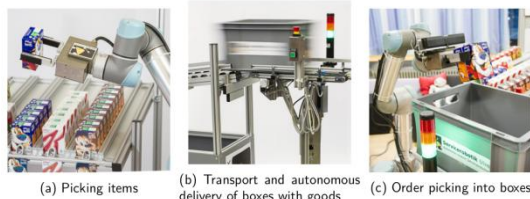


RobMoSys defines a platform of assets and services to help **robotics industry to improve their software/system engineering practice**. Join us to **work together to create this ecosystem** and to demonstrate your own success story with real world cases in line with our **industrial pilots**.

Description

This pilot [1] is about **goods transport** in a company, such as factory **intra-logistics**. It can be used to showcase robotics **navigation**, e.g. to show the performance of goods delivery and according non-functional requirements. It can be extended to object recognition and **manipulation**.



Expected Benefits

The pilot is intended for open call 2 contributors to showcase the **ease of system integration via composition** of software components to a complete robotics application.

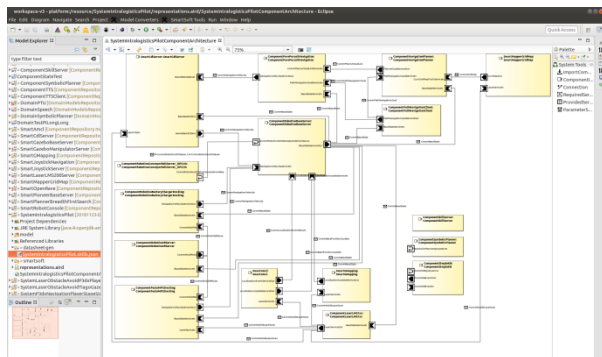
The pilot is fully **supported by the SmartMDS Toolchain**, an Integrated Software Development Environment (IDE) for system composition in an robotics software business ecosystem. This ensures full conformance to the RobMoSys methodology when using this pilot.

The pilot can be used to demonstrate:

- Software components and system composition: e.g. composition of previously developed software components and/or exchange of software components to address new needs.
- Ecosystem collaboration including the different roles that participants can take
- Task level coordination; skills; robotic behavior
- Managing of non-functional properties
- Dependency graphs for composed components to enable predictability for navigation

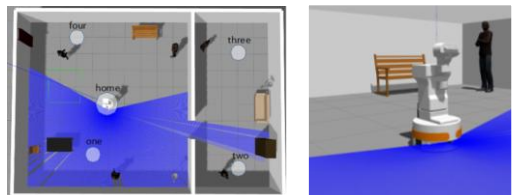
Scenario Examples

- The pilot is intended for the use with FESTO Robotino but **can be extended to any robot** thanks to the Flexible Navigation Stack [2]
- Potential Use-Cases for ITP demonstrations:
 - Integrate your own robot
 - Interact with the pilot on task-, service- or component-level.
 - Work with a single robot or a fleet of robots
- See **examples and videos of the pilot** in action in the RobMoSys wiki [1].



Pilot Resources

- The pilot is physically located at Ulm University of Applied Sciences; **Germany** and may be used on site or remotely. An excerpt is available in **simulation** for off-site use.



- **Software components available** [3] for use with the SmartMDS Toolchain:
 - Robot platforms, mapping, planning, obstacle avoidance, etc. for immediate composition
 - Software component templates for manipulation and object recognition
- **Documentation and Tutorials available**

- [1] <https://robmosys.eu/wiki/pilots:intralogistics>
- [2] https://robmosys.eu/wiki/domain_models:navigation-stack
- [3] <https://robmosys.eu/wiki/baseline:components:smartsoft>
- [4] <https://wiki.servicerobotik-ulm.de/tutorials:start>

Get involved in the **Second RobMoSys Open Call!**

Further information at: www.robmosys.eu