



MOTOROLA SOLUTIONS

IMPRES Battery
Fleet Management
Installation Guide

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1. Introduction

Please read the instructions below before proceeding with the installation package for IMPRES Battery Fleet Management. Be sure to carefully read all on-screen instructions during the installation.

2. System Installation Requirements

All computers installing the available IMPRES Battery Fleet Management application must adhere to the following minimum requirements:

2.1 Operating System Requirements

IMPRES Battery Fleet Management is required to run on English language operating systems from the below list. Running the application on Non-English operating system may cause the application to not function correctly.

- Microsoft® Windows® 7 Professional and Premium Editions with Service Pack 1
- Microsoft® Windows® 8 Professional and Enterprise Editions
- Microsoft® Windows® 8.1 Professional and Enterprise Editions
- Microsoft® Windows® 10 Professional and Enterprise Editions
- Microsoft® Windows® Server 2008 R2 with Service Pack 1
- Microsoft® Windows® Server 2012

2.2 Hardware Minimum Requirements

IMPRES Battery Fleet Management can either be installed on a client computer or a server computer. Although the installation package is the same for client and server computers, the hardware installation requirements are different for each:

2.2.1 Server Hardware Minimum Requirements

- 2 GB of hard disk space
- 2 GB RAM

2.2.2 Client Hardware Minimum Requirements

- 1 USB (Universal Serial Bus) Port
- 1 GB of hard disk space
- 1 GB RAM

2.3 Software Minimum Requirements

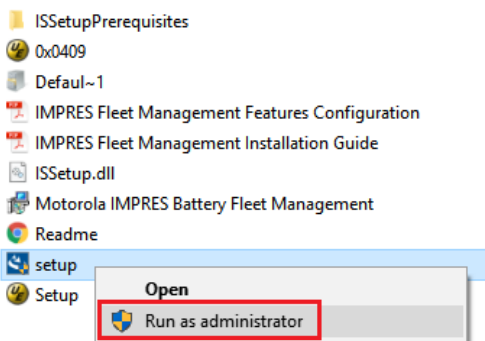
- Microsoft® Internet Explorer®, Version 6.0.2900.xxxx and above

2.4 Access Rights

-
- You must have Administrator rights on the target computer in order to proceed with the installation.

3. IMPRES Battery Fleet Management Installation Instructions

1. Unplug any IMPRES devices that are connected to your computer.
2. Exit all the programs running on your computer.
3. **(Option for Reinstallation)** Click **Start->Settings->Control Panel->Add or Remove Programs**, highlight “Motorola IMPRES Battery Fleet Management” from currently installed programs and Click **Remove** to uninstall the old version of Fleet Management software.
4. **For installation with zip file:** Download the application zip file from MOL or Motorola Solutions website to you local computer and then unzip the file. Highlight the application file “setup.exe“, right click mouse and then select Run as administrator to start the installation

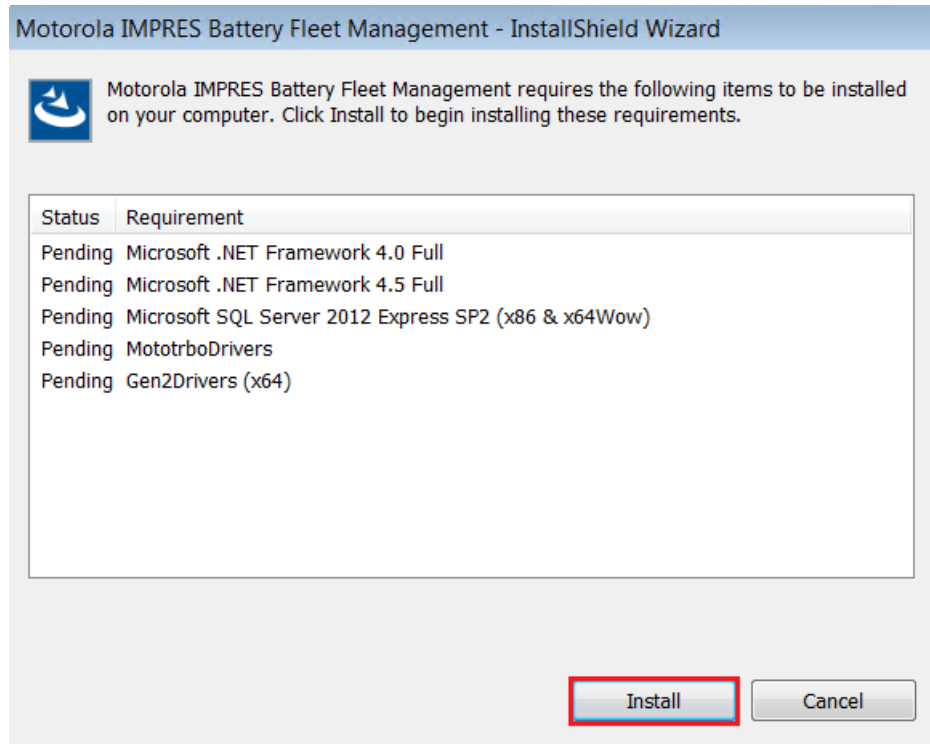


5. Install prerequisite software

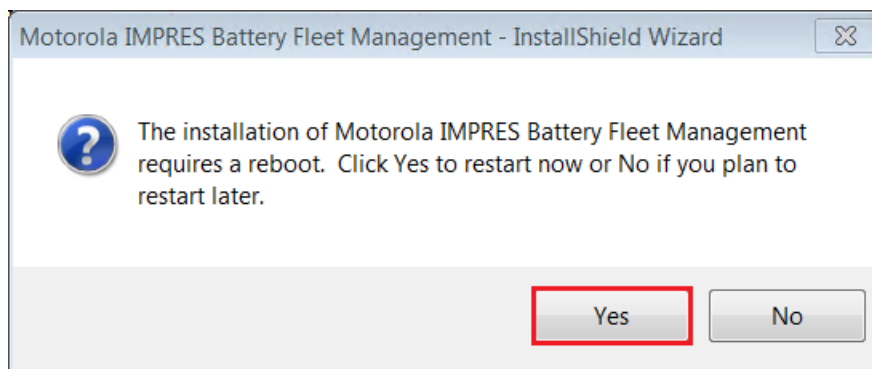
Note: There is prerequisite software that must be installed onto your computer prior to IMPRES Battery Fleet Management. You will be prompted to install the Microsoft .Net Framework version 4.0, 4.5 and/or Microsoft SQL Server Express 2012 prior to install IMPRES Battery Fleet Management, if they have not been previously installed on your computer. To install the prerequisites, click **Install** when prompted during the installation. Note that a reboot will be required after the .NET Framework is installed.

3.1 Installing .NET Framework 4.0 and 4.5

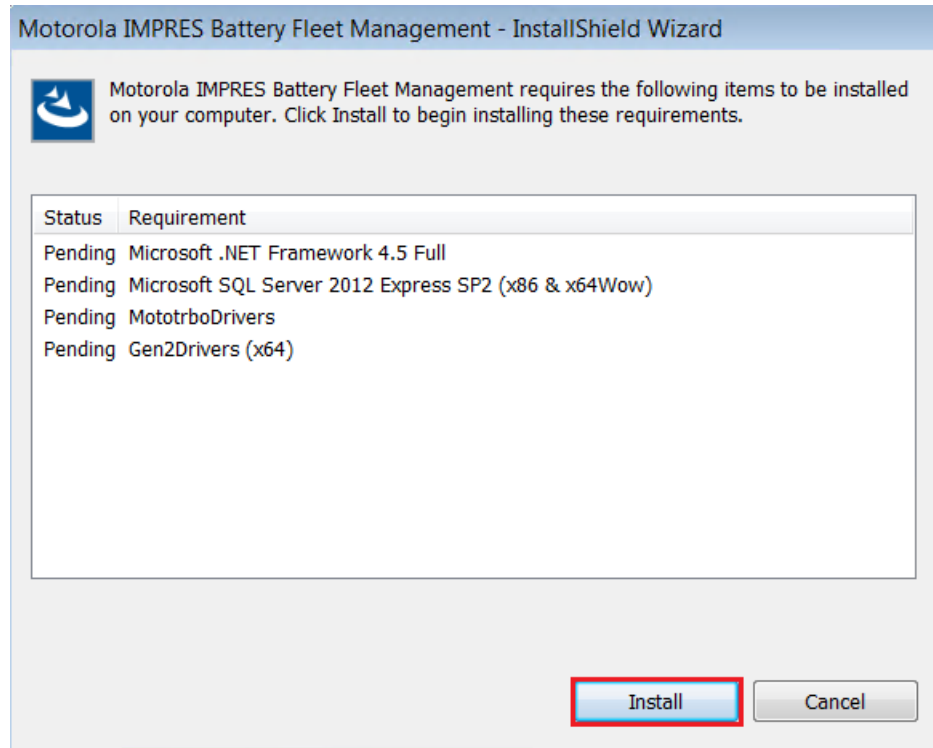
1. To install Microsoft .NET Framework 4.0, click **Install** to continue the installation.



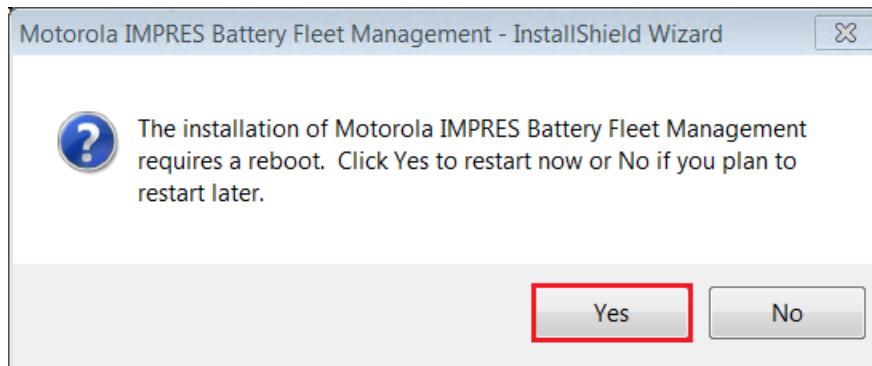
2. Reboot will be required after the .NET Framework 4.0 is installed. Click on **Yes** to restart.



