



JavaBeans™ in the Enterprise

Chris Biber, Director, Strategic Alliances

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Corel Corporation

Agenda

- ◆ Corel office for Java™ -- architecture and brief overview
- ◆ Corel JavaBeans™
- ◆ Demo and technical aspects
- ◆ Q&A



Corel Office for Java -- Today

- ◆ Based on JDK™ 1.02
- ◆ Complete enterprise solution
- ◆ WordPerfect, Quattro Pro, Chart, Draw, Presentations, PIM for Java
- ◆ Client and server components
- ◆ Not just a productivity suite
 - ◆ Corel Office for Java will also represent a “Bean Bag” allowing the creation of custom built applications



Corel Office for Java C/S Architecture

Spell Checker	Search/ Replace	...
Document Object Storage (Virtual Object Memory)		Group scheduling/ Email server
File IO and Filters	Groupware/Workflow	
File Management System Printing and User logon	Database connectivity	
Java LDAP API	JDBC	
LDAP	SQL/Databases	
Server OS, Java Virtual Machine		

Document Object Storage (Minimum Storage)
Persistent Class
App Components/Documents Word processing, Spreadsheet, etc.
Corel Application Framework
Client OS and JVM



Corel JavaBeans

- ◆ What are Corel JavaBeans?
- ◆ How are they used in development projects?



What Are Corel JavaBeans?

- ◆ WordPerfect
- ◆ Chart
- ◆ Draw
- ◆ Quattro Pro
- ◆ Scheduler and calendar
- ◆ Email service
- ◆ Library of UI controls
- ◆ Adaptors
- ◆ And more



How Are Corel JavaBeans Used?

- ◆ Rich, interactive document content
- ◆ Custom developments
 - ◆ UI customization
 - ◆ Corporate customization



Rich, Interactive Document Content

- ◆ Create documents comprised of embedded beans that interact with each other
 - ◆ Charts, spreadsheets, databases, word processor fields, all connected together



[Rich, Interactive Document Content (cont.)]

- ◆ Sophisticated bean containers, such as WP, can wrap text around embedded beans
- ◆ Publish office documents directly to the Web using light-weight viewers



Rich, Interactive Document Content (cont.)

Personal Stock Tracker

Symbol: Corel Corporation

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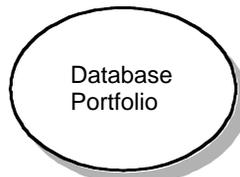
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Last	X.xX	Change	X.xx
Previous	X.xX	Ask	X.xX
High	X.xX	Bid	X.xX
Low	X.xX	EPS	X.xX



Corel stock prices
Jan 1996

Symbol	Current	Purchased	Gain	Volume
CA: COS	X.xX	X.xX	X.xX	X.xX
CA: DFT	X.xX	X.xX	X.xX	X.xX
CA: SER	X.xX	X.xX	X.xX	X.xX



