

# Tools and Technologies for Business Framework Architecture

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## R/3 Integration Scenarios

- **Legacy systems**
  - Initial R/3 implementation
  - Company to Company
- **User Interfaces**
  - Desktop applications
  - Hand held devices
  - Telephony, voice recognition ...
- **Internet applications**

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## Considerations

- **Common issues when integrating to R/3**
  - **Cost of training**
  - **Learning curve**
  - **Resources**



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## Tools and technologies

- **SAP Automation and DCOM Connector**
  - **Leverage your expertise/knowledge**
  - **Focus on business issues**
  - **Superior technology**
  - **Address all common issues**



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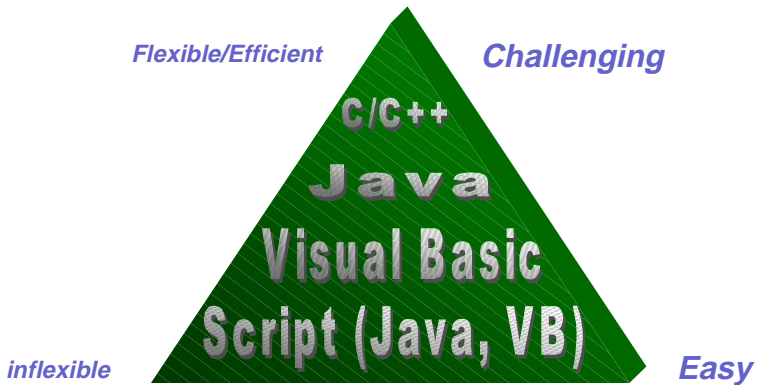
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## Overview

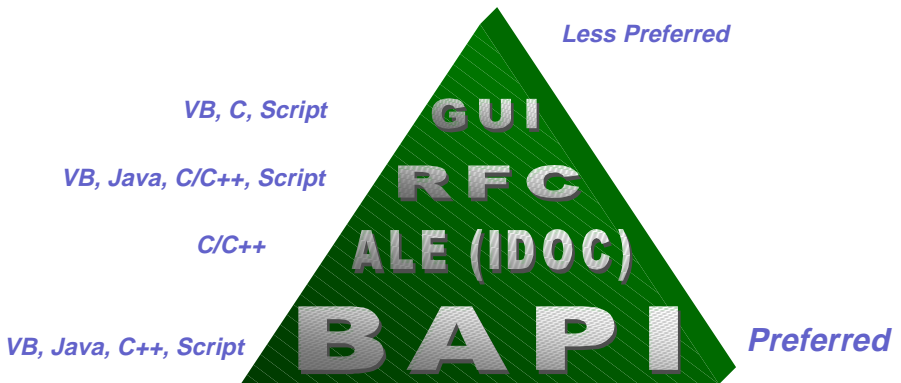
- Integration Components for BAPI, RFC, IDOC, Batch Input and SAPGUI Programming
- Supports VB, Java, C/C++, ...
- Supports Windows (95, NT), Unix (HP, Solaris)
- Supports COM/DCOM and EJB environments



## Language Model



# Interface Model



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## Interfaces to R/3 (1)

### ● BAPI Interface

- Provides access to R/3 business objects
- Requires no ABAP programming experience
- Provide long term stability and standard interfaces
- Access Support
  - ◆ DCOM Connector
  - ◆ Wizard for Java and C++ classes
  - ◆ Business Object Environment for VB (COM/DCOM)
  - ◆ EJB environments



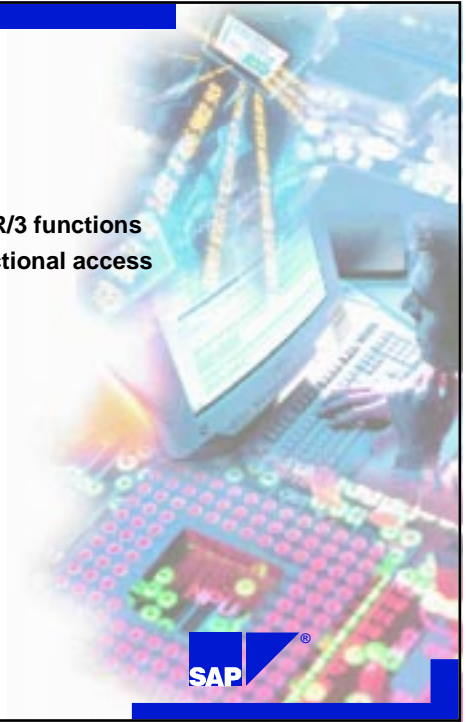
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## Interfaces to R/3 (2)