3. To install Microsoft .NET Framework 4.5, click **Install** to continue the installation.

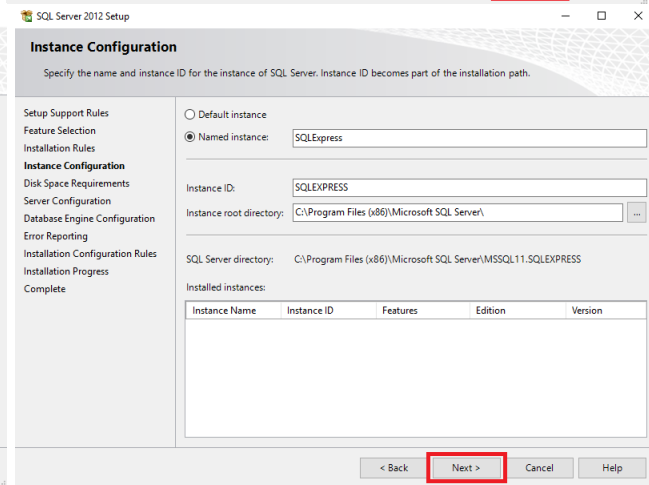
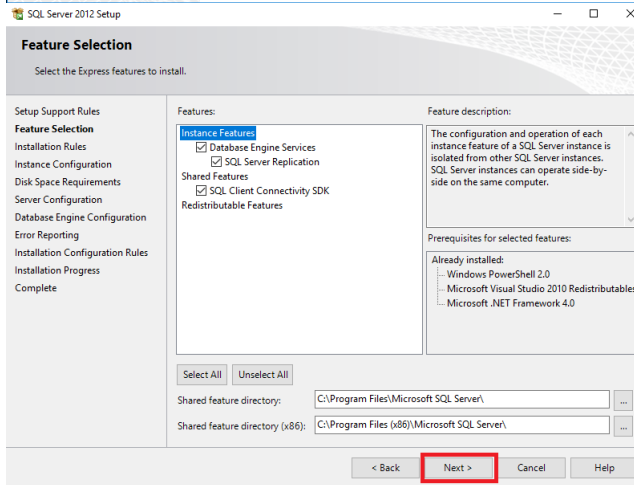
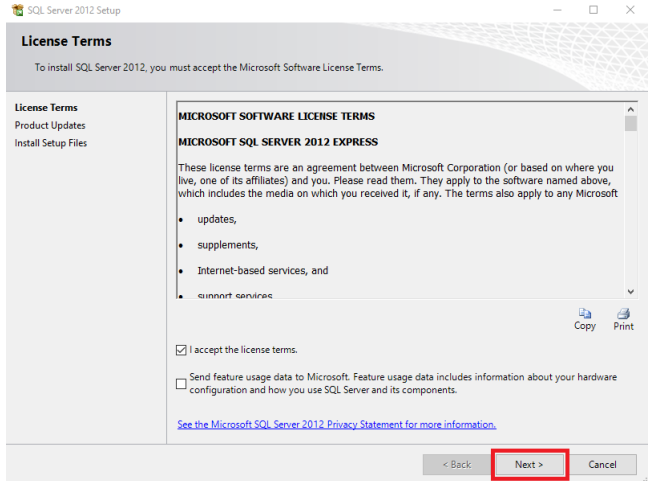
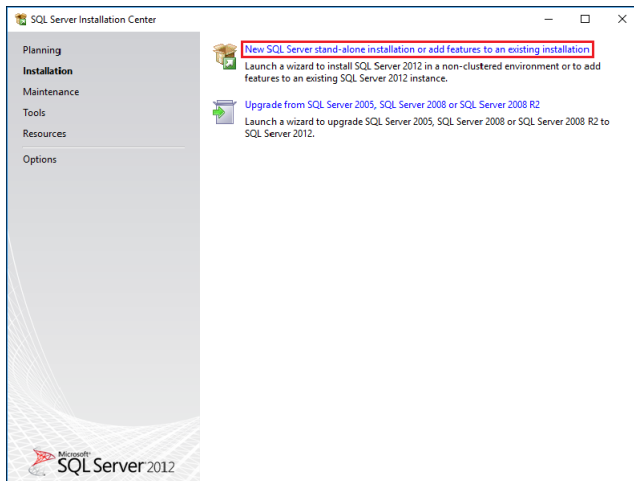
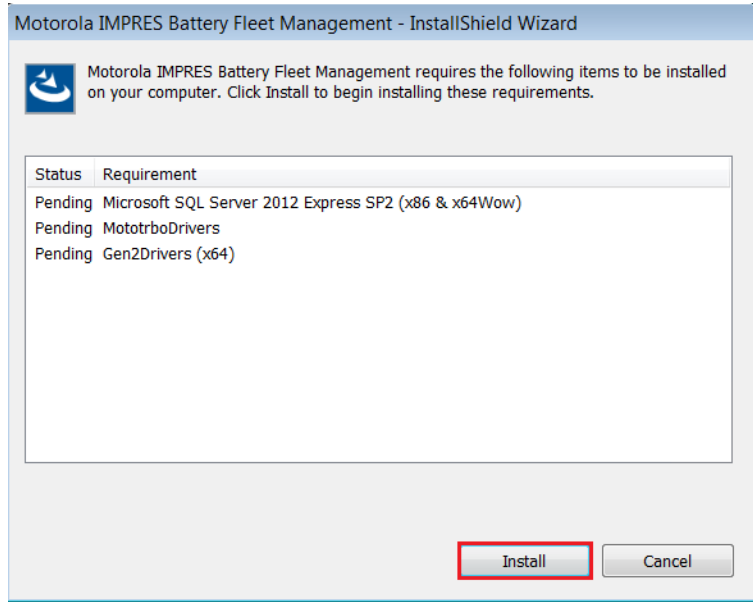


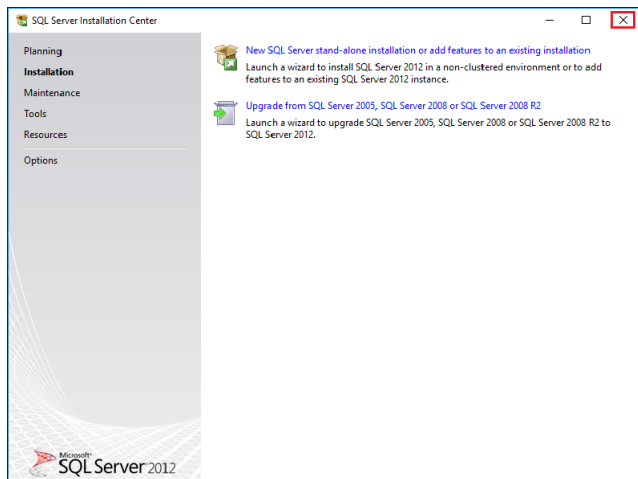
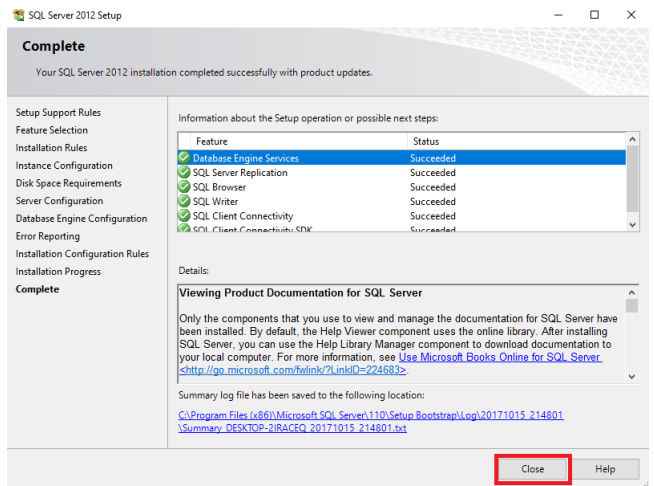
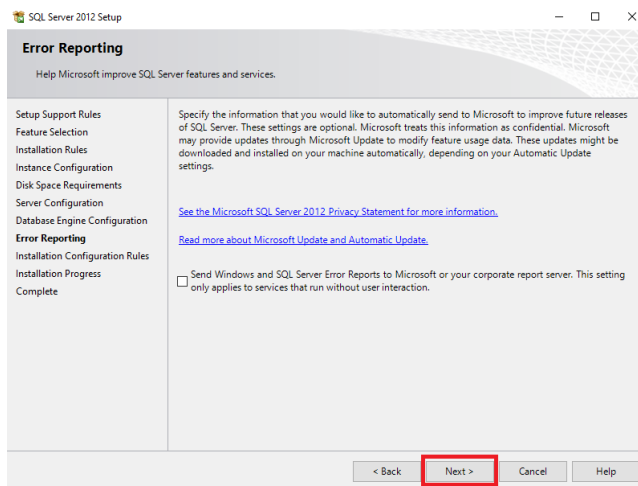
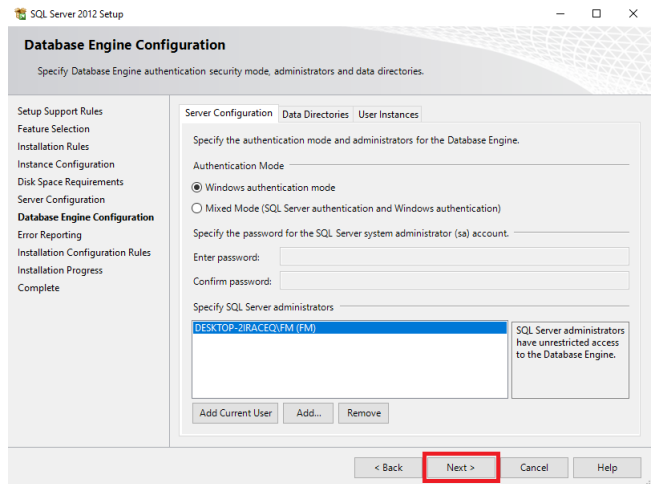
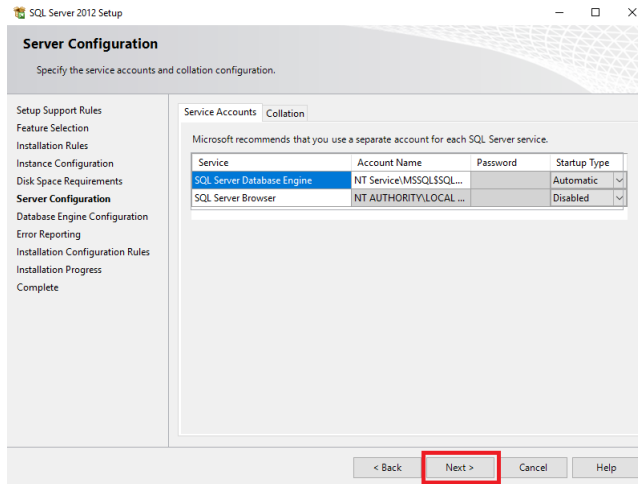
4. Reboot will be required after the .NET Framework 4.5 is installed. Click on **Yes** to restart.



3.2 Installing SQL Server Express 2012

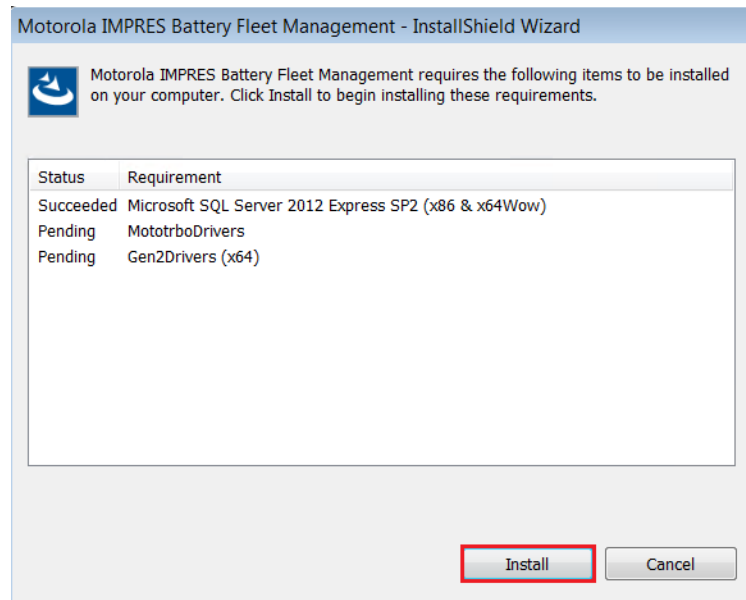
1. To install Microsoft SQL Server Express 2012, click **Install** to continue the installation and then follow the steps from the snapshots to complete the installation.

