

WINTERGREEN RESEARCH, INC.

**Enterprise Service Bus (ESB) Market Opportunities,  
Strategies, and Forecasts, 2007 to 2013**

---

**Enterprise Service Bus (ESB)**

---



*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

**WinterGreen Research, Inc.  
Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

---

REPORT # SH29821492    415 PAGES    107 TABLES AND FIGURES    2007    \$3,200

**CHECK OUT THESE KEY TOPICS**

*ENTERPRISE SERVICE BUS (ESB) MARKET FORECASTS*

*Enterprise Service Bus (ESB) Market Shares*

*Greater Value From Existing Assets*

*Enterprise Service Bus Architecture*

*ESB Multiple Process Categories*

*ESB Process Life Cycle*

*WORKFLOW AND ESB*

*CUSTOMER SUPPORT*

*LINKING INTERNAL OPERATIONS*

*SYSTEM INTEGRATOR ROLE*

*ENTERPRISE SERVICE BUS TECHNOLOGY ISSUES*

*ESB TECHNOLOGY ANALYSIS*

*ESB BUSINESS BENEFIT*

*ESB SOFTWARE PROCESS DESIGN*

*ESB / WEB SERVICES / SOA*

*WEB SERVICES*

**OPPORTUNITY ABOUND**

**WinterGreen Research, Inc.**

**Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

## **Enterprise Service Bus (ESB) Market Opportunities, Market Forecasts, and Market Strategies, 2007-2013**

ESB market driving forces relate to the need for automation of process. Information exchange depends on access to every different type of enterprise resource planning (ERP) system and network connectivity. Supply chains are automated using BPM technology based on integration infrastructure. Electronic commerce needs application servers and integration infrastructure to function.

New customer service systems need ESB in order to be implemented efficiently. Long running processes can be supported in a number of ways, but BPM is most efficient. Indirect factors relate to the migration of existing products from separate market segments. File transfer, CTI, applications development, and workflow illustrate the alternate ways to implement long running processes.

Enterprise application integration is occurring in the context of corporate adoption of best-of-breed ESB strategies. Mergers, acquisitions, and reorganizations are increasing. The driving force is the need to leverage economies of scale brought by the Internet. A desire to develop closer links with customers, suppliers, and partners is also evolving. These events all drive demand for ESB.

ESB helps corporations integrate their existing data and applications into new business systems. ESB is an integration technology that supports Web services. ESB software components allow customers to more quickly react to changing market conditions by using process models to design and build more flexible applications. ESB software projects routinely range from \$100,000 to \$2.5 million. IBM has implemented 1,800 ESB projects, many of them trial installations.

Enterprise service bus is at the core of implementing business process management. Business process management promises to take the islands of knowledge, data and business rules that represent the core of enterprise activities and unite them into a business system that is accessible to ordinary business people. Business automation allows companies to rapidly automate and analyze business processes that flow across multiple applications.

Enterprise service bus (ESB) markets at \$190.5 million in 2006 are expected to reach \$494.4 million by 2013. Market growth comes because ESB enables the flexible IT architecture that is needed to respond to market shifts brought by speeded product cycles and competitive challenges.

