



Making Software Work Together™

ESBs: Essential Infrastructure for a Successful SOA

March 2005

2



... at a glance

Customers include world's largest firms

- ❑ 80% of Global Telecom
- ❑ 70% of Financial Services in Global 100
- ❑ Blue Chip System Integrator Partners



Worldwide presence

- ❑ EMEA HQ in Dublin, Ireland
- ❑ US HQ in Massachusetts
- ❑ APAC HQ in Tokyo, Japan



Solid business with a history of profitable growth

- ❑ Founded in 1991
- ❑ Publicly traded since 1997
- ❑ \$50+ million cash on hand
- ❑ No debt

NASDAQ:IONA

Our Approach: Making Software Work Together™

- ❑ We work within the normal diversity and heterogeneity found in enterprise computing systems
- ❑ We tie together applications from different vendors running on different operating systems and using different protocols and different message formats
- ❑ Especially when those applications were never designed to be integrated



Making Software Work Together™

The Enterprise Service Bus

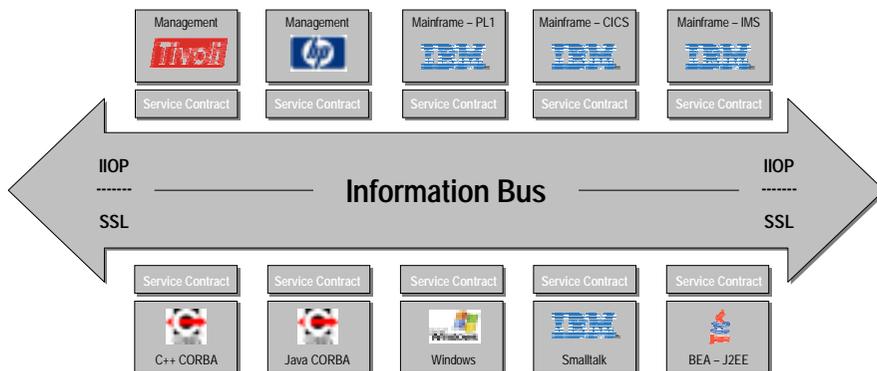
Infrastructure for Mission-Critical SOA



Making Software Work Together™

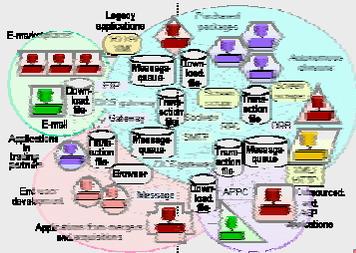
IONA and its Customers Pioneered This Approach

4



Making Software Work Together™



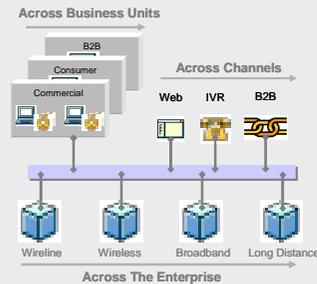


Almost all of the business applications of the enterprise were not written in an SOA-platform technology. Instead are byproducts of the evolution of IT:

- Mainframe transactions
- C++ Client/Server Apps
- Middleware Islands
- Home Grown / Dark Matter

Expose and standardize existing enterprise systems as software services

- Plug-in to business applications and process flows
- Encapsulate the unique complexities
- Extend into the Web services foundation of today's modern software platforms



Infrastructure Requirements for Enterprise SOA

- Industry standard Web services based interoperability
- Qualities of service (QoS) -- for scalability, performance, reliability, security & transactions
- Extended interfaces & contracts
- Registration and discovery
- Management -- monitoring, load balancing, failover, configuration & deployment
- Comprehensive message exchange patterns



Enterprise Service Bus

Gartner

An Enterprise Service Bus (ESB) is a new kind of middleware that combines features from several previous types of middleware into one package.

ESBs provide the fabric of services required for enterprise system interoperability and building new applications.