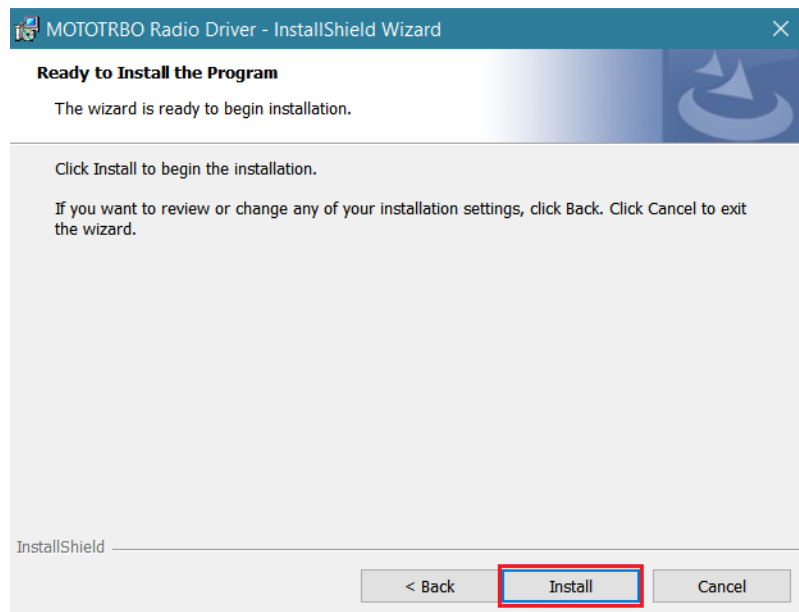
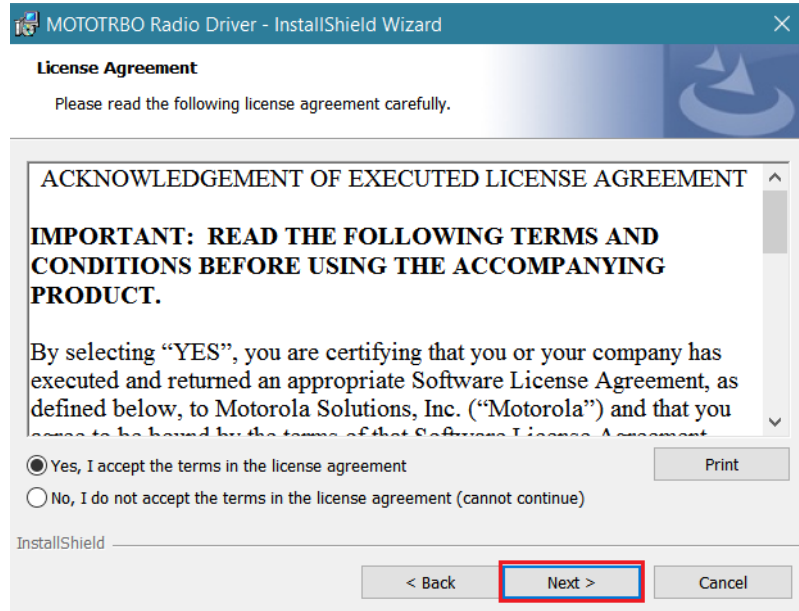


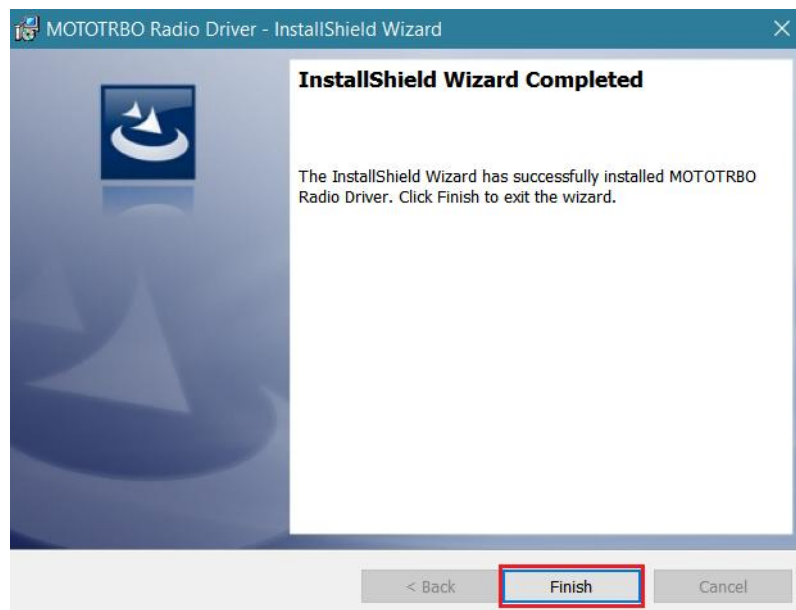
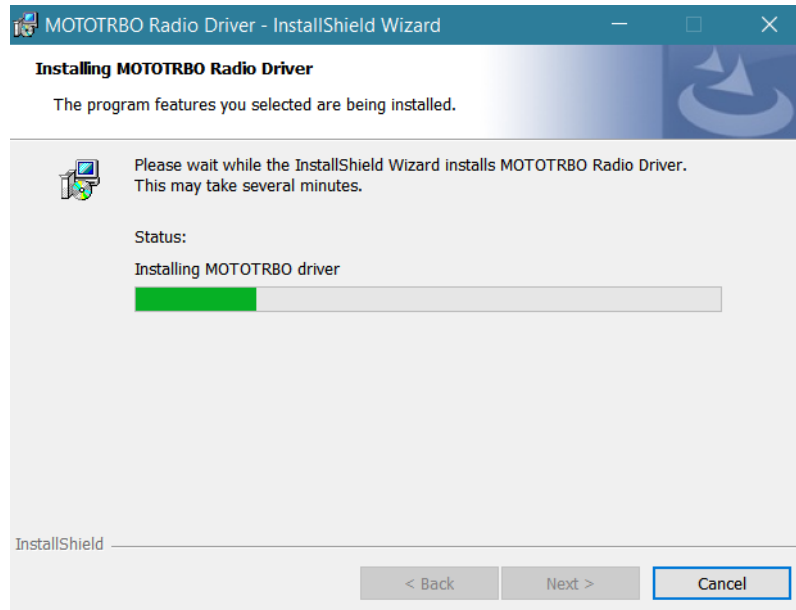


3.3 Installing MOTOTRBO Radio Driver

1. To install MOTOTRBO Radio Driver, click **Install** to continue and then follow the steps to complete the installation.



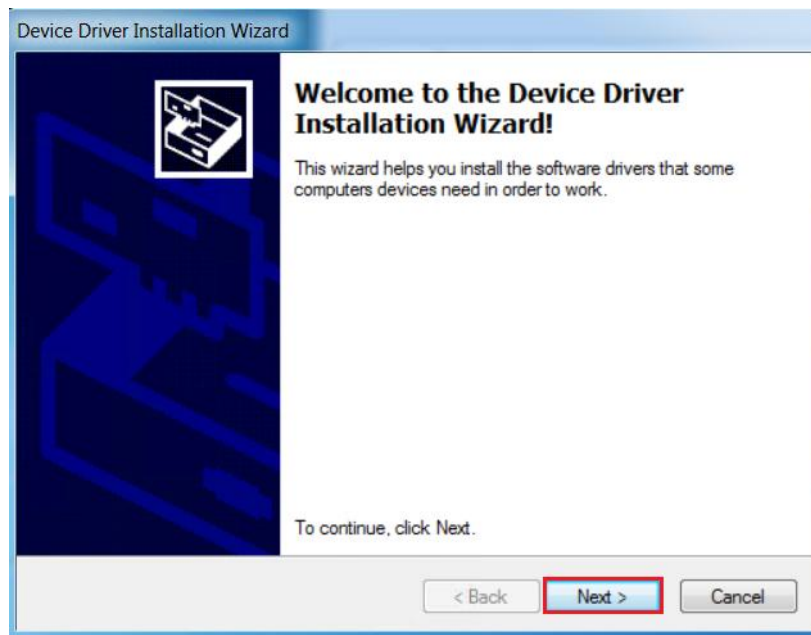
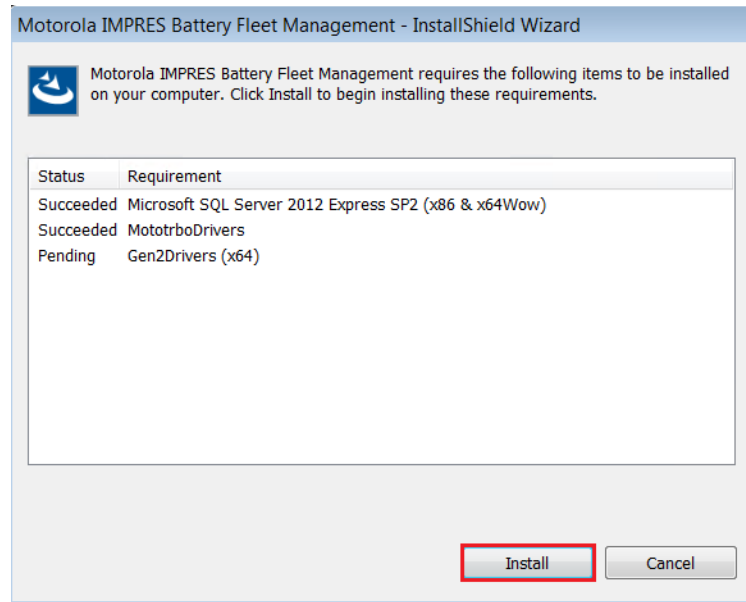




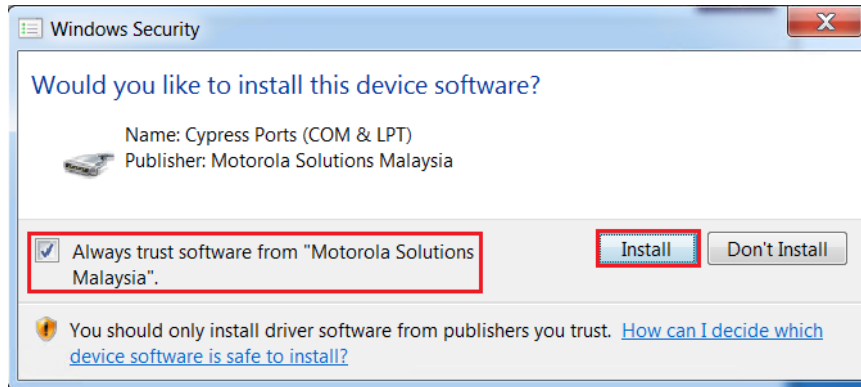
3.4 Installing IMPRES Gen 2 Drivers

1. To install IMPRES Gen 2 drivers, click **Install** to continue and then follow the steps to complete the installation.

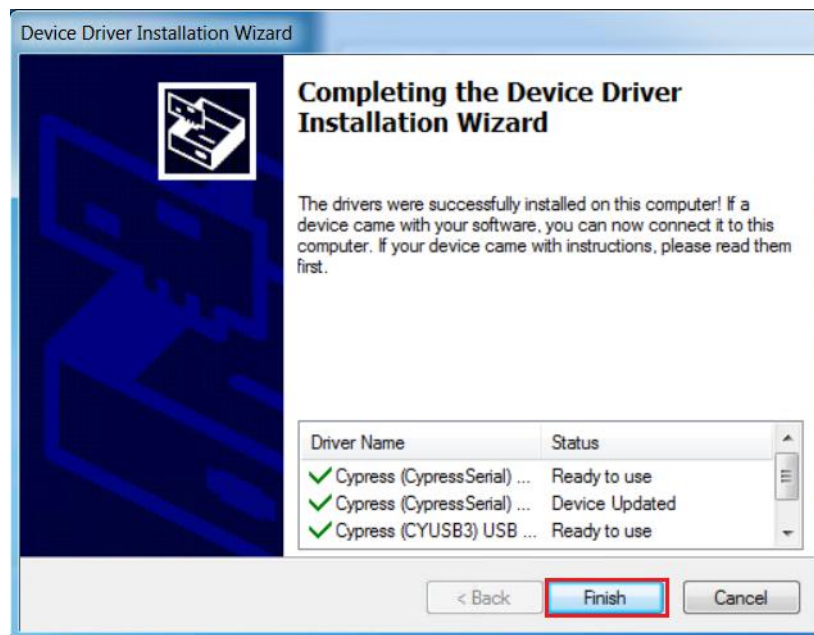
Note: The prerequisite name will be displayed as 'Gen2Drivers (x64)' for 64 bit computer and 'Gen2Drivers (x86)' for 32 bit computer.



