

Psydex Platform

SOLUTIONS

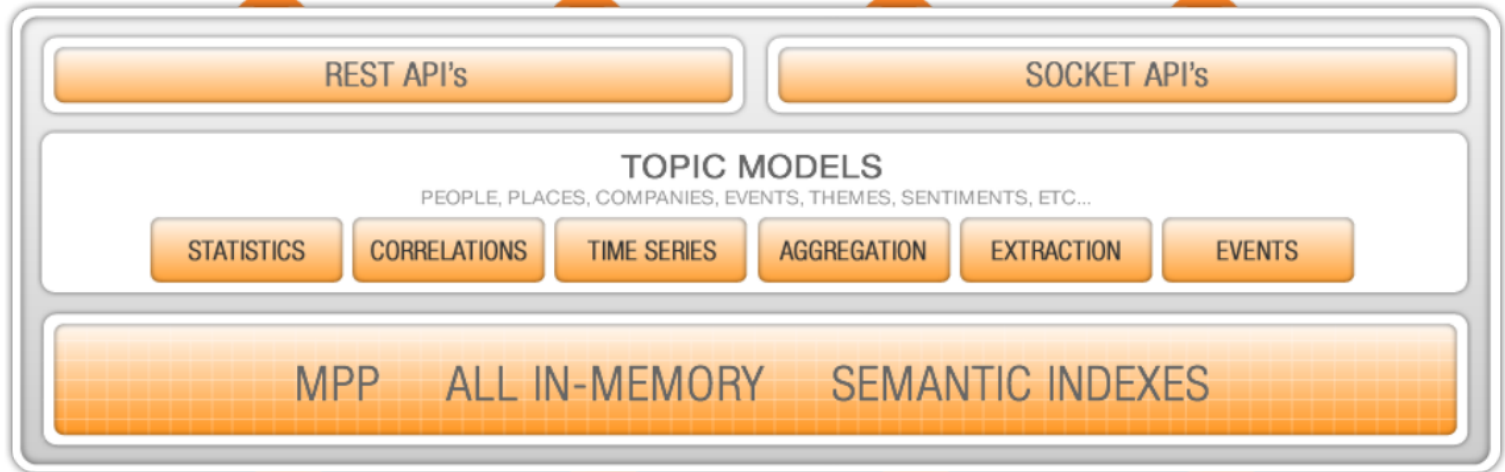
DEFENSE / INTELLIGENCE

TRADING

REGULATORY COMPLIANCE

ADVERTISING MEDIA MONITORING

psydex
ANALYTICS GRID



UNSTRUCTURED

NEWS
TV
WIRE FEEDS
RSS

MESSAGES
EMAIL
IM
TEXT

SOCIAL
FACEBOOK
TWITTER
BLOGS

PACKET
PAYLOAD

Psyng Product Suite



SERVICE APPLICATIONS

psyng.com

Public SEARCH

psyngbot

AIM News BOT

psyngfx

Advanced ANALYTICS

psyngfeeds

Data FEEDS

SEARCH - DATA MINING - PREDICTIVE ANALYTICS

EVENTS - PEOPLE - COMPANIES - PLACES - THEMES - SENTIMENT

NEWS WIRES

AP Associated Press

BusinessWire
A Berkshire Hathaway Company

DOWJONES

marketwire

THOMSON REUTERS

PRNewswire

INTERNET/SOCIAL

WEB RSS

twitter

facebook

ENTERPRISE

DOCUMENT

EMAILS

TEXT MESSAGING

TELEVISION

Bloomberg
TELEVISION

CNBC

CNN

C-SPAN

ESPN

FOX NEWS

FOX BUSINESS

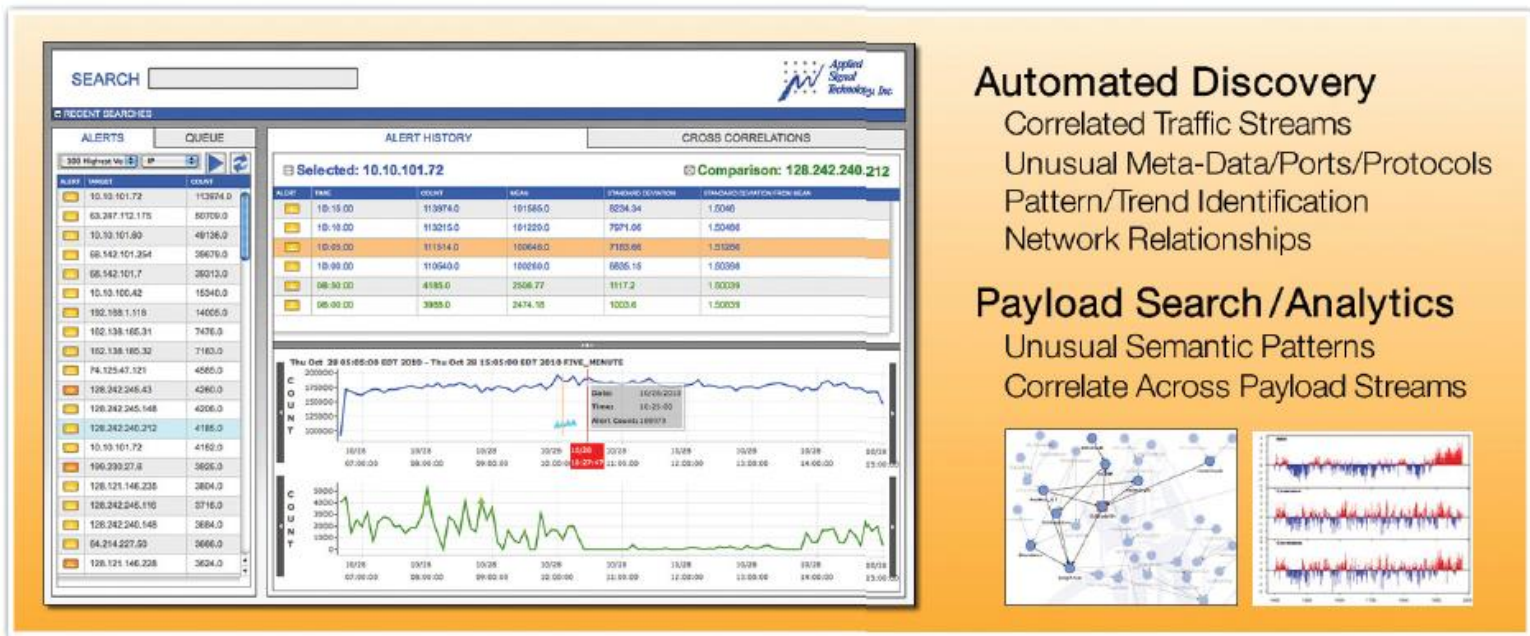
msnbc

THE HISTORY CHANNEL

... REALTIME ...

psydex

What the world is thinking®



Automated Discovery

- Correlated Traffic Streams
- Unusual Meta-Data/Ports/Protocols
- Pattern/Trend Identification
- Network Relationships

