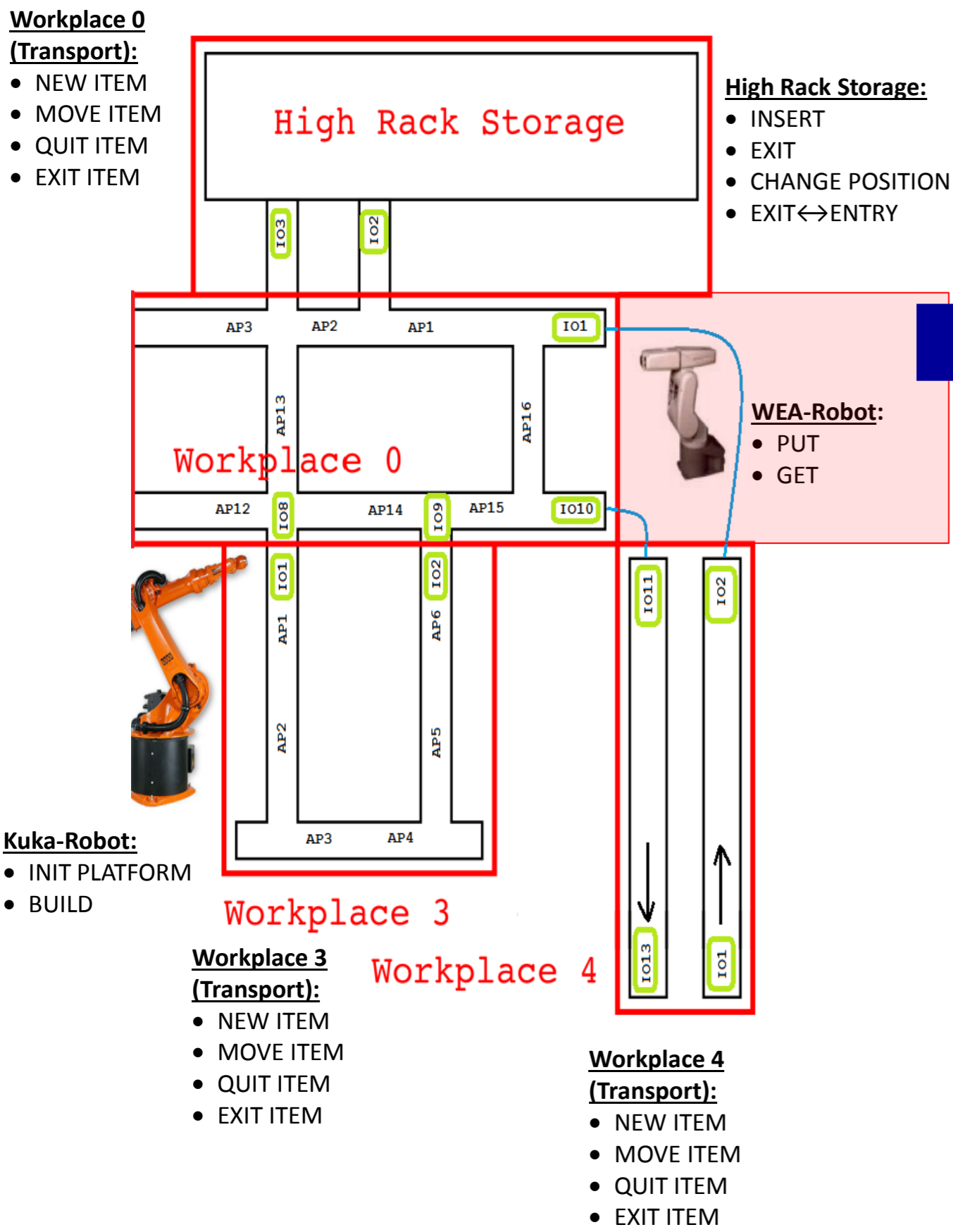
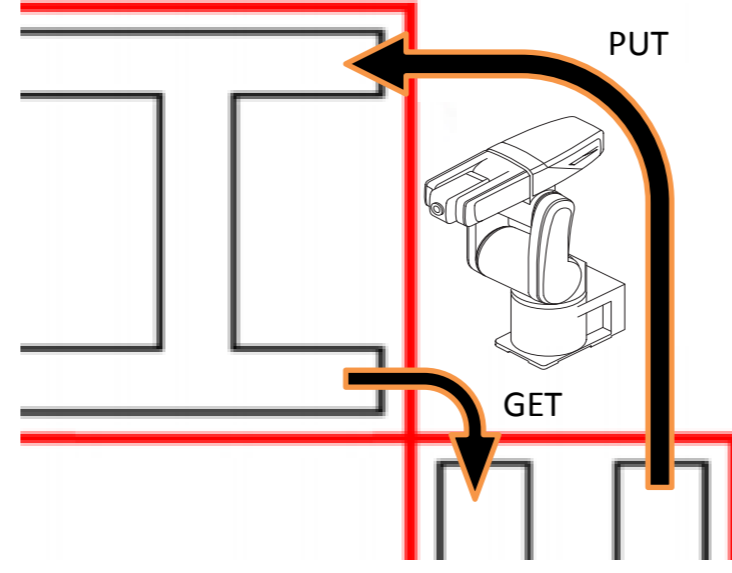




