Sonic ESB® 7

KEY CAPABILITIES

> Connects, mediates and controls services, wherever they are deployed

> Fast, dependable and secure communications

> Transactional failover of service interactions

> Enterprise-class Web services

> Operates across domains, physical networks and corporate boundaries

KEY BENEFITS

> Creates new processes using existing applications and data

> Flexibly adapts to new business requirements

> Easy to learn and use standards-based technology

> Incremental deployment reduces risk and up-front investment

SUPPORTED STANDARDS

> WSDL, SOAP, HTTP, WS-Addressing, WS-ReliableMessaging, WS-Security, WS-Policy

> JMS, JCA, JMX Management

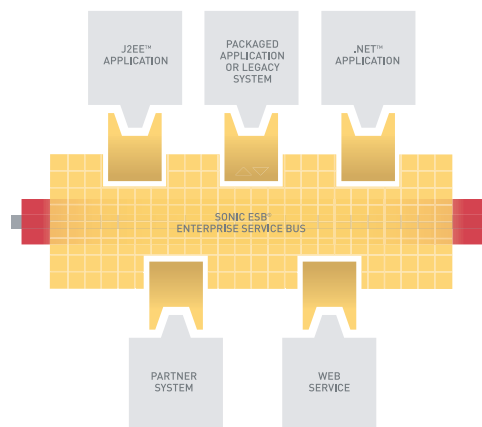> XML, XML schema, XSLT, XPath and XQuery

SONIC ESB® 7

Sonic ESB 7 is an enterprise service bus which simplifies the integration and flexible reuse of business components using a standards-based, service-oriented architecture (SOA).

Overview

Your customers are expecting more for less. New business initiatives, M&A, reorganizations and regulatory compliance all drive business process change. But business processes are hard to change because the IT systems that automate them can't be flexibly adapted to new uses.

SOA promises dramatically improved alignment of IT with the needs of business. To do this, SOA needs an infrastructure which can connect any IT resources, regardless of where they are deployed. To be flexible, it needs an infrastructure which can easily re-assemble services without disruption. And to be dependable, it needs an infrastructure which is robust and secure.
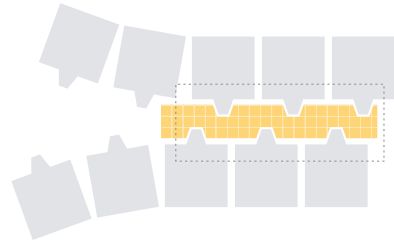
This infrastructure is the Enterprise Service Bus.

Free of the inflexible and costly customization required by other middleware technologies, Sonic ESB lets architects dynamically configure the reliable connection, mediation and control of services and their interactions. Sonic ESB spans clusters and security domains to form a federated environment which can be managed from any point. Configurable service interaction eliminates hard-wired dependencies, so Sonic ESB makes it easy to deploy initial projects and, without disruptive recoding, swiftly evolve, scale and extend them throughout the enterprise.

sonic
SOFTWARE®

SONIC ESB: SIMPLE, FLEXIBLE, MANAGEABLE

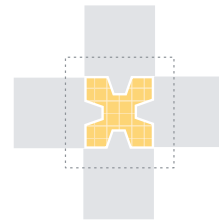### *Connect*

> Easily connect applications, Web services and hundreds of legacy technologies.

> Provide robust, scalable and secure communications.

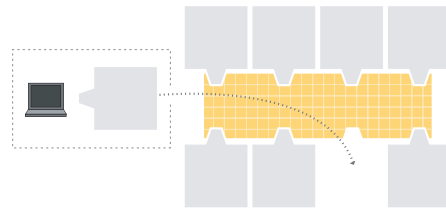> Seamlessly link services and processes across the extended enterprise.

Mediate

> Reconcile incompatible protocols, data formats and interaction patterns of connected services.

> Eliminate inflexible, hard-coded service interdependencies.

> Combine and extend existing services to meet new requirements.

Control
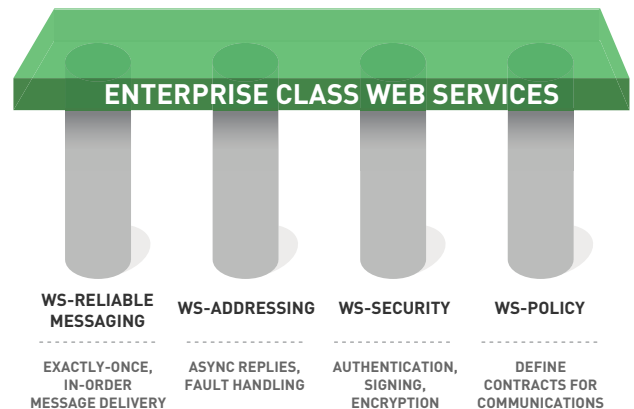
> Dynamically deploy and upgrade hosted services.

