

Retail Outlets



TPS[®]/NTM (Network Transaction Manager) is a highly configurable system that provides a backbone for processes such as forwarding transactions for credit authorizations, performing a central database query, real time messaging between applications, and message broadcasting to applications. TPS[®]/NTM is a proven real time messaging and transaction integration tool for retail establishments and other business systems.

TPS[®]/NTM allows any number of applications to attach through a simple programming interface and send messages or transactions. TPS[®]/NTM is able to recognize transactions by their content, and then route them to their appropriate destination without the help of the user application. Through the use of content based routing, the application need not concern itself with transport specific information.

An application wishing to utilize the NTM framework will link to the NTM Client Application Programming Interface (API). On the opposite end, user-supplied Transaction Processing Modules (TPMs), on the TPS[®]/NTM Server, can provide functionality from credit card authorization to shared database lookup.

Since new modules may be developed and interfaced with the system at any time, your company's needs can be quickly integrated into an NTM solution.

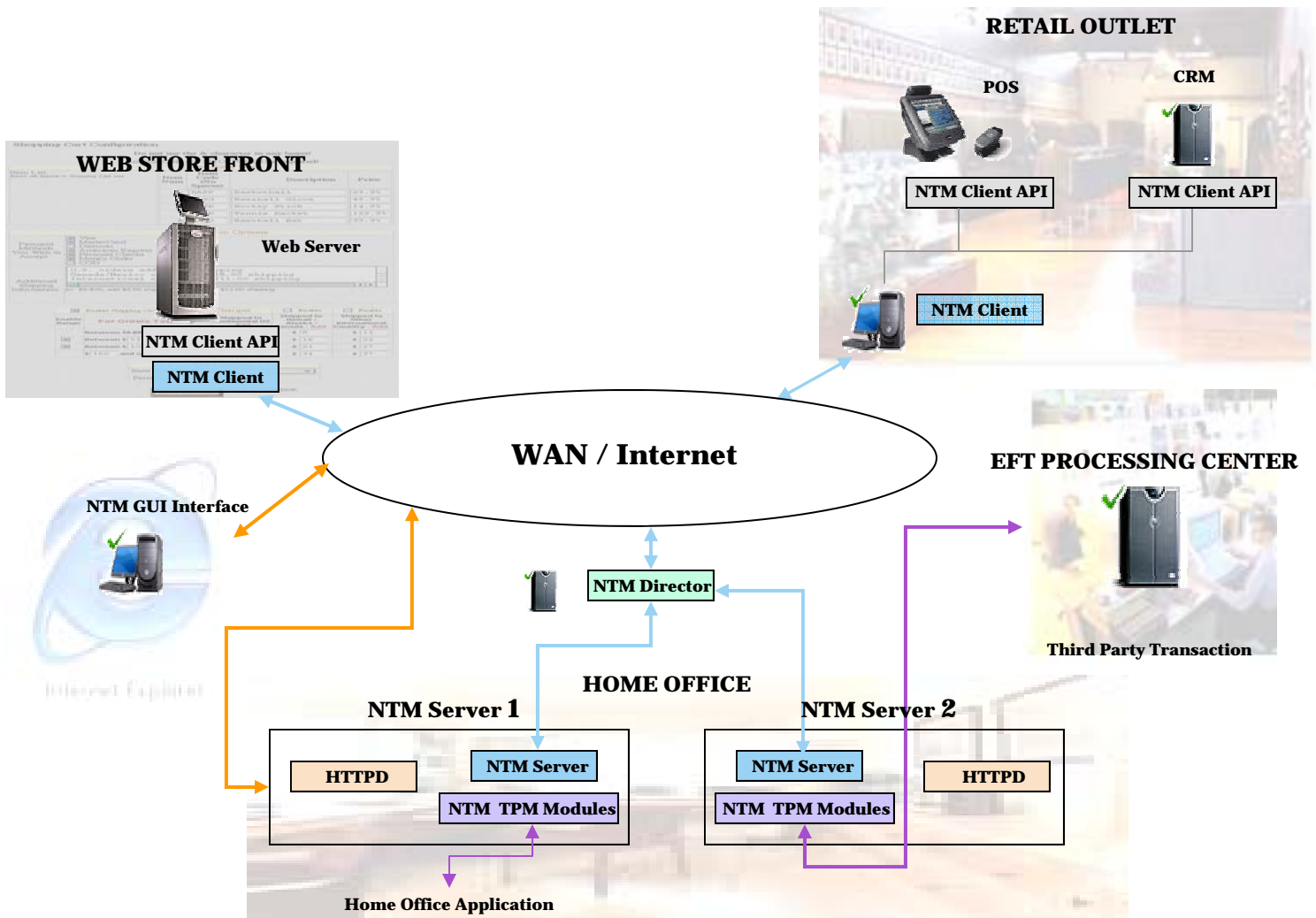
HIGHLIGHTS

- ✓ Real-time point-to-point messaging
- ✚ Route Credit Authorization from POS to third party applications
- ✚ Route Messages to and from Home Office or store applications
- ✚ Broadcast Messages to all sites
- ✓ Trickle messages to free up bandwidth
- ✓ Message broadcasting
- ✓ TCP/IP, SNA, Bisync, Async Host Connections
- ✓ Monitor and Configure Client and Server activity using JAVA enabled browser
- ✓ Multiple OS platforms
- ✓ Multiple switch server capability

