Rocket software

Rocket® VisiBroker-RT 7.0

(formerly a Micro Focus® product)

Rocket Software is the world's largest provider of CORBA products. Rocket VisiBroker-RT 7.0, alongside Rocket® VisiBroker® 8.5*, Rocket® Orbix 6* and Rocket® Orbix 3*, form a comprehensive suite of Premier CORBA products. Premier ORBs are built to enable easy integration with Rocket® CORBA Modernization AddOns.

Product highlights

Rocket CORBA solutions have been under continuous development and improvement for over 30 years. Rocket VisiBroker underpins mission-critical systems in many of the world's largest organizations. Rocket software's commitment to the future of CORBA ensures its customers can continue to rely on Rocket VisiBroker to power their 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. Rocket VisiBroker-RT supports the CORBA Real-time specifications for deployment within embedded systems. Rocket Software'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 CORBA applications with other leading technology stacks.

Key benefits

Compact and efficient

Rocket VisiBroker-RT for C++ is made available as a set of high performance runtime libraries. Application developers are free to pick and choose which features are to be loaded, enabling the application footprint to be kept as small as necessary to suit the target constraints.

Accelerates distributed software development

Rocket VisiBroker-RT simplifies and accelerates distributed software development by providing a complete, high-level, C++ communications infrastructure that liberates developers from the low level details of interprocessor messaging and system architecture.

Full CORBA compliance

Rocket VisiBroker-RT provides a complete CORBA implementation, maximizing source code port ability and runtime interoperability. Allows embedded developers to choose between a full CORBA implementation and the CORBA/e Compact Profile — both with the Real-Time CORBA extensions.

Quick view

Rocket VisiBroker-RT for C++* accelerates development and deployment of distributed applications incorporating embedded computers, including communications equipment, defense electronics, instrumentation, and process control systems.

CORBA 3 compliant.

Compliant with OMG Realtime CORBA Specification version 1.2.

Portable Object Adapter (POA) ORB that also provides compatibility with Basic Object Adapter (BOA) developed applications.

VisiBroker OSAgent 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++.

Provides OMG Naming and Event Services.

Rocket software | CORBA An OMG Standard

Discover the Future of CORBA

Well suited to heterogeneous applications

For applications that span embedded and general-purpose systems, Rocket VisiBroker-RT and Rocket VisiBroker 8.5 (for C++ and Java) provide the same development tools, programming interfaces, and high availability infrastructure. For example, user interface and management applications can be developed in Java, while the embedded agent is written in C or C++ where typically no on-board Java Virtual Machine is available.

Enables highly available applications

Rocket VisiBroker-RT allows an object to have redundant instantiations. In the event that an object is no longer accessible — due to hardware, network, or software reasons — requests can automatically fail-over to a backup. Multi-homing allows an object to be visible on multiple networks; if one network fails, communication reroutes to an alternate.

Proven reliability and interoperability

The core technology that underlies both Rocket VisiBroker-RT and VisiBroker 8.5 is the most widely deployed CORBA solution on the market.

Key features

Rocket VisiBroker-RT for C++ CORBA compliance

- Compliant with CORBA 3, minimizing the learning curve for developers with CORBA experience.
- A complete Portable Object Adapter (POA) implementation maximizes portability and allows optimization of application performance and memory utilization.
- IIOP 1.2 maximizes runtime interoperability with other CORBA implementations.
- Rocket VisiBroker-RT for C++ also allows choice between full CORBA and CORBA for Embedded (CORBA/e) Compact Profile which minimizes static memory utilization.
- Real-Time CORBA extensions provide fine-grained control over resource utilization and multi-threading behavior.
- Interoperable Naming Service (INS) provides standard mechanism for locating objects and interoperates with other CORBA implementations.
- Event Service provides supplier-consumer and publish-subscribe messaging model; events (such as alarms) may be delivered to multiple consumers with a single call.

Embedded and real-time optimizations

- Native support for fully utilizing the available CPU cores to service many object requests concurrently (VxWorks SMP).
- Support for running applications in kernel mode or user mode (VxWorks RTP).
- Extensible Transports enable the use of custom and other nonTCP/IP networks.
- System-level logging interface allows custom handlers to be installed for both Rocket VisiBroker-RT and application-originated error, warning, informational, and debug messages.
- Optimized communications between in-process clients and servers — performance can be nearly that of a direct function call.

Robust development environment

- Visualization tools available through Customer Support aid in both development and debugging by providing runtime view of Rocket VisiBroker-RT and distributed objects.
- Wind River VxWorks Simulator (VxSim) support allows development and testing to proceed without the need for target hardware.

System requirements

- Development host on Red Hat Linux 7, Red Hat 8, OpenSUSE Leap 15.1
- VxWorks 7: ARM, Intel/AMD, SIMLINUX. Other VxWorks-supported chipsets available on demand.

For full details of system compatibility please check the Support Line site.

*formerly Micro Focus products

MAR-11002_DS_VisiBrokerRT_V2