

Setting Up the CamBot Translation Server

The CamBot Translation Server software enables the DashBoard PT Head Control plugin to control CamBot PT heads.

This document describes how to install and configure the CamBot Translation Server. It includes the following topics:

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About the CamBot Translation Server

The CamBot Translation Server is a Windows service that facilitates communication between the DashBoard Control System and CamBot PT heads. Only one CamBot Translation Server is required, even if there are multiple robot control workstations.

Set up a CamBot Translation Server only if advised to do so by Ross Video.

The CamBot Translation Server is intended for the following scenarios:

- You are installing CamBot PT heads and intend to control them using DashBoard instead of SmartShell.
- You are changing your existing CamBot control system from MasterPanel to DashBoard.

IMPORTANT: The DashBoard PT Control plugin interface is very different than CamBot MasterPanel. Some MasterPanel features are not available in DashBoard. Shots created in MasterPanel can not be imported into DashBoard. All existing shots are lost. For more information, contact Ross Video Technical Support.

IMPORTANT: The CamBot Translation Server must **NOT** be used if one or more of the robots you intend to control through DashBoard is also to be controlled through any of the following:

- SmartShell control application in conjunction with Robotics Server
- CamBot MasterPanel control application.

Before You Begin

Perform the following tasks before you install the CamBot Translation Server:

1. Read this entire document carefully.
If you have any questions, contact Ross Video Technical Support.
2. Check that your CamBot PT heads are running firmware **v3.4.xxx**, and upgrade if necessary.
For information about upgrading CamBot firmware, contact Ross Video Technical Support

3. Determine which computer will run the CamBot Translation Server:
 - The computer must be network-accessible to all CamBot heads and all robot control workstations using DashBoard to control CamBots.
 - If there will be only one robot control workstation, use it as the CamBot Translation Server to ensure the service is always available when required.
 - If there will be multiple robot control workstations, choose a computer that will remain powered on, to ensure the service is always available when required.

Note: It is possible to have multiple CamBot Translation Servers on a network, but only one CamBot Translation Server can connect to a particular CamBot PT head at a time.
4. Download the CamBot Translation Server zip file from the Ross Video website:
<https://www.rossvideo.com/support/software-downloads/robotic-camera-systems/>.
5. Install the latest version of the DashBoard Control System application on each robot control workstation computer. DashBoard and the DashBoard User Guide are available as free downloads from Ross Video. The DashBoard User Guide contains instructions for installing DashBoard. Both are available from the following location:
<http://www.rossvideo.com/control-systems/dashboard/index.html>.
6. Obtain a list of all CamBot PT heads you want to control, including their robot names, IP addresses, and CamBot models (520PT or 600PT).

Install the CamBot Translation Server

Once installed, the CamBot Translation Server automatically starts whenever the computer reboots.

To install the CamBot Translation Server:

1. Extract the CamBot Translation Server zip file (**CamBot Translation Server x.x.x.x.zip**) to **C:\Ross**.
2. Note the version number of the zip file, as represented by **x.x.x.x** in **Step 1**. For example, **5.2.100.6999**.
3. Start the **Command Prompt** application:
 - a. Open the Windows **Start** menu and then start typing **Command Prompt**, until the **Command Prompt** application appears in the list.
 - b. Right-click **Command Prompt** and then click **Run as administrator**. See **Figure 1**.

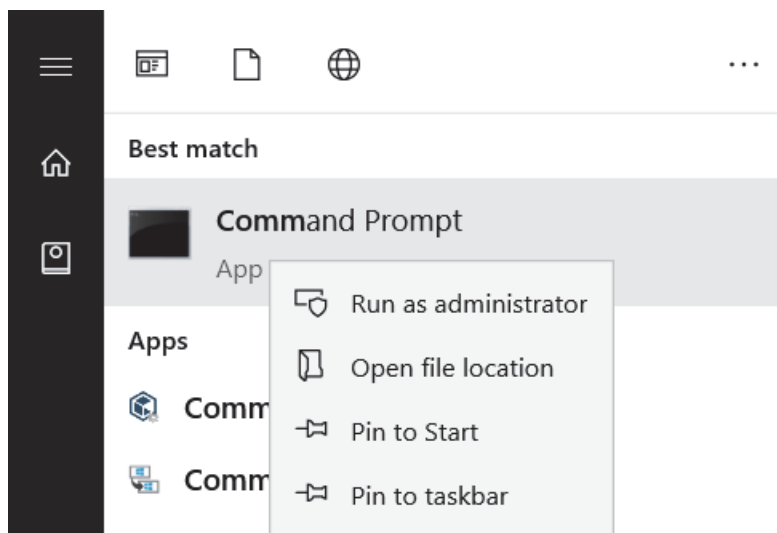


Figure 1 - Starting the Command Prompt Application

The **Administrator: Command Prompt** window appears. See **Figure 2**.

