IMS and Cognos: Perfect Together

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IBM

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Share Session 7851
Agenda

- What is Cognos?
- Cognos Overview
- The Value of Using Cognos and IMS for Enhanced Reporting and Operational BI
- Cognos and IMS examples
- Installation and operational considerations
- Summary and Next Steps
What is Cognos?

- An industry solution that facilitate business decisions through the implementation of business intelligence (BI) and financial performance management (FPM) software
  - Allows decision makers to aggregate data from transaction systems (SAP, Oracle,... and now IMS.) along with other sources across the organization to create a single, integrated business performance management framework

- Value
  - **Reduces the effort** needed to generate reports and address new business requirements
  - **Reduces complexity** through an accurate deployment strategy and the use of existing infrastructure
  - **Saves time** with proactive administration that enables you to resolve issues before they impact the business

- With IMS
  - Allows IMS data to be integrated into this new environment
    - Using the Cognos generic JDBC driver interface
    - And the IMS universal drivers with ODBM
## Cognos Overview – Product Portfolio

### Performance Management

The performance management system from Cognos integrates software, services, best practices, and partners.

- Measuring and monitoring
- Reporting and analysis
- Planning, budgets, and forecasts

<table>
<thead>
<tr>
<th>IBM Cognos 8 Business Intelligence</th>
<th>IBM Cognos 8 Planning</th>
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<tr>
<td>All capabilities. One product. One platform.</td>
<td>IBM Cognos 8 Planning is a finance-managed solution that provides real-time visibility into resource requirements and future business results.</td>
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<tr>
<td>- Reporting</td>
<td>- IBM Cognos TM1</td>
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<td>- Analysis</td>
<td>- IBM Cognos TM1 provides a real-time approach to consolidating, viewing, and editing enormous volumes of multidimensional data.</td>
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<td>- Scorecarding</td>
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<tr>
<td>IBM Cognos Now!</td>
<td>IBM Cognos 8 Controller provides Finance organizations with unmatched capabilities for managing the close, consolidation, and reporting process.</td>
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<td>IBM Cognos Now! is a family of operational business intelligence and performance management solutions available as appliances or hosted software-as-a-service (SaaS) models.</td>
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<td>IBM Cognos Performance Applications</td>
<td>IBM Cognos 8 Workforce Performance</td>
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<td>Ready-built reports, analysis, and metrics for key business functions.</td>
<td>An analytic application for better workforce and HR metrics.</td>
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**Financial Performance Management**

- Financial metrics and outcomes – helps create "what if" business scenarios

**Business Intelligence**

- Monitoring of business processes and workflows

**BI and PM Solutions**

- All capabilities. One product. One platform.
- Reporting
- Analysis
- Scorecarding
- IBM Cognos 8 Platform
Using Cognos with IMS for Enhanced Reporting and Operational BI

- Customers interested in Cognos want:

  - Lower cost, single platform solution for DW and/or BI
  - New BI operations such as real-time and/or Operational BI
  - Require assured 24x7 operation
  - Consolidate distributed servers
  - Standardization on one or fewer BI tools
  - Data security rules

**Bottom Line:**
Cognos 8 delivers capabilities (such as reporting, analysis, planning) where and how our customers need them (over the web, to a mobile device via search or MS Office) through a common set of services that provide access to all data, where ever it resides.
Easily Fitting Into IBM’s BI SOA Model
The IBM Cognos 8 platform

**Presentation Tier**

**Application Tier**

**Data Tier**

**Services**

**Framework Manager**

**Broad Range of Capabilities**

**Common Set of Services**

**Open Data Access**

(Transactional, Warehouses or Modern data sources)
Reporting & OLAP

■ Enterprise Reporting

- Supports multiple report types: Production, Managed, Ad-hoc, Financial, etc
- Operates from a single metadata layer
- Can be personalized and targeted
- Can be distributed via email, portal, MS-Office, search application and mobile device
- Can assist in the management and optimization of daily business operations
- Capable of reporting on real-time data
- Presents complex data in a business way so it is easy to understand

■ Analysis

- Enables the guided exploration of information that pertains to all dimensions of your business
- Moves from summary level to detail levels of information effortlessly
- Analyzes and reports against online analytical processing (OLAP) and dimensionally aware relational sources
- Gets to the “why” behind an event or action to improve business performance.
- Identifies potential problems and recognizes business trends
The Solution

Why use Cognos with IMS?

- IMS runs core business processes – critical to the running of the business
  - Manages data that reflects the most current state of the business
- Before IMS 11, often difficult to directly access IMS data
  - No built-in ad hoc query capabilities in IMS
  - Standard tools often did not support hierarchical data; left to write own interfaces and reports or had to purchase bridging tools
  - Must be skilled in IMS to integrate with IMS and write reports
- Many installations periodically copy IMS data to relational store/data warehouse to run reports
  - They then only have access up to the point of copy, not current business state
The Value of Using Cognos and IMS for Enhanced Operational BI

Operational Business Intelligence

- A type of BI that helps drive and optimize business operations on a daily basis
  - **Value**
    - Extends the use of BI to a much wider user audience
    - Enables more timely business decisions; in relation to real time or right-time
    - BI Processing
    - Allows business users to report on, analyze and optimize business
    - operations
    - Reduces time between discovery of problems/opportunities and taking action
    - on them

