2025
MULTI-CIM

CNC Software Solutions by CIM-TECH

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by CIM-Tech.com, Inc.

We are pleased to announce the release of Multi-CIM.

Multi-CIM Users Guide

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1 About This Guide

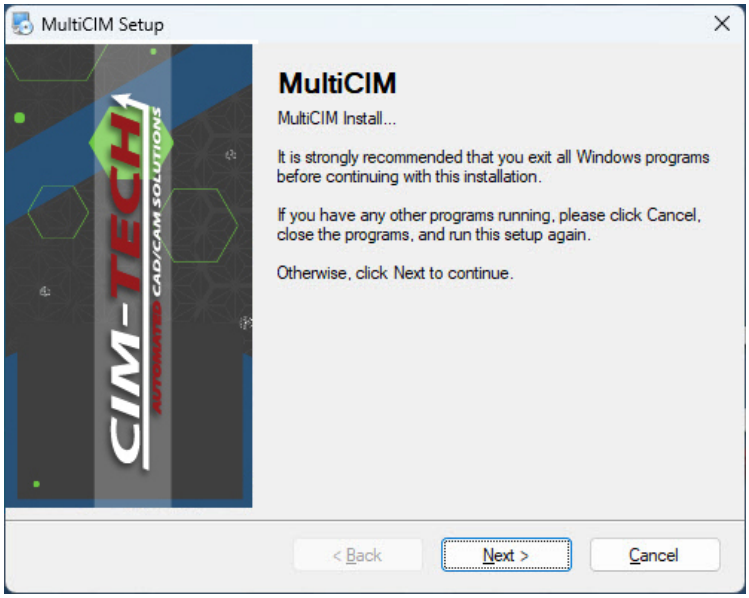
About This Guide

This document is divided into the following chapters:

1.1 Installing the Program

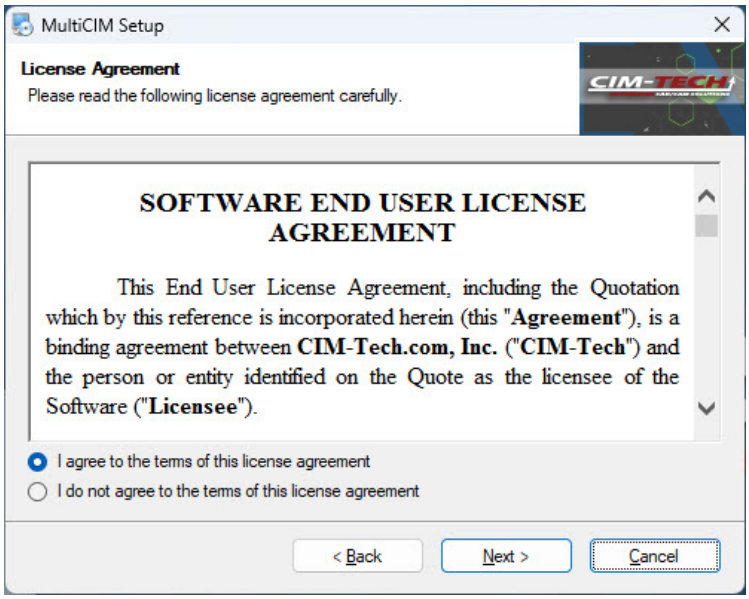
Installation and Configuration

Download the Multi-CIM installation files according to the included download card with your Multi-CIM software package or visit www.cim-tech.com/20MCIM25. The website will include the instructions for starting the installation.



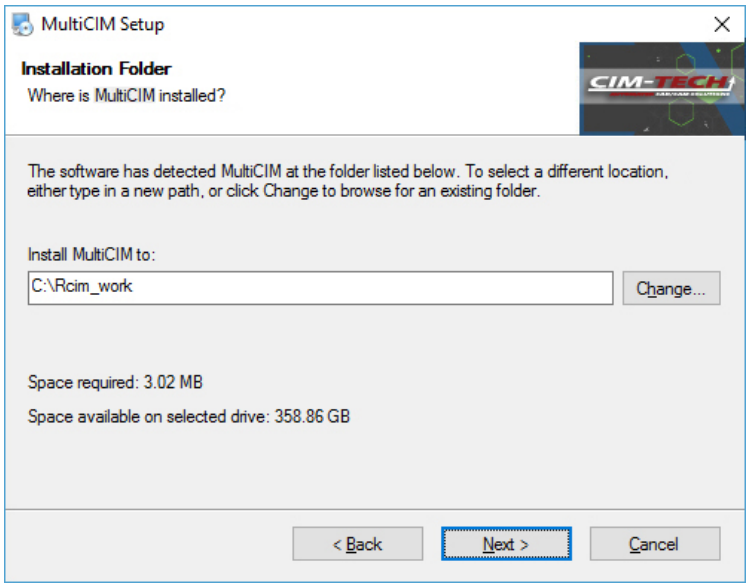
From here, all of the default selections have been made for you. We recommend that you leave the defaults, as it will be simpler for you later if technical support is needed and you need to know the locations of the Multi-CIM files.

Select '**Next**' to continue.



