S C IntelliTeam II Automatic Restoration System Instruction Manual

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Contents

Overview

IntelliTeam II Mode

The IntelliTeam Designer software supports the ability to configure a system in the native IntelliTeam II Automatic

Restoration System mode of operation. This functionality is available in software revision 7.1.x and later. These instructions demonstrate how to set up, configure, and validate an IntelliTeam II Automatic Restoration System with IntelliTeam Designer software.

The IntelliTeam II Automatic Restoration System supports slower, less robust communication systems and can be used by customers who have deployed S&C automation equipment, such as IntelliRupter® PulseCloser® Fault Interrupters, 6800 Series Automatic Switch Controls, and IntelliNode™ Interface Modules. This mode of operation sends coach messages between team members to collect operational data and perform isolation and restoration functions in the event of a fault or loss-of-voltage condition occurring on distribution feeders. This mode does not use runner messages like the IntelliTeam® SG Automatic Restoration System does while running in IntelliTeam II system compatibility mode. The runner messages require a higher speed, low-latency communication network

Setup and Configuration for Versions 7.1.x and 7.3.x

Setup and Configuration

Follow these steps to configure an IntelliTeam II Automatic Restoration System when using IntelliTeam Designer versions 7.1.x and 7.3.x:

STEP 1. Draw a circuit using the IntelliTeam Designer application. See S&C Instruction Sheet 1044-570, “IntelliTeam Designer: User’s Guide,” for information about drawing circuits.
STEP 2. When the circuit drawing is completed, enter the necessary attributes for the circuit.
STEP 3. For the IntelliTeam Options Enabled setting, select the ITII option, as shown in **Figure 1.**

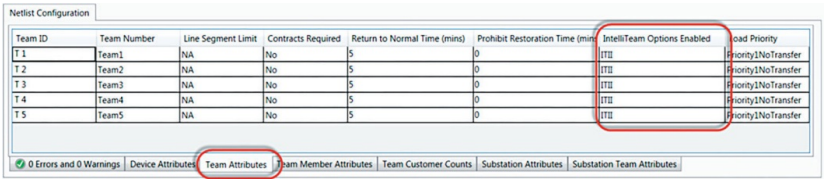

Figure 1. The Team Attributes>IntelliTeam Options Enabled setting.

STEP 4. For the IntelliTeam Options Enabled setting, select the ITII option, as shown in **Figure 2.**

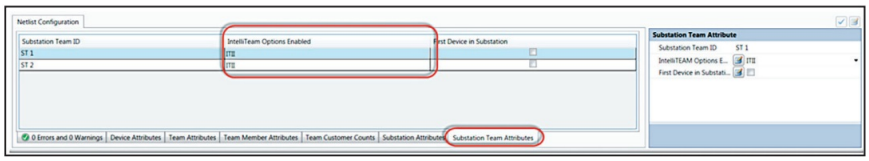

Figure 2. The Substation Team Attributes>IntelliTeam Options Enabled setting.

STEP 5. Validate and save the circuit drawing. Correct any validation errors if they occur.
STEP 6. When the circuit is successfully validated, open the communication manager and push the netlist to the controls. See S&C Instruction Sheet 1044-570, “IntelliTeam Designer: User’s Guide,” for information on how to set up the Communication Manager and push a netlist.

STEP 7. When the netlists have been successfully pushed, click on the Clear button in the Communication Manager screen to clear the netlists. This will stop the IntelliTeam system runners. **See Figure 3.**

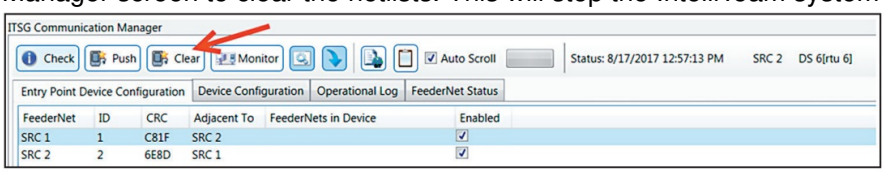

Figure 3. The ITSG Communication Manager Clear button for clearing netlists.

