

tcs BaNCS™



TCS BaNCS for Market Infrastructure



The business landscape is being increasingly influenced by the dominant forces of technology and innovations like Blockchain and AI. Against this backdrop, financial market infrastructure institutions are at the crossroads of change. While on one end, there is rising competition with new market models being created by new entrants and niche players, on the other end of the spectrum, organizations need to deal with disparate customer segments with varied needs. Timely investment in technology holds the key to enabling organizations stay at the forefront of change, adapt quickly, and ensure service excellence to their customers.

The Market Infrastructure solution from TCS BaNCS is designed and continuously enhanced to help achieve these objectives.

Functional Richness, Componentization and Flexibility

TCS BaNCS for Market Infrastructure from Tata Consultancy Services is a solution that supports components and offerings for end-to-end trade and post-trade functions, including unified clearing, settlement along with integrated risk and collateral management. The solution also offers trade matching, surveillance, issuance, depository and registry functions across multiple asset classes in a single solution.

Bringing in the unique ability to support multiple markets and asset classes on the same platform, it has been continuously benchmarked to global regulatory standards such as G30, PFMI, SFTR, GDPR, SMPG, FATCA/CRS, EMIR and CSDR as well as messaging standards such as ISO 20022, ISO 15022, FIX, FIXML and FpML, in addition to standard APIs for integration.

The TCS BaNCS for Market Infrastructure solution can be deployed on a wide range of technology stacks and is also “Cloud ready” thereby providing an efficient way to manage TCO for our customers.

A Comprehensive suite for Depositories, CCPs, Exchanges, Central Payment Infrastructures and Central Banks

TCS BaNCS for Market Infrastructure encompasses the following:

Depository – The solution provides support for a comprehensive range of business functions to cater to the evolving business needs of CSDs. A sophisticated double entry system with support for both omnibus and end investor accounting is provided for a wide range of asset classes on a single platform. The solution supports multiple settlement models including a unique settlement optimization to help manage liquidity across both securities and cash. The solution provides comprehensive support for Corporate Actions for wide range of events with compliance to CAJWG / SMPG standards. The solution has been built with an inherent componentization and additional functions including cross-border settlement, pledge, collateral management, repo and securities lending and borrowing which can be enabled based on market needs.

The solution supports real-time interfaces with the market participants using a wide range of messaging standards. The solution provides full support for ISO 20022 standards for settlement, corporate actions and statements. The co-existence approach for supporting both ISO 15022 and 20022 enables a seamless and efficient transition to ISO 20022 across the market.

CCP Clearing – Designed for high performance using our unique HpTM (High Performance Transaction Management) framework, the solution provides ‘Unified Clearing’ across Cash and Derivatives markets.

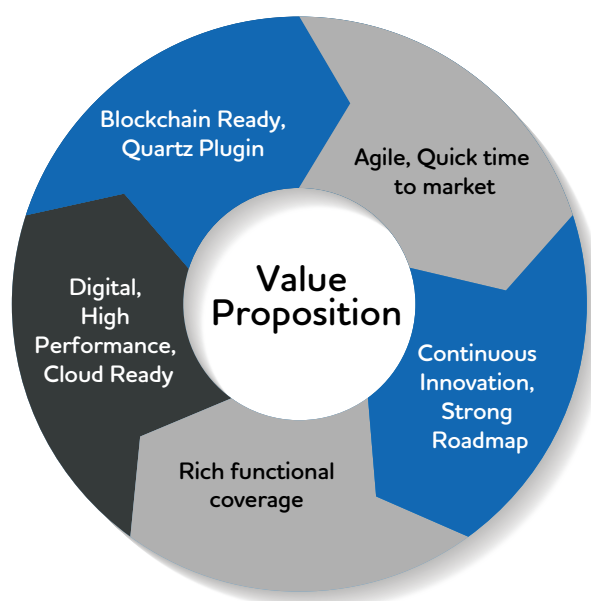
The solution supports trade management, position management, settlement and expiry management. The solution allows to launch newer asset classes and create Derivative contracts with ease. The hierarchical account structure provides support for client clearing and the ability to manage positions, margins and collateral at various levels of accounting hierarchy. The CCP services are integrated with risk and collateral management with real-time / intraday margining capabilities and stress testing / back testing. The offering is architected to be deployed as a microservice in a container framework to provide scalability as the market expands.

Exchange – Designed for high performance and low latency on HpTM framework, the Exchange solution provides order management and matching across Cash, Derivatives markets and emerging digital assets. The solution provides comprehensive market data dissemination enabled through Blockchain. The solution also offers a modern Digital solution for brokers to manage the entire trading lifecycle along with AI enabled voice and mobile trading capabilities.

Central Bank – Central Banks can manage both primary and secondary market operations for government securities, with comprehensive matching and settlement services for such markets. The solution also provides central bank repo and reverse repo, inter-bank repo and lien functions, multi-currency transaction management capabilities for a wide range of cash instructions along with an ability to integrate with other RTGS solutions.

