



ORCHESTRATION. INTEGRATION. AUTOMATION.

ORCHESTRATION. INTEGRATION. AUTOMATION.

Our intelligent interface to your production.

Let the AMRs communicate with your manufacturing.



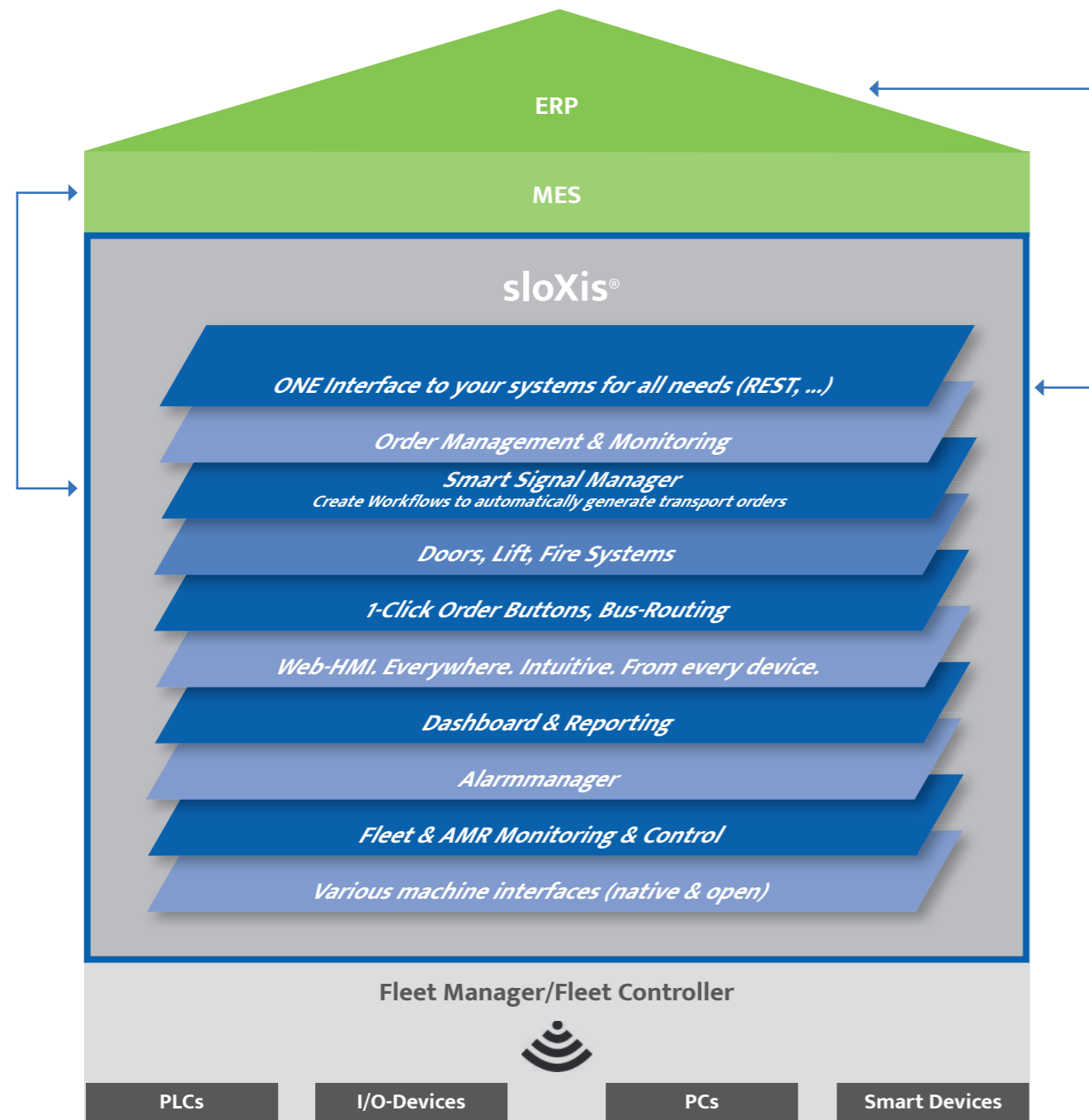
**sloXis® I4.0 software - the intelligent interface for your company.**

sloXis® is a modular, open connectivity-based software that acts as middleware between the AMR fleets and your MES/ERP system. In addition, it connects the AMRs with your machines on the shop-floor. This provides you with a central interface through which you can order transportations and receive all information about the AMRs.

