

SOA and IP Telephony


VoiceCon[®]
SPRING 2007
The Forum for Business IP Telephony



Dr. Jack Jachner
March 6, 2007

New business environment requires the "Real Time Enterprise"



Always On

**Faster
Decisions**

**Customers
More Demanding**

**Shorter
Response Time**

**Faster
Actions**



Real Time Enterprise

Communications Solutions for the Real Time Enterprise



Web Services and SOA

A key technology for Real Time Enterprises

Web Services use Internet standards (Platform independent):

- XML (eXtensible Markup Language)
 - Language used to structure and define information on the web
- SOAP (Simple Object Access Protocol)
 - Protocol (over HTTP) through which Web Services communication takes place
- WSDL (Web Services Description Language)
 - Language (XML-based) to describe operations a Web Service can support
- UDDI (Universal Description Discovery & Integration)
 - Standard for publishing and discovering Web Services



Web Services provide a standard way to expose application interfaces through XML and WSDL and rely on a standard way to communicate, SOAP



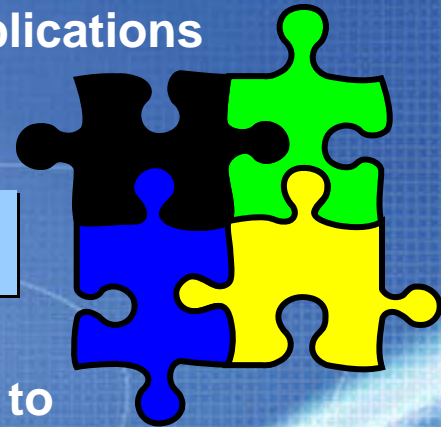
Web Services Technology allows user to create granular Web Services from multiple systems

Then combine several granular Web Services into composite Web Services

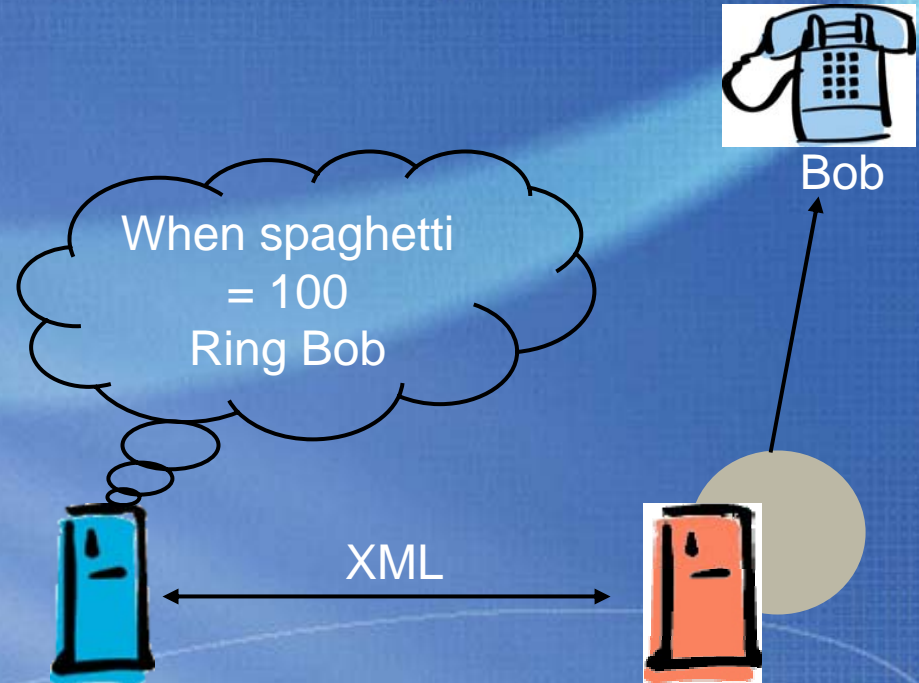
Next combine composite Web Services into composite applications

SOA (Services-Oriented Architecture)

Base functions and high level services are reusable again to create new business services



Web Services example









Spaghetti production

- Knows how to count spaghetti
- Does not know how to ring a phone

Telephony environment

- Does not know how to count spaghetti
- Knows how to ring a phone

Advantages of Web Services

	web SERVICES
Internet standards	
Simplicity	
Reusability	
Quick integration of disparate systems	
Minimize cost and complexity of building new applications	
Speed deployment to roll out new goods and services	



XML

Initially intended for deployment over the Internet, many Web Services will be deployed internally to the enterprise

