IBM Systems and TCS BaNCS Market Infrastructure

Drive growth and improve quality of service with a synergistic IT solution

Highlights

- Deliver 24x7 availability for TCS BaNCS Market Infrastructure mission-critical environments with IBM® DS8000® and IBM z Systems™
- Achieve extraordinary performance for demanding transactional and real-time analytics workloads
- Reduce risk and improve business continuity with bulletproof storage systems that offer unparalleled integration with z Systems and uncompromising availability through industry-leading capabilities
- Consolidate workloads with a highly scalable, efficient and reliable IT infrastructure
- Transform data economics with a tested and proven enterprise-level solution from IBM and TCS

Timely investment in technology that will drive business value is imperative to enabling organizations to stay at the forefront of change, adapt quickly and to help ensure service excellence to their customers—at lower costs and with lesser risks. This is especially true for the Market Infrastructure space, which faces growing competition and stringent regulation.

IBM Systems in combination with Tata Consultancy Services (TCS) BaNCS Market Infrastructure suite provides an ideal solution for financial institutions looking to address these dynamic demands and drive growth while improving quality of service.

With vast capital market expertise, the Market Infrastructure product suite from TCS BaNCS comprises highly scalable and deployable solutions that can help organizations retain and improve their competitive edge, transform business processes and increase operational efficiency and profitability.

IBM z Systems is designed to help address today's biggest marketplace challenges and opportunities by bringing together unparalleled data, transaction and analytics capabilities into a single, powerful, integrated mainframe platform that's built for the digital generation.

IBM DS8000 Data Systems are designed to deliver high performance, reliability and flexibility while providing tight synergy with z Systems and support for a range of open server operating environments. DS8000 includes a broad set of features that automate performance optimization and application quality of service, as well as high levels of reliability and 24x7 system uptime. Offering specialized advanced functions optimized for both IBM z Systems and IBM Power Systems™, DS8000 is exceptionally suited for mission-critical financial industry workloads.

TCS BaNCS Market Infrastructure: Comprehensive and modular

TCS BaNCS Market Infrastructure is a comprehensive, web-enabled solution for stock exchanges, clearing organizations, central securities depositories / registries, central banks and regulators. The componentized solution can be deployed independently for each of these entities, or as a single solution for vertically integrated organizations that provide the entire range of trade and post-trade services. Support for multiple entities, languages, asset classes and state of the art access channels on a single platform offers unmatched competitive advantage. The solution enables high scalability and performance, even while ensuring lower total cost of ownership (TCO) and quick time-to-market. The real time solutions are continuously benchmarked to global standards and regulations including G30, ISO20022, EMIR, T2S and CSD-R, and comes with 24x7 support and regular upgrades.

The solution from TCS is highly scalable, deployable in an integrated Straight-Through Processing (STP) mode and offers support for flexible business models. The TCS product suite is designed to help financial institutions of any size stay agile, maintain regulatory compliance and gain a distinct, competitive edge.

IBM DS8000: Bulletproof hybrid data systems

IBM DS8000 Data Systems are mission-critical, high-performance, high-capacity, highly secure hybrid systems designed to deliver the needed throughput, flexibility, scalability, resiliency and overall value for the most demanding workloads making them well-suited for TCS BaNCS deployments. Organizations worldwide, including many in the banking and financial industry, entrust their mission-critical data to this flagship IBM storage system with its unparalleled availability and extraordinary enterprise-level capabilities.

The latest additions to the DS8000 family, IBM DS8880 Data Systems, are architected and built for the future of business. DS8880 offers hybrid configurations that leverage self-tuning features to help deliver consistent microsecond application

