USA (Team Leader)
- Litrik De Roy, Inventive Designers, Belgium
- Daniel Sieber, DV Bern, Switzerland
- John Taylor, Typex, England
- Also thanks to:
  - Tom Bliss, Harold Rodakowski, George Romano, Suzy Stewart, Ronald J. Stringsteen, Joan Finney, Tom Waldron, Will Witten, Alfred Maurer, Thomas Schneider, Chuck Golladay, Ken Wise, Christian Grière, Thomas Johnson, Robert Schneider, Guy Dehond, Leon Pillich, Steve Smith, Jenifer Servais and Karen Virgil.

# What is OfficeVision/400?



## Calendar

- Events, reminders, meetings, multiple view, free time search. Remote support. Job scheduling.

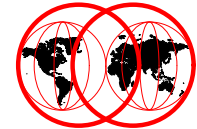
## Directory

- List of people, description, name, EMail address, phone, fax, location, organisation, department, reports to, etc. plus search.

## EMail

- Messages, notes, documents, PC files, confirmation of delivery, action due, etc. Interface to AnyMail for SMTP addressing. Integration with fax.

# What is OV/400? contd.



## Document Library

- File documents, PC files, hard copy reference, faxes, etc. Folder structure. Open to PCs. Index external and/or text content. Search.

## Word Processing

- Fast, high function, batch format and print, graphical interface, poor font support, PC editor option.

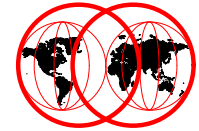
## Data/Text Merge

- High performance merge of database or Query data with text. Conditional, data-driven output.

## Administration, Security and User Function

- Enrollment profiles, authority to calendars, email, documents, etc. Document conversion tools.

# What is JustMail/400?

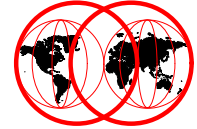


## Subset of OfficeVision/400

- Mail
- Directory

**Note: In this presentation, please assume that references to OfficeVision/400 also include JustMail/400 for these functions.**

# Withdrawal of IBM Support



## The Announcements

- 02/99 - V4R4 is last supported release
- 07/99 - extended to 'next release'

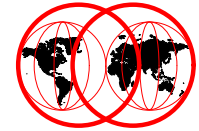
## The Timescales

- End of Support for V4R4 is May 2001
- End of Support for next Release is unknown
  - usually up to two Releases per annum
- Next Release will delete OV/400 LP
- End of Support for all CISC software is May 2000

## Exactly What Support is Withdrawn?

- No OV/400 function remains
- Some OS/400 function is affected

# IBM Plans



## End of Life for OV/400

- Already announced. Some customers still unaware.

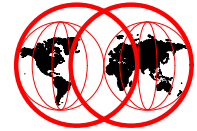
## Strategy is Lotus Notes & Domino

- Clear message
- AS/400 is preferred platform
  - better performance
  - better integration
  - more manageable

## Policy is Migration AND Coexistence

- No 'Big Bang'.
- No 'Rip and Replace'.

# IBM Plans, cond.



## Extensive Toolset

- Migration and Coexistence Tools
  - OS/400 Mail & Directory Coexistence
  - OV/400 to Notes Migration Toolkit
  - BNDW for AS/400 (BlueNotes Document Warehouse)
  - EverGreen/400

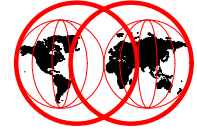
## Extensive Support

- 200 trained specialists.
- Dedicated web site.

## Offers and Promotions

- Trade-up OV/400 to Notes
- Free Domino and Notes with new AS/400
- Other country-specific

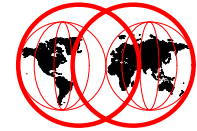
# What will Happen to Applications?



## It Depends on the degree of OS/400 integration

- Functions using OS/400 APIs will give errors
- Functions using some OS/400 APIs may give errors or unpredictable output
- Some of the changes may not be obvious, e.g. print format.

# CL Commands, APIs and User Exits



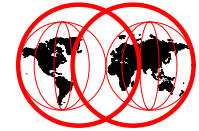
## Introduction

- The many APIs, commands and user exits provided by OV/400 allow for easy integration with other AS/400 products and line of business applications. End users can work entirely from OV/400 panels or OV/400 can be masked and end users can work entirely from their primary line of business application. This has resulted in OV/400 being integrated in thousands of applications.

## CL Commands, APIs and User Exits

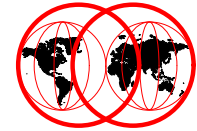
- The term API is used to refer to any application programming interface. However, in OV/400 terms we must separately consider CL commands, APIs and User Exits. The next three foils aim to explain the differences.

# OV/400 CL Commands



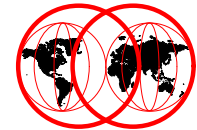
- The OV/400 commands are like other AS/400 Control Language (CL) commands and can be used stand-alone as well as in CL programs. They are designed to provide the link between applications, database files, programs and OfficeVision/400 objects such as directories, distribution lists and document library objects. The OfficeVision/400 and related CL Commands are listed in the Redbook

# OV/400 APIs



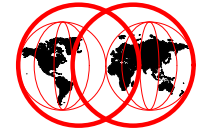
- Application Programming Interfaces are programs that belong to the user domain but may operate in the system state. They are directly callable from high-level language programs. They allow you to:
  - ▶ • Use system information and functions that are not available through CL commands.
  - ▶ • Provide better performance when getting system information or when using system functions that are provided by CL commands.
  - ▶ • Use calls from high-level languages to those interfaces.
- There are a dozen or so OfficeVision/400 APIs. Their use is largely restricted to:
  - ▶ 1. OfficeVision/400 application enabler
  - ▶ 2. Optimising performance when calling an OfficeVision/400 function
  - ▶ 3. Displaying calendar information in an OfficeVision/400 session
- After the withdrawal of OfficeVision/400, only the application enabler APIs (at an OS/400 V2R2 level) will be available.

# OV/400 Exit Programs



- An exit program is a specific point in an IBM software product where a user program or application can be invoked by the IBM software product upon some condition. User exits are provided to modify or extend the functions of an IBM software product with which an application program is running, where the modification or extension affects only that particular application.
- There are half a dozen OfficeVision/400 user exit programs. As they are called from an OfficeVision/400 user session they will not be appropriate in future. They are used in two main areas:
  - Application enabler
    - Replaced in a Domino environment by IBM BNDW for AS/400 (BlueNotes Document Warehouse).
  - Directory search
    - Part of OS/400 and is still available through CL commands when called from other applications.

# OS/400 CL Commands



**Many 'OV/400' commands are in fact 'OS/400'**

- e.g. SAVDLO, SNDDST

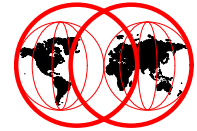
**Much 'OV/400' function is in fact OS/400 and will remain**

- e.g. Shared Folders

**Some OS/400 commands use OV/400 function**

- e.g. PRTDOC
- Their function will be reduced or command will fail
- Most can be directed to call other applications

# Am I Using OfficeVision/400?



## Is OV/400 Installed?

- GO LICPGM
- See Redbook for IBM Licence numbers

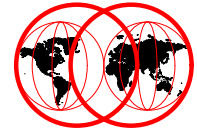
## Is OV/400 In Use?

- Look for enrolled users
- See Redbook to look for:
  - recent document edits
  - future calendar entries
  - scheduled jobs

## Do I have OV/400 Data?

- See Redbook for:
  - Counting documents and folders
  - Counting EMail items
  - Counting Calendars and entries

## Am I Using OfficeVision/400? (*continued*)



### **Are OV/400 APIs In Use?**

- See Redbook for audit information
  - journalling API usage
  - scanning source

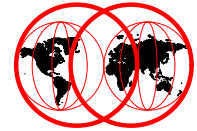
### **Do My Own Applications Contain OV/400 APIs?**

- Ask the developer
- See Redbook for audit information

### **Do Third Party Applications Contain OV/400 APIs?**

- Ask the software house
- See Redbook for audit information

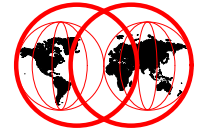
## Am I Using OfficeVision/400? *(continued)*



