Innovation and security for real-time gross settlement

IBM, Montran power high-performance transaction processing with the confidence of data privacy, pervasive encryption and high resiliency

Highlights

- Modular structure to meet country requirements allowing for flexible growth

- 24/7 payments processing capabilities

- Final and irrevocable settlement of funds transfers, continuously in real time

- Highest reliability; redundant components enable uninterrupted service 24/7

- No compromise performance with scale; specialty processors do the heavy lifting

- Maximum efficiency running at or near 100% resource utilization

The challenge

The global economy depends upon highly sophisticated payment and transaction settlement systems. The Bank for International Settlements (BIS) established real-time gross settlement (RTGS) as the standard for central banks to execute large-value interbank funds transfers in real-time to improve efficiency and reduce risk. These transactions require immediate clearing, security and are final and irrevocable.

Given its mission-critical role, when selecting new or enhancing RTGS technology, the central bank must not only consider business level capabilities, but also ensure the full technology stack from the hardware up can deliver the qualities of service needed to execute as the hub of the worldwide banking system. This stack must deliver settlement performance at scale to meet peak demands, with zero downtime, and the highest levels of security to meet the strictest compliance requirements and pervasive encryption. A highly engineered system technology stack can't be overlooked when deciding upon an RTGS platform.

Next-generation features central banks look for in an RTGS platform

- Enhanced liquidity optimization and risk management technology with advanced features such as high-performance gridlock resolution and priority payment streams
- Efficient anti-money laundering (AML) with identification and blocking of transactions of parties found on the Office of Foreign Asset Control (OFAC) and other AML lists
- Ability to more easily and efficiently address complex regulatory requirements such as the EU General Data Protection Regulation (GDPR), the second iteration of the Payment Services Directive (PDS2) and others to reduce risk and protect members
- Extended messaging support such as ISO20022 global financial messaging standards, as well as centralized message format conversion.
- Payment processing scale, zero downtime and reduction of costs
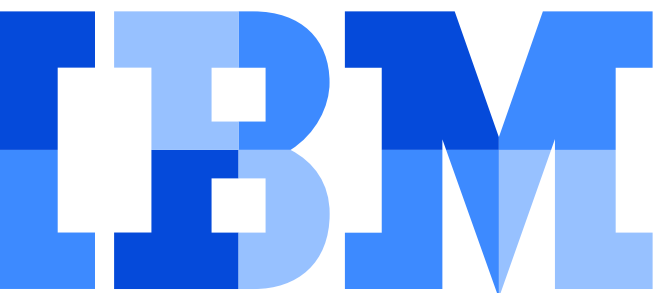
Introducing the Montran RTGS on IBM LinuxONE

The Montran RTGS solution on IBM LinuxONE is a differentiated solution which provides a highly engineered RTGS platform for central banks. It provides all of the modern capabilities and features that central banks are looking for in an RTGS system. Montran, a leading global banking software company, offers a modern RTGS solution, ideal for organizations in growing financial markets to improve the execution of monetary policy. This partnership with IBM combines the strengths of two industry leaders to offer a full solution stack that is highly engineered with the latest in payments and systems technology. The full solution enables the highest qualities of service for an RTGS platform including security, high availability, scalability and reliability, large scale server consolidation and superior disaster recovery with GDPS.

Central banks are already turning to IBM and Montran to run their RTGS on this platform. They realized that they can respond faster to changing market opportunities, address new regulatory requirements, get the scale and performance needed, and still reduce operating costs. All contributing to delivering extraordinary customer service!

Montran RTGS and IBM LinuxONE features at a glance:

Montran RTGS

- Modular structure to meet country requirements allowing for flexible growth
- 24/7 payments processing capabilities
- Final and irrevocable settlement of funds transfers, continuously in real time
- Absolute control over access and processing flows of individual payments
- Centrally located queuing of payments held awaiting availability of funds
- Automatic gridlock resolution
- Real-time monitoring and alerts
- Latest liquidity management facilities and capabilities
- Standard SWIFT and ISO20022 message formats
- A multi-currency and multi-lingual system
- Full support for SWIFTNet FIN, Browse, InterAct and FileAct services
- Cross-border payments
- Operational reliability with backup and contingency arrangements
- Complete audit trail, recovery and reporting facility

IBM LinuxONE

- Two models, Rockhopper II and Emperor II
- Enterprise scale with up to 170 cores and 32 TB of memory
- Rockhopper II has an industry-standard 19-inch, cloud-ready form factor
- Hyper-protect technology that delivers:
  – Secure Service Container (SSC) that provides pervasive encryption and enables a tamper-resistant solution
  – Secure Key encryption: keys secured in HSM certified to highest standard FIPS 140-2 Level 4
- Highest reliability; redundant components enable uninterrupted service 24/7
- No compromise performance with scale; specialty processors do the heavy lifting
- Capacity on-demand to scale and pay for compute as needed, connecting infrastructure investment to business growth
- Maximum efficiency running at or near 100% resource utilization

In summary

Montran RTGS on LinuxONE provides a cost-effective, purpose-built RTGS platform helping central banks to meet their requirements to deliver next-generation payments services. It is perfect for new emerging bank installations, or for those looking to modernize and consolidate existing legacy systems.

Build your Montran RTGS platform with Montran on LinuxONE, and you'll have the confidence to deliver a quality of service with a 99.999% availability rating as redundant compute is engineered to address any component failure. LinuxONE scales vertically or horizontally with capacity on demand for peaks, and LinuxONE's integrated HSM, Hyper-protect security features, and EAL5+ rating, will accelerate compliance requirements.

Learn more about the Montran solution for central banks

If your organization is need of high-performance transaction processing with the confidence of data privacy, pervasive encryption and high resiliency, ask for an assessment at IT.Economics@us.ibm.com, and learn how you can leverage the cost-effective, purpose-built platform of Montran RTGS on LinuxONE.

Ready to get started

Let us show you how Montran on IBM LinuxONE has proven operational efficiencies, providing a lower TCO than a commodity hardware platform, please contact your IBM representative or IBM Business Partner.