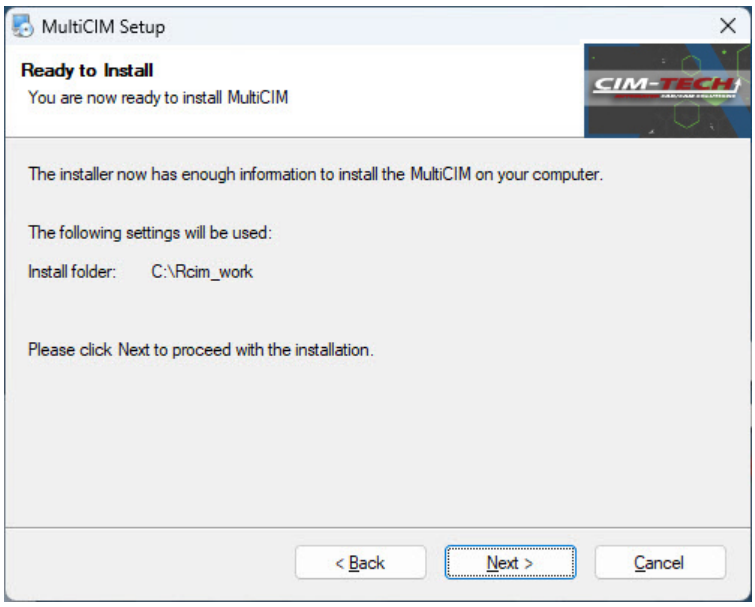
This is the license agreement for Multi-CIM. Be sure you read the agreement. Selecting **'I do not agree to the terms of this license agreement'** will allow you to exit the program without installing Multi-CIM to your computer. Selecting **'Back'** will return you to the previous window.

Select **'I agree to the terms of this license agreement'** and **'Next'** to continue.



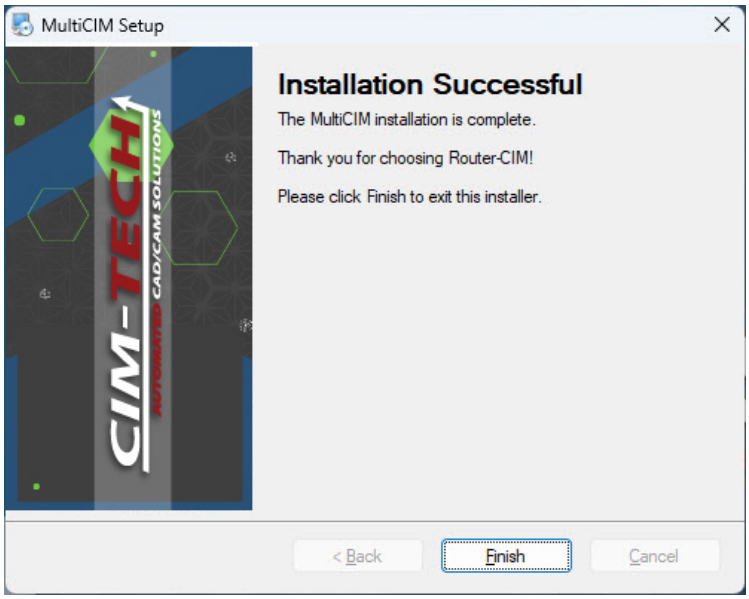
It is recommended to leave the default location.

Select '**Next**' to continue.



This screen will recap where Multi-CIM is going to be installed to.

Select '**Next**' to continue.



Once the install is completed, and you click on **'Finish'**, all the files will be in the correct locations.

The sample drawing, lisp program, and necessary Router-CIM changes are copied to your drive along with the macro.

In the Install:

There is a sample drawing named MultiCIM_Sample.dwg. This dwg file is in the C:\Rcim_work folder.

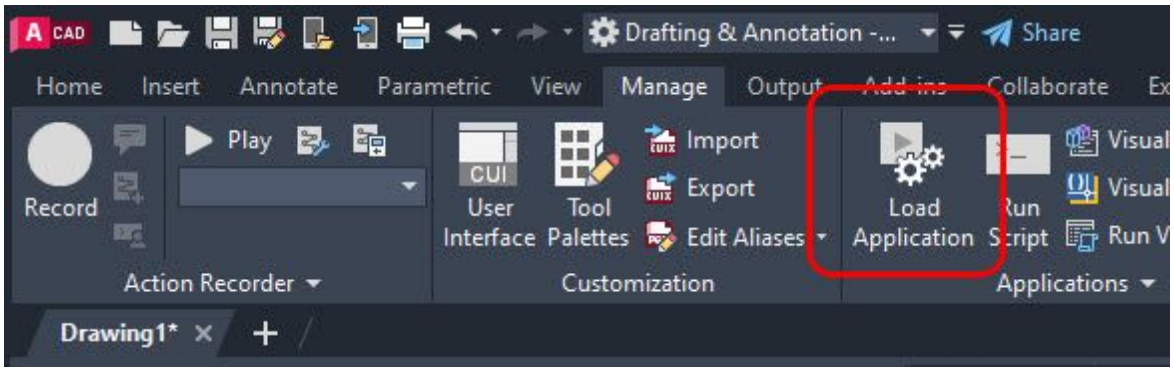
There is also the developed program, named **MCIM.fas** copied into the C:\rcim_work folder.

