

your TRANSACTIONS, your TECHNOLOGY, your FUTURE

Companies with existing online transaction processing (OLTP) systems want to get maximum value from the significant investments they have made in software by extending the life of their software capital as much as possible. At the same time, they also want to take advantage of new and improved technology products that logically displace products nearing the end of their functional lifecycles.

Baldwin Hackett and Meeks, Inc. (BHMI), a leading provider of high-volume OLTP solutions, developed Concourse - Transaction Messaging System (TMS) to do just that - allow companies to move to contemporary hardware and software technologies, while preserving their existing software application environments.



"Consumers, merchants, and financial institutions count on the reliability and availability of the MasterCard Debit Switch, and our goal is to continue being the best in the world," stated John Meister, Group Head, Global Transaction Processing Systems for MasterCard Worldwide. "A critical component of MasterCard's distributed debit platform is the ability to move an extremely high volume of messages - 24 hours a day, seven days a week, anywhere in the world. Concourse – TMS provides important support because it is a comprehensive, integrated transaction messaging facility that can accommodate our demanding global needs in an open environment."

- MasterCard Worldwide

What is TMS?

TMS is a comprehensive, integrated transaction messaging facility that replaces and expands the capabilities currently provided by NET24-XPNET™. It supports high-volume messaging among application processes executing on HP NonStop S-Series and Itanium platforms.

Benefits

- Deploys on HP NonStop S-series and Itanium platforms
- Replaces NET24-XPNET with minimal cost, application changes, and operations training
- Designed for application-to-application communication across NonStop, UNIX, Linux, and Windows platforms
- Facilitates migration of application processes from XPNET to TMS with minimal disruptions to processing
- Upgrades networking infrastructure while preserving a company's existing application investment
- Supports multiple virtual networks distributed over disparate sets of shared platforms
- Provides a technology path to open systems

Key Benefits

Message-Handling Flexibility

TMS provides controlled safe storage of messages so users can ensure successful delivery of critical messages not otherwise protected by application processes. TMS Message Storage can be turned off for less critical messages or those already protected by application logic – thus producing the highest levels of TMS throughput performance. Therefore, reliable message delivery can be combined with blazing performance to give users maximum message handling flexibility.

Fault Resilience

TMS provides monitoring services for all application processes under its control. TMS's monitoring capabilities include the restarting of application processes in case of process failures. So TMS application processes are automatically fault-resilient. And, of course, restart capabilities are extended to TMS itself, so TMS protects itself as well as the application environment under its control.



Open-Platform Services

In addition to HP NonStop S-Series and Itanium platforms, TMS has been designed for open-systems deployment. Future TMS networks will be extended across Linux, UNIX, and Windows systems so application processes on these platforms can be integrated with NonStop application components into a seamless TMS networking environment. All TMS functionality available on NonStop platforms will also be available on all other supported platforms – TMS capabilities will transcend hardware boundaries.

Single Point of Control

TMS offers a single integrated point of control for network system managers. System managers can be attached to any node in a TMS network and can configure and control all facets of the network. And, if an authorized system manager needs to relocate a point of control, that's fine – all TMS networks can be controlled from any network node. Network configuration changes made at any network node are automatically propagated across an entire TMS network; there is no need to reconfigure network nodes individually.

PCI-Compliant

In this era of heightened security awareness, TMS is supported by a PCI-compliant network configuration database. All configuration database operations are fully audited for security reviews. All user logons are managed in accordance with PCI-compliant guidelines.

Distributed Virtual Networks

TMS accommodates multiple TMS environments that can be distributed across disparate sets of shared platforms. Each TMS environment defines a virtual network that can be safely configured and managed from a single integrated point of control. This feature allows changes to be selectively and automatically distributed across individual networks without affecting other managed TMS networks. This ability to support multiple independent TMS networks dramatically simplifies the task of running production and test networks across the same set of host platforms.