Verification

When the devices are successfully configured and netlists have been cleared (using the steps in the previous

section), verify the netlists have been removed from all IntelliTeamenabled devices. This is necessary because the netlists are self-healing, meaning a single netlist left in a single device can be propagated to other devices, which will re-enable runner messages. Follow these steps to perform the netlist-removal verification process on every device:

STEP 1. Verify the netlists have been cleared by looking for confirmation in the Operation Log tab on the ITSG Communication Manager screen. **See Figure 4.**

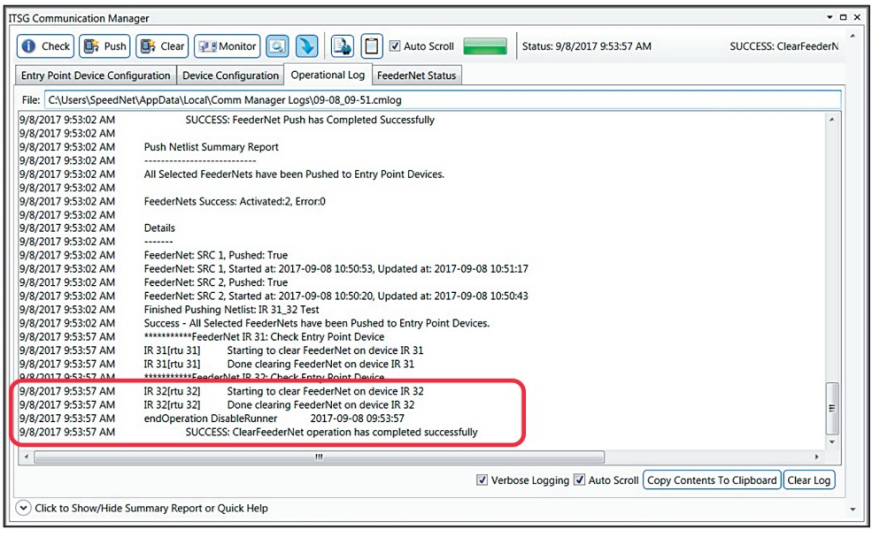

Figure 4. The Operation Log tab on the IntelliTeam SG system Communication Manager screen.

STEP 2. Open the Intelli Link® Setup Software and verify the netlists have been removed from all IntelliTeam system-enabled devices by going to the IntelliTeam SG>Activity Monitoring screen and reviewing the Feeder Nets section to make sure there is no Feeder NetID listed there. **See Figure 5.**