2. Check on **Always trust software from "Motorola Solutions Malaysia"** and click **Install** to proceed.



3. Do the same step as above for the rest of the 2 drivers to complete the Device Driver Installation Wizard.

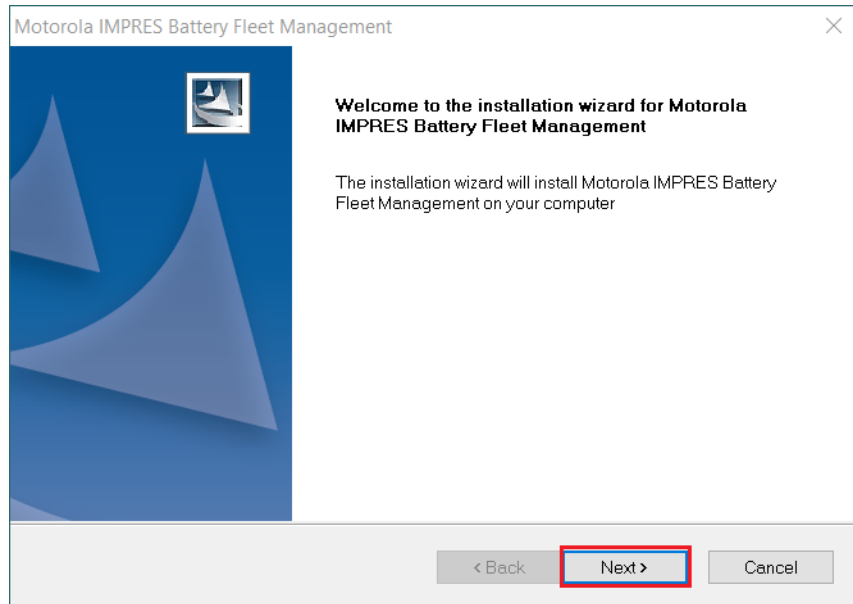


4. Click on **Finish** to close the Installation Wizard.

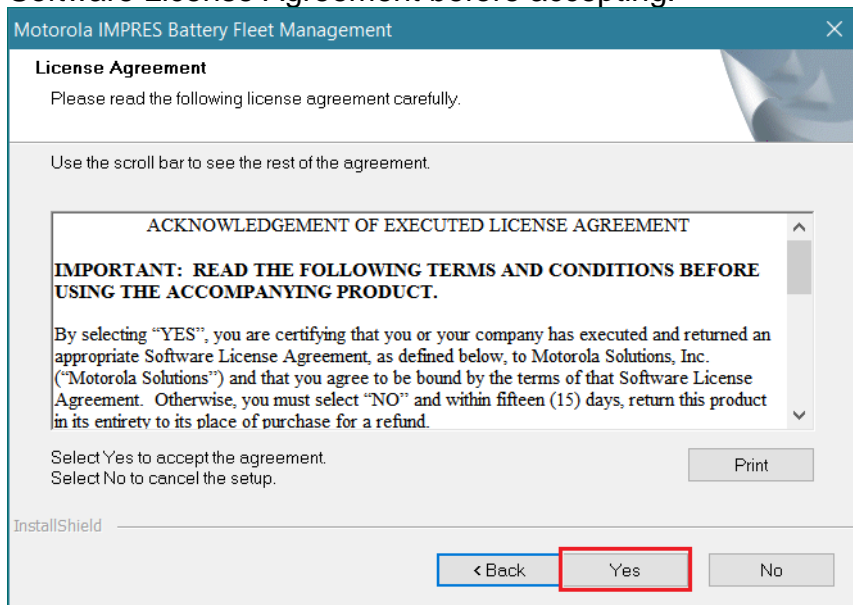
3.5 Installing IMPRES Battery Fleet Management

After all the prerequisites software have been installed, the IMPRES Battery Fleet Management Welcome screen will be displayed.

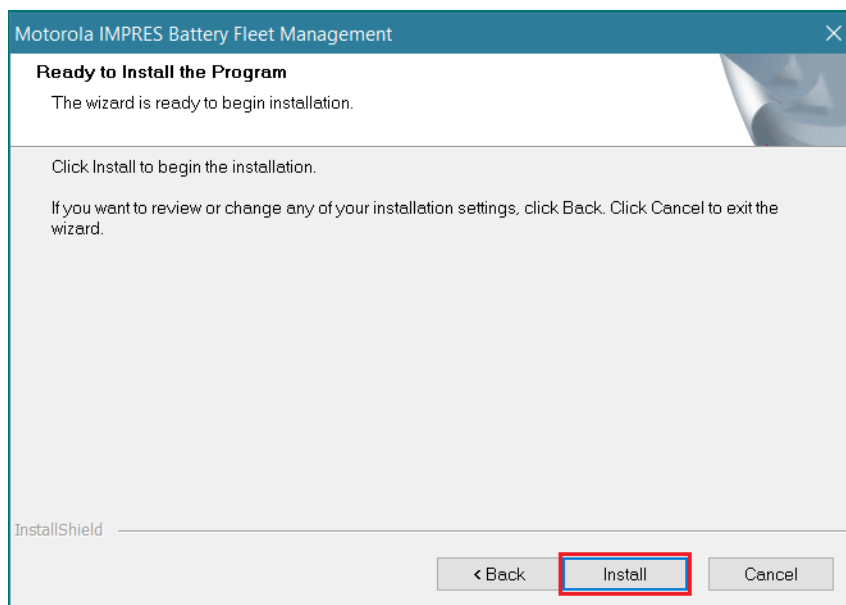
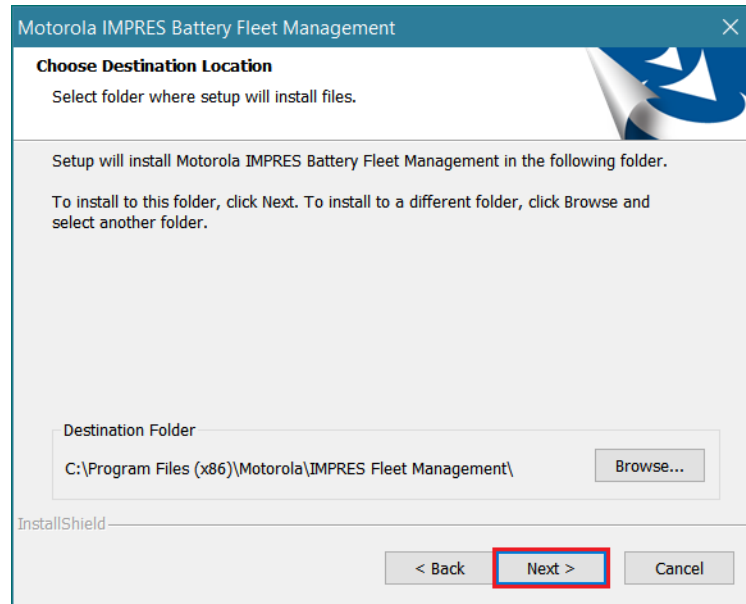
1. To install IMPRES Battery Fleet Management application, click on **Next** when the Welcome screen appears.



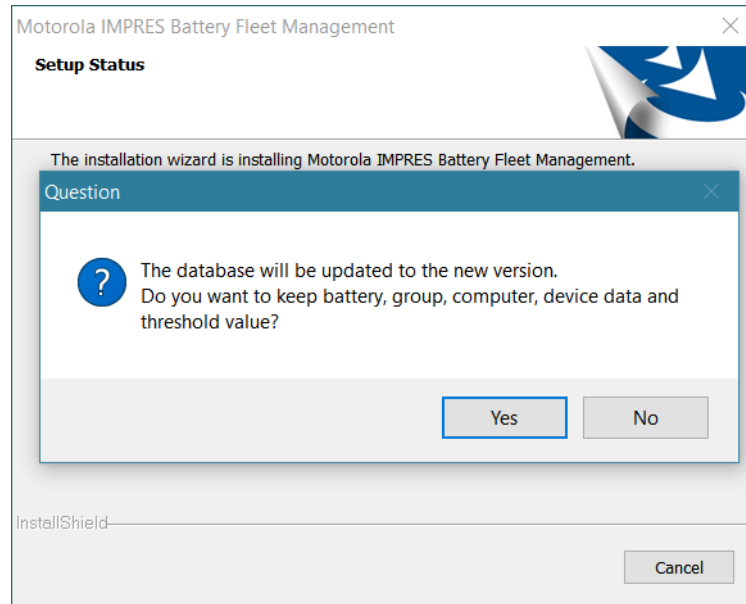
2. Read the Software License Agreement before accepting.



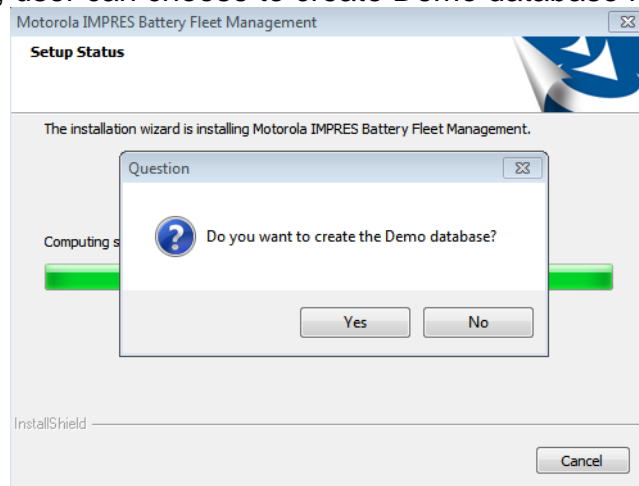
3. Follow the instructions on the screen to complete the installation.



4. If there has been any previous version IMPRES Battery Fleet Management installed on user's computer, then user can choose to automatically upgrade battery data during installation. Click **Yes** for database automation upgrading.

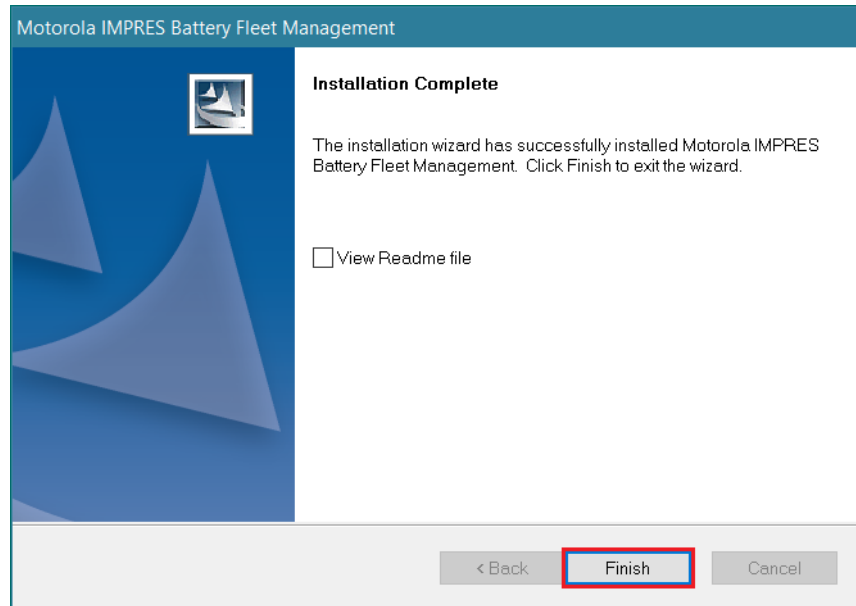


5. For Trial version, user can choose to create Demo database for sample battery data.



6. Once the IMPRES Battery Fleet Management installation is complete, proceed to install the IMPRES driver (see “Installing IMPRES Devices and the IMPRES Driver”) on the computer.

