Exercise 6-4: Creating a Package

Goal

Create a package for distributing the stand-alone application.

Hardware Setup

(Hardware) In the exercises where we work with Analog Input/Output channels, we use PCI-6221/USB-6212 multifunction I/O device paired with the BNC-2120 shielded connector block. Analog Input 2 should be connected to the Sine/Triangle BNC connector. Analog Input 3 should be connected to the TTL Square Wave BNC connector. The Sine/Triangle waveform switch should be set to Sine.

Scenario

Creating a package allows deploying an application (i.e. source distribution, packed project library, shared library, .NET assembly, and/or application) to clients through NI Package Manager or SystemLink.

Design

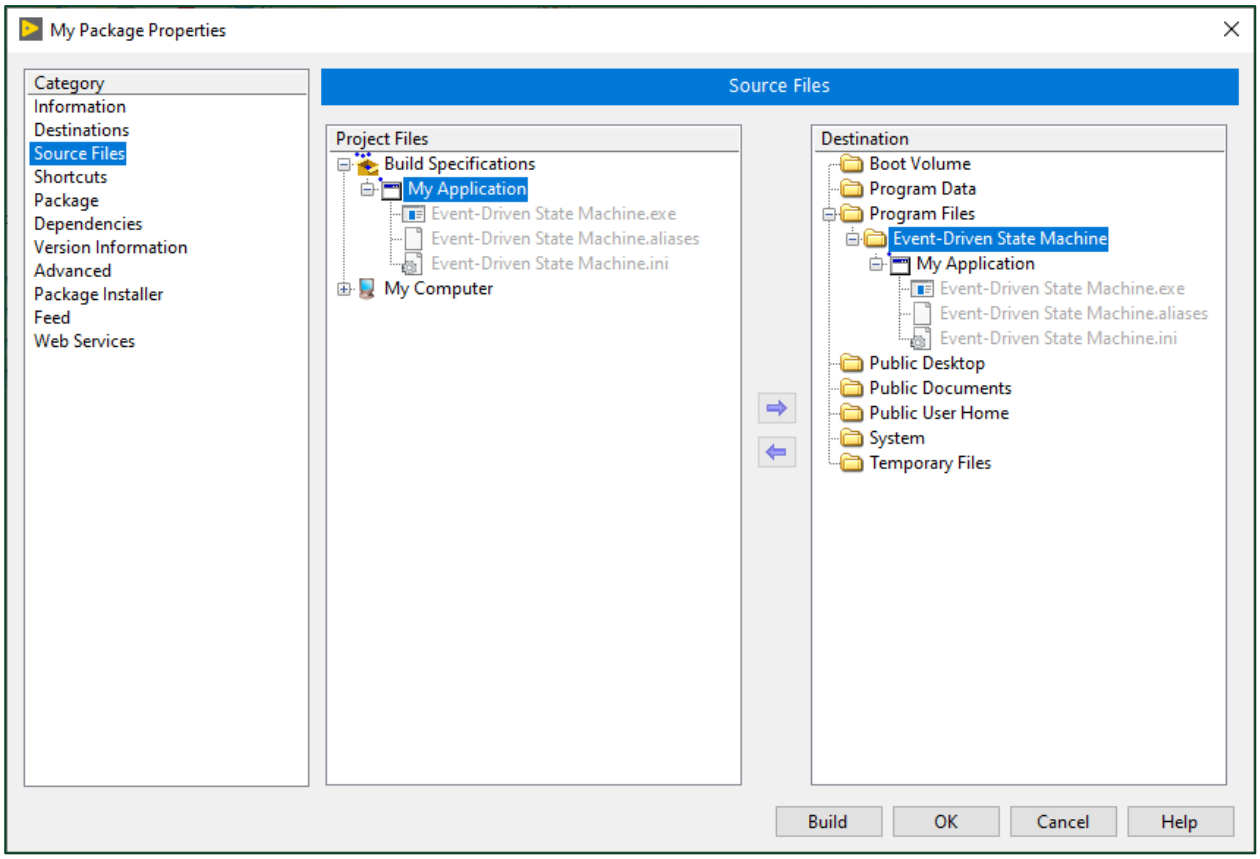
Use a package build specification to create a package that includes the application for distribution.