- **RFC Interface**

- Allow “full-duplex” access to R/3 functions
- Provide asynchronous transactional access
- High performance, flexible
- Access support
  - ◆ C/C++ libraries
  - ◆ Java library
  - ◆ RFC COM Component
  - ◆ DCOM Connector



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## Interfaces to R/3 (3)

- **IDOC Interface**

- Allows transactional processing
- Must- use Interface for ALE integration
- More benefits when using C++ library
  - ◆ Requires no RFC programming knowledge
  - ◆ Provides framework for both inbound and outbound IDOC
  - ◆ Allows accessing IDOC segments and fields by name



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## Interfaces to R/3 (4)

- GUI Interface

- Allows programming directly transaction screens
- Requires no ABAP programming knowledge
- Requires no knowledge of internal application business logic
- Access support
  - ◆ C APIs
  - ◆ COM
  - ◆ VB Code Generator



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## GUI Interface

***DEMO***



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## Assisting Tools

- SAP Assistant
- Repository Browser Control
- Repository Service Component

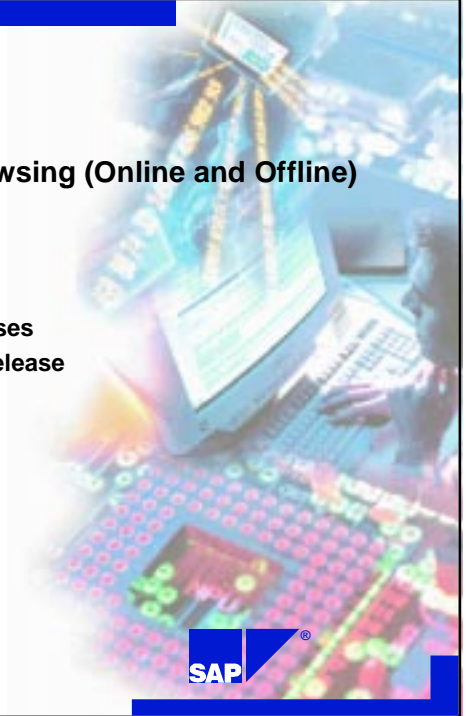


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## SAP Assistant

- Repository Information Browsing (Online and Offline)
- On-line RFC Calls
- Business Object Wizard
  - Java BAPI and C++ BAPI classes
  - Support Visual Basic in next release
- Repository data transfer



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# SAP Assistant

# DEMO

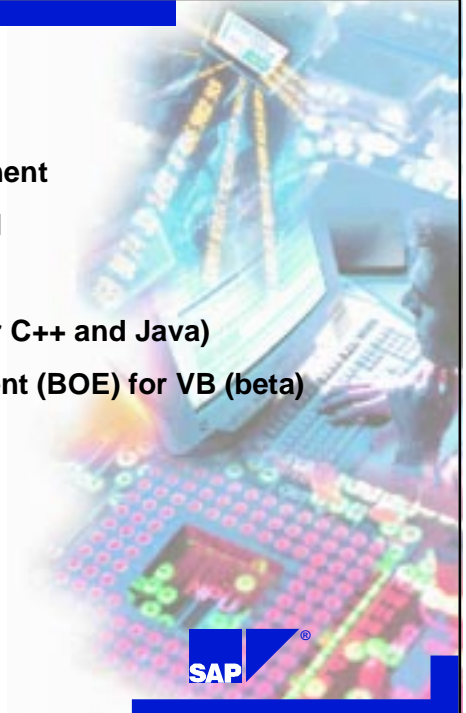


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## What's New in 4.5A?