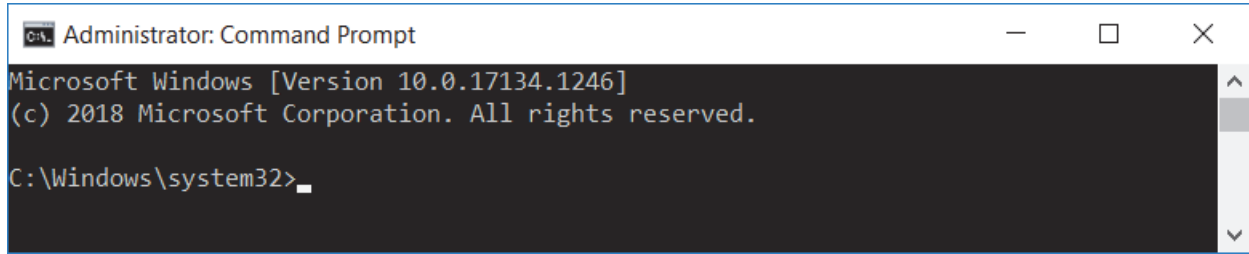


Figure 2 - Command Prompt Window

4. In the **Command Prompt** application, navigate to the **CamBot Translation Server** folder:
 - a. Type **CD** followed by a space and the folder path, for example, **CD C:\Ross\CamBot Translation Server x.x.x.x**), where **x.x.x.x** represents the version number you noted in **Step 2**. See **Figure 3**.

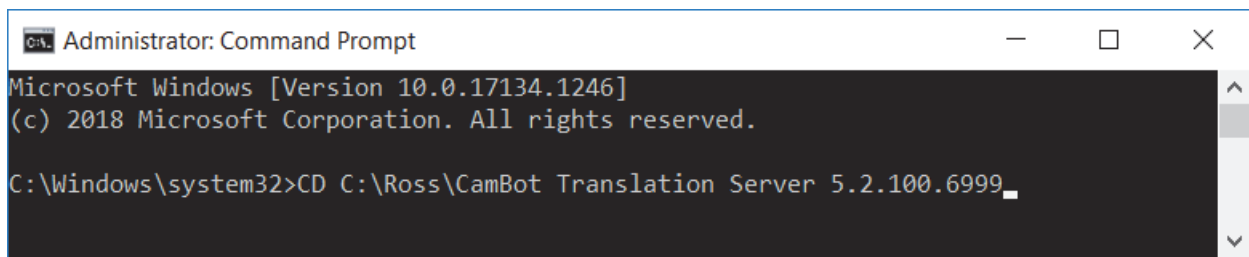


Figure 3 - Navigating to the CamBot Translation Server folder

- b. Press **Enter**.
5. At the command prompt, type **ManagedServicesHost.exe -install**, and then press **Enter**. See **Figure 4**.

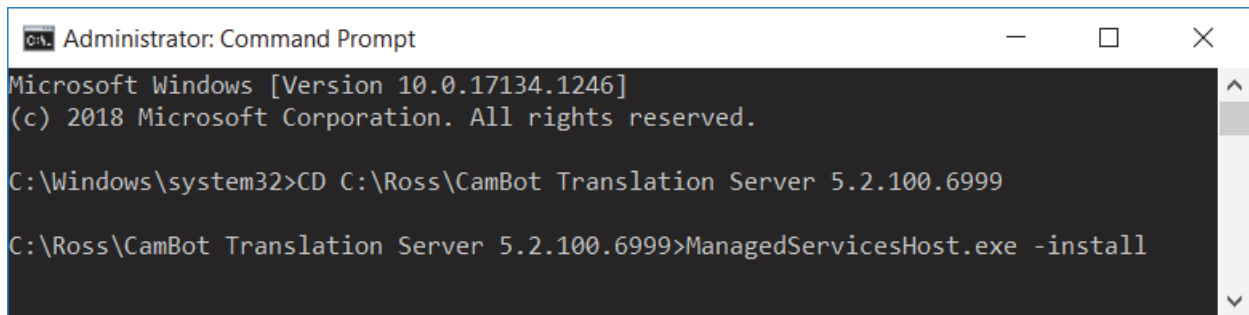


Figure 4 - Installing ManagedServicesHost.exe

The service is installed. See **Figure 5**.