IONA's View:

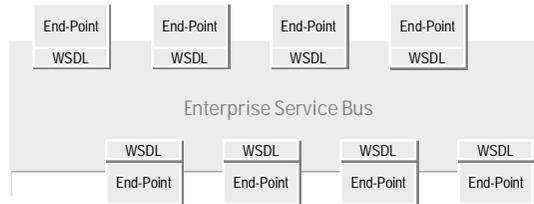
- The best modern way to implement SOA
- Designed specifically to support SOA with Web services
- Radically changes the technology and economics of integration projects

Industry consensus:

- Deep native support for all relevant XML and Web services standards
- Transformation capability and routing support
- Support for existing enterprise applications platforms and infrastructures

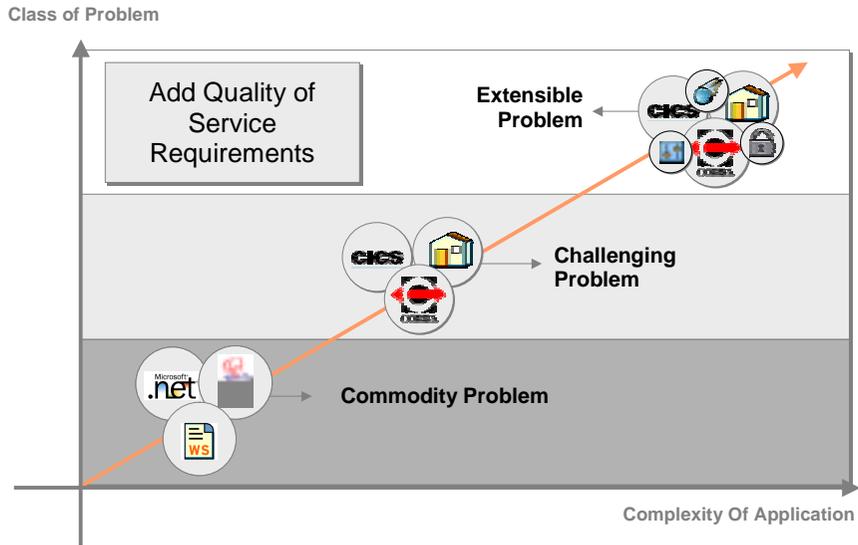
Offer order-of-magnitude better economics than enterprise application integration (EAI) or customized integration approaches.

ESBs Demystified

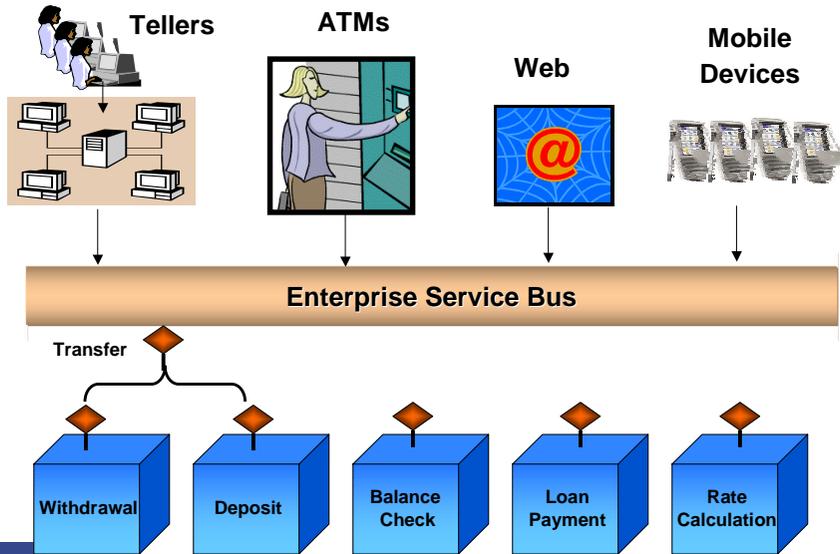


- ESBs are a collection of distributed, interconnected end-points
 - ESBs cannot be based on a single transport – but instead must support multiple transports
 - ESBs do not use an internal canonical format – but must support transformation and routing
-
- Endpoints must be secure, manageable and reliable
 - Endpoints must support configurable QoS for small footprint
 - Endpoints are standards based (WSDL) and extensible

Extensible - Class of Problem



Services oriented agility – example





Artix, the Extensible Enterprise Service Bus



Making Software Work Together™

Artix

- Extensible Enterprise Service Bus (ESB) - non-invasively, service-enables valuable IT investments, while preserving their mission-critical qualities
- Enables your existing enterprise applications to be integrated with common infrastructure components
- Key Features:
 - Plug-In Architecture for Transports, Protocols, Application Platforms and Value-Added Services
 - Broad Platform Support Including the Mainframe
 - Proven High Performance Lightweight Run-Time