1.2 Loading the New Function

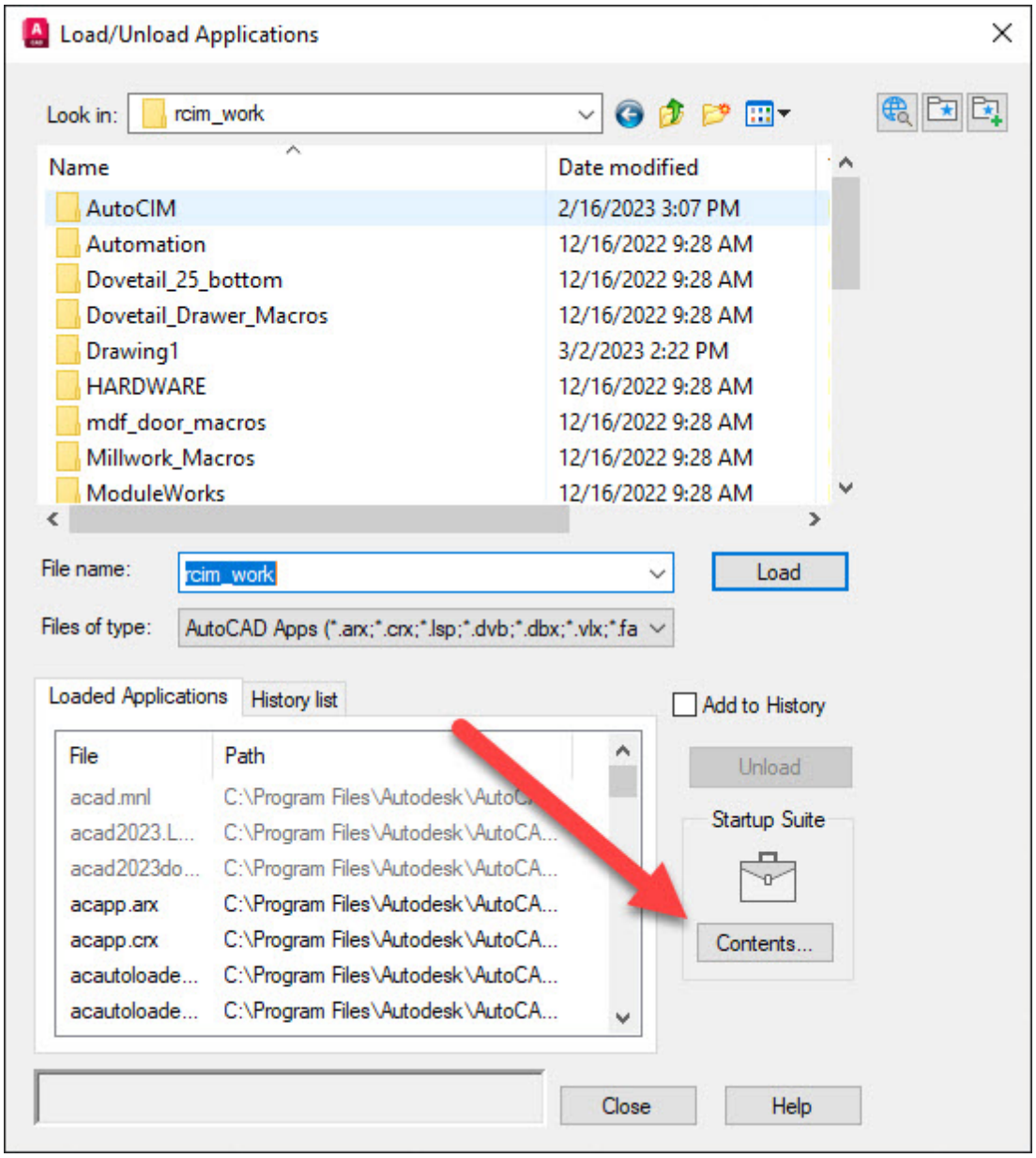
Loading the New Function

The name of the program file is MCIM.fas and is located in the C:\rcim_work folder.

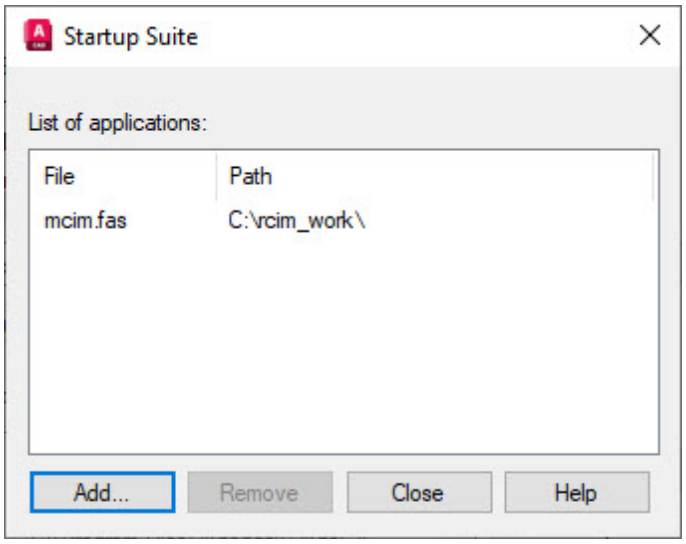
In order to run the function, you will open the Manage Ribbon and select 'Load Application'.



A new window will appear where you can set the Start Up routines you want to run when AutoCAD starts up.



Click on the Startup Suite Contents in the lower right corner and add the new routine into the contents of the Startup Suite.



The name of the program you are adding is **MCIM.FAS** and it is located in C:\Rcim_work.

Once you have added this to the startup, select **'Close'**.

1.3 Executing the Function

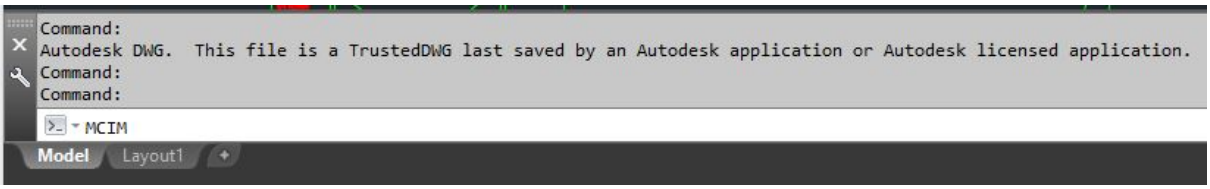
Executing the Function

To run the function, open a drawing whose contents you want wblocked out into a separate folder, and then start Router-CIM.

