

Introduction

Wheeling Systems Validator is a Windows desktop application you can use to check the coverage of wheeling systems (coverings) and then upload them, if their coverage is 100%, to the Covering Repository website.

Starting from version 2 the download is only available to users with a valid subscription.

Please visit <http://www.coveringrepository.com> for more information.

System requirements

Operating system: Windows Vista SP2, Windows 7 SP1, Windows 8, Windows 8.1, Windows 10 or later.

Architecture: 32 or 64 bits

RAM: 2GB

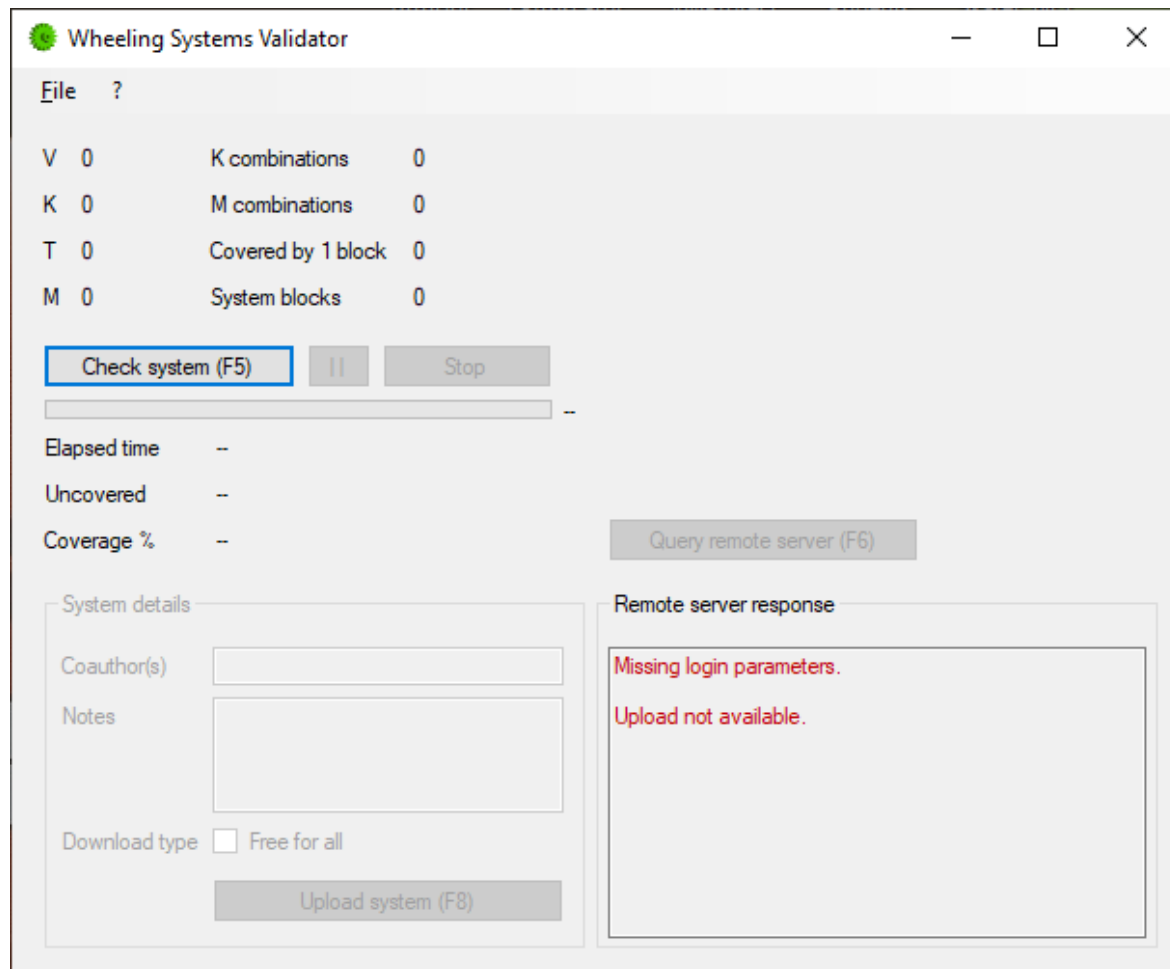
NOT WORKING on Windows XP

Tutorial

Launching the program

You can launch the program by clicking on the green gear desktop icon called Wheeling Systems Validator 2.

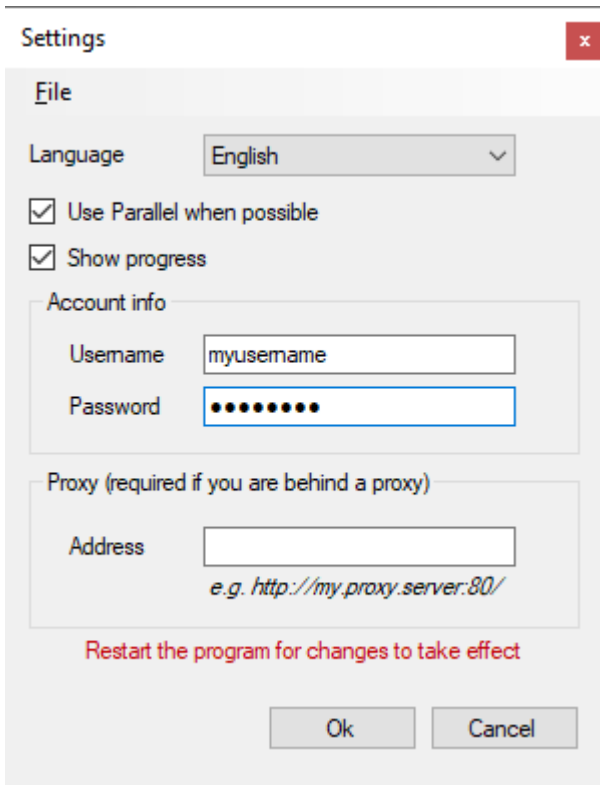
The first time you should see something like this



The red **Missing login parameters** basically means that the upload to the remote Covering Repository will not be available. If you are interested in uploading your coverings, you need a valid subscription which you can buy on the Covering Repository website at the following link:

<http://www.coveringrepository.com/subscribe.aspx>

To activate your subscription, go to **File -> Settings** and the following window will open.



Here you can fill the form with your credentials, add a proxy address if you are behind a proxy and set other things:

- Language – since version 1.0.9 you can change the language of the UI. English and Italian are the two options available but you can add your own language
- Use parallel when possible – for some coverings the program can use all the cores of your CPU to shorten the processing time
- Show progress – uncheck this if you don't want to see the green progress bar in the main window (sometimes it helps to reduce the processing time)

When you change Username and/or Password, you need to restart the program to verify if the remote server can validate your subscription on startup.

If everything goes well, when you restart the program a green message will tell you it's ok to upload your systems.



Loading a system from a .txt file

To load a system, go to **File -> Load system**

The program needs to know your V, K, T, M settings and you have a couple of options.

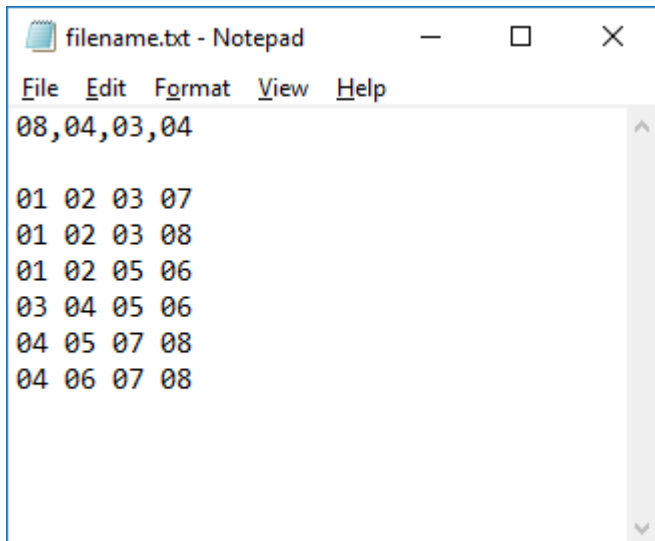
Option nr. 1

Put the parameters in the file name with comma separated values. The following formats are all valid:

8,4,3,4.txt
8,4,3,4=6.txt
8,4,3,4-6.txt
8,4,3,4_6.txt
08,04,03,04.txt
08,04,03,04=6.txt
08,04,03,04-6.txt
08,04,03,04_6.txt

Option nr. 2

Put the parameters in the first line inside your file



The system blocks can be written as follows

1 2 3 7
1 2 3 8
1 2 5 6
...
or
01 02 03 07
01 02 03 08
01 02 05 06
...

It is not necessary to write numbers in increasing order. The following blocks are also recognized:

02 07 01 03
08 01 03 02
06 05 02 01
...

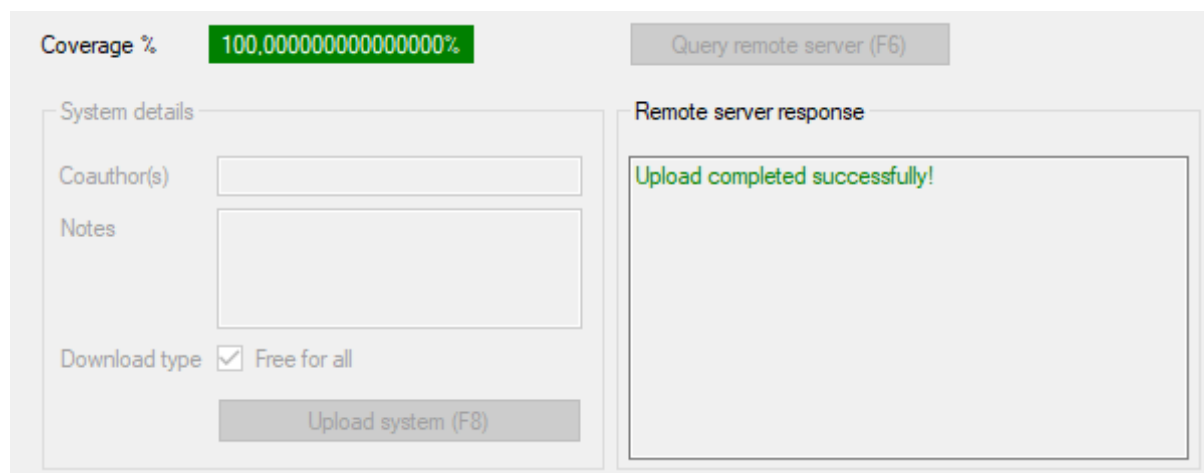
Checking/uploading a system

When the system is loaded, click the **Check System** button. If its coverage is 100%, the **Query remote server** button activates. Click it and the server will tell you if it's a new record or not.

If it's a new record, the **System Details** section activates and you can write the name of the coauthors, if any and some **Notes** (which method you used, which program and so on). Both fields are not mandatory.

If you select the "Free for all" checkbox, all users will be able to download it from the Covering Repository website regardless of a valid subscription.

Finally, click on the **Upload System** button and wait for the server response.



The screenshot displays a web interface for system management. At the top left, the 'Coverage %' is shown as '100.00000000000000%' in a green box. To its right is a grey button labeled 'Query remote server (F6)'. Below this, the 'System details' section contains three input fields: 'Coauthor(s)', 'Notes', and 'Download type'. The 'Download type' field has a checked checkbox next to the text 'Free for all'. At the bottom of this section is a grey button labeled 'Upload system (F8)'. To the right of the 'System details' section is a 'Remote server response' area, which contains a green message: 'Upload completed successfully!'.

