

Creating and editing a recommendation strategy

Learn how to create and edit a [recommendation strategy](#), and define the settings for the strategy.

- [Quick start](#)
- [Creating a recommendation strategy](#)
- [Editing a recommendation strategy](#)
- [Previewing the recommendation data of a strategy](#)
- [Recommendation strategy settings](#)
 - [Supported algorithms](#)
 - [Filter settings](#)
 - [Filter examples](#)

Quick start

To get started, watch the following tutorial on how to create and use a simple recommendation strategy.

Creating a recommendation strategy

To create a recommendation strategy:

1. In the Frosmo Control Panel, select **Data Management > Recommendations > Strategies**.
2. Click **Create recommendation strategy**.
3. Define the [recommendation strategy settings](#).

The screenshot shows a form for creating a recommendation strategy. It includes the following sections:

- Name ***: A text input field.
- ID ***: A text input field with a note: "The ID is automatically generated based on the name. You can edit the ID when you create a new strategy, but only until you save the strategy for the first time. [Learn more](#)".
- Description**: A large text area for a description.
- Page type ***: A dropdown menu with "other" selected. Note: "Select the type of page on which the recommendation is displayed. [Learn more](#)".
- Fixed items**: A section with a note: "Define items that are always displayed in the recommendation. The algorithms, filters, and shuffling do not apply to these items. [Learn more](#)". It includes an "Add item" button.
- Algorithms**: A section with a note: "Select the algorithms for the strategy, and set the number of items returned by each algorithm. [Learn more](#)". It shows a dropdown menu with "Most viewed on the site in the past 2" and a text input with "5" and "items". It includes an "Add algorithm" button.
- Filters**: A section with a note: "Create filters to further refine the set of items returned by the strategy. [Learn more](#)". It includes an "Add filter" button.
- Affinity**: A section with a note: "Set the level of visitor affinity applied to the recommendation. The higher the level, the more personalized the set of recommended items is for each visitor. [Learn more](#)". It features a horizontal slider from "No affinity applied" to "Full affinity applied".

4. When you're done, click **Save**. The Frosmo Platform generates the [recommendation data](#) for the new strategy. The data generation may take several minutes.
5. Once the recommendation data has been successfully generated, [preview the data](#).
6. To return to the recommendation strategies list, click **Cancel**.

You can now use the strategy in a modification to build and display a [recommendation](#).

Editing a recommendation strategy

 Be careful when editing a recommendation strategy that is in use, since changes to the strategy affect all modifications that use it. In particular, if you edit a strategy that is currently used in an active variation of an active modification, the changes will affect all visitors who see the variation content.

 If you want to make major changes to a strategy, such as change its algorithms or filters, it is recommended that you first [duplicate the strategy](#) and associated [modification](#), test the changes with the duplicates, and update the original strategy only after you're happy with how its duplicate works. You might even consider switching to using the duplicate strategy, while leaving the original unchanged. This way, you can always revert back to the original strategy, if necessary.

To edit a recommendation strategy:

1. In the Frosmo Control Panel, select **Data Management > Recommendations > Strategies**.
2. In the recommendation strategies list, find the strategy you want to edit, and click its name.
3. Edit the [recommendation strategy settings](#).
4. When you're done, click **Save**. The Frosmo Platform regenerates the [recommendation data](#) for the updated strategy. The data generation may take several minutes.
5. Once the recommendation data has been successfully generated, [preview the data](#).
6. To return to the recommendation strategies list, click **Cancel**.

Previewing the recommendation data of a strategy

 The preview does not work for [algorithms](#) that rely on data about the current visitor's behavior, such as **Most viewed by the visitor** and **Recently viewed by the visitor**. In addition, the preview does not account for [affinity](#), as that, too, relies on data about the current visitor.

 The platform automatically regenerates the recommendation data at regular time intervals. The exact regeneration frequency depends on the [algorithms](#) used by a strategy.