- Repository Service Component
- Repository Browser Control
- Java RFC Library
- Business Object Wizard (for C++ and Java)
- Business Object Environment (BOE) for VB (beta)

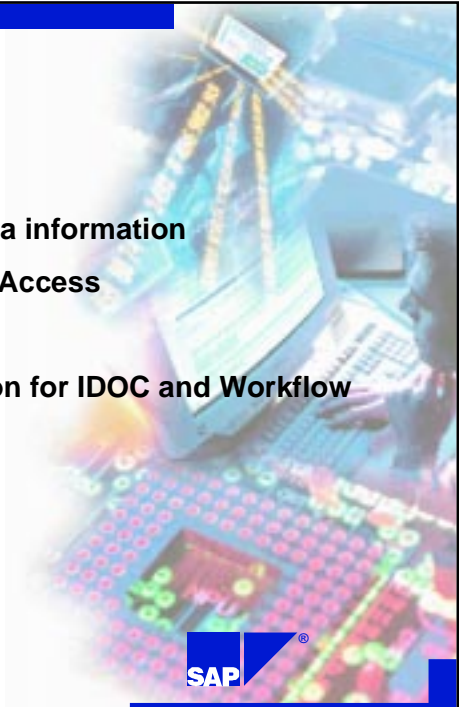


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## Repository Service

- ActiveX Server component
- Provides BAPI and RFC meta information
- Supports online and offline Access
- R/3 release independent
- Will provide meta information for IDOC and Workflow



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## Repository Browser Control

- ActiveX Control
- Browser for BAPI and RFC meta information
- Customizable / Programmable
- Supports Drag and Drop with SAP Assistant
- Will support IDOC and Workflow



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# Repository Browser Control

# DEMO

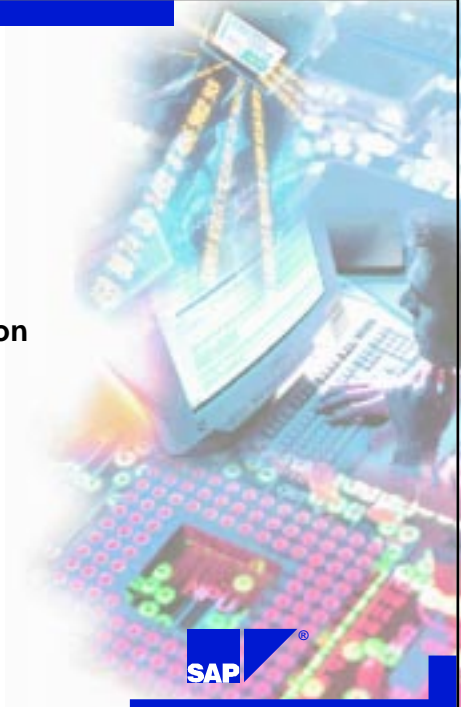


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# SAP BOE for VB

- ActiveX Designer
- Integrated with VB
- Supports DCOM Connector
- Design time for customization



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## SAP BOE for VB

# DEMO

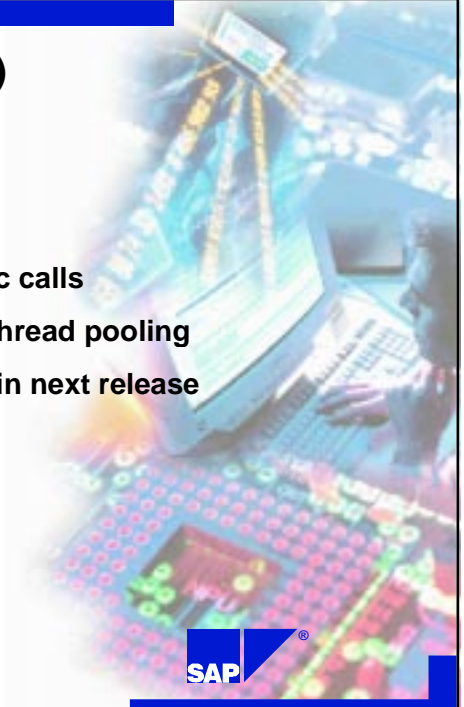


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## Java RFC Library (JRFC)

- Platform independent
- Pure Java support
- Supports static and dynamic calls
- Support table caching and thread pooling
- Support EJB environments in next release



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# BAPIs as EJBs

# DEMO



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## Summary

- Choice of integration interfaces
  - BAPI, RFC, IDOC, SAPGUI
- Choice of programming languages
  - C/C++, VB, Java, ...
- Choice of runtime environments
  - MTS(with DCOM), EJB containers, Java VM, ...
- Choice of development environments
  - Visual Studio, ColdFusion, Haht ...



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## Call to Action

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- Build world class applications using SAP Automation
- Always let us know your feedback
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