Artix Customers



Making Software Work Together™

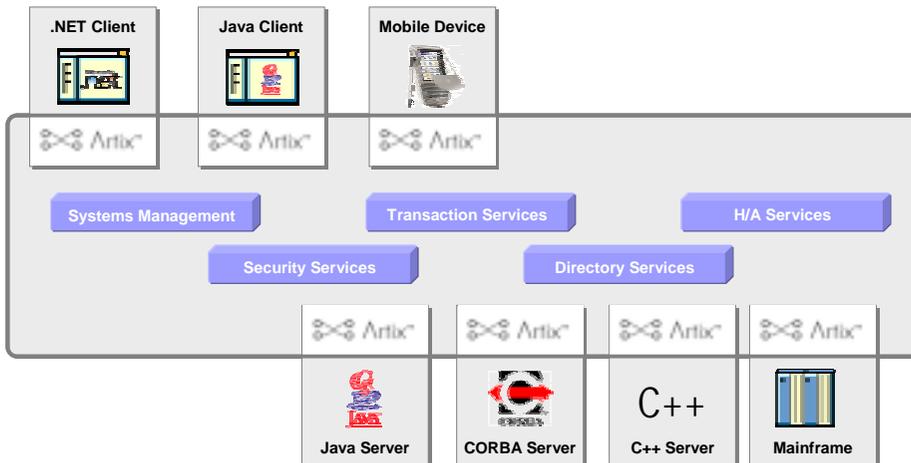
Plug-In Architecture

Transports, Protocols, Application Platforms and Value-Added Services

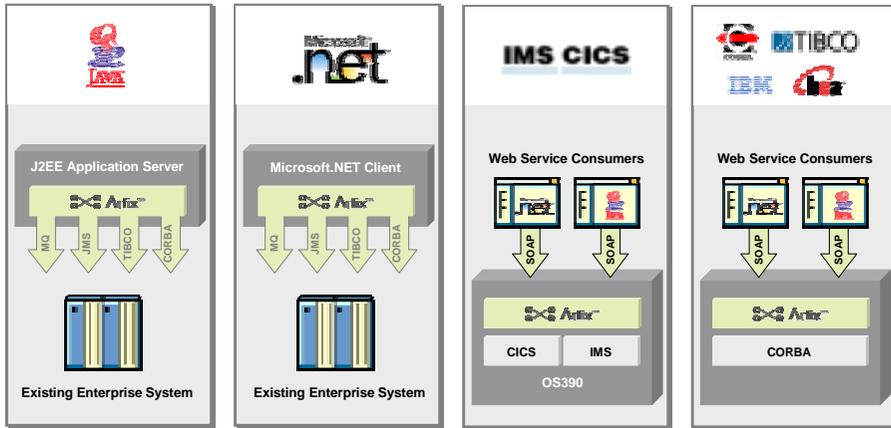
- Popular messaging middleware & application platforms
- Plug-Ins extend existing security, management, high availability and transaction capabilities



