Cognos Software

**Data Sheet** 

# **IBM**

## Highlights

- · Reach all your information reliably and timely
- Deliver a complete, consistent view of your business
- Cost-effectively scale as user communities grow
- · Adopt infrastructure and adapt to change

# **The IBM Cognos Platform**

Deliver complete, consistent, timely information to all your users, with cost-effective scale

### **Overview**

IBM Cognos® Business Intelligence is based on an open, enterprise-class platform that meets all your Business Intelligence and performance management requirements. This platform delivers complete, consistent and timely information for all user communities, all on an easily scalable infrastructure.

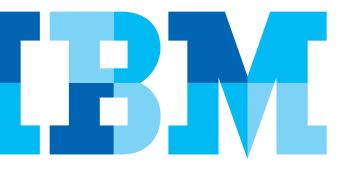
Satisfy all Business Intelligence (BI) needs, such as reports, dashboards, scorecards, analysis and planning, all with a platform that reduces the complexity of your BI environment, increases your return on investment and ultimately lowers your total cost.

# Reach all information reliably and timely

The Cognos platform ensures your Business Intelligence and performance management systems have access to all relevant data sources throughout your organization.

The Cognos platform can access the complete mix of data sources present in most organizations today, whether they are data warehouses, technology platforms applications, OLAP cubes, legacy data sources or modern data sources.

It provides broad reach, open access to all data sources and an easy modeling environment for building access to all needed information.



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# IBM Cognos 10: Intelligence Unleashed Smarter Decisions. Better Results

Cognos 10 delivers a revolutionary new user experience and expands traditional business intelligence (BI) with planning, scenario modeling, real-time monitoring and predictive analytics. With the ability to interact, search and assemble all perspectives of your business, Cognos 10 provides a limitless BI workspace to support how people think and work.

Cognos 10 enables organizations to outperform by providing:

- Analytics that everyone can use in a BI workspace that sharpens individual skills to answer key business questions
- Collective intelligence intelligence with built-in collaboration and social networking to connect people and insights to gain alignment
- Actionable insight everywhere in mobile, real-time and business processes to instantly respond at the point of impact

Built on a proven technology platform, Cognos 10 is designed to upgrade seamlessly and to cost-effectively scale for the broadest of deployments. Cognos 10 provides you and your organization the freedom to see more, do more—and make the smart decisions that drive better business results.

### Single query service

The Cognos platform accesses data using a single query service that issues both SQL and MDX queries and returns consistent and predictable results to all BI requests made through this service. The query service understands and leverages the data source strength.

The Cognos platform optimizes data retrieval while ensuring consistent, optimum access with the single query service. New data sources can be added quickly and easily, with data from the new source becoming immediately available to all Cognos capabilities.

### In-memory patented technology

The Cognos platform offers enhanced performance for complex heterogeneous data with 64-bit in-memory optimized query generation with pattern intelligence, in-memory calculations and aggregate operations, security-aware 64-bit cache facilities with 'in-memory' optimizations — hierarchies, members, facts, calculations and prompts.

### Flexible data sourcing approaches

The Cognos platform offers various sourcing approaches that can be used in any combination to deliver data in the format and with the frequency required by your business.

### Optimized direct access

Optimized direct access is a native interface using the single query service described above. Data professionals use Cognos Framework Manager, a metadata modeling tool for creating a common business model, to manage direct access and leverage any mix of existing data sources that exists in the organization.

#### Federated access

Using the Cognos Virtual View Manager, data is combined on the fly from multiple sources into a virtual view. Data professionals can combine both current and historic data into a single, easy-to-query view, without incurring the overhead of physically building a data warehouse or data mart.

### Dimensional ETL

Data professionals can use Cognos Data Manager, an ETL tool, to build dimensional data warehouses. Data Manager is focused on building data marts for BI and performance management. It is the optimal tool for high-performance transformations and provides a dimensional framework that automates the management of slowly changing dimensions, late arriving facts, surrogate key management, balancing, flattening and recursive hierarchy support.

### Optimize access for faster data delivery

The Cognos platform provides tools for optimizing data storage for access. Cognos Transformer helps IT build and deliver OLAP cubes. The architecture ensures the resulting cube can be accessed by any capability with the single query service.

Cognos Virtual View Manager also provides the option to cache data in virtual views to both speed response times for the user and offload hits on the operational sources.

### **Expand Traditional BI**

The Cognos platform expands traditional BI capabilities with real time monitoring and what-if scenario analysis. With real-time monitoring, you can view up-to-the-second relevant information in-context with all other BI information. What-if scenario analysis allows you to model and compare scenarios as well as validate planning assumptions.

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# Deliver a complete, consistent view of business

The Cognos platform ensures consistent information and query results for your entire organization with a multilingual common business model. The common business model ensures users gain consistent access to their data by packaging up relevant information to different user communities, so everyone is working with the same data for all BI capabilities.

