# XM360 X-Tractor Troubleshooting

1. Downloading X-Tractor
   - **PROBLEM**: You encounter an error during the downloading process.
     ANSWER: Stop the download process and retry. If you continue to experience difficulties, contact XM360 Technical Support.

2. Activating X-Tractor
   - **PROBLEM**: The registration key needs to be activated or is not accepted. You may see various error messages that appear, below are some examples.
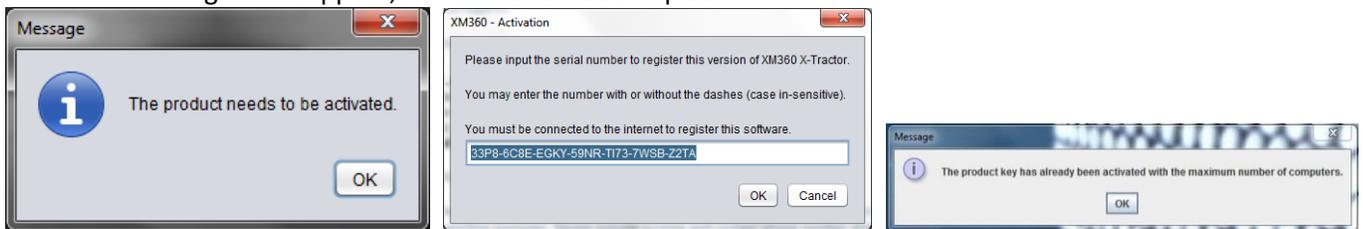
   ANSWER: Users need to be connected to the internet to activate X-Tractor using the registration key. If it doesn't work on the first try, close X-Tractor then reopen and enter the registration key again.
   **ANSWER**: If you are connected to an internet service that requires you to log in, (for example, guest internet connections like hotels or airports), then you may need to open your internet browser and log in to verify that you have access to the full internet.
   ANSWER: If all else fails, contact XM360 Technical Support for a new registration key.

3. Opening X-Tractor
   - **PROBLEM**: Error message pops up indicating "Start class alpha.xm.XM360Main not found".
     ANSWER: This is most likely the result of having old versions of Java that need to be uninstalled. You can uninstall old versions of Java by going to the Control Panel and removing any older versions of Java. Then rerun the X-Tractor setup.exe file to ensure you have the latest version of Java installed on your machine. X-Tractor requires that you have the latest version of Java to run the software.
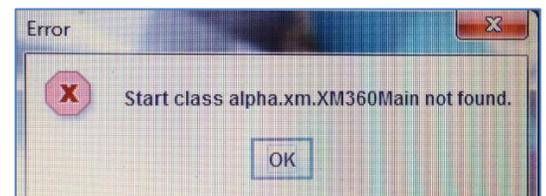
   - **PROBLEM:** The program will not open after making the Java 8 update.
     ANSWER: X-Tractor is not compatible with Java 8 at this point. If you have already made the update to Java 8, you will need to uninstall Java 8 from your computer first. Then you will need to download XM360 X-Tractor again. When you download X-Tractor, it will download Java 7 again which will enable you to open X-Tractor.

   - **PROBLEM:** When trying to open XM360 X-Tractor, a pop-up appears indicating that your registration key has been activated on too many devices. This may prevent you from opening the program and/or uploading reports at the end of the day.
     ANSWER: This cannot be corrected by the technician. You must contact your Administrator, Program Manager or the XM360 team and they can reset the registration key for you. A registration key cannot be activated if the device is not connected to the internet.

- **PROBLEM**: The loading/splash screen gets stuck when opening X-Tractor.
  ANSWER: This can be resolved by deleting the AppData directory on your computer. The AppData folder is hidden, so you will first need to show hidden files. You can do this by going to Folder Options > View > select Show hidden files, folders and drive. Then proceed to: C:\Users\<username>\AppData\Local\XM360 X-Tractor and delete only the AppData folder. (Your path may vary slightly if you are using Windows XP).

4. Connecting to the Power Supply
   - **PROBLEM**: Can't connect to the transponder via Serial-to-USB adapter.
     ANSWER: Ensure that all connections on the Serial-to-USB and Craft Cable adapter are properly fastened. If they are slightly loose or disconnected, X-Tractor may not recognize the power supply.