Central Payments Infrastructure – Designed for high performance and low latency using the Hp™ framework and deployed as microservices, the clearing and settlement solution enables real-time and deferred net settlement for retail and high value payments. The unique unified clearing approach provides for consolidation of the multiple payment rails in a single solution and yet provides the flexibility and configurability to cater to a differentiated payments infrastructure. The full ISO 20022 support enables standardization while the APIs enable easy integration with overlays, expanding the reach of the payments ecosystem.

Surveillance – Stock exchanges, CSDs, Self-Regulatory Organizations (SROs), and market regulators can seamlessly maintain integrity and transparency in their markets using this solution. The solution offers real-time monitoring of capital market transactions and detects manipulative trends. The AI and ML enabled monitoring ensures easier filtering of alerts to increase operational efficiencies.



- **Multi-Asset Class, Multi-Market Capability**
Equities, Fixed Income, Commodities, Index, Currency Pairs, Interest rates, Energy, Carbon, Cash, Derivatives & OTC markets

- **Regulatory and Standards Compliance**
EMIR, PFMI, GDPR, CSDR, FATCA, CRS compliance
G30, BIS settlement models and payment methods
Compliance to messaging standards – ISO/FIX/XML
Co-existence of ISO 15022, ISO 20022

- **Configurability, Flexibility, Ease of operations**
Componentized design and ease of enabling business services, Business parameter driven models, Rule engine support, configurable workflows, dashboards

Vision: “To provide best in class financial technology for Market Infrastructure Institutions, with unique multi-asset class, multi-market capability, enabling transformation and regulatory compliance”.

Blockchain Ready

Organizations are working towards enabling truly connected ecosystems with real-time, efficient transaction processing, without the intervention from intermediaries. Blockchain, with its ability to synchronize data across participating entities, builds trust and encourages firms to collaborate in setting up such ecosystems. Quartz – The Smart Ledgers are targeted at helping organizations leverage blockchain meaningfully for their businesses.

The Market Infrastructure solution with Quartz plugin enables MI organizations demonstrate our ability to future proof customers by leveraging this technology for their businesses.

Our distinctive ‘Co-existence approach’ has been designed to enable customer to roll end to end business functions either on Blockchain or on traditional technologies, depending on the organization’s strategic initiatives.

The TCS BaNCS Advantage

The TCS BaNCS Market Infrastructure solution’s global footprint combined with TCS Business 4.0™ thought leadership framework can help your organization leverage new age technologies to create and extend your reach and capabilities to new ecosystems and marketplaces.

We want to provide capital efficiency for our participants wherever possible, and we are designing infrastructure to support that. To execute on that vision, we need not just state-of-the-art technology solutions for what we are doing today, but also an infrastructure capable of supporting changes to our operating environment on a more timely basis. In meeting with the senior team at TCS, we found that we have a shared vision of how we expect market infrastructures to evolve. This gave me great comfort that TCS, as a partner, could help us evolve our business.

Glenn Goucher,
Former President and Chief Clearing Officer, TMX Group

About TCS BFSI Products & Platforms

TCS BFSI Products & Platforms is a strategic business unit that enables financial services and Insurance organizations across the globe in achieving growth, superior customer experience, reduced enterprise complexity and operational transformation by delivering end-to-end platform-based engagement models such as BPaaS, Paas and SaaS solutions by leveraging TCS BFSI Products & Platforms offerings such as TCS BaNCS™, Unified Communication Hub (UCH), Digital, etc.

To know more about TCS BFSI Products & Platforms, please visit: <http://www.tcs.com/platforms>

About TCS BaNCS™

TCS BaNCS™ solution is designed to help financial services institutions enhance end customer experience, enabling them to embrace open and innovative technologies that embody true digital customer engagement by deploying at more than 450 installations worldwide.

To know more about TCS BaNCS, please visit: <https://www.tcs.com/bancs> or write to us at tcs.bancs@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services (TCS) (BSE: 532540, NSE: TCS) is a digital transformation and technology partner of choice for industry-leading organizations worldwide. Since its inception in 1968, TCS has upheld the highest standards of innovation, engineering excellence and customer service.

Rooted in the heritage of the Tata Group, TCS is focused on creating long term value for its clients, its investors, its employees, and the community at large. With a highly skilled workforce of over 607,000 consultants in 55 countries and 180 service delivery centres across the world, the company has been recognized as a top employer in six continents. With the ability to rapidly apply and scale new technologies, the company has built long term partnerships with its clients – helping them emerge as perpetually adaptive enterprises. Many of these relationships have endured into decades and navigated every technology cycle, from mainframes in the 1970s to Artificial Intelligence today.

TCS sponsors 15 of the world's most prestigious marathons and endurance events, including TCS New York City Marathon, TCS London Marathon and TCS Sydney Marathon with a focus on promoting health, sustainability, and community empowerment. TCS generated consolidated revenues of US \$29 billion in the fiscal year ended March 31, 2024. For more information, visit www.tcs.com

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