> Configure business process and service mediation.

> Gain visibility over the entire distributed infrastructure.

ENTERPRISE CLASS WEB-SERVICES

Sonic ESB 7.0 is the industry's most robust implementation of the advanced Web services standards needed for reliable, secure and event-driven SOA. The first ESB that integrates WS-ReliableMessaging, WS-Addressing, WS-Security and WS-Policy, it dramatically simplifies the development of enterprise-class SOA in an open and interoperable way.

Sonic's advanced Web services implementation leverages the scalability, availability, agility and reach of Sonic's unique distributed services architecture and multi-protocol communication broker technology. Proven in large-scale financial services and telecommunications production environments, it's a foundation that the most demanding environments rely on 24x7.

ENTERPRISE CLASS WEB SERVICES

WS-RELIABLE MESSAGING	WS-ADDRESSING	WS-SECURITY	WS-POLICY
EXACTLY-ONCE, IN-ORDER MESSAGE DELIVERY	ASYNC REPLIES, FAULT HANDLING	AUTHENTICATION, SIGNING, ENCRYPTION	DEFINE CONTRACTS FOR COMMUNICATIONS

SERVICE MEDIATION: ELIMINATE INFLEXIBLE, HARD-CODED SERVICE INTERDEPENDENCIES

Transport, protocol and interaction model mediation
Easily integrate services representing diverse technologies, without modifying underlying applications or introducing hard-coded dependencies. Mediated interaction models include synchronous and asynchronous invocation, publish and subscribe, intelligent routing and stateful orchestration.

Intelligent routing
Configurable subject, content and itinerary-based routing of messages to services on the ESB. Provides highly-scalable service interaction without performance bottleneck or single point of failure.

XML message transformation, splitting, aggregation and enrichment
Rapidly reconcile incompatible data formats used by interoperating services. Merge data from various sources and flexibly extend services' functionality without disturbing running services.

Support for event-driven architecture
Event-driven service model decouples service interactions, minimizing dependencies among integrated services. Simplifies configuration of new service relationships, and supports high-throughput, distributed processing of event streams.

Global service namespace
Logical service naming scheme provides location trans-parency of deployed services: physical deployment of services may be changed without disrupting logical service relationships. Leverages Dynamic Routing Architecture® (DRA) to route data across domains, physical networks and corporate boundaries without introducing significant management overhead. Supports creation of enterprise SOA by allowing data and process flows to span organizations.

SERVICE COMMUNICATION: ROBUST, SCALABLE AND SECURE COMMUNICATIONS

Guaranteed message delivery
Reliably delivers data to the specified destinations according to configured quality of service (e.g. once-and-only-once delivery) and eliminates the need to manage retransmission of data if receiving services are unavailable.

Continuous Availability Architecture™ (CAA)
Provides high availability and transactional fault tolerance. Completely transparent to services; in-process transactions continue without recovery process delay or roll-back. Eliminates operational risk of lost data without expensive RAID, OS clustering software or third-party HA frameworks in the messaging layer. Fast-Forward mode eliminates reli-able messaging bottlenecks created by disk writes, offering more than an order of magnitude greater throughput than any other reliable messaging system.

High performance
Industry-leading high-throughput and low-latency communi-cations, including high-volume/high-availability scenarios (durable, persistent) and high QoS scenarios (durable, persistent, transacted). Provides fast service response at a lower cost of hardware for given throughput requirement.

Clustering
Scales service throughput and ensures constant response time by load balancing over clustered servers. Allows deployments to scale to support large numbers of messages, users and applications.

Dynamic Routing Architecture® (DRA)
Supports global service namespace across large, distributed deployments. Routes data and process flows across clusters and sites without manual gateway reconfiguration.

Flexible security infrastructure
Provides comprehensive, pluggable authentication, authorization and encryption capabilities across the ESB, with flexibility to use existing enterprise security policies. Encryption support from RSA built-in.

SERVICE END POINT CONNECTIVITY: A BROAD SET OF ON-RAMPS TO THE ESB

Web services
Provides advanced Web service endpoint connectivity. Reliable, scalable and secure integration of Web service-enabled applications.

