

Validatrix for The Raiser's Edge

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Overview

Validatrix allows you to define data entry rules in The Raiser's Edge and decide how to deal with breaches of those rules. Validatrix can be purchased as part of the [Audit Trail Pro package](#), working along side the 'audit standards' or as a stand alone plug in.

Installation

When you download Validatrix from Zeidman Development and unzip the compressed file, there are two directories containing the applications to be installed. If you are installing Validatrix as part of Audit Trail Pro then ensure that you download the Audit Trail package rather than the standalone Validatrix download as the two are not compatible with each other. For Audit Trail Pro installation information see [Audit Trail Pro installation guide](#).

For the stand-alone version there will be two directories:

- Validatrix client installation – Installed on all RE users' machines
- Validatrix configuration - Installed on the machine of anyone who wishes to set-up data standards checks.

In general the installation is straightforward. In each case run the setup.exe file and follow the wizard.

Day to Day Usage

Setting up your validation rules can be complex and we advise you to spend some time planning them in advance of set-up. For examples and help on set up please take a look at our Validatrix 'Unraveling Rules and Dependencies document and our 'recipes' list for examples and solutions created by others.

The home screen shows you any rules already set up with a keyword search function across all the rules.

Using the arrowed file buttons at the bottom of the screen you can export rules to share with others and import those that others have created too. Take a look at our 'recipes' document for some ideas.

The buttons on the bottom left allow you to add, edit and remove rules and you can drag rules up and down to change priority order.



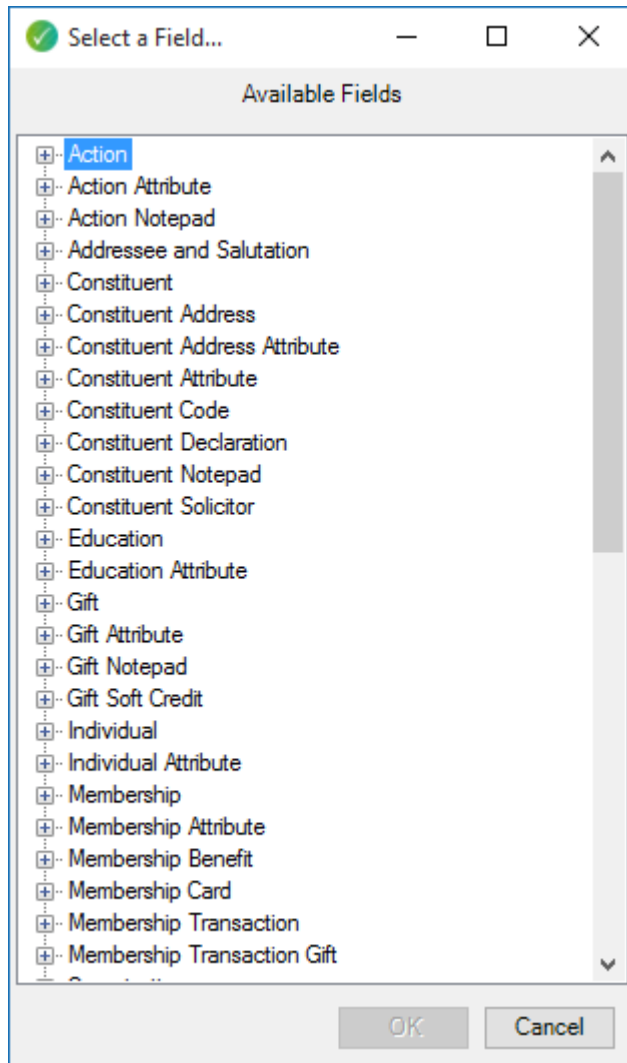
The screenshot shows the Validatrix application window. At the top left is the Validatrix logo and a search bar with the placeholder text "Enter Search Text". Below the search bar is a table with the following columns: Name, Audit Standard, Realtime Validation, Is a Dependant, Created By, and Created. The table contains 11 rows of audit standards. The first row is highlighted in blue. The bottom of the window features a toolbar with icons for adding (+), editing (pencil), deleting (X), and moving (up/down arrows) rows, along with a "Close" button and the instruction "Drag the rows up and down to change the priority order".

Name	Audit Standard	Realtime Validation	Is a Dependant	Created By	Created
concode is mailchimp and has give over 1000 - Constituent Code [...]				Supervisor	17/07/2015 12:25
concode is mailchimp and has give over 1000 - Gift Amount [0.1.1]			✓	Supervisor	17/07/2015 12:25
Email must be valid				Supervisor	07/09/2015 15:16
Cannot change first name				Supervisor	07/09/2015 17:28
constituent attribute date changed				Supervisor	08/09/2015 10:46
amount has changed		✓		Supervisor	08/09/2015 10:55
Inactive has changed				Supervisor	08/09/2015 10:59
First Name should not contain " and " or "&"				Supervisor	09/09/2015 11:01
Deceased Date		✓		Supervisor	17/09/2015 12:32
Deceased constituent?		✓	✓	Supervisor	17/09/2015 12:32

Basic set up is very straightforward, click on the + symbol to add a rule.

Firstly you'll need to select the field on which you want the rule to act upon from the dropdown. The rule will only act when the record that this field sits on is saved.





Overview

The overview tab shows you the field the rule acts on, you can give the rule a short name and a longer description.

If the rule field contains different types you can narrow the rule down further by selecting only one type for it to act on. If the field is a collection on the main record you can choose whether the rule applies to all child records or at least one child record, as seen below.



✕
Rule - Email must be valid

Overview Criterion Dependencies Realtime Validation Audit Standard

This rule will act on the Phone number field (on a Phone)

Rule Name

Description

If set then this rule will only apply to the following phone formats

This rule should apply to one or more Phone records
 This rule should apply to all Phone records
 Apply the rule even if there are no records in the collection

View
OK
Cancel

Criterion

The criterion tab allows you to set up how the rule will act, the options available will vary depending on the field you select; 'Total number' values, text fields, dropdown fields, date fields, number fields or tickboxes.

For text based fields, we have created a number of common rules (based on regular expressions) which you can select from.

Choose whether the rule should act when a record agrees or disagrees with the criterion.



All field types give you the option of checking whether the field value has changed or not.

For text fields and drop downs you can choose from any of the below regular expressions

- First letter is upper case
- Is UPPER CASE
- Is lower case
- Validate as an email address
- Is blank
- Is not blank

You can also select from the dropdown and enter text either using

- Is exactly
- Starts with
- Ends with
- Contains

And if the field is a dropdown field the 'is one of selection box will be populated, you can select more than one using CTRL/Click.

Alternatively you can create your own rule using regular expressions, if you are not familiar with regular expressions there is help available via a link in the plug-in or we can provide these for you as a service. Those users with active annual maintenance receive 2 bespoke regular expressions per year free of charge.



Rule - Email must be valid


Overview Criterion Dependencies Realtime Validation Audit Standard

Apply when the record agrees with the criterion
 Apply when the record disagrees with the criterion

Criterion

The record has changed
 First letter is upper case
 Is UPPER CASE
 Is lower case
 Validate as an email address
 Is blank
 Is not blank

 Is one of...

Create your own criterion using regular expressions 

`^[a-zA-Z0-9._%+]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

View OK Cancel

There are different options depending on the type of field you select:

For numeric and total number fields choose from:

- Equals
- Greater than
- Less than
- Does not equal



For date fields choose from:

- Is the same as
- Is after
- Is before
- Is different from

For tick boxes choose from:

- Is ticked
- Is not ticked

You can click on the 'view' button in the bottom left corner at any time to see a visual representation of the rule as a flow chart. This is the easiest way to check your logic.

Dependencies

The dependencies tab allows you to select any rules that work in conjunction with the parent rule.



The screenshot shows a dialog box titled "Rule - Email must be valid" with a close button (X) in the top right corner. The dialog has five tabs: "Overview", "Criterion", "Dependencies", "Realtime Validation", and "Audit Standard". The "Dependencies" tab is active. It contains three sections for defining dependency rules:

- All of these rules must be met:** A text input field, a green "+" button, and a red "X" button.
- At least one of these rules must be met:** A text input field, a green "+" button, and a red "X" button.
- None of these rules must be met:** A text input field, a green "+" button, and a red "X" button.

At the bottom of the dialog, there are three buttons: "View", "OK", and "Cancel".