Great! Your system is online.

If the server response was that something went wrong, you should save your system locally by clicking on **File -> Save as .wsvf**, then login on the Covering Repository website and try to upload it manually. Go to **Account -> Upload a cover** and follow the instructions.

Checking/uploading multiple systems (new in version 2.0.4+)

Starting from version 2.0.4 you can select multiple files to check and upload (**File -> Load systems**).

In this case the fields Coauthor(s), Notes and Download type are immediately enabled so you can fill them before the uploads take place. This is useful in case all the systems share the same details.

If the systems need different details, you can still upload them leaving the fields blank and then modify the details on the website once the upload is complete (**Account -> My coverings**).

If a system is taking too much time to verify, you can skip it by clicking the Stop button. The program will continue with the next file in the queue.

If, for some reason, some systems could not be uploaded (not 100% covered, not new records, network errors etc.) a final message box will give you the list of these files.

Please note: do not move, rename or delete the files you selected before the check is completed.

Union construction (new in version 2.0.5+)

Starting from version 2.0.5 you can create, then quickly verify, a system with a union construction technique (**File -> Union construction**).

The dialog box titled "Union construction" contains four panels for System 1, System 2, System 3, and System 4. Each panel has a "System X" button and a "Reset" button. Below each panel are five labels: V, K, T, M, and B, each followed by a dash. At the bottom, there is a "FINAL SYSTEM" section with five labels: V, K, T, M, and B, each followed by a dash. Below this section are three buttons: "Reset all", "Confirm", and "Cancel".

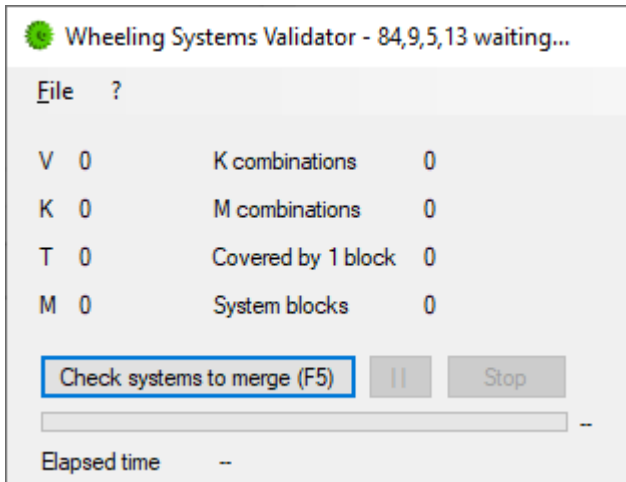
By clicking on System 1, 2, 3 and/or 4 buttons, you specify which files will make up the final system. The "FINAL SYSTEM" labels V, K, T, M and B tell you what the resulting system will look like as systems are added.

The dialog box titled "Union construction" shows the same layout as the previous screenshot, but with numerical values in the "FINAL SYSTEM" section. The "System 1" and "System 2" buttons are highlighted with blue boxes. The "V", "K", "T", "M", and "B" labels for System 1 and System 2 are also highlighted with red boxes. The "FINAL SYSTEM" section is highlighted with a red box and contains the following values:

	V	K	T	M	B
FINAL SYSTEM	84	09	05	13	3.648

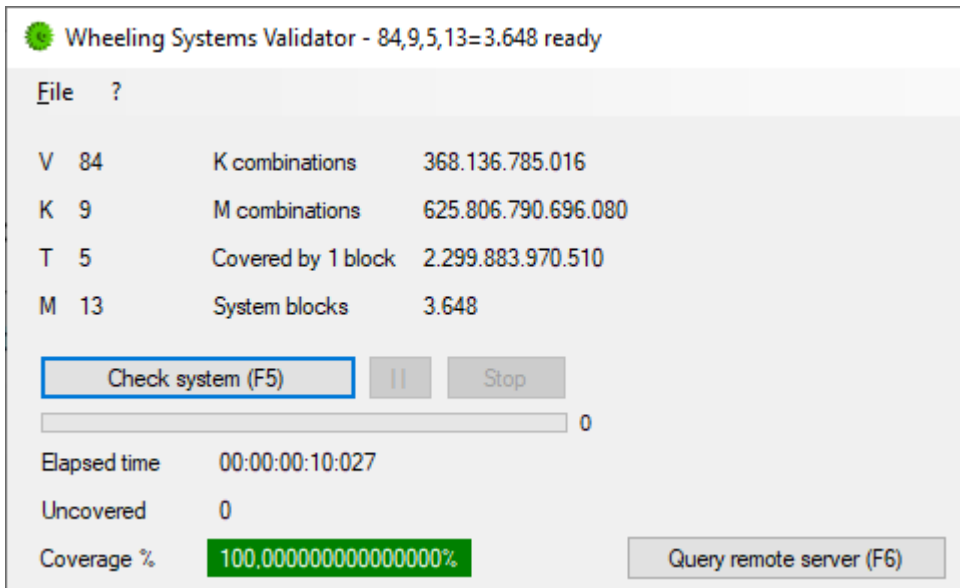
When finished, click on the **Confirm** button to return to the main form.

The “Check system” button text changes to “Check systems to merge (F5)”.



Click on it and the program will start to verify, one by one, all the systems you selected in the previous step.

If all the systems are verified and 100% covered, the final system is in memory and ready to upload.



In this example a system that would have taken hours to verify just took 10 seconds.

Now you can click on the **Query remote server** button and proceed with the same steps as described in the section “Checking/uploading a system” on page 5 of this manual.

You can also save the final system as a txt file (**File -> Save as .txt**)

If, for some reason, some systems could not be verified (not 100% covered, inconsistent rows etc.) a final message box will give you the list of these files.

Please note: do not move, rename or delete the files you selected before the check is completed.

This union construction technique allows you to create bigger systems starting from smaller ones.
If the smaller ones are 100% covered, it is safe to say that the final system will be 100% covered as well.

The final system will be in the format

$$(V1 + V2 \dots + Vn, K, T, M1 + M2 \dots + Mn - (n - 1)) = B1 + B2 \dots + Bn$$

e.g. Given 2 systems

$$(V1, K, T, M1) = B1 \text{ and } (V2, K, T, M2) = B2$$

the final system will be

$$(V1 + V2, K, T, M1 + M2 - 1) = B1 + B2$$

e.g. Given 3 systems

$$(V1, K, T, M1) = B1, (V2, K, T, M2) = B2 \text{ and } (V3, K, T, M3) = B3$$

the final system will be

$$(V1 + V2 + V3, K, T, M1 + M2 + M3 - 2) = B1 + B2 + B3$$

and so on...

e.g. 2 systems

$$21, 10, 04, 05 = 19$$

$$22, 10, 04, 05 = 22$$

$$43, 10, 04, 09 = 41$$

e.g. 3 systems

$$28, 09, 05, 05 = 1.216$$

$$28, 09, 05, 05 = 1.216$$

$$28, 09, 05, 05 = 1.216$$

$$84, 09, 05, 13 = 3.648$$

Adding another language for the UI (user interface)

Adding another language is quite simple. Open the installation folder, typically

“C:\Program Files (x86)\Giovanni Acerbi\Wheeling Systems Validator 2”

Inside the Translations folder there are two files: English.txt and Italiano.txt

Copy one of these two files, name it the way you like (e.g. Spanish.txt) and open it.

Now change the sentences to your liking, for example:

LoadSystem = Cargar el sistema

...

Restart the program, go to Settings and select the new language.