Note: You may be asked to reboot your computer during the installation.



4. IMPRES Devices Installation Instructions

4.1 Installing IMPRES Devices

The IMPRES Battery Fleet Management application collects data from your IMPRES chargers when a battery is inserted into an IMPRES charger pocket. Your IMPRES chargers must be connected to a computer on which IMPRES Battery Fleet Management is installed in order for the application to collect battery data. The IMPRES Charger Interface Unit (CIU) is used to communicate between your IMPRES chargers and the computer. One CIU is required for each IMPRES charger that you connect to a computer that has IMPRES Battery Fleet Management installed onto it. You may connect up to 25 IMPRES chargers/CIU units to a single computer.

4.2 Installing IMPRES Charger Interface Unit (CIU) for Gen 1 Charger

To prevent damage to the computer, IMPRES Multi-Unit Charger and IMPRES Charger Interface Unit, please follow the step-by-step instructions listed below:

The following items are required in order to complete the installation (not furnished with the Motorola IMPRES Charger Interface Unit):

- i. A Personal Computer with one or more USB 1.1 ports (a compatible USB hub may be used between the IMPRES CIU and the PC).
- ii. A Motorola IMPRES Multi-Unit Charger or a Motorola IMPRES Single-Unit Charger

The following items are included in the NNTN7677A IMPRES Multi-Unit Charger Interface Unit packing box and in the NNTN8045A Single-Unit Charger Interface Unit packing box:

- i. CIU control assembly
- ii. USB cable (SKN6371C)

To install an IMPRES CIU:

1. Disconnect power to the IMPRES Charger and the computer
2. If you are connecting a CIU for a IMPRES Multi-Unit Charger, then
 - i. Connect the 15 pin DB-15 plug from the IMPRES CIU into the 15 pin DB-15 receptacle on the back of the IMPRES Multi-Unit Charger



- ii. Tighten the two thumb screws to secure the DB-15 plug to the receptacle



- iii. Connect the mini-USB Plug of the furnished USB cable (SKN6371C) to the mini-USB connector on the side of the IMPRES Multi-Charger Interface Unit



3. If you are connecting a CIU for a IMPRES Single-Unit Charger, then
- i. Connect the RJ-11 plug from the CIU into the RJ-11 receptacle on the back of the Charger



- ii. Connect the mini-USB Plug of the furnished USB cable (SKN6371C) to the mini-USB connector on the side of the Charger Interface Unit.



- iii. Connect the standard USB plug of the furnished USB cable (SKN6371C) to the USB connector on the computer.



- iv. Apply power to the computer and to the IMPRES Multi-Unit Charger.

4.3 Installing a Mobile Radio as a Data Gateway

If you need a Mobile Radio as a data gateway, you can have a front connection or a back connection on the mobile radio and then connect other USB end to a computer which is used in IMPRES Battery Fleet Management,

- i. The following diagram illustrates one possible front connection on the Mobile Radio
OR



- ii. Back connection on the Mobile Radio



- iii. Connect the standard USB cable to the USB connector on the computer.



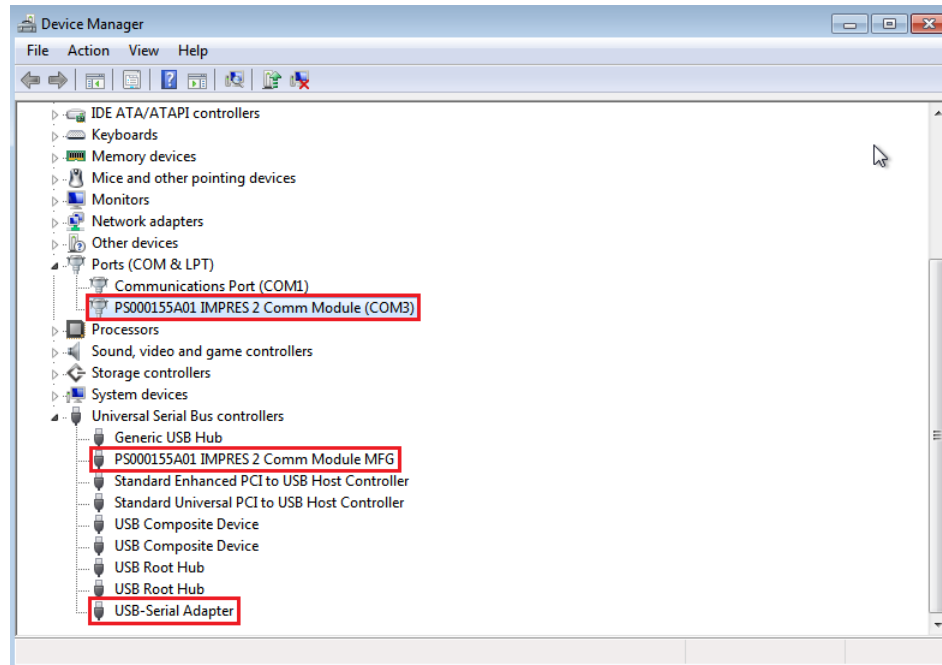
Note: The computer shall be able to identify the connected mobile radio. A static IP route may need to be manually entered in the computer that routes all radio data through the mobile radio's network interface if the Multi-Channel Device Driver (MCDD) is not utilized.

4.4 Installing IMPRES 2 Charger

To install an IMPRES 2 Charger:

1. Disconnect power to the IMPRES 2 Charger and the computer.
2. Connect standard USB cable from charger to USB port on the computer.
3. Apply power to the IMPRES 2 Charger. The IMPRES 2 drivers would be automatically installed for the first time.
4. After all drivers have successfully installed, there will be 3 known devices found under **Ports** and **Universal Serial Bus controllers** as below.

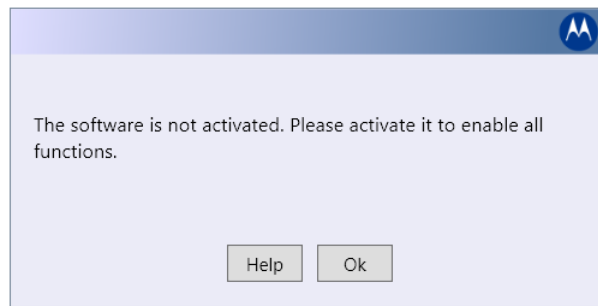
Note: There will be different names for different chargers for SUC or MUC.



5. In any cases if IMPRES Gen 2 Charger drivers are not properly installed and the hardware found for IMPRES 2 devices appeared to be not the same from the above image, then it is required to perform a manual update to the drivers. For more details, please refer to section 6.2 Installing IMPRES Gen 2 Charger Drivers Manually.

5. Activation Instructions

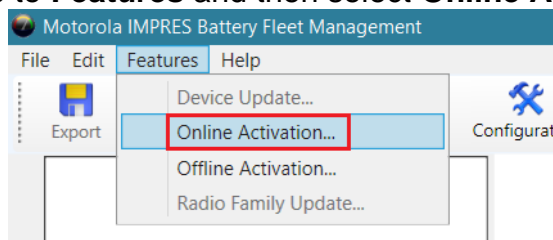
IMPRES Battery Fleet Management application is required to be activated in order to enable full functionalities. If the application is not activated, the below message box will be shown during launching the application.



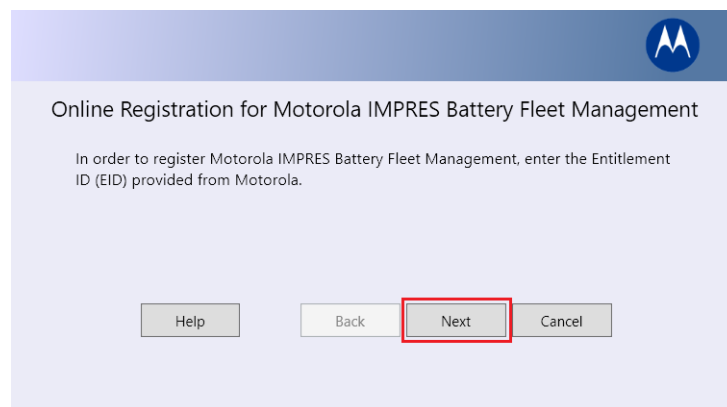
To activate the application, follow the below steps:

5.1 Online Activation

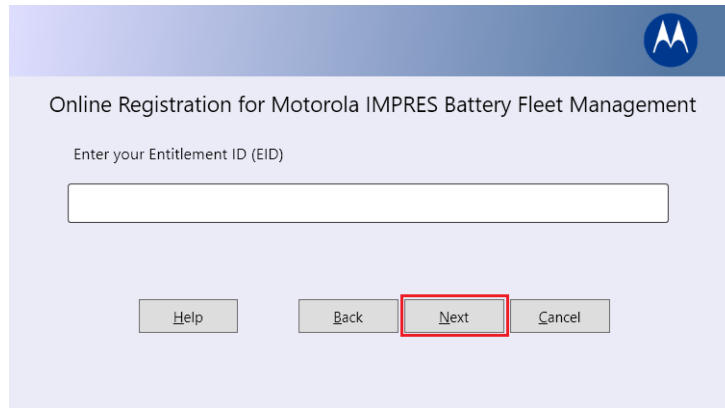
1. For Online Activation, go to **Features** and then select **Online Activation...**



2. Click on **Next**.



3. Enter the provided **Entitlement ID (EID)** and click on **Next** to proceed.

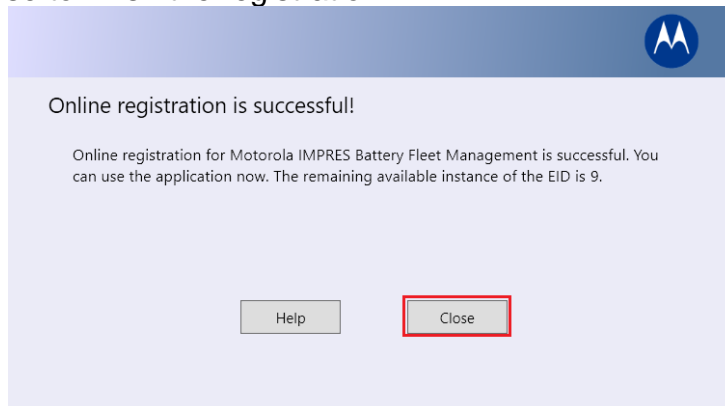


Online Registration for Motorola IMPRES Battery Fleet Management

Enter your Entitlement ID (EID)

Help Back **Next** Cancel

4. Once the registration is successful, you can see the remaining available instance of the EID left. Click on Close to finish the registration.



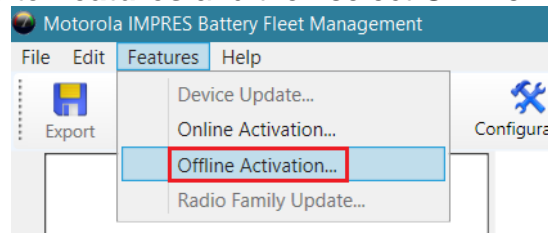
Online registration is successful!

Online registration for Motorola IMPRES Battery Fleet Management is successful. You can use the application now. The remaining available instance of the EID is 9.