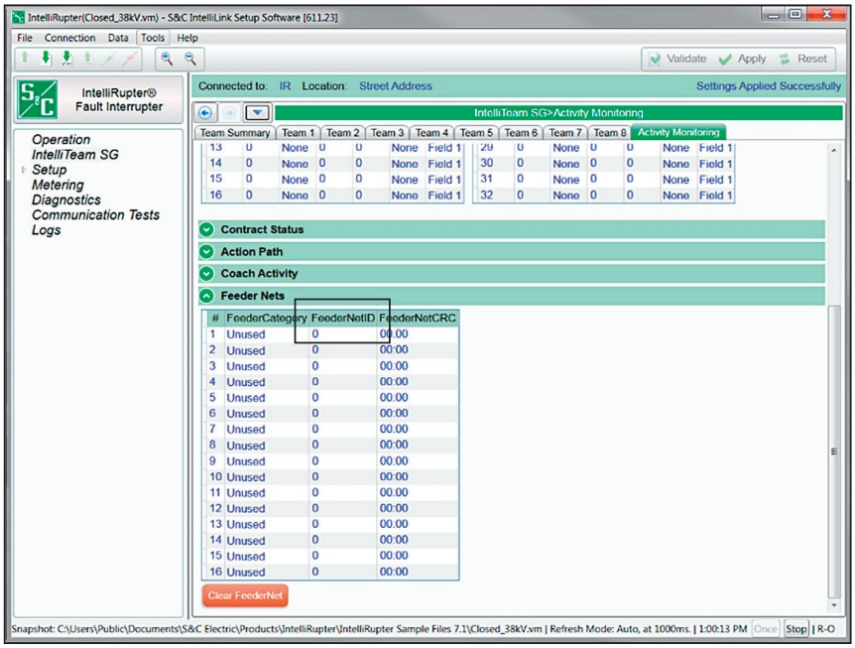

Figure 5. The IntelliTeam SG>Activity Monitoring screen – Feeder Nets section.

STEP 3. Go to the Logs>Status Point Log screen, and find the status description for **NET:** ITII Mode and make sure it is active. **See Figure 6.**

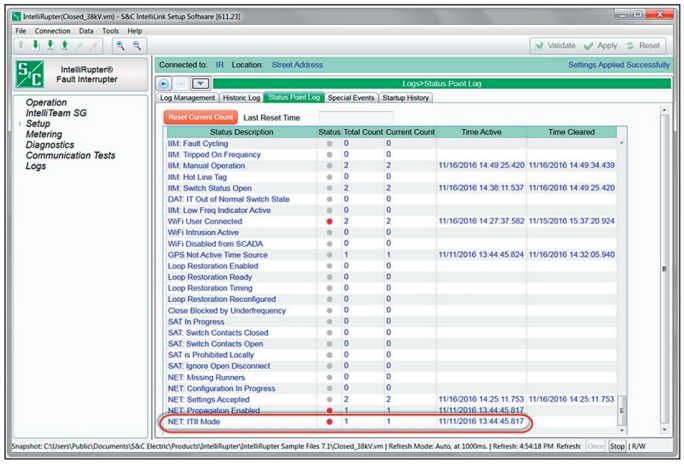

Figure 6. The Logs>Status Point Log screen – NET: ITII Mode entry.

This procedure must be completed for each IntelliTeam system-enabled device in the system to ensure the netlists have been removed and the runners are not active. If any device is found to have a netlist or Feeder Net, either click on the IntelliTeam Designer communication manager Clear button to clear the netlists (see Figure 3 on page 4) or click on the Clear Feedr Net button in the Intelli Link software on the IntelliTeam SG>Activity Monitoring>Feeder Nets screen (see Figure 5 on page 5).

Setup and Configuration

Follow these steps to configure an IntelliTeam II Automatic Restoration System when using IntelliTeam Designer version 7.5.x and later:

STEP 1. Draw a circuit using the IntelliTeam Designer application. See S&C Instruction Sheet 1044-570, “IntelliTeam Designer: User’s Guide,” for information about drawing circuits.
STEP 2. When the circuit drawing is completed, enter the necessary attributes for the circuit.
STEP 3. For the IntelliTeam Options Enabled setting, select the ITII option, as shown in **Figure 7.**

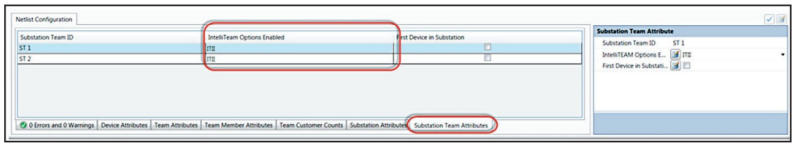

Figure 7. The Team Attributes>IntelliTeam Options Enabled setting.

STEP 4. For the IntelliTeam Options Enabled setting, select the ITII option, as shown in **Figure 8.**

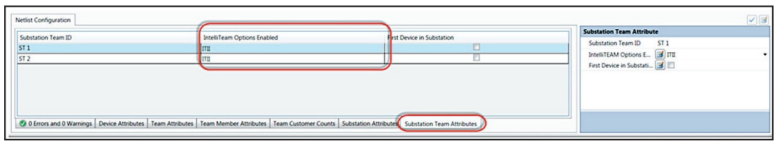

Figure 8. The Logs>Status Point Log screen.