TPS[®] / NTM (Network Transaction Manager) provides the foundation for a range of functionality from credit card authorization handling to shared database lookup. The diagrams herein pertain to the retail industry, but could pertain to other industries by just substituting that industry's action words.

TPS®/NTM Topography

(Matching colored lines represent the path data travels)



TPS®/Network Transaction Manager components:

TPS®/NTM Client API allows user applications to attach to the NTM system. Available in Java or C, this API consists of simple open, close, read, and write routines for allowing transactions to be sent to the NTM Server.

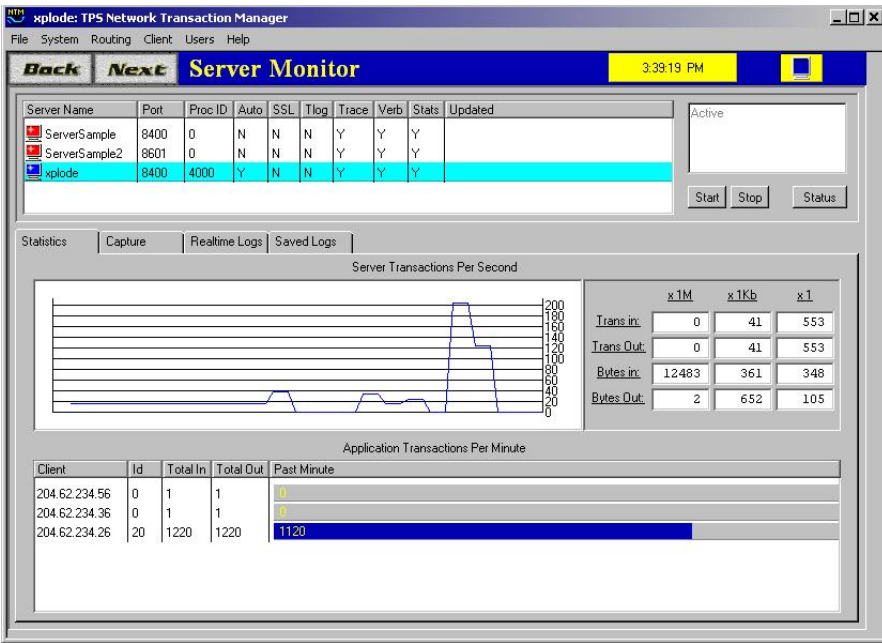
TPS®/NTM Client establishes a TCP/IP connection to a NTM Transaction Server, if one is not currently available. It will deliver the transactions to the server program, wait for transaction response messages (from server), and then give the response messages back to the application that originated the transaction message.

TPS®/NTM Server accepts TCP/IP connections from one or more NTM Clients. The NTM Server will then optionally convert the transaction, and route it to the appropriate Transaction Processing Module (TPM).

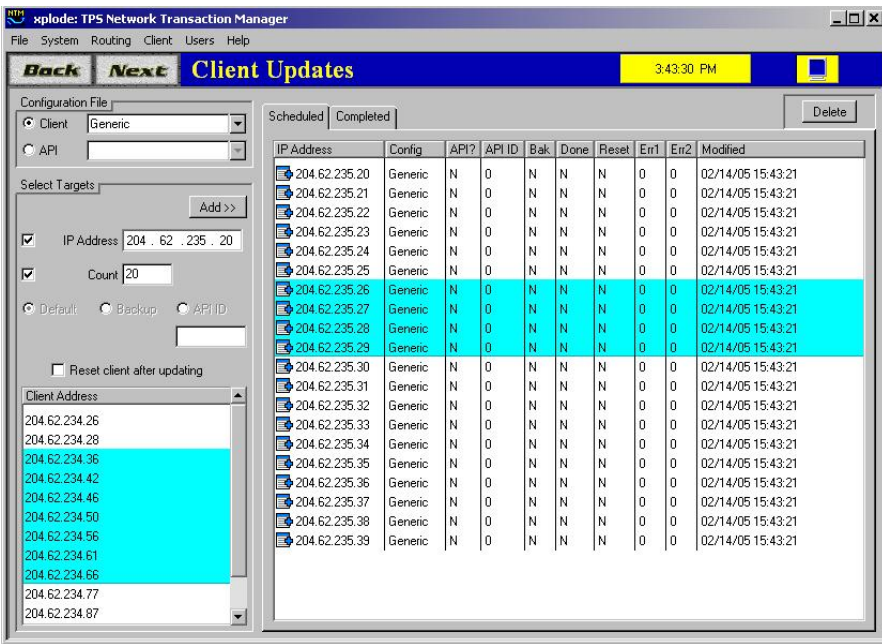
TPS®/NTM GUI Interface allows the user to remotely administer, configure and monitor the entire system via a Java enabled web browser.

