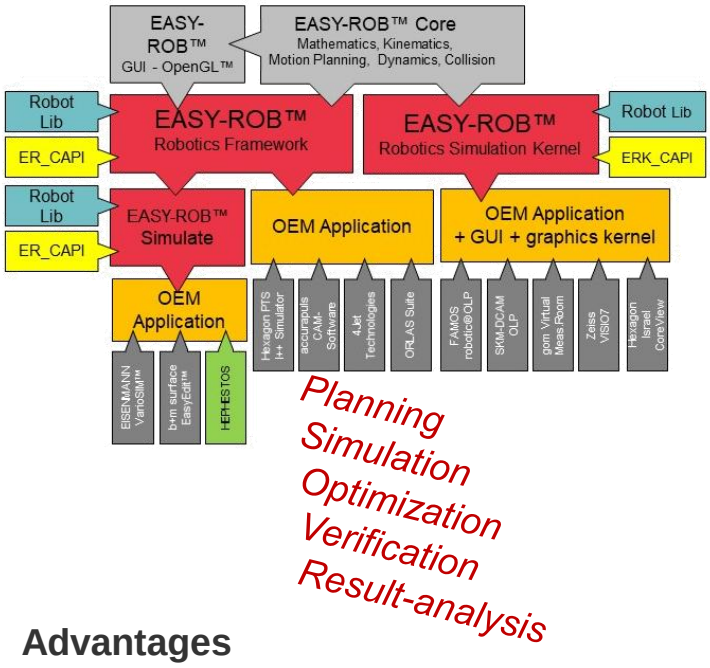
EASY-ROB™ Framework

EROSA - **E**ASY-**R**OB™ **O**pen **S**oftware **A**rchitecture

The whole EASY-ROB™ functionality can be integrated as an OpenGL™ window in your own application. The open software architecture „EROSA“ allows to take advantage of the exported method class ER_CAPI and a bidirectional control of the Framework.

Robot Kinematics

- Standard Robot libraries
  adept, b+m, Comau, Denso, Eisenmann VarioRobots, Güdel, igm, Kawasaki, Manz-Automation, Mitsubishi, OTC-Daihen, Unimation, Universal Robots
- Optional Robot libraries
  Abb, Fanuc, Kuka, Yaskawa, PKM Delta, Stäubli, Tricept®
- More than 1000 pieces!
- Modeling of own specific robots, positioners, gripper, turn tables and user-defined kinematics
- Formula parser with mathematical functions
- Numerical solution methods



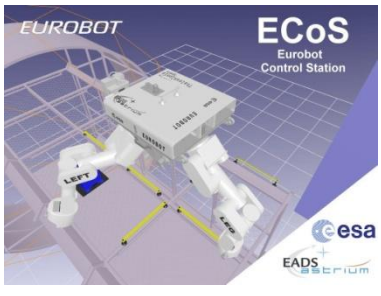
Interpolation

- Motion types: PTP, LIN, CIRC, SLEW
- Jerk free and phase synchronous velocity profile
- Tool- and work piece guided movement (external TCP)
- Cycle time estimation

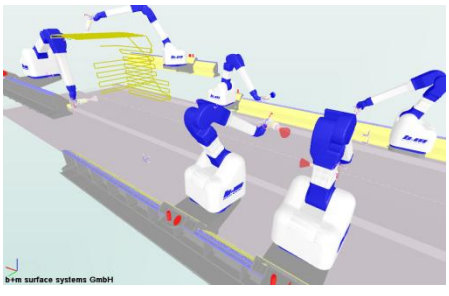
Advantages

- Integration in technology-based software solutions
- Bidirectional control
- 100% robotics know-how
- Collision detection with tolerances
- AutoPath™- collision free path planning
- Positioning of OpenGL™ window
- Available for Window® 64-Bit