## Companies Profiled

### Market Leaders

IBM  
TIBCO  
webMethods

### Market Participants

Applied Technology  
Fiorano  
IONA  
Polarlake  
SOA Software

Cape Clear  
Fusionware  
Oracle  
Progress Software

## Enterprise Service Bus (ESB) Strategies and Forecasts, 2007-2013

### REPORT METHODOLOGY

THIS IS THE 293RD REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, TELEPHONE EQUIPMENT, HEALTH EQUIPMENT, AND ENERGY. THE PROJECT LEADERS TAKE DIRECT RESPONSIBILITY FOR WRITING AND PREPARING EACH REPORT. THEY HAVE SIGNIFICANT EXPERIENCE PREPARING INDUSTRY STUDIES. FORECASTS ARE BASED ON PRIMARY RESEARCH AND PROPRIETARY DATA BASES. FORECASTS REFLECT ANALYSIS OF THE MARKET TRENDS IN THE SEGMENT AND RELATED SEGMENTS. UNIT AND DOLLAR SHIPMENTS ARE ANALYZED THROUGH CONSIDERATION OF DOLLAR VOLUME OF EACH MARKET PARTICIPATION IN THE SEGMENT. INSTALLED BASE ANALYSIS AND UNIT ANALYSIS IS BASED ON INTERVIEWS AND AN INFORMATION SEARCH. MARKET SHARE ANALYSIS INCLUDES CONVERSATIONS WITH KEY CUSTOMERS OF PRODUCTS, INDUSTRY SEGMENT LEADERS, MARKETING DIRECTORS, DISTRIBUTORS, LEADING MARKET PARTICIPANTS, OPINION LEADERS, AND COMPANIES SEEKING TO DEVELOP MEASURABLE MARKET SHARE. OVER 200 IN DEPTH INTERVIEWS ARE CONDUCTED FOR EACH REPORT WITH A BROAD RANGE OF KEY PARTICIPANTS AND INDUSTRY LEADERS IN THE MARKET SEGMENT. WE ESTABLISH ACCURATE MARKET FORECASTS BASED ON ECONOMIC AND MARKET CONDITIONS AS A BASE. USE INPUT/OUTPUT RATIOS, FLOW CHARTS, AND OTHER ECONOMIC METHODS TO QUANTIFY DATA. USE IN-HOUSE ANALYSTS WHO MEET STRINGENT QUALITY STANDARDS. INTERVIEWING KEY INDUSTRY PARTICIPANTS, EXPERTS AND END-USERS. OUR RESEARCH INCLUDES ACCESS TO LARGE PROPRIETARY DATABASES. LITERATURE SEARCH INCLUDES ANALYSIS OF TRADE PUBLICATIONS, GOVERNMENT REPORTS, AND CORPORATE LITERATURE.

**YOU MUST HAVE THIS STUDY**

# Enterprise Service Bus (ESB) Market Opportunities, Strategies, and Forecasts, 2007 to 2013

## Table of Contents

### ENTERPRISE SERVICE BUS (ESB) EXECUTIVE SUMMARY

<b>ENTERPRISE SERVICE BUS (ESB) EXECUTIVE SUMMARY</b>	<b>ES-1</b>
Enterprise Service Bus (ESB) Market Driving Forces	ES-1
Enterprise Service Bus Market Shares	ES-4
Enterprise Service Bus Market Forecasts	ES-6

### ENTERPRISE SERVICE BUS (ESB) MARKET DEFINITION AND MARKET DYNAMICS

<b>1. ENTERPRISE SERVICE BUS (ESB) MARKET DEFINITION AND MARKET DYNAMICS</b>	<b>1-1</b>
1.1 Enterprise Service Bus Architecture	1-1
1.2 Greater Value From Existing Assets	1-4
1.2.1 Enterprise Service Bus Benefits	1-6
1.2.2 Product Development Process	1-9
1.2.3 Provisioning Framework for ESB	1-9
1.2.4 Highly Available Services	1-13
1.2.5 Data Mapping For ESB	1-14
1.2.6 Data Mapping Phased Services Approach	1-14
1.2.7 Availability Assessment	1-15
1.2.8 Deploying ESB	1-16
1.2.9 ESB Features	1-18
1.2.10 Reliability and Serviceability	1-18
1.2.11 Rapid Response To Changing Business Conditions	1-19
1.3 Modifying Business Processes	1-20
1.4 Business Process Services	1-23
1.5 ESB Multiple Process Categories	1-24
1.5.1 Duration And Complexity ESB Process Categories	1-27
1.5.2 Transaction-Centric Processes	1-28
1.5.3 Person-To-Person Collaboration Processes	1-28
1.5.4 Automation	1-29
1.6 ESB Process Life Cycle	1-31
1.7 Workflow and ESB	1-33
1.8 Building And Implementing Business Process Workflows	1-34
1.8.1 ESB Challenges	1-35
1.9 Straight-Through Processing with Enterprise Service Bus	1-35
1.9.1 Form Filter	1-37
1.9.2 Rules-Based Routing	1-37
1.9.3 Timely Filing Logic	1-38
1.10 Business Process Integration Market	1-38
1.11 Customer Support	1-39
1.11.1 Business E-Services Benefits	1-40
1.11.2 E-Services Approach	1-41

1.11.3	E-Services Challenge	1-43
1.11.4	E-Services Partnering	1-45
1.11.5	Retail Portal Channels	1-47
1.11.6	E-Services Is The Business Model	1-47
1.11.7	Enterprise Service Bus (ESB) Capabilities	1-56
1.11.8	Business Process Execution Engine	1-58
1.11.9	E-Business Engine	1-59
1.11.10	Need For Automating Internal And External Processes	1-60
1.12	Rapid, Reliable, Scalable Integration Solutions	1-60
1.13	Role Of Mission Critical Middleware Messaging	1-65
1.13.1	Messaging Solutions	1-66
1.14	Linking Internal Operations	1-68
1.14.1	Enterprise service bus , ESB	1-70
1.14.2	Business-to-Business Integration, B2Bi	1-70
1.14.3	Enterprise Application Integration, EAI	1-70
1.14.4	Business Process Intelligence, BPI	1-71
1.14.5	Business Vocabulary Management, BVM	1-71
1.15	Market Needs For Enterprise service bus	1-71
1.16	Difference Between An Application Server And Application Integration	1-75
1.17	Difference Between Enterprise service bus (ESB) And Workflow	1-75
1.18	Enterprise Service Bus Customer Services Solutions	1-77
1.19	System Integrator Role	1-78
1.19.1	Targeting Vertical Markets	1-79
1.19.2	Strategic Alliances	1-80
1.20	Delivering Business Services Via The Web	1-80
1.20.1	Organization Central To The Ability To Move Forward With ESB Strategy	1-82
1.20.2	Organizational Changes	1-84