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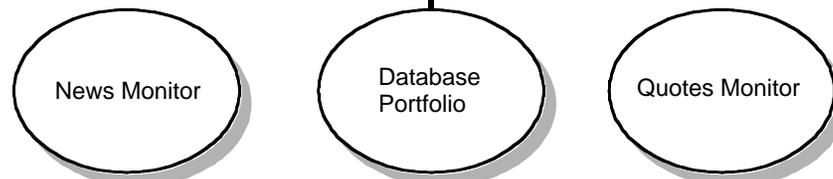
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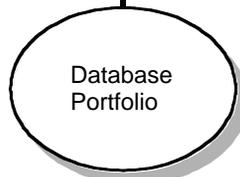
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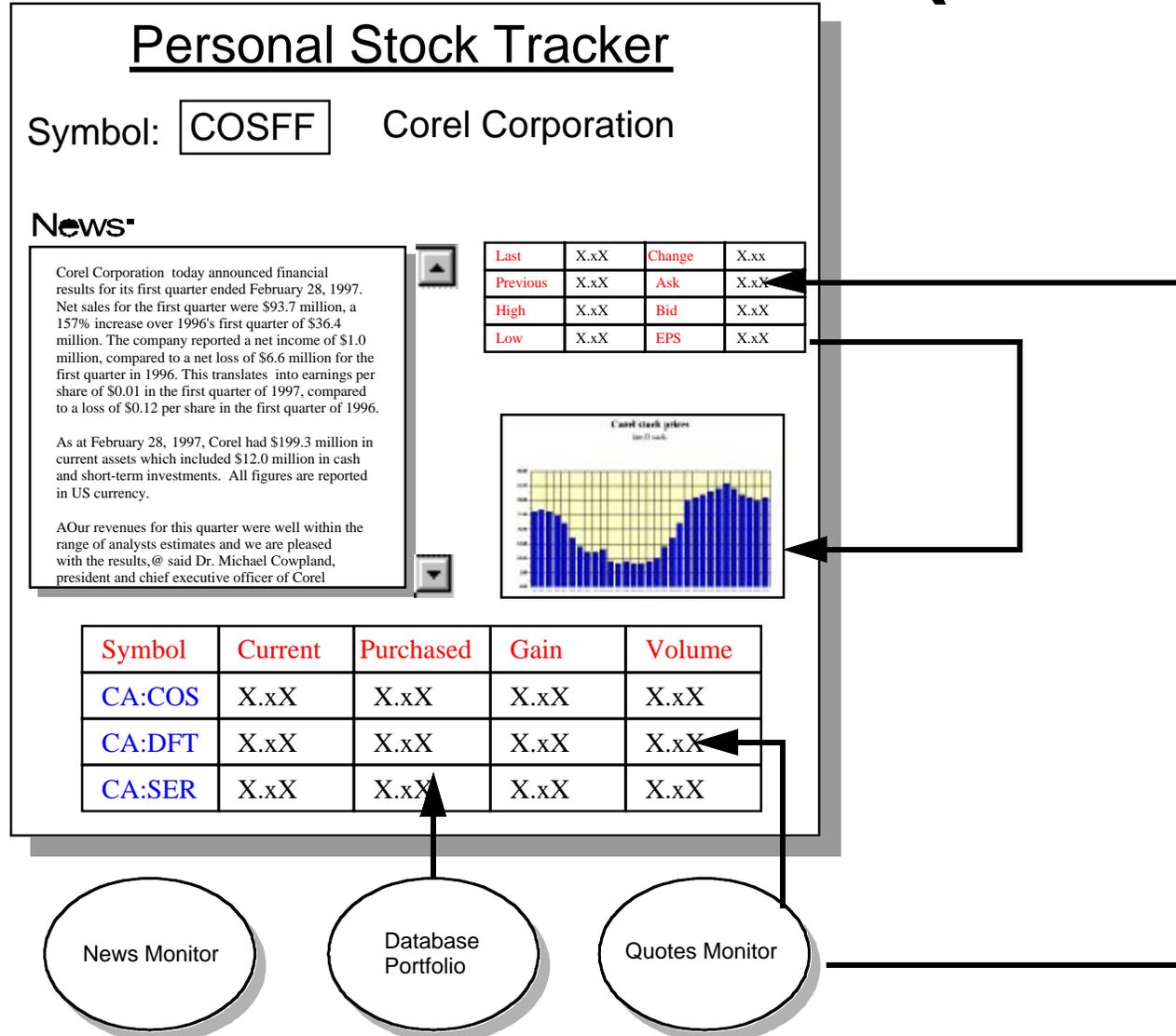
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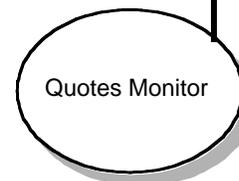
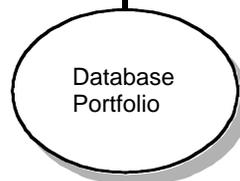
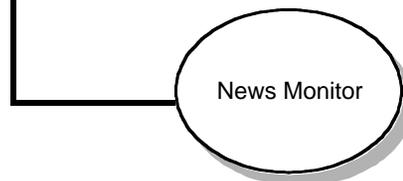
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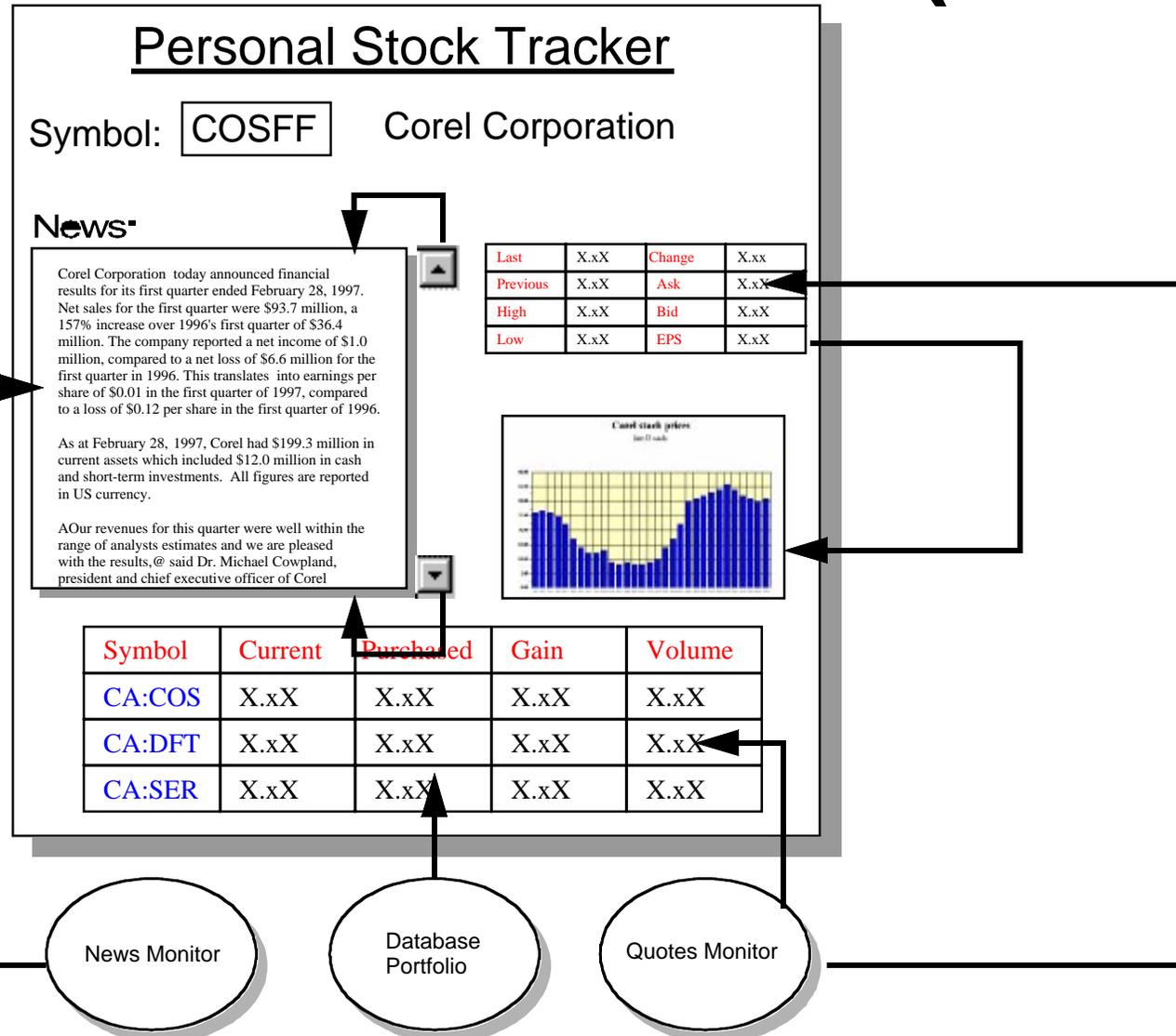
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Rich, Interactive Document Content (cont.)



Custom Developments

- ◆ Create custom applications that generate rich, interactive document content quickly and easily
- ◆ VARs and SIs can deliver custom applications using building blocks
- ◆ Corel will provide a library of UI control beans that can be used to create these custom applications
- ◆ Third party control builders will be able to create marketable Corel specific controls



Custom Developments

Financial Results news editor

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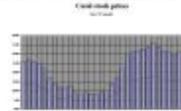
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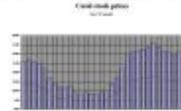
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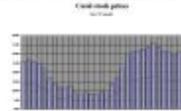
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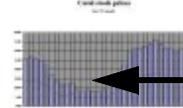
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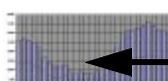
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[Demo]

- ◆ What we will do?
 - ◆ Use WordPerfect in a standard BeanBox
 - ◆ Create a form application
 - ◆ Customize the UI of a WordPerfect Bean



Demo (cont.)

