

# Make the most of Cognos 8 BI with IBM Tivoli software



*Managing the end-to-end Cognos 8 BI for Linux on System z infrastructure*

---

## Highlights

- Centralize and streamline the monitoring and management of your IBM Cognos® 8 BI for Linux® on System z® infrastructure
  - Provide executives and operational users across the business with on-demand access to the information they need, when they need it, to enable smart business decisions
  - Combine the industry-leading management capabilities of IBM Tivoli® software with the legendary performance, scalability and availability of the IBM System z platform to maximize the value of your Cognos 8 BI investments
- 

Successful companies have long recognized the strategic value associated with business intelligence (BI)—the value of transforming critical business data and leveraging it for smart business decisions. They understand the power that BI offers for enabling smarter decision making and finding competitive differentiation. Over the years, many companies have deployed departmental BI solutions for individual groups, capturing valuable business data at various points throughout the organization. In many cases, multiple systems were deployed, duplicating resources and creating maintenance and management challenges.

These systems, while providing value to an individual department, often result in incomplete views because they don't operate within the larger business and don't take into account other relevant inputs. Departmental systems often provide little value to the individuals who need a higher-level, cross-departmental view. Now companies are realizing the need to consolidate these fragmented solutions in order to achieve a full view of the data as well as to centralize management of BI systems and improve operational efficiencies.



For many companies, the answer to the BI question is IBM Cognos 8 BI for Linux on System z. For all the reasons enterprises run their mission-critical and data-intensive systems on System z—including its industry-leading availability, scalability, reliability, security, energy efficiency, and performance—System z is also an ideal platform for deploying Cognos 8 BI.

A successful Cognos 8 BI for Linux on System z deployment includes more than just Cognos 8 BI and System z. It often includes the equally important middleware components such as IBM WebSphere® Application Server and IBM DB2® for the content store. And while Cognos 8 BI is equipped with its own monitoring capabilities for its software components, all of the components of that BI infrastructure are critical to ongoing success, and all components must perform at an equally high level for the BI solution to provide optimal business value to the organization. With so many moving parts, it can be difficult to keep everything up and running reliably. How do you troubleshoot effectively when problems arise? How do you ensure that your business is extracting every ounce of value from your BI investments?

IBM Tivoli software can help—by offering a comprehensive portfolio of solutions for monitoring and managing the Cognos 8 BI for Linux on System z environment, which provides end-to-end visibility into the many components that make up the BI infrastructure. Tivoli software provides monitoring and management of the entire BI infrastructure from one centralized console. These solutions help organizations reduce the cost of systems management as well as reducing the business costs associated with BI system downtime.

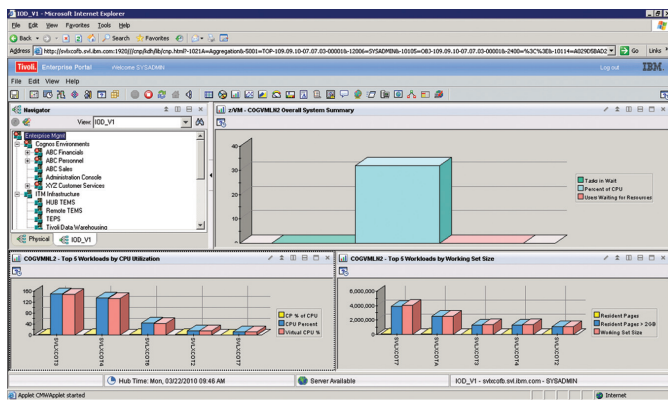
## Extending the value of BI across the organization

For many companies, BI is extending its reach across the organization, serving both tactical and strategic purposes. By no longer limiting BI to executives making long-term decisions, companies are learning to leverage these resources in an operational context, giving front-line managers access to critical information for making day-to-day and minute-to-minute decisions. The ability to make better business decisions and take advantage of business opportunities can be affected by the ability to access BI information. However, in order to function at this level—providing information on demand for a wider breadth of users—BI has to be treated as a mission-critical IT system. For enterprises operating in multiple time zones, BI system availability is especially important.

Another challenge of maintaining a BI infrastructure is the need to accommodate unanticipated demand. The nature of operational use of BI is that you often have unanticipated requests for information, and the data may be complex. Business questions or issues arise that are often precipitated by external events that cannot be predicted. Unlike strategic use by executives who consult the BI system on a scheduled basis, operational use of BI reporting and analysis is much more likely to be ad hoc. BI is of the most value to the business during these times, when targeted information is needed very quickly.

