Motivation for using Virtual Machines

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We have created virtual machines for both VirtualBox and Vmware Player.

Both options are supported across several platforms, but experience says that some hardware plays better with one or the other.

Having both options helps users who are familiar with one of the programs.

Why use virtual machines?

- You can setup a machine once and then duplicate the result (good for classrooms).
- Students can copy the VM from a school machine, and load it on their personal computer.
- New users can download a virtual image with ROS, Scratch and libraries already configured (less chance to mess up!)
- You can run ROS in Ubuntu, regardless of the actual platform that you're using.
- If you break something (either the VM or the real machine), you can load a backup.
- If new ROS version comes out, simply download and run the newest virtual image!

Here, let me get that for you :)

- ROS, Scratch, iRobot Create driver, gscam, ar_recog, examples like teleop_twist_keyboard.

- Startup scripts launch roscore, Create driver, Scratch, rosjs/processing browser automatically.

- VMs setup to minimize work for the user. (auto-login, no screen lock, no updates...)

Anything you can do, I can do on a virtual machine!

- Virtual machines have lower hardware ceilings than the host machine, but even slow machines can run ROS.

- Using bluetooth communication to the robot platform, powerful host machines can operate the robot, overcoming hardware challenges.