### Free OV/400 DTM Analysis Tool

- Scans OV/400 documents
- Scans applications
  - No source code required
- Download from <http://www.inventivedesigners.be/>

# Development Guidelines



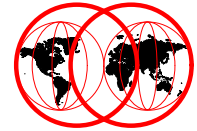
## How to Use The Redbook

- Determine the functions to be replaced
- Review the matching Redbook section
- Select products and study in detail

## Development Strategies

- Quick fix or major rewrite, or fix then rewrite?
- What clients? 5250? GUI? Notes? Web?

# Development Guidelines, contd.



## Notes/Domino Development Techniques

- @ functions. LotusScript, JavaScript, Java
- DECS, Lotus Enterprise Integrator, APIs (separate Redbook)

## Client-Server Development Techniques

- CA/400 Solution Developer Kit for ActiveX and OLE DB

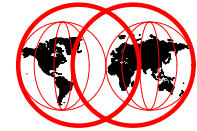
## Enabling OS/400 Commands

- Tell OS/400 to use non-OV/400 or no other function, e.g. CRTDOC

## Shared Folders vs. /root of IFS.

- Slightly better performance in IFS

# Guidelines contd.



## OV/400 Database Files

- Unlikely to change now
- Use directly or use as basis for redesign

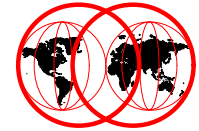
## Testing

- Delete selected OV/400 program components
- Migrate users to Notes first

## OV/400 Data Cleanup

- delete data before deleting program
- keep the manuals

# Are Notes and Domino the Answer?



## Usually, but not always

- OS/400 or Job Scheduler for jobs
- BP products for data/text merge

## Most function is available in Notes/Domino R5

- email, calendars, directory, etc.

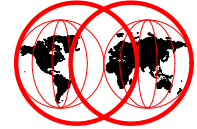
## Lots more function too

- workflow, Web, etc

## A few gaps in the Notes/Domino picture

- external documents, WP editor, data/text merge
- filled by IBM and 3rd party products

# OV/400 Functions and Alternatives

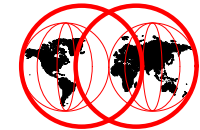


**Overview**

**Main Withdrawal Effects**

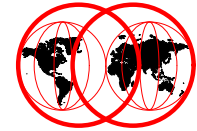
**Our General Approach**

# OV/400 Functions - IBM Alternatives



OV/400 Function	Sub-Function	Effect	Notes User	NWS User	5250 User	PC user
<b>Calendars</b>	Scheduling	Fail	Notes	eSuite	EVG/400 + Domino	
	Jobs	Fail	OS/400 Job Scheduler	OS/400 Job Scheduler	OS/400 Job Scheduler	
<b>EMail</b>		No UI	Notes	eSuite + Domino	EVG/400	POP3
<b>Editor</b>		No UI	Smart-suite e DTM for D	eSuite	DTM for AS/400	Smart-suite
<b>Document Library</b>		No UI	BNDW	eSuite + Domino		Operations Navigator
<b>Text Search</b>		No UI, no update				
<b>Application Enabler</b>		No UI	BNDW	eSuite + BNDW		
<b>Data/Text Merge</b>		Fail	forms (*) DTM for D		DTM for AS/400	Smart-Suite

# Calendar Services



## Used For

- personal diaries, resource scheduling, jobs scheduling

## Effect of Withdrawal

- No function

## OS/400 Approach

- Use WRKJOBSCDE or AJS for job scheduling

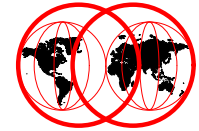
## Notes/Domino Approach

- Notes calendars

## IBM EverGreen/400 Approach

- 5250 interface to Notes calendars

# Email & Distribution Services



## Used For

- Messages, Notes, Documents, To Do

## Effect of Withdrawal

- No UI

## OS/400 Approach

- AnyMail/400 Mail Server Framework

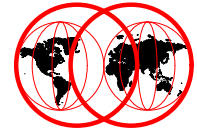
## Notes/Domino Approach

- Notes Mail, Domino POP3

## IBM EverGreen/400 Approach

- 5250 'POP3' interface to Domino and AnyMail/400

# Directory, Distribution List, Nicknames



## Used For

- EMail addressing, corporate telephone directory. System shadowing.

