XML/WEB SERVICES PRODUCT BRIEF

Tarari®
The Acceleration Company

Publish/Subscribe Content Processor (PubSub-CP)

The Tarari Publish/Subscribe Content Processor (PubSub-CP) is the first XML messaging acceleration solution to combine the speed of dedicated silicon and the power of XPath to deliver high-performance, content-based, publish/subscribe capabilities. PubSub-CP delivers on the promise of XML messaging in publish/subscribe by allowing unprecedented precision in subscription profiling with the high rates of throughput demanded by enterprise applications.

Publish/subscribe systems need to perform comprehensive XML analysis to fully service today's event-oriented applications. Many solutions depend on simplistic topic or keyword techniques in order to meet performance expectations. These systems do not scale smoothly to large numbers of subscribers, cannot handle high message volume without trading off accuracy, and do not leverage the rich contextual information offered by XML. Tarari's content processing technology can solve all of these problems.

Applications

- Event-Driven Enterprise
- Enterprise Application Integration
- Commodities Exchange
- Real Time Enterprise Reporting
- Collaboration Tools
- Stock Trading Environments
- Interactive/Online Gaming
- SCM, ERP, CRM
- Business Intelligence

Tarari's PubSub-CP relieves bottlenecks and significantly increases throughput in publish/subscribe systems. With PubSub-CP, publishers can send messages in higher volumes, subscribers can create profiles with greater levels of detail, and message systems can operate at higher message evaluation rates.

New Approach to Message Evaluation

PubSub-CP is a high-performance, high-capacity, hardware-accelerated solution for XML-based publish/subscribe systems.
At the heart of Tarari's PubSub-CP solution is the Tarari Random Access XML Content Processor - a purpose-built silicon acceleration technology that performs XPath evaluation at the speed of the network. Exploiting this gigabit-rate capability allows the creation of highly precise subscription profiles which can be fulfilled at unprecedented message rates.

PubSub-CP has two primary deployment models:
1) Publisher/gateway mode allows applications to map arbitrary messages to a broad set of subscriber profiles.

2) Subscriber mode allows the application to efficiently identify locally relevant messages from a broader content stream of XML-formatted messages.

Features

Powerful Subscription Profiling

The power of Tarari's XPath evaluation in silicon makes high-performance, content-based, publish/subscribe infrastructure a reality in all environments. Subscriptions can be defined using value ranges, sets of exact values, and wildcards.

Subscription Management Engine

The subscription management engine provides a comprehensive interface for defining, updating and reporting subscription profiles.

Random Access XML Module

PubSub-CP supports, through a modular library, integration with existing applications based on Tarari's Random Access XML Content Processor (RAX-CP). This extended functionality provides direct application access to the XML evaluation and transformation of the RAX-CP API. The extended capability enables the Pub/Sub infrastructure to act as an intermediate XML processing agent, which might, for example, perform data extraction for monitoring or archival purposes.

Benefits

- Highest available message evaluation rates - 20 times better than software
- Highest available subscription fulfillment rate - up to 25 million per second
- Near-zero CPU overhead - Evaluation and routing tasks offloaded to dedicated silicon
- Support for complex semantic constructs through XPath
- Simple integration with existing XML document types
- Optimization of Web services SOAP messages
- Schema-defined and schema-less XML document handling
- Support for high-speed XML data extraction and transformation
- Programming model aligned with emerging WS-Eventing standards and other web services

Specifications

OPTIONAL RAX-CP Module

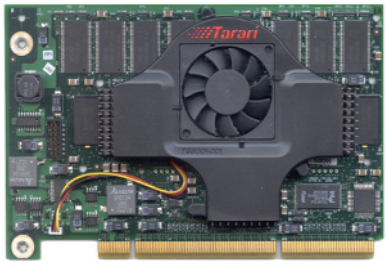
- RAX - Random Access XML
- Simultaneous XPath
- SOAP Processing
- Streaming XML Transformation

Content Processing Platform

- Full-height, short-card operating with 3.3v I/O signal levels on a PCI bus Rev. 2.2
- Recommend 64-bit/66MHz bus widths and speeds
- UL, CB, FCC Class A, CE and VCCI Certificates

Operating System and Software Support

- SMP & non-SMP support for Linux kernel 2.4.x and 2,6.x
- Diagnostic software and tools
- Command-line evaluation tools
- Library support for multi-threaded and single threaded applications



Tarari Content Processors are hardware-based subsystem building blocks (silicon, boards) that snap into servers, appliances and network devices to allow control and inspection of complete messages and rich data at much greater rates than previously possible. Tarari Content Processors ensure that the information in the payloads of these messages can be intelligently accessed and processed while maintaining network speeds.

Ask about other Tarari Agents

- Regular Expressions
- Compression / Decompression
- UUdecode and Base64 decoding
- Signature-based pattern matching
- Character Conversion UTF-8 to UTF-16

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