## Managing complex BI infrastructures

Critical applications like BI on the front-end rely on a solid infrastructure foundation on the back end in order to deliver on their promised business benefits. Running Cognos 8 BI for Linux on System z enables companies to deliver the complete range of BI capabilities required to meet the needs of the various users across the organization within a single architecture. Deploying Cognos 8 BI on System z not only reduces installation time and complexity as compared to a distributed solution, but also allows companies to leverage the premier platform for service quality, helping IT organizations eliminate the latencies and potential performance issues associated with data access on distributed platforms.



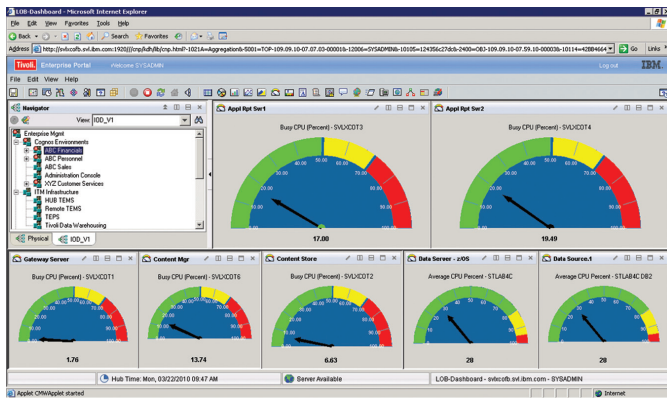
Tivoli software provides a real-time view of system utilization with tailored views for the guest machines hosting the Cognos 8 BI environments. At a glance, one can spot any potential overall CPU or memory guest machine issues which may affect user satisfaction.

Today's BI deployments can become particularly complex as they scale to handle the dynamic workloads associated with growing user communities. Multiple lines of business often have simultaneous needs for key information. Multiple IT components are involved in the delivery of complex BI metrics, and performance issues on any single component can impact the ability to deliver the BI your users need.

Likewise, a performance issue on any single component within the Cognos 8 BI for Linux on System z infrastructure can affect the performance or availability of the entire BI service. Often, multiple logical or physical hardware and software components must be accessed, including Web servers, application servers (such as for analytics, reporting, and meta-data management), security servers, data source servers, and operating systems.

Managing the end-to-end infrastructure is critical. Adding Tivoli software to the infrastructure helps organizations address the unique systems management needs of the Cognos 8 BI environment, providing the monitoring, management, and reporting capabilities that enable closed-loop control of the BI environment and insight into the many components that must run successfully in order to maximize the business value of Cognos 8 BI to the organization.

Tivoli software provides the performance management capabilities required to ensure that unplanned events and unanticipated spikes in demand do not impede business decision making. From data and applications to transactions, subsystems and network performance, Tivoli software provides the ability to identify and react quickly—often proactively—when system issues arise.



Tivoli software provides a simple, configurable dashboard view of the utilization across the various Cognos 8 BI infrastructure components to highlight degrading performance that needs attention.

### The benefits of combining Tivoli software with Cognos 8 BI

The IBM Cognos 8 BI solution itself offers a full, feature-rich complement of management functions, but the scope is limited to the Cognos 8 BI platform. By adding a layer of Tivoli software to the Cognos 8 BI solution, management is extended to include the entire BI infrastructure, including

applications, middleware, operating systems, and databases, for comprehensive visibility and control of the Cognos 8 BI environment.

Tivoli software provides real-time health-check monitoring, which helps IT administrators be proactive in identifying and resolving potential issues before they have a chance to impact service levels. IT administrators are alerted to production problems quickly, speeding time to resolution and reducing system downtime and its impact on users. When demand for resources is unanticipated, management of workload and services is critical to ensure the demand is met.

Tivoli software also provides historical reporting for reactive management, helping BI and IT administrators identify trends that may necessitate a change to the environment, helping them manage capacity requirements and pinpoint solutions that can help prevent recurring problems.

Tivoli software puts valuable BI service delivery information at the fingertips of IT administrators through a centralized, customizable IT console. This console displays:

- Key performance indicators for components across the BI infrastructure, including CPU, memory, I/O, and Java™ Virtual Machine (JVM™) utilization.
- Real-time system usage information, along with thresholds, alerts, and take-action options.
- Historical usage trend reports.