STEP 5. Go to Options>IntelliTeam II Setpoint Configuration and select the firmware version of the devices in the circuit. **See Figure 9.**

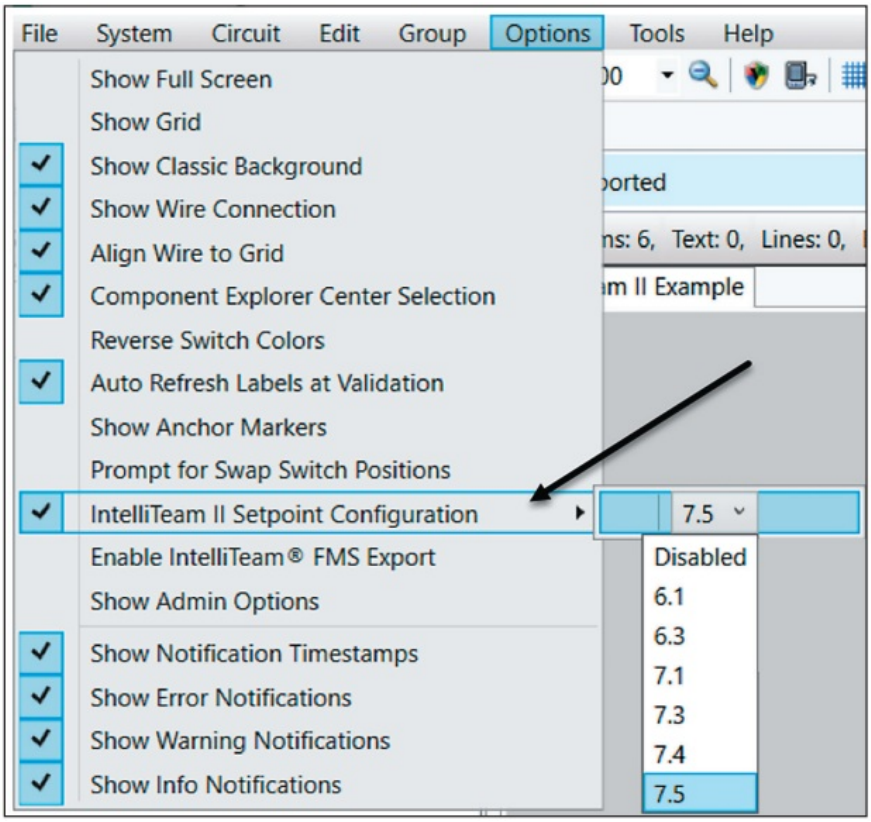

Figure 9. The IntelliTeam II Setpoint Configuration entry.

Note: The setpoint files that are created by IntelliTeam Designer will be based on the firmware version selected and no mixed firmware setpoint files can be created.

Note: All devices must be on the same firmware version for the push process to proceed if IntelliTeam Designer is used to send the setpoint files.

STEP 6. Go to the File>Save As menu entry and save the circuit.

Note: If the circuit is not saved before validation is attempted an error message will occur stating the circuit must be saved before setpoints can be created. **See Figure 10.**

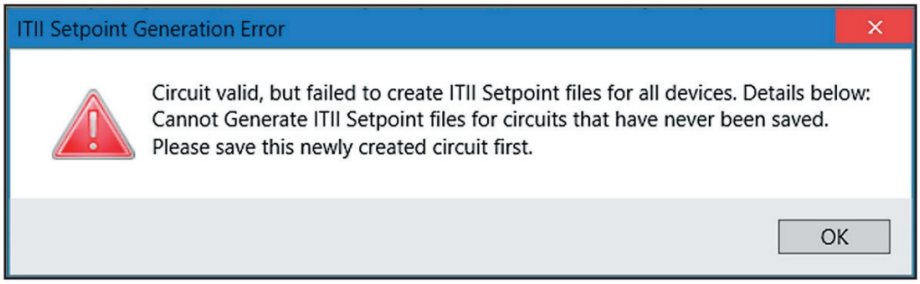

Figure 10. The Setpoint Generation Error dialog box.