The top box will check if the first dependent rule entered here is met. If it is your error message will not be displayed. If it is not, it will move onto the next one. If none of the rules are met it will display your error message.

The middle box will check if the first dependent rule entered here is met. If it is not your error message will not be displayed. If it is, it will move onto the next one and check that, if the rule is met your error message will be displayed,

The bottom box will check to ensure that no rule here is met. If a rule is met then your error message will be displayed. If no rule is met then then no error message will be displayed.



You can click on the 'view' button in the bottom left corner at any time to see a visual representation of the rule as a flow chart. This is the easiest way to check your logic.

For more information about rules and dependencies see our companion guide "Unraveling Rules and Deciphering Dependencies"

Realtime Validation

Here we can determine the user experience when entering or changing data that does not meet the requirements of this rule.

Realtime Validation Actions

What action should the validation take?

Simple message, cancel save

Message box not allowing user to proceed with save. On import, exception created

This is the default action for all users (can be updated when other actions are added)

Security Groups to exclude

Data Entry
Volunteers
Admin
limited

Security Groups to include

Applies to a supervisor user

Run on import

Dialog message

Email address - {Previous Value} - is invalid

[Insert Previous Value](#) [Insert Current Value](#)

OK Cancel

The first validation action will be the default and will apply to all users unless another action is added that applies to a specific security group.

Firstly, choose the action to take. You can select from:



-
- *Simple message, cancel save.* This will show the user the error message you type below and stop the user from continuing until they correct the error, remove the incorrect information altogether or revert to the previous value
 - *Simple message, revert to previous value and continue saving.* The record will close, the data entered is not saved but the user will receive the message you type in the box below.
 - *No message, revert to previous value and continue saving.* The record is closed, the data entered is not saved and the user won't be made aware of this.
 - *Yes, No, Cancel message.* The user is presented with these three options. Yes saves the value, No reverts to the previous value and saves, Cancel prevents the save.
 - *Ignore for these security groups.* This allows you to assign a rule only to certain RE users and ignore the users specified.

Using the tick boxes you can also additionally apply this action to the Supervisor user(s) and you can make this action a default for certain user groups, this means it will apply to any new user groups created after the actions are set up or any user groups that are not specified. Note that if you only create one action for the rule it is automatically the default and applied to all users whether specified or not.

Finally you can create your error message, obviously the way you word this will depend upon the action you selected above. You can choose to insert the previous and current values as merge fields in the text.

Some things to note:

- If a user is entering a new record the 'previous value' field will show as a blank.
- If you do a 'last changed date' rule that then saves a change please be aware that this will update the time stamp
- If you add a value that breaks the rule but give an option to save and revert to a previous value where it did not exist it will leave the field line but with no value. E.g. Email type line exists but a blank value

Audit Standards

For those users who have purchased Audit Trail Professional you can set an Audit Standard here too, this will feed into your Audit Viewer when reviewing changes made to the database.



Testing your Rule

Before rolling out your Validatrix rules to everybody in your organization we recommend testing them thoroughly.

There are often multiple ways of writing the same rule so there is not always a right way of doing it.

We recommend no more than three layers of dependencies. If you find that your dependencies are not work then try each dependency independently of the main rule.

