

# Truck Builder

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A component of the Railcar Integrated Maintenance Suite (RIMS)

## User Guide



# **Railcar Integrated Maintenance Suite**

DATA COLLECTION • AUTOMATION

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## Introduction

Truck Builder is a data collection application that assists in collecting component application information that will be associated to an equipment (ie rail car) at a later time. It is intended to be used on the shop floor to record the required element data for Component Registration as required by the AAR's Comprehensive Equipment Performance Monitoring (CEPM) program. This program tracks the application of Wheelsets, Side Frames <sup>1</sup>, Bolsters 1 , and Couplers 1 to the equipment. For more information refer to the CEPM Program Overview at <https://www.railinc.com/rportal/cepm-project-overview>

Once the components have been scanned into Truck Builder they can be associated to an equipment by scanning a single barcode using the Car Builder application at the time the truck is applied. This allows for easily collecting the required Component ID barcodes and positions without having to crawl around the equipment after the components have been applied. For more information about Car Builder refer to the Car Builder User Guide or [contact us](#).

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<sup>1</sup> Required in 2014

## System Requirements

This application has minimum system requirements as described below. These requirements must be met in order for the application to operate as designed.

This application supports the following Microsoft Windows operating systems.

- Windows Vista SP2 (x86 and x64)
- Windows 7 SP1 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2008 SP2 (x86 and x64)

The application requires the Microsoft .Net Framework 4.5 Full which can be obtained from Microsoft at <http://www.microsoft.com/en-us/download/details.aspx?id=30653>

The application requires the following hardware at a minimum.

- 2.0 GHz Processor
- 1 GB installed RAM
- 100 MB available disk space
- Ethernet Card

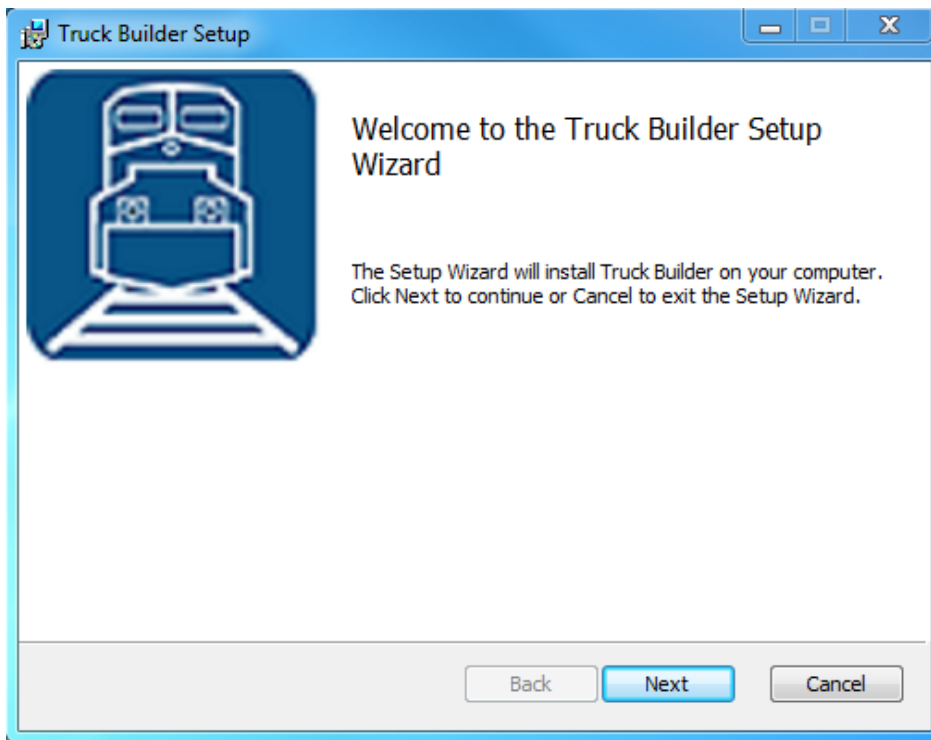
## Getting Started

### Installing Truck Builder

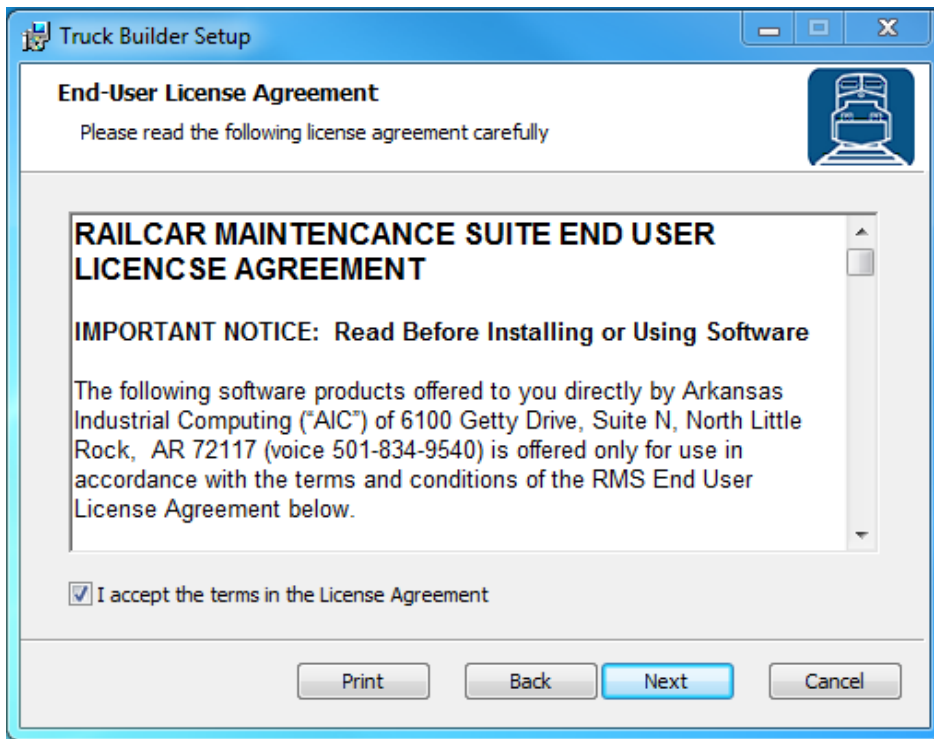
You will need Administrator rights to install Truck Builder.

Make sure you have the latest version of our Truck Builder Setup program. [Contact](#) our support team for assistance. To install Truck Builder, run the setup program and follow the on screen prompts as described below:

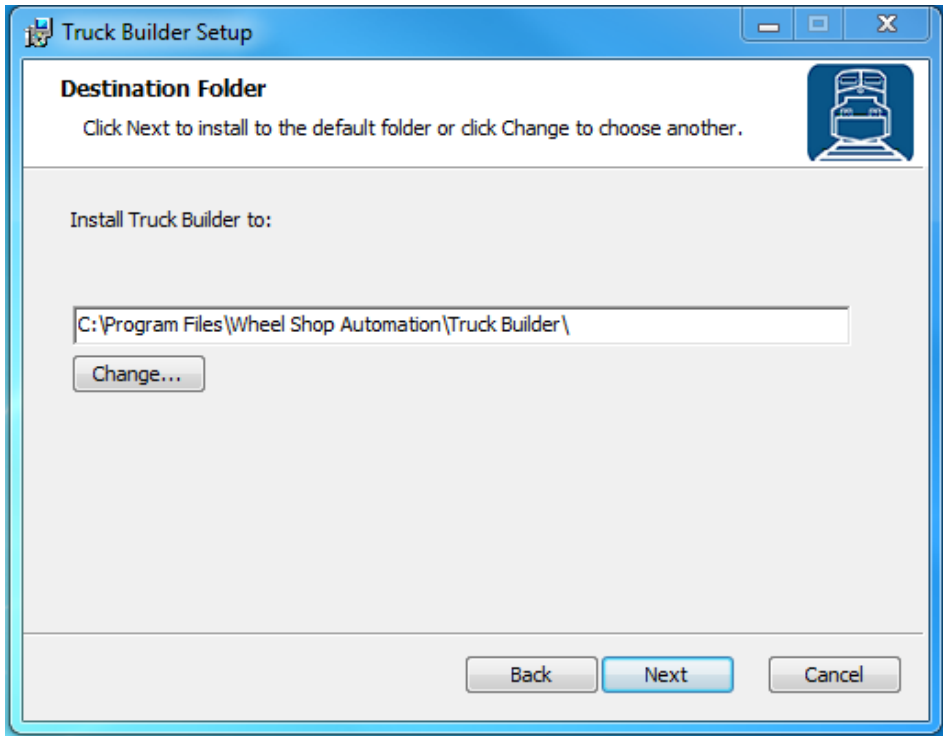
Click 'Next' to continue.



Accept the license agreement and click Next.

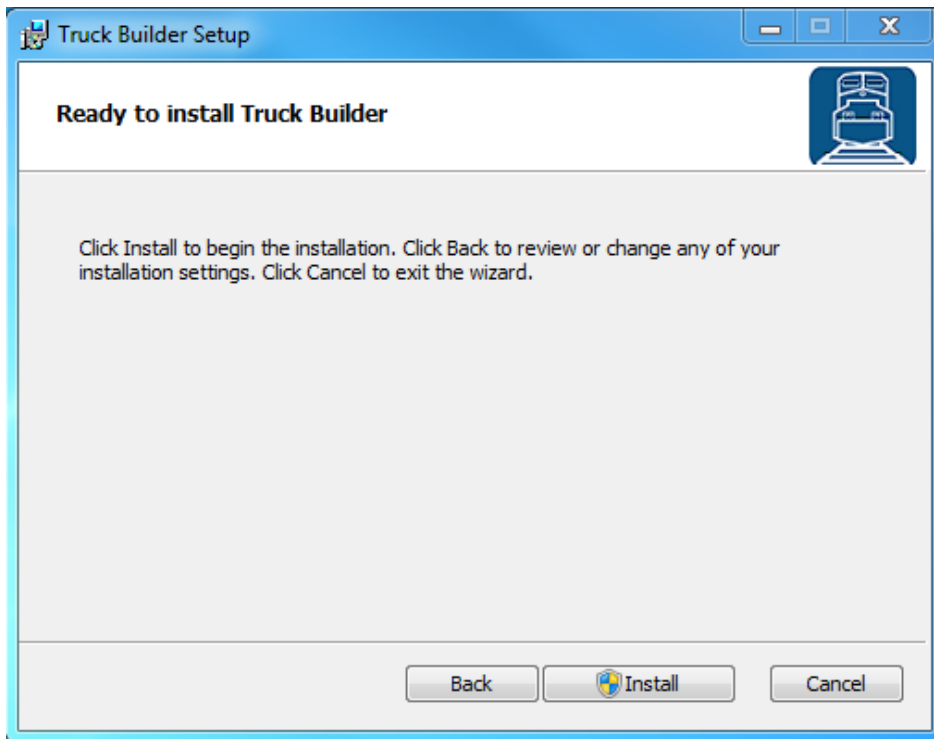


Select the location where you would like to install Truck Builder and click Next.