**Information everywhere and at any time:**

Get the information you need at any time and from anywhere, not only about AMRs, but also about your machines and moving equipment (automatic and manual). This is made possible by the intuitive web-based user interface of sloXis®.

**Let the AMRs communicate with you!**



**Basic modules**

**Order-Manager**

- Main communication to intelligent factory management systems
- Order distribution to fleet managers
- Monitor orders
- Trigger material transfer handling
- Alarm management

**Web-HMI**

- Display all information in the web browser
- Configuration of AMRs, fleet managers, destinations, settings ...
- Responsive HTML interface
- Role-based security

**Robot-Manager**

- Communication with AMRs via the manufacturer or VDA5050 Core functions interface
- Exchange and normalisation of proprietary information

**Fleet-Manager-Client**

- Communication with fleet managers via manufacturer or VDA5050 Core functions interface
- Exchange and normalisation of proprietary information

**Manual order creation via web HMI (1-Click Dash Buttons)**



**The modules can be combined according to your needs!**

## Additional modules

### Smart Signal Manager

- Creates transport orders automatically based on configurable rules/workflows
- All signals from interface modules can be used in the rules/workflows
- Time-based requests
- Logical connections in the rules

### Bus-Routen & Virtual 1-Click Dash Buttons

- Bus routes via the web HMI (if required )
- Role-based
- Available destinations for the bus route are configured by the supervisor
- Alias for destination names
- Use of virtual areas and groups, for easy overview
- Fixed bus routes via 1-click dash button

### Robot-Device-Mapper

- Direct assignment of robot I/O to physical devices via one of the interfaces

### Universal Command Server

- Sending user-specific messages from each AMR to a central server.
- Messages are converted into variables that are used within sloXis®.

### Dashboard

- Status of the fleet at a glance
- Most important information per AMR at a glance

### Reporting Tool

- View alarms/orders in filtered table view (export as csv/xls/pdf)
- KPI diagrams

### Universal Map

- Web-based map showing position and status of each AMR
- Status of all connected machines/transfer stations are displayed
- Interface to display position and status of all moving equipment such as forklifts, tractor-trailers and even materials that are equipped with a locator equipped

### Door and lift control

- Connecting and controlling gates, doors and lifts
- Authorisation check
- Displays status and individual signals, enables manual intervention
- Easy-to-understand, web-based user interface

### Fire alarm module

- Configuration of critical zones
- Linking these with safe zones
- In case of fire alarm, all AMRs from a critical zone are sent to a safe zone
- Safety: no automatic restart after fire alarm

## Interface modules

### Siemens SPS-Interface

- Communication with S7-300/400/1200/1500 via Ethernet

### Beckhoff PLC and OPCON+Interface

- Communication with TwinCAT2- and Twin-CAT3 CX-Geräte via Ethernet

### Omron PLC-Interface

- Communication with NX-devices via Ethernet TCP (XML-Protocol)

### MOXA-Interface

- Communication with ioLogic Geräte via Ethernet

### All Interfaces

- Variables and cycle times configurable
- Provision of data via a REST interface

### Electronic production

- PCB magazines/cassette handlers from IPTE, Rundfunk-Gernrode, YJLink, ACHAT5, Asys (incl. material stations, towers, warehouses)
- Continuous expansion (e. g. FlexLink ...)

### Generic XML Interface

- Communication via Ethernet
- Delivers data via REST

### Generic handover handling module

- Management of material transfer from/to AIV/AMR to/from machines with a sloXis® interface module





cts GmbH | Fuhrmannstraße 10 | D-84508 Burgkirchen  
Phone: +49 (0)8679 91689-110 | [factory-automation@group-cts.de](mailto:factory-automation@group-cts.de) | [www.group-cts.de](http://www.group-cts.de)