J2EE application connectivity
Exposes J2EE business logic as first-class service on the ESB. Simplifies application server connectivity to ESB.

Database Service (sold separately)
Simplifies access and reuse of relational data sources in a service-oriented architecture.

Adapters for ESB (sold separately)
Reduces time and cost to service-enable and incorporate proprietary packaged applications, B2B, mainframe and legacy technologies.

Enterprise messaging clients
C/C++, Java, COM clients for Sonic ESB. Native language and platform client for most direct and highest performance connectivity.

MANAGEMENT AND ADMINISTRATION: PROVIDES GLOBAL VISIBILITY AND CONTROL

Centralized configuration and monitoring
Built-in JMX-based framework for managing ESB infrastructure and services. Supports management of a large deployment from a single console.

Configuration-driven service interaction
Configurable control of service interactions allows modification of data and process flow without re-coding or shutdown of running services. Provides flexibility to adapt SOA to changing business requirements.

Distributed, dynamic deployment
Support distributed deployment of services and their configuration. Provides ability to independently scale, reconfigure and redeploy individual services without disrupting other operations.

Staged deployment
Supports deployment and migration of ESB services and processes from development, to test, and to deployment environments. Solves the problem of service and process upgrade management for large-scale SOA deployments.

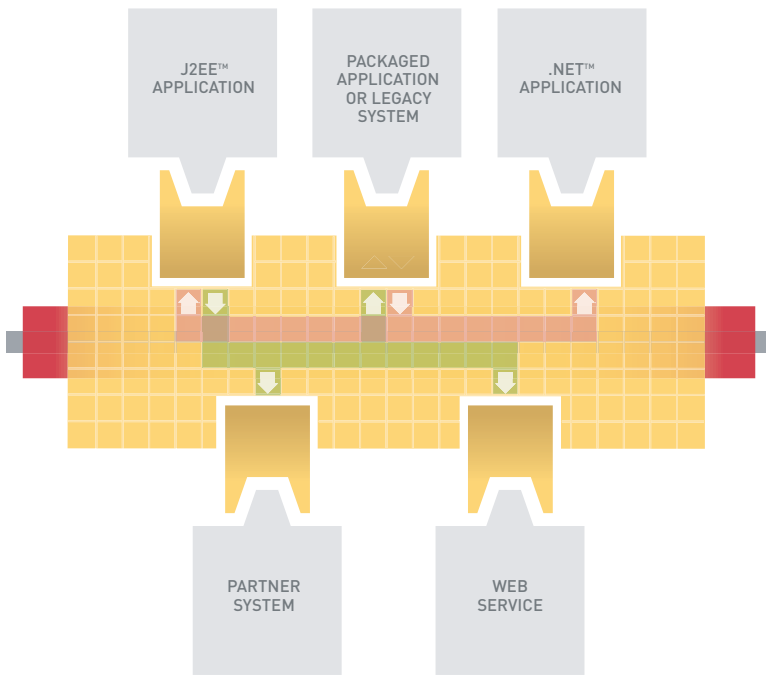### Centralized auditing and logging
Ability to monitor and diagnose behaviors of complex distributed systems through central logging and auditing of services, faults, process status, etc.

IDEAL CHOICE FOR WIDE-AREA SOA

Sonic ESB overcomes the limited scalability and reach of traditional hub-and-spoke-based architectures. By distributing ESB Process state with service communications, Sonic ESB intelligently directs process flow without the overhead of central process state management. This unique process model leverages Sonic DRA to seamlessly span clusters and security domains. The result: end-to-end process visibility and control, without the hub-and-spoke performance bottleneck or the WAN latency incurred in back-and-forth messaging traffic.

SONIC ESB ARCHITECTURE

ESB Services

Your application services, directly deployed in the ESB or proxies for connected IT resources, as well as mediation services, such as transformation and intelligent routing.
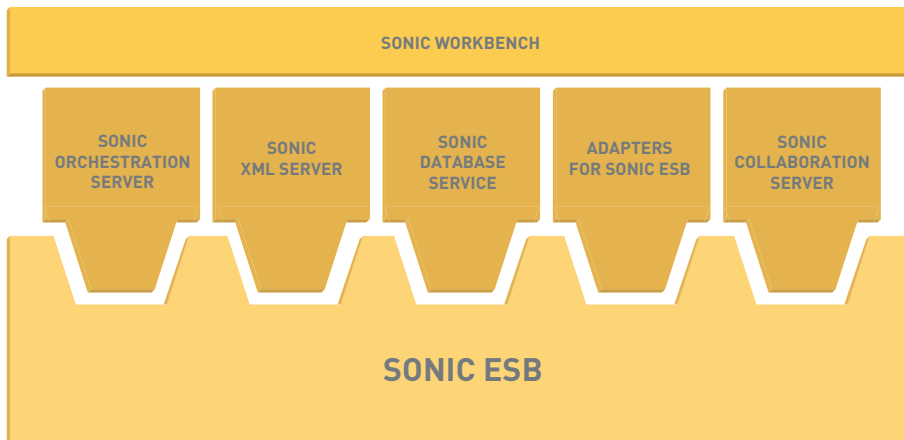
Service Container

