myP 1.3 Release

New myP-Version was released on 16 February 2018.

The updated version involves many User Experience Improvements, including for example improved robot dynamics, secure websockets, improved sensor usage or an easier setup of Network and Updates:

- **Improved Robot Dynamics:** The mathematical model of P-Rob and P-Grip have been improved and sped up. This results in more precise current calculations used for both the gravity-less manual motion mode as well as the collision detection feature.
- **Secure Websockets:** The graphical user interfaces provided by myP support secure communication via the https protocol (https://<ROBOT_IP>:8888). This prevents potential attacks from devices in the same network as P-Rob.
- **Custom Function Scripts:** Instead of defining commonly used functions in headers of applications, the user is now able to write scripts containing small libraries of her or his custom functions. These functions can then be imported and used by any main application throughout myP.
- **Improved Sensor Usage:** Applications now support official Python packages for reading sensors via e.g. TCP sockets or a Modbus. Using those packages, many more official sensor functions are available via myP scripts and the speed of sensor readings has been improved dramatically. The old sensor editors of myP are deprecated and have been removed.
- **Reboot and Shutdown:** The main graphical user interface of myP contains new buttons for restarting and shutting down both myP and P-Rob.

Easier Setup of Network and Updates

- A new admin server interface is available to change computer settings by the system administrator, such as uploading myP updates or changing IP settings of P-Rob. This interface is accessible via https://<ROBOT_IP>:5000.
- A new license manager handles automatic installations of myP add-ons. By adding license key files for one or multiple robots onto the USB update stick, the myP update procedure takes care of installing bought software add-ons automatically.

Robot Operating System (ROS) Support
- myP now comes with support for the open-source ROS interface. ROS Kinetic is installed on P-Rob with any update for myP 1.3. ROS allows for communication and control of the robot and its connected devices through other machines in the same ROS network. The official ROS package for this purpose is called "myp_ros" can be downloaded on GitHub: https://github.com/fp-robotics/myp_ros.
- myP publishes data to ROS topics in form of ROS messages to be read by any device interested in this information. These topics contain robot joint information, tool center point information as well as sensor information.
- ROS services are provided to control P-Rob via any machine or device. These services include many functions available in standard myP applications (via GUI) as well as some special control and observation functions.