## ENVOY MQ

### **Product Details**

For Envoy Message Queuing version 1.3

Windows® Messaging for the Enterprise



### **OVERVIEW**

The Windows 2000 operating systems provide comprehensive internet and application services and were built on the strengths of Windows NT Server 4.0 by delivering increased reliability, availability, scalability, and interoperability options.

Microsoft is committed to ensuring that the Windows platform works with other key platforms and systems in the heterogeneous computing environment of its customers.

Envoy Technologies Inc. provides Envoy Message Queuing (Envoy MQ) — the Simple, reliable, cost effective Windows messaging solution for the enterprise.

Envoy Message Queuing is Microsoft's only recommended implementation of MSMQ on non-Microsoft operating system platforms.

While MSMQ focuses on the Windows platforms, Microsoft recognizes the value of MSMQ interoperability with other key Platforms.

To that end, Envoy Technologies provides the Envoy Message Queuing Connector (Envoy MQC) that runs on the Windows 2000 platform. This connector enables Windows-based MSMQ Applications to send and receive MSMQ messages to non-Windows Envoy MQ applications.

Envoy Message Queuing extends full MSMQ functionality from its native Windows environment to encompass the full range of non-Windows operating systems, including Solaris, HP-UX, AIX, Linux, Tru64 Unix, SCO Uniware, VMS (VAX and Alpha), OS/400, HPe3000 MPE/iX, Tandem Guardian and OS/390.

#### **SIMPLICITY**

Microsoft has set the standard for delivering easy to use development tools and technologies for building powerful applications; Envoy extends this simple approach to cross-platform application development with Envoy Message Queuing (Envoy MQ).

#### Simple MSMQ Programming Interface

Envoy MQ programming is performed through the standard Microsoft MSMQ API, primarily through five simple MSMQ functions (open, close, send, receive, and locate). Envoy MQ delivers its advanced message queuing benefits without complex network-level programming.

#### **Object Model**

Envoy MQ provides a queuing object model that implements a convenient and full-featured application programming interface (API) to MSMQ features. Such support makes it easy to access the MSMQ API from popular object-oriented programming languages such C++ and Java. This makes the Envoy MQ environment easy to use and accessible to a wide range of developers.

## Protocol Independence

From a programming perspective, all Envoy MQ functions and features are completely protocol-independent. This greatly simplifies programming because developers never have to be aware of protocol translation or bridging issues.

## Platform Independence

The MSMQ programming model is preserved even when an application is spread over a network of heterogeneous computer platforms. The portable MSMQ API provides for immediate source code portability between dissimilar platforms. The messaging portion of an application need only be written once.

#### **RELIABILITY**

Business integration solutions are comprised of many applications and business systems running on many computers. Message queuing "guarantees" that information sent from one application will arrive at its destination, regardless of network or system failures.

#### Reliable, Resilient Message Delivery

Envoy MQ uses sophisticated techniques such as sliding window protocols and recoverable storage to deliver messages. This lets developers focus on business logic and not on sophisticated communications programming.

#### One Time, In Order Message Delivery

Envoy MQ makes sure that messages are delivered exactly one time, and that messages are delivered in the order that they were sent. This prevents many different kinds of problems that can occur within receiving applications such as duplicated orders and overdrawn accounts or inventories.

#### **Transaction Support**

Application developers can bundle groups of messaging operations as a single logical unit of work (for example, internal transaction). Transaction support enables Envoy MQ operations to be committed or aborted while preserving data integrity.

#### Automatic Message Journaling

Envoy MQ can make journal copies of all messages sent or received by applications. Journals provide audit trails and simplify recovery from many types of failure.

#### **Notification Services**

Envoy MQ can notify sending applications that messages were (or were not) received and processed correctly. Sending applications then know when they can treat messages as delivered or take corrective action when failures occur.

#### Message Priority Support

The MSMQ API enables applications to assign priorities to messages and queues. Envoy MQ routes and delivers messages in order of priority. Priorities make it easy for applications to process important requests first when there is a backlog.

#### **INTEROPERABILITY**

Microsoft is committed to ensuring that the Windows platform works with other key platforms and systems in the heterogeneous computing environment of its customers. Envoy Message Queuing provides asynchronous interoperability between Windows and non-Windows applications.