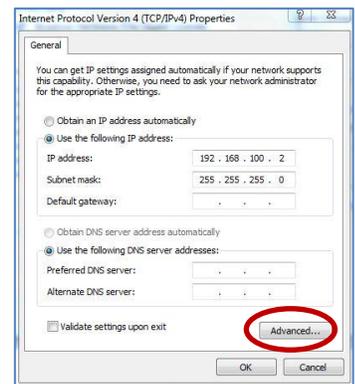   - **PROBLEM**: Can't connect to the transponder.
     ANSWER: X-Tractor pulls information from the transponder every 15 seconds or so. To expedite the process to populate the "System Overview" page, click the "Refresh" button in the top left corner.
     ANSWER: Verify that you can view the transponder webpage by going to your web browser and entering 192.168.100.1. If this page is not available, first try changing the Static IP address.
     ANSWER: Ensure the Static IP address is set to 192.168.100.2. You can do this by going to Control Panel\Network and Internet\Network and Sharing Center\Change Adapter Settings and then right click on Local Area Connection or Ethernet (depending on computer) and select Properties. Highlight Internet Protocol Version 4 and double-click. Then you will select "Use the following IP address:" and enter the IP address 192.168.100.2 and subnet mask 255.255.255.0.
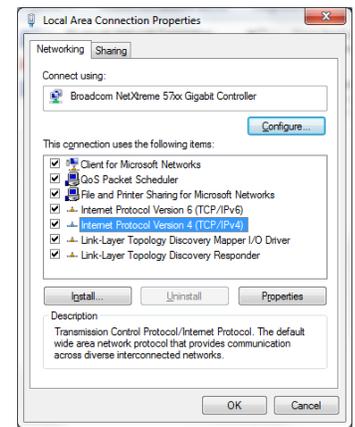
     - ✓ **NOTE:** If the transponder page still doesn't load after you have set the Static IP address as instructed above, you may also need to set the Static IP address in the Advanced section (by clicking the button highlighted in red.)

     - ✓ **NOTE**: If you have taken all of the previously measures and still cannot view the transponder page, try a hard reboot of your computer. We also suggest trying to install another transponder and load X-Tractor. If you still cannot view the transponder page, there may be a problem with the compatibility of the software and the hardware. You may want to contact your hardware manufacturer for additional information.

   - **PROBLEM**: The X-Tractor System Overview shows a connection to the transponder, but key information is missing.

ANSWER: Verify that you can view the missing information on the transponder webpage by going to your web browser and entering 192.168.100.1. If the information displays on the web page but not in XM360, please contact your Project Manager. If the information is missing on the webpage and in the X-Tractor System Overview there is a problem with the power supply/transponder system. Troubleshoot the specific system components to address the missing data. See specific examples below:

1. **PROBLEM**: Power supply data does not display.
   ANSWER: Verify Device Address is set on the Inverter Module LCD display. (Recommend Device Address "1" for single PS installations.)
   ANSWER: Verify 2x9 Connector (18 pin jumper) is installed correctly. Power down the inverter module and shut off the battery breaker before installing the transponder. The 18 pin jumper is not required for XM3s.
   ANSWER: Try the Reset or Stat button on transponder front panel.
   ANSWER: Replace the Inverter Module with known good unit.
   ANSWER: Replace the transponder with a known good unit. For XM3 installations, the transponder firmware version must be V4.4.9.0_3.02 or higher.

2. **PROBLEM**: Battery voltages do not display.
   ANSWER: Verify battery sense harness is connected to A/B connector for strings 1 & 2 and Bat C/D for strings 3 & 4.
   ANSWER: If using a DSM3, verify the A/B LED indicator is solid Green.
   ANSWER: Verify the battery sense harness is wired per instructions provided with kit or in transponder manual.
   ANSWER: Using a digital voltmeter, measure the voltages at the connector pins that plugs into the A/B connector on transponder.

3. **PROBLEM**: Transponder Transmit(Tx) and Receive(Rx) levels do not display.
   ANSWER: Verify the status for the DS (Downstream) and REG (Registration) LED indicators.
   ANSWER: Verify coax cable is connected to the RF input connection on transponder.
   ANSWER: Verify RF levels using a DSAM meter and/or RF LED indicators – DSM3/IDH4 Series only.
   ANSWER: Try the Reset or Stat button on transponder front panel.
   ANSWER: Replace the transponder with a known good unit.
   ANSWER: Contact the network/modem administrator – DOCSIS Config file, MAC Filtering, etc.