**ENTERPRISE SERVICE BUS (ESB) MARKET SHARES AND MARKET FORECASTS**

<b>2. ENTERPRISE SERVICE BUS (ESB) MARKET SHARES AND MARKET FORECASTS</b>	<b>2-1</b>
2.1 Enterprise Service Bus Market Aspects	2-1
2.1.1 Enterprise Service Bus (ESB) Message Components	2-2
2.1.2 Enterprise Service Bus (ESB) Market Driving Forces	2-3
2.2 Enterprise Service Bus Market Shares	2-6
2.2.1 IBM ESB Services Architecture Portfolio	2-13
2.2.2 Tibco ESB	2-14
2.2.3 WebMethods Enterprise Service Bus	2-14
2.2.4 BEA Systems Business Process Lifecycle Management Solution	2-15
2.2.5 Cape Clear	2-16
2.2.6 Sonic Progress	2-16
2.3 Enterprise Service Bus Market Forecasts	2-16
2.3.1 Enterprise Service Bus (ESB) Market Changes	2-21
2.4 Bus Supports Composite Application Platform	2-24
2.5 ESB Regional Analysis	2-25

**ENTERPRISE SERVICE BUS (ESB) PRODUCT DESCRIPTION**

<b>3. ENTERPRISE SERVICE BUS PRODUCTS</b>	<b>3-1</b>
3.2 Fiorano Enterprise Service Bus™	3-6
3.3 Progress Software's Sonic ESB®	3-7
3.4 Cape Clear	3-8
3.5 IBM	3-14

3.5.6	WebSphere® Message Broker	3-20
3.6	Iona Technologies	3-29
3.6.6	Iona Products	3-33
3.7	Celtix	3-36
3.7.6	Celtix Packages	3-37
3.8	Polarlake	3-43
3.8.6	Polar Lake Integration Suite	3-46
3.9	FusionWare	3-48
3.10	Cordys	3-53
3.11	webMethods	3-56
3.12	SOA Software	3-58
3.13	Tibco	3-64
3.14	BEA	3-68
3.15	Oracle	3-106
3.16	Sun Microsystems	3-108
3.17	Fujitsu/Software AG	3-111
3.18	Logicblaze	3-117
3.19	Apache ServiceMix	3-125
3.20	Service Mix	3-129
3.21	JBOSS	3-131
3.22	MULE	3-132

**ENTERPRISE SERVICE BUS (ESB) TECHNOLOGY**

<b>4. ENTERPRISE SERVICE BUS (ESB) TECHNOLOGY</b>	<b>4-1</b>
4.1 Enterprise Service Bus Technology Issues	4-1
4.1.1 Application Integration Professional Services Implementation Strategies	4-2
4.1.2 Application Connectivity	4-2
4.1.3 Single Vendor Issues	4-3
4.1.4 Standards Adoption	4-4
4.2 ESB Technology Analysis	4-5
4.3 ESB Business Benefits	4-6
4.4 Technology Platforms	4-7
4.4.1 Automated Virtualization Of Existing Enterprise Assets	4-7
4.4.2 Complexity Of The Underlying IT Technologies	4-8
4.4.3 Impact of Platforms	4-9
4.4.4 Platforms and Disparate Technologies	4-10
4.5 Events	4-10
4.5.1 Event Transmission	4-13
4.5.2 Business Process Automation	4-14
4.6 Process-Oriented Architecture	4-17
4.6.1 Business Process Automation	4-17
4.6.2 Enterprise service bus Modular Architecture	4-17
4.6.3 Business Components	4-18
4.7 Advanced E-Business Infrastructure	4-21
4.7.1 Application Integration Technical Advantages	4-22
4.7.2 Integration System Architecture	4-23
4.8 Open Systems	4-25
4.8.1 SOA Adapters	4-25
4.9 Development Toolset	4-27
4.9.1 Infrastructure And System Management	4-28
4.10 ESB Software Process Design	4-28
4.10.1 Process Monitoring	4-29