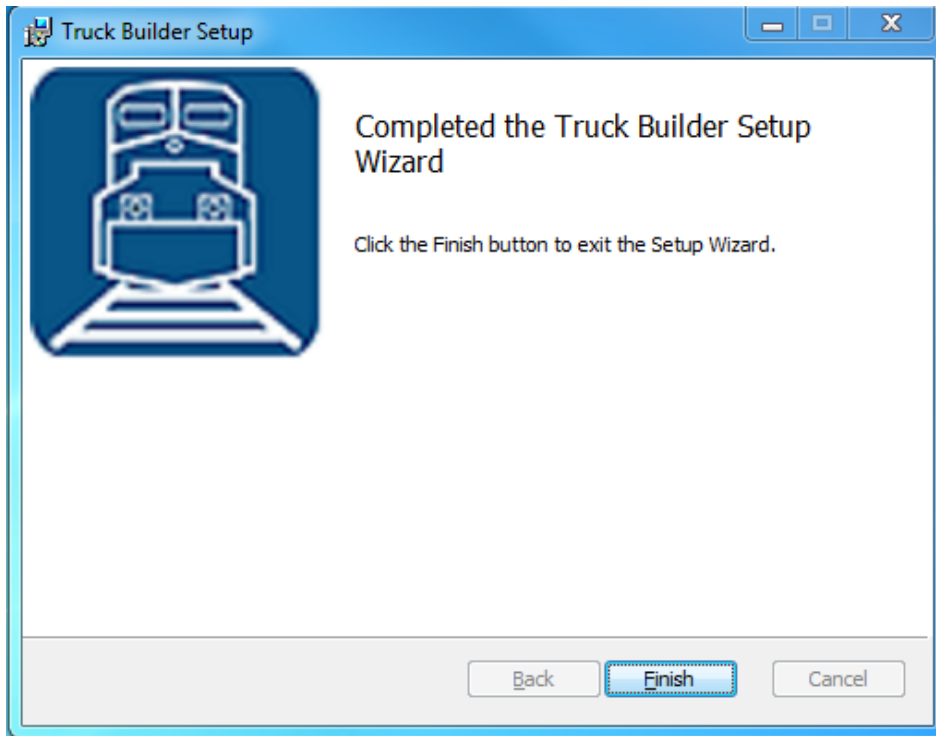




Click Install to begin the installation.



When the installation has completed, click Finish to close the setup application.



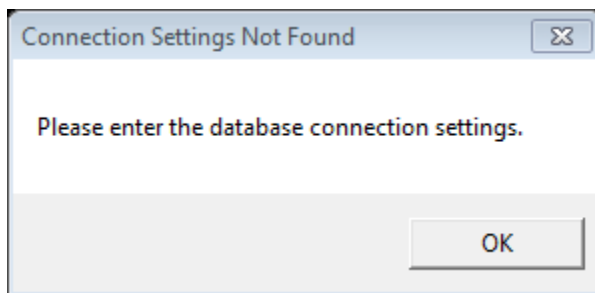
## Initial Setup

Once you have installed Truck Builder you can double click the desktop shortcut to start the application.

### Database Connection Settings

Truck Builder requires access to an instance of the RIMS database which can be installed on the same computer or any computer with network access and the required permissions. The first time you run Truck Builder you will be prompted to enter your database connection settings.

Click OK to display the Connection Settings dialog.



Click Configure.

Connection Settings

Database

Source:

Name:

Configure

Machine Settings

Shop Name:

Machine Name:

Save Cancel

Enter the connection settings for the server where the RIMS database is located. If you are unsure contact your IT Department or our [support team](#).

Click Test Connection to verify your settings.

Click OK when you are finished.

Configure Server Connection

Server Name  
 Refresh

Log on to the server

Use Windows Authentication  
 Use SQL Server Authentication

User Name:   
Password:

Save my password

Connect to a database

Select or enter a database name

Attach to a database file  
 Browse

Logical Name

Test Connection

OK Cancel

Click the Shop Name drop down to select the location for which you want to configure this installation. RIMS can support multiple locations or 'shops' hosted in one database. In order to isolate the data and settings to your location you must provide this information.

After you have selected the Shop Name click on Machine Name and select the machine you are installing on. Some settings are stored per machine so this setting will be used to differentiate each installation.

The screenshot shows a 'Connection Settings' dialog box. It has a title bar with a close button. The dialog is divided into two sections: 'Database' and 'Machine Settings'. In the 'Database' section, there is a 'Source' text box containing 'ANDERS\WSA' and a 'Name' text box containing 'RMS\_UTA'. Below these is a 'Configure' button. In the 'Machine Settings' section, there are two dropdown menus: 'Shop Name' and 'Machine Name'. At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Click Save to save your changes.

