FUJITSU

Fact Sheet
Fujitsu Interstage Business Operations Platform: Smart Services Grid

Aligning SOA with BPM to Achieve Business Agility

The Fujitsu Interstage® Business Operations Platform (BOP) is a next-generation business solution and integration platform. Based on the leading Business Operations Platform from Cordys™ Software, it is designed to truly support the way businesses operate, finally bringing the worlds of business and IT together.

The SOA approach

Service-Oriented Architecture (SOA) offers a new approach to business design and plays a fundamental role in the development of an agile enterprise — one that supports improved speed, cost and quality. SOA enables the sharing of business capabilities, ensuring that they can be applied in various business contexts. This allows organizations to achieve economies of scale and consistency of operations and control. From an information technology perspective, a SOA-led approach enables the effective management of complex IT assets — systems, applications and databases — making them easier to re-use, integrate and evolve without any disruption to the business solutions that use them.

Business Process Management (BPM) orchestrates other IT systems such as existing databases, legacy systems and packaged solutions, to create flexible end-to-end business processes. SOA enables the agility required for BPM by presenting modular and loosely coupled services that wrap the underlying IT infrastructure using industry standard interfaces such as WSDL, SOAP and XML.

Interstage BOP Smart Services Grid
How Interstage BOP Smart Services Grid contributes

At the heart of the Interstage BOP Smart Services Grid is an Enterprise Service Bus (ESB), with the associated benefits of granular failover and scalability. To achieve near-linear scalability, the Interstage BOP Smart Services Grid provides self-optimizing load management and fully distributed deployment of all services on a grid of commodity blades. A robust, high-availability framework allows non-stop execution of business processes.
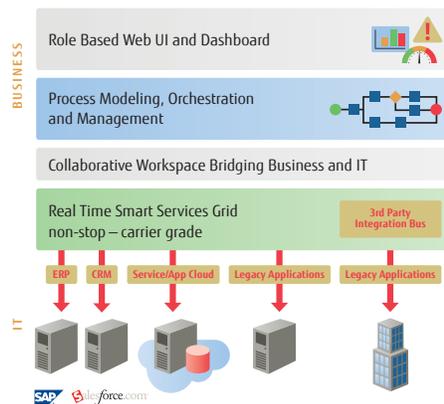

Diagram 1: Interstage BOP Smart Services Grid

Interstage BOP ESB features

Interstage BOP Enterprise Service Bus features a standards-based Web services architecture, which is a superior method for achieving complete interoperability among different systems. By contrast, many ESB vendors use the Java Message Service (JMS) rather than Web services (WSDL, SOAP, and UDDI). The distributed nature of the ESB architecture makes Interstage BOP more scalable and available.

Unlike a hub-and-spoke architecture, Interstage BOP ESB does not have a central hub, which eliminates single point of failure and removes a common performance bottleneck. In a hub-and-spoke architecture, all backend systems (spokes) rely on the hub to communicate with each other and any hub failure causes the entire integrated system to fall over. In addition, any backend systems can potentially overload the hub, making it necessary to augment the hub with additional computing power. However, using the Interstage BOP ESB, additional computing power can be applied where it is truly needed, on specific backend systems that exhibit higher workload.
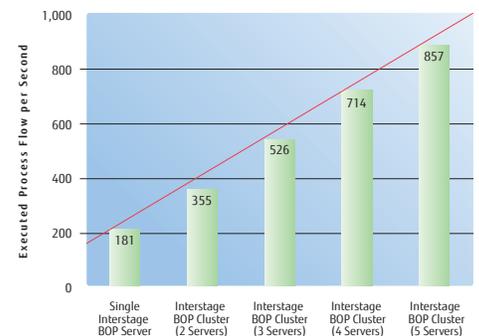

Diagram 2: Process flows with Interstage clusters

Interstage BOP ESB, with its superior middleware capabilities, is complemented by a number of components to form the Interstage BOP Smart Services Grid offering, providing a robust platform for building composite applications, coupled with efficient system administration and management capabilities:

- Interstage BOP Gateway serves as an entry point for clients accessing Interstage BOP services over the internet, making the enterprise applications hosted on Interstage BOP available beyond the firewall

- Interstage BOP Connectivity framework enables organizations to connect to their existing enterprise assets (such as databases, packaged applications, legacy systems, FTP servers and email servers), reusing them in new composite applications

- Interstage BOP Services framework enables developers to create and manage the service life-cycle on the Interstage BOP Smart Services Grid. Organizations can employ a wide range of communication and messaging protocols to access services deployed on the Smart Services Grid

- Interstage BOP Application Deployment framework provides robust capabilities for packaging and deploying applications in a variety of deployment styles including support for single server instances and clustered models in between demilitarized zones, as well as in private or public hosted environments

- Interstage BOP Single Sign On (SSO) delivers full support for single sign on using SAML 1.1 to provide seamless access to software assets across trusted domains with a single identity

Why Interstage BOP Smart Services Grid?

Interstage BOP Smart Services Grid, with its robust capabilities, is uniquely positioned to quickly deliver benefits to a broad range of organizations, by leveraging existing IT assets as services. This provides a framework for true business agility, enabling enterprises to adapt rapidly to changing business needs and substantially lowering the total cost of ownership. The Smart Services Grid is a feature-rich, easy-to-use environment, which is built on a near linear scalable architecture.

Interstage BOP offers a complete solution for any business seeking to create a flexible, process-oriented enterprise by combining the business process components with a Service-Oriented Architecture, Business Process Modeling, Business Activity Monitoring (BAM), and composite application development/deployment into a single unified environment.

About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.5 trillion yen (US$55 billion) for the fiscal year ended March 31, 2011. For more information, please see http://www.fujitsu.com