

Production of the Future  
**Autonomous  
Intralogistics**  
InSystems Automation



# Product evolution



✓ Cooperative Systems



○ Collaborative Systems

2012

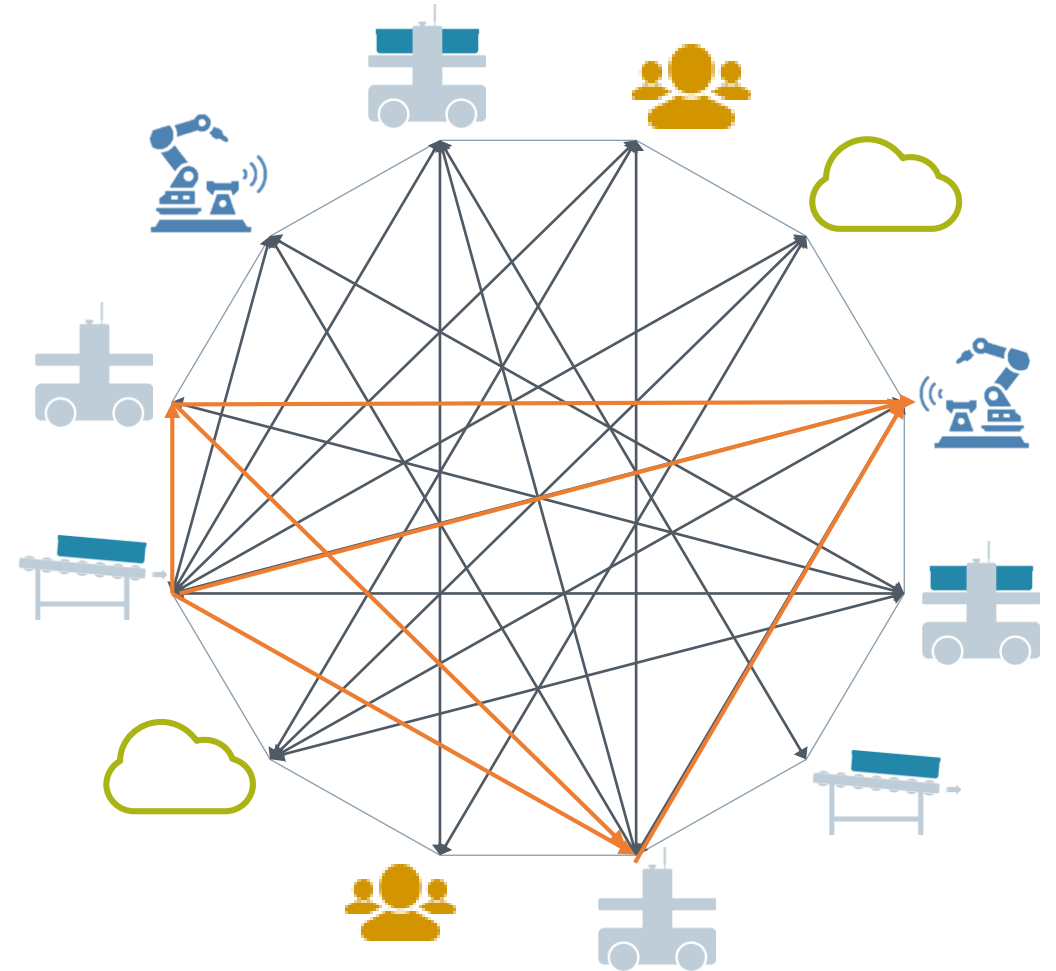
2018



# Why do we need collaborative agents?

Less human interference and more autonomous and flexible behavior of the fleet:

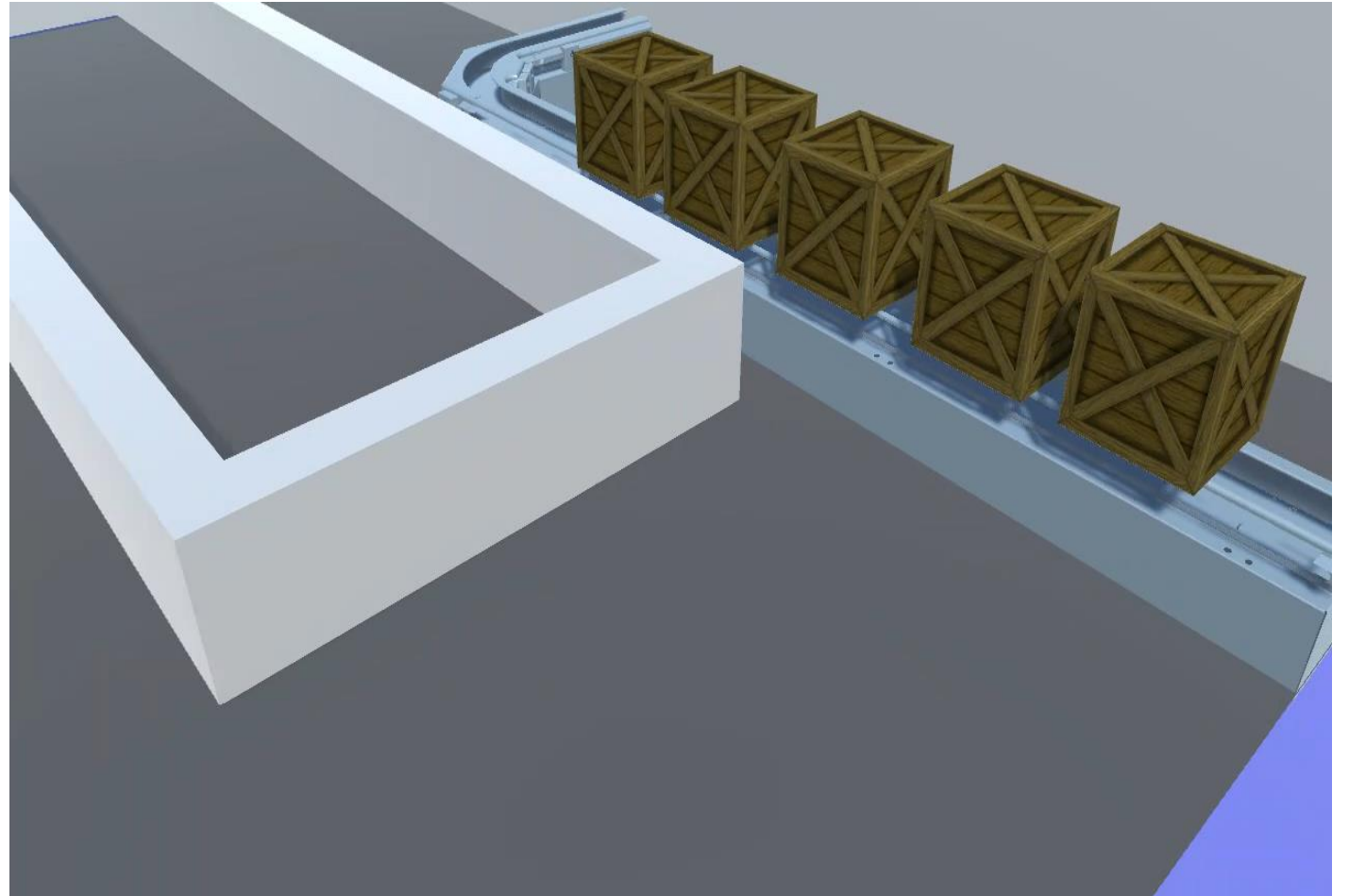
- Plug & play at runtime
- Decentralized fleet management
  - No single point of failure
- Sharing information among the System Group
  - Dynamic Obstacle
  - Status Information (Battery Value, Driven km,...)
- Distributed decision making in the task assignment
- ❖ Form an adaptive IoT System Group



# Collaborative fleet of robots

Groups of Robots are capable of:

- Order Assignment via Negotiation
- Exchanging data about their system and the environment
- Consensus about their Environment



# Product evolution



✓ Cooperative Systems



○ Collaborative Systems



○ Self-Organizing & Self-Optimizing systems

2012

2018

2020



# Thank You!

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