STEP 7. Validate the circuit. Correct any validation errors if they occur and re-validate the circuit. When the Validation button is clicked on and no validation errors occur, the setpoint files will be created by the IntelliTeam Designer application and saved to the local drive where the circuit was saved. **See Figure 11.**

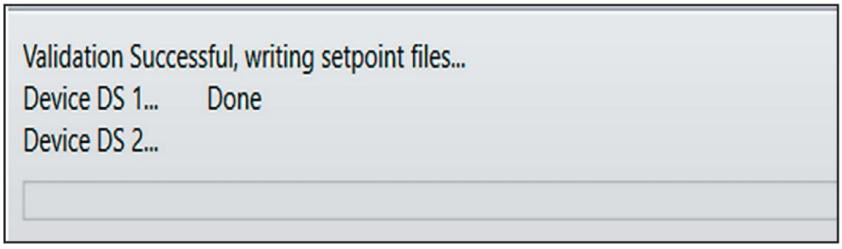

Figure 11. The Setpoint File Creation dialog box.

Configuring Devices With Setpoints Using IntelliTeam Designer

Follow these steps when using IntelliTeam Designer to push the setpoint files to the devices:

STEP 1. Open the communication manager and run a communication check to the controls by clicking on the Check button. **See Figure 12.**

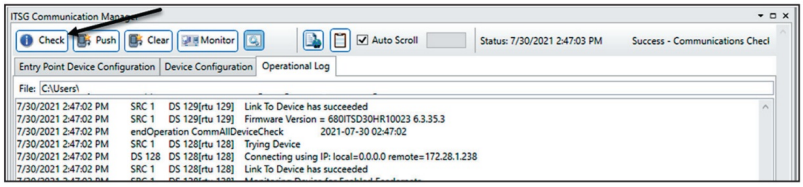

Figure 12. The communication Check button.

STEP 2. Push the IntelliTeam II Setpoint files by clicking on the Push button. A warning message will appear. **See Figure 13.** Ensure all devices have accurate switch states and then click on the Yes button to proceed.

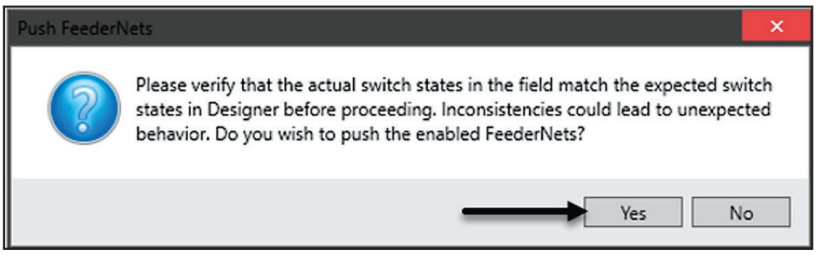

Figure 13. The Push Feeder Nets dialog box.

STEP 3. Go to the Operational Log tab and check the log to ensure the settings are being loaded and applied to the devices. **See Figure 14.**

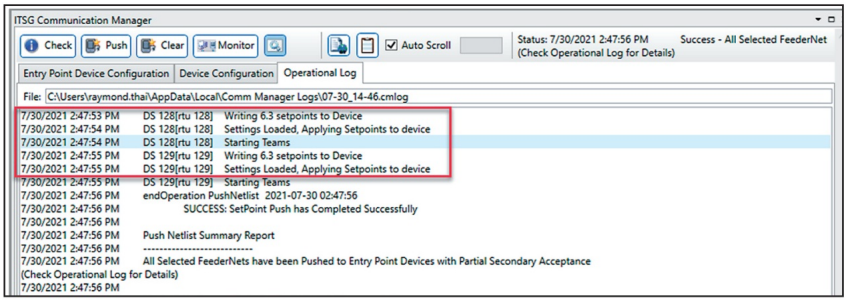

Figure 14. The Operational Log tab showing setpoint files loaded and applied.