To preview the latest [recommendation data](#) generated for a strategy, in the strategy settings, scroll to the **Preview** section, and view the recommendation results.

The preview displays the recommended items in slot order, that is, in the order in which the items are recommended to visitors (when not adjusted for affinity). The preview also displays selected information, such as ID and name, for each item. Finally, the preview provides two links for each item: one to the item details page in the Frosmo Control Panel, and the other to the item page on the site, such as a product page.

Preview

Preview the items returned by the strategy. [Learn more](#)

Slot	ID	Name	Image	Price	Type	Algorithm	Item details
1	23	Lipstick		20	Makeup/Makeup Products	Most viewed on the site in recent weeks	Details Page
2	2	IRadix DPS3000SY 2700 Watts		580	Power Tools/Saws	Most viewed on the site in recent weeks	Details Page
3	37	Blue Golf Shoes		180	Fashion/Shoes	Most viewed on the site in recent weeks	Details Page
4	5	Brandix Router Power Tool 2017ERXPK		1700	Power Tools/Woodworking	Most viewed on the site in recent weeks	Details Page
5	1	Electric Planer Brandix KL370090G 300 Watts		510	Power Tools/Woodworking	Most viewed on the site in recent weeks	Details Page
6	10	Water Tap		15	Other/Plumbing	Most viewed on the site in recent weeks	Details Page
7	14	Brandix Air Compressor DELTAKX500		1800	Other/Compressors	Most viewed on the site in recent weeks	Details Page
8	16	Brandix Screwdriver SCREW1500ACC		1500	Power Tools/Drills	Most viewed on the site in recent weeks	Details Page

[Save and generate](#)

If the strategy relies on a target category or item against which to generate recommendations, enter the name of a category or item, and click **Show**. The name must be the exact full name tracked for the category or item by the Frosmo Platform.

Preview

Preview the items returned by the strategy. [Learn more](#)

To preview data for algorithms that rely on a target category or item against which to generate recommendations, enter the name of a category or item, and click **Show**. It may take up to a few minutes to generate the preview.

Based on category [Show](#)

Slot	ID	Name	Image	Price	Type	Algorithm	Item details
1	2	IRadix DPS3000SY 2700 Watts		580	Power Tools/Saws	Most viewed on the site in recent weeks	Details Page

[Save and generate](#)

If you [edit the strategy](#), you need to regenerate the recommendation data to preview it. To regenerate the data, click **Save and generate**.

Preview

Preview the items returned by the strategy. [Learn more](#)

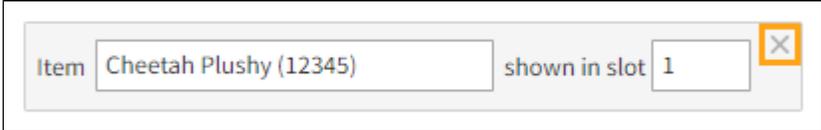
Regenerate the preview.

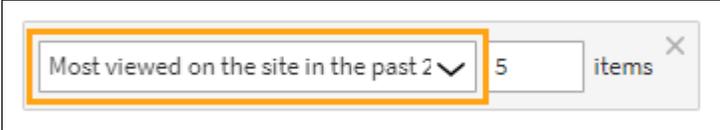
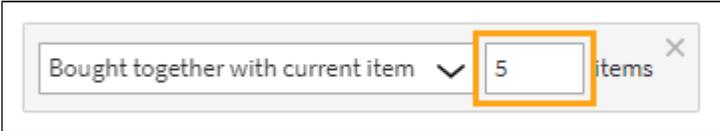
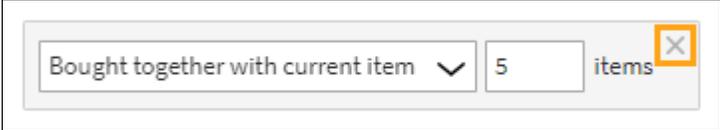
[Save and generate](#)

Recommendation strategy settings

The following table describes the settings you can define for a recommendation strategy in the Frosmo Control Panel.