Communication Services

XML Services



Integration of business applications

“Consumer” Device

Communication Web Services

web SERVICES



Integration of telephony services in business applications

WS “Provider” Servers



Integration of UC services in business applications



Web Services

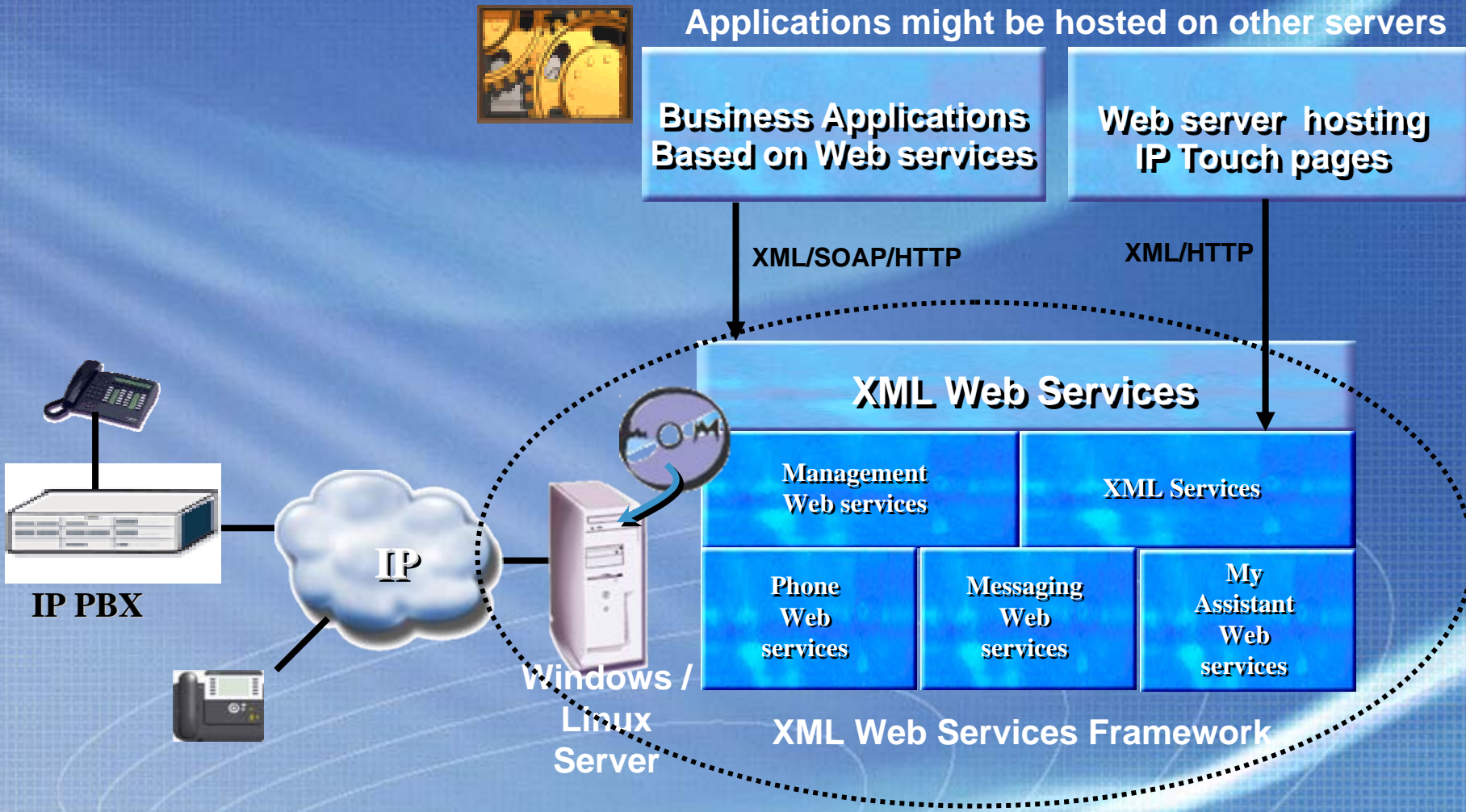
2 components :