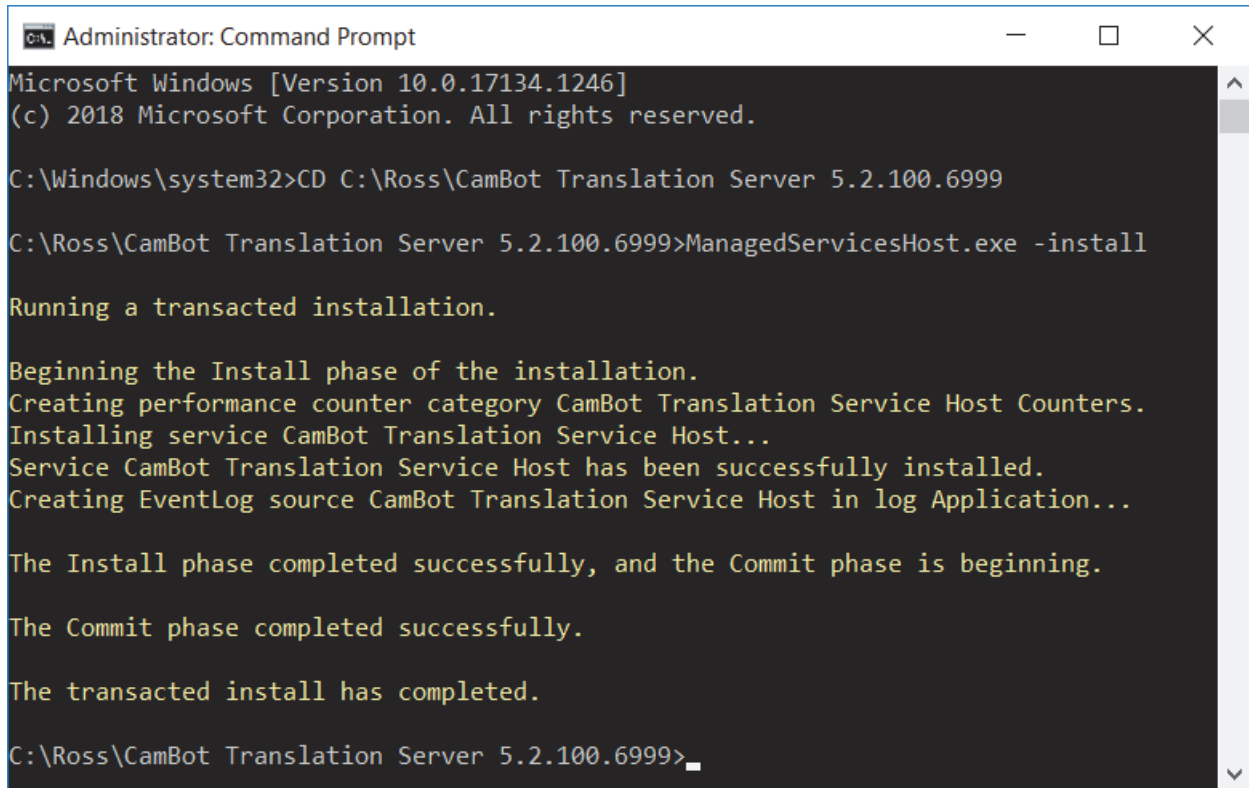


Figure 5 - ManagedServicesHost.exe is installed successfully

6. When the command prompt reappears, close the **Command Prompt** application.

Configure the CamBot Translation Server

Configure the CamBot Translation Server by registering the CamBot PT heads you want to control.

For this procedure, you will need the list of CamBot PT heads you obtained earlier.

