



MembrainSFC

The flexible solution for integrating a variety of system and applications within production, warehousing and distribution logistics

THE LEADING STANDARD IN ENTERPRISE MOBILITY & SHOP FLOOR INTEGRATION

DATA SHEET

Mobile data acquisition

The efficient handling of business processes is a decisive factor for commercial success along the entire length of the logistical value-added chain. IT solutions for supporting such business processes are therefore gaining in importance. In the logistical environment (warehousing, production, dispatch, etc.) the advantages of individual, optimised system components are more often than not made worthless by complex, unreliable or non-existent integration scenarios. Strict adherence to optimised business processes while utilising the potential of the components used thus often falls by the wayside.

Immediately processing logistical information on site as it is created unlocks a high optimisation potential in many areas of production, warehousing and distribution logistics.

For example, the use of mobile data acquisition systems in conjunction with automatic identification processes (barcode, RFID, etc.) minimises the number of manual entries made by the user. This ensures that all relevant processes are reliably booked in in real time. This minimises stock discrepancies and inventory differences. As a result, stock levels can be reduced while the level of materials planning reliability is increased. Furthermore, the utmost transparency is achieved along the entire material flow, thus ensuring continuous traceability.

Mobile data acquisition with MembrainSFC enables the entry of:

- Goods receipts
- Locks/releases
- Internal stock movements
- Production supply and disposal (e.g. kanban)
- Picking processes

- Packing functions
- Dispatch process
- Stock corrections / inventories, etc.

at any time by the employee on site within an inventory management or warehouse management ERP system (e.g. SAP R/3, Navision). Specific advantages result from the immediate availability of logistical information such as

- Stock levels (bin stocks, material stocks)
- Requirements (e.g. requests for production supply)
- Pending transportation orders (e.g. fixed bin replenishment),
- Inventory situation (e.g. empty bins)
- Master data (e.g. customer and material information)

MembrainSFC offers the option of adapting user dialogs to the specific requirements, irrespective of the underlying ERP system. This makes ideal use of the options of modern terminals while achieving maximum end user acceptance.



System requirements

Hardware

- Compatible with virtual machines
- At least 2 cores (or blocks)
- At least 2 GB of spare working memory
- At least 10 GB of free hard disk space (+ additional memory for entry logs)

Operating system

- At least Windows Server 2008 (x86/x64)
- Installed Windows updates are recommended but not necessary

.NET Framework

- Version 4.0
- Version 4.5.x

Network

- Remote access via VPN or RDP would be desirable

SQL Server (if necessary)

- SQL Server from 2005 onwards; 2008 R2 SP2 recommended
- Central instance is supported

Local Express instance is likewise supported. In both cases, Management Studio (Express) is sufficient.

Additional software tools (optional)

- Notepad++
- ProcessExplorer
- TCP/IP Viewer



Microsoft Partner

Silver Application Development

MembrainRTC - Mobile Platform 4.0

The technological basis of MembrainSFC

Integration of different clients

- Mobile terminals: handhelds, scanners, smartphones/tablets (Android, Windows, iOS), etc.
- RFID terminals
- BITBUS terminals
- etc.

Connection of different systems and technologies

- A range of ERP systems (SAP R/3 etc.) using existing functions within them
- Databases (SQL, OLE, ODBC)
- File systems
- Command and control systems (materials handling technology, PDA systems, etc.)
- Other systems (e.g. Catia)
- HTTP and WEB services
- Mail service
- etc.

High level of security and performance

- Secure transmission in potentially unreliable wireless networks
- Sensitivity to wireless dead spots
- Forgiving communication
- Rapid processing of large data volumes
- Low administrative overheads and independent data cleaning
- Context-related storage (caching) of the results of specific requests

Service- and object-oriented architecture

- Functions available to a range of clients as services
- Option to add additional services without changing the standard

Multidirectional communication

- Communication between server and client, and between client and client
- RTC acts as RFC server

User-friendly administration

- Administration tool for configuring the RTC, the available services and the clients
- Selective user rights assignment

Monitoring and test environment

- Permanent monitoring possible (for all relevant functions)
- Emulation options
- Test option for all available services

Rapid Prototyping

- Use of standard IDE
- Fast, cost effective implementation
- Integration within the existing system landscape

You will find further information at

www.membrain-it.co.uk



The SAP certified technology of MembrainRTC server (RealTime Communicator) ensures error-free data transfer to and from SAP.

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© Membrain GmbH
Hauptstraße 1
82008 Unterhaching

Tel.: +49 (0) 89 520 368 – 0
Fax: +49 (0) 89 520 368 – 11
E-Mail: info@membrain-it.com
www.membrain-it.com



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