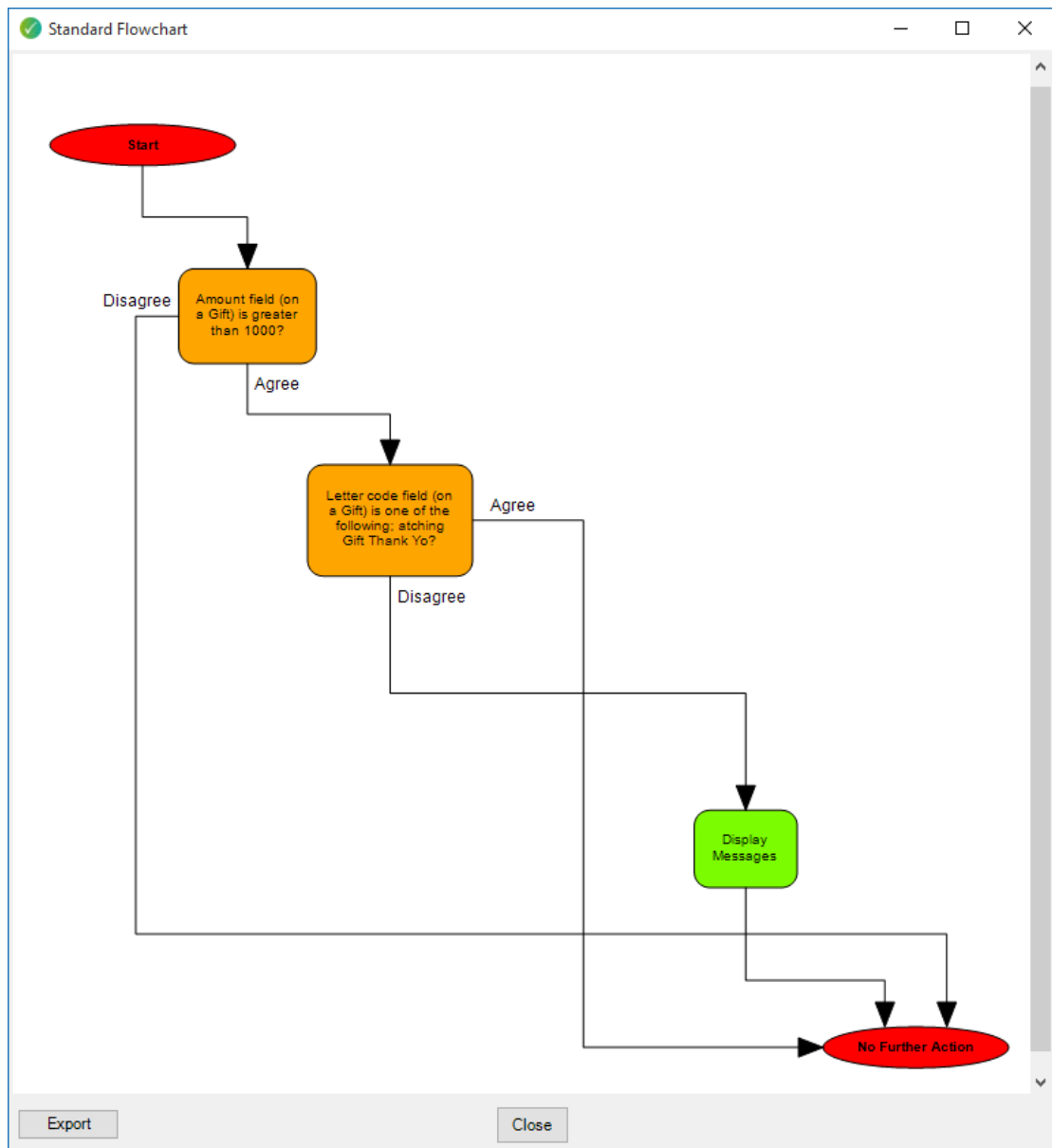
Do read our document *Unravelling Rules and Deciphering Dependencies* to get a good understanding of how the criteria work and how they work with dependencies.

Take a look at some of the [Validatrix recipes](#). These are ideas for rules that you can copy and adjust to suit your purpose.

View the rule

Check by looking at the View function on the rule. This will bring up a flowchart that takes you through the possibilities as shown below.