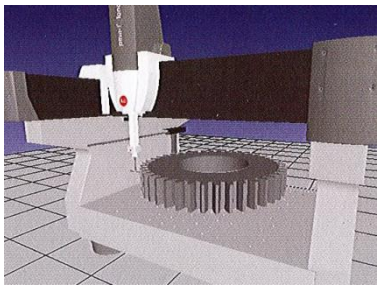
Integration examples



Eurobot Control Station, ECoS
EADS astrium, ESTEC



EasyEdit™ painting of drivers cabin
b+m surface systems GmbH


QUINDOS with I++ Simulator
Hexagon Metrology GmbH

EASY-ROB™ App ● EASY-ROB™ Framework ● EASY-ROB™ Kernel

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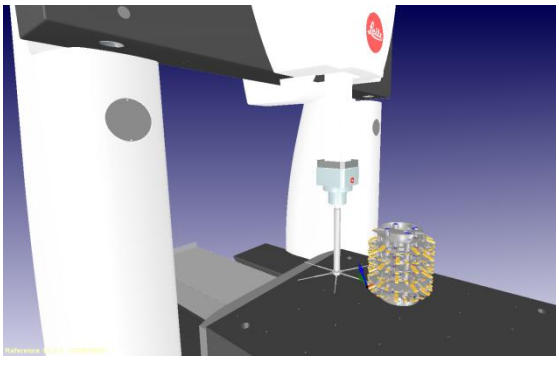
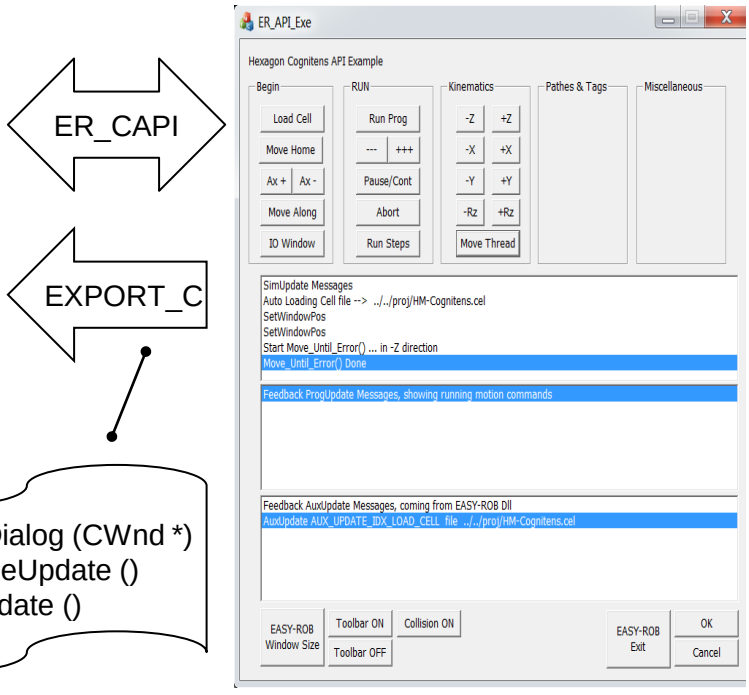


Figure: I++ Simulator, Hexagon EASY-ROB™ Framework with OpenGL™ Window

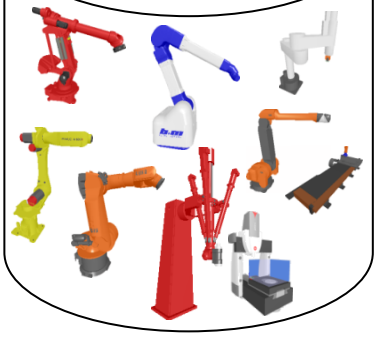


ER_CAPI

EXPORT_C

```
int  OpenDialog (CWnd *)
int  ProglineUpdate ()
int  AuxUpdate ()
```

Robot Libraries and work cells



OEM Application (Exe) technology-based software solution

System requirements

- Windows® 10 64-Bit

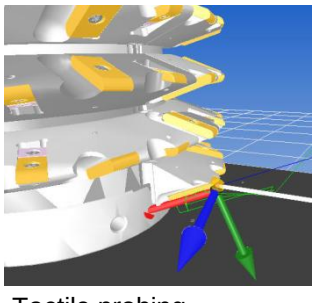
Integration

- Detailed Doxygen documentation
- Method class ER_CAPI
- Programming examples Kinematics, simulation + verification for Microsoft® Visual Studio C++ compiler development environment

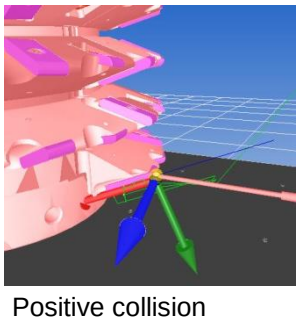
Support

- Support for individual integration

Collision detection



Tactile probing



Positive collision

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