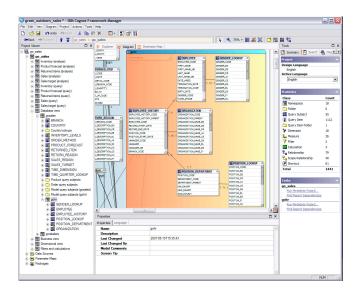


Figure 1. Framework Manager helps IT build a common business model to ensure all users get a consistent view of the business, no matter the data source type or location.

### A common business model to ensure consistency

Data modelers create a common business model using Cognos Framework Manager, a metadata modeling tool. The common business model helps provide a consistent view of the business to the user, and captures all the data users want to access.

Framework Manager provides cross-functional business views that span heterogeneous data sources, insulates the business from the technical complexity of the underlying data sources and becomes the common foundation for information sharing on an enterprise scale.

The business model can be multilingual, reducing duplication of effort and report proliferation.

The common business model can be packaged up and published as any number of targeted views, ensuring every department or user community gets the view of data they want and need, without overwhelming them with too many reports. No matter the capability (reports, ad hoc queries, analysis), the type (web, mobile device, office), or department, information remains consistent, helping generate greater confidence in the BI system.

### **Enhanced data model development**

The common business model is fundamental to any BI or performance management deployment. The Cognos platform provides a number of capabilities to the metadata modeler and modeling teams to speed model development and ensure optimal results.

### Cognos Model Design Accelerator

The Cognos Model Design Accelerator is a graphical utility that guides both novice and experienced modelers through a simplified modeling process. Novice modelers can easily build powerful models without extensive experience or training, while experienced modelers can create models faster.

### Guidance on model development

Modelers have the information they need at their fingertips to build a robust model, right from the start. Accessible directly from the tool, Cognos Model Advisor helps improve the model as it is being designed and as it evolves over time, providing guidance based on proven practices.

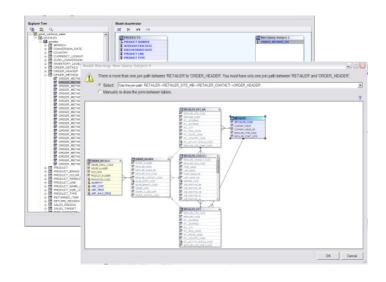


Figure 2. Cognos Model Design Accelerator helps modelers build an optimal model and easily maintain and manage it.

### Multi-participant modeling

The Cognos platform provides an environment for modelers to work in teams for model development. Models can be segmented for different developers and then brought back together to create the enterprise model.

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### Tools to engage the user community in understanding data

The Cognos platform has a set of capabilities for providing a view of information that the business understands and that engages the business user in the information itself.

### Cognos Business Viewpoint

Cognos Business Viewpoint is a tool for defining, governing and sharing dimensions, hierarchies and attributes in BI and performance management environments. With an easy-to-use interface, Business Viewpoint simplifies such tasks as redefining the sales hierarchy to reflect a recent reorganization or setting up a future cost center hierarchy for next year's planning.

### Data lineage

The Cognos platform offers users the unique ability to trace back to the original source of data. The investigation feature helps ensure data quality by providing greater understanding of the data and where it's coming from.

Users right-click on a report table or chart and select Lineage to view the lineage information of a data item. A data item's lineage information traces the item's metadata back through the report and the report's data sources.

# Cost-effectively scale as user communities grow

The Cognos platform provides helpful tools to IT so they can deploy, manage and scale their BI systems easily. Consolidated system management features such as task-based system monitoring and proactive administration provides the critical information IT teams need to scale their BI systems cost-effectively.

### Deploy applications more broadly

The Cognos platform lets you deploy broadly with peer-to-peer services, built-in fault tolerance and predictable linear response.

It can re-route services during peak time using the built-in load balancing, to avoid more hardware deployment. Any request can be routed to and handled by any server in the system.

The Cognos platform has been proven to scale in a linear fashion. Services can scale-up or scale-out to provide predictable linear response to workloads. With linear scalability, administrators can proactively plan for resources when scaling their BI solutions.



Figure 3. IT can reschedule or delay reports as they need to, allowing them to reduce bottlenecks such as when too many reports have been scheduled to run at the same time or for large reports that are slowing down the run time of other reports.

### **Enhanced system management efficiency**

The Cognos platform provides several capabilities for streamlining system management processes, allowing IT organizations to focus less on system administration and more on responding to new business demands.

#### Task-oriented system monitoring

Task-oriented system monitoring gives administrators a consolidated view of all system activity, from scheduled and interactive report to servers and dispatchers. Administrators can prevent bottlenecks and reduce the load on the system with greater visibility into hourly schedules and data elements and with the ability to suspend activities.

### Proactive system administration

Cognos solutions reduce the amount of time administrators have to spend finding information by providing detailed system metrics that can be monitored automatically. Administrators can set thresholds that trigger personal alerts, allowing them to detect issues early and take action on them.

