Using VisiBroker, the market leading CORBA environment, to scale up your distributed applications
EXECUTIVE SUMMARY

In the rush to adapt to changing market realities, a successful enterprise constantly reinvents itself. Competitive pressures, evolving service delivery models and the increasing mobility of both its workforce and customer base dictate the need for ultimate agility. A key element of such an enterprise is an effective portfolio of distributed technologies and software applications capable of serving multiple data sources, devices and other delivery channels simultaneously. This paper will summarize how Micro Focus VisiBroker™ can help you build a truly agile, distributed and high-performing enterprise.

ROBUST INDUSTRY SOLUTIONS

Consider some of the challenges industries face in the age of global mobility and connectivity.

Over the past few years, communication service providers (CSPs) have increasingly focused their resources and efforts on migration to mobile platforms and devices. With competitive pressures mounting, efficient, interoperable OSS (Operations Support Systems) and BSS (Business Support Systems) are also being retooled to enable a better combination of services, features, equipment and content at the most granular level to meet market demand.

Because VisiBroker is ideally suited to the construction of complex, large mission-critical applications requiring high performance, high reliability and low latency characteristics, it is the infrastructure of choice for leading global Telecom providers and ISVs. For the past decade they have been using VisiBroker to develop and integrate leading edge OSS, number portability, radio networking and VOIP solutions.

In the Defense arena, the smart battlefield initiative is gaining traction in many national defense and internal security organizations. This initiative includes the ability to quickly and securely transmit information from thousands of end points to an intelligent control center and use it for both operational and decision-making purposes.

VisiBroker is being leveraged as the basis for the most advanced military tracking and guidance systems worldwide, including devices in tanks, jeeps, trucks and moveable command stands. Its highly reliable and secure environment makes it ideal for use in this demanding space.

Organizations in other domains – including investment banking and pension funds, transportation, government and healthcare – face similar challenges. With the growing sophistication and ubiquity of devices and applications, end customers and internal users require robust and highly reliable solutions spanning large networks with diverse hardware, operating systems, databases and programming languages, handling high workloads behind the scenes.

By its design as the leading CORBA object request broker, VisiBroker is used to assemble and run these applications in an optimal manner. As a natural result, VisiBroker is the “glue” behind many other leading-edge industry applications, including:

- **Financial Services**: Monetary clearing systems, internal digital communications within banks, investment banking front office clearing systems;
- **Entertainment**: an innovative digital, secure TV pay-per-view application;
- **Healthcare**: Patient monitoring systems including heart and blood pressure monitoring from personal devices;
- **Transportation**: Newly developed traffic monitoring systems;
- **Government**: One of the largest unemployment processing systems in the world.
BEST FIT FOR MISSION-CRITICAL NEEDS

What makes VisiBroker a better selection than the alternatives? That depends on the problem domain being addressed. While conventional middleware and application server technologies may suffice for many operational tasks, VisiBroker is the best fit for systems with inherently distributed problem domains: where the components of the system are necessarily separated, either physically or geographically.

Consider that a mission-critical system promotes requirements that drive to the heart of an organization’s ability to compete and to deliver. Where it requires integration of distributed components, having expertise in solving the problems introduced by distribution is crucial to creating a successful system. Distributed systems challenges occur wherever the physical or geographical separation of components is intrinsic to the problem: for example managing a telecoms network or controlling road traffic. In contrast to linking libraries into a single executable, providing functionality with distributed components creates problems of discovery, failure handling and heterogeneous platforms.

For a complex, mission-critical system to deliver competitive advantages, it must also be well engineered. VisiBroker provides the developer a high degree of control over the management of internal resources, thereby facilitating trade-offs between these conflicting requirements.

CONSISTENCY IN BOTH STANDARDS AND IMPLEMENTATION

The insights captured in VisiBroker’s architecture and the emphasis placed on keeping it coherent through more than a decade of innovative development set VisiBroker apart from other request-reply middleware. Standard specifications only capture half the story: the purpose of certain provisions within a specification is known to the authors but not easily recreated from the final document. The engineers who built VisiBroker lead the specification process and in many cases VisiBroker innovations seeded the specifications themselves. The continuity that promotes a coherent architecture also ensures that support is provided by experts. VisiBroker compares against open source solutions favorably for all of these reasons.

Looking to the future, systems that migrate to Cloud Computing will necessarily be distributed. Furthermore, problems raised by distributed systems and the solutions provided will be transparent to the consumers of Cloud Computing Services. VisiBroker has a track record of allowing engineers to solve these issues and to hide the solutions.
SUMMARY OF BENEFITS

Highest total cost of ownership (TCO) value

VisiBroker offers the best price-performance ratio of any commercial CORBA ORB on the market, as well as better development productivity and rapid integration. It provides very high reliability and built-in management capabilities to reduce system downtime while ensuring efficient, active resource utilization. Coupled with outstanding technical support, VisiBroker is a cost-effective, low risk solution for CORBA applications.

Impressively engineered to give power-users the edge

VisiBroker is engineered internally to the highest standards to enable users to build sophisticated distributed systems that meet the most demanding requirements thrown at Systems Architects. This attention to detail allows high performance, highly scalable and highly reliable challenges to be met without compromise. Additional components solve security, transactional and asynchronous notification needs.

Services-oriented multi-technology interoperability

VisiBroker allows CORBA applications to be SOA-enabled by providing out-of-the-box functionality to interoperate with applications based on Web Services and J2EE standards. Additionally, VisiBroker enables developers to write .NET applications, in any .NET language (such as Microsoft® C++, C# and Visual Basic®), that can talk to existing, unmodified CORBA and J2EE applications.

Backward compatibility and interoperability

VisiBroker releases provide built-in features for CORBA application compatibility, interoperability and efficient migration. This feature provides investment protection and a migration path for applications written in prior versions of VisiBroker.

Widest range of support for hardware, operating system and compiler

VisiBroker recognizes that Systems Architects will already be placed under platform constraints so VisiBroker is available for a wide range of platform options. Available platforms are characterized by operating system, processor architecture, C++ compiler and JDK.

About Micro Focus

Micro Focus, a member of the FTSE 250, provides innovative software that allows companies to dramatically improve the business value of their enterprise applications. Micro Focus Enterprise Application Modernization and Management software enables customers’ business applications to respond rapidly to market changes and embrace modern architectures with reduced cost and risk.

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