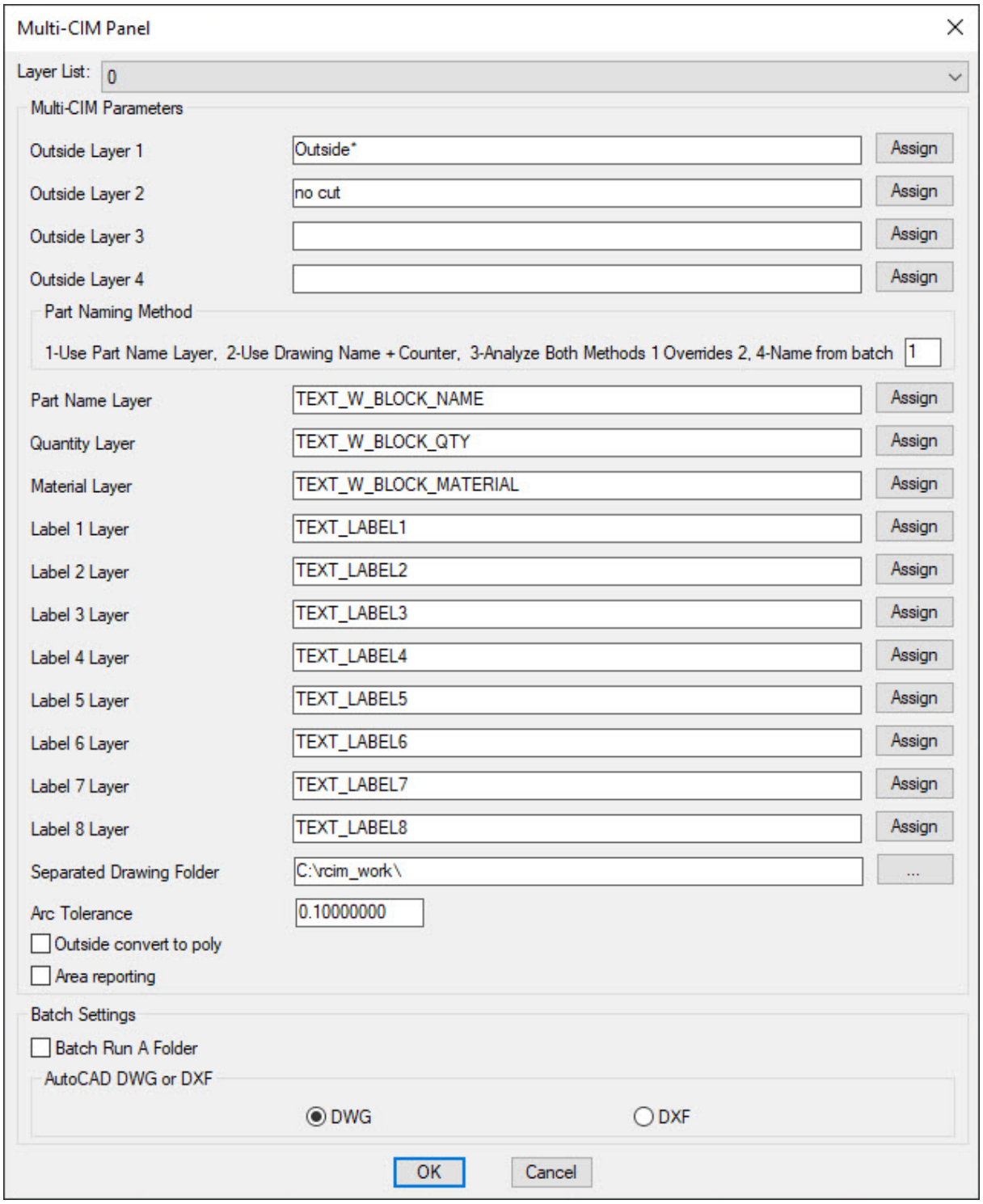
Note: Router-CIM MUST be running for the Multi-CIM routine to function. If Router-CIM is not running, MCIM will start it.

Once Router-CIM is running, type **MCIM** at the command line and press **'Enter'**.

Note: In order for Multi-CIM to recognize the outside layer that you specify, it must be a closed polyline.



You will see the options window for Multi-CIM.