Table: Recommendation strategy settings

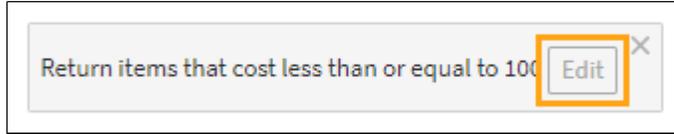
Setting	Description	Role
Name	Enter a name for the strategy.	Required
ID	The Control Panel automatically generates a unique ID for the strategy based on the name. You can edit the ID when you create a new strategy, but only until you save the strategy for the first time. Once you save the strategy, the ID becomes non-editable.	Required
Description	Enter a description for the strategy. You can use the description to, for example, explain what sort of recommendation the strategy generates.	Optional
Page type	Select the type of page on which the recommendation is displayed. The page type determines the available algorithms . The available page types are: <ul style="list-style-type: none"> • cart: Shopping cart page or other checkout funnel page. • category: Any page that displays information about multiple items belonging to the same group. For example: game category page, product category page • other: Any page that does not match the other types. For example: site home page, user profile page • product: Any page that displays detailed information about a single product or other item. For example: product page • search: Search results page. 	Required
Fixed items	<p>Define the items that are always included ("fixed") in the recommendation.</p> <p>You must at minimum define either one algorithm or one fixed item for the strategy.</p> <p>If a fixed item also appears in the results generated by an algorithm, the platform automatically removes the duplicate from the final set of items returned by the strategy.</p> <p>Adding a fixed item</p> <p>To add a fixed item:</p> <ol style="list-style-type: none"> 1. Click Add item. The Control Panel adds an undefined item. 2. In the empty field, start typing the item name or ID, and select the item you want. The field automatically lists items tracked for the site.  <ol style="list-style-type: none"> 3. Enter the slot number for the item. The slot number determines the item's absolute position in the recommendation results. The position is not affected by algorithms, filters, or shuffling. For example, if you set the slot number to "1", the item is always displayed first in the recommendation. You cannot enter the same slot number for multiple items.  <p>Editing a fixed item</p> <p>You can change the selected item and slot number of a fixed item.</p> <p>Removing a fixed item</p> <p>To remove a fixed item, click  for the item.</p> 	Optional

<p>Algorithms</p>	<p>Select the algorithms for the strategy. The algorithms together determine the dynamically generated set of items returned by the strategy. You can further refine the set by applying filters and affinity.</p> <p>You must at minimum define either one algorithm or one fixed item for the strategy.</p> <p>You can select a maximum of five algorithms. A new strategy includes a single preselected algorithm, which you can change.</p> <p>How algorithms work</p> <p>The platform runs each algorithm separately against the same source usage data and combines the results from the algorithms in the order in which the algorithms are selected. For example, if you have Bought together with current item - 60 days with 5 items as your first algorithm and Viewed together with current item - 30 days with 3 items as your second algorithm, the strategy returns a total of eight items: the first five items are the top five items from the former algorithm and the remaining three items are the top three items from the latter algorithm.</p> <p>The platform automatically reruns the algorithms at regular time intervals, thereby periodically regenerating the recommendation data returned by the strategy. The platform reruns each algorithm separately based on its regeneration frequency. If you select multiple algorithms with different regeneration frequencies, some parts of the data returned by the strategy will be updated more frequently than other parts. To find out the frequency of an algorithm, see Supported algorithms.</p> <p>Adding an algorithm</p> <p>To add an algorithm:</p> <ol style="list-style-type: none"> 1. Click Add algorithm. The Control Panel adds an algorithm with default settings. 2. Select the algorithm you want to use. For more information about the supported algorithms, see Supported algorithms.  <ol style="list-style-type: none"> 3. Enter the maximum number of items returned by the algorithm. The algorithm will always return this many items, unless it cannot find enough items matching its criteria.  <p>Changing an algorithm</p> <p>You can change the selected algorithm and the maximum number of items returned by the algorithm.</p> <p>Removing an algorithm</p> <p>To remove an algorithm, click  for the algorithm.</p> 	<p>Optional</p>
<p>Filters</p>	<p>Create filters to further refine the set of items returned by the strategy. You can also apply predefined filters available to certain page types</p> <p>The platform applies the filters separately to the full results of each algorithm, removing items based on the filter settings. The platform then picks the top items for each algorithm, and combines the top items and any fixed items into the final set of recommended items returned by the strategy.</p> <div style="border: 1px solid #ffc107; padding: 5px; margin: 10px 0;">  The platform does not apply filters to the results of the Most viewed by the visitor and Recently viewed by the visitor algorithms. </div> <p>Adding a filter</p> <p>To add a filter:</p> <ol style="list-style-type: none"> 1. Click Add filter. The filter settings open. 2. Define the filter settings. 3. Click Save. 	<p>Optional</p>