Message Processing Flexibility

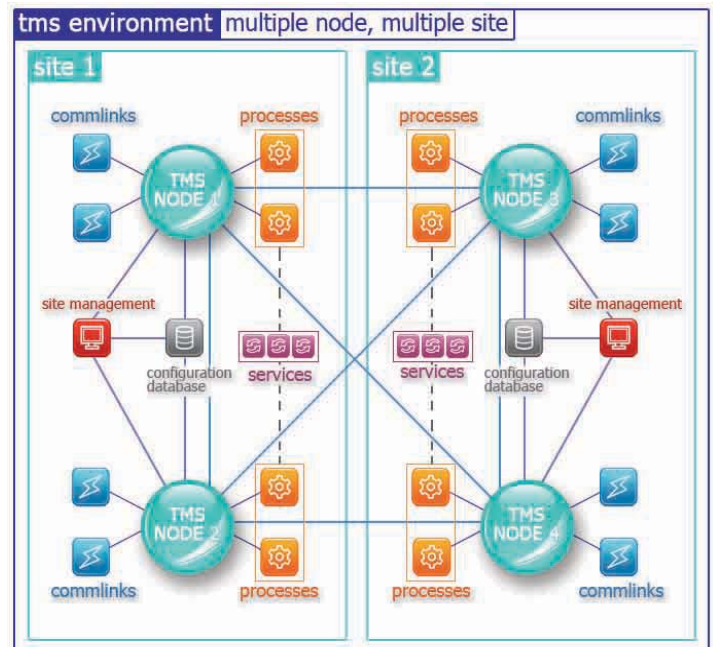
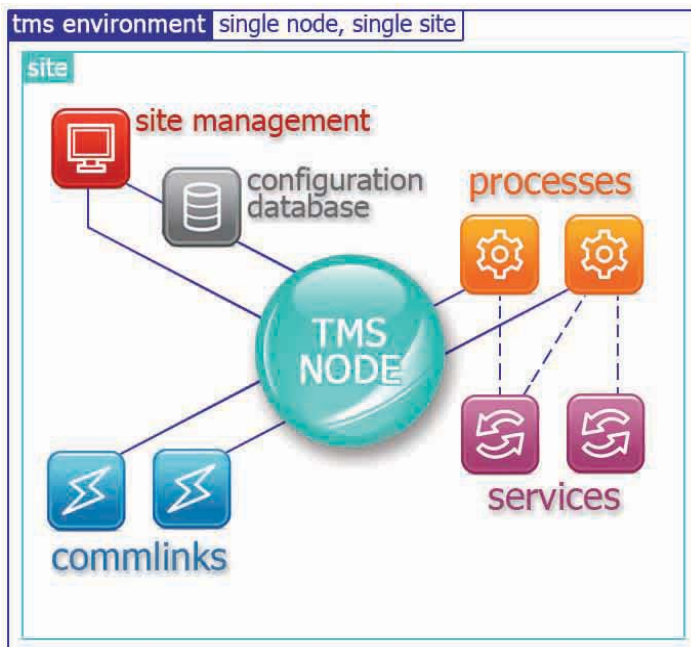
TMS allows multiple application process instances to be configured as providers of one or more services. TMS service-based message routing can then direct a message associated with a given service to any of the processes providing the service. As a consequence, multiple process instances are available to handle a given message type. And, since TMS provides load balancing across process instances, bottlenecks are minimized and overall network message throughput is increased.

Seamless Migration

TMS allows system managers to easily migrate applications from NET24-XPNET to TMS. TMS interface libraries replace XPNET interfaces with easy, controlled changes to user applications. And, TMS networks can coexist with XPNET networks – TMS gateways can be created to allow bidirectional message flows across the two environments. So, network operators can move applications to TMS over time, any time, thereby allowing migrations to TMS to be staged to accommodate user timeframes and preferences.

How Does TMS Work?

A complete instance of a TMS-based application executes in a TMS environment, which defines a single virtual network. A TMS environment can span multiple computer systems, each of which is defined as a TMS site. The same physical computer can host multiple TMS environments and sites. Each site has one or more nodes, where a node provides message routing and queuing facilities to its associated processes and commlinks; the node also provides support for the site's services. Processes can participate in zero or more site services, and site services can be supported by one or more processes. Site services can also be supported by processes on other nodes/sites. There is no architectural limit on the number of sites within an environment.



Features Summary

Message-Handling Flexibility

- High performance
- Controlled safe storage of messages

Message Processing Flexibility

- Service-based message routing allows multiple process instances to handle messages, thereby minimizing bottlenecks and increasing overall message throughput
- Supports load balancing across network entities

PCI-Compliant

- TMS network configuration database is PCI-compliant with full auditing of all configuration database operations
- TMS user logon management is PCI-compliant

Distributed Virtual Networks

- Separate logical TMS networks can be configured across shared platforms
- TMS integrated point of control can propagate changes across a single TMS environment without affecting other TMS environments that share the same host platforms
- System managers can safely reconfigure test networks without affecting other test or production networks

Fault Resilience

- Auto-restart of TMS networked application processes
- Auto-restart of TMS network nodes

Single Point of Control

- Authorized system managers can control a TMS network from any node in the network
- Network control functions automatically propagate network configuration changes across an entire TMS network so there is no need to reconfigure network nodes individually

Open-Platform Services

- Future releases of TMS will seamlessly integrate application processes on disparate platforms into an integrated TMS networking environment

Seamless Migration

- TMS networks can coexist with NET24-XPNET networks
- TMS interface libraries can be used to gradually replace XPNET interfaces
- TMS facilitates the creation of gateways to route messages between TMS and XPNET networks

Product Capabilities

	TMS
Message routing	X
Message queuing	X
Message service definition and routing	X
Message tracing	X
Data communications support	X
Secure online system configuration	X
Secure online system management	X
Security auditing	X
Automated restart of failed components	X
PCI security compliance	X
Supported on the latest HP NonStop platforms	X
Modern product	X
Configurable status reporting	X
Full featured API for application integration	X
Designed for heterogeneous platforms	X
Automated configuration change management	X
SQL configuration database	X

TMS is a powerful and flexible middleware solution that can meet the needs of your organization today and into the future. TMS gives you the opportunity to leverage contemporary technological platforms while salvaging the significant investment you have made in existing online transaction processing (OLTP) software applications. TMS is absolutely the best solution to fulfill your networking software needs.

*All product names are trademarks of their respective companies.