Once you have entered your database settings you will be prompted to log on. You must have an existing user name and password in the RIMS system. If you do not have this information, contact your manager or a system administrator. See the following section regarding [Log on](#) for more information.

## Log on / Log off

Each user is given a unique user name and password for the RIMS system for authentication and accountability. You must provide your user name and password each time Truck Builder starts before you can begin. Your log on also determines what functions you have permissions to perform. For more information about permissions and users refer to the Car Manager User Guide.



The image shows a login dialog box titled "Truck Builder". It features a blue header bar with the title. Below the header, there is a yellow padlock icon on the left. To the right of the padlock, there are two text input fields: "Name:" followed by a white rectangular box, and "Password:" followed by another white rectangular box. Below these fields are two buttons: "Login" and "Cancel", both with a light blue gradient and rounded corners.

To log off the current user select Log off from the File menu.

## Component Application

The screenshot displays the 'Truck Builder' software interface. At the top, there is a menu bar with 'File', 'Tools', and 'Help'. Below the menu bar, there is a 'WIP Tag:' field. The main area is divided into several sections: 'Wheelsets' with two input fields labeled '1' and '2'; 'Sideframes' with 'Left' and 'Right' input fields; and 'Bolster' with one input field labeled '1'. The central part of the screen is titled 'Left Sideframe' in large blue text. Below this title is a large form with various input fields and dropdown menus, including: 'Condition Code', 'Reconditioner AAR Facility Code', 'Serial Number', 'Cast Month', 'Cast Year', 'Design Feature Code', 'AAR ID Code', 'Drawing Number', 'Drawing Number Revision', 'Nominal Wheel Base', 'Button Count', 'Pattern Number', 'Cast Trademark', 'Heat Number', 'Foundry AAR Facility Code', 'Heat Treat Load Number', 'Classification / Reconditioned Date' (with a date picker), and 'Column Wear Plate Installed'. At the bottom of the form, there are 'Default' and 'Custom' tabs. The bottom of the window features a 'Save' button, a 'Cancel' button, and a footer with 'Copyright © 2013 Arkansas Industrial Computing, Inc.', 'Truck Builder', and 'Version 1.4.0.27251'.

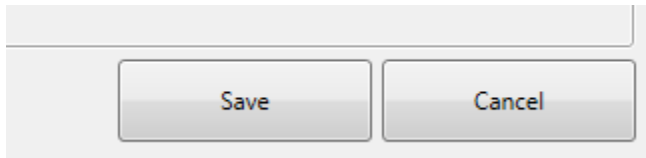
This is the main screen of Truck Builder. From this screen a user can create a new truck and associate components to that truck by entering the truck's WIP Tag number and the corresponding CID tag for each component.

CID tags can be scanned into Truck Builder without interacting with the program directly. Simply scan the tags in order, and they will be automatically entered in the corresponding text fields. The default scan order is from top to bottom, starting with Wheelset 1 and 2 followed by Sideframes and finally the Bolster. This scan order can be changed by selecting File->Options and selecting the Scan Order tab.

When entering/scanning a CID, the component details will display on the right-hand side of the screen (bolster and sideframe only; wheelset coming soon). This allows a user to confirm component information as they are applied to a truck, or complete the information for an incomplete component.



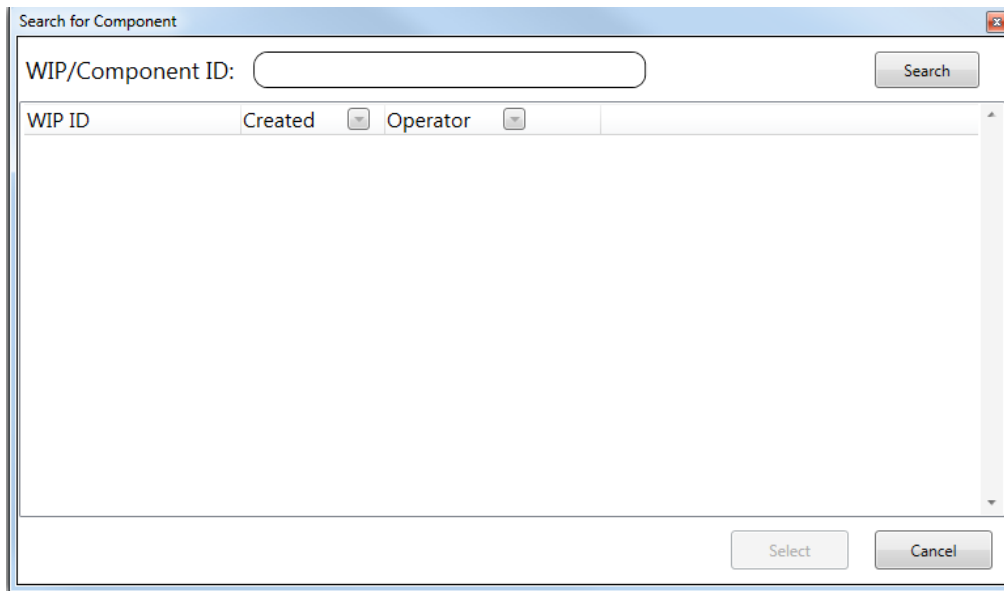
## Save/Cancel



Once you have entered the WIP and CID information for the current truck, select Save in the bottom right corner to commit the truck to the database. Selecting Cancel will discard your entries. After selecting either Save or Cancel, the text fields will clear, and Truck Builder will be ready for a new entry.