Webservices in the Digital Factory



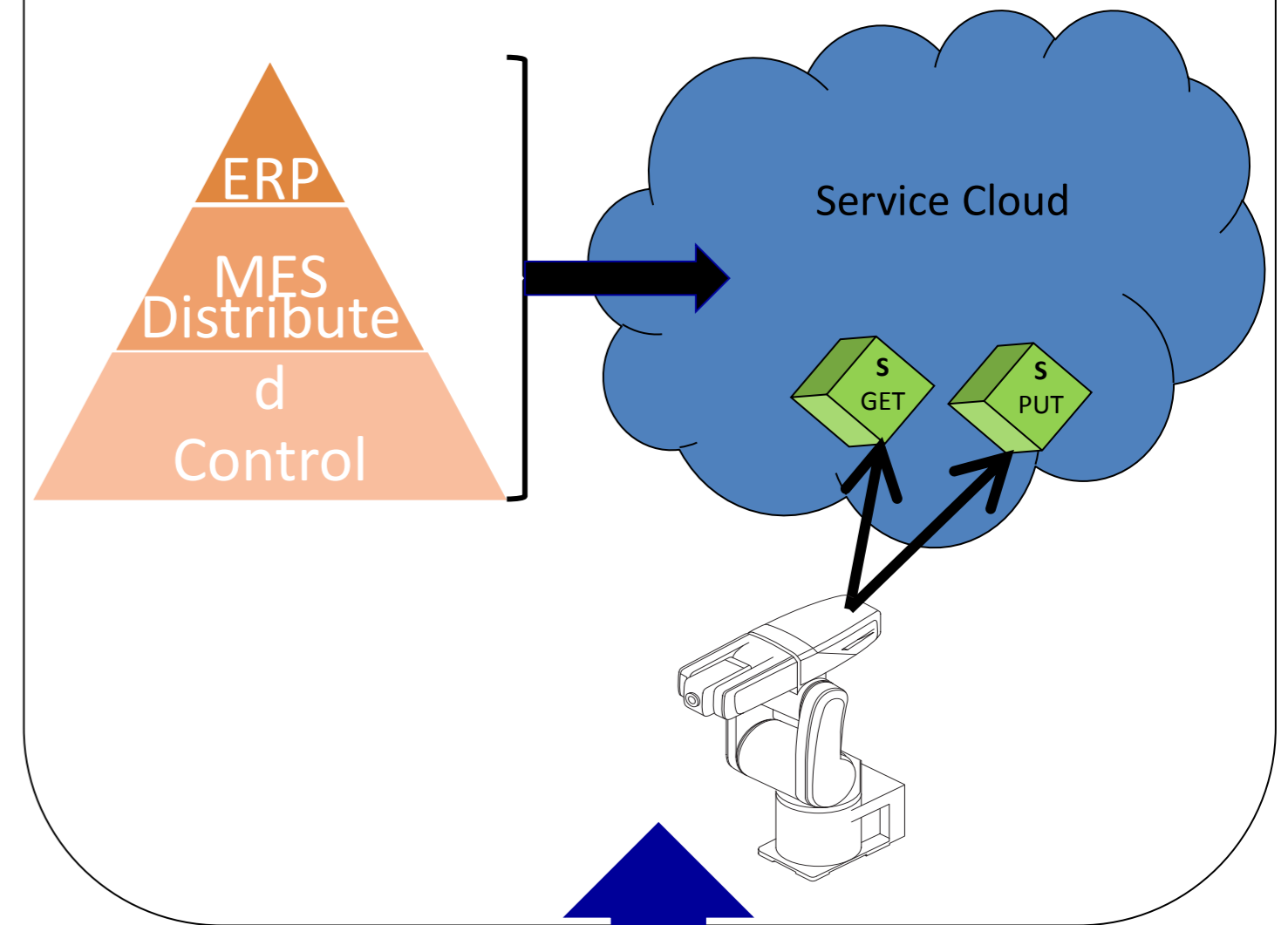
Implementation example: WEA Robot



PUT: Pallet transfer from the warehouse to the main conveyor system

GET: Pallet transfer from the main conveyor system to the warehouse

Robot-services in the Servicecloud



WS4D-gSOAP

Web Services for Devices
Equipment description via XML-File:
3 basic areas:

- ThisRelationship: Relations between the services in a device.
- ThisModel: Manufacturer, type
- ThisDevice: Firmware-Version, serial number

Service Definition via WSDL-File

Migration from webservices to IPC



Phoenix Contact IPC
VLC BP 1000
Emdebian Griip
WS4D/gSOAP

Service-based Automation Systems for Flexible Manufacturing Systems



Input and Output of Wares

Offering services for the input and output of wares

- Analysis of wares with the help of image processing
- Buffering of Pallets



Inico S1000



Warehouse

Offer for stock tasks

- Input
- Output
- Transfer



Inico S1000



Transport System's Workplace

Offering services for the processing and the transport

- Move to fixed positions
- Buffering of pallets
- Processing of pallets



Inico S1000

WEBSERVICES

General information

- Implementing of SoA by means of Web-services
- Inico-Devices: Optimized for Web-services
- Networking through „Office“-Ethernet
- Access also Possible from the Internet (Remote Maintenance)

Transport System: Main Conveyor

Services' offer for the transport

- Go to one position
- Offer of different routes
- Jam prevention
- Rerouting
- Buffering



Inico S1000