4.10.2	Messaging as Part of Process Operation	4-29
4.11	ESB / Web Services / SOA	4-30
4.11.1	SOA Engine and Adapters Position Information As A Service	4-31
4.12	Services Oriented Applications (SOA) Unlock Business Value	4-38
4.12.1	Aligning Business Process And Technology	4-38
4.12.2	Business Process Challenges	4-39
4.12.3	Business Environment	4-39
4.13	Services Oriented Architecture (SOA) Ability To Transform Business	4-40
4.13.1	Services Oriented Architecture Works By Abstracting Business Processes	4-40
4.13.2	Enterprise Application Servers	4-41
4.13.3	Advantages Of Java In Context Of Application Integration	4-41
4.13.4	EAI Technology Heritage	4-42
4.14	Web Services	4-43
4.14.1	Promise Of Web Services	4-44
4.14.2	Microsoft .Net Framework	4-44
4.14.3	Java	4-45
4.14.4	Java Technology	4-47
4.14.5	J2EE	4-47
4.14.6	Soap	4-48
4.14.7	Apache Soap	4-49
4.14.8	Load Balancer With SSL Support	4-49
4.14.9	Points Of Failure	4-50
4.14.10	Soap Limitations	4-50
4.14.11	WSDL	4-53
4.14.12	WSDL Service Descriptions	4-54
4.14.13	UDDI	4-55
4.14.14	UDDI Test Registries	4-55
4.14.15	UDDI Distributed Web Service Discovery	4-56
4.14.16	UDDI Consortium	4-57
4.14.17	WS-Inspection Document Extensibility	4-57
4.14.18	XML	4-59
4.14.19	XSLT	4-60
4.14.20	Metadata Repository	4-60
4.14.21	Wrapping	4-62
4.14.22	Workflow Management Coalition	4-63
4.15	Service Level Challenges	4-64
4.15.1	Quality Of Service (QoS) Functions	4-64
4.15.2	Network Efficiency	4-66
4.15.3	RosettaNet Standardizing Supply Chain Processes	4-67
4.16	Business Need	4-69
4.16.1	Enterprise service bus Packaged Solutions for Rapid Deployment	4-69
4.16.2	Quality Of Service Control	4-70
4.16.3	ESB Transactional Finite-State Machines	4-70
4.16.4	XML Standards	4-74
4.17	Oasis	4-75
4.18	Integration and B2B	4-75

**ENTERPRISE SERVICE BUS (ESB) COMPANY PROFILES**

<b>5. ENTERPRISE SERVICE BUS (ESB) COMPANY PROFILES</b>	<b>5-1</b>
5.1 Applied Technology	5-1
5.2 Cape Clear	5-1
5.2.1 Cape Clear Products	5-2

5.2.2	Cape Clear Customers	5-3
5.2.3	Cape Clear Partners	5-5
5.2.4	Cape Clear Solutions	5-5
5.2.5	Cape Clear Positioning	5-6
5.3	<b>Fiorano</b>	5-6
5.3.1	FioranoMQ	5-6
5.3.2	Fiorano ESB	5-7
5.3.3	Fiorano Customers	5-7
5.3.4	Fiorano Partners	5-8
5.3.5	Fiorano / Improvisive Technologies	5-8
5.3.6	Fiorano / IntegraSolv	5-9
5.3.7	Fiorano / Asidua	5-10
5.4	<b>Fusionware</b>	5-11
5.5	<b>IBM</b>	5-12
5.5.1	Description of Business	5-15
5.5.2	IBM's Strategy	5-16
5.5.3	Products and Services	5-17
5.5.4	IBM WebSphere	5-17
5.5.5	IBM and SAP	5-19
5.5.6	IBM / DataPower	5-20
5.5.7	DataPower	5-20
5.5.8	IBM DataPower's strategy	5-21
5.5.9	DataPower XG3 Product Family	5-21
5.5.10	IBM Acquires Ascential Software	5-22
5.5.11	IBM / Ascential ESB Platform	5-23
5.5.12	IBM / Micromuse Inc.	5-24
5.5.13	IBM Acquires Bowstreet, Inc.	5-25
5.5.14	IBM 2006 Revenue	5-26
5.5.15	IBM Full-Year 2006 Revenue	5-28
5.6	<b>IONA</b>	5-30
5.6.1	Iona Artix Products	5-30
5.6.2	Iona Partnerships	5-31
5.6.3	Iona Artix Universal Service Platform	5-31
5.6.4	Iona Products	5-32
5.6.5	Iona Partners	5-33
5.6.6	Iona And Industria Form Strategic Partnership	5-33
5.6.7	Iona and Wipro Technologies Partner for SOA	5-33
5.6.8	Iona And Amberpoint Announce Integrated SOA Infrastructure Capabilities	5-34
5.6.9	Iona Fourth Quarter 2006 Revenue	5-34
5.6.10	IONA First Quarter 2006 Revenue	5-35
5.6.11	IONA 2005 Revenue	5-35
5.7	<b>Oracle</b>	5-36
5.7.1	Oracle Business	5-37
5.7.2	Recent Acquisitions	5-37
5.7.3	Oracle Middleware Products and Services	5-38
5.7.4	Oracle Acquires Oblix	5-40
5.7.5	Oblix Identity Management Products and Services	5-40
5.7.6	Oracle Buys Open Source Software Company Sleepycat	5-41
5.7.7	Oracle Revenue 2006	5-41
5.7.8	Oracle Corporation Q2 Fiscal 2007 Quarter Revenue	5-42
5.7.9	Oracle Buys Open Source Software Company Sleepycat	5-43
5.8	<b>Polarlake</b>	5-43