## Search

You can modify the data for a truck that you already entered by searching for the truck or a component on the truck. Click the Search button in the top right corner of the screen to open the search Dialog.

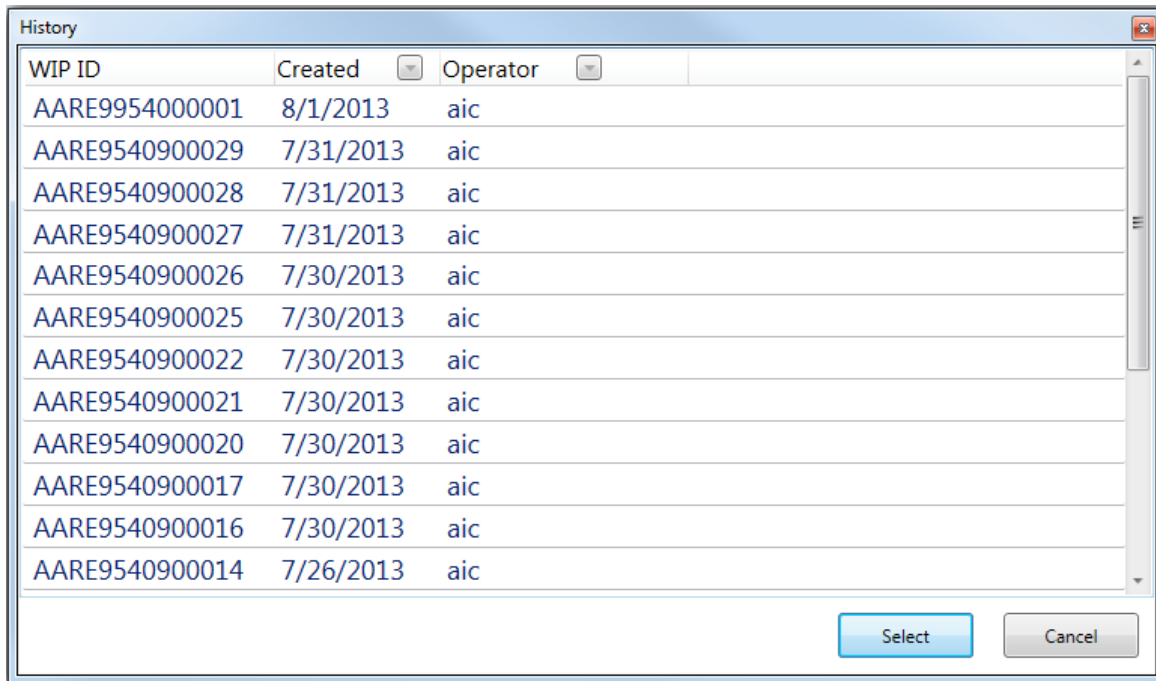


The screenshot shows a window titled "Search for Component". At the top, there is a text input field labeled "WIP/Component ID:" and a "Search" button to its right. Below the input field is a table with the following columns: "WIP ID", "Created", and "Operator". The table is currently empty. At the bottom of the window, there are two buttons: "Select" and "Cancel".

If the Component ID label or WIP Tag is available and you have [configured a barcode scanner](#) you can simply scan the barcode to automatically retrieve the truck record and display the element data.

You can also manually search for the component using part of all of the Component ID or WIP Tag. After you've typed all or part of the ID, click search and a list of matching trucks will be displayed (once the results have been narrowed down to a manageable view). If you see a message indicating too many results to display you need to enter more of the ID to narrow down the results. If you see a message indicating no results found then the ID you entered does not match any components or trucks in the database. See [Appendix A: Frequently Asked Questions](#) for help on problems with searching.

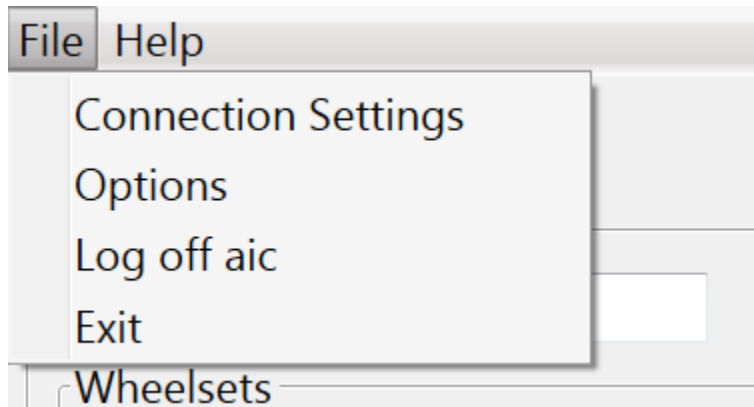
## History



WIP ID	Created	Operator
AARE9954000001	8/1/2013	aic
AARE9540900029	7/31/2013	aic
AARE9540900028	7/31/2013	aic
AARE9540900027	7/31/2013	aic
AARE9540900026	7/30/2013	aic
AARE9540900025	7/30/2013	aic
AARE9540900022	7/30/2013	aic
AARE9540900021	7/30/2013	aic
AARE9540900020	7/30/2013	aic
AARE9540900017	7/30/2013	aic
AARE9540900016	7/30/2013	aic
AARE9540900014	7/26/2013	aic

