

Network Switch Test Plans

Generic SIMPL Test Plan

1. Create a SIMPL program, and then define the wrapper module for the device type you are testing. Test all inputs and outputs of the SIMPL wrapper module and verify that they work with your driver.

Crestron Home Verification Points

Configuration

1. Load the driver onto the CP4-R or MC4-R, then navigate to **Third Party Devices** in the **Pair Devices** page and wait for the list to update. Verify the manufacturer shows under the device type, all supported models from the driver show under the manufacturer, and there are no typos.
2. Add the driver to a room, and verify the **Add Device** dialog box appears with the appropriate connection fields (list of IR/COM ports or the IP/Hostname field).
3. Verify any additional attributes on the driver show in subsequent dialogs with the appropriate descriptions and fields.
4. Verify the driver is successfully added to the room.

Settings

1. Select **Settings**. Verify there is an **About** menu option available. Verify there is a **Control** menu option available. Verify there is a **Power Banks** menu option available. Verify there is an **Advanced** menu option available.
2. Select the **About** menu option. Verify the **Device Name**, **Room Name**, **Type**, **Manufacturer**, **Model**, **Version**, and **Control Type** are displayed. Verify that **Status** is displayed and shows Online when the device is connected and Offline when the device is disconnected.

3. Select the **Control** menu option. Verify the **IP Address** and **IP Port** are displayed. Verify that the **Requires Authentication** check box is available, and when checked, the **Username** and **Password** fields are shown. Verify these fields are not shown when **Requires Authentication** is not checked.
4. Select the **Power Banks** menu option. Verify all Power Ports are listed. Verify that each **Power Port** has a **Settings** icon. Verify that each **Power Port** has a color code for the power status. Verify that the power status shows red when powered off and green when powered on.
5. Select the **Advanced** menu option. Verify there is a **Enable Logging** check box. Verify that, when checked, the driver logs to the Crestron console. Verify that the driver stops logging to the Crestron console when unchecked.

Power Banks – Assigned Devices

1. Select **Settings**. Verify a **Power Banks** menu option is available.
2. Select **Power Banks**. Verify that each **Power Port** has a **Settings** icon. Verify that each **Power Port** has a color code for the power status.
3. Assign a device to a power port by selecting the gear icon next to the port and then select **Assigned Devices**. Verify that a list of all available items is shown. Verify that you can navigate rooms by selecting the left carat (<) icon next to the room name.
4. Under **Assigned Devices**, select a device to be assigned to the power port. After the selection has been made, select the **x** button in the top right corner. Verify that the device name appears below the power port name.
5. Under **Assigned Devices**, select multiple devices to be assigned to the power port. After the selections have been made, select the **x** button in the top right corner. Verify that "X devices assigned" appears below the power port name, where "X" is the number of assigned devices.

6. Under **Assigned Devices**, select a device that has been assigned to another power port. After the selection has been made, select the **x** button in the top right corner. Verify that the device is reassigned to the current power port. Verify that the device was removed from the previous power port.
7. Under **Assigned Devices**, do not make a selection, then select the **x** button in the top right corner. Verify that no errors occur and that no devices were assigned to the power port.

Power Banks – Power

1. Select **Settings**. Verify a **Power Banks** menu option is available.
2. Select **Power Banks**. Verify that each **Power Port** has a **Settings** icon. Verify that each **Power Port** has a color code for the power status.
3. Adjust the power settings by selecting the gear icon next to a power port. Select **Power**. Verify there is a **Status** that shows power feedback. Verify there are **On** and **Off** buttons. Verify there is a **Cycle** button. If supported, verify there is a power on delay setting. If supported, verify there is a cycle delay.
4. Under **Power**, select **On**. Verify that PoE is applied to the selected port. Verify that the **Status** changes from off to on. If supported, verify that the power on delay is observed before the port powers on. Exit the power port settings and verify that the port color shows green for online.
5. Under **Power**, select **Off**. Verify that PoE is disabled from the selected port. Verify that the **Status** changes from on to off. Exit the power port settings and verify that the port color shows red for online.
6. Under **Power**, select **Cycle** while the power port is turned on. Verify that the port is turned off immediately. Verify that the status changes from on to power cycling. If supported, verify that the port remains off for the duration specified by the cycle delay. Verify that the port powers back on again. Verify that the status changes from power cycling to on. Exit the power port settings and verify that the port color shows green for online.

7. Under **Power**, select **Cycle** while the power port is turned off. Verify that no errors are generated and that the status changes from off to power cycling. If supported, verify that the port remains off for the duration specified by the cycle delay. Verify that the port powers on. Verify that the status changes from power cycling to on. Exit the power port settings and verify that the port color shows green for online.

System Tests

1. Simulate a power outage in the house by removing power from the processor, device, and network for at least 120 seconds, before restoring power. Verify once the program loads, the driver reconnects to the device and all functionality is restored within 60 seconds.
2. Simulate a network outage by disconnecting all network cables from the device and processor and waiting at least 120 seconds before restoring. Verify the device and driver reconnect and all functionality is restored within 60 seconds.
3. Leave the driver connected to the device for a minimum of 24 hours, periodically checking functionality. After 24 hours, the driver should still be connected, all functionality should still work, and there should be no degradation in performance (functions should continue to work immediately and feedback should remain prompt and accurate).
4. Delete the driver from the system. The driver should no longer be listed in the room or seen in the end user UIs. No exceptions should be thrown in the error log.

Signature:

Date: