

# Software Product Description

PRODUCT NAME: HP Reliable Transaction Router Version 4.2 for Sun Solaris

80.67.04

#### **DESCRIPTION**

HP Reliable Transaction Router (RTR) is fault tolerant transactional messaging middleware used to implement large, distributed applications using client/server technology. This version of Reliable Transaction Router enables enterprises to deploy distributed applications on Sun<sup>TM</sup> Solaris<sup>TM</sup> systems.

# **License Types**

Reliable Transaction Router for Sun Solaris has two license types. The Backend license provides full client/router/server functionality. It is required for nodes configured as routers or servers, and can also be used for nodes configured as clients.

#### **Backend Features**

- Provides transparent, content-based transaction routing for client/server applications.
- Provides publish/subscribe broadcast (nontransactional) messaging for delivery to multiple subscription domains within a virtual network.
- Allows user-defined partitioned data models (contentbased routing) for improved performance of user applications.
- Acts as a layer between client and server applications, thus decoupling the end-to-end relationship normally required by user application control. This provides the application developer with a single system view of the programming environment.
- Ensures atomicity of transactions (all or nothing) by using a two-phase commit protocol for transactional message delivery among one or more server applications.

- Offers at-most-once semantics for valid transactions.
   This includes specially flagged transaction replay to a surviving server application, or a later instantiation of that server on the same or a different machine on the virtual network.
- Supports multiple (concurrent) servers as well as multithreaded clients and servers.
- Supports user authentication control (callout servers) with consistent reply in shadow environments.
- Provides disaster protection against site failure by mirroring transactions in shadow-server environments. Automatic resynchronization of shadow pairs after recovery is provided transparently to the application.
- Maintains performance scaling over a wide range of configurations allowing easy horizontal expansion of both hardware systems and application software.
- Enables automatic failover/failback of server applications on multiple backend systems while remaining transparent to client applications executing on remote systems. RTR can maintain application operation in many instances of single or multiple failures in a widely distributed software/hardware configuration.
- Includes system management interfaces for online control of virtual networks from any workstation or terminal with the appropriate privileges. Monitoring of statistics, software and hardware states, and clients and servers is provided from local and remote nodes.
- Uses HP TCP/IP as the underlying network transport.
   HP DECnet is also supported.

- Enables the operator to manage partitions, providing the ability to:
  - Create or delete a partition with a user-specified name.
  - Define a key range definition.
  - Select a preferred primary node.
  - Select the failover precedence option to choose between local and cross-site shadow failover.
  - Suspend and resume operations to synchronize database backups with transaction flows.
  - Override RTR's automatic recovery decisions to allow manual special recovery procedures.
  - Specify retry limits for problem transactions.
- Enables the operator to selectively inspect, modify the state of, or remove transactions from the journal or the running RTR system.
- Supports anonymous clients, that is, allows clients to be configured with wildcarded node names.
- Supports compression and decompression of broadcast event and transaction reply data to improve network throughput.
- Supports failover between multiple IP addresses for any host machine with multiple network adapters.

# **Frontend Features**

- Provides the ability for the client to start transaction branches, where the global transaction may be controlled by RTR.
- Provides the necessary environment to run Reliable Transaction Router client applications under Sun Solaris as part of a Reliable Transaction Router application network (facility).
- Provides client functionality in a production environment.
- Uses TCP/IP as the underlying network transport. DECnet is also supported.
- Supports transactional and broadcast (nontransactional) messages.
- · Supports router load balancing in a facility.
- Supports automatic router failover in the event of a communication link failure.
- Supports Reliable Transaction Router system management operations.

# HARDWARE REQUIREMENTS

Any hardware that supports the Sun Solaris operating system.

#### **SOFTWARE REQUIREMENTS**

- Sun Solaris Versions 7 or 8.
- TCP/IP as provided by the operating system.

# **OPTIONAL SOFTWARE**

- Remote execution software to support system management from remote nodes.
- Microsoft-supported Windows-based browser for system management running on a Windows® PC: Internet Explorer Version 5.01, 5.5, 6.0.

Reliable Transaction Router applications can be written using C and C++ compilers.

· Workshop 6 update 1.

Refer to the optional product's Software Product Description for more information on optional software products, hardware requirements and support.

#### **GROWTH CONSIDERATIONS**

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

# **DISTRIBUTION MEDIA**

The software and documentation for Reliable Transaction Router are available on CD-ROM. The software documentation is also available in hardcopy format.

#### **ORDERING INFORMATION**

# RTR for Sun Solaris

Backend Software Licenses: QL-4BVA\*-\*\*
Frontend Software Licenses: QL-4BUA\*-\*\*

Media and Hardcopy Documentation: QA-4BVAA-H8

Hardcopy Documentation: QA-4BVAA-GZ

For additional information on available licenses, services, and media, refer to the appropriate price book.

<sup>\*</sup> Denotes variant field.

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