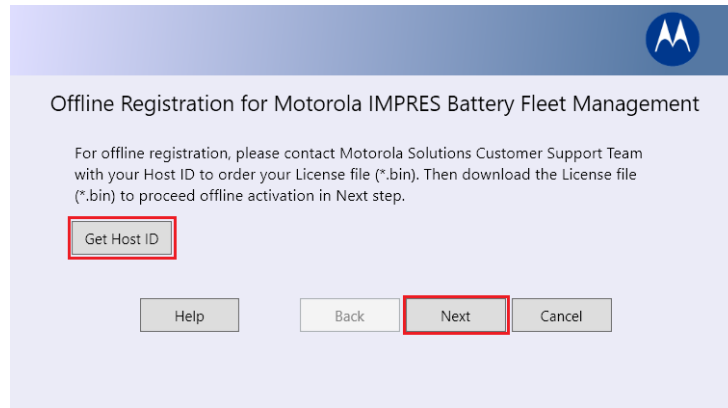
Help **Close**

5.2 Offline Activation

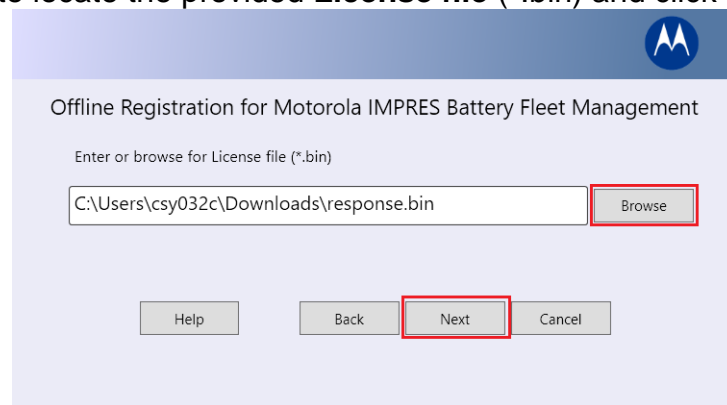
1. For Offline Activation, go to **Features** and then select **Offline Activation...**



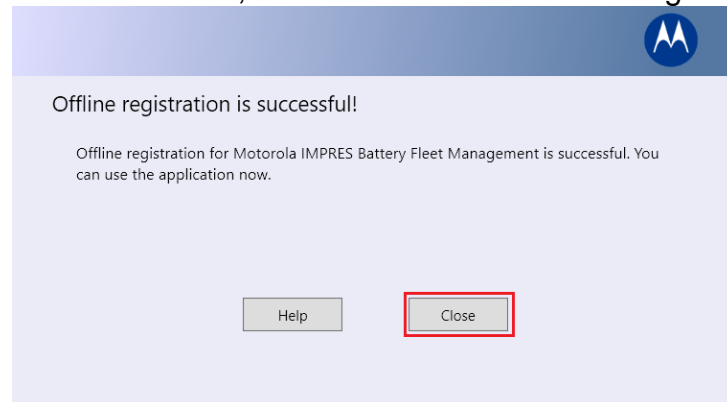
2. Click on **Get Host ID** to save the Host ID file and then contact **Motorola Solutions Customer Support Team** with the Host ID to order License file. Once you have the License file, click on **Next**.



3. Click on **Browse** to locate the provided **License file (*.bin)** and click on **Next** to proceed.



4. Once the registration is successful, click on **Close** to finish the registration.



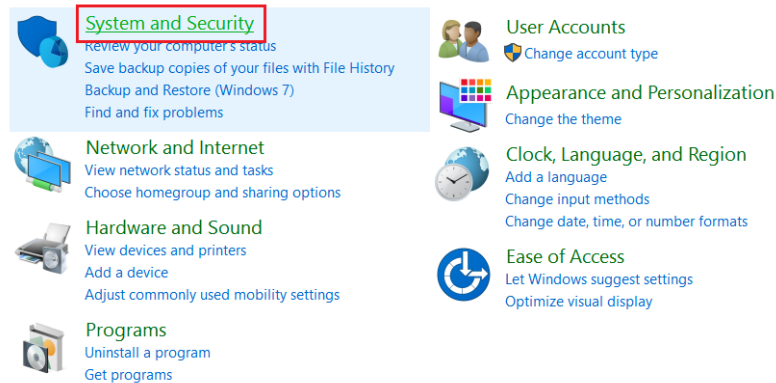
6. Installation Troubleshooting

6.1 Enable Windows Firewall to Accept Messages From UDP Ports

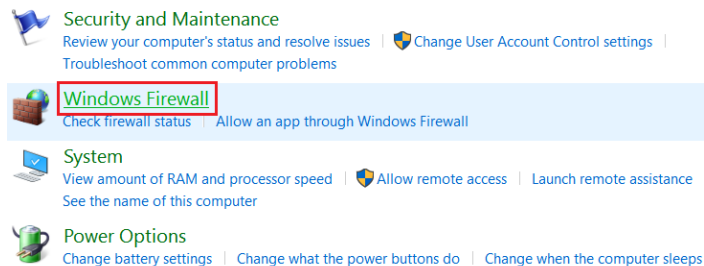
In some instances, the computer's firewall will block any messages from a TCP/UDP ports. The UDP port for exchange battery messages over the radio's RF links will be blocked. User will not able to see any radio's registration and battery data exchange information in IMPRES Battery Fleet Management.

Below is the procedure to enable the TCP/UDP inbound/outbound ports:

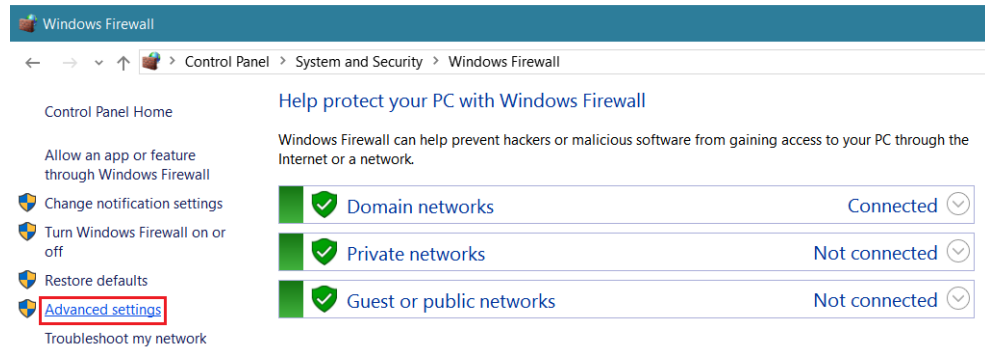
1. Go to **Control Panel**, select **System and Security**.



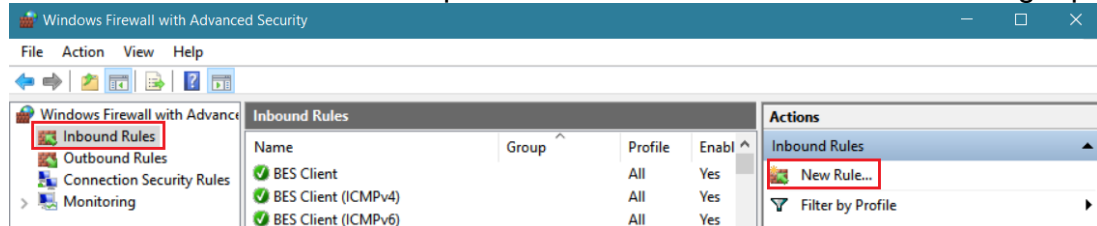
2. Then select **Windows Firewall**.



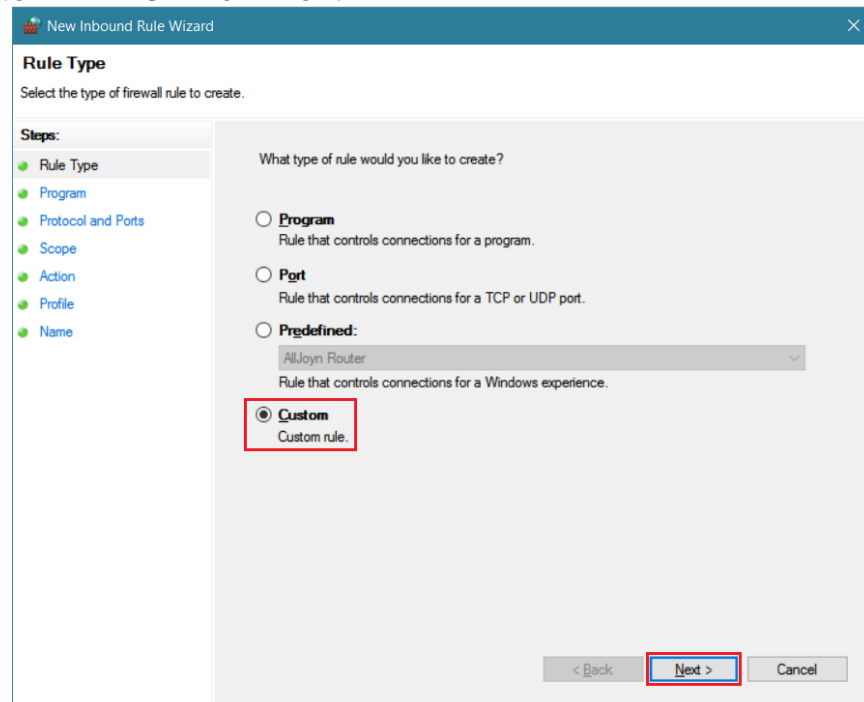
3. Click "**Advanced settings**" in the Windows Firewall window.



4. Select “Inbound Rules” at the left panel and click on “New Rule...” at the right panel.



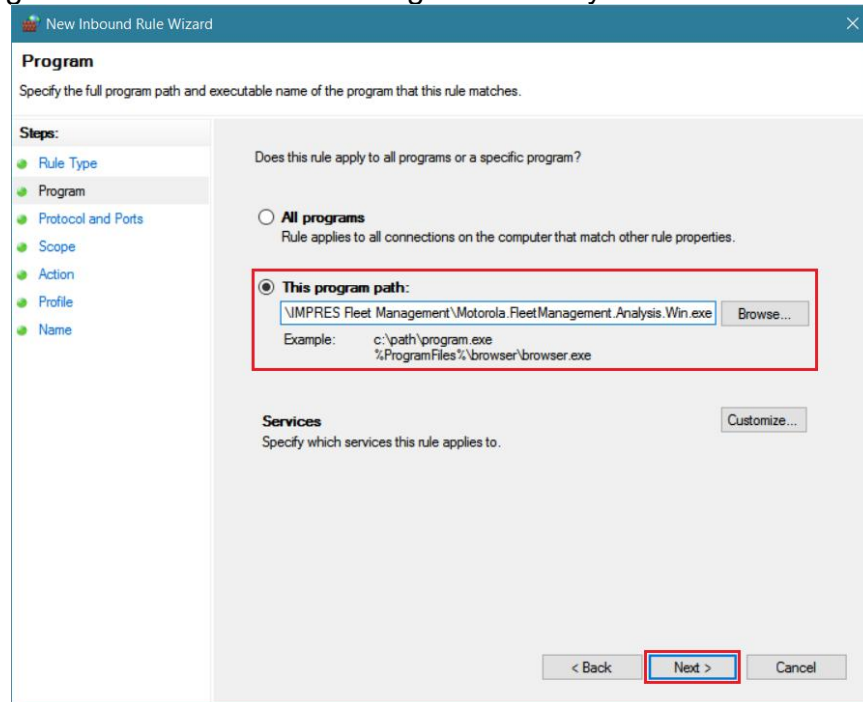
5. Select “Custom” and Click on “Next” button.



