Rocket software

Rocket® VisiBroker®

(formerly a Micro Focus® product)

™

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

Product highlights

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

Built on proven, open industry standards and a high-performance architecture, Rocket 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, Rocket VisiBroker easily scales to large numbers of clients and servers. It also supports the Rocket CORBA Real-time specifications for deployment within embedded systems.

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

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

Rocket software | **CORBA** An OMG Standard

Discover the Future of CORBA

Quick view

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.

Rocket 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.

Comprehensive enterprise-strength implementations of OMG CORBA services: Naming Service, Notification Service, Event Service, Telecom Log Service, Time Service, Interface Repository.

CORBA services persistence pluggable via JDBC, licensed Embarcadero JDataStore relational database included.

Operational visualization with management GUIs: Rocket 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.

Key benefits

Modernization built-in

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

Low total cost of ownership (TCO)

Rocket 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 Rocket CORBA applications.

Engineered for the enterprise

Rocket 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

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

Multi-platform availability

Rocket 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, Rocket 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 Rocket CORBA services

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

Rocket CORBA 3 support

Rocket 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 (IR), Messaging QoS and Internet Inter-ORB Protocol (IIOP).

Security

Transport Layer Security provides data security for applications that communicate across networks. Rocket® 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.

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

In addition, Rocket VisiSecure features include:

• Support for the OMG Common Secure Interoperability specification, version 2 Level 0 (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 Rocket 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

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

Asynchronous messaging interfaces

Rocket 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 Rocket CORBA specific features. Migrate existing RMI applications to the high-performance Rocket VisiBroker runtime environment.

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Firewall support

Rocket 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. I-DBC, and IIOP firewall and proxy service is also available as a Rocket CORBA Add-On product.

Real-time requirements

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

System requirements

- Windows XP, Windows 7, Windows 8.1, Windows 10, Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019 with Visual Studio 2008, 2012, 2013, 2015, 2017, and 2019
- Linux on Intel platform support including Red Hat 5, 6, 7 and 8, SUSE 10, 11, 12, and 15, 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 6, 7, and 8
- Sun JDK 6

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