5.9	Progress Software	5-45
5.9.1	Progress Software Products	5-46
5.9.2	Progress Software Partners and Customers	5-47
5.9.3	Progress Software / NEON Systems	5-48
5.9.4	Progress Software Reports First Quarter Financial Results	5-48
5.9.5	Progress Software 2005 Revenue	5-49
5.10	SOA Software	5-50
5.10.1	Customers	5-51
5.10.2	Partners	5-51
5.10.3	Products	5-51
5.10.4	Solutions	5-52
5.10.5	SOA Software Acquires Blue Titan	5-52
5.10.6	Blue Titan Products	5-52
5.10.7	Blue Titan Customers	5-53
5.10.8	Blue Titan Partners	5-53
5.10.9	SOA Software 2005 Revenue	5-53
5.11	Tibco	5-53
5.11.1	Tibco Products	5-55
5.11.2	Tibco SOA	5-55
5.11.3	Tibco BPM	5-55
5.11.4	Tibco Business Optimization	5-56
5.11.5	Tibco Professional Services	5-56
5.11.6	Tibco Partners	5-56
5.11.7	HP / Tibco	5-56
5.11.8	Tibco / IDS Scheer	5-57
5.11.9	Tibco Financial Data	5-57
5.11.10	Tibco Software 2006 Fourth Quarter Revenue	5-58
5.12	webMethods	5-61
5.12.1	webMethods Fabric	5-62
5.12.2	webMethods Enterprise Services Platform	5-64
5.12.3	webMethods Business Process Management	5-66
5.12.4	webMethods is Business Activity Monitoring	5-66
5.12.5	webMethods Composite Application Framework	5-67
5.12.6	webMethods is Business Process Productivity Solutions	5-68
5.12.7	webMethods for Financial Services	5-69
5.12.8	webMethods for the Demand-Driven Enterprise	5-70
5.12.9	webMethods Second Quarter Fiscal 2007 Revenue	5-71
5.12.10	webMethods / Infravio	5-71
5.12.11	Professional Services Revenue	5-74

## List of Tables and Figures

### ENTERPRISE SERVICE BUS (ESB) EXECUTIVE SUMMARY

Table ES-1	ES-2
Enterprise Service Bus (ESB) Market Driving Forces	
Figure ES-2	ES-5
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Figure ES-3	ES-7
Worldwide Enterprise Service Bus (ESB) Market Forecasts, Licenses and Services, Dollars, 2007-2013	

**ENTERPRISE SERVICE BUS (ESB) MARKET DEFINITION AND MARKET DYNAMICS**

Table 1-1	1-2
Enterprise Service Bus Features	
Table 1-2	1-3
Enterprise Service Bus Architecture	
Table 1-3	1-5
Primary Aims Of Enterprise Service Bus (ESB)	
Table 1-4	1-7
Benefits Of Enterprise Service Bus	
Table 1-5	1-8
Enterprise Service Bus (ESB) Software Challenges	
Table 1-6	1-12
Role Of Middleware In High Availability ESB Computing Systems	
Table 1-7	1-17
Core Components Of A High Availability Application Readiness Service	
Table 1-8	1-21
Business Process Services Issues	
Table 1-9	1-22
Issues Addressed By Enterprise service bus Systems	
Table 1-10	1-23
Business Services Addressed By ESB Components	
Table 1-11	1-25
ESB Process Categories	
Table 1-12	1-26
Business Process Complexity	
Table 1-13	1-40
Business Benefits Of Establishing An E-Services Approach	
Table 1-14	1-42
E-Services Positioning For Delivering It-Based Benefits	
Table 1-15	1-43
Principles Of Application Integration	
Table 1-16	1-45
E-Services Challenge	
Table 1-17	1-48
E-Services Partnering Strategy	
Table 1-18	1-49
E-Services Systems Strategy	
Table 1-19	1-50
E-Services Positioning	
Table 1-20	1-51
E-Services	
Table 1-21	1-52
E-Services Marketing Directions	
Table 1-22	1-53
ESB E-Services Market Positioning	
Table 1-23	1-54
E-Services Modular Strategy	
Table 1-24	1-55
E-Services Component Strategy	
Table 1-25	1-56
Business Process Complexity	

