

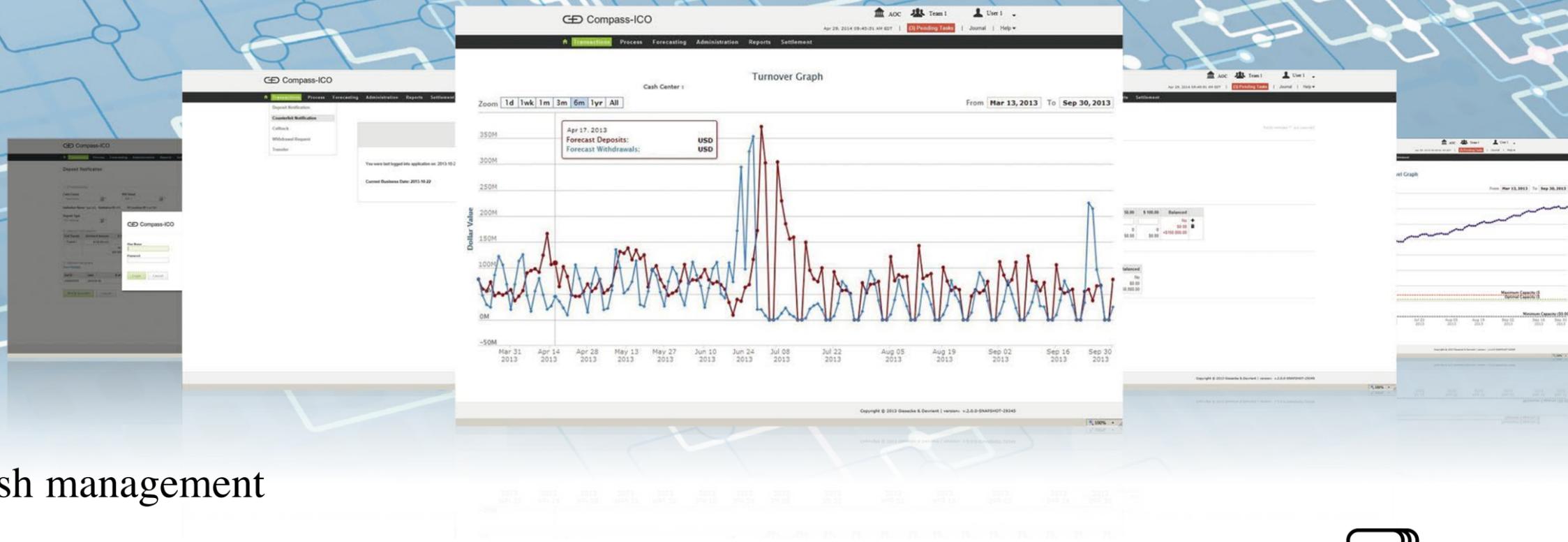
# G&D Software Solutions

Compass ICO™ – inventory control and optimization



Giesecke & Devrient  
Creating Confidence.

# Optimized cash management



**ICO – The solution designed around operational policies, state-of-the-art technology, and you.**

While consumers often think that cash is free, the true costs are high and mostly hidden: processing, distributing, and storing large volumes of notes and coins is complex, costly, and time-consuming. Cash inventories may be spread across multiple sites, and organizations are under increasing pressure to reduce costs, meet regulatory compliance challenges, and stay a step ahead of the competition. It's a juggling act.

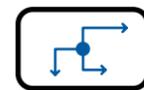
That's why, at Giesecke & Devrient (G&D), our Compass Inventory Control and Optimization (ICO) software solution has in-depth visibility, cost control, and time savings built in. It's tailored specifically to meet the demands of modern cash inventory and its movements. As part of our holistic approach to software, it encompasses people, technology, and operations: customers gain a complete view of their cash supply chain inventory operations across multiple physical and virtual sites. They can also efficiently monitor, control, and optimize cash flow by leveraging Compass ICO's proactive demand forecasting capabilities.



## Futuristic solution design

Designed for flexibility, our software product is able to continuously adapt to suit the ever-changing world of technology and business processes. Compass ICO is designed around the notes-held-to-order (NHTO) and note exchange system (NES) schemes.

- Optimizes and manages inventory of the note pools and note-held-to-order vaults involved in the cash cycle
- Facilitates the process of emitting new series of money and revoking old series from the cash cycle (e.g. replacing paper with a hybrid)
- Manages the inventory at a physical or virtual location according to rules defined by you



## Proactive control

Gain control of the inventory. Optimize cash position and minimize overhead costs such as transportation, storage, and handling.

- Built around automated inventory movement and dispatch control logic at its core
- Allows advanced inventory limit settings for replenishment planning based on currency, specific denomination/series, and note quality
- Formulates replenishment schedules thanks to constant cash-level monitoring



## 360-degree visibility

Compass ICO is designed around a highly effective cash concentration process, with a virtual note pool spanning across your own and shared cash reserves.

- Helps with notification of cash orders
- Sends orders to regional NHTO financial institutions or regional hubs
- Assists with inventory projections and optimizes shipping processes



## One integrated view

Gain full transparency over time and space with a holistic view of all geographical regions, and generate reports across them at any time.

- Single source of truth on multiple business functions spread across any number of geographical locations or sites
- Management-level reporting on order processing, audit and balancing, and forecast and optimization for cash inventories
- Cash-level monitoring and forecasting based on regional stock turnover



## Robust real-time reporting

Immense reporting capabilities give staff the insight they need to be more effective in everything they do.

- Powered by SAP® Business-Objects™
- Highly configurable reporting empowers application users with self-service access to data and visualizations so they can make faster, and better informed decisions
- Advanced cash inventory reporting across all cash centers helps drive smarter processes and employee efficiency, and improves performance metric tracking



## 3-D forecasting

Optimized cash management starts with a forecast. Reliable data and automated tools speed things along.

- Supports forecasting of optimum cash levels specific to the needs of cash centers
- Generates forecasts based on currency, denominations, and even quality specifications

“Our vision for the ICO software is to enhance cash and valuables inventory management by increasing enterprise-wide visibility, enforcing security, and enabling transparency as per specific operational needs. Our software solution is sensitive to the fact that every customer has unique business and technology requirements.”



## The holistic approach that works

### State-of-the art technology

Central banks, commercial banks, and related service providers (including ATM estate operators, smart safe providers, and retail cash recyclers) manage cash inventories spread across multiple physical and virtual sites. At G&D, our holistic approach provides the in-depth visibility organizations need to efficiently monitor, control, and optimize cash flow for proactive demand forecasting. The results? Reduced costs, time, operational overheads – and customers that rise above the competition. We work with a range of software, including Java™, SAP® BusinessObjects™, Oracle® Database, and Microsoft SQL Server, to create solutions uniquely tailored to your operational and technological needs.

### Trusted expertise

However you prefer to do business, G&D is always there as an expert advisor. We look back on 160 years of success in the specialization of banknote printing, as well as the supply of security paper and machines for banknote processing. Our expertise has expanded to include other security technologies, with a focus on smart cards and electronic payments. We're cash-flow management experts who bring together vast experience in business, technology, and thought leadership. G&D helps companies improve interactions and implement change so they can achieve more.

### Maximum value

Compass ICO is designed to positively impact all aspects of the complex cash management process for tangible benefits across the entire cash chain and organization.

- Increase operational productivity
- Increase visibility and lower risk
- Reduce total cost of ownership and redress the save/spend balance
- Achieve optimal cash-flow management anywhere and anytime

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