◆ Note

- ◆ We use a 100% Pure JDK 1.1 BeanBox
- ◆ Will work under any visual tool that supports standard JDK 1.1 BeanBox features (such as PropertyHookup)



Demo -- Part 1

- ◆ Hooking beans or fields inside WordPerfect to Corel-specific controls

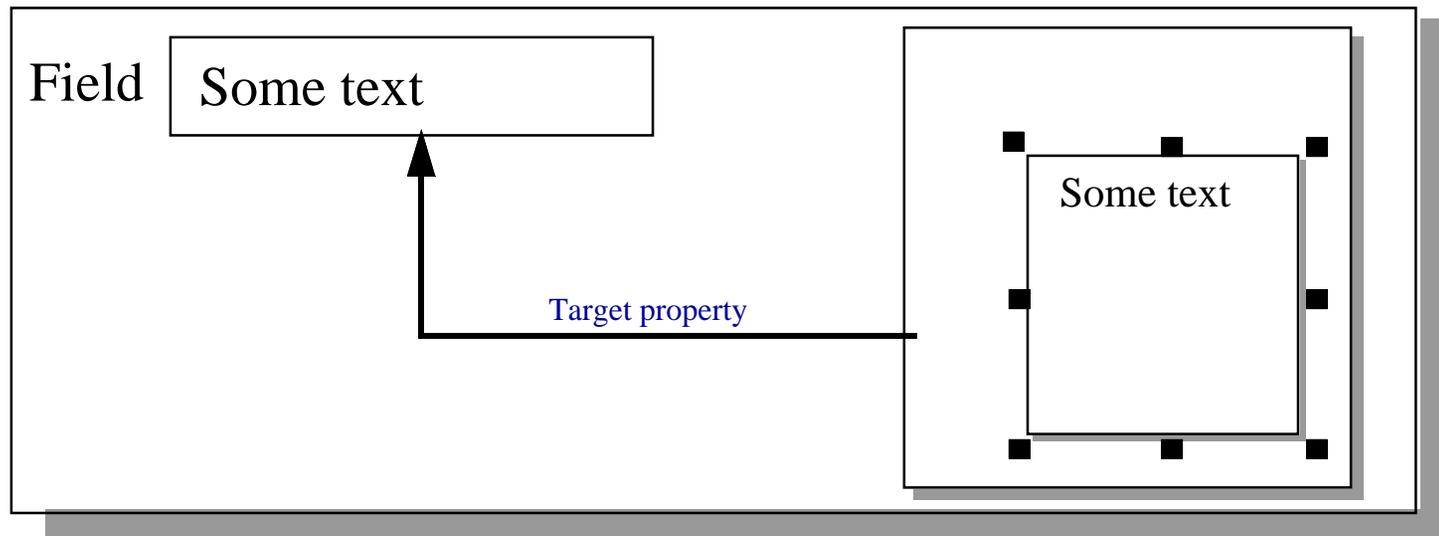
Field

Some text

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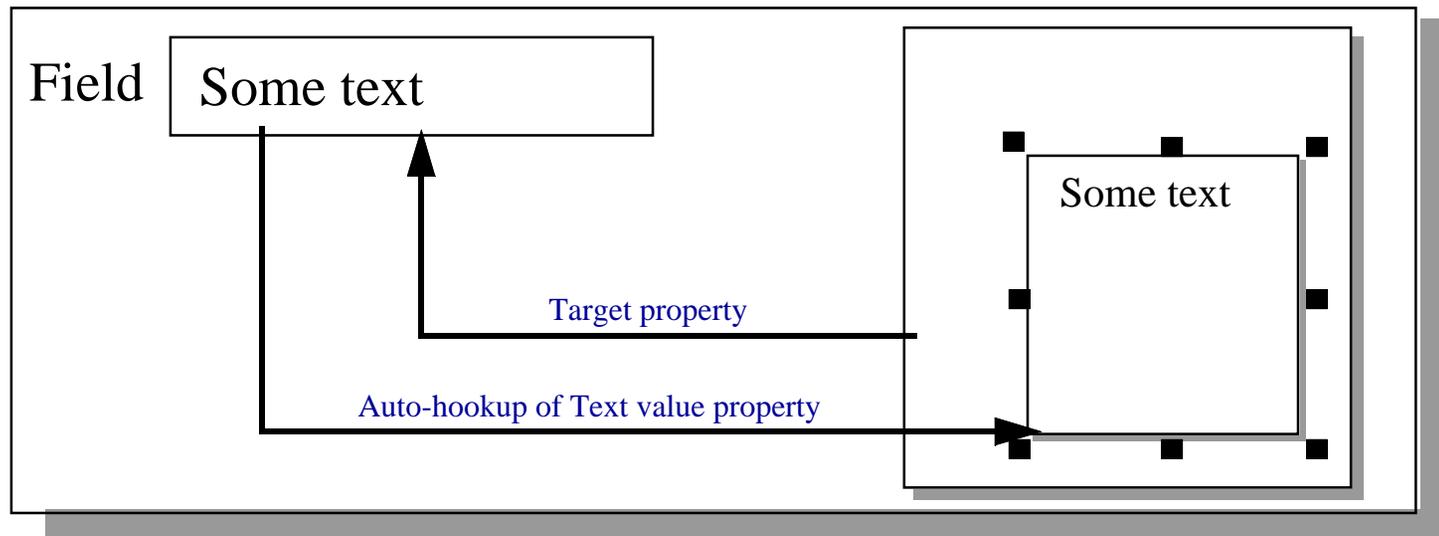
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What Did We Do?

- ◆ We exposed embedded beans to the outer world
 - ◆ We let the external bean container introspect beans located inside another bean container



How Did We Do That?

- ◆ Through a three step process
 - ◆ Expose the embedded bean (the target) as a property of the parent bean
 - ◆ Bind the target to the UI control
 - ◆ Corel controls handle the value property binding internally

Demo -- Part 2

- ◆ Connecting generic AWT UI controls to embedded beans



Generic Controls

- ◆ Generic controls cannot connect directly to beans inside an embedded bean container
- ◆ Why?
 - ◆ Because current JavaBeans specification does not offer aggregation APIs

Generic Controls (cont.)