Table 1-26	1-62
Integration Platform Functions	
Table 1-27	1-64
Application Integration Software Functions	
Table 1-28	1-65
ESB Software Industries Targeted	
Table 1-29	1-67
Enterprise Messaging Integration Functions	
Table 1-30	1-69
Internal Enterprise Application Integration Tasks	
Table 1-31	1-72
Market Needs For Enterprise service bus	
Table 1-32	1-78
Key Elements Of ESB Strategy	
Table 1-33	1-81
Enterprise service bus (ESB) Initiatives Benefits	

**ENTERPRISE SERVICE BUS (ESB) MARKET SHARES AND MARKET FORECASTS**

Table 2-1	2-4
Enterprise Service Bus (ESB) Market Driving Forces	
Figure 2-2	2-7
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Table 2-3	2-8
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Figure 2-4	2-9
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Table 2-5	2-10
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Figure 2-6	2-11
Enterprise Service Bus (ESB) Market Share, Services, Dollars, 2006	
Table 2-7	2-12
Enterprise Service Bus (ESB) Market Share, License and Services, Dollars, 2006	
Figure 2-8	2-18
Worldwide Enterprise Service Bus (ESB) Market Forecasts, Licenses and Services, Dollars, 2007-2013	
Figure 2-9	2-19
Worldwide Enterprise Service Bus (ESB) Market Forecasts, License, Dollars 2007-2013	
Figure 2-10	2-20
Worldwide Enterprise Service Bus (ESB) Market Forecasts, Services, Dollars 2007-2013	
Table 2-11	2-21
Worldwide Enterprise Service Bus (ESB) License and Services Market Forecasts, 2007-2013	
Table 2-12	2-23
Ecosystems That Shape The ESB Environment	
Figure 2-13	2-25
ESB Regional Market Shares, 2006	
Table 2-14	2-26
ESB Regional Market Shares, 2006	

**ENTERPRISE SERVICE BUS (ESB) PRODUCT DESCRIPTION**

Table 3-1	3-9
Cape Clear Software's products provide over 200 companies with the ability to:	

Table 3-2	3-10
Cape Clear ESB	
Table 3-3	3-13
Cape Clear Service Availability	
Table 3-4	3-15
WebSphere Enterprise Service Bus Benefits	
Table 3-5	3-16
IBM WebSphere Enterprise Service Bus Capabilities	
Table 3-6	3-18
WebSphere ESB ease of use	
Table 3-7	3-22
IBM WebSphere® Message Broker Enterprise Service Bus Features and Benefits	
Table 3-8	3-23
IBM WebSphere® Message Broker Web Services support	
Table 3-9	3-25
IBM WebSphere® Message Broker helps develop productivity	
Table 3-10	3-30
ESB Functions	
Table 3-11	3-38
Celtix Features	
Table 3-12	3-45
Polar Lake ESB Features	
Table 3-13	3-49
FusionWare Designer Features	
Table 3-14	3-51
FusionWare Server delivers	
Table 3-15	3-52
FusionWare Administrator Functions	
Table 3-16	3-55
Cordys ESB Benefits:	
Table 3-17	3-61
Additional complexities of Web Services	
Table 3-18	3-63
Service Manager Features	
Table 3-19	3-65
Benefits of TIBCO ESB	
Table 3-20	3-66
TIBCO ESB Key Features	
Table 3-21	3-70
List BEA AquaLogic Benefits	
Table 3-22	3-75
System Characteristics	
Table 3-23	3-76
Areas Where Aqua Logic Service Bus Helps	
Table 3-24	3-78
AquaLogic Service Bus Configurations:	
Table 3-25	3-89
AquaLogic Service Bus Resources	
Table 3-26	3-97
AquaLogic Service Bus Type System Varieties	
Table 3-27	3-98
Ways to handle an error in the pipeline	

Table 3-28	3-99
AquaLogic Service Bus Security Features	
Table 3-29	3-105
Types of Alerts	
Table 3-30	3-112
Centrasite Benefits	
Table 3-31	3-133
Mule Characteristics	
Table 3-32	3-138
Mule Features	
Table 3-33	3-140
The common scenario for using Mule -	