6. Select “This program path” and click on the **Browse** button to locate the IMPRES Battery Fleet Management application (.exe) file. Then click “Next” button.

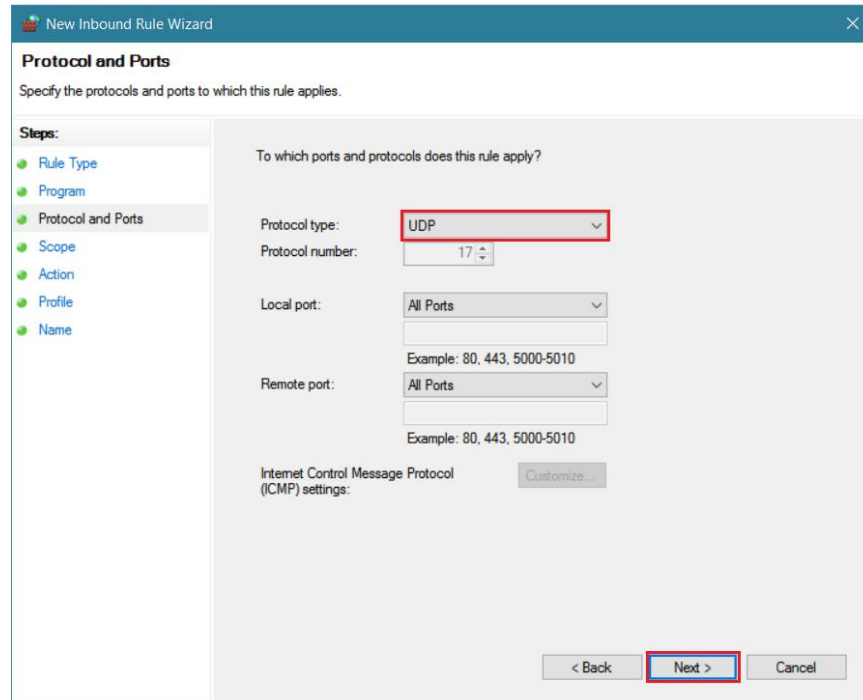
Note: The default full path for the application file is located at

C:\Program Files (x86)\Motorola\IMPRES Fleet Management\Motorola.FleetManagement.Analysis.Win.exe



The screenshot shows the 'Program' step of the 'New Inbound Rule Wizard'. The left sidebar lists steps: Rule Type, Program, Protocol and Ports, Scope, Action, Profile, and Name. The main area asks 'Does this rule apply to all programs or a specific program?'. The 'All programs' option is unselected. The 'This program path:' option is selected and highlighted with a red box. Below it, a text box contains the path '\\IMPRES Fleet Management\Motorola.FleetManagement.Analysis.Win.exe' and a 'Browse...' button. Examples of paths are provided: 'c:\path\program.exe' and '%ProgramFiles%\browser\browser.exe'. At the bottom, the 'Next >' button is highlighted with a red box.

7. Select “UDP” and click on “Next” button.

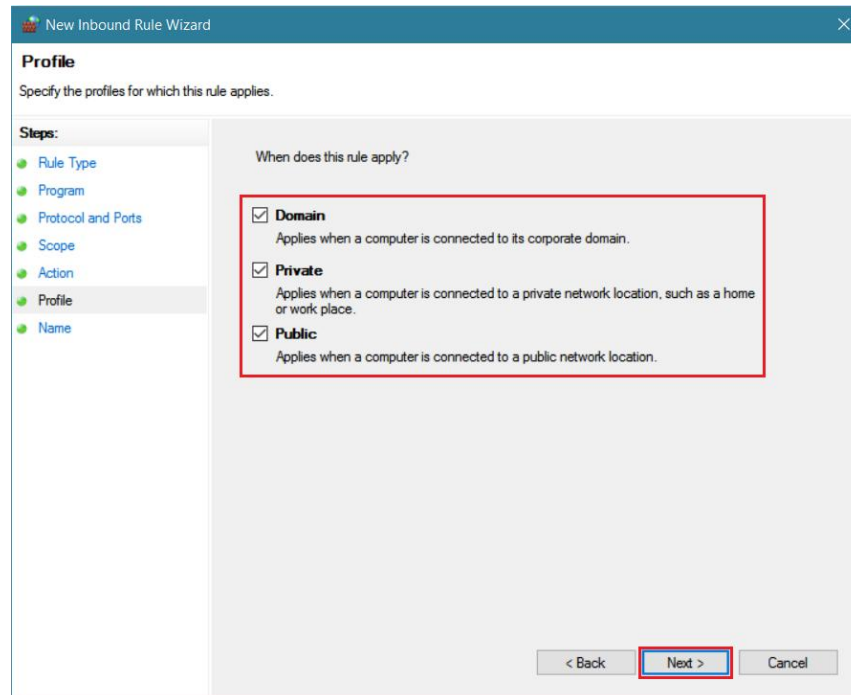


The screenshot shows the 'Protocol and Ports' step of the 'New Inbound Rule Wizard'. The left sidebar lists steps: Rule Type, Program, Protocol and Ports, Scope, Action, Profile, and Name. The main area asks 'To which ports and protocols does this rule apply?'. The 'Protocol type:' dropdown is set to 'UDP' and highlighted with a red box. The 'Protocol number:' is set to '17'. The 'Local port:' and 'Remote port:' dropdowns are both set to 'All Ports'. Examples of port ranges are provided: '80, 443, 5000-5010'. At the bottom, the 'Next >' button is highlighted with a red box.

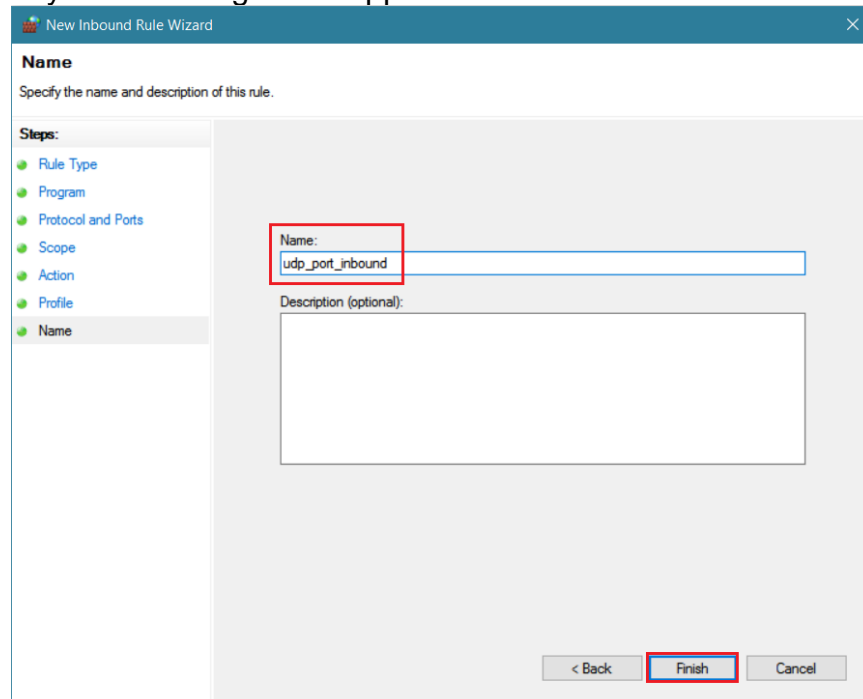
8. Click on “Next” button.

9. Select **“Allow the connection”** and click on **“Next”** button.

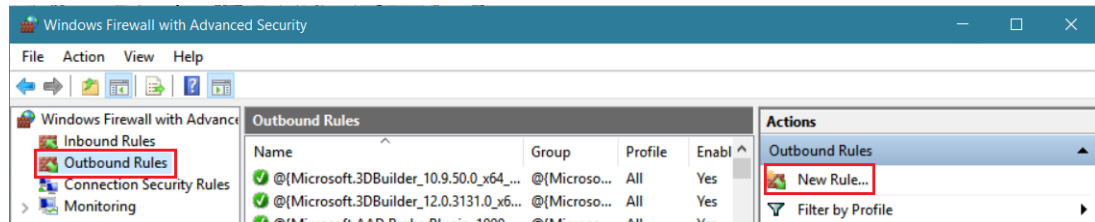
10. Select all of the 3 location **“Domain”**, **“Private”**, **“Public”** and Click on **“Next”** button.



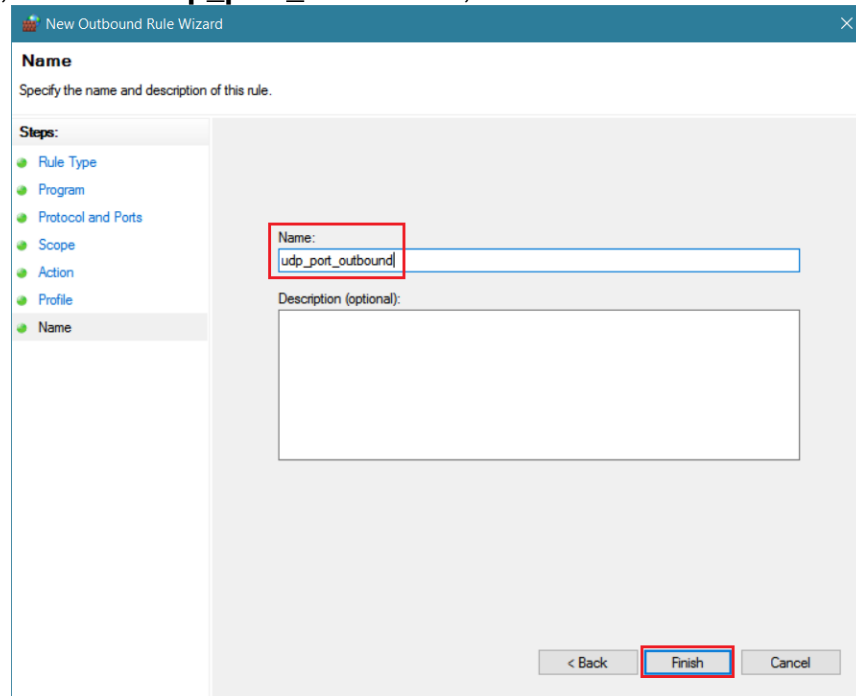
11. Name the new rule, such as “**udp_port_inbound**”, click on “**Finish**” button. After this step, a new inbound rule is created, and all of the inbound UDP port will be allowed for IMPRES Battery Fleet Management application.



12. To add a new outbound rule, select “**Outbound Rules**” in the left panel and click “**New Rule...**” in the right panel



13. Then perform the same steps above (Step 5-11) to add a new outbound rule. Name the new rule, such as “**udp_port_outbound**”, click on “**Finish**” button.

