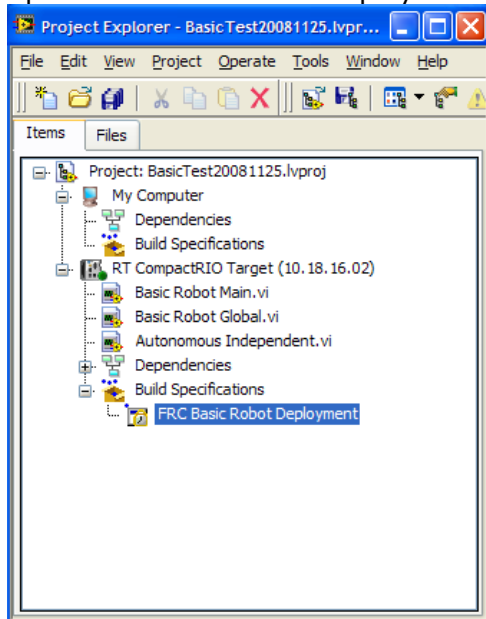


Using LabVIEW

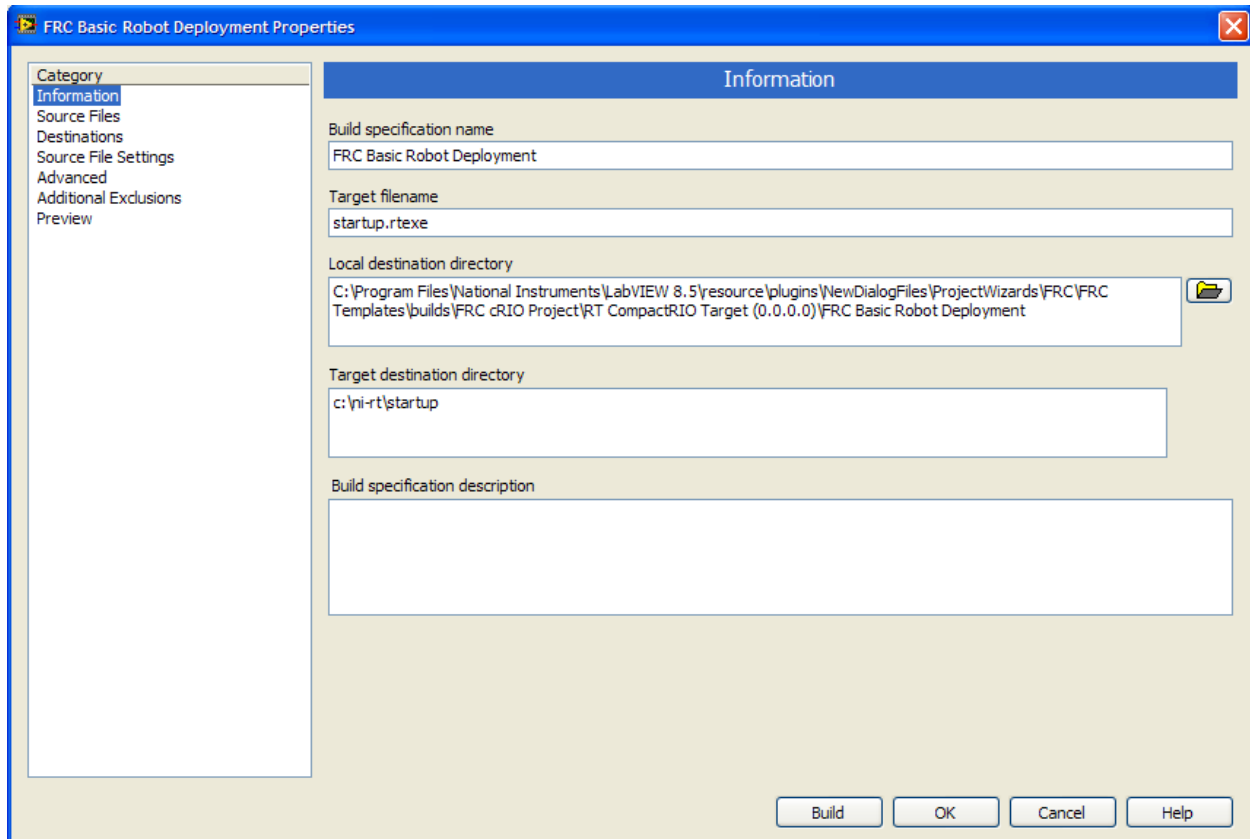
When you create a new LabVIEW robot project, it will ask for the cRIO IP address. This should be 10.xx.yy.2 where "xxyy" is replaced by your team number. For teams without four digit numbers, precede your number with however many zeroes are needed to create a four digit number. When you go to test your LabVIEW code, you have two options. The first is to run the code through the laptop or computer. Once you have the connection to the cRIO established, simply click on the block, white arrow in the top left corner of the screen. Be sure you are looking at the "Robot Main" diagram or front panel. A small dialogue box should open and display the progress of deploying the code. When the download is complete, you will be able to run the code while tracking it in LabVIEW. This is a great way to debug because you can see real-time values through indicators and data flow with the highlighting tool. However, downloading the code with this method doesn't install it for competition use.