Solutions

- ◆ Define a new JavaBeans specification

Or

- ◆ Use adaptors

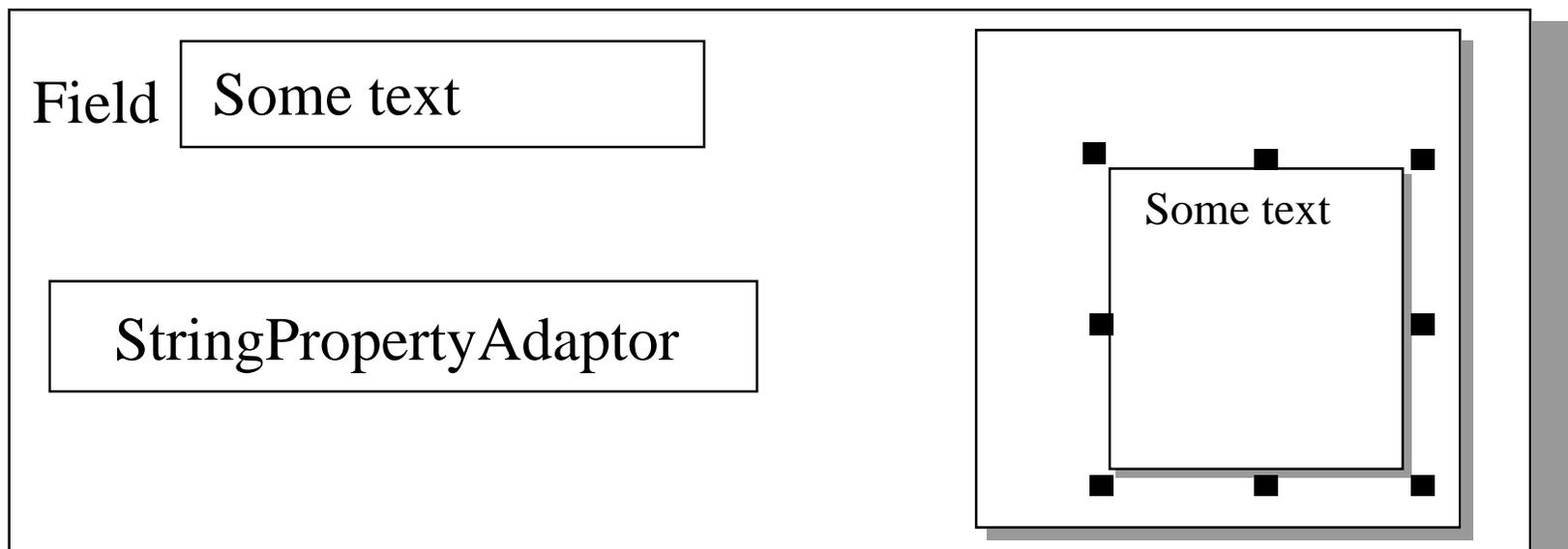


Adaptors

- ◆ Compatible with JDK 1.1
- ◆ Adds a level of complexity
- ◆ An adaptor must be added for each embedded bean that has to interact with the outside
- ◆ Works right now in any visual builder tool that conforms to the standard BeanBox functionality