To configure the CamBot Translation Server:

1. On the CamBot Translation Server computer, navigate to the **C:\Ross\CamBot Translation Server x.x.x.x** folder.
2. Open the **CamBotTranslationServer.config** file in a plain text editor such as Windows Notepad, or in an XML editor.
3. Find the list of Robots, as shown in **Figure 6**.

```
<Robots>
<Robot-Id="1".Name="CAM1".Protocol="Cambot".HostName="192.168.0.91".Type="520PT"/>
<Robot-Id="2".Name="CAM2".Protocol="Cambot".HostName="192.168.0.92".Type="520PT"/>
<Robot-Id="3".Name="CAM3".Protocol="Cambot".HostName="192.168.0.93".Type="520PT"/>
<Robot-Id="4".Name="CAM4".Protocol="Cambot".HostName="192.168.0.94".Type="520PT"/>
<Robot-Id="5".Name="CAM5".Protocol="Cambot".HostName="192.168.0.95".Type="520PT"/>
<Robot-Id="6".Name="CAM6".Protocol="Cambot".HostName="192.168.0.96".Type="520PT"/>
<Robot-Id="7".Name="CAM7".Protocol="Cambot".HostName="192.168.0.97".Type="520PT"/>
<Robot-Id="8".Name="CAM8".Protocol="Cambot".HostName="192.168.0.98".Type="520PT"/>
</Robots>
```

Figure 6 - The Robots section of the CamBotTranslationServer.config file, shown in an XML editor

4. Starting with the first entry, edit the list of Robots to add the CamBot PT heads you want to control (**Figure 7**):
 - Edit the value of the **Name** attribute to match the name of the CamBot PT head.
 - Edit the value of the **HostName** attribute to match the IP address of the CamBot PT head.
 - Edit the value of the **Type** attribute to match the model of CamBot PT head (**520PT** or **600PT**).

Note: The value of the **Id** attribute must start at **1** for the first entry, and proceed upwards to **2, 3**, etc.

```
<Robots>
<Robot-Id="1".Name="Right".Protocol="Cambot".HostName="196.90.112.01".Type="520PT"/>
<Robot-Id="2".Name="Center".Protocol="Cambot".HostName="196.90.112.02".Type="600PT"/>
<Robot-Id="3".Name="Left".Protocol="Cambot".HostName="196.90.112.03".Type="520PT"/>
<Robot-Id="4".Name="CAM4".Protocol="Cambot".HostName="192.168.0.94".Type="520PT"/>
<Robot-Id="5".Name="CAM5".Protocol="Cambot".HostName="192.168.0.95".Type="520PT"/>
<Robot-Id="6".Name="CAM6".Protocol="Cambot".HostName="192.168.0.96".Type="520PT"/>
<Robot-Id="7".Name="CAM7".Protocol="Cambot".HostName="192.168.0.97".Type="520PT"/>
<Robot-Id="8".Name="CAM8".Protocol="Cambot".HostName="192.168.0.98".Type="520PT"/>
</Robots>
```

Figure 7 - Editing the list of Robots (edited entries are shown highlighted yellow)

5. Delete or comment out any unused entries (**Figure 8**).

```
<Robots>
<Robot-Id="1".Name="Right".Protocol="Cambot".HostName="196.90.112.01".Type="520PT"/>
<Robot-Id="2".Name="Center".Protocol="Cambot".HostName="196.90.112.02".Type="600PT"/>
<Robot-Id="3".Name="Left".Protocol="Cambot".HostName="196.90.112.03".Type="520PT"/>
</Robots>
```

Figure 8 - The Robots list after editing, with unused entries deleted

6. Save and close the **CamBotTranslationServer.config** file.
7. Restart the **CamBot Translation Service Host** service:
 - a. Open the Windows **Start** menu and then start typing **Services**, until the **Services** application appears in the list.
 - b. Right-click **Services** and then click **Run as administrator**. See **Figure 9**.

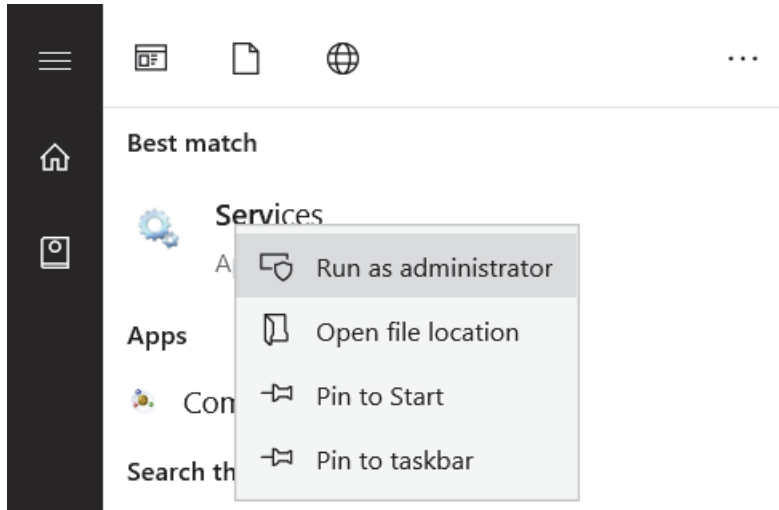


Figure 9 - Launching the Services Window

The **Services** window appears. See **Figure 10**.