STEP 4. Go to the Device Configuration tab and verify all devices have accepted their setpoint files. **See Figure 15.**

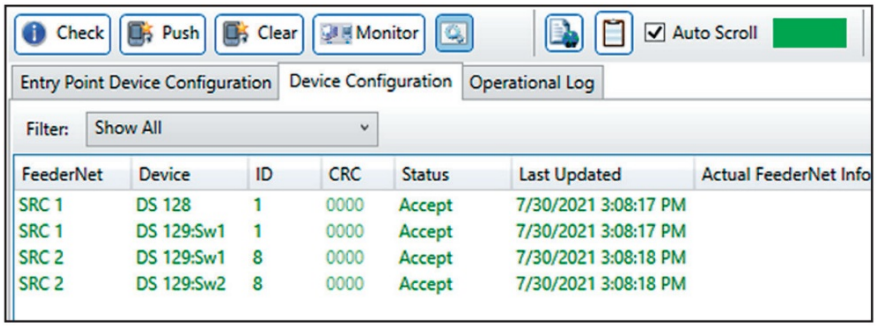

Figure 15. The Device Configuration tab setpoint files accepted.

STEP 5. Proceed to the “Verification” section on page 14 to verify the devices are now configured for the IntelliTeam II system.

Configuring Devices With Setpoints Using IntelliLink Setup Software

Follow these steps when using the IntelliLink Setup Software to load and apply settings to the devices:

STEP 1. Open the IntelliLink application and select the appropriate connection type (i.e., Local or Remote). **See Figure 16**

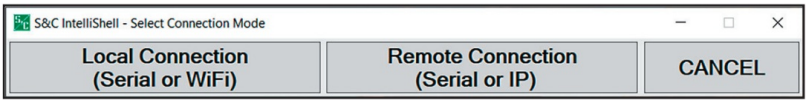

Figure 16. The IntelliShell – Select Connection Mode dialog box.

STEP 2. Select the appropriate product type and verify all other connection settings. Then click on the IntelliLink button to launch the IntelliLink application. **See Figure 17.**

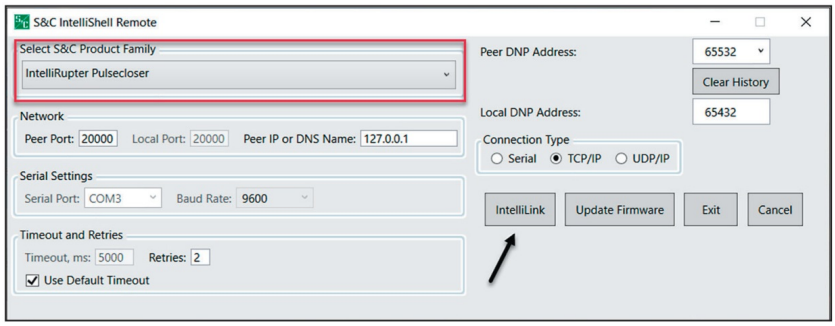

Figure 17. The Intelli Shell Remote dialog box.

STEP 3. Go to the File>Load Setpoints menu option. A Windows file selection screen will open. Navigate to the folder where the .xspt setpoint files were saved and select the file for the device to which IntelliLink software is connected. **See Figure 18.**