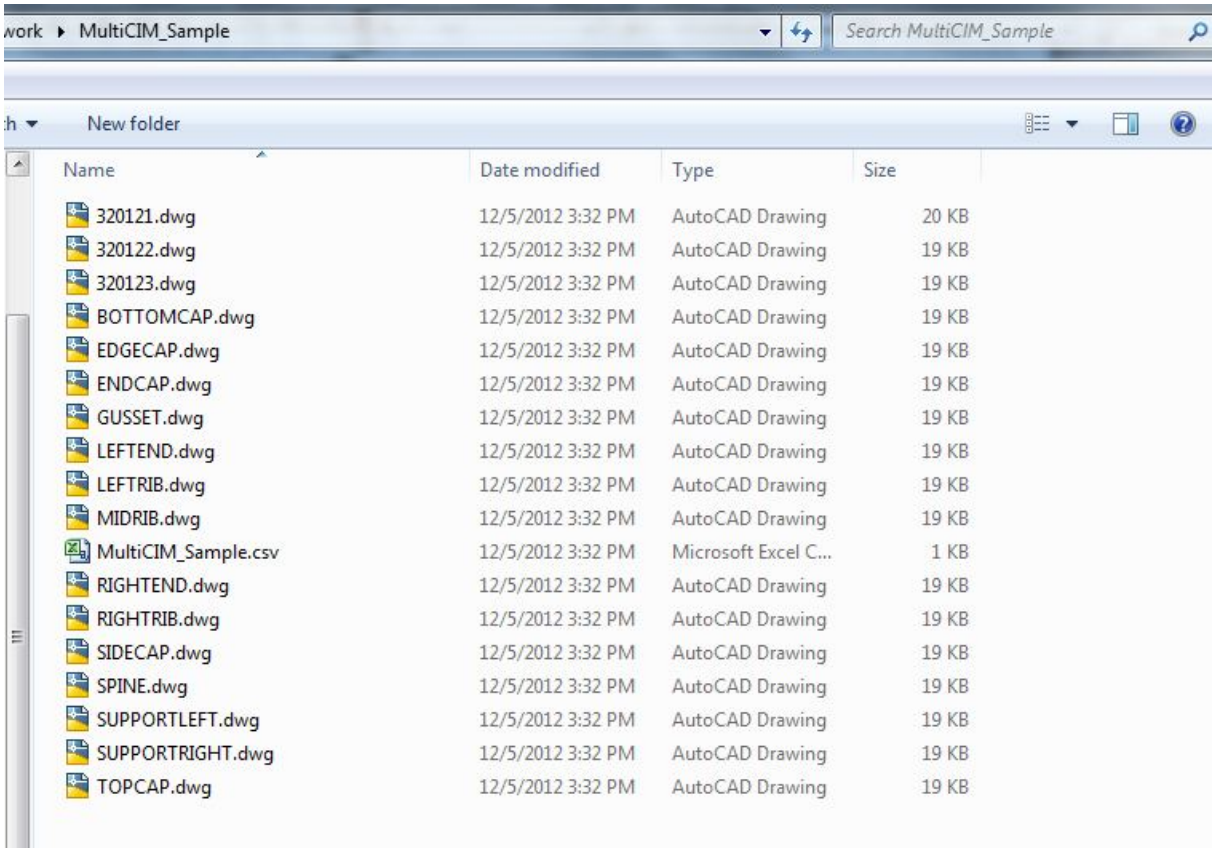
From here you can set the name of the layers that contain your Outside Geometry. There is a pull down list at the top so that you can check the names and spelling of the layers to add to the lists.

There are also layers names here you must set for the layers that contain the text for the part name, the part material, and the part quantity.

The defaults are **TEXT_W_BLOCK_NAME**, **TEXT_W_BLOCK_QTY**, and **TEXT_W_BLOCK_MATERIAL**.

From this location, you can also set the name of the default output folder where Router-CIM will export the folder containing all the parts that Multi-CIM exports. The folder will have the same name as the drawing that the command is executed from.

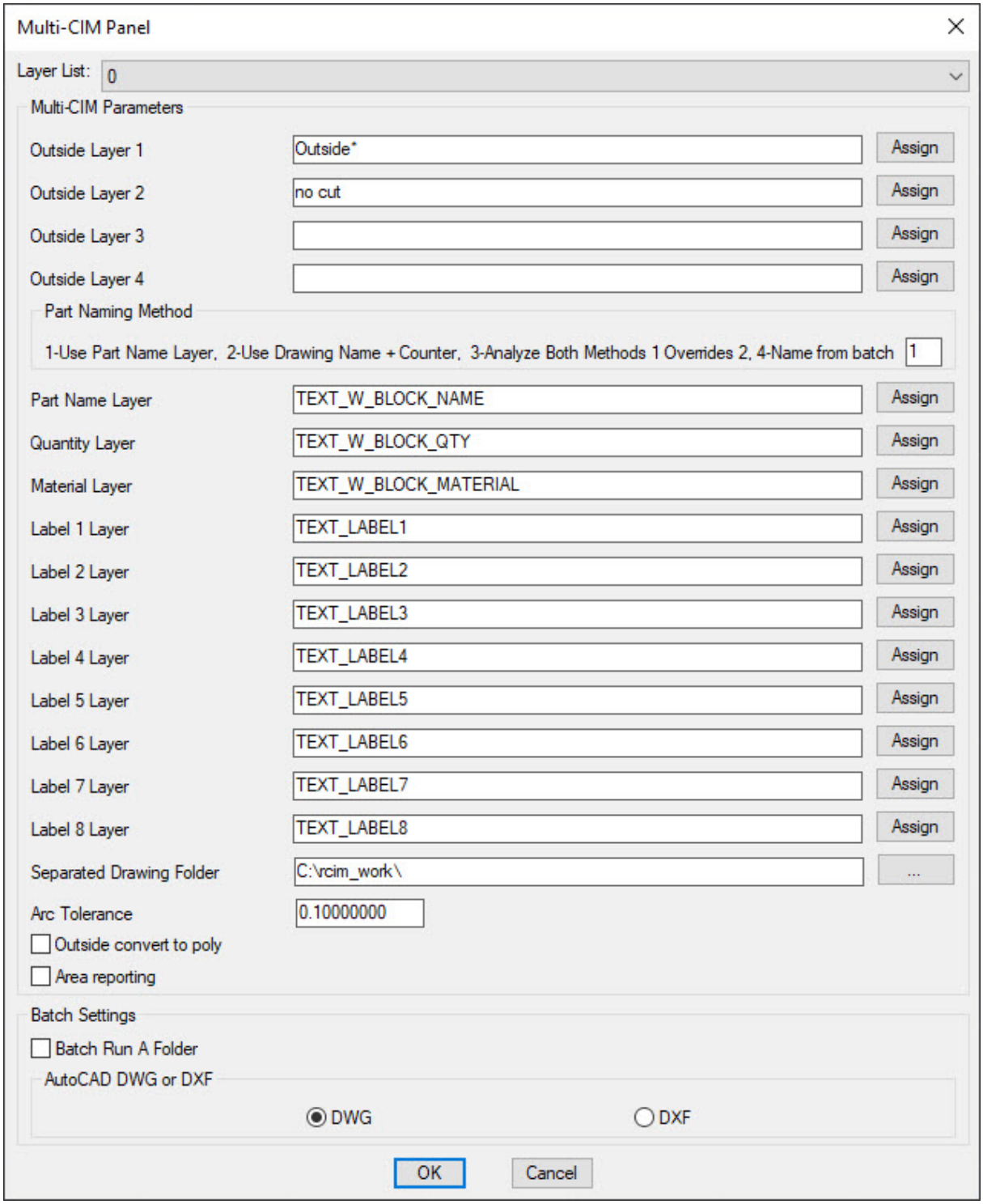
The new function will run on the drawing and it will make a folder on the hard drive in the C:\rcim_work folder with the same name as the drawing and place all the wblocked parts into it.



In addition to the parts, a CSV file will be created for import into Router-CIM Automation Suite.

1.4 Multi-CIM Panel

Multi-CIM Panel



Assigning Layers:

Layer List: Contains a list of all of the layers that were found in the drawing that is open. This can be used with the "Assign" button to automatically add the selected layer to the Outside, Part Name, Quantity, Material, or Label Layers.

In order to assign layers using the layer list drop down you will first need to select the layer from the list. Next, select the assign button that is on the right side of the window that corresponds with the layer. Once the assign button is selected you will see the text box update with the new layer name.

Multi-CIM Parameters:

The settings in this section are used to define the layers that contain the outside geometry, part name, quantity, material, and label information.

Outside Layer (1-4): When Multi-CIM runs it will look for geometry found on any of these four (4) layers.

Part Name Layer: If text is found inside the part on this layer, it will be used to name the part when the part drawing is created.

Quantity Layer: If text is found inside the part on this layer, it will be used to populate the necessary column in the Multi-CIM CSV file for the parts quantity.

Material Layer: If text is found inside the part on this layer, it will be used to populate the necessary column in the Multi-CIM CSV file for the parts material.

Label Layer (1-8): If text is found inside the part on these layer, it will be used to populate the necessary columns in the Multi-CIM CSV file for the parts label information.

Separated Drawing Folder: This is the export directory where Multi-CIM will place the parts. In this folder there will be a job folder made to match the name of the drawing. All of the exported part drawings and the Multi-CIM CSV file will be found in the job folder.

Arc Tolerance: If the radius of an arc is less than half of this value then the arc will be converted to a line.

Outside Convert to Poly: If this box is checked, all lines that are on the outside layer will be joined into a single polyline when possible.

Area Reporting: If this box is checked, a part area calculation for each part will be performed and added to the Multi-CIM CSV file.

Part Naming Method:
There are four (4) options for how your exported parts will be named.

Option 1: This option will use the "Part Name Layer" field to find the text for the name of each part.

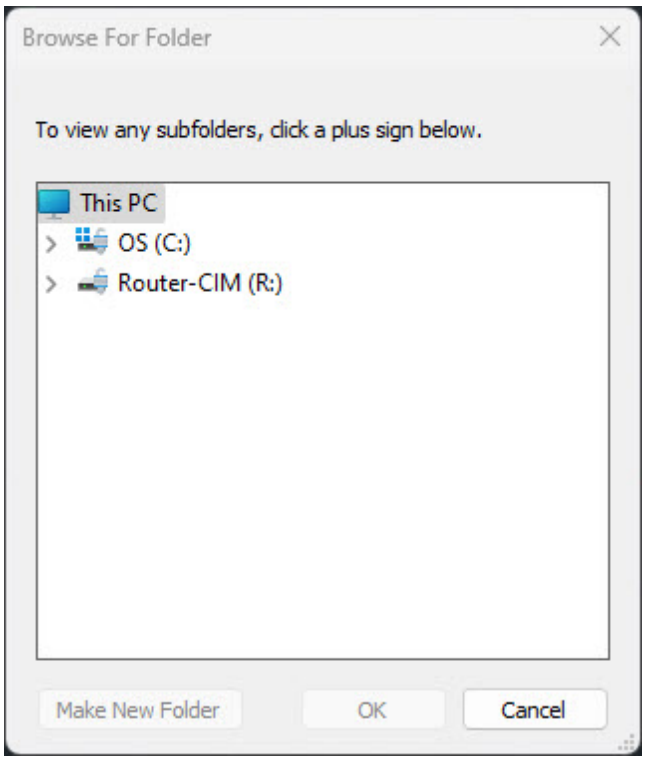
Option 2: This option will use the drawing name when naming your parts followed by a part counter.

Option 3: This option will allow for a combination of Option 1 and Option 2, but if text is found on the part name layer then it will be used first.

Option 4: This option is only used when the option "Batch Run Job Folder" is checked. If a batch run job is performed then the part name will match the drawing name. If "Batch Run Job Folder" is not checked, then this will default to Option 3.

Batch Settings:

Batch Run A Folder: When this option is checked you will be prompted to select a folder that contains all of the files you would like processed through Multi-CIM. Drawings located in the selected folder will be processed through Multi-CIM.



AutoCAD DWG or DXF:

Drawing File (DWG): If you select the DWG output type then all of the exported part drawings will be drawing files.

Drawing Exchange Format (DXF): If you select the DXF output type then all of the exported part drawings will be DXF files.