## Effect of Withdrawal

- Not affected

## OS/400 Approach

- System Distribution Directory (SDD) is OS/400 function

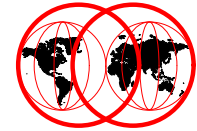
## Notes/Domino Approach

- Domino Directory (DD)
- Domino for AS/400 synchronises SDD with DD

## IBM EverGreen/400 Approach

- Both the SDD and the DD can be accessed from the EverGreen/400 e-mail and calendaring client

# Document Library Services



## Used For

- finding documents and PC files by describing them when filed

## Effect of Withdrawal

- Folders and descriptions are OS/400 function
- No UI to describe or search except by folder

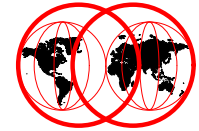
## OS/400 Approach

- API still available

## Notes/Domino Approach

- IBM BNDW for AS/400 (BlueNotes)
  - replicates descriptions to Notes
  - launches appropriate editors

# Text Search Services



## Used For

- finding RFT documents by searching pre-built index of text contents

## Effect of Withdrawal

- no text search index management, no UI

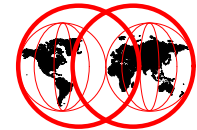
## OS/400 Approach

- not in current release

## Notes/Domino Approach

- many options, not yet for existing RFT documents

# WP Editor & Dictionary Services



## Used For

- Creating, editing and printing documents. Spell check. Data/text merge.

## Effect of Withdrawal

- No UI. Very limited print function.

## Notes/Domino Approach

- Notes editor for new documents
- BNDW for AS/400 launches WordPro, Word, etc.

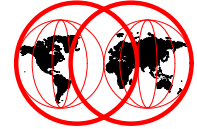
## IBM AFP Viewer Approach

- Free with CA/400. View FFT, image, fax, also spool.

## Lotus WordPro Approach

- Reasonable conversion of RFT documents. Better than other editors.

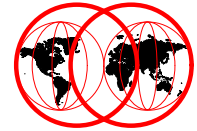
# Editor, contd.



## Third Party Approaches

- PC-based editors, e.g. MS Word
  - Check for filters.
- DTM for AS/400 and DTM for Domino from Inventive Designers

# Help Text



## Used For

- Creating and labelling Help Text with OV/400 editor. OS/400 API to display by document or label.

## Effect of Withdrawal

- No editor to update text and retain labels

## Notes/Domino Approach

- Split labelled text to smaller documents (enables display without labels). Later cut and paste to Notes RTF.

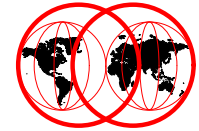
## IBM AFP

- Recreate with AFP 'labels'. View from AFP Viewer.

## 5250

- DTM for AS/400 from Inventive Designers

# Data/Text Merge



## Used For

- Standard letters, address labels, reports
  - merging DB2/400 data or Queries with standard text, usually to print

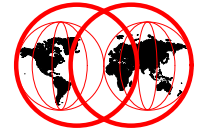
## Effect of Withdrawal

- No function

## Notes/Domino Approach

- Requires substantial programming

# Data/Text Merge continued



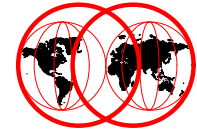
## IBM Advanced Function Printing

- Range of tools
  - AFP Utilities/400 - Print Format Utility
  - AFP Toolbox
  - Data Description Specifications
- Appropriate for address labels and fixed format letters
  - Full AFP function including bar codes, logos, overlays
  - limited text manipulation, no word wrap

## Lotus SmartSuite

- Client/server environment
  - ODBC connection to DB2/400, e.g. Client Access/400
  - Letters and labels with Lotus WordPro
  - Reports with Lotus Approach
- Appropriate for end user access
  - easy to use