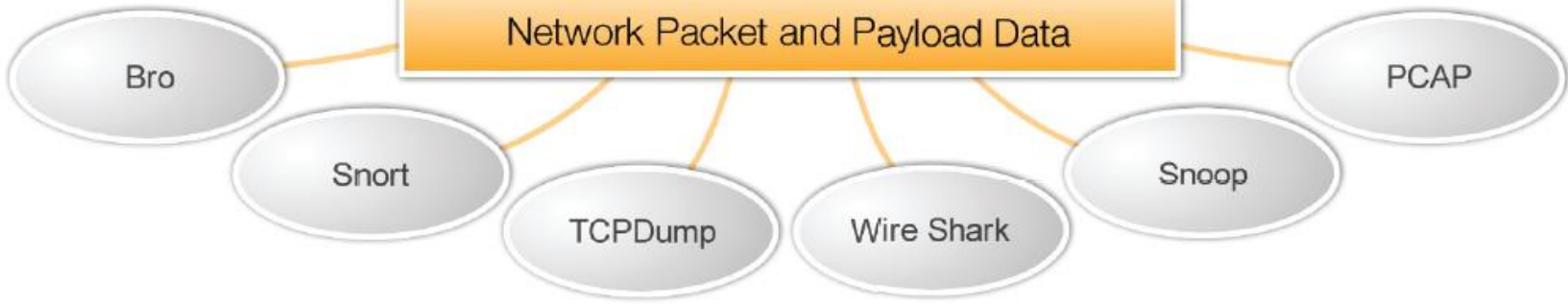
Payload Search/Analytics

- Unusual Semantic Patterns
- Correlate Across Payload Streams

Real-time Search, Data Mining & Predictive Analytics

PSYDEX AG (ANALYTICS GRID)

