

PR2 Reinstall

ROS + PR2 Training Workshop

Introduction

1. The PR2 reinstall process is based on a USB or DVD installer

- The USB stick or DVD can be used to install the basestation
- The basestation contains all the packages necessary to reinstall the PR2
- All of this can be performed on a completely isolated network

Before you begin

1. The install process wipes the disk in c1.

- All user data stored here will be lost.

2. You may want to back up the user accounts

```
$ pr2-usermigrate save robot.users
```

- Store the file robot.users somewhere safe

3. Any users with home directories in /pr/2 should have their contents preserved

- However, you should never leave anything irreplaceable on the robot during an install

Making a USB Installer

1. Acquire a 4GB USB-stick or a DVD
2. Download the most recent .tgz file from the PR2 website
3. Untar the file and it will contain:
 - install_dev1
 - createusb.py
4. Run the USB installer with the path to the USB device to install on

```
$ cd basestation_installer  
$ ./createusb.py /dev/sdb
```

Making a DVD Installer

1. Download the basestation iso from the PR2 website
2. Burn it to a DVD

Installing the Basestation

1. Put the USB installer or DVD in the basestation and reboot
 - Hit while booting
 - Choose “Advanced BIOS Features”
 - Choose “Hard Disk Boot Priority”
 - For USB installer: select the drive listed as “USB-HDD0” and hit page-up to move it to the top of the list
 - For DVD installer: select CDROM and hit page-up to move it to the top of the list
 - Hit <F10> to save and exit setup
2. Installation should proceed automatically
3. When complete hit Enter, and remove USB stick
4. Once the basestation boots, you will probably want to configure it with its proper name and IP address

Installing a robot

1.Plug the robot into the service port of the basestation

2.Make sure all hwlogs have been pushed off the robot:

```
pr2admin@c1$ sudo send-hwlog --wg
```

3.On the basestation run the robot installer

```
pr2admin@basestation$ sudo robot-install
```

4.Reboot the robot with the netboot option

```
pr2admin@c1$ sudo pr2-shutdown --netboot --reboot
```

5.Netconsole will eventually connect to robot

6.Hit enter to install the robot

7.The robot will shutdown when installation complete

8.Proceed with appropriate configuration as discussed in previous workshop

Restoring data

1.If you backed up user accounts, you can restore them now

- Get the robot.users file back onto the robot

```
$ pr2-usermigrate load robot.users
```

2.For any user with a home directory on c2, you will need to recreate their symlink in “/u”

```
$ rm /u/leibs
```

```
$ ln -sf /pr/2/leibs /u/leibs
```


Where To Get More Help

1. Everything covered here should be mentioned in the PR2 Manual
2. The PR2-documentation website contains additional FAQ information
3. Mailing list:
 - pr2-admin@lists.willowgarage.com