

















## networked device interface / multiple robot simulator

Player/Stage provides tools for rapid code development and large-scale testing An Integrated platform for experiments in mobile robotics and sensor networks,

## Player

- Provides network access to robots and sensors
- Includes device drivers for robot hardware
- Language- and platform-independent interface
- Client libraries in C, C++, Java, Lisp, Python
- Includes visualization and debugging tools

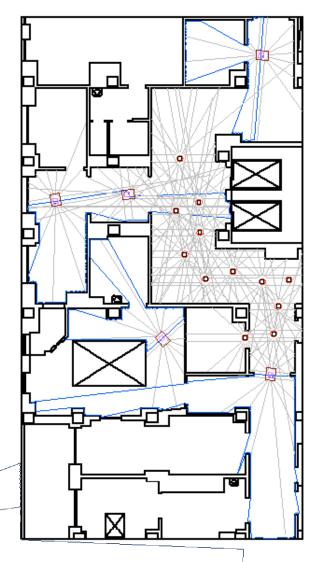
## Stage

- Simulates large populations of robots & sensors
- Define custom robots with parameterized devices
- Import complex environments from graphics files

Platform: Unix/Linux, X11, POSIX

Community: share code, devices, support

GPS, ACTS color vision compass, gripper, moveable pucks, pan-tilt-zoom camera, AmigoBot, sonar, SICK laser scanner & beacons **Devices:** differential and omni-drive robot, Pioneer,



## In development

- Support for more robots & sensors
- Abstract device interface for robot-independent code
- Standard implementations of processing algorithms
- Distribute Stage across cluster computers





Player/Stage is Free Software, available from http://playerstage.sourceforge.net