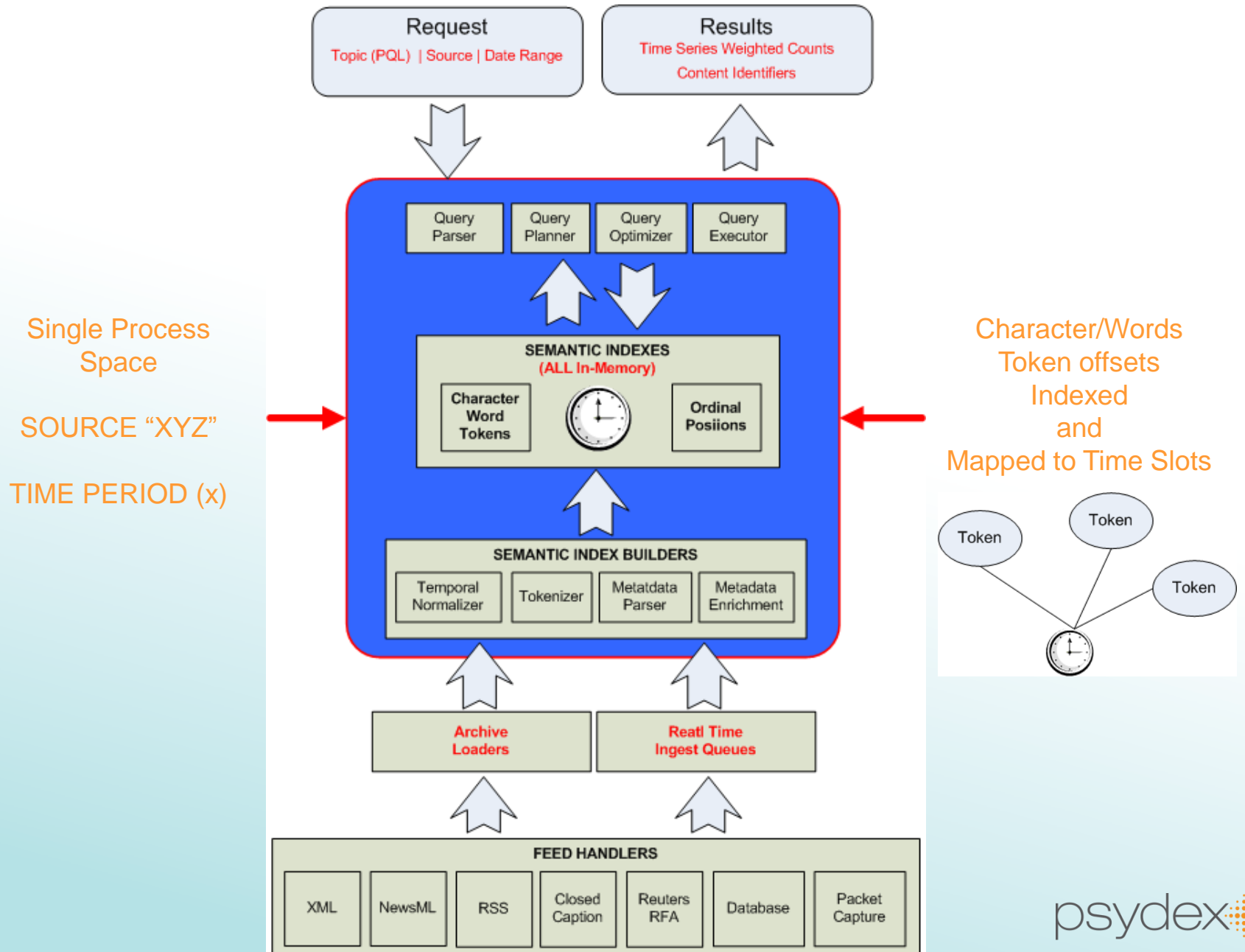
Network Packet and Payload Data