Managed environment hosts services and binds them to external connected business services. Supports dynamic deployment and service lifecycle management across large distributed systems.

Multi-Protocol Communication Broker

Reliable, secure, high-throughput and low-latency communications using Web services or JMS protocols. Communication brokers can be clustered and dynamically deployed to scale capacity independent of ESB Containers. Sonic's exclusive Continuous Availability Architecture™ (CAA), provides high availability and transactional fault tolerance without specialized third-party hardware or software.

On the Sonic ESB, all connected resources—whether a J2EE application, a Web service, or a legacy message broker—are first-class citizens. These services are broadly available for dynamically configured interaction with other services. Services can be scaled, moved, or upgraded without disturbing other running services. Service configurations and relationships are stored in a globally-accessible repository. With distributed caching, it's fast and continuously available, even during periods of network outage.

FOUNDATION OF THE SONIC ESB PRODUCT FAMILY

Sonic ESB is the foundation of the ESB Product Family, which adds Sonic Workbench™, the Sonic Orchestration Server™, Sonic XML Server™, Adapters for Sonic ESB, Sonic Collaboration Server™, and Sonic Database Service™ to form a comprehensive, ESB-based distributed services platform, providing business process management and operational visibility across the enterprise.

SONIC ESB: THE CHOICE FOR ENTERPRISE SOA

Improved customer service, better decision support, swifter project delivery. Meeting today's business demands is challenging. Reducing costs at the same time is doubly so.

IT needs to become more efficient in the delivery of differentiated services to the market. Flexibility is essential. This is the promise of SOA. Sonic ESB is the foundation of enterprise SOA.

As the inventor and leading provider of the enterprise service bus, Sonic understands the need to rapidly and flexibly integrate services across the enterprise. Sonic ESB has helped clients:

> Deliver reliable service, with fast response and throughput to spare, even during peak periods.
> Measure the effects of business decisions through up-to-date and unified views of data across systems deployed across multiple locations.
> Reduce IT capital and labor costs through standardization on open technologies.
> Extend these benefits incrementally: deliver value one project at a time, while investing for the future.

Financial Services
Sonic Software enables securities firms to extend their value-chain to customers by easily and securely deploying and managing enhanced services to remote sites and desktops.

Government
Government agencies that need a way to share critical information without compromising the security, privacy, or autonomy of their independent operations, introduce a new order of interoperability and flexibility by using Sonic as the foundation of their service-oriented architecture.

ABOUT SONIC SOFTWARE
Sonic Software is the inventor and leading provider of the enterprise service bus (ESB), a new communication and integration infrastructure that supports the enterprise requirements of a service-oriented architecture (SOA). Sonic's technology delivers the scalability, security, continuous availability and management capabilities necessary to connect, integrate and control distributed, mission critical business processes. Over 1,000 customers use Sonic products to achieve broad-scale interoperability of IT systems and the flexibility to adapt these systems to ever-changing business needs.

Sonic Software is an operating company of Progress Software Corporation (Nasdaq: PRGS), a global software industry leader. Headquartered in Bedford, Massachusetts, Sonic Software can be reached on the Web at www.sonicsoftware.com, or by phone at +1-781-999-7000 or 1-866-GET-SONIC.

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PLATFORMS

Sun Solaris
Microsoft Windows
HP-UX
IBM AIX
SuSE Enterprise Linux
Red Hat Enterprise Linux

PACKAGING

Sonic ESB Enterprise Edition	Per-CPU deployment license
Sonic ESB Continuous Availability Edition	Per-primary CPU deployment license
Sonic ESB Remote Site Edition	Per-CPU deployment license
Sonic Workbench	Named-user development license

Check Sonic's website at www.sonicsoftware.com for the latest information on supported platforms.

www.sonicsoftware.com

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