

06-编译安装RobWork

源码介绍：

RobWork is a collection of C++ libraries for simulation and control of robot systems. RobWork is used for research and education as well as for practical robot applications。

RobWork是C++库的集合，用于仿真和控制机器人系统。

RobWork用于研究和教育以及实际的机器人应用。

官网源码地址：<https://gitlab.com/sdurobotics/RobWork/> [<https://gitlab.com/sdurobotics/RobWork/>]

官网Ubuntu编译安装：https://robwork.dk/installation/ubuntu_compile/ [https://robwork.dk/installation/ubuntu_compile/]

编译步骤：

本教程针对Ubuntu 16.04，其他版本请参见官网步骤

安装工具：

```
sudo apt-get install git mercurial
sudo apt-get install gcc g++ cmake
```

安装依赖：

```
sudo apt-get install libboost-dev \
    libboost-date-time-dev \
    libboost-filesystem-dev \
    libboost-program-options-dev \
```

```
libboost-regex-dev \  
libboost-serialization-dev \  
libboost-system-dev \  
libboost-test-dev \  
libboost-thread-dev
```

可选依赖（可以不安装）：

可选依赖编译工具

```
sudo apt-get install libxerces-c3.1 libxerces-c-dev  
sudo apt-get install swig liblua5.3-dev python3-dev default-jdk  
sudo apt-get install libgtest-dev
```

安装RobWorkStudio依赖（可以不安装）：

```
sudo apt-get install qtbase5-dev
```

获取源码并编译：

获取源码：

```
git clone https://gitlab.com/sdurobotics/RobWork.git
```

准备编译目录：

```
cd RobWork  
mkdir Build  
mkdir Build/RW  
mkdir Build/RWStudio  
mkdir Build/RWSim  
mkdir Build/RWHardware
```

执行cmake：

```
cd Build/RW
cmake -DCMAKE_BUILD_TYPE=Release ../../RobWork
make -j4
```

编译RobWorkStudio:

For RobWorkStudio:

```
cd ~/RobWork/Build/RWStudio
cmake -DCMAKE_BUILD_TYPE=Release ../../RobWorkStudio
make -j4
```

配置环境，编辑 ~/.bashrc 添加：

```
#ROBWORK#
export RW_ROOT=~/RobWork/RobWork/
export RWS_ROOT=~/RobWork/RobWorkStudio/
```