## **Envoy's Message Queuing Connector**

Envoy Technologies provides the Message Queuing Connector (MQC) for the Windows 2000 platform. This connector enables MSMQ applications to send and receive MSMQ messages to non-Windows Envoy MQ applications.

#### Heterogeneous Platform Support

Envoy MQ extends full MSMQ functionality from its native Windows environment to encompass the full range of non-Windows operating systems including: Solaris, HP-UX, AIX, Linux, Tru64 Unix, HPe3000 MPE/iX, VMS (VAX and Alpha), Tandem Guardian, OS/400 and OS/390, providing complete and seamless MSMQ messaging interoperability between all supported platforms.

# Seamless Interface with Windows NT MSMQ Environment

Envoy MQ supports a unified MSMQ application messaging environment across Windows NT based MSMQ applications and applications on non-Windows platforms from the smallest PC workstation through UNIX middle tier nodes up to large-scale MVS systems.

#### Optimized for Native Platform

Envoy MQ implements MSMQ environments on supported Platforms by fully leveraging each platform's underlying System services. This guarantees Envoy MQ's high performance and robust characteristics.

#### MANAGEMENT CAPABILITY

For an organization to implement a robust business integration solution, they must be able to manage and monitor the run-time environments so that system failures, overloads or problems can be quickly diagnosed and repaired. Envoy Message Queuing is shipped shrink-wrapped with tools for monitoring and management of the messaging infrastructure.

# Hierarchical, Directory Service Based Architecture

Envoy MQ keeps track of all MSMQ management objects dynamically (such as machines and queues) using MSMQ's centralized directory service. This improves scalability because administrative operations, such as adding machines or moving queues, can be performed centrally and do not require making changes to individual machine configurations.

In addition, applications on any machine within an MSMQ enterprise can send messages to an application on any other machine without requiring channels or routes to be preconfigured. This dramatically improves scalability by eliminating the inevitable exponential increase in management tasks that occur when the total number of connected machines increases.

#### MMC Snap-In Management Console

Envoy MQ also comes packaged with the Envoy Explorer, a Microsoft Management Console (MMC) snap-in that allows an administrator to monitor a cross-platform messaging network from the familiar Windows interface.

#### LOW TOTAL COST OF OWNERSHIP

Total cost of ownership (TCO) includes budgeted costs (like hardware and software costs) and unbudgeted costs (like end-user training, management and downtime). Successful business integration solutions achieve low total cost of ownership and clear return on investment.

Overall, Envoy Message Queuing and MSMQ are easy to use and provide low TCO to organizations looking to build business integration solutions.

#### Cost effective messaging solution on all non-Windows Platforms

Following the Microsoft model, Envoy has priced Envoy MQ in order for it to be a very cost effective messaging solution on all supported platforms, including UNIX, VMS, HPe3000 and even large mainframe platforms as AS/400, Tandem and MVS.

#### **Add-On Tools**

Both Envoy and Microsoft provide a basic management tool at no additional cost that allows customers to install and implement message queuing systems quickly and easily. This approach is in contrast to the competing message queuing systems that require expensive third-party management tools even for the most basic monitoring functions.

#### **AVAILABILITY**

Envoy Message Queuing is available for the following platforms:

- IBM OS/390
- Sun Solaris
- IBM AIX
- HP-UX
- Linux
- SCO UnixWare
- SCO OpenServer
- Tru64 Unix
- HPe3000 MPE/iX
- IBM OS/400
- Compaq Alpha/AXP Open VMS
- Compaq VAX Open VMS
- Tandem Guardian
- Java

#### **ABOUT ENVOY TECHNOLOGIES**

Envoy Technologies provides mission critical infrastructure software that enables companies to exchange and manage information seamlessly, within and across the extended enterprise, using Internet and transactional messaging solutions.

Envoy Technologies products are used in mission critical applications at more than 100 Global 2000 customers. Corporate headquarters are located in Iselin, New Jersey. For more information about Envoy Technologies and our products and services, visit us on the Web at <a href="https://www.envoytech.com">www.envoytech.com</a> or send email to <a href="mailto:info@envoytech.com">info@envoytech.com</a>.

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