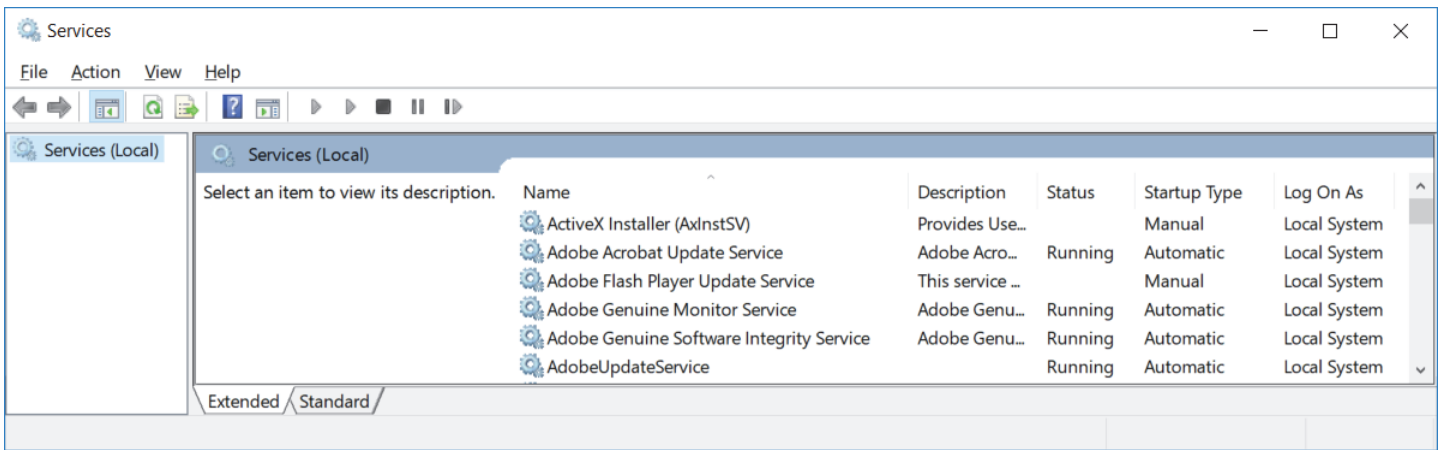


Figure 10 - The Services Window

- c. Find and select the **CamBot Translation Service Host** service. See **Figure 11**.

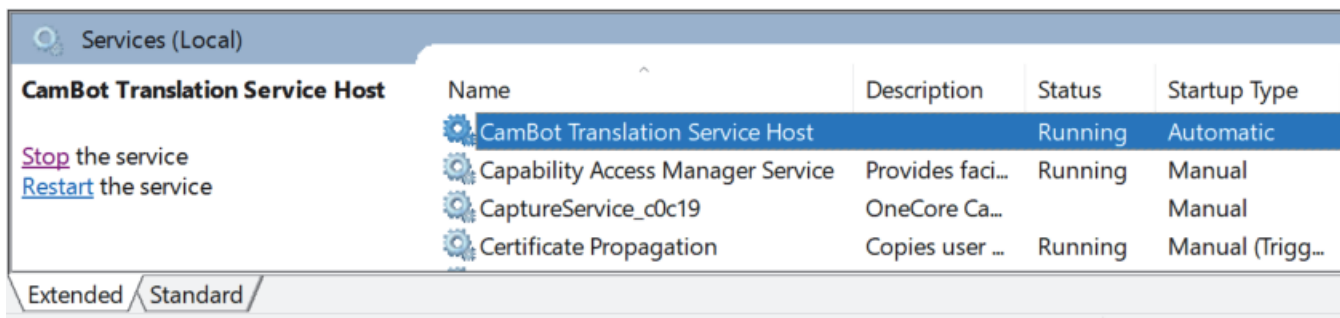


Figure 11 - Selecting the CamBot Translation Service Host

- d. Click **Restart** to restart the service.
- e. After the service has stopped and restarted, close the **Services** window.

