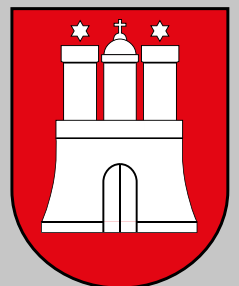# PORT OF HAMBURG

SI-CON

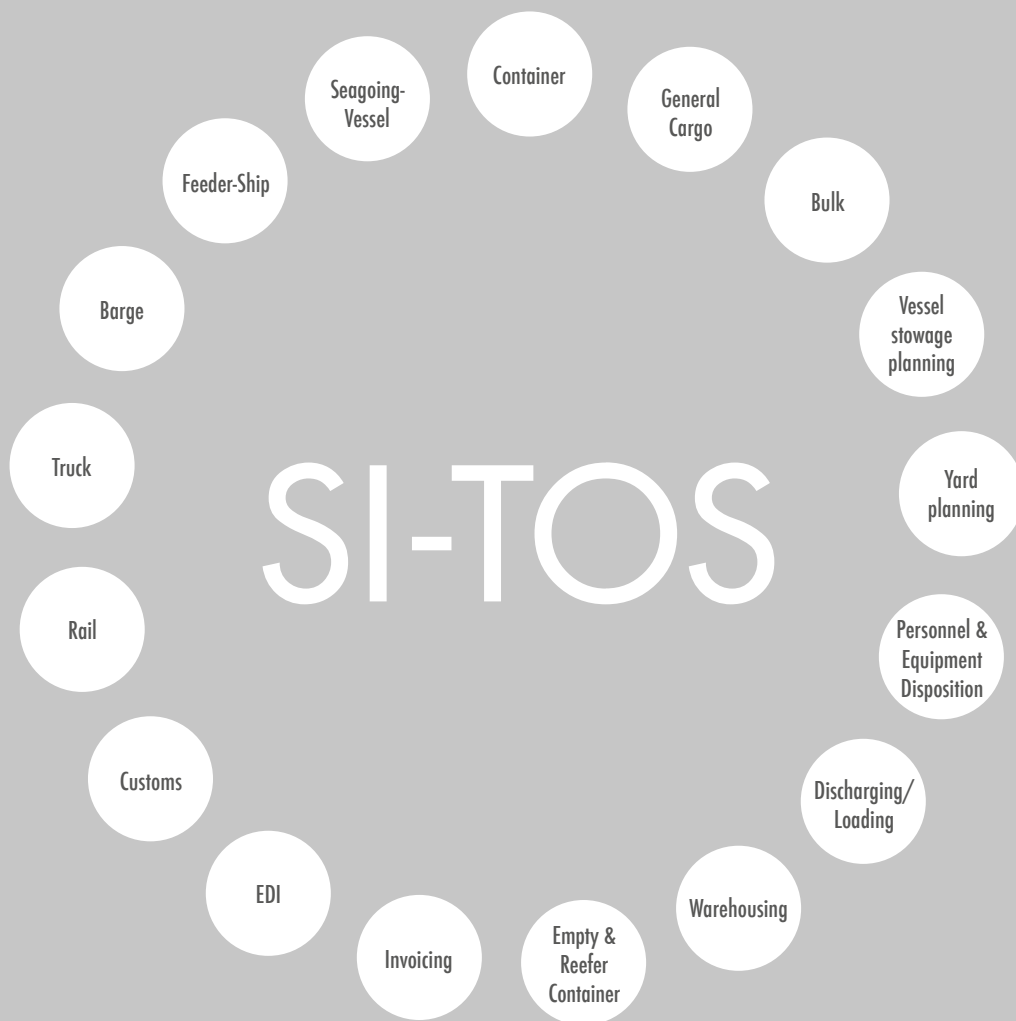SI-TRUCK

SysIng

SI-STORE

SI-CARGO

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TERMINAL OPERATING SYSTEM

MADE IN THE PORT OF HAMBURG
MULTI-PURPOSE TERMINAL CONTROL
IN ONE SYSTEM

SI-TOS

- Seagoing-Vessel
- Container
- General Cargo
- Bulk
- Feeder-Ship
- Vessel stowage planning
- Barge
- Yard planning
- Truck
- Personnel & Equipment Disposition
- Rail
- Discharging/ Loading
- Customs
- Warehousing
- EDI
- Empty & Reefer Container
- Invoicing

SysIng

Practical Experience

SysIng has 25 years experience of dealing with a great variety of multi-purpose terminal operations. We know that members of workforce in such terminals have to master a great many operational procedures. And that the customers require much more individualised processes, far more so than in the larger container terminals. Your terminal must be able to deal with such requirements while still conforming to the increasingly stricter official regulations.

SI-TOS supports the operational and administrative processes for containers, general cargo, bulk, container freight stations, and warehousing in one integrated application that has a user-friendly, uniform operating concept. The complex practice-derived rules and automatic planning procedures for the process sequences work in the background, while the user is safely guided through the assignment.

Whether landside acceptance and deliveries, waterside handling, yard movements, warehouse management, handling documentation, contract-controlled invoicing or personnel and equipment planning: the procedure and the menu navigation – the look and feel – are always the same.

You can also carry out any analyses you want in real time to obtain the figures you need for your daily controls and result checking.

