Enterprise Information is in Isolated Silos

Independent Sources and Systems
Complex Enterprise Initiatives

Middleware Makes it Simple, and Better
WebSphere Information Integrator

Information Consumers

Processes, Applications, Clients

Multiple access paradigms

Structured
Semi-structured
Unstructured

Metadata Management

Federation
Replication
Publication
Find

Data and Content Access, Transformation, Caching

Text Search
SQL Query
XQuery
Content API

Any source

Multiple Integration disciplines

DB2
Oracle
SQL Server...

Content stores
Applications
XML, web services, ...

Message systems

Integrated Access to Information

Our customer service reps need integrated access to information so they can address customer problems the first time they call. How can IBM help us?

WebSphere Information Integrator enables you to access many data sources, including DB2, MS SQL server, Oracle, files system, XML, web services,…

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IBM
WebSphere Information Integrator Makes All Data Readily Available

- Customer Data
- Policies
- Claims Information
- Claims Payment

One interface “one” source

Data users

WebSphere Information Integrator Benefits

- For the Customer Service Representative - one request to access all information
- For the Developer – a portlet with a single SQL query
- For the Administrator – single view of servers, wrappers, nicknames
DEMO: WebSphere Information Integrator

Federated view
A single SQL query

Schema mapping
Wrappers for Individual source

Data sources

Sample WebSphere Information Integrator
Federation Data Sources and Wrappers

Relational Source
- DB2 UDB
- Informix
- Oracle
- Sybase
- Teradata
- MS SQL Server
- ODBC

ODBC Source
- Red Brick Warehouse
- Classic Federation (5)
  - IMS, VSAM, CA-Datacom, CA-IDMS, Adabas
- Ingres
- Lotus Notes
- Microsoft Access
- Microsoft Excel
- MySQL
- PostgreSQL
- Progress
- SAS
- Sybase SQL Anywhere
- U2 (UniData/UniVerse)
- and more…

Non-relational Wrappers
- Web Services
- SAP
- PeopleSoft
- Siebel
- Content Data (4)
- Additional Non-Relational (4)
- Life Sciences (6)
- Legacy Data Access via WS II Classic Federation for z/OS (6)
- Build custom wrappers
  - Java and C++ SDK

WIICE Source
- FileNet (6)
- IBM (6)
- Microsoft (2)
- and more…
WebSphere Information Integrator Data Federation Technologies

- Insert, update, or delete rows from federated relational databases
- Dynamic query service
  - Arbitrary SQL statements to be executed at runtime
- Leverages intelligence about optimizing access to the data sources
  - Provided by the data source wrapper, database
  - Additional logic through User Defined Functions
  - Cost based pushdown query optimization
- Define data caches over any federated data
  - Materialized Query Tables (MQTs) based on an input query workload
  - Cube Views over distributed or remote star schemas
- Unicode support at the integration engine

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- Multiple Integration disciplines
- Any source
  - Structured
  - Semi-structured
  - Unstructured
Enterprise Search

WebSphere Information Integrator OmniFind Edition

- Complexities in enterprise searching
  - Less content ... lower chance for perfect matching
  - Heterogeneous nature (form and size) affects search precision
  - Less well linked – fewer link and anchor text cues

- OmniFind enterprise search
  - Sophisticated relevancy algorithms for corporate content
    - Delivers the best results with sub-second response
  - Scales for large collections
    - 500K+ documents and 1000s of concurrent users
  - High quality, scalable, and secure (J2EE)
    - Java APIs with document level security
  - Eases administration and maintenance
    - Easy to install, common configurations, analysis under-the-covers
  - Seamless upgrade from WebSphere Portal search
    - Leverage existing taxonomies, rules, user experience

Itergo Federate its Databases with WebSphere Information Integrator

**Challenge**
Simplify access to disparate data for inventory management and customer

**Solution**
- Federated access over Oracle inventory scan database and DB2 employee and inventory basic and planning database for integrated view of asset and contact information.
- Federated access across disparate warehouses and data marts for unified client view

“[WebSphere] Information Integrator is a strategic product for all cases where different database systems needs to be federated.”
Thomas Dalewski
Systems Engineer, Itergo

**Business benefits**
- Simplify asset management and comparison of target/actual inventory
- Improve customer service with up to the minute insurance claim reports

**Technology benefits**
- Saves over 10% of IT employee time in data prep and reporting
- One tool to access diverse systems across the company
- Avoid extensive changes to existing infrastructure
Finding Information Across the Enterprise

With WebSphere Information Integrator, our Customer Service Representatives can obtain integrated customer information, the correct forms, and policies easily. Now they can serve customer much better.

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