This Web-based console provides a single source of data for systems, database, and BI administrators alike. From a single pane of glass, these users have access to the data they need to continuously fine tune the BI implementation and deliver high-quality, uninterrupted BI service to the organization.

## Industry-leading systems management capabilities from Tivoli software

With an IBM Cognos 8 BI deployment for Linux on System z, Tivoli software can provide enterprise-wide management views starting with the first-level operating system. Administrators can manage overall System z usage as well as resource consumption by the Cognos 8 BI systems that are providing the BI service. Tivoli software provides capabilities for monitoring, managing, and analyzing each component of the BI infrastructure:

**Hardware management:** Captures and displays hardware utilization data, including CPU, disk, and memory utilization.

**Database systems management:** Captures and displays hardware and software resource utilization data for IBM DB2, including DB2 pools, CPU, disk, and memory utilization, as well as response times for DB2 data requests generated in Cognos 8 BI. Tivoli software has long provided management for databases operating on Linux for System z.

**JVM management:** Captures and displays JVM hardware and software resource utilization data, including JVM pools, garbage collection, and CPU utilization, helping administrators understand resource requirements and anticipate potential resource shortages to proactively improve service delivery.

**Cognos 8 BI systems management:** Captures and displays Cognos 8 BI hardware and software resource usage data, then generates alerts and actions based on configurable rules that reflect system performance requirements, helping to streamline problem determination and resolution.

**OS management:** Captures and displays Linux usage data for the systems that are running Cognos 8 BI components.

The comprehensive, integrated Tivoli software portfolio offers a range of solutions that can be customized to meet an organization's specific service management needs.

## The cost benefits of powerful BI systems management

Integrating Tivoli software with your Cognos 8 BI implementation helps protect your Cognos 8 BI investment and helps ensure that its business value is realized across the organization. This powerful combination can also help organizations realize significant financial benefits as well. BI performance issues that prevent a line of business manager from making a critical business decision can have a measurable impact on the bottom line. By enabling real-time monitoring, proactive management, and historical analysis, Tivoli software helps reduce the business costs associated with BI downtime, helping to ensure that your Cognos 8 BI environment is up and running and that both executives and operational users have on-demand access to the information they need.

Tivoli software can also help reduce overhead costs by simplifying and centralizing systems administration with a single console, rather than having multiple people use multiple methods to monitor and manage the different components. By enabling consolidated monitoring and management of the Cognos 8 BI infrastructure, Tivoli software can help IT organizations free up valuable IT resources, allowing them to reinvest those resources in innovation initiatives and high-value projects that generate revenue for the organization.

## For more information

To learn more about how Tivoli software can help you make the most of your Cognos 8 BI implementation, please contact your IBM sales representative or IBM Business Partner for a demonstration, or visit [ibm.com/tivoli](http://ibm.com/tivoli).

## About Tivoli software from IBM

Tivoli software offers a service management platform for organizations to deliver quality service by providing visibility, control and automation—visibility to see and understand the workings of their business; control to effectively manage their business, help minimize risk and protect their brand; and automation to help optimize their business, reduce the cost of operations and deliver new services more rapidly. Unlike IT-centric service management, Tivoli software delivers a common foundation for managing, integrating and aligning both business and technology requirements. Tivoli software is designed to quickly address an organization's most pressing service management needs and help proactively respond to changing business demands. The Tivoli portfolio is backed by world-class IBM Services, IBM Support and an active ecosystem of IBM Business Partners. Tivoli clients and Business Partners can also leverage each other's best practices by participating in independently run IBM Tivoli User Groups around the world—visit [www.tivoli-ug.org](http://www.tivoli-ug.org)

The customer is responsible for ensuring compliance with legal requirements. It is the customer's sole responsibility to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the customer is in compliance with any law or regulation.



---

© Copyright IBM Corporation 2010

IBM Corporation Software Group  
Route 100  
Somers, NY 10589  
U.S.A.

Produced in the United States of America  
March 2010  
All Rights Reserved

IBM, the IBM logo, [ibm.com](http://ibm.com), Cognos, System z, and Tivoli are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

No part of this document may be reproduced or transmitted in any form without written permission from IBM Corporation.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements (e.g. IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided.



Please Recycle