

ObjectWall™

Robust IOP Firewall

Robust perimeter protection for J2EE/CORBA/CCM

Many organisations today use middleware as a technology to consolidate applications from different systems and networks. It is increasingly common to use middleware to integrate applications between different organisations and over the internet.

Systems integrators can choose from a number of standard middleware technologies depending on their particular requirements. Java 2 Enterprise Edition (J2EE), the Common Object Request Broker Architecture (CORBA), CORBA Components (CCM) and Microsoft .NET are well-established and widely used middleware technologies. All these technologies use the Internet-Inter-ORB-protocol (IOP) as their standard protocol or as an option.

ObjectWall – Full IOP support

These platforms are much more powerful than standard client/server systems like the World Wide Web. Thanks to the high flexibility of IOP they enable full, tightly-coupled and bi-directional application integration.

For example, IOP supports “call-backs”: if a client calls a server, the server can invoke operations on the client at a later stage, for example to send a notification. Because of such complex protocol features, traditional firewalls cannot simply deal with IOP in the same way as with many other classical Internet protocols. As a consequence, the handling of IOP with standard firewalls is difficult and unreliable.

ObjectWall is a proxy firewall developed specifically for IOP. It supports the complete IOP functionality and is therefore a critical building block for leveraging the advantages of CORBA, J2EE, CCM and .NET

ObjectWall – Secure integration

ObjectWall allows IOP network traffic across the boundary without exposing critical IT systems and applications to a security risk.

ObjectWall achieves this whilst also ensuring application protection, thus enabling secure, full integration over domain boundaries.

ObjectWall provides optimal filtering of requests, for example to expose only subsets of interfaces to partners. It can also be used as a bridge between secure IOP and unencrypted IOP, or to protect security unaware applications.

ObjectWall – the robust IOP firewall

ObjectWall is extremely robust because it is built on the sound concepts of the CORBA architecture and based on a mature CORBA implementation.

Integrated security administration

ObjectWall can be managed in an integrated way using the OpenPMF policy management framework. Alternatively, it can be used as a stand-alone firewall.

ObjectWall Appliance

ObjectWall is also available as a convenient, robust appliance with a number of support options, such as 48h replacement service and remote administration.

ObjectWall technical features

ObjectWall comes in two different editions: The stand-alone Professional Edition and the OpenPMF-enabled Enterprise Edition.

ObjectWall Professional Edition

ObjectWall Professional Edition is a stand-alone edition that does not require advanced setup or any services except interface repository.

- ▶ **Full IOP firewall traversal** ObjectWall supports firewall traversal by rewriting passed object references. It uses the interface repository to be able to traverse complex CORBA types passed as request parameters. In this way, ObjectWall “compresses” an entire CORBA application behind the firewall into one or a few TCPIP (or TLS) entry points to the application.
- ▶ **Application integration** ObjectWall is transparent to the applications, so no changes are required to the application logic except a small addition to the initial service bootstrap. The proxy fully supports call-backs and call reverse processing.
- ▶ **Vendor independence** ObjectWall is built on the MICO open source CORBA 2.3 implementation, which was branded “CORBA-compliant” by the OpenGroup. Hence the proxy itself uses the CORBA-compliant GIOP/IOP engine which ensures seamless interoperability with other IOP-based products.
- ▶ **Multi-home support** ObjectWall supports multi-home firewall machines and makes sure that the rewritten object reference is accessible on all outer or inner network interfaces (for call-backs by clients).

- ▶ **TLS transport layer support** ObjectWall supports TLS/SSLIOP protocol outside the perimeter from the client to the outer interface(s), internally between target(s) and inner interface(s), or for the entire system communication.
- ▶ **NAT support** ObjectWall supports NAT, an important requirement for many IT environments.
- ▶ **Built-in interface repository (IR)** The interface repository is normally required by the proxy to run. However, to also support the setup without the interface repository and improve performance, the proxy itself might be started with the built-in interface repository enabled.
- ▶ **O(1) object scalability** Only one CORBA object is created on the proxy server for all traversed objects of the same type, which results in excellent scalability and low memory requirements when traversing/serving many CORBA objects.

ObjectWall Enterprise Edition

The Enterprise Edition supports more advanced access control features. It uses the OpenPMF policy management framework, which supports the flexible enforcement of access control on the firewall based on a unified policy (stored in a central repository together with policies for other systems).

To learn more and get started, we invite you to talk with us about the solution that works for your needs and environment.

Please contact us at: info@objectsecurity.com.

www.objectwall.com