1.5 Importing Into Automation

Importing Into Automation

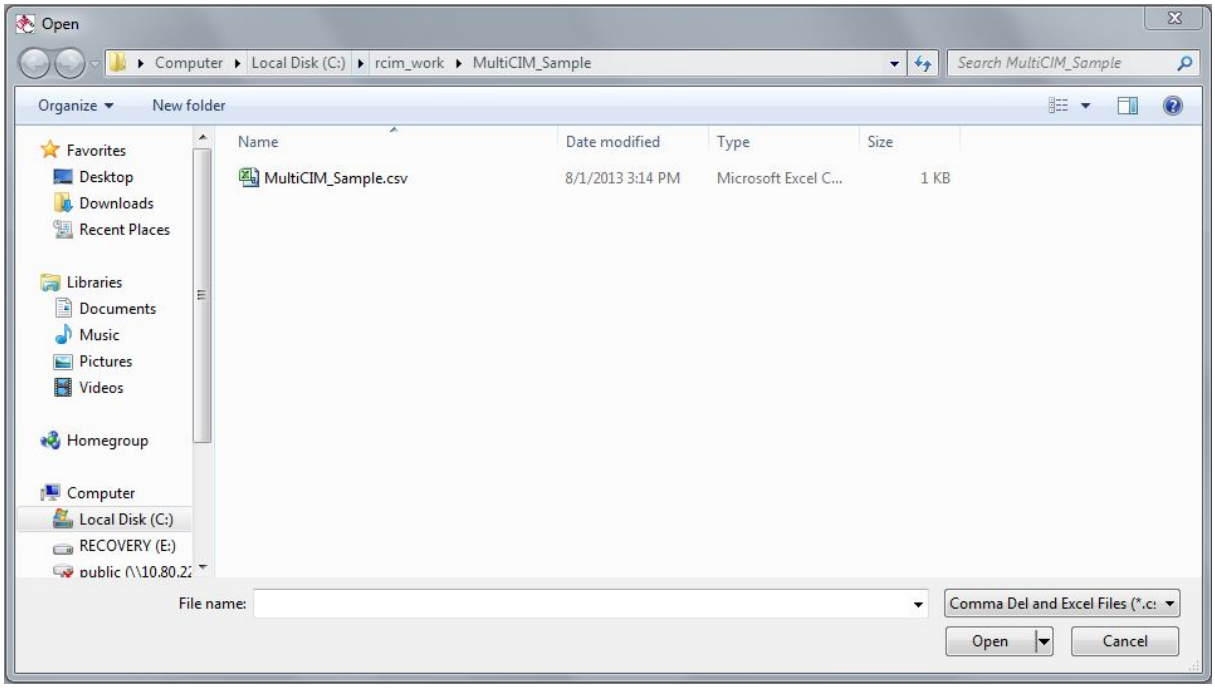
You can import the CSV file created by Multi-CIM into Automation. Then the parts can be nested and sequenced.

You should create an import template so that you can use that each time you wish to import a job.

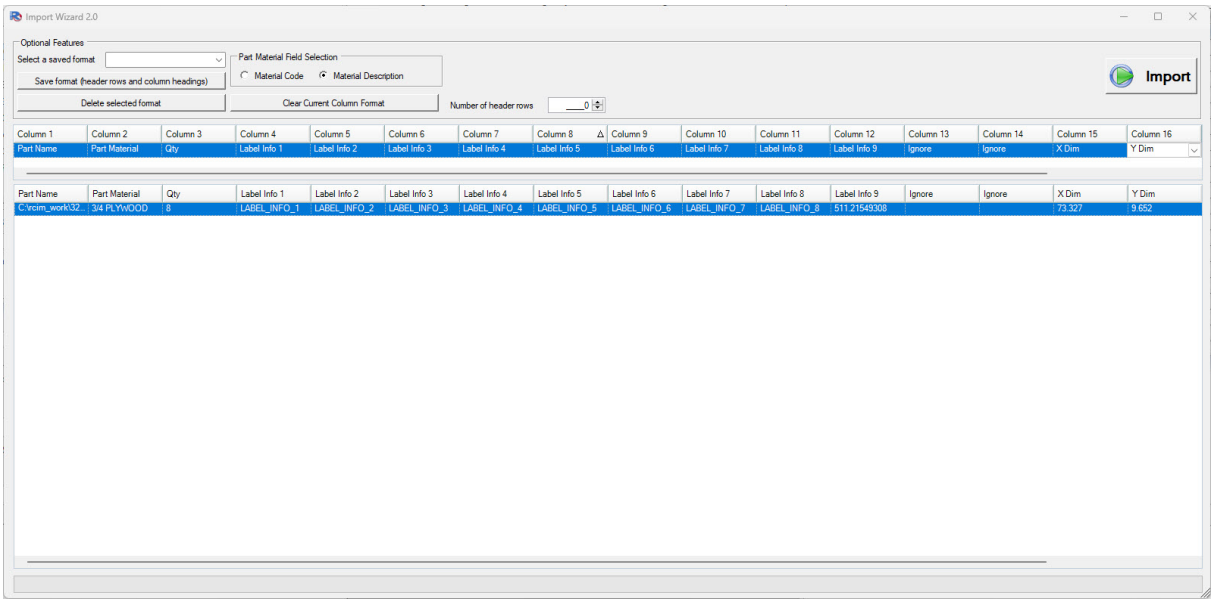
To import into Automation, open Automation and select **Import Wizards >> Excel and Comma Delimited (CSV) Import Wizard.**

Once you select this the import wizard will appear where you can select your CSV file.