Mobile to Mainframe

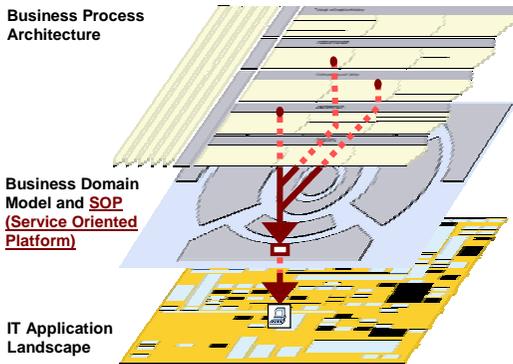


Broad Platform Support



Making Software Work Together™

ESB Early Adopter



Since 1999 Deutsche Post works successfully on introducing and running an ESB

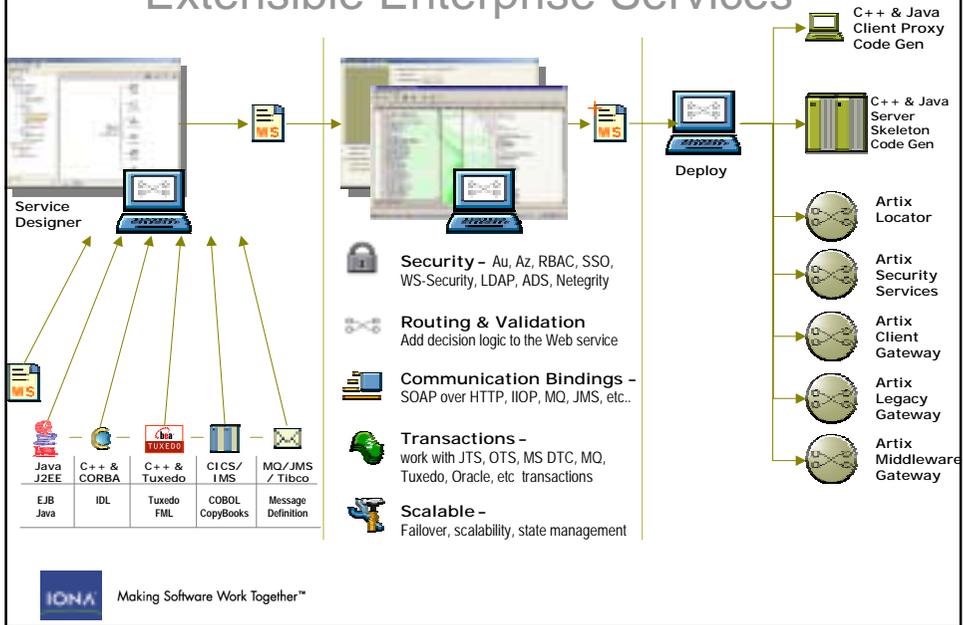
- Developed and operational since end of 2001
- About 20 service participants implemented
- More than 80 services available



Making Software Work Together™

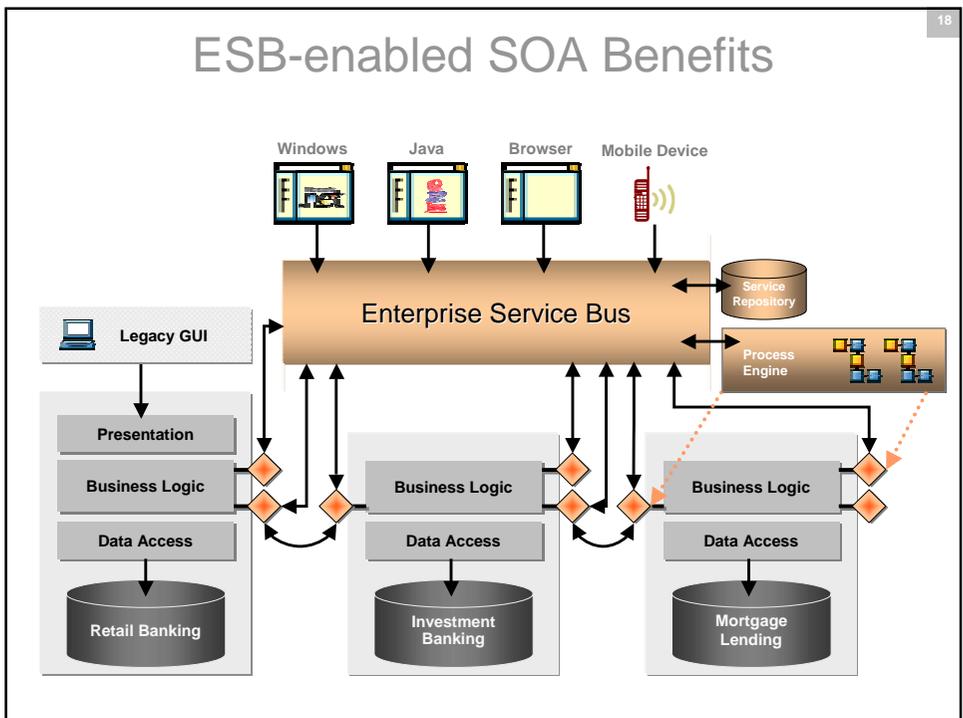
Rapid Configuration of Extensible Enterprise Services

17



ESB-enabled SOA Benefits

18



For More Information

Download the Extensible Integration
Strategies White Paper at:
www.iona.com/whitepapers



Upcoming Webcasts:

- Next Generation ESBs – March 16th
- Successful SOA Using CORBA – March 23rd



www.iona.com/webcasts

Or visit us on the Web at: www.iona.com/artix



Making Software Work Together™