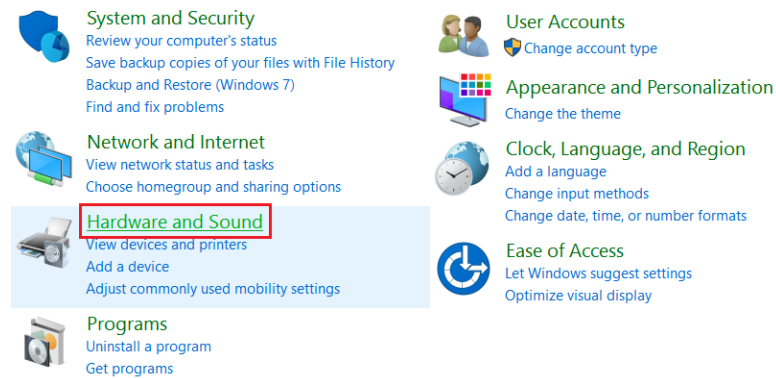


6.2 Installing IMPRES Gen 2 Charger Drivers Manually

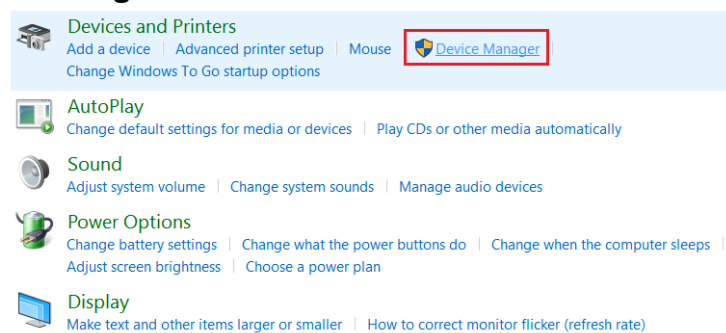
In any cases if IMPRES Gen 2 Charger drivers are not properly installed or IMPRES Battery Fleet Management application not able to detect IMPRES Gen 2 charger after charger is connected to PC, user can perform a manual install on the drivers for IMPRES Gen 2 Chargers.

To perform a manual installation on IMPRES Gen 2 drivers:

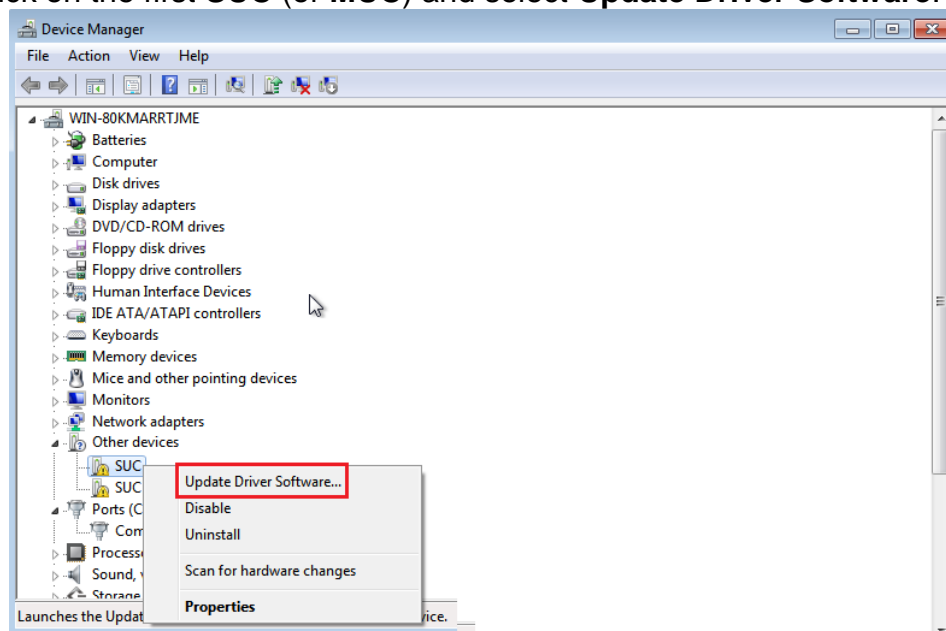
1. Exit all the IMPRES programs running on your computer.
2. Connect the USB cable to the USB port on your computer.
3. Go to **Control Panel**, select **Hardware and Sound**.



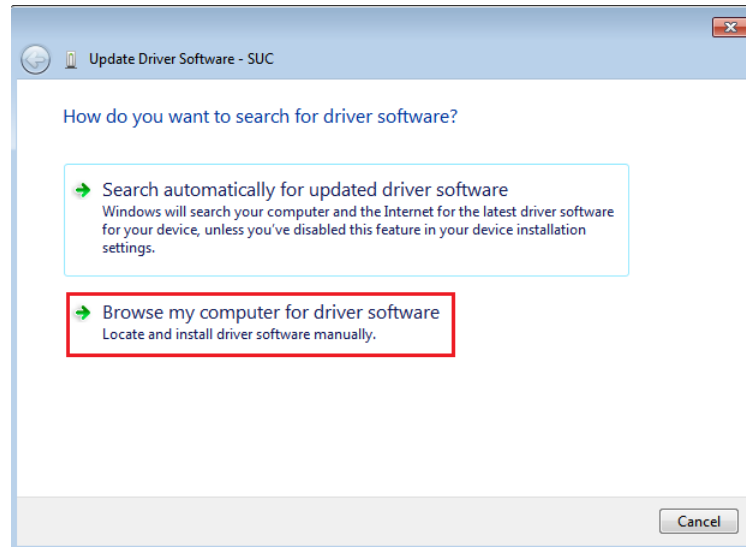
4. Then select **Device Manager**.



5. In the Device Manager, look for the devices found under **Other devices** for **SUC/MUC**. Then right click on the first **SUC** (or **MUC**) and select **Update Driver Software**.



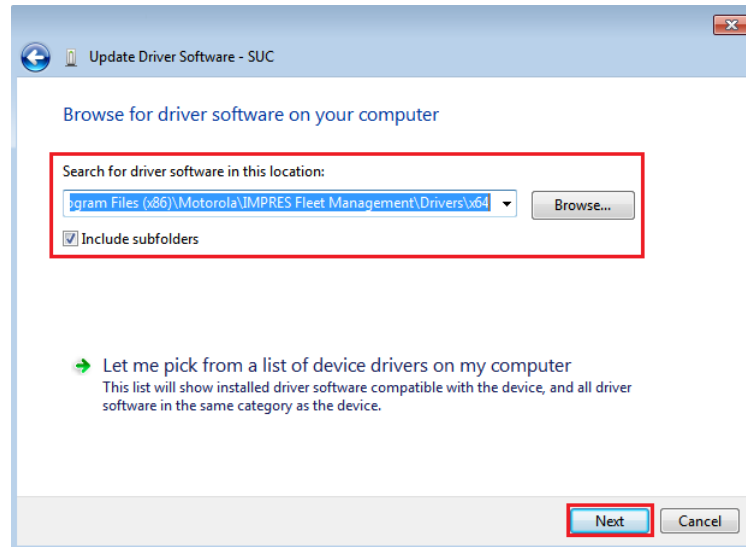
6. Click on **Browse my computer for driver software**.



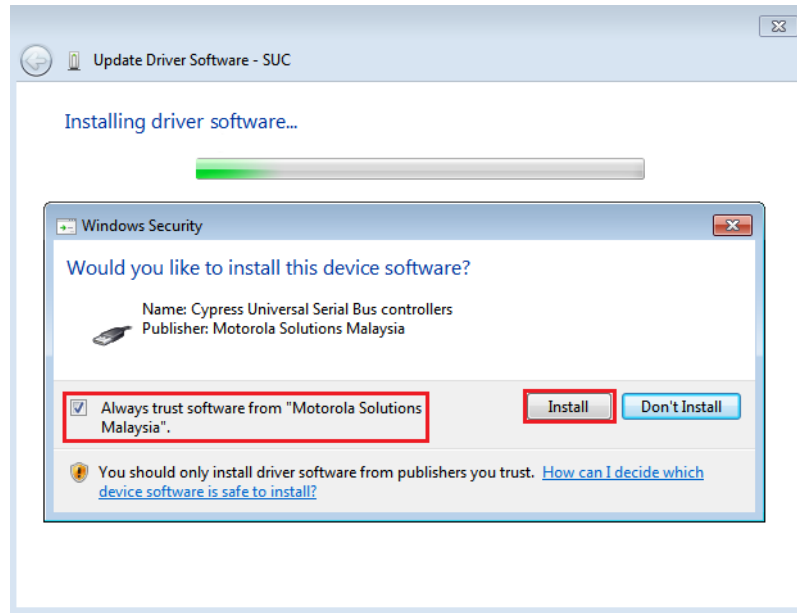
7. Click on the **Browse** button to manually locate the driver.

Note: The driver files are located at the sub-folder of the IMPRES Battery Fleet Management installation folder. The default full path for the device drivers are located at:

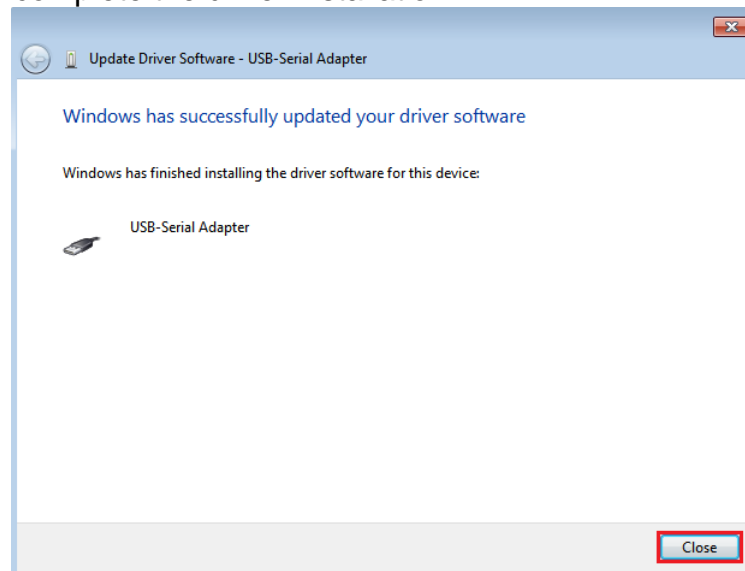
C:\Program Files (x86)\Motorola\IMPRES Fleet Management\Drivers\x86 or x64, depending on whether your computer is a 32 bit computer (use the x86 folder) or a 64 bit computer (use the x64 folder). Once you have located the driver, click on **Next**.



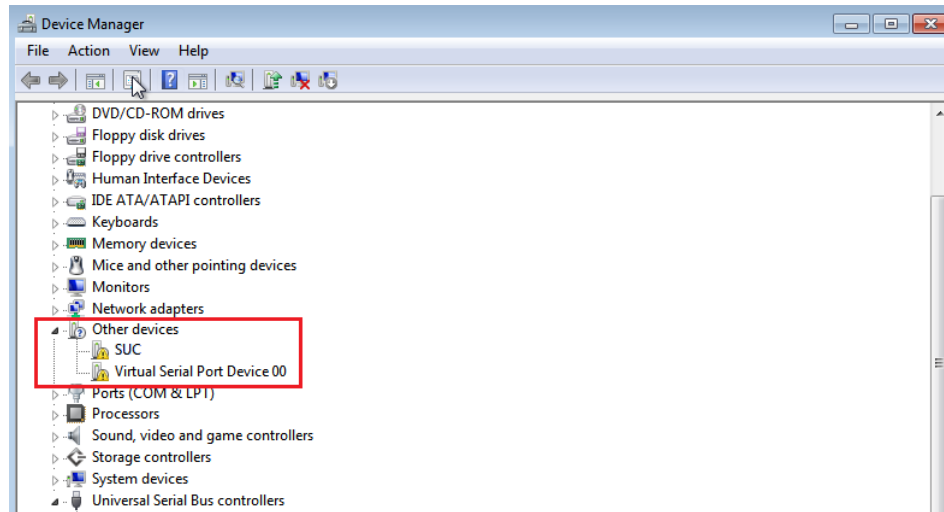
8. Check on **Always trust software from “Motorola Solutions Malaysia”** and click **Install** to proceed.



9. Click on **Close** to complete the driver installation.



10. Once the driver has successfully installed, there will be another new hardware found under **Other devices** which is the **Virtual Serial Port Device**. Perform the same steps above (Step 5-9) to install the remaining 2 more devices.



11. After all drivers have successfully installed, there will be 3 known devices found under **Ports** and **Universal Serial Bus controllers** as below.

Note: There will be different names for different chargers for SUC or MUC.