NTM Transaction Processing Module (TPMs) execute on the NTM Server and establish a connection to the transaction host, send the transaction message via a predefined protocol (SNA, BSC, TCP/IP, etc.), wait for a transaction response message, and then give the transaction responses back to the NTM Server.

TPS®/NTM Director accepts TCP/IP connections from one or more NTM Clients. The director will notify the client of the best server connection available. This decision is based on server load and setup / configuration of the NTM Server.



The Server Monitor interface allows you to view activity on the server system. The monitor displays all configured NTM servers, their respective status, and a subset of the configuration parameters.



The Client Updates interface allows you to schedule configuration updates for clients connecting to a Director enabled system. Updates are performed when a client connects to a director process.

BENEFITS

- \$ Enables dependable, fully automated movement of data and transactions among multiple delivery channels and disparate systems thereby helping organizations to lower their total cost of information sharing.
- \$ Allows organizations to have a competitive advantage as the change towards real-time connectivity and interactive communications progresses in the 21st century.
- \$ Provides potent and efficient management and conversion of data communication.
- \$ Specially designed to support high throughput transaction processing requirements for various core processing applications, business functions, web and e-Commerce initiatives.
- \$ Enables organizations to migrate to newer technologies while preserving their investments in existing hardware and software.
- \$ Offers unparalleled performance, reliability, high availability, security and scalability to handle many critical enterprise-wide computing endeavors.
- \$ Proven server/client architecture supports diverse network communication environments, standards-based open systems platforms, and strategic host connections.
- \$ Intelligent browser-based management, monitoring, configuration, and reporting capabilities provide for effective deployment, administration and ease-of-use.

The screenshot shows the Director Monitor interface with two main tables. The top table lists directors with columns for Name, Proc ID, Auto, SSL, CPort, SPort, Trace, Verb, and Updated. The bottom table lists servers with columns for Name, IP Address, Port, Clients, APIs, CPU, Txn In, Txn Out, Pend Rsp, and Time Stamp.

Name	Proc ID	Auto	SSL	CPort	SPort	Trace	Verb	Updated
DirectorSample	4684	N	N			Y	Y	
DirectorSample2	0	N	N	8601	8502	Y	N	

Name	IP Address	Port	Clients	APIs	CPU	Txn In	Txn Out	Pend Rsp	Time Stamp
DirectorSample									
Deputy	204.62.234.110	8400	1	1	9	0	0	0	02/14/05 15:34:49
redhat	204.62.234.46	8400	2	2	0	0	0	0	02/14/05 15:35:32
scorpion	204.62.234.28	8400	2	2	16	0	0	0	02/14/05 15:35:05
size64	204.62.234.87	8400	1	1	1	1	1	0	02/14/05 15:35:38
susie	204.62.234.77	8400	1	1	3	0	0	0	02/14/05 15:35:33
xplode	204.62.234.61	8400	2	2	0	0	0	0	02/14/05 15:35:31

The Director Monitor interface allows you to view activity on the director system. The monitor displays all configured NTM Directors, their respective status, and a subset of the configuration parameters. In addition, the monitor displays the status of the connected servers.

Future Direction

- The evolution to a standardized JMS (J2EE) message/transaction solution
- The ability to interface to additional platforms and OSs as needed

Evaluation Licenses

Evaluation copies of TPS® software products are available for a pre-specified timeframe under the terms and conditions of the single-page TPS® Evaluation Agreement.

PRODUCT POSITIONING

NTM can act as the backbone for applications such as:

- Claims Processing
- EDI (Electronic Data Interchange)
- Remote Monitoring for Industrial systems
- Medical Practice Management
- Facility Management and Monitoring
- Inventory Control
- RFID Integration
- EFT (Electronic Funds Transfer) - POS traditional, mobile, wire, and ACH (Automated Clearing House)
- CRM (Customer Relationship Management)

OPERATING ENVIRONMENT

NTM Server and Client:

Linux® for IBM® pSeries (64-bit), Intel®/AMD® (32-bit), Intel® Itanium (64-bit)

Windows® NT (Service Pack 6 or greater)

Windows® 2000

Windows® 2003

Windows® XP

Additional NTM Clients:

Windows® 98

Pure Java Client and API available on Java enabled platforms



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