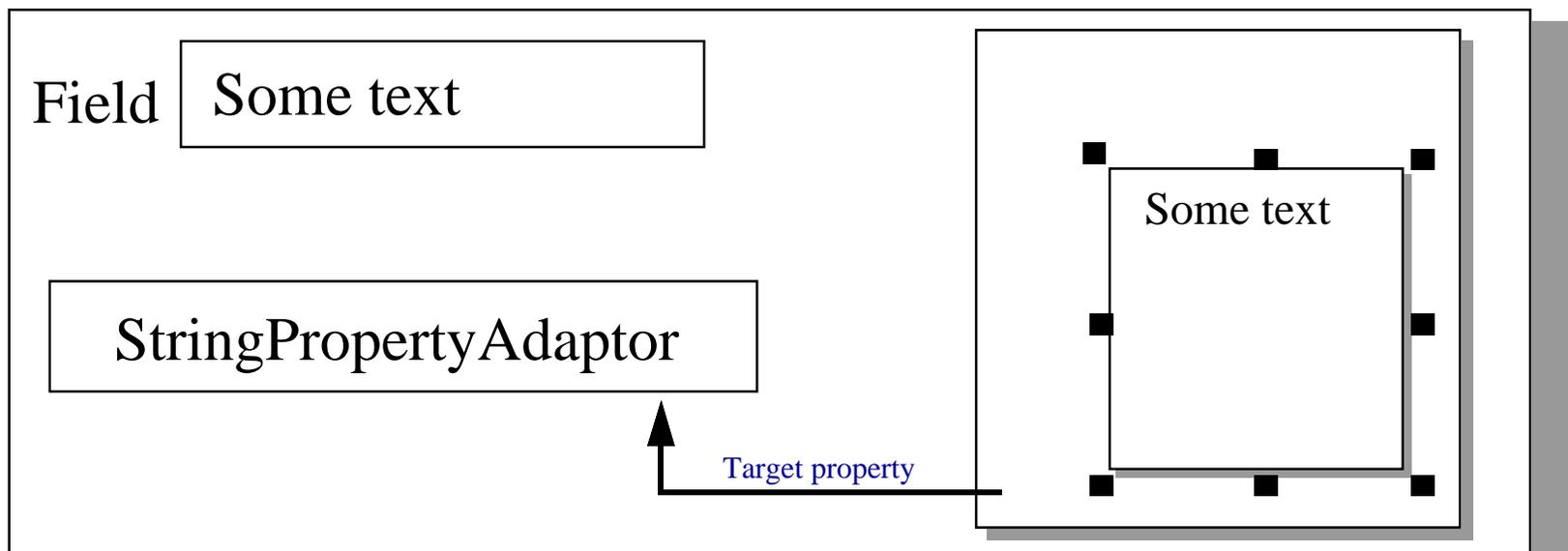
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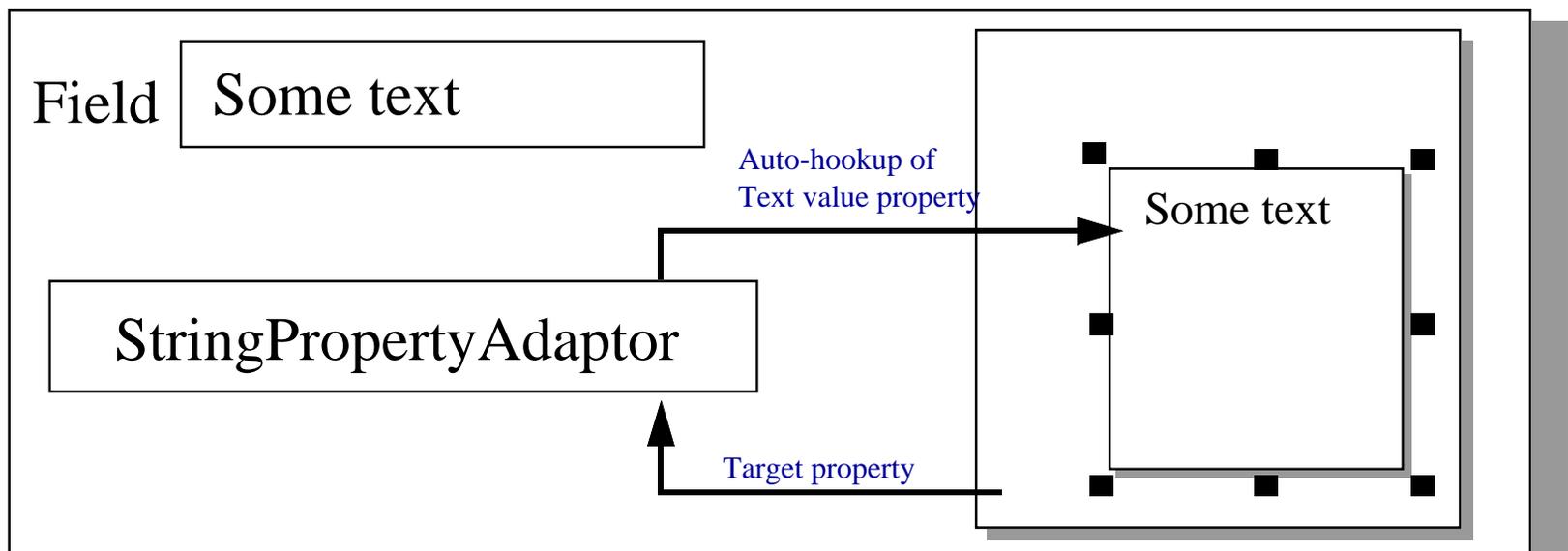
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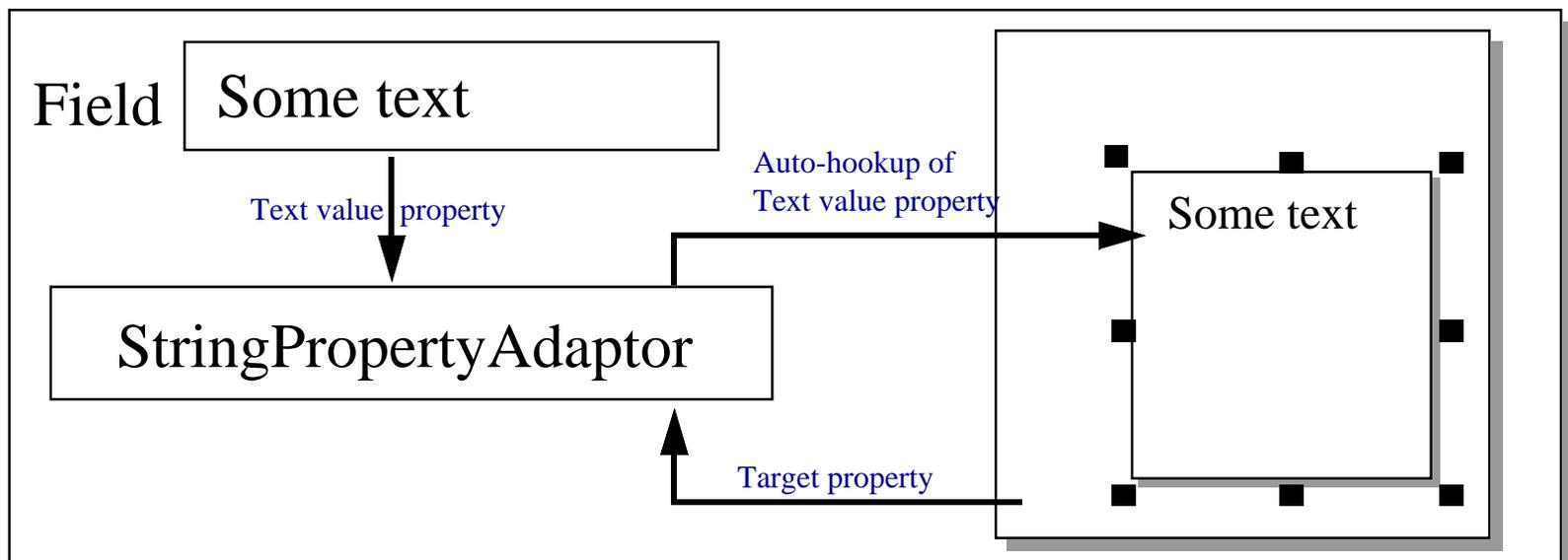
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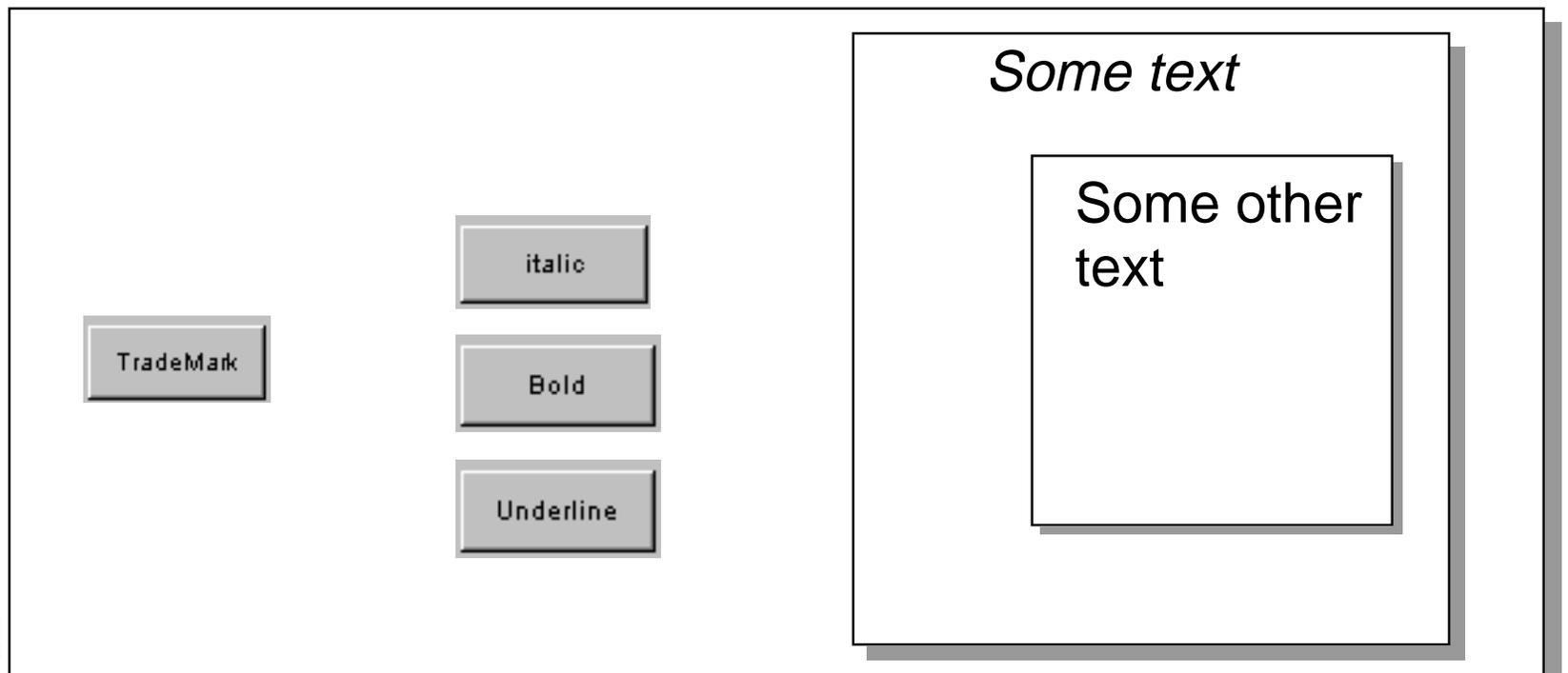
