

# **Beginner – Data Quality**

### **Data Quality**

This application will allow you to execute data quality rules upon your project data to check for discrepancies in your data. Pre-defined data rules that are already developed for you in the application are for such things as missing values, field validation errors and outliers for numerical fields.

A "data quality rule" is a calculation expression that must evaluate to True or False. When a rule is executed on your project data any records for which the expression evaluates False can be viewed and potentially corrected.

The Data Quality page includes detailed instructions.

#### **Execute Rules**

Execute rules one at a time using Execute, or all together using All.

The Clear button refreshes the view to the state before any rules have been executed.

Data Quality Rules				Image: Secure rules: All All except A&B Clear   Apply to: All records ▼			
	Rule #	Rule Name	Rule Logic (Show discrepancy only if)	Real-time execution ?	Total Discrepancies	Delete rule?	
	A	Blank values*	-		Execute		
	В	Blank values* (required fields only)	-		Execute		

#### Discrepancies

Rules that identify discrepancies (i.e. where your project contains data for which the calculation expression returns False) are highlighted in red.

d	Field validation errors (out of range)	20 <del>0</del> 4	2	<u>view</u>
е	Outliers for numerical fields (numbers, integers, sliders, calc fields)		0	<u>view</u>

• Click view to see the records that fail the test.

Record (Sorted by DAG)	Discrepant fields with their values	Status	Exclude 😡
5	integer_with_range = <u>66</u> (min: 18, max: 65)	Out of range	exclude
1 (Group 2)	integer_with_range = <u>17</u> (min: 18, max: 65)	Out of range	<u>exclude</u>

- Navigate to the record / form that contains the discrepant value by clicking on the value
- Clicking exclude will mark a discrepant value as not to be included as a discrepancy in future executions of this rule Add a New Rule

Add a new rule by entering a description of the rule and the calculation expression. Then click Add.

	Num1 should be >= Num2	[num1] < [num2]	
Add	Enter descriptive name for new rule (e.g., Participants below age 18)	Enter logic for new rule (e.g., [age] < 18) How do I use special functions?	Execute in real time on data entry forms ?

For more information on calculation expressions see Calculated Fields. Remember that data quality rule expressions must evaluate to True or False.

Important Tip! If your expression includes a "less than" sign (<), ensure that you include a space after it (as shown above). This stops the page thinking that you're entering a potential harmful HTML tag and stripping out the remainder of your expression! Using "Less than or equal to" (<=) is fine – this problem does not occur.

## **Real Time Execution**

Ticking the Execute in real time option is a useful mechanism for performing cross-field validation checks during data entry. Rules where this option is ticked will be execute each time you save a data entry form that contains a field that is part of the expression.

Note that the rules are executed on data entry forms only: NOT when importing data via Data Import or API, and NOT during survey data entry.