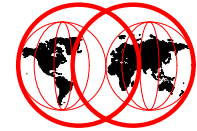
# Data/Text Merge continued



## Third Party Approaches

- DTM for AS/400 (Inventive Designers, Belgium)
  - Native 5250 editor
  - Native AS/400 merge
  - Supports existing documents
  - Supports existing OV/400 API's
- DTM for Domino (Inventive Designers, Belgium)
  - Like DTM for AS/400
  - But :
    - Stores documents on Domino server
    - Adds graphical (Notes based) editor

# Admin., Security & User Functions



## OV/400 Function

- Enroll users. Manage security of DLOs. Document Conversions. Launch of PC editors

## Effect of Withdrawal

- No enrollment (not required)

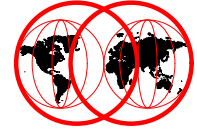
## OS/400 Approach

- Security is an OS/400 function

## Notes/Domino Approach

- Domino Administrator
- BNDW for application launch.

# Redbook Samples



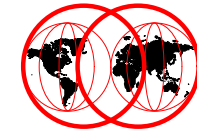
## Samples

- most of the work on the Residency!

## Approach

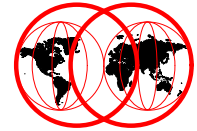
- Show OV/400 worked example
- Show OS/400 alternatives
- Show Domino alternatives
- Show third party alternatives

# Samples Overview



Subject	Category : Subcategory	Version
OV/400 API Auditing	API Usage	OS/400 CL + Journal
OV/400 API Source scanning	API Usage	OS/400 CL + RPG
Add, search and change cal items	Calendar : Items	OV/400 CL
		Domino Java agent
		EverGreen/400 CL
Schedule jobs	Calendar : Job scheduling	OV/400 CL
		OS/400 CL
		Domino
Send message	Email : Email	OV/400 CL
		EverGreen/400 API
		Domino
Send document	Email : Email	OV/400 CL
		EverGreen/400 API
		Domino
Search & display document	DocLib & App Enab: search, display	OV/400 CL
		BNDW/400
Merge/print letters & data	WP/Editor : Data/Text/Merge	OV/400 CL
		DTM/400
		AFP
		Domino LS:DO
Help text	WP/Editor : Help	OV/400 CL + DSPF
		OS/400 UIM
		DTM/400
Formfill	WP/Editor : Formfill	OV/400 CL
		Domino LS:DO

# IBM Applications and Tools, contd.



## **IBM OV/400 to Notes Migration Tools V2, 5697-F08**

- Migrates user mail and calendars
- Coexistence for calendars (LCCOV/400)

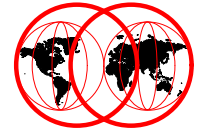
## **IBM BNDW for AS/400 (BlueNotes Document Warehouse), 5620-BNY**

- Notes access to documents. Launch PC tools. Optional migrate.

## **EverGreen/400, 5620-BQV**

- 5250 access to Domino mail and calendars.

# Actions



**Order the Redbook**

**Review your applications**

**Analyse your exposure**

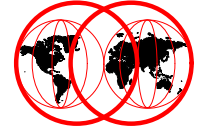
**Review other plans for OV/400**

**Develop your strategy**

**Select partners**

**Get started - you haven't got very long!**

# The IBM Redbook



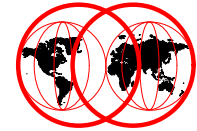
## Title

- How to Replace OfficeVision/400 in Your Applications: Looking at Domino for AS/400 and AS/400 Alternatives, SG24-5406-00

## Ordering

- Web Site
- EMail
- Telephone
- Fax

# More Information



## Web Sites

- IBM ITSO Redbooks
  - <http://www.ibm.redbooks.com>
- OfficeVision/400 to Lotus Notes Information
  - <http://www.dominodotoffice.com>
- Techdocs
  - <http://www-1.ibm.com/support/techdocs/atmastr.nsf>
- Mig Tools
  - <http://service2.boulder.ibm.com/nov/index.html>
- BlueNotes Product Family
  - <http://www.bluenotes.com>
- EverGreen/400
  - <http://www.inventivedesigners.be>

# Questions?