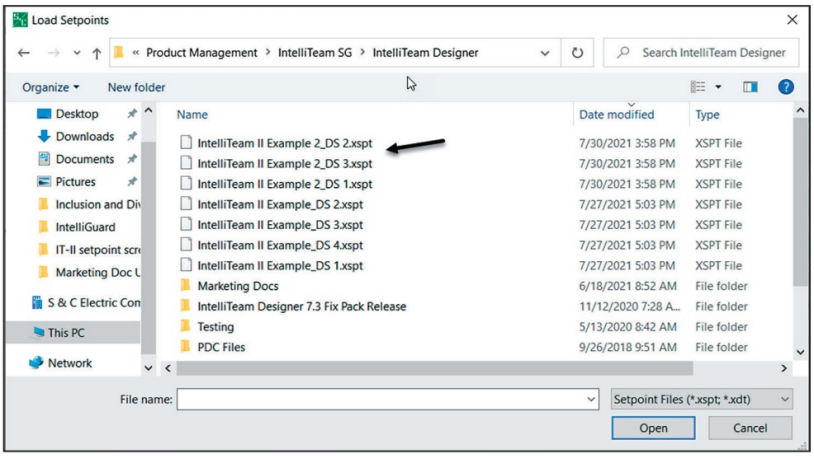

Figure 18. The Load Setpoints dialog box.

STEP 4. The Load Setpoints dialog box opens. Click on the Load button. **See Figure 19**

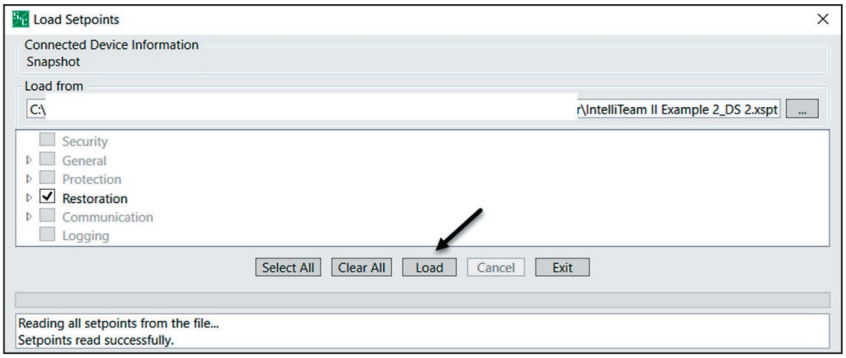

Figure 19. The Load Setpoints dialog box.

STEP 5. When the setpoints are loaded into IntelliLink software, a verification message is displayed. **See Figure 20.**

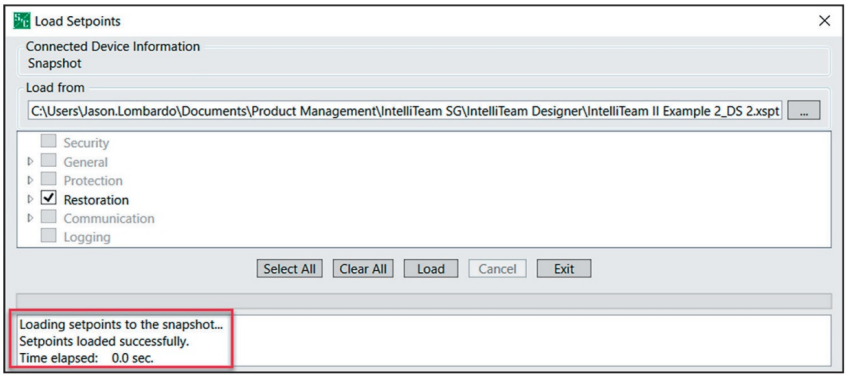

Figure 20. The setpoints loaded successfully verification message.

STEP 6. Go to the Setup>Validate/Apply screen. Validate and apply the settings to the device. **See Figure 21**.