- **Cognos and Operational BI**
  - **Cognos Now!**
    - Offers operational dashboards for real time monitoring of key performance
      indicators and operational metrics across different data sources
Using Cognos with IMS Business Case

**Cognos with IMS Improves Functionality by:**

1. Delivering a scalable, efficient technology that is quickly refreshed with current data.
2. Enhancing the value of an existing IMS-centric infrastructure while containing costs.
3. Performing business reporting against both operational and data warehousing environments.
4. Generating reports from other data sources outside of IMS.
5. No longer requiring the move of IMS data to a relational store to do Business Intelligence.
Using Cognos with IMS

AND ..Provides quick answers to commonly asked business questions

- Enables users to integrate data from multiple systems and data sources to create reports, dashboards and scorecards
  - Directly accessing IMS data allows visibility to current state of business
- Allows a common context for decision making that scales and adapts to all roles within an organization
  - Can be used for everything from simple reporting to analytical processing
- Improves management and operational processes to increase revenue, reduce costs, or both
  - Provides relevant information on the hows, whens, and wheres of the business
- Grants report authoring capabilities to all employees of a company
  - Enabling companies to quickly and easily get the right information at the right time to the right people
Using Cognos with IMS

Discovering New Business Value in Existing Data

Cognos Data Source Supports:

- Generic JDBC Driver
- DB2
- Oracle
- Informix
- Sybase
- MS SQL Server
IMS Integration with Cognos

Three Steps to Building Cognos Application with IMS

1. Locate and prepare IMS data sources and models
2. Build and publish the content
3. Deliver and view the information
Step 1: Setup Virtual View Manager

- Stop Virtual View Manager
- Copy IMS JDBC driver (imsudb.jar) and IMS database views* to:
  - `\cognos\vvm\conf\adapters\ims`
- *Database Views are generated using the DLIModel utility
- Start Virtual View Manager
- Add New Adapter
- Add New Data Source
- Publish IMS Segments (Tables)
Step 2: Framework Manager Meta Data

- Import the ODBC Data Source(s)
- Configure the Table relations
  - Required for usage of joins in Cognos
- Publish the Package for use in Cognos
Step 3: Generate the Reports

- Open Report Studio
- Select the published Package
- Drag the Data objects into the Widgets provided by Cognos
Using Cognos and IMS for Enhanced Operational BI

Software Requirements

- HTTP Server (Apache HTTP Server 2.2)
- Cognos 8.4.1 Business Intelligence Modeling
  - Framework Manager (FM)
- Cognos 8.4.1 Virtual View Manager (VVM)
- IMS V11
  - IMS Open Database Solution to access IMS data
    - IMS Connect – TCP/IP endpoint for Type 4 database access to IMS
    - ODBM – IMS component used for processing Type 4 database requests
IMS Integration with Cognos

**Topology**

[Diagram showing the integration of IMS with Cognos BI and Framework Manager, with connections to VVM and ODBC.]
IMS Integration with Cognos

The IMS Environment:

- IMS V11 allows distributed access over TCP/IP using the IMS Universal Database Driver (JDBC)
- IMS Connect and Open Database Manager now work together as a DRDA server for IMS data
  - Shipped with IMS V11 – requires System Programmer for initial setup
The Application:

- An insurance claims processing application written in a combination of different programming languages (COBOL, PL/I, JAVA).
- The environment mimics a real-world insurance company
- CRUD functions access IMS DBs using DLI calls

The IMS DB contains the following data:

- Customer Information
- Policy General Information
  - Motor Policy
  - Endowment Policy
  - House Policy
  - Policy Claim

<table>
<thead>
<tr>
<th>Customer No</th>
<th>Customer Name</th>
<th>Date of Birth</th>
<th>Address</th>
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<tr>
<td>000000001</td>
<td>Good Irvin</td>
<td>1975-08-10</td>
<td>127 Home Sweet Home, 90123</td>
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<tr>
<td>000000002</td>
<td>Diane Davies</td>
<td>1958-09-02</td>
<td>61 Dun Roamin 41239</td>
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<tr>
<td>000000003</td>
<td>Chris Evans</td>
<td>1967-09-26</td>
<td>46 Rose Cottage 92111</td>
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<table>
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<tr>
<th>Customer No</th>
<th>Policy No</th>
<th>Policy Type</th>
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<tbody>
<tr>
<td>000000001</td>
<td>000000001</td>
<td>Endowment</td>
<td>LOADSADOSH</td>
<td>$15000</td>
<td>10</td>
</tr>
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Cognos and IMS Examples

Scenario 1:

Accessing detailed information regarding customer accounts

- View basic account information regarding policies with the company
- Drill down capabilities into policies and claims
Cognos and IMS Examples

Scenario 2:

*Obtaining a high level overview of key performance measures essential to the organization*

- Year to date performance of the insurance firm based on revenue, costs, and profit
- A nation map that displays the number of claims files by state during the current fiscal year
- Drill down capabilities into monthly performance
Cognos and IMS – Summary and Next Steps

- Extending your Reporting and BI capabilities to IMS provides:
  - Real-time access to IMS data for report generating
  - Advantages of creating and managing business-related metadata and translating it into visual presentations
  - Knowledge to help decision makers know sooner, understand faster, and react more quickly than competition
  - Ability to compare performance across dimensions to spot trends and anomalies over time

- Next Steps
  - On-site demo? POC?
  - askzcognos@us.ibm.com