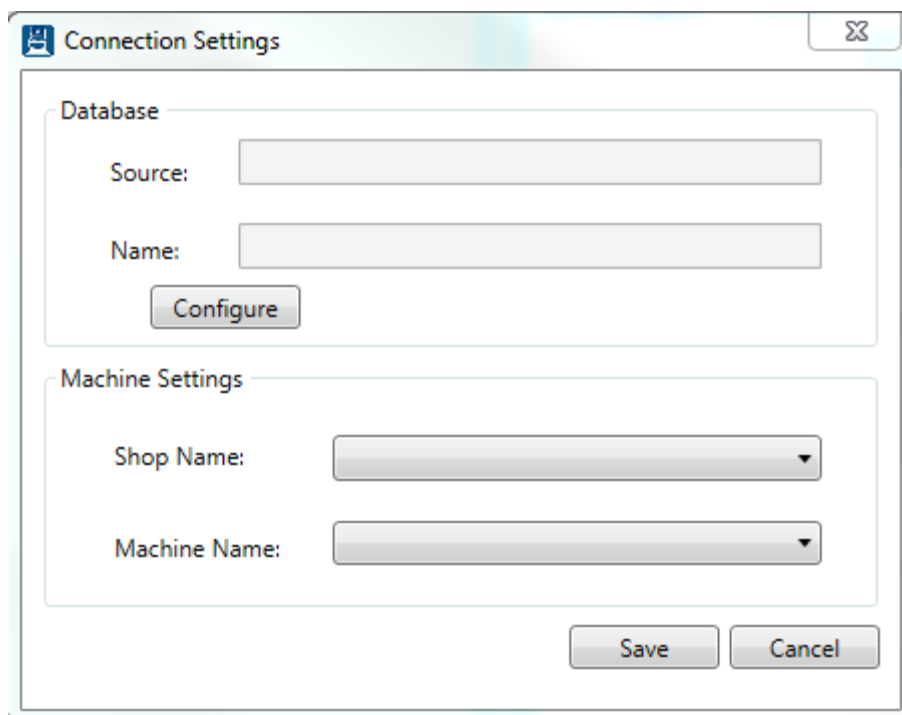
Another way to retrieve a previously edited truck is via the history list. To open this window, click on the history button in the upper right corner of the Truck Builder main screen. This will provide a list of recently created trucks; clicking on a truck and then 'Select' will open the truck in the main screen.

## Menu



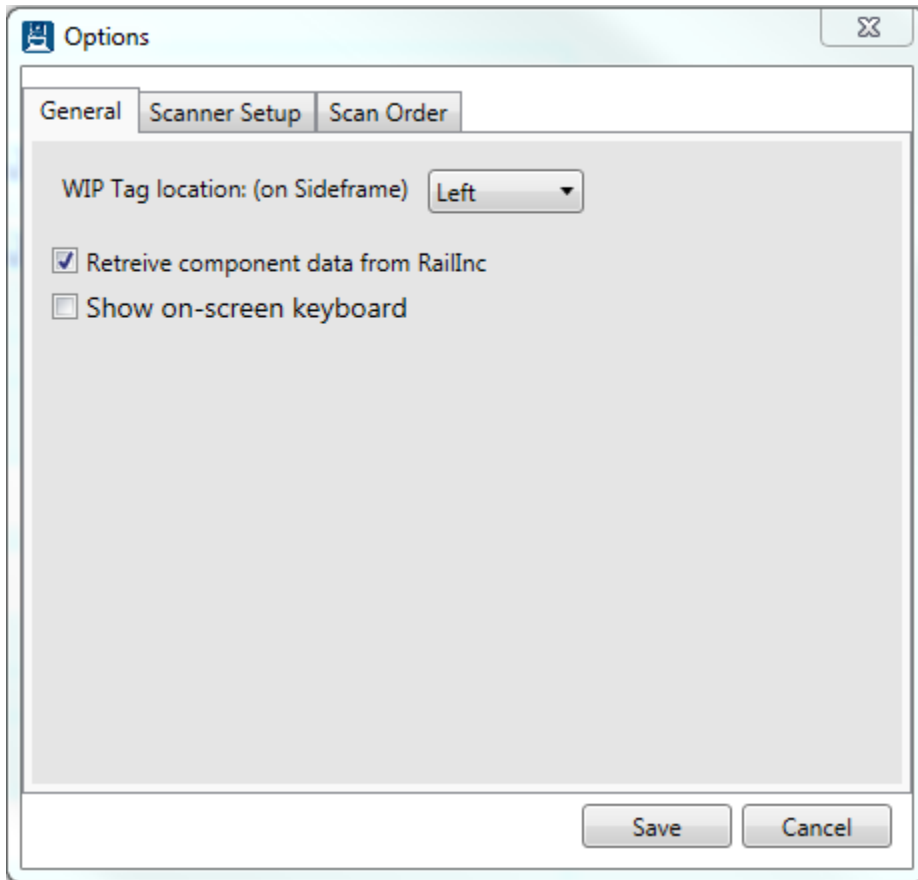
The Truck Builder menu gives users access to several configurable settings as well as information about your copy of Truck Builder.