5. Completing the form
   ▪ **PROBLEM**: The Site ID won't let you enter certain characters:
     ANSWER: The Site ID becomes the name of the report so X-Tractor limits the characters allowed. Users must abide by Windows standards and does not allow the following characters: /\:*?"<> and |.

   ▪ **PROBLEM**: Certain fields are not automatically populated from the X-Traction.
     ANSWER: Depending on the system configuration, some information is not available through the X-Traction. (For more detail on what will be automatically populated through the X-Traction, see the PM Cert Report configuration examples at the back of the training guide.) If information was not populated from the X-Traction, you have the option of manually entering it into the form if the information is available through the power supply.

   ▪ **PROBLEM:** After the self-test completes, the battery voltages under load do not populate.
     ANSWER: This may happen if the connection to the transponder is inconsistent. If the transponder drops the connection throughout the self-test, it may stop the self-test or be unable to read the voltages

after the self-test completes. If the voltage under load does not populate, right-click the cell and it will unlock it to allow you to manually enter the voltages.

- **PROBLEM:** You are missing a WORK ITEMS tab.
  ANSWER: The WORK ITEMS tab will only be present if you are assigned to a specific project, which is done on the administrative side. WORK ITEMS are customized by project. If you are not assigned to any particular project, the WORK ITEMS tab will not appear.

- **PROBLEM:** There is no PROJECT ID or MSO under the SITE tab.
  ANSWER: The PROJECT ID and MSO will be auto-populated when you are assigned to a project, which is done on the administrative side. Being assigned to a specific project also ensures that your data is uploaded to the correct area. If you do not see a PROJECT ID or MSO auto-populated, contact your Administrator, Project Manager or XM360 representative.

- **PROBLEM:** After you enter a SITE ID, a pop-up appears indicating that there is no address matching the SITE ID enter.
  ANSWER: In order for the SITE ID to be matched with a physical address and the remaining site information, the technician must be assigned to a specific project, which is done on the administrative side. In addition, a site list must be preloaded into the database to enable the SITE page to auto-populate. If you are assigned to a specific project and the site does not auto-populate after typing in the SITE ID, contact your Administrator, Project Manager or an XM360 representative.
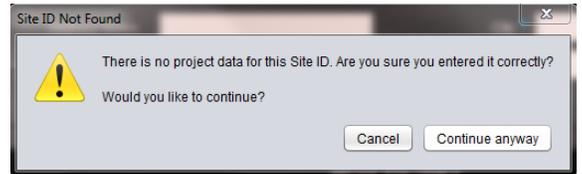
- **PROBLEM**: You click "Save & Close" and the report doesn't close.
  ANSWER: The entire form does not have to be completed to save a report, but it is required to enter a Site ID and MSO name.
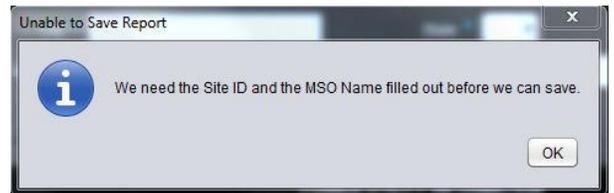
- **PROBLEM:** After I have reopened a report to edit it, I cannot "Save & Close".
  ANSWER: You may not have the PDF for that report open at the same time. If you have the PDF for a report open, you cannot edit a report and "Save & Close" at the same time. You will need to close the PDF and then press "Save & Close".
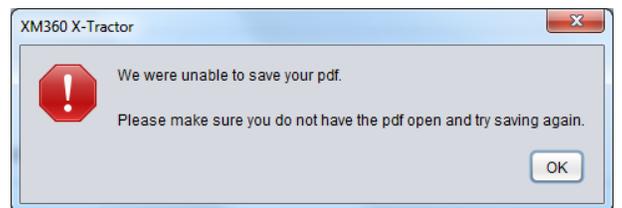
6. Uploading Reports
   - **PROBLEM**: Cannot upload reports at the end of the day.
     ANSWER: Ensure there is a connection to the internet. If you are connected to an internet service that requires you to log in, (for example, guest internet connections like hotels or airports), then you may need to open your internet browser and log in to verify that you have access to the full internet. Go to your Network Connections to troubleshoot until you have a secure connection.
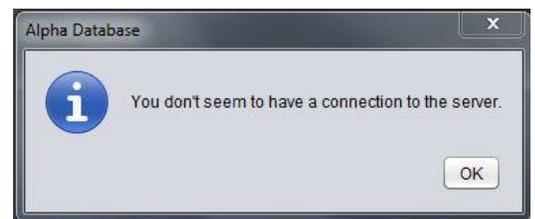
ANSWER: This may require changing the settings in your Network Connections again. You will want to go back to your IPv4 Properties and select "Obtain an IP address automatically." You can follow the same instructions referenced in Section 4: Setting static IP address.

