Rocket software

Rocket® Orbix® 6

(formerly a Micro Focus® product)

Rocket is the world's largest provider of Rocket CORBA products. Rocket Orbix 6, along with Rocket VisiBroker 8.5* and Rocket Orbix 3*, is part of a suite of comprehensive Premier Rocket CORBA products designed for developing, deploying and managing distributed applications. All of our 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 Orbix underpins mission-critical systems in many of the world's largest organizations. Rocket's commitment to the future of Rocket CORBA enables organizations to rely on Rocket Orbix to power their enterprise applications for decades to come.

Built on proven, open industry standards and a high-performance architecture, Rocket Orbix 6 is ideally suited for integration and scalability problems in the largest and most complex systems. Rocket Orbix is attractive to organizations that need large, resilient systems to handle enormous peak volumes of data and service requests, while guaranteeing a high level of availability.

Rocket delivers binary compatibility for future versions of Rocket Orbix 6, enabling an easy upgrade to future 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 Orbix 6 provides all the functionality needed for seamless interoperability of Rocket CORBA applications with other leading technology stacks.

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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.

Automatic discovery of objects and services through Rocket Orbix locator and node daemon services, providing load-balancing and high-availability across object replicas.

Highly available, replicated, and fault tolerant Rocket Orbix services to build reliable and performant Rocket CORBA applications.

Transport layer security — TLS / SSL.

Rocket CORBA layer security — CSIv2, authentication, delegation, authorization, identity assertion, and impersonation support.

Distributed transaction support through the Object Transaction Service.

Comprehensive enterprise strength implementations of the OMG Rocket CORBA Services: Naming Service, Notification Service, Event Service, Telecom Log Service, Interface Repository, Trading Service, Persistent State Service.

Rocket CORBA Persistent State Service backed by embedded replicated Berkeley DB.

Berkeley DB Persistence State Service available for user application state replication.

Operational visualization with management GUIs: Rocket Orbix Configuration tool, Management Service Web console, Notification Service console, Telecom Service console, Trading Console.

Rocket CORBA 3 specification support — compliant product features such as Rocket CORBA Messaging, and AMI enable loosely coupled microservices application development.

Key benefits

Modernization Built-In

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

Low Total Cost of Ownership (TCO)

Rocket Orbix 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 Orbix is engineered internally to the highest standards to enable users to build distributed systems that meet the most demanding 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

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Multi-Platform Availability

Rocket Orbix is supported on Windows, multiple distributions of Linux, Solaris, HP-UX, and AIX. Rocket Orbix supports several processor architectures and is compatible with multiple JDK versions including Java 11. See the System Requirements section for a complete list.

Key features

High Availability of Rocket CORBA Services

Replication, load balancing and failover of Rocket CORBA objects through the Rocket Orbix node daemon, locator, naming service, and PSS layer. Together they enable high availability of application objects/servers through object clustering and replication. COS services ensure high availability replicated and mirrored database and dynamic service discovery.

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

Secure Rocket Orbix applications communicate using IIOP layered above SSL/TLS. Rocket Orbix includes support for the latest TLS protocol versions and cipher suites.

Rocket Orbix SSL/TLS 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 Rocket Orbix security server, and a single sign-on Rocket CORBA login service.
- Key Distribution Mechanism (KDM), responsible for managing the secure storage and retrieval of authentication data and its distribution to automatically launched server applications.

Operational Visualization

Rocket Orbix provides easy to use management and administration tools that address the biggest system management problem facing enterprises that run large-scale, mission-critical systems, dealing with many different servers.

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.

Persistent State Service

Rocket Orbix includes an implementation of the Persistent State Service (PSS), a Rocket CORBA service that interposes a Rocket CORBA-based abstraction layer between a server and persistent data. Rocket Orbix uses PSS internally and the PSS is available for use by applications.

Security Service

The Rocket Orbix Security Service is a scalable, standards-based security implementation of an authentication service, an authorization service and a repository of user information and credentials. It provides role-based access control, logging, and integration with third-party enterprise security systems via pluggable enterprise security adapters. Flat file or LDAP enterprise security adapters are included. The Rocket Orbix SecurityService supports SSL/TLS, CCITTX.509, OMG CSIv2 and SAML.

Interoperable Naming Service and Load Balancing Extensions

The Rocket Orbix Naming service extends the Rocket CORBA Naming Service model to allow a name to map to a group of load-balanced objects, instead of an individual object. This can be implemented via a round-robin or random selection algorithm.

Code Generation Toolkit

The Rocket Orbix code generation toolkit is a rapid application development tool, capable of generating a complete and operational client/server application automatically from an IDL file.

Compression Plug-in

The Rocket Orbix ZIOP plug-in provides compression of GIOP messages on the wire, achieving significant performance improvements on low bandwidth networks.
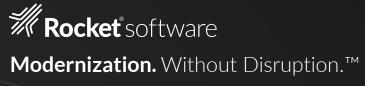
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System requirements and platform support

- 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, 2010, 2012, 2013, 2015, 2017 and 2019

- Linux on Intel platform support including Red Hat 5, 6, 7 and 8, SUSE 12 and 15, Oracle Unbreakable Linux 6, Ubuntu 18 and CentOS 7

- 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 8

*Formerly Micro Focus products.

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