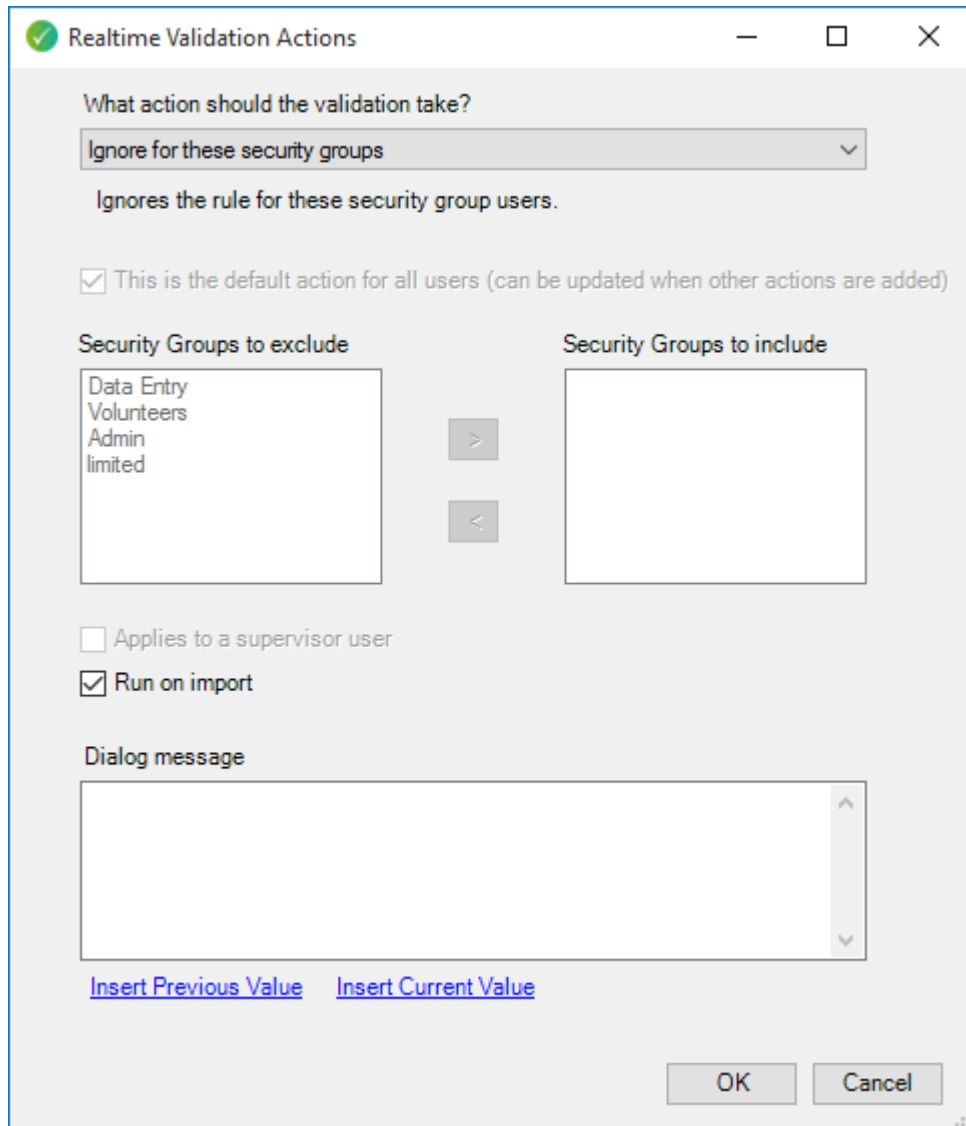
For the simpler rules this may not be necessary but where you have multiple dependencies this will be useful.

Assign a rule to your own security group only

Test your rule by making it only apply to your security group first. This can be done by setting up the default validation action as ignore and then setting up a message for your security group. These two actions are shown below.

