

Filters for Objects, Events, Table Lists

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Filters are used to process and filter data, stored on the platform, to make it available anywhere via [hashtags](#) mechanism. It is a visual way to create SQL requests to data stored on the platform.

FILTERS' USAGE

Data sets that can be filtered	How to refer to filtered results	Where to reference Filtered data
<ul style="list-style-type: none">• Objects data• Events• Lists of Tables	<ul style="list-style-type: none">• Hashtags	<ul style="list-style-type: none">• in any Constructor Elements/Components• in Events creation hashtag as value• To define elements visibility logic• Loops for multiline/element data• Operations

This is how a set of Filters can look in you app:

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You can create Filters in **APP DATA** section for both Objects and Events ([ORANGE MARK](#)) , Add New Filter ([RED MARK](#)).

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+ ADD FILTER

Mobsted E... ☰

71

71 records

long time ago ↻

Average Age ☰

69.35

77 records

16 minutes ago ↻

Button Clic... ☰

39

39 records

more than two hours ago ↻

Create New Filter — OR — Choose from Existing filters

	Visible In Backend	Visible In Objects	Filter Name
⋮	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Mobsted Employees
⋮	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Average Age
⋮	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Button Clicked

You can make VISIBLE/INVISIBLE or HIDE/SHOW needed filters in your admin panels

Each Filter shows:

1. Aggregate function chosen - SUM, AVG, MIN, MAX, COUNT
2. Number of records fitting the conditions
3. When it was last time refreshed

Setting up an Events/Objects Filter

Create and Name a new Filter. Naming is very important, as you will refer to it's data using [Hashtags](#):

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Set up Events/Objects Filter's Conditions:

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1. Select the value to be compared. Possible options:

- Action name of the Event
 - Key of the [Event](#)
 - Object property, such as: Phone, Email, Login date.
2. Select the comparison criteria. Possible options:
- Equal (=) - strict match.
 - Not equal (<>)
 - Contains
 - Doesn't contain
 - Is Set - checks if the field specified is NOT empty
 - Is Not Set - checks if the field specified is empty
3. Select the comparison value. Possible options:
- String from the dropdown
 - Any text typed in manually

i Filters automatically pull data which you have in any of your tables. So, for example, if you have a Column called Email in Objects, then you'd be able to select it for checking.

SO - Make sure all data fields you need in filters are ALREADY CREATED.

EXAMPLE 1: Set up for **Object** filter that calculates the average age of people with [mobsted.com](#) email:

CONDITIONS



SORTING

AGGREGATE

EXAMPLE 2: Set up for **Event** filter that calculates the number of clicks on the button with the BackendName "updatePhone" within 7 days:

CONDITIONS

BackendName = updatePhone

SORTING

Properties

AGGREGATE

Properties COUNT

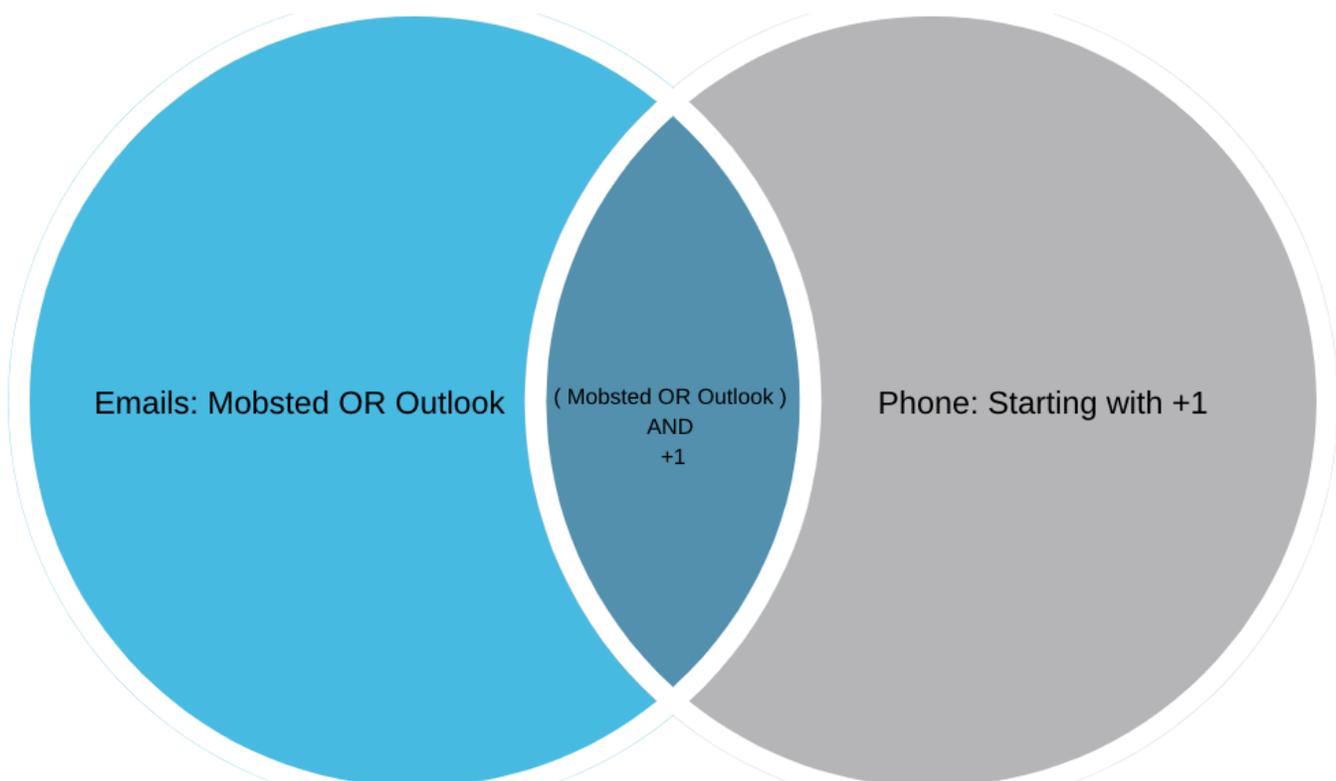
PERIOD

CreateDate running Younger than 7 days ago

Merge Results of Two Filters

Each Filter can ONLY contain either AND or OR condition. In order to have OR + AND conditions use server side [hashtags](#) within new filter.

EXAMPLE: we created the filter that will display everyone with email on Mobsted **OR** Outlook domain, **and** who has US phone number.



1. First filter will contain the required Email condition, we will name it as **Email**.

CONDITIONS

The screenshot shows a filter configuration interface. On the left, there are two buttons: 'AND' (highlighted in blue) and 'OR'. To the right, there are two filter conditions stacked vertically. Each condition consists of a dropdown menu with 'Email' selected, a small 'A' icon, a dropdown menu with 'contains' selected, and another dropdown menu with 'mobsted' (top) and 'outlook' (bottom) selected. Each condition has a small 'x' icon to its right. A vertical line connects the 'AND' button to the first filter condition.

2. Second filter will contain the required phone condition merged (AND operator) with the **Email** filter above.

CONDITIONS

The screenshot shows a filter configuration interface. On the left, there are two buttons: 'AND' (highlighted in blue) and 'OR'. To the right, there are two filter conditions stacked vertically. The top condition consists of a dropdown menu with 'Phone' selected, a small 'A' icon, a dropdown menu with 'contains' selected, and another dropdown menu with '+1' selected. The bottom condition consists of a dropdown menu with 'Email' selected, a small 'A' icon, a dropdown menu with 'contains' selected, and a text input field containing '#ServerSide:ObjectsFilter:Email:Data@join(\", \"objects@Email\")#'. Each condition has a small 'x' icon to its right. A vertical line connects the 'AND' button to the top filter condition.

You need to use this hashtag to render filter's results in server side and pull it into second filter's conditions - #ServerSide:ObjectsFilter:**NAME**:Data@join(",", "objects@id")#

Where two variable are: **NAME** - is how you call the FIRST filter, **ID** is a common field used to "join" the results with.

USE PERIOD SETTING

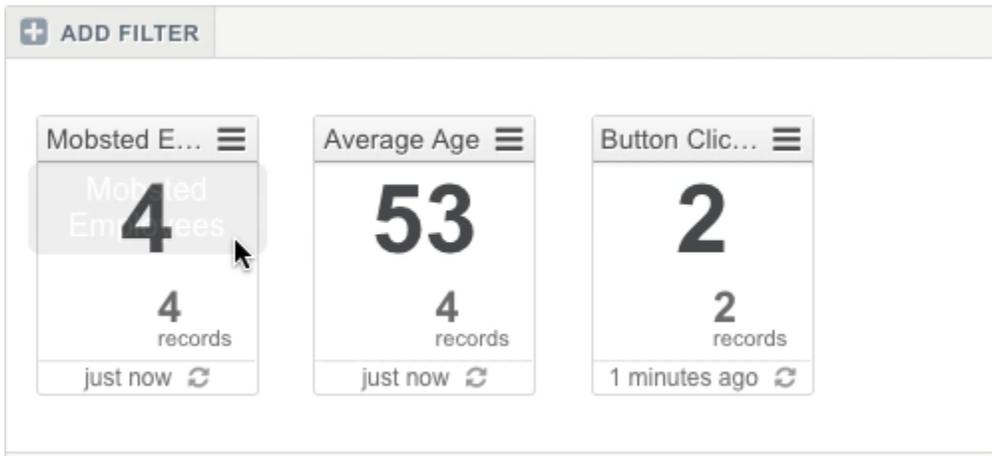
Set up a time period the filter will be applied on. Time period can be fixed between dates specified, or dynamic - older than 2 days / younger than 3 weeks. Can be used with OR or AND conditions, but not combined.

PERIOD

The screenshot shows a period setting interface. On the left, there are two buttons: 'AND' (highlighted in blue) and 'OR'. To the right, there are two period filters stacked vertically. The top filter consists of a dropdown menu with 'CreateDate' selected, a calendar icon, a dropdown menu with 'fixed' selected, a dropdown menu with 'between' selected, two text input fields with '05.03.2019' and '20.03.2019', a dropdown menu with 'and' selected, and a small 'x' icon. The bottom filter consists of a dropdown menu with 'UpdateDate' selected, a calendar icon, a dropdown menu with 'running' selected, a dropdown menu with 'Younger than' selected, a text input field with '2', a dropdown menu with 'weeks' selected, a dropdown menu with 'ago' selected, and a small 'x' icon. Below the filters, there is a blue circular button with a white plus sign.

PREVIEW YOUR FILTER RESULTS

Click on the filter to see all the data applicable to it. To see all the data click again on the filter to unselect it.

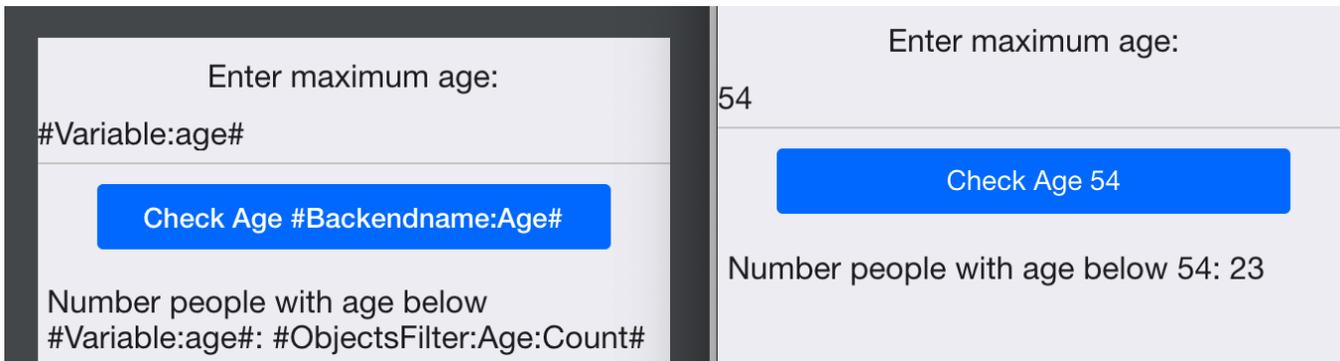


Use Filter Results on App Screen

It is possible to display filter results to app user by using [Hashtags](#).

SHOWING SINGLE FILTER RESULT

Showing filter counts: We use Hashtags to refer to Object's Filter "Age" and show the Count of matching records - `#ObjectsFilter:Age:Count#`



i To see how it is set up go to the **Demo App** in your account, screen name - **"Filters Count"**.

SHOWING AN ARRAY OF FILTER RESULTS

Iterating through filter records: We use [Hashtags](#) functionality combined with loops to go through each record. How to set it up:

1. Enable loop on the element you want to iterate
2. Use your filter data as data source. In our case it is **#ObjectsFilter:AgeEmail:Data#**
3. Name the loop. In our case it is **AgeEmailLoop**
4. Reference the loop and call the properties of the Object that you want to display, in our case it is **Name (#Loop:AgeEmailLoop:objects@Name#)** and **Age (#Loop:AgeEmailLoop:objects@Age#)**.

All users with gmail.com email filtered by age

All Gmail Users:

Employee: #Loop:EmailLoop:objects@Name# |
Age: #Loop:EmailLoop:objects@Age#

#Variable:age#

Less than Age #Backendname:Age#

Filtered data:

Employee:
#Loop:AgeEmailLoop:objects@Name# |
Age: #Loop:AgeEmailLoop:objects@Age#

Hidden

Show conditions

#Variable:click = 1

+ Add OR block

LOOP

Enabled

Data Source

#ObjectsFilter:Age and Email:Data#

Loop Name

AgeEmailLoop

AND Resulting view in app:

Filtered data:

Employee: Jeorge | Age: 23

Employee: Donald | Age: 32

Employee: Mick | Age: 49

Employee: Paul | Age: 37

 To see how it is set up go to the **Demo App** in your account, screen name - "**Filters Iterate**". Also Refer to [Loops](#) article on details of looping arrays of data.

Filtering Lists of Data Tables

This functionality is not yet visually shown (like in Objects/Events. However it is 100% up and running on a backend of Mobsted. Write to support@mobsted.com and we will create any number of Filters needed for you - **it is free of charge.**

- [View and Manage Sub-Accounts](#)
- [Create Sub-Accounts Manually](#)
- [Send Push to Android and iOS](#)
- [Create Sub-Accounts by API](#)
- [Create Apps by API](#)