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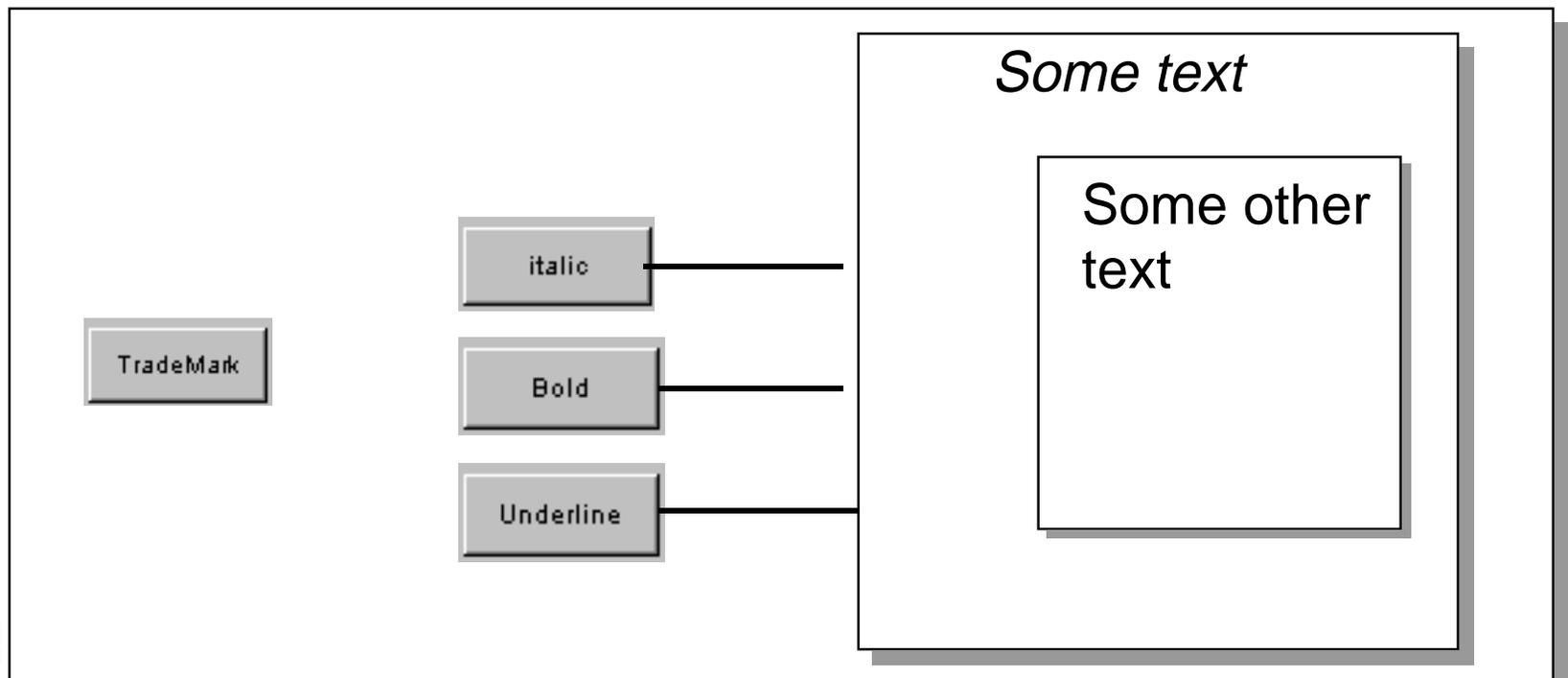
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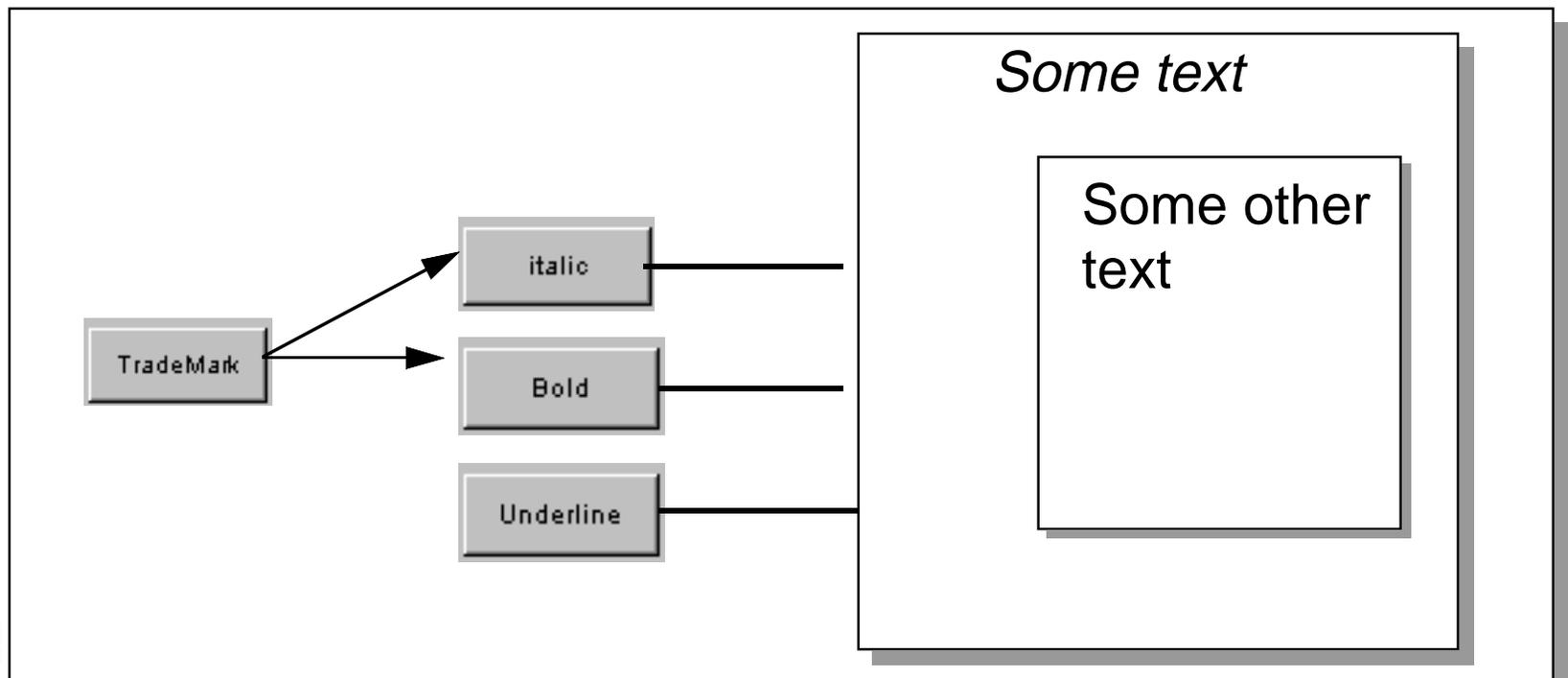
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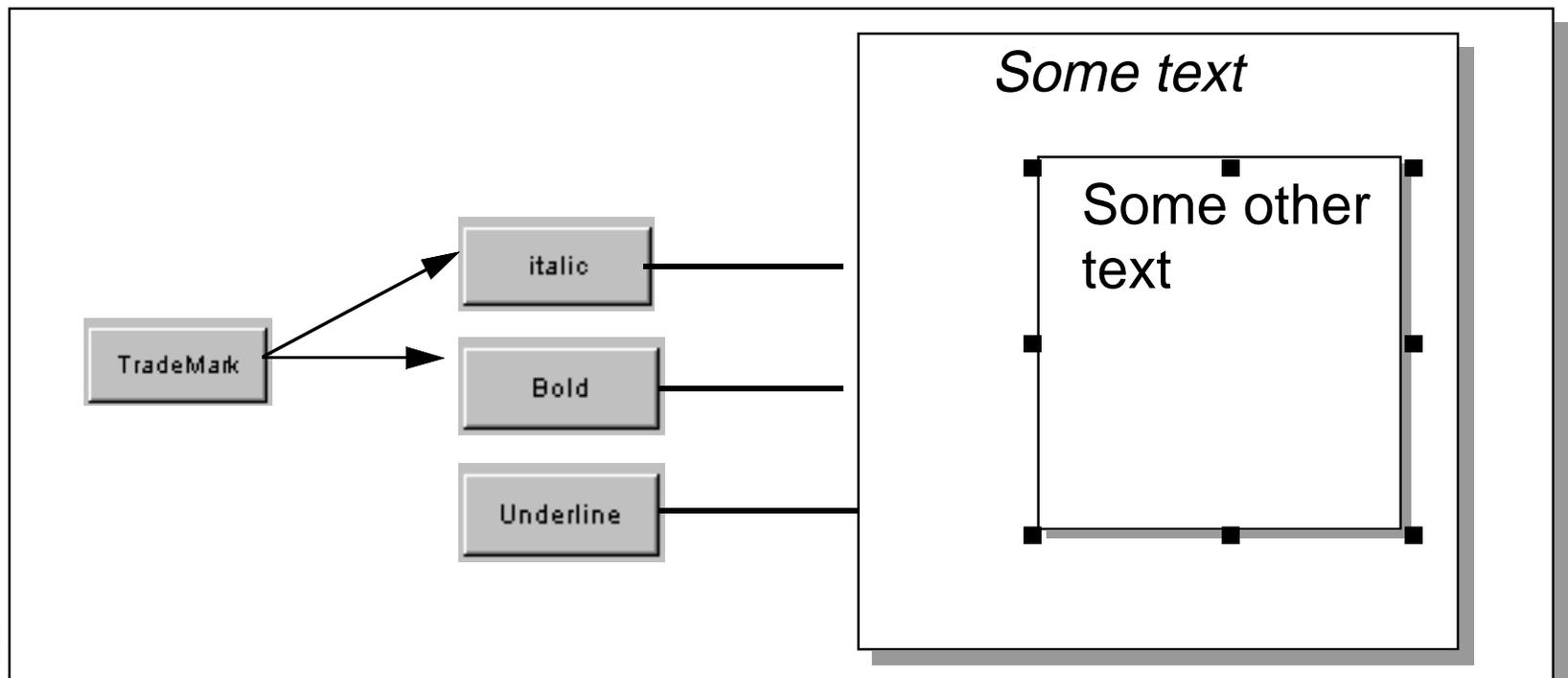
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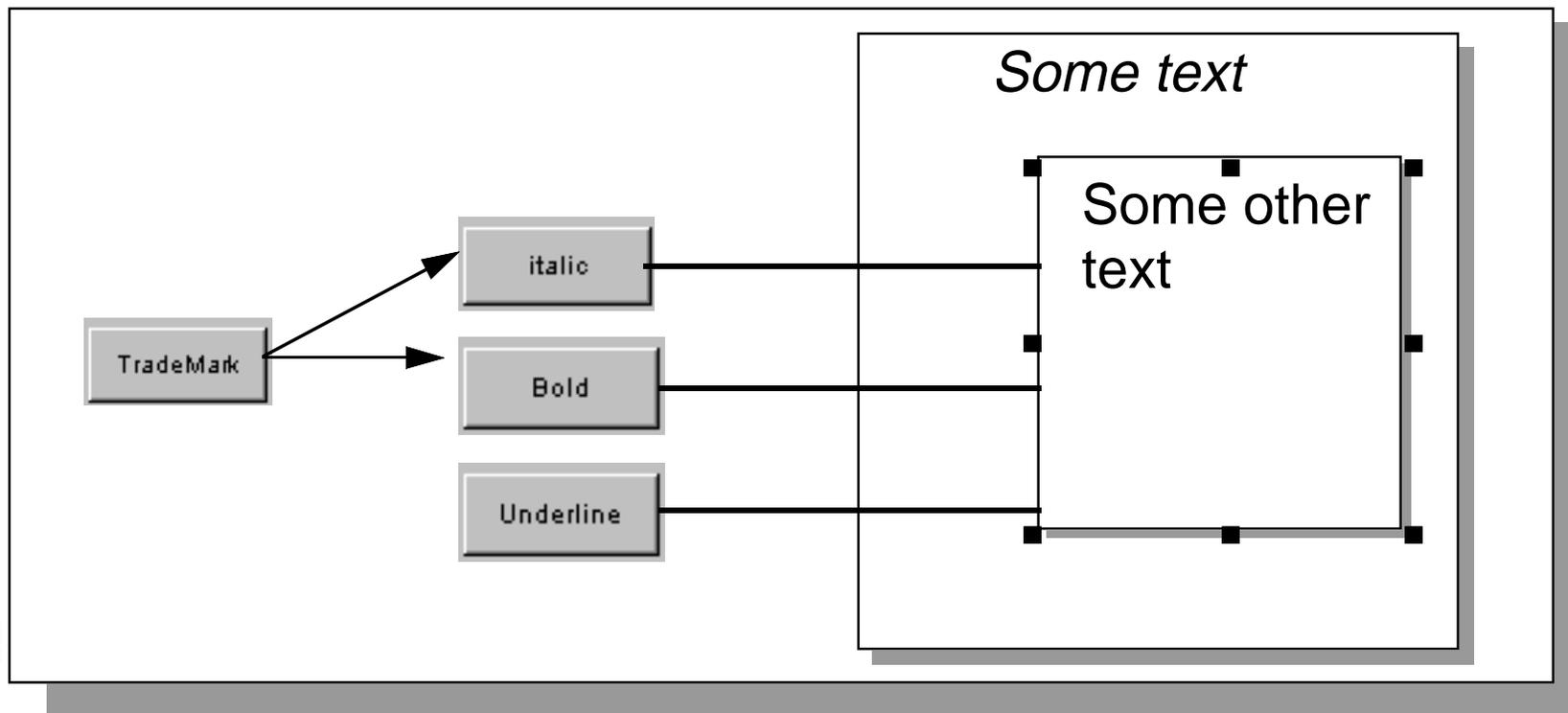