Communication Web Services:
Communication Infrastructure Services

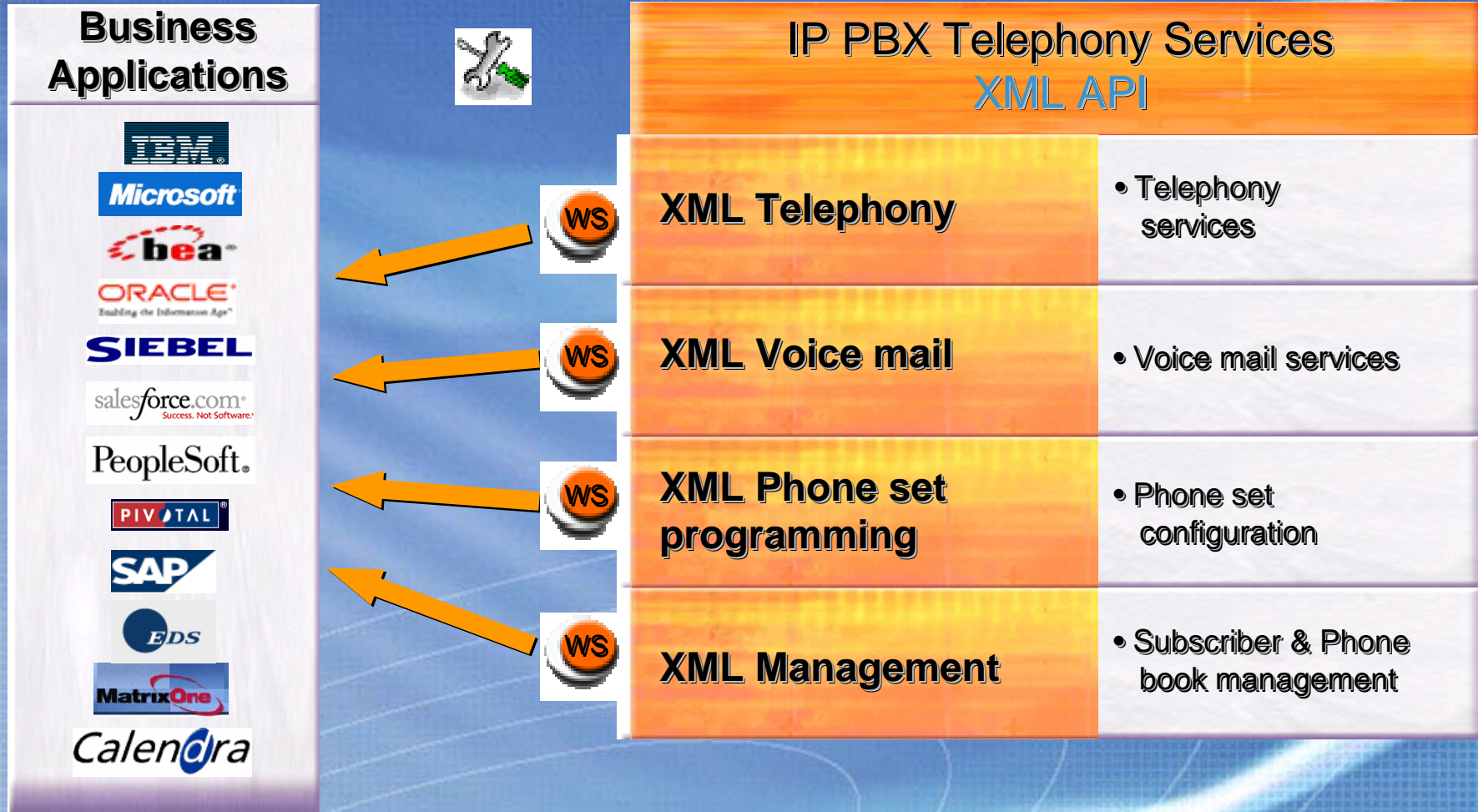
Terminal XML Services:
Application phone Services



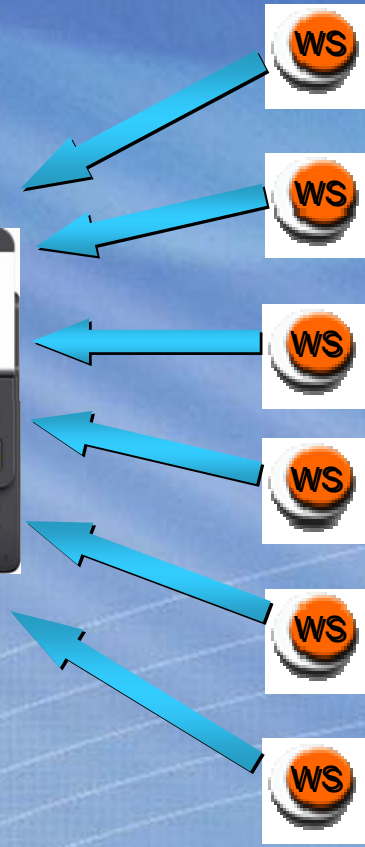
Communication Web Services architecture





Communication Infrastructure Services



IP Terminals - Consumers of Web services



Telephony	OmniPCX 
Directory, Data base	LDAP Active Directory ORACLE® <i>Building the Information Age™</i>
Messaging	 Microsoft Exchange Server Microsoft Live Communications Server 2003
Communication UC, Routing, SMS, video...	Alcatel OmniTouch <i>Unified Communication</i>
Portal Info push, Business alerts...	WebSphere bea® Microsoft SharePoint Portal Server
Business, Vertical Contact Center, Help Desk Hotel, Security...	 novar® GENESYS®

XML Services integration example : NOVAR Intelligent Building business applications

Display a fire alarm message with a map of the nearest exits



Adjust the heating and light in a meeting room



Check the image of visitor and open a gate after hours



Conclusions

Communication Services are the cornerstone of the Real Time Enterprise

Communication Services empower the Enterprise Business Processes