ANSWER: Some anti-virus programs and firewalls can add a level of difficulty when uploading reports. You can disable your anti-virus programs and/or firewalls, or add X-Tractor as an allowed program to override this issue. You can access your firewall settings through your Control Panel.

- **NOTE**: You may also have to add XM360 to an Exception list in your third-party anti-virus and/or firewall. For instructions, refer to your Firewall User Guide.
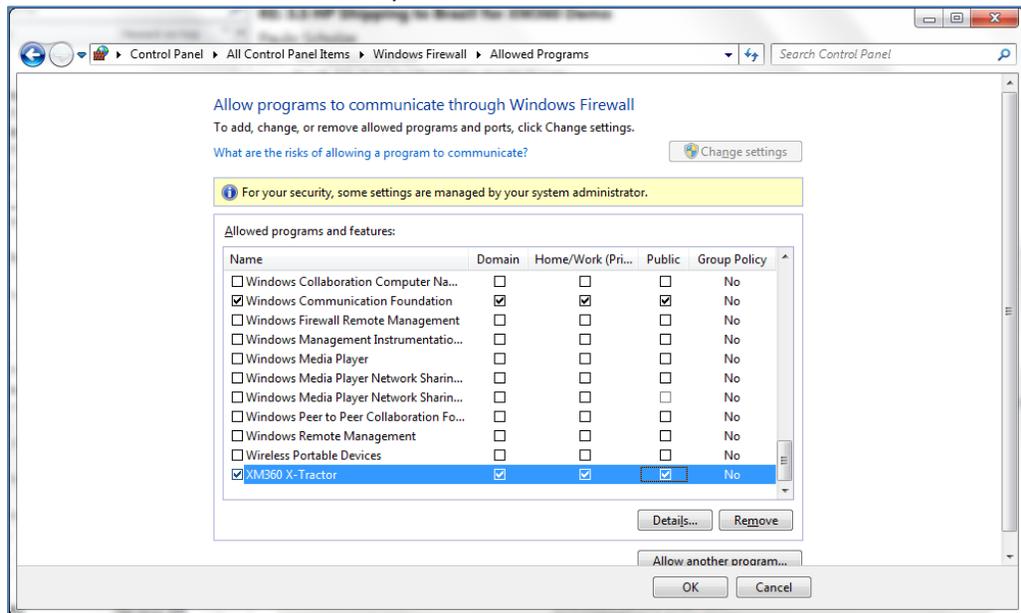
- **PROBLEM**: Some of the reports do not upload. **ANSWER**: And error message will appear. Read the error dialog box to determine why the report will not upload. A box may appear asking if you want to upload an error report. This report is not viewable, but it will send a text file to the server to be added to an error log. It contains X-Tractor debug output and minimal system information only used to help diagnose and fix the problem.

- **PROBLEM:** You have trouble uploading sites after making an update to the latest version of X-Tractor. When making the update to X-Tractor, sometimes the program does not completely write over the existing AppData folder. This can cause some files no to upload until resolved. **ANSWER:** Change settings on your computer to show the hidden folders. Once all folders are viewable, open the AppData>X-Tractor folder. Copy the data folder and paste on your desktop. Then delete the AppData folder. Reopen X-Tractor which will cause a new AppData folder to be created. Then close X-Tractot. Move the data folder from your desktop back into the AppData folder. When you reopen X-Tractor and move to the PM Cert Reports page, you will see the reports pending upload and can then Upload.