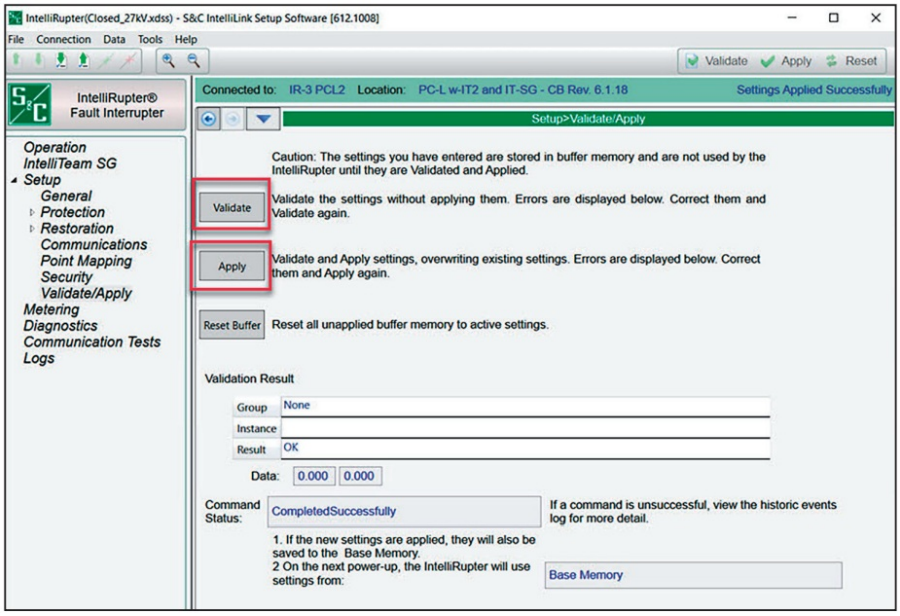

Figure 21. The Setup>Validate/Apply screen.

Verification

Using IntelliLink Setup Software, go to the Logs>Status Point Log screen, nand find the status description for NET: ITII Mode and make sure it is active**. See Figure 22.**

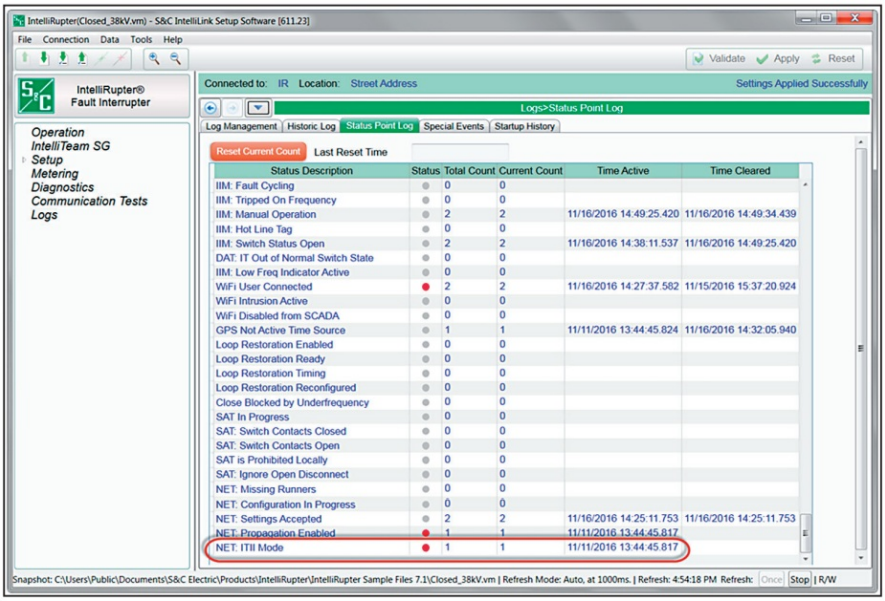

Figure 22. The Logs>Status Point Log screen.

This procedure must be completed for each IntelliTeam system-enabled device in the system to ensure the setpoint files have been loaded, validated, andn saved on the devices. If this status point is not active, go back to Step 7 on page 9 if using IntelliTeam Designer to load the setpoints on the devices. When using IntelliLink software to load the setpoints on the device, go to Step 1 on page 11.

Documents / Resources

	S C IntelliTeam II Automatic Restoration System [pdf] Instruction Manual IntelliTeam II Automatic Restoration System, II Automatic Restoration System, Automatic Restoration System, Restoration System

Manuals+,