To install the LabVIEW code,

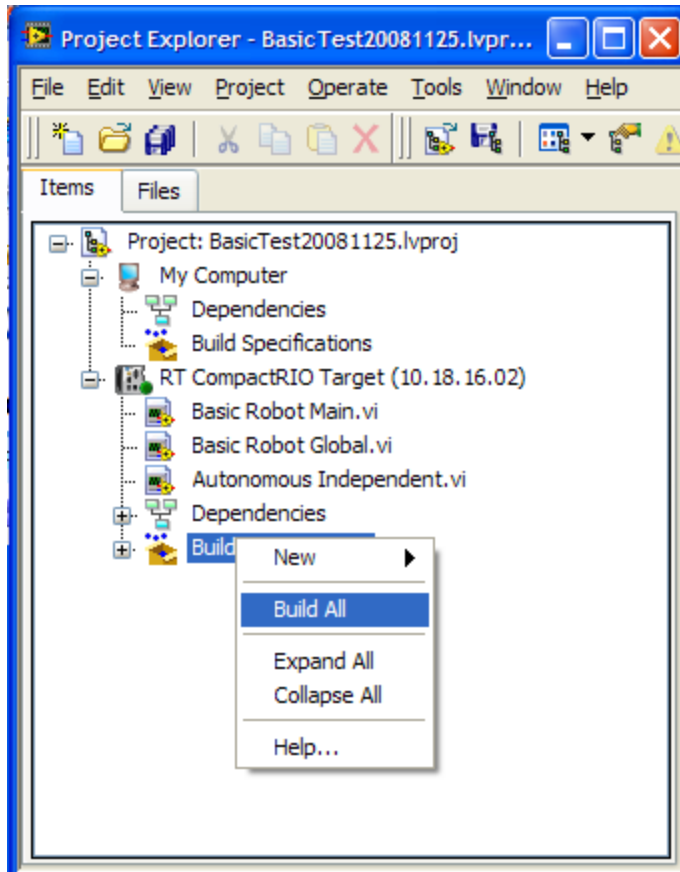
1. In the Project Explorer window, double-click the FRC Basic Robot Deployment build specification or the FRC Robot Boot-up Deployment build specification under the Build Specifications folder to display the Real-Time Application Properties dialog box.



2. On the Information page, specify a name for the build specification in the Build specification name text box.
3. Specify a name for the application in the Target filename text box.
4. Specify the location on the host computer to which you want to save the stand-alone application in the Local destination directory field.
5. Specify the location on the cRIO device to which you want to save the stand-alone application in the Target destination directory field.
6. Select Source Files from the Category list.
7. Verify that the Basic Robot Main VI or the Robot Main VI is in the Startup VIs list.
8. Click the OK button to close the Real-Time Application Properties dialog box.



9. In the Project Explorer window, right-click the build specification and select Build from the shortcut menu to build the application.



10. Right-click the build specification and select Run as startup from the shortcut menu to set the application as the startup application and deploy the application to the CompactRIO device. LabVIEW prompts you to reboot the RT target.
11. Reboot the cRIO device to run the application.