Editing a filter

To edit a filter:

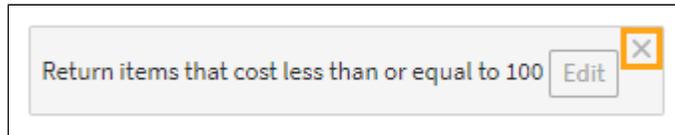
1. Click **Edit** for the filter. The filter settings open.



2. Edit the [filter settings](#).
3. Click **Save**.

Removing a filter

To remove a filter, click  for the filter.



Limiting the results to the viewed category

If the **Page type** of the strategy is **category**, and if you only want to return items that belong to the category currently viewed by the visitor, select **Only return items whose type matches the viewed category** or **Only return items whose categories include the viewed category**, or both. Your selection depends on whether item data for your site uses the `type` (string) or `categories` (array of strings) attribute, or both, for storing category information.

If you select both options, the strategy only returns items that pass both filters.

<input checked="" type="checkbox"/> Only return items whose type matches the viewed category
<input type="checkbox"/> Only return items whose categories include the viewed category

Limiting the results to the viewed item's categories

If the **Page type** of the strategy is **product**, and if you only want to return items that belong to the same category or categories as the item currently viewed by the visitor, select **Only return items whose type is the same as the viewed item's** or **Only return items whose categories include at least one category to which the viewed item belongs**, or both. Your selection depends on whether item data for your site uses the `type` (string) or `categories` (array of strings) attribute, or both, for storing category information.

If you select both options, the strategy only returns items that pass both filters.

<input checked="" type="checkbox"/> Only return items whose type is the same as the viewed item's
<input type="checkbox"/> Only return items whose categories include at least one category to which the viewed item belongs

Limiting the results to searched categories

If the **Page type** of the strategy is **search**, and if you only want to return items that belong to the same category or categories as the items returned by the search, select **Only return items whose type matches a searched category** or **Only return items whose categories include a searched category**, or both. Your selection depends on whether item data for your site uses the `type` (string) or `categories` (array of strings) attribute, or both, for storing category information.

If you select both options, the strategy only returns items that pass both filters.