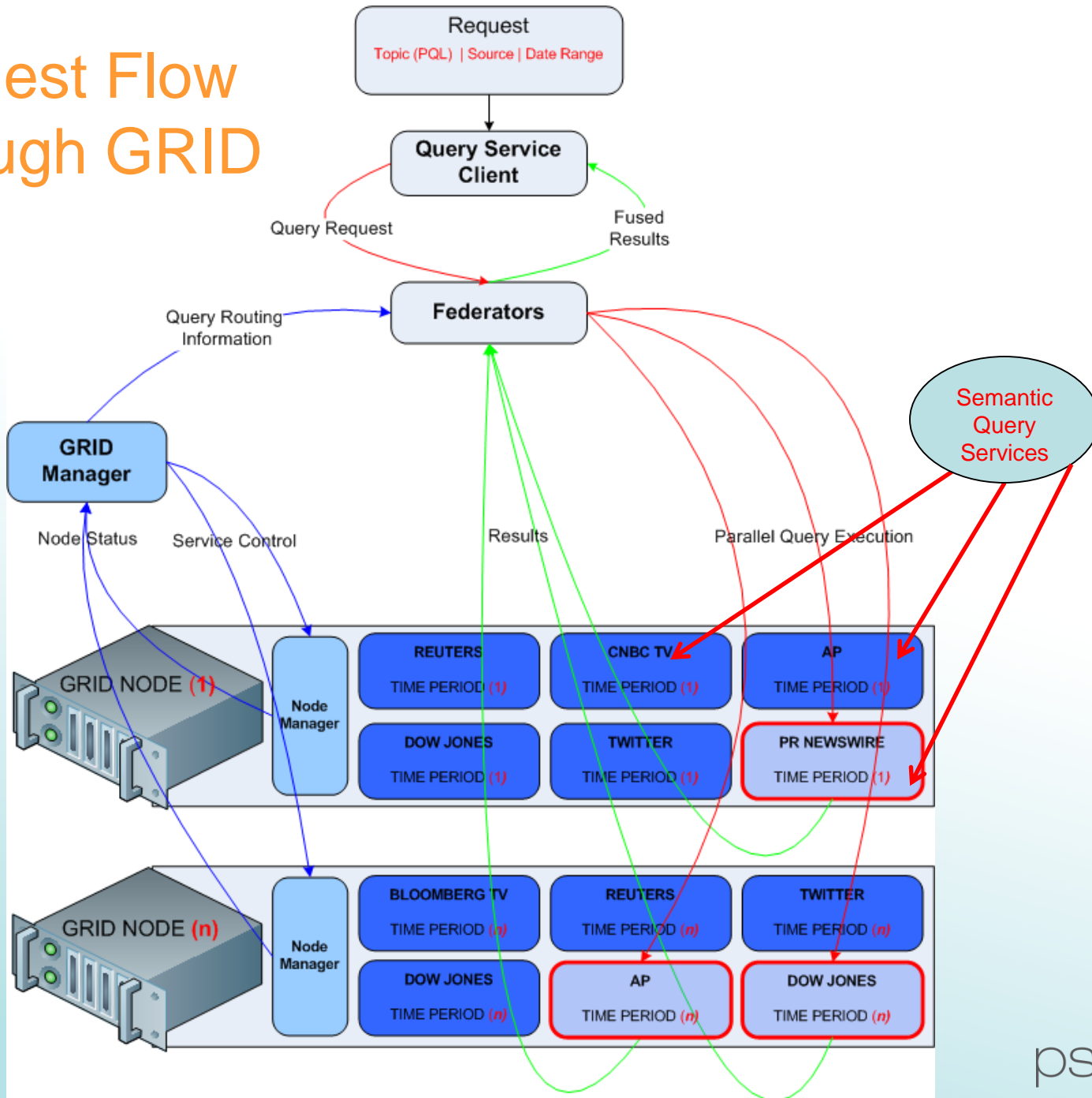
Query-Fusion across Petabytes of Streaming and Historical Data