Warning: To successfully build a package, make sure that your exercise source files are placed in the appropriate location, that is — C:\Exercises\ LabVIEW Core 2\"name of the current exercise".

Guided Instructions
Creating a Package Build Specification

1. Open C:\Exercises\LabVIEW Core 2\Creating a Package\Event-Driven State Machine.lvproj.
2. Right-click **Build Specifications** in the **Project Explorer** window
3. Select **New» Package** from the shortcut menu.
4. Modify the package information.
    - Select the **Information page**.
    - Set the package build specification name under the **Build specification name** section and filename of the package under the **Package name** section of the page.
    - Type C:\Exercises\LabVIEW Core 2\Creating a Package\Package as the **Package output directory** to specify the package build directory.
5. Specify the install destination under the Destinations page.
    - Select the **Destinations page**.
    - Select **Program Files» Event-Driven State Machine** in the **Destination** tree. Modify the **Destination name**, if needed.
6. Specify the source files to include in the package on the Source Files page.
    - Click the **Source Files** page.

- Select the **My Application** build specification.
- Select **Program Files» Event-Driven State Machine** in the **Destination View** tree.
- Click the right arrow **next** to the **Project Files View** tree to place the Event-Driven State Machine application and all application support files under **Program Files» Event-Driven State Machine** in the **Destination** tree as shown in the figure below



7. Manage the shortcuts created during the package installation.
    - Select the **Shortcuts** page
    - Under **Shortcuts** tree, select the **Event-Driven State Machine**, and optionally rename it under the **Name** box. You can select the **type of the shortcut** under the **Directory** drop-down menu - **Program Menu** for Start menu shortcut, **Public Desktop** for Desktop shortcut and **Startup** for the application to run automatically on startup. For this example, select the **Public Desktop** option.
8. Configure the dependencies for a package.
    - Select the **Dependencies** page.
    - Select the **LabVIEW Runtime (32-bit)** and **NI-DAQmx Runtime** packages, if they are not already automatically selected.

- You can specify the dependency relationship with the package you select in the **Related packages** listbox by selecting the desired dependency relationship under the **Dependency relationship** drop-down menu.

9. Under the **Package Installer** page you can specify whether or not to build your distribution into a package installer file (.exe). You can distribute your application to clients using the package installer. By default, the package installer includes all the package dependencies in the output so that your clients can install the package installer without network access.
10. Under the Feed page you can add your package to a feed, so that your clients can subscribe to the feed to receive update notifications and install the package from **NI Package Manager** or **NI SystemLink** via network access.
11. Click **OK**.
12. In the **Project Explorer** window, right-click the **My Package** build specification and select **Build** from the shortcut menu.
13. Click **Done** when LabVIEW finishes building the package.
14. Save and close the **Project Explorer** window and close LabVIEW.

Test

1. Navigate to C:\Exercises\LabVIEW Core 2\Creating a Package\Package in Windows Explorer.
2. Double-click the **event-driven-state-machine_1.0.0-0_windows_all.nipkg.**
3. When the **User Account Control** dialog box appears, click **Yes** to grant the NI Package Manager administrator rights.
4. Click **Next** to progress the installation.
5. Click **Close** to exit setup.
6. Notice that there is a new folder on the desktop called **Event-Driven State Machine**.
7. Inside it, you will find the Event-Driven State Machine.exe shortcut, which links to the C:\Program Files (x86)\Event-Driven State Machine directory.
8. Right-click **Event-Driven State Machine.exe** and select **Run as administrator**.
9. Test the application by clicking the **Acquire** button, **Clean** button, and the **Exit** button.

Note: Your package is visible in the NI Package Manager. To find it, launch the NI Package Manager, then under the **INSTALLED** tab remove the checkmark from the **Products only** checkbox and search for your package. Here you can **Remove** or **Repair** the installed package.

End of Exercise 6-4