

# Mobile cloud robotics

- **Demo Description:** Automation in logistics and manufacturing industry enabled with fixed and mobile robots and automated infrastructure controlled in real time by services running in the cloud. Robots are transporting materials between warehouse and work cell and subjected to dynamic changes. Smart facility management service is set remotely using a mobile device.
- **Demonstrated Functionalities:**
  - Network slicing and NFV (network function virtualization) distributing real-time control processes close to the serving area while not-real time services execute on remote servers.
  - High performance mobile connectivity and low latency.
- **Applicability & Technology Value:** Smart robots and their control systems have enabled entire processes, like vehicle assembly, to be carried out automatically. By adding mobility to the mix, a higher level of flexibility together with the reduction of infrastructure can be reached, increasing effectiveness of industrial processes and the introduction of system automation in almost any process in almost any industry. But there is a challenge. How do you build smart robotic systems that are affordable?  
**The answer: cloud robotics enabled by 5G**  
5G brings a seamless, reliable and mobile connectivity between the cloud and each individual robot supporting high bandwidth and low latency processes. Network Slicing, NFV, software defined network (SDN) and Distributed Cloud technologies will allow operators use one physical network to address a variety of consumer and industrial use cases.