**ENTERPRISE SERVICE BUS (ESB) TECHNOLOGY**

Table 4-1	4-11
Type Of Event Information	
Table 4-2	4-12
Event Management Definition	
Table 4-3	4-16
Integration Services	
Table 4-4	4-18
Business Components Chained Together To Comprise A Business Service	
Table 4-5	4-20
Integration Services	
Table 4-6	4-24
Design Concerns For Integration System Architecture	
Table 4-7	4-31
SOA Engine Manages Information Access To Create A Service	
Table 4-8	4-32
Services Oriented Architecture To Achieve Flexible Infrastructure	
Table 4-9	4-33
Services Oriented Architecture Line Of Business Positioning	
Table 4-10	4-34
Services Oriented Architecture Business Process Efficiency	
Table 4-11	4-34
Services Oriented Architecture Business Process Challenges	
Table 4-12	4-36
Services Oriented Architecture Business Process Risk Management	
Table 4-13	4-37
Services Oriented Architecture Business Process Improvements	
Table 4-14	4-52
Soap-Based Web Service Production Environment Testing	
Table 4-15	4-60
XSLT Transformation Of XML	
Table 4-16	4-61
Metadata Repository	
Table 4-17	4-72
ESBL E-Business Processes	
Table 4-18	4-77
Enterprise Service Bus (ESB) Functions	

Table 4-19	4-78
Enterprise Service Bus (ESB) Features	

**ENTERPRISE SERVICE BUS (ESB) COMPANY PROFILES**

Table 5-1	5-3
Cape Clear Product	
Table 5-2	5-4
Cape Clear Customers	
Table 5-3	5-8
Fiorano Partner Categories	
Table 5-4	5-18
IBM WebSphere Product Categories	
Table 5-5	5-46
Progress Software's Product Categories	

## ABOUT THE COMPANY

**WINTERGREEN RESEARCH**, HAS A UNIQUE RESEARCH STRATEGY THAT RELATES TO IDENTIFYING MARKET TRENDS THROUGH READING AND INTERVIEWING OPINION LEADERS. BY READING THE ELECTRONIC EQUIVALENT OF 40 FEET OF PAPER, WINTERGREEN RESEARCH SENIOR ANALYSTS CAN LEARN A LOT MORE ABOUT MARKETS, A LOT FASTER THAN CAN BE LEARNED THROUGH EXPENSIVE SURVEYS AND FOCUS GROUPS. THINKING ABOUT MARKET TRENDS IS A HIGH PRIORITY AT WINTERGREEN RESEARCH. AS WITH ALL RESEARCH, THE VALUE PROPOSITION FOR COMPETITIVE ANALYSIS COMES FROM INTELLECTUAL INPUT.

IT IS A LUXURY REALLY, AVAILABLE TO ONLY A VERY FEW PEOPLE, TO BE ABLE TO GATHER INFORMATION, LOTS OF INFORMATION FROM READING MASSIVE AMOUNTS OF CONTENT, AND THEN TRYING TO MAKE SENSE OF THAT CONTENT. THE ABILITY TO THINK ABOUT MARKET TRENDS IS ENHANCED BY DOING IT OVER AND OVER FOR MANY DIFFERENT MARKETS. THAT IS WHAT WINTERGREEN RESEARCH IS ALL ABOUT: READING AND THINKING IS AN ESSENTIAL ASPECT OF COMPETITIVE ANALYSIS. TALKING TO OPINION LEADERS IS THE THIRD ESSENTIAL ASPECT OF PRODUCING GOOD, RELIABLE DATA.

**WINTERGREEN RESEARCH**, FOUNDED IN 1985, PROVIDES STRATEGIC MARKET ASSESSMENTS IN TELECOMMUNICATIONS, COMMUNICATIONS EQUIPMENT, HEALTH CARE, INTERNET AND ADVANCED COMPUTER TECHNOLOGY. INDUSTRY REPORTS FOCUS ON OPPORTUNITIES THAT EXPAND EXISTING MARKETS OR DEVELOP MAJOR NEW MARKETS. THE REPORTS ASSESS NEW PRODUCT AND SERVICE POSITIONING STRATEGIES, NEW AND EVOLVING TECHNOLOGIES, AND TECHNOLOGICAL IMPACT ON PRODUCTS, SERVICES, AND MARKETS. MARKET SHARES ARE PROVIDED. LEADING MARKET PARTICIPANTS ARE PROFILED, AND THEIR MARKETING STRATEGIES, ACQUISITIONS, AND STRATEGIC ALLIANCES ARE DISCUSSED. THE PRINCIPALS OF WINTERGREEN RESEARCH HAVE BEEN INVOLVED IN ANALYSIS AND FORECASTING OF INTERNATIONAL BUSINESS OPPORTUNITIES IN TELECOMMUNICATIONS AND ADVANCED COMPUTER TECHNOLOGY MARKETS FOR OVER 30 YEARS.