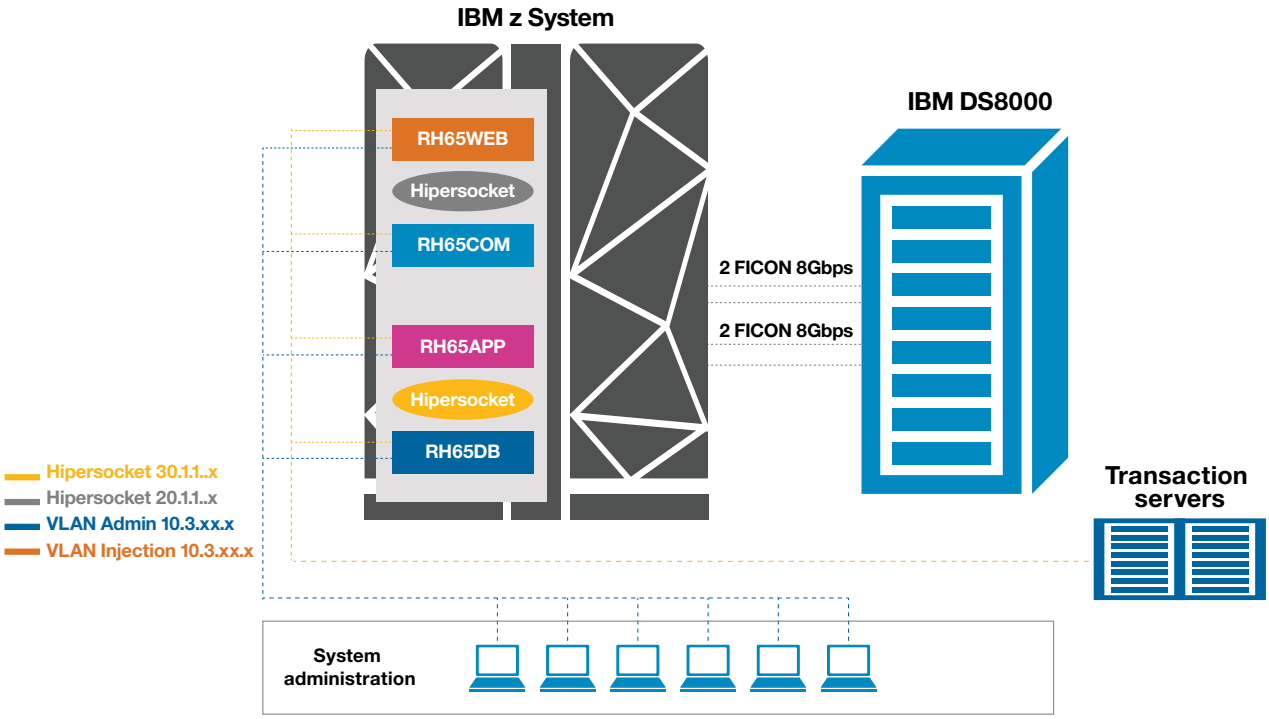

Figure 1: An example hardware configuration for this solution includes IBM z System and IBM DS8000 with a shared IFL in a zVM LPAR environment. A sample configuration would include individual servers deployed on zVM LPAR with 2 IFL and 48 GB memory shared across all the VMs.

response times. These features include intelligent caching algorithms, automated quality-of-service management and advanced storage tiering that can optimize data placement between the DS8880 and the attached enterprise servers.

IBM DS8000 enterprise storage delivers a variety of performance, availability and scalability features that help users maximize the potential of their z Systems environments. Performance examples include advanced integration with IBM High Performance FICON® (zHPF) and IBM DB2® for z/OS® that delivers extreme performance and helps improve remote data speed for database-intensive applications, such as core banking, enterprise resource planning, healthcare and real-time analytics applications. And IBM Easy Tier® enables applications running on z Systems to optimize data placement by communicating information about workload activity and performance requirements.

Synergy with z Systems is further strengthened with an intelligent and resilient I/O infrastructure. Features include 16Gb FICON host adapters, FICON Dynamic Routing and Forward Error Correction support—all geared towards improving throughput and system availability. Advanced integration with other IBM offerings focused on business continuity—such as IBM HyperSwap®, IBM GDPS and IBM z/OS Parallel Sysplex®—add to the deep synergy with z Systems and robust capabilities of the DS8000 family.

DS8000 is designed to deliver mission-critical acceleration, high efficiency, uncompromising availability and unparalleled synergy with z Systems. With its fully redundant architecture, enterprise-class capabilities, massive scalability (more than 3PB of physical storage capacity) and tight integration with the mainframe, DS8000 is ideal for the most demanding TCS BaNCS deployments.

IBM z Systems: Enterprise infrastructure for digital business

Delivering unmatched security, operational efficiency, speed, seamless scale and lower costs per transaction, IBM z Systems is the premier enterprise server and data transaction engine. Enabled for the mobile generation, z Systems integrates transaction and analytics and transforms the economics of IT with efficient and trusted clouds. z Systems solutions help facilitate the integration of operational analytics with mobile transactions and enable secure cloud delivery with the most trusted systems available.

z Systems drives innovation in the retail, computer services and banking arenas, bringing together infrastructure management, virtualization, productivity software to deliver robust, agile, scalable business solutions.

Close and integrated cooperation between the z Systems server and DS8000 reinforces each building block within the mainframe configuration model. Integrating z Systems and the DS8000 Data Systems helps achieve the best overall efficiency from the complete solution, which results in a combination that offers even more than the sum of its individual components.

Why IBM?

IBM and TCS BaNCS are committed to delivering state-of-the-art infrastructure technology, so financial institutions around the world can grow revenue while controlling costs. The two companies work together to deliver a superior platform that can enable industry transformation.

The IBM and TCS Financial Solutions difference is grounded in banking industry leadership. The two companies have a deep understanding of how market, regulatory and business conditions vary around the world and what it takes to accommodate the circumstances unique to a specific region—a particularly important consideration in an industry as heavily regulated as banking.

For more information

To learn more about IBM z Systems, please contact your IBM representative or IBM Business Partner, or visit: **ibm.com**/systems/z

To learn more about IBM DS8000 storage, please contact your IBM representative or IBM Business Partner, or visit:
ibm.com/DS8000
ibm.com/mainframestorage

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. We'll partner with credit-qualified clients to customize an IT financing solution to suit your business goals, enable effective cash management, and improve your total cost of ownership. IBM Global Financing is your smartest choice to fund critical IT investments and propel your business forward. For more information, visit: **ibm.com**/financing

© Copyright IBM Corporation 2016

IBM Corporation
IBM Systems and Technology Group
Route 100
Somers, NY 10589

Produced in the United States of America
March 2016

IBM, the IBM logo, ibm.com, DB2, DS8000, EasyTier, FICON, HyperSwap, POWER8, Power Systems, Sysplex, z Systems and z/OS are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. It is the user's responsibility to evaluate and verify the operation of any other products or programs with IBM products and programs.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANT-ABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

Please Recycle

TSS03178-USEN-00