Semantic Query Service (“SQS”) Instance



Request Flow Through GRID



Technology Highlights (Advantages)

- Performance and Scalability
 - Shared-Nothing MPP (Massively Parallel Processing) Architecture. **All In-Memory** Indexes
 - Seamless **Real-time Ad Hoc** Query Across Both Streaming and Historical Data (**Terabytes**)
- Adaptive
 - Semantic Models are **Independent of Indexed Data** and executed at Run Time
 - Language Independent. Lexicons can Evolve and Change in **Real Time**
 - Models are Dynamically Applied to Content as Opposed to “**Extracted**”
- Power and Precision
 - High Precision Rules for Modeling People, Companies, Sentiment , Events etc...
 - Powerful Operators (Sets, AND, OR, Proximity, Negation, Lexical Expansion)
- Analytics
 - Ad Hoc** Semantic Statistics ,Time Series, and Data Correlations in **Real Time**
- Collection/Ingest
 - Standards Based (RSS, NEWSML, NITF, RDF/RFA ,JDBC etc.)
 - High Speed Wires Direct** (AP, BW, DJ, MW, PR, Thomson Reuters)
 - Packet Capture and Other Streaming Content(TV Caption Recovery)
 - Social Media Integration (Twitter, Facebook etc..)
 - Other Collectors (Email, AOL IM, SMS, **Network Packet Capture**)
- APIs and Feeds
 - Full REST API and Custom TCP Feeds

How Unstructured Data is Handled

- Feed Handlers Collection/Ingest fastest possible live data feeds
 - (n) Semantic Query Services (“SQS”) receive new data
- Distributed Source Indexing and Querying
 - SQS span (n) processes/nodes
 - Partitioned by source and time period
 - Historical data is indexed when service is initialized
 - Real time data is indexed by SQS on arrival
- Semantic Indexing
 - Tokenization of all characters, words, phrases
 - Tokens are mapped to discrete time slots
 - All meta is indexed as word tokens
 - Only token positions, offsets and times maintained.
- Semantic Topic Models (rules) based on words and phrases
 - Ordinal position, relative and temporal proximity
 - AND, OR, Negation, Sets , Proximity, Expansion, Substitution
 - Models can change independent of content

PQL ("Psydex Query Language")

() Sets - Phrases separated by commas where the comma means "OR"

ex. (Apple Computer, iPhone, ipod, ipod, imac, itablet)

+ "AND" Co-Reference within 1024 word tokens

ex. (IBM, big blue, International Business Machines) + (acquired, is acquiring,, will acquire)

{n} Proximity Un-Ordered (Anything in First Set within 5 tokens of Second Set)

ex. (IBM, big blue, International Business Machines) {5} (acquired, is acquiring, will acquire)

[n] Proximity Ordered (Anything in First Set within 5 tokens of Second Set)

ex. (IBM, big blue, International Business Machines) [5] (acquired, is acquiring)

- Negation

ex. (Iraq-nuclear)

~ Semantic Expansion

ex. (Economic, Economy) {10} (~Worry)

\$ Nested Topic

ex. (\$IBM) {10} (\$ACQUISITION)

>?< Extraction

ex. (announced, announcement ,announcing) >< (is acquiring ,acquired, is buying)

Status : Testing....Targeted 3/1/2010

Partner and Customer Integration

**List of Partners Provided Upon request*