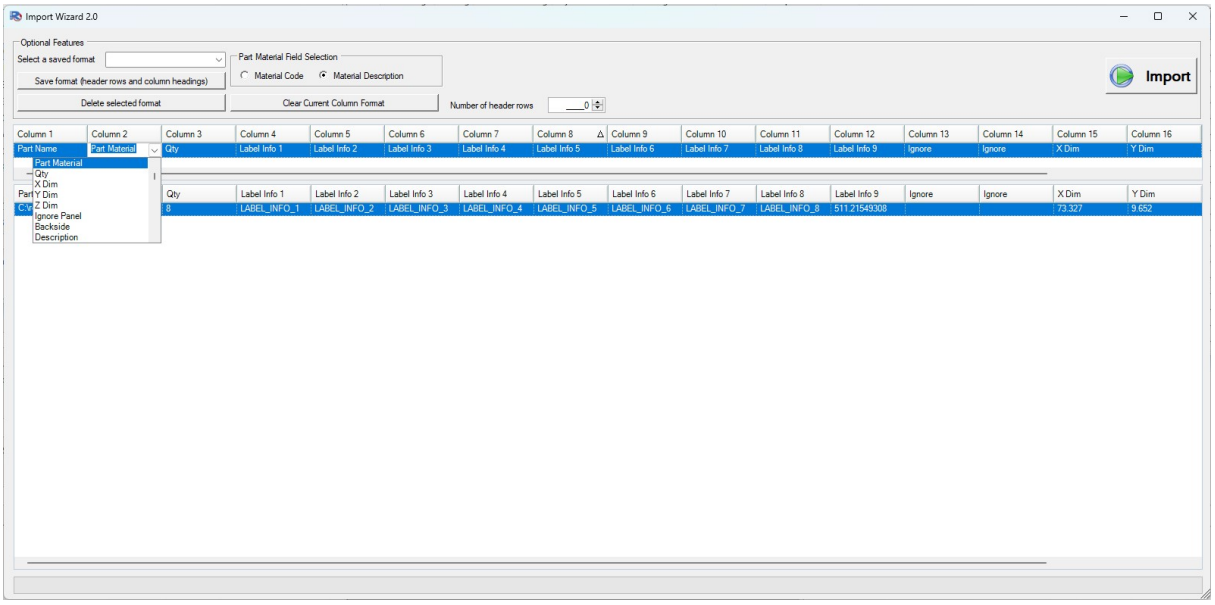
The CSV file should have the same name as the original drawing as well and should be the same name as the folder.



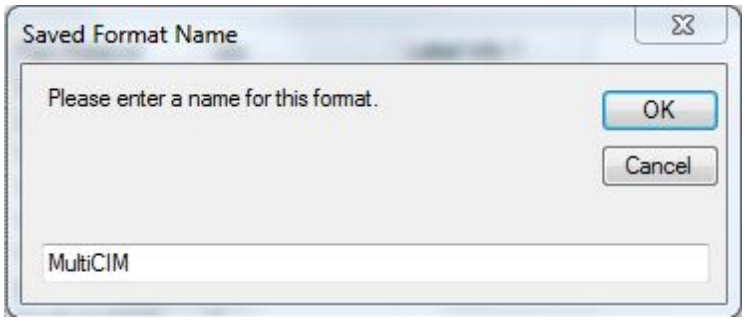
Once you select that file, it will be imported into the grid in Automation where you can select the format of the columns and save that format as a template to be used next time you import a CSV file from Multi-CIM.



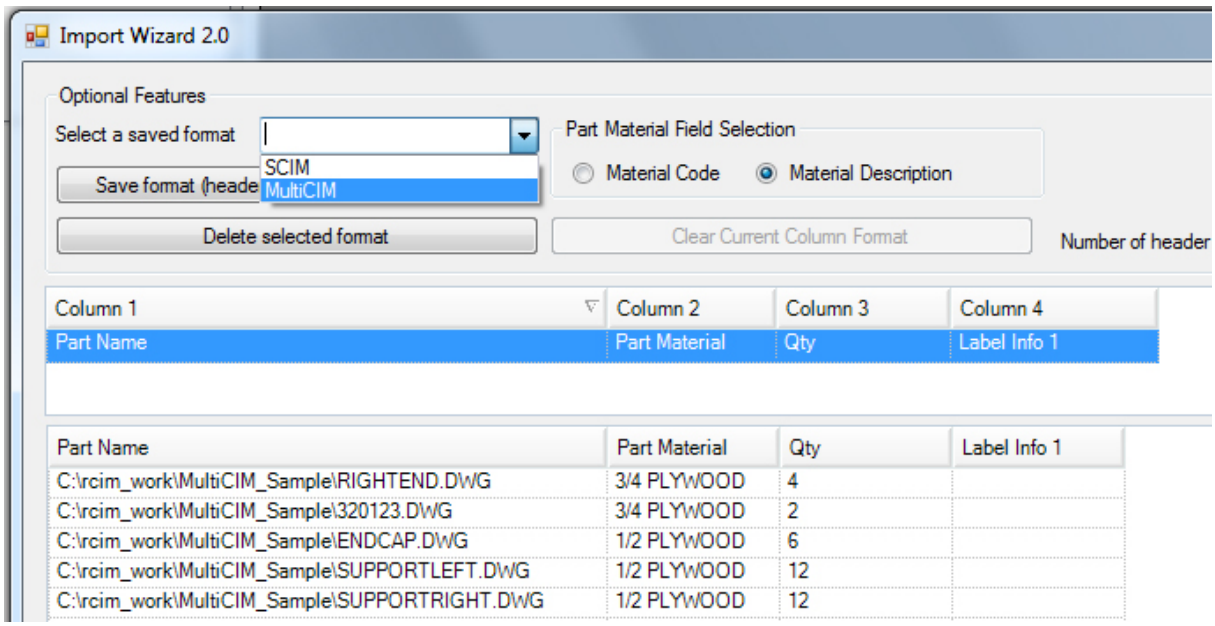
Pull down the column header that says **Select Data Type** above each row and set them to the correct fields. The first one is the **Part Name**, the second is the **Part Material** and the third is the **Quantity (Qty)**.



Once these are set, you can pick on Save Format, and a window will appear for you to input a name for that saved format.



Select OK, and that name will be added to the list above where **Select a saved format** shows up. In the future you can simply import your file, and then pick on this format and it will set the columns for you.



Once the columns have been assigned or a saved format has been applied, select the **'Import'** button and a job will be created in Router-CIM Automation Suite.

For more information in regards to executing a Router-CIM Automation Suite job, please refer to the Router-CIM Automation Suite help manual.

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