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### System Management Methodology

Companies can jump start their BI deployment and deliver results more quickly using the Cognos System Management Methodology, a systematic methodology based on proven practices. The methodology consists of:

- White papers containing proven practices for system administration (for example, System Auditing), complete with sample reports.
- Metadata models that speed up your ability to administer your deployment.
- Tools to establish performance thresholds automatically in your specific environment.
- Sample administration models and reports, built using Cognos Business Intelligence, to help administrators understand performance trends and tune system performance.

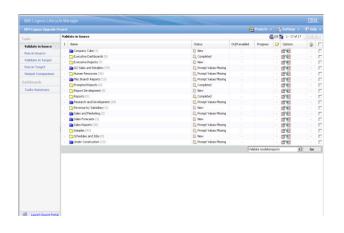


Figure 4. Cognos Lifecycle Manager allows IT to streamline environment changes to minimize the impact not just on IT but the entire organization.

### Dynamic Query Analyzer

Cognos Dynamic Query Analyzer is a new self-service, visual tool for IT. Query visualization gives administrators greater insight into how the dynamic query was generated and visually displays results flow, making it easier to maintain and troubleshoot.

### Lifecycle Manager

Cognos Lifecycle Manager is a tool used for validating report content between two versions of Cognos software or when introducing a change to your environment.

IT can create benchmark projects to compare reports from a single environment. They can also compare snapshots against a baseline, or compare reports after the installation of a refresh pack or any other upgrade, such as a new database version. Lifecycle Manager reduces the effort of validating the impact of changes to your environment and allows IT to respond quickly to new business requirements.

IIT can also validate content in multiple environments, comparing a large number of report outputs, such as PDF, HTML, XML, CSV, Microsoft® Excel 2002/2007, and Microsoft Excel 2000 Single Sheet format.

### Single sign-on

The Cognos platform leverages existing enterprise security providers, helping lower administration costs while ensuring a secure environment. It also provides the ability to link to one or more security systems simultaneously, as you require. The Cognos platform supports LDAP, NTLM, Microsoft Active Directory®, Netegrity, and SAP® Business Information Warehouse (SAP BW), among others.

This integration makes single sign-on for authentication possible, simplifying the login process and restricting access to data according to business requirements.

## Adopt infrastructure and adapt to change

At the heart of the Cognos platform is its long-established and proven Services-Oriented Architecture (SOA). The Cognos platform is built on a true set of peer-to-peer services and is built from the ground up on SOA.

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### **Environment-neutral architecture**

The platform is based on open standards. This, combined with the SOA, means IT can use their existing technology standards and be confident that the environment-neutral platform will meet their future requirements as they evolve. Companies can continue to rely on the enterprise technology standards already in place, including security, operating systems, servers and data sources.

The standards-based services are interoperable and extensible though modern standard interfaces and protocols, including SOAP, XML and SQL.

### Flexible peer-to-peer services

The Cognos platform easily fits into your hardware deployment strategy, whether it is single server, multi-server, cluster or grid.

The Cognos platform can scale up or out to fit your optimal deployment approach, with peer-to-peer services that can be located anywhere on the network. For the Cognos platform, hardware locations and operating systems are transparent. Use your existing infrastructure by installing the Cognos platform on UNIX®, Microsoft Windows, Linux® or any combination of these in the same configuration.

### Single open API

A single open API ensures full access to functionality. You can easily embed BI into other applications, such as Microsoft Office, Search, handheld devices or other applications.

The internal communication between services uses the same API that is exposed in the software development kit (SDK). Use the SDK confidently with the knowledge that the same APIs are used internally in the architecture. The single open API gives you and your IT partners full access to all BI functionality to build additional value or to integrate BI into your business process management, Search or other infrastructure tools.

### **Purpose-built services**

Every service is built for a different use. For example, there is one service for query and one service for presentation.

You have control to determine which services or group of services run on each machine. You can configure the services in your environment for optimal use. This also provides far greater flexibility for quickly responding to your clients' changing needs.

### Conclusion

Satisfy your BI needs with a platform that reduces the complexity of your IT infrastructure, increases your return on investment and ultimately lowers your total cost. The Cognos platform provides complete, consistent and timely information for all user communities, all on an easily scalable infrastructure.

## **About IBM Business Analytics**

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers trust to improve business performance. A comprehensive portfolio of business intelligence, advanced analytics, financial performance and strategy management and analytic applications gives you clear, immediate and actionable insights into current performance and the ability to predict future outcomes.

Combined with rich industry solutions, proven practices and professional services, organizations of every size can drive the highest IT productivity and deliver better results.

### For more information

For further information or to reach a representative: <a href="https://ibm.com/cognos.">ibm.com/cognos.</a>

## Request a call

To request a call or to ask a question, go to ibm.com/cognos/contactus.

An IBM Cognos representative will respond to your enquiry within two business days.



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