<input checked="" type="checkbox"/> Only return items whose type matches a searched category
<input type="checkbox"/> Only return items whose categories include a searched category

Affinity	<p>Set the level of visitor affinity applied to the recommendation. The higher the level, the more personalized the set of recommended items is for each individual visitor.</p> <p>The platform applies affinity separately to the full results of each algorithm, after first applying filters to the results. Applying affinity reorders (reranks) the items to a greater or lesser degree depending on the level of affinity selected and how closely a given visitor's affinities match the algorithm results.</p> <p>The possible slider values are:</p> <ul style="list-style-type: none">• 0% (no affinity applied, an algorithm fully determines how the items it returns are ranked)• 25%• 50% (affinity and algorithm have equal weight in determining how the items returned by an algorithm are ranked)• 75%• 100% (affinity fully determines how the items returned by an algorithm are ranked) <p>If a visitor's affinity is not known, the platform does not apply any affinity to the recommendation for that visitor.</p> <p>For more information about affinity and how it works, see Feature: Affinity.</p>	Required
-----------------	--	----------

Name *

Product page - Customers also bought

ID *

The ID is automatically generated based on the name. You can edit the ID when you create a new strategy, but only until you save the strategy for the first time. [Learn more](#)

product-page---customers-also-bought

Description

Page type *

Select the type of page on which the recommendation is displayed. [Learn more](#)

product ▾

Fixed items

Define items that are always displayed in the recommendation. The algorithms, filters, and shuffling do not apply to these items. [Learn more](#)

Item shown in slot ×

Add item

Algorithms

Select the algorithms for the strategy, and set the number of items returned by each algorithm. [Learn more](#)

▾ items ×

Add algorithm

Filters

Create filters to further refine the set of items returned by the strategy. [Learn more](#)

Only return items whose **type** is the same as the viewed item's

Only return items whose **categories** include at least one category to which the viewed item belongs

×

Add filter

Affinity

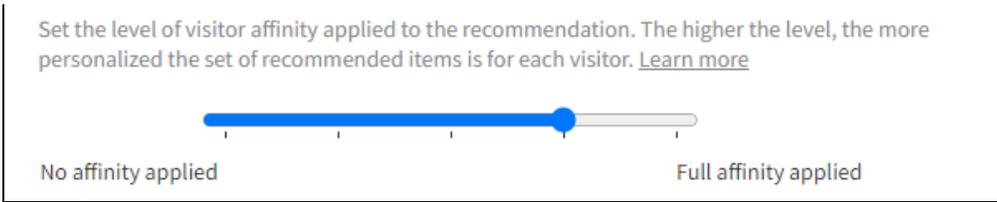


Figure: Defining the recommendation strategy settings (click to enlarge)

Supported algorithms

The following table describes the [algorithms](#) you can use in a recommendation strategy. The table also shows for which [page types](#) an algorithm is valid and how often the recommendation data returned by the algorithms is automatically regenerated.

Table: Supported algorithms

Algorithm	Description	Page type	Regeneration
Bought together with categories recently bought by the visitor	Returns items bought together (by default, in the past 60 days) with the items the visitor has recently bought (by default, in the past 7 days). The returned items are from the same category or categories as the items bought by the visitor. Example The visitor recently bought the following items: <ul style="list-style-type: none"> Item A from category X one day ago Item B from category Y five days ago Item C from category Z nine days ago The algorithm returns items from categories X and Y that visitors have commonly bought together with items A and B.	All	1 day
Bought together with current category	Returns items bought together (by default, in the past 60 days) with items from the category the visitor is currently viewing.	Category	1 day
Bought together with current item	Returns items bought together (by default, in the past 60 days) with the item the visitor is currently viewing.	Product	1 day
Bought together with item added to cart	Returns items bought together (by default, in the past 60 days) with the item the visitor added to their shopping cart.	Cart	1 day
Bought together with items recently viewed by the visitor	Returns items bought together (by default, in the past 60 days) with the items the visitor has recently viewed (by default, in the past 7 days).	All	1 day
Most bought on the site in the past 24 hours	Returns the most bought items on the site in the past 24 hours.	All	1 hour
Most bought on the site in recent days	Returns the most bought items on the site in, by default, the past 7 days.	All	1 day
Most bought on the site in recent months	Returns the most bought items on the site in, by default, the past 60 days.	All	1 day
Most viewed by the visitor	Returns items the visitor has viewed the most in, by default, the past 7 days.	All	1 day
Most viewed on the site in the past 24 hours	Returns the most viewed items on the site in the past 24 hours.	All	1 hour
Most viewed on the site in recent weeks	Returns the most viewed items on the site in, by default, the past 30 days.	All	1 day
Recently viewed by the visitor	Returns items the visitor has viewed in, by default, the past 7 days.	All	1 day
Viewed together with categories recently viewed by the visitor	Returns items viewed together (by default, in the past 30 days) with the items the visitor has recently viewed (by default, in the past 7 days). The returned items are from the same category or categories as the items viewed by the visitor. Example The visitor recently viewed the following items: <ul style="list-style-type: none"> Item A from category X one day ago Item B from category Y five days ago Item C from category Z nine days ago The algorithm returns items from categories X and Y that visitors have commonly viewed together with items A and B.	All	1 day

Viewed together with current category	Returns items viewed together (by default, in the past 30 days) with items from the category the visitor is currently viewing.	Category	1 day
Viewed together with current item	Returns items viewed together (by default, in the past 30 days) with the item the visitor is currently viewing.	Product	1 day
Viewed together with items recently viewed by the visitor	Returns items viewed together (by default, in the past 30 days) with the items the visitor has recently viewed (by default, in the past 7 days).	All	1 day
Viewed together with recently searched categories	<p>Returns items viewed together (by default, in the past 30 days) with items from the three categories that feature most in the visitor's current search results.</p> <p>Example</p> <p>The visitors current search returns 20 items:</p> <ul style="list-style-type: none"> • 2 items from category A • 5 items from category B • 8 items from category C • 2 items from category D • 3 items from category E <p>The algorithm returns items that visitors have commonly viewed together with items from categories C, B, and E.</p>	Search	1 day
Viewed together with recently searched items	Returns items viewed together (by default, in the past 30 days) with the top three items in the visitor's current search results.	Search	1 day

Filter settings

The following table describes the settings you can define for a recommendation strategy filter in the Control Panel. A filter defines a single rule set for filtering recommended items.

Table: Filter settings

Setting	Description	Role
Name	Enter a name for the filter.	Required
Rules	<p>Create one or more rules that together define the filtering logic for the filter.</p> <p>A rule defines a single comparison operation between an item attribute value and a target value defined by you. The rule is used to include and exclude items from the final recommendation results: any item for which the rule evaluates to true is included, while any item for which the rule evaluates to false is excluded. The comparison is case-insensitive.</p> <p>If you create multiple rules, the platform applies them all, that is, the platform treats the rules as combined with logical AND operators. The platform only returns items for whom all the rules evaluate to true.</p> <p>The filter must include at least one rule. A new filter includes a single empty rule, which you can edit.</p> <p>Example</p> <p>If you wanted to exclude items that cost more than 100 in your site currency, you would filter for items whose price attribute value was less than or equal to 100, which would give you the rule:</p> <p><i>price is less than or equal to 100</i></p> <p>The platform would then evaluate every item in the algorithm results and remove any item for which the rule evaluates to false. The final recommendation results returned by the strategy would thus exclude these items. For example:</p>	Required

```

# Set of items returned by the algorithms

Item 1, price: 100
Item 2, price: 500
Item 3, price: 30

# Filter evaluation

Item 1, price: 100 -> TRUE
Item 2, price: 500 -> FALSE
Item 3, price: 30 -> TRUE

# Set of items returned by the strategy after applying the filter

Item 1, price: 100
Item 3, price: 30

```

For more examples, see [Filter examples](#).

Adding a rule

To add a rule:

1. Click **Add rule**. The Control Panel adds an undefined rule.
2. Select the item attribute you want to use for filtering items. The field automatically lists the item attributes tracked for the site.

Item attribute: brand equals

3. Select the relational operator for comparing the item attribute value to the target value. The drop-down menu only displays operators that are valid for the data type of the selected item attribute.