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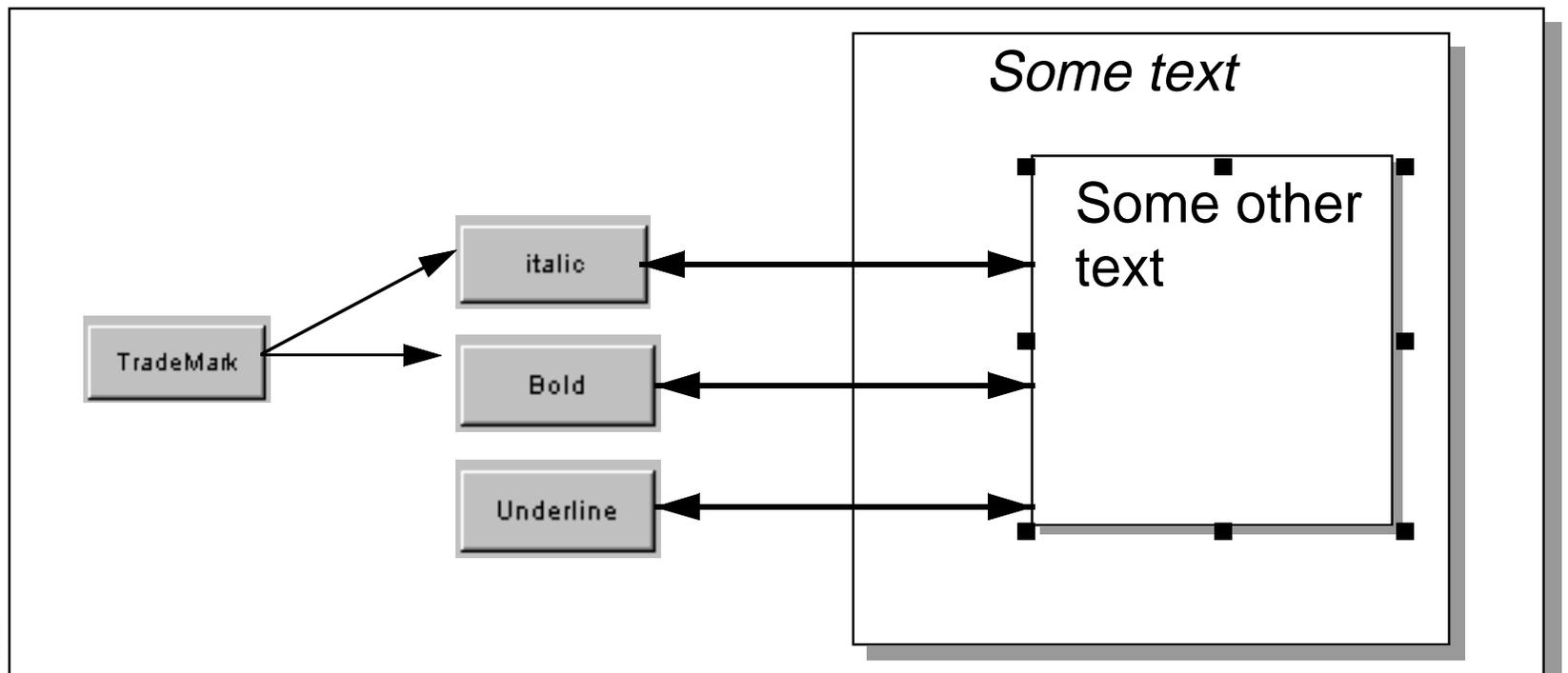
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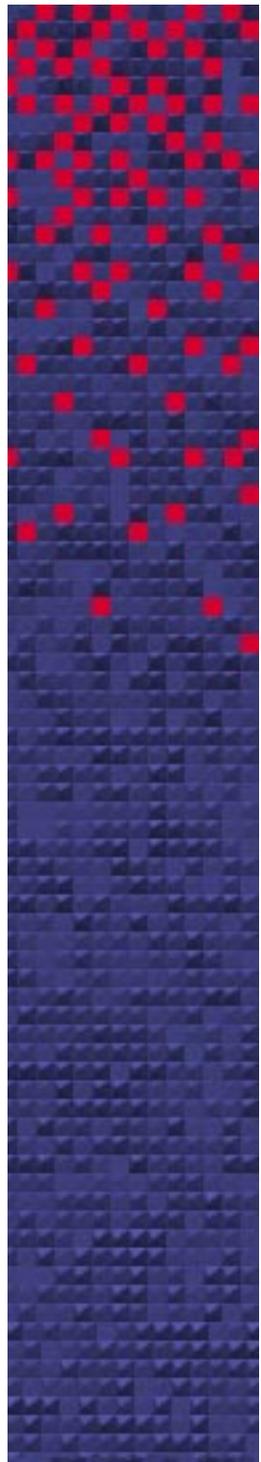


What's Coming Up?

- ◆ Corel is involved in a discussion on an aggregation model that should resolve issues such as:
 - ◆ Exposing embedded beans
 - ◆ Accessing UI elements from embedded beans, such as
 - ◆ Menu bar and tool bar merging
 - ◆ Status bar
- ◆ Data exchange standards
- ◆ Serialization and externalisation

Until Then

- ◆ Stay tuned to Corel JavaBeans information at *<http://officeforjava.corel.com>*
- ◆ You will find information on
 - ◆ Corel adaptor Beans
 - ◆ Corel JavaBeans API documentation
 - ◆ and much more...



Q&A