## Connection Settings

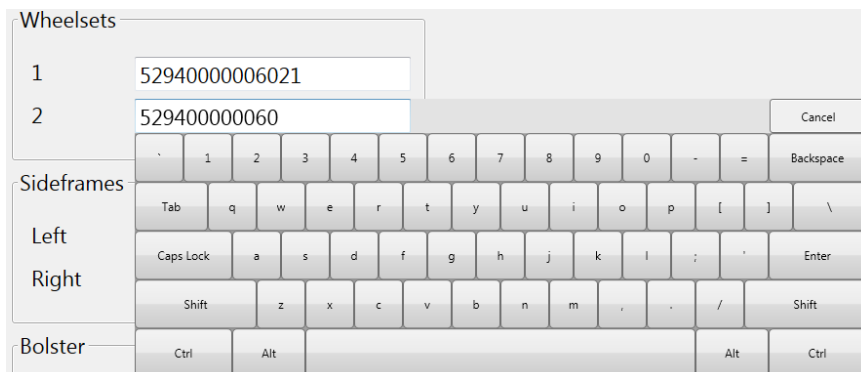


The Connection Settings box allows you to change your database settings in the event that they change from your initial setup. Refer to the [Database Connection Settings](#) section for more information.

## Options

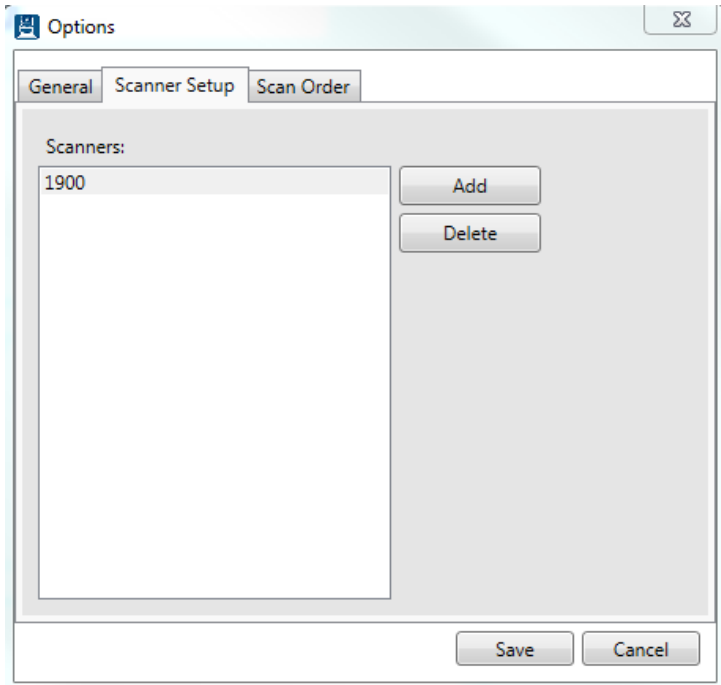


The Options pane allows you to customize certain behaviors of the Truck Builder application. Under the General tab, you can specify the location of the WIP Tag as either Left or Right. There is also an option to retrieve component data from RailInc.

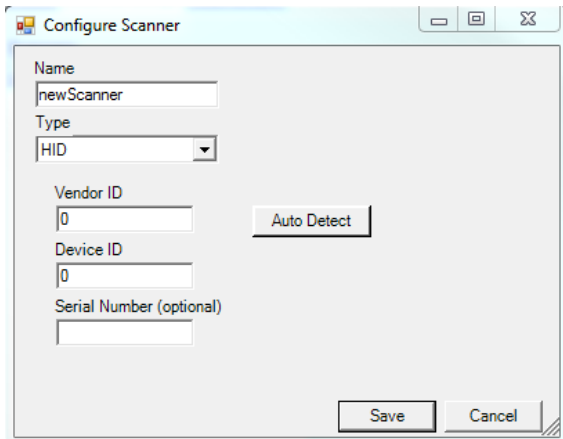


The 'Show on-screen keyboard' activates a touch enabled on screen keyboard anytime a text field is selected. Enable this option if you are running Truck Builder on a touch enabled device.

