VisiBroker

Micro Focus is the world’s largest provider of CORBA products. VisiBroker 8.5, Orbix 6 & Orbix 3 are part of a comprehensive suite of Premier CORBA products designed for distributed applications. Premier ORBs are built to enable easy integration with Micro Focus® CORBA Modernization Add-Ons.

Product Highlights
Micro Focus CORBA solutions have been under continuous development and improvement for over 25 years. VisiBroker underpins mission-critical systems in many of the world’s largest organizations. Micro Focus’s commitment to the future of CORBA ensures its customers can continue to rely on VisiBroker to power their CORBA applications for decades to come.

Built on proven, open industry standards and a high-performance architecture, VisiBroker is ideally suited for low latency, complex, data-oriented, transaction-intensive, mission-critical environments. With its thread and connection management and efficient implementation of the IIOP protocol, VisiBroker easily scales to large numbers of clients and servers. It also supports the CORBA Real-time specifications for deployment within embedded systems.

Micro Focus delivers binary compatibility for future versions of VisiBroker 8.5, allowing an easy upgrade to the latest CORBA technology. Micro Focus’s continuing support for the latest operating systems and compilers enables organizations to take advantage of the latest performance improvements within modern hardware platforms.

VisiBroker provides all the functionality needed for seamless interoperability of CORBA applications with other leading technology stacks.

Key Benefits
Modernization Built-In
VisiBroker provides backwards binary compatibility, interoperability and efficient migration, thus ensuring CORBA applications to benefit from new features, improvements, and security enhancements delivered by future VisiBroker release updates, without requiring existing CORBA applications to be rebuilt. Drop-in VisiBroker release upgrades minimize application maintenance and modernization costs.

Low Total Cost of Ownership (TCO)
VisiBroker offers improved developer productivity and rapid integration. Built-in management capabilities reduce system downtime while ensuring efficient use of resources. This provides a low risk solution for CORBA applications.

Engineered for the Enterprise
VisiBroker is engineered internally to the highest standards to enable users to build distributed systems that meet the most demanding enterprise requirements. This attention to detail enables challenges surrounding high performance to be met without compromise. Additional components solve security, transactional and asynchronous notification needs.

Services-Oriented Multi-Technology Interoperability
VisiBroker provides all the functionality needed for seamless interoperability of CORBA applications with other leading technology stacks.

Data Sheet
Application Modernization and Connectivity

- Unified Java and C++ ORB implementation that shares a common configuration, developer toolset, and set of services across languages
- Portable Object Adapter (POA) ORB that also provides compatibility with Basic Object Adapter (BOA) developed applications
- VisiBroker OSAgent and Object Activation Daemon manages applications for minimal configuration, automatic discovery of services and objects. Provides load-balancing and high availability across Object replicas
- Real-Time CORBA features in C++
- Transport layer security—TLS/SSL
- CORBA layer security—CSIv2, authentication, delegation, authorization, identity assertion, impersonation support
- Java Remote Objects programming with RMI-over-IIOP and Java-to-IDL
- Distributed transaction support through the Object Transaction Service
- CORBA services persistence pluggable via JDBC, licensed Embarcadero JDataStore relational database included
- Operational visualization with management GUIs: VisiBroker Console, JDataStore Explorer
- CORBA 3 support—CORBA 3 specification compliant product features such as CORBA Messaging, and AMI enable loosely coupled microservices application development
Multi-Platform Availability
VisiBroker is formally supported on an extensive range of platforms including Windows, multiple distributions of Linux on Intel, Solaris, HP-UX, and AIX. For each operating system, VisiBroker supports several processor architectures and is compatible with multiple JDK versions including Java 11. For a complete list of supported platforms see the System Requirements section of this datasheet.

Key Features
High Availability of CORBA Services
Easy configuration for automated discovery of objects, load balancing and failover of CORBA objects through the VisiBroker Smart Agent (OSAgent) and CORBA Naming Service. Together they enable high availability of application objects/servers through object clustering.

CORBA 3 Support
CORBA 3 specification compliant product features include Portable Interceptors (PI), Portable Object Adapters (POA), Objects-by-Value (OBV), Dynamic Invocation Interface (DII), Dynamic Skeleton (DSI), Repository Interface (IR), Messaging QoS and Internet Inter-ORB Protocol (IIOP).

Security
Transport Layer Security provides data security for applications that communicate across networks. VisiSecure applications communicate using IIOP layered above SSL/TLS. The SSL/TLS protocol provides connection security that has three basic properties: Authentication, Confidentiality, and Integrity.

VisiSecure includes support for the latest TLS protocol versions and cipher suites.

In addition, VisiSecure features include:
- Support for the OMG Common Secure Interoperability specification, version 2 (CSIv2) includes username/password authentication, identity propagation control fully integrated with the security server, and a single sign-on CORBA login service.
- Through the use of VisiBroker Vault, the ORB can distribute pass-phrases to automatically launched server applications. The Vault is responsible for managing the secure storage and retrieval of authentication data and it aids the usability and security of the product by providing username and password credentials automatically to servers without user interaction. These communications are fully TLS secure (encryption, privacy and integrity are available).

Operational Visualization
VisiBroker Console provides a runtime view of distributed objects, which helps in development and debugging of CORBA applications.

Asynchronous Messaging Interfaces
VisiBroker implements key features of the CORBA Messaging specification from CORBA 3. Asynchronous Messaging Interfaces (AMI) enable clients to make type-safe, asynchronous invocations of normal CORBA operations.

Bidirectional GIOP Support
Bidirectional GIOP allows connections from the client to the server to be reused for callbacks from the server to the client, offering a simple and efficient solution to the problem of traversing network firewalls or NATs.

RMI-over-IIOP and Java-to-IDL
Write CORBA applications in Java without having to learn IDL and other CORBA specific features. Migrate existing RMI applications to the high-performance VisiBroker runtime environment.

Firewall Support
VisiBroker supports bi-directional GIOP for managing a return path through a firewall, as well as, a flexible proxy-server for managing HTTP web connections, and configuring connections for firewalls and Network Address Translations. Micro Focus I-DBC, and IIOP firewall and proxy service is also available as a CORBA Add-On product.

Real-Time Requirements
VisiBroker for C++ provides a compliant implementation of the Real-time CORBA specifications for applications with real-world timing requirements. Real-time CORBA extensions provide granular control of resource utilization and multi-threading behavior.

Learn more at www.microfocus.com/products/corba/

System Requirements
- Linux on Intel platform support including Red Hat 5, 6, and 7, SUSE 10, 11, and 12, Oracle Unbreakable Linux 6, Ubuntu and CentOS
- Embedded Linux platform MontaVista Linux CGE v4
- UNIX support across a variety of platforms including AIX 6 and 7, Solaris 10 and 11 SPARC and x86_64, and HP-UX Itanium 11iv3
- Oracle JDK 7, 8 and 11
- Open JDK 8 and 11
- HP JDK 7 and 8
- IBM JDK 7 and 8
- Sun JDK 6

For full details, check the Micro Focus SupportLine site: https://supportline.microfocus.com/prodavail.aspx