Because you have to quickly comply with the demands set by your customers and the authorities, SI-TOS's modular architecture and flexible software engineering mean that it can be easily adapted to suit your special procedures or any suddenly altered requirements. And if you ever have a problem, we are there to give you support 24/7.

SysIng

SysIng is the German abbreviation for System Engineers, and we see software manufacture as a proven engineering discipline. For over 25 years SysIng has been developing individual solutions for logistics partners in port operations. Our staff has a detailed knowledge of virtually all aspects of harbour operations, for both operational and administrative processes in cargo handling firms, shipping companies, forwarding and storage enterprises. The core competence of our employees is their combination of soft skills, qualified logistics and expert IT knowledge allied to an abundance of practical experience in realising many successful projects. They are proficient in the terminology language of our partners, so they don't need an "interpreter" to explain any complex specifications.

We are experienced in converting customer requirements and business processes for port operations into software solutions.

The SysIng Philosophy

The reason behind many mistakes made in software development is the different interpretation of the task descriptions by those involved in the development process. This is why we use the rapid prototyping process that has been successfully applied throughout the industry for decades. We use prototypes to plan, coordinate, test and implement complex projects. Our adaptable approach reduces project risk as far as possible, thus securing the customer's investment.

Our Methodical Approach
The early involvement of the future users in the development process is one of the indispensable prerequisites for the success of the project.

The prototypes are reviewed together with the customer in every development phase to ensure that they fully meet the requirements. This means that discrepancies and change requests can be detected and integrated early on.

Our approach helps reduce the project risk to a minimum. Adherence to budget and delivery date are paramount maxims for our work. The success of our customers is what safeguards our market presence. Every day we bring out the best to make sure this remains so in future.

CUTTING-EDGE DATABASE TECHNOLOGY

Our Technical Basis
For over thirty years, applications based on Caché databases have had low hardware, administration and maintenance requirements. This means the highest failsafe performance of the database as the costs sink and the infrastructure becomes easier to manage.

The provision of a reliable IT infrastructure for extremely high availability is the key argument for using the Caché database.

This is verified by the increasing number of Caché database users worldwide.

Caché has been successfully used in the most varied areas of application in logistics and in the Port of Hamburg for years.

This is why we also use Caché as the basis for a reliable SI-TOS.

Growth and Safeguarding the Future
Outstanding scalability for the highest performance in distributed systems.

Failure-free Operation
Extremely high availability through (ECP) application servers with mirroring technology.

Secure Availability
For over 30 years a constantly growing, globally available database system.

Easy and Economical Implementation
SI-TOS's Caché-based subsystems guarantee fast and individual IT solutions.
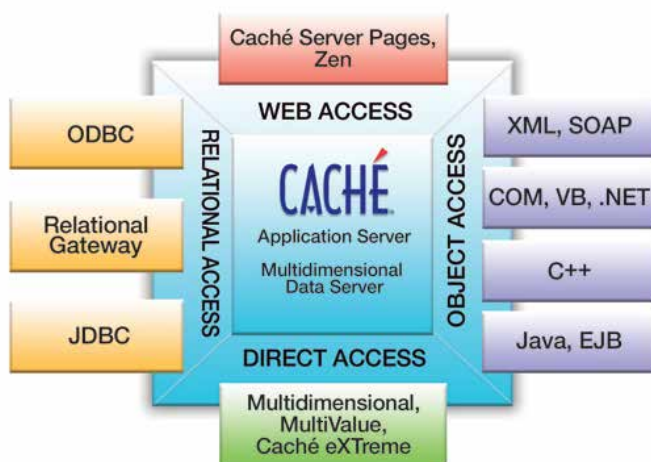
Flexibility of Configuration
Any combination of application-servers and data-servers as well as a variety of point-to-point topology.

Interfaces and SQL
Comprehensive selection of interfaces, support of standard SQL queries.

Service availability
Low-maintenance costs.

MULTI-PURPOSE TERMINAL OPERATING

SI-TOS Terminal Operating System
SI-TOS reflects and supports the complete process chain of handling operations.

Carriers
- Seagoing vessels/feeders
- Inland waterway vessels
- Trucks
- Rail

Order Processing, General functions
- Master data administration
- Communication
  SMDG messages, customer specific formats, interfaces to external systems
- Customs
- Processing with mobile devices
- Handling hazardous goods
- Personnel and equipment disposition
- Payroll accounting (gross pay)
- Equipment management
- Yard management for all kinds of goods
- History function for all cargo movements, change history

Container Handling
- Gate processing
- Discharging/loading
- Automatic yard planning
- Graphic yard overview
- Graphic ship loading planning
- Management of internal transport jobs
- Reefer monitoring
- Empty depot management

General cargo Handling and Rolling Goods
- Gate processing
- Discharging/loading
- Barcoding for lot/consignments and individual kolli
- Project cargoes
- Vehicle loading

Bulk
- Lot/Consignment management

Container Freight Station
- Acceptance of generally freight in/out of warehouse or gate in/gate out
- Interaction with container management: positioning/removal, transfer to full stock or depot, assignment to export orders

Warehousing
- Storage/retrieval
- Barcoding
- Inventory record keeping

Invoicing
- Customer contracts
- Automated billing of handling services
- Quantity and completeness checks