Add CamBots in DashBoard

The PT Head Control plugin is available free of charge, as part of the DashBoard Control System.

On each robot control workstation, you must register (add) each PT head to DashBoard. You can then control them from DashBoard.

This section describes how to add a CamBot PT head to DashBoard. For complete information about setting up and using the DashBoard PT Head Control plugin, see the *User Manual for PT Head Control (8351DR-019)*. To download a PDF copy, go to <https://www.rossvideo.com/products-services/acquisition-production/robotic-camera-systems/studio-robotics/>, follow the **Downloads** link, expand the **Manuals** node, and select the manual.

To add a CamBot PT head in DashBoard:

1. On the robot control workstation, start DashBoard.
2. From the **File** menu, click **New**, and then click **Other**.
The **New** dialog box appears.
3. Expand the **Robots** node, click **Ross PT Head**, and then click **Next**.
The **New Ross Robotics Connection** dialog box appears. See **Figure 12**.

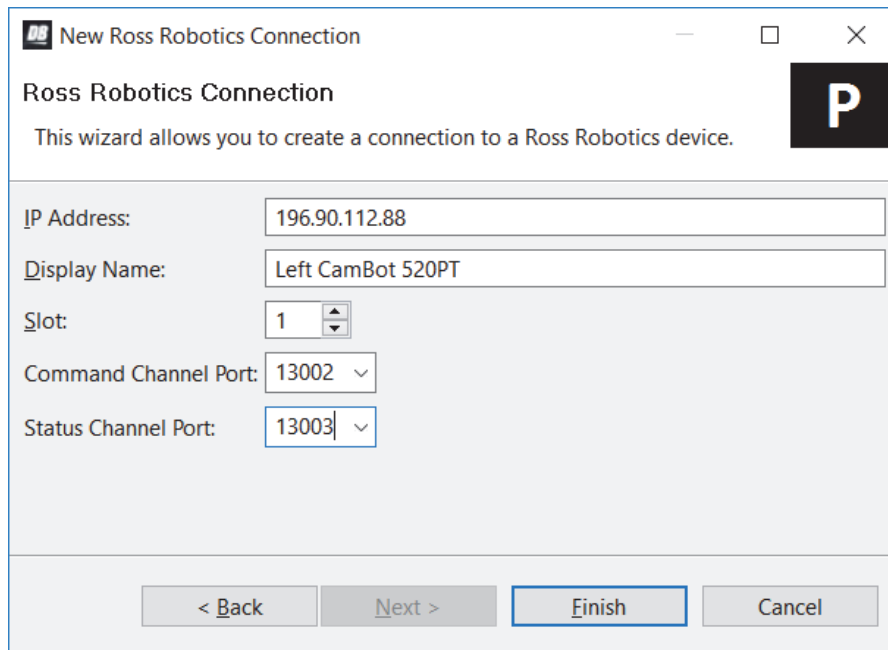


Figure 12 - The New Ross Robotics Connection dialog box (shown completed for the first CamBot PT head)

4. In the **IP Address** box, type the IP address of the CamBot Translation Server.
5. In the **Display Name** box, type the name of the PT head, as you want it to appear in DashBoard.
6. In the **Slot** box, select or type a slot number (**1** or higher) to specify the order in which the PT head is to be listed in the DashBoard tree.

Tip: If you do not specify a slot number, or if you specify one that is already in use, the PT head is assigned the lowest available slot number.

7. Set the **Command Channel Port** and the **Status Channel Port** as follows:
 - a. For the first CamBot head you listed in the **<Robots>** section of the **CamBotTranslationServer.config** file (**Id="1"**), the **Command Channel Port** is **13002** and the **Status Channel Port** is **13003**.
 - a. For the second CamBot head listed (**Id="2"**), the **Command Channel Port** is **13004** and the **Status Channel Port** is **13005**.
 - b. For subsequent CamBot heads, the port numbers increment accordingly (**13006/13007**, **13008/13009**, etc).
8. Click **Finish**.

The CamBot PT head appears in the DashBoard tree, within the **Ross Robotics** node. See **Figure 13**.

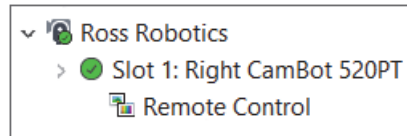


Figure 13 - The Ross Robotics node of the DashBoard tree

9. To control the head you just added, expand the **Ross Robotics > Slot** node for the head, and then click **Remote Control**.

The PT Head Control interface appears.