**ABOUT THE PRINCIPAL AUTHORS**

**ELLEN T. CURTISS**, TECHNICAL DIRECTOR, CO-FOUNDER OF WINTERGREEN RESEARCH, CONDUCTS STRATEGIC AND MARKET ASSESSMENTS IN TECHNOLOGY-BASED INDUSTRIES. PREVIOUSLY SHE WAS A MEMBER OF THE STAFF OF ARTHUR D. LITTLE, INC., FOR 23 YEARS, MOST RECENTLY AS VICE PRESIDENT OF ARTHUR D. LITTLE DECISION RESOURCES, SPECIALIZING IN STRATEGIC PLANNING AND MARKET DEVELOPMENT SERVICES. SHE IS A GRADUATE OF BOSTON UNIVERSITY AND THE PROGRAM FOR MANAGEMENT DEVELOPMENT AT HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION. SHE IS THE AUTHOR OF RECENT STUDIES ON WORLDWIDE TELECOMMUNICATIONS MARKETS, THE TOP TEN INTERNET EQUIPMENT COMPANIES, THE TOP TEN CONTRACT MANUFACTURING COMPANIES, AND THE TOP TEN TELECOMMUNICATIONS MARKET ANALYSIS AND FORECASTS.

**SUSAN EUSTIS**, PRESIDENT, CO-FOUNDER OF WINTERGREEN RESEARCH, HAS DONE RESEARCH IN COMMUNICATIONS AND COMPUTER MARKETS AND APPLICATIONS. SHE HOLDS SEVERAL PATENTS IN MICROCOMPUTING AND PARALLEL PROCESSING. SHE HAS THE ORIGINAL PATENTS IN ELECTRONIC VOTING MACHINES. SHE HAS NEW PATENT APPLICATIONS IN FORMAT VARYING, MULTIPROCESSING, AND ELECTRONIC VOTING. SHE IS THE AUTHOR OF RECENT STUDIES OF THE REGIONAL BELL OPERATING COMPANIES' MARKETING STRATEGIES, INTERNET EQUIPMENT, BIOMETRICS, A STUDY OF INTERNET EQUIPMENT, WORLDWIDE TELECOMMUNICATIONS EQUIPMENT, TOP TEN TELECOMMUNICATIONS, DIGITAL LOOP CARRIER, WEB HOSTING, WEB SERVICES, AND APPLICATION INTEGRATION MARKETS. MS. EUSTIS IS A GRADUATE OF BARNARD COLLEGE.

**WINTERGREEN RESEARCH, INC.**

ORDER FORM

Return To: WinterGreen Research, Inc.  
6 Raymond Street  
Lexington, MA 02421 USA  
Phone: (781) 863-5078 --- Fax: (781) 863-1235 or (781) 860-0897

PLEASE ENTER MY ORDER FOR:

**Enterprise Service Bus (ESB) Market  
Opportunities, Strategies, and Forecasts  
2007-2013**

***-ALL REPORTS ARE AVAILABLE IN EITHER PRINT OR PDF-***

***PDF PRINT***

ENCLOSED IS MY CHECK FOR \$2,800 FOR SINGLE COPY, \$3,800 FOR WEB SITE POSTING

PLEASE BILL MY COMPANY USING P.O. NUMBER \_\_\_\_\_

PLEASE CHARGE MY MASTERCARD/VISA/AMERICAN EXPRESS—

CARD NUMBER \_\_\_\_\_ EXP. DATE \_\_\_\_\_

If charging to a Credit card you may e-mail the order form, but not the card information

Fax or Call with credit card information - Do not send card number as e-mail - You may send the order as e-mail

ADDITIONAL COPIES, @ \$375 (EXTRA COPY PRICE IN EFFECT ONLY WITH INITIAL ORDER)

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

COMPANY \_\_\_\_\_ DIVISION \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE / ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_

FAX \_\_\_\_\_

EMAIL \_\_\_\_\_

**PLEASE NOTE:** RESIDENTS OF MASSACHUSETTS AND CONNECTICUT MUST INCLUDE APPROPRIATE SALES TAX

SUBSCRIBERS OUTSIDE THE UNITED STATES MUST PROVIDE PREPAYMENT IN U.S. FUNDS

REPORT # SH29821492 415 PAGES 107 TABLES AND FIGURES 2007 \$3,200