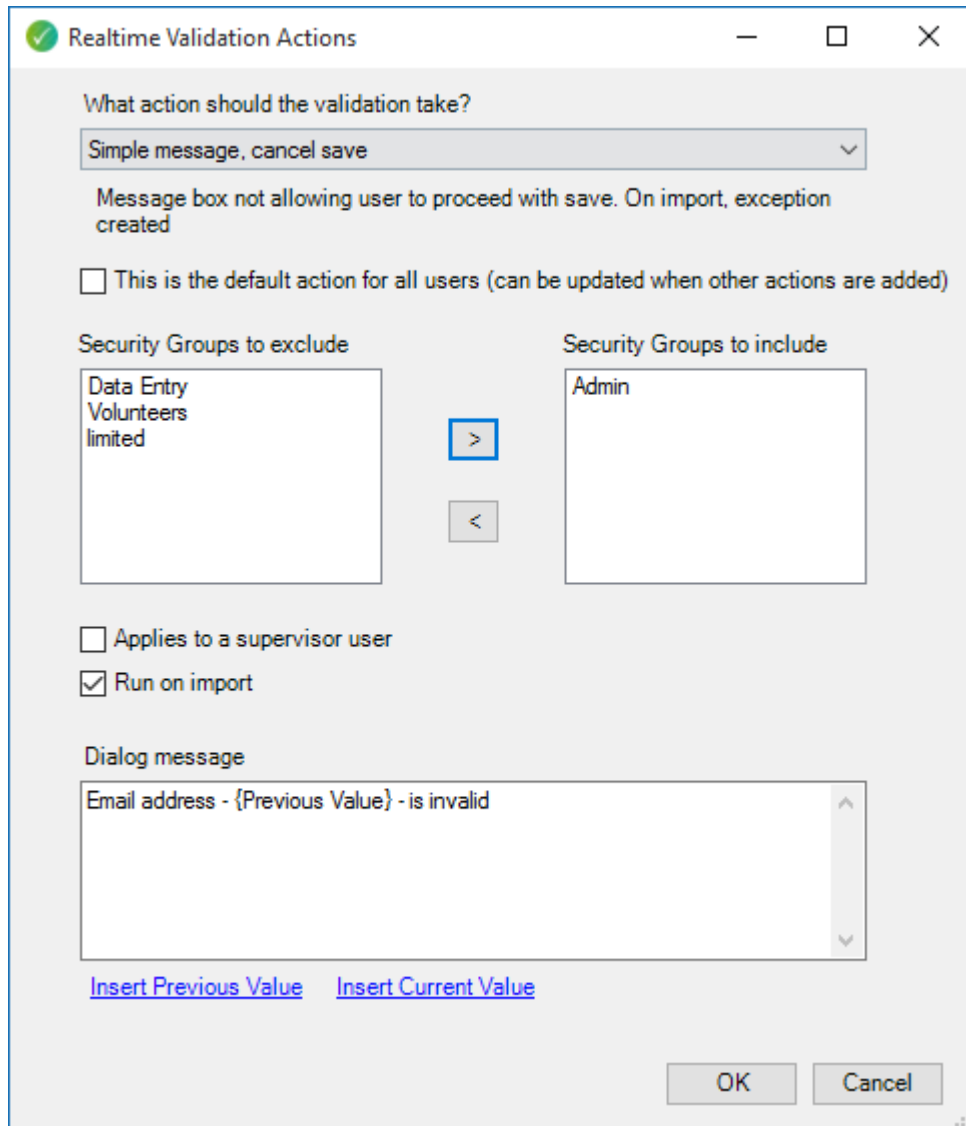
Firstly setup the default ignore:





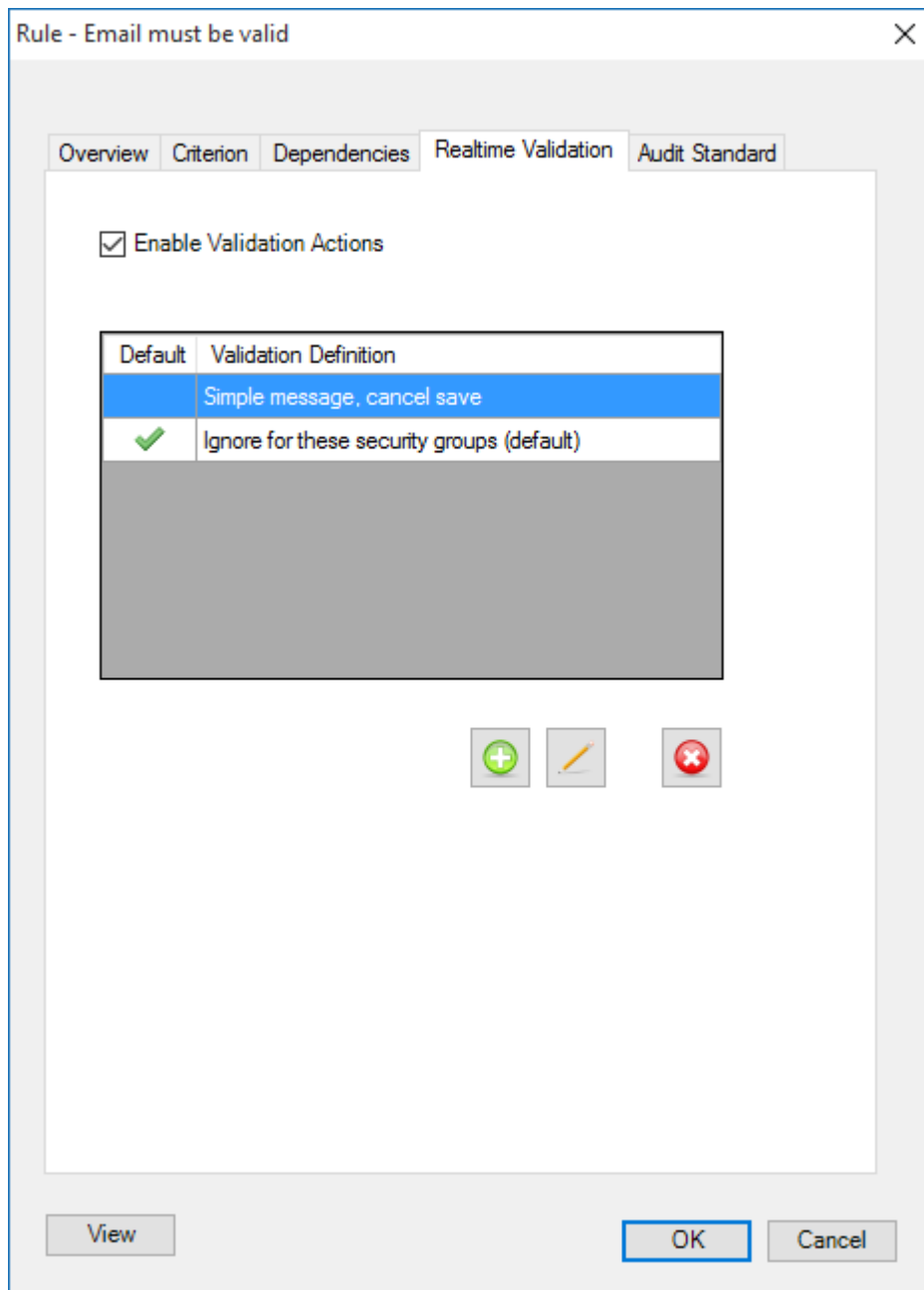
Then set up the rule for your security group.





Once you have saved the actions the action grid will look like this:





When you are happy that the rule works you can make the action with the message the default and then delete the ignore action.

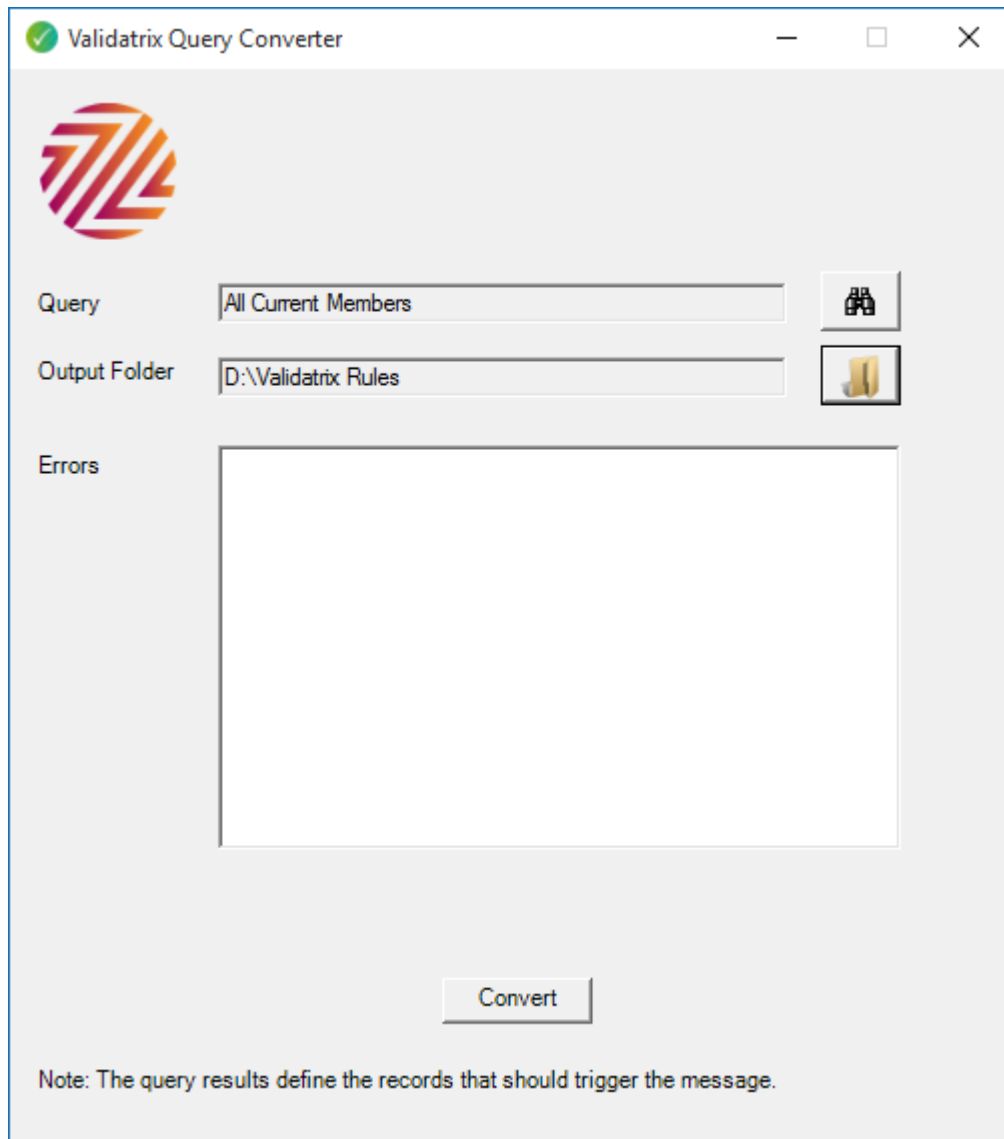


Validatrix Query Converter

The Validatrix Query Converter takes a Raiser's Edge query and converts it to a Validatrix rule that can be easily imported into the Validatrix Configuration module ready for use.

Steps for use

1. Firstly create a query in The Raiser's Edge. The records shown in the query results will be those where the rule fires and the message is shown.
2. In Validatrix Query Converter select the same query
3. Select a folder to store the converted rule files
4. Press the convert button.
5. The converted rule file will appear in the Windows explorer.

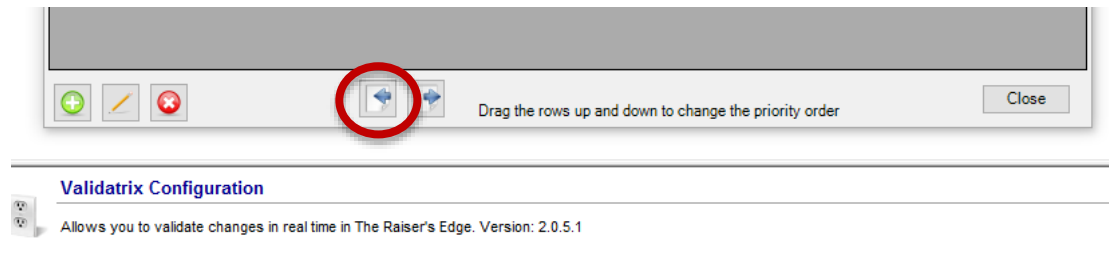


The screenshot shows the 'Validatrix Query Converter' application window. The title bar includes a green checkmark icon and the text 'Validatrix Query Converter'. The window contains a logo in the top left, a 'Query' text box with 'All Current Members' and a search icon, an 'Output Folder' text box with 'D:\Validatrix Rules' and a folder icon, and an 'Errors' text box with a large empty white area. A 'Convert' button is centered at the bottom. A note at the bottom reads: 'Note: The query results define the records that should trigger the message.'



If there are any errors in converting the rule, they will appear in the text box. Note that not every kind of query can be converted. There are things that query can do that Validatrix cannot do and vice versa. When a field or type of criteria is not supported then the error message will report this and the resulting file will be incomplete.

6. Import the rule file into Validatrix. This is done using the import button on the main Validatrix configuration as shown below.



Installation Notes

Note that Validatrix Query Converter is installed separately from the rest of Validatrix. The reason for this is because Validatrix only requires Microsoft.NET 3.5 whereas Validatrix Query Converter requires Microsoft.NET 4.0. At the time of writing both versions should be widely available and most likely already installed on the workstation using The Raiser's Edge. We have not bundled the two products in a single installer on the off chance that this is not the case.