## Scanner Setup

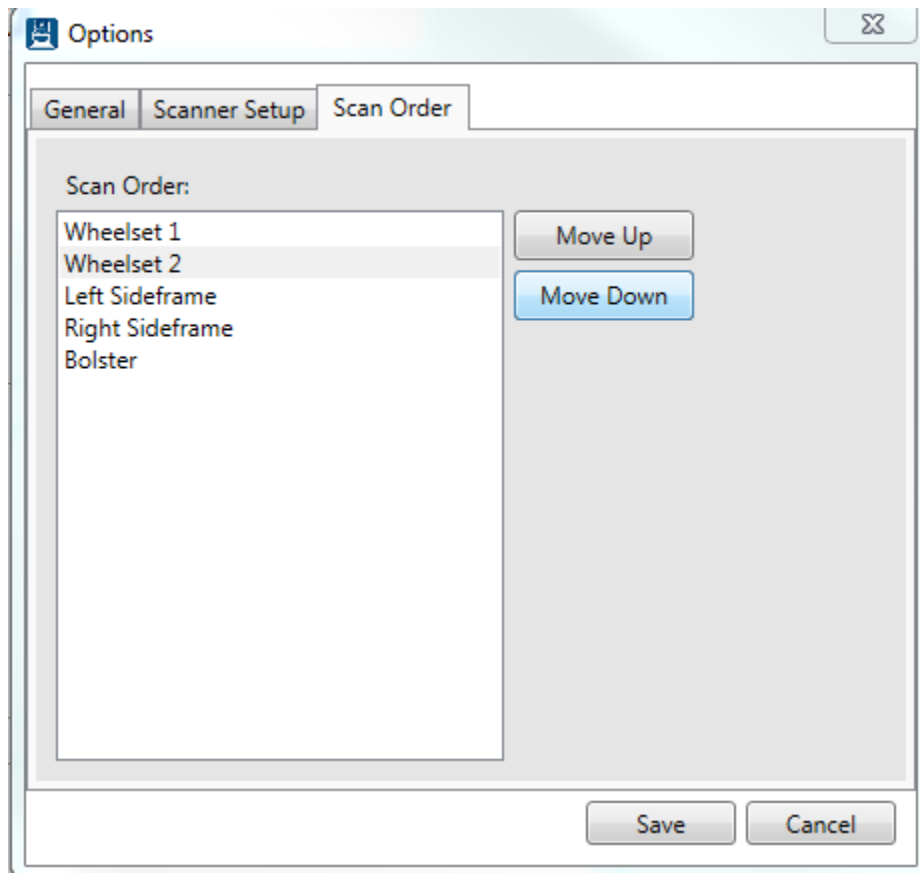


The Scanner Setup pane allows management of attached barcode scanners. From this pane, users can add new or delete existing scanners used to interact with the Truck Builder application.



To add a new barcode scanner select Add from the Scanner Setup pane. In the Configure Scanner window, enter the desired name of the new scanner and select a barcode scanner interface type (usb HID is the most common). Click Auto Detect and scan any barcode with the scanner to be added, and Truck Builder will determine the configuration settings for your scanner. Click Save and the new scanner should appear on the list in the Scanner Setup pane.

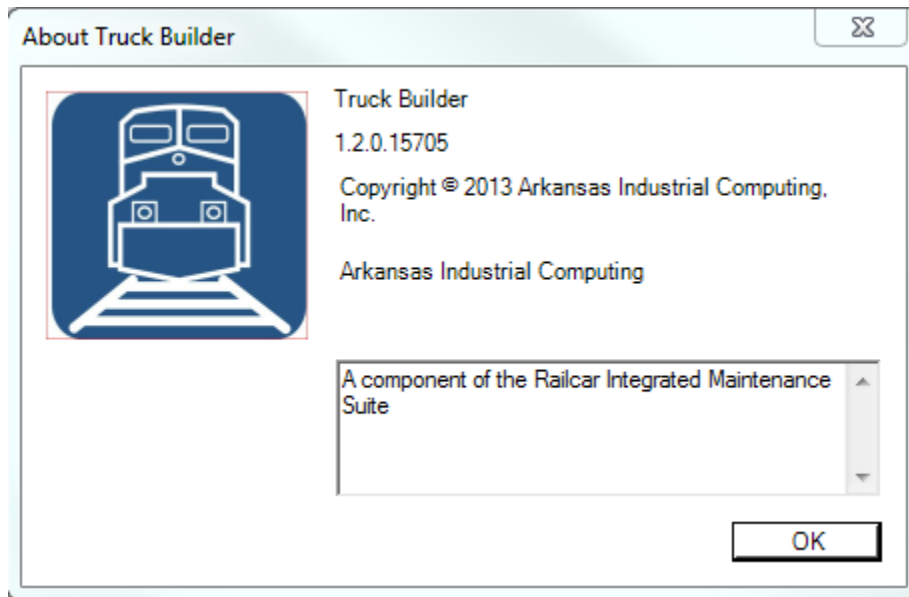
## Scan Order



The Scan Order pane can be used to edit the default scan order used for entering component information into the Truck Builder application. Arrange components in the order that they will be scanned and click Save. The order that component information is displayed on the main screen will not change, but the scanned CID Tag numbers will be entered in the order selected on the Scan Order pane.



## About



The about screen contains contact information and version information for the current version of Truck Builder. This information is useful for keeping your software up to date as well as troubleshooting. Please reference this number when contacting support to better enable us to assist you with any issues you may have.

## Appendix A: Frequently Asked Questions (FAQ)

Q. I get the one of the following errors after trying to save a truck: ‘... The underlying provider failed on Open’ or ‘An error occurred while starting a transaction on the provider connection. See the inner exception for details’. What’s wrong?

A. The most likely cause of this error is a loss of connection to your database. Go to File->Connection Settings and click on Configure. Now, click on Test Connection. If your connection fails, enter the correct connection settings and retry. Next, exit Truck Builder and check your network connection settings. If all of these things are still working, [contact support](#).

## Appendix B: License

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## Appendix C: Contact Information

AIC Rail  
6100 Getty Drive  
Suite N  
Sherwood, AR 72117

### **Online Support**

Visit our website at [www.aicrail.com](http://www.aicrail.com) for 24/7 technical information and available downloads  
Email us at [support@wheelshopautomation.com](mailto:support@wheelshopautomation.com)

### **Phone Support (Existing support contract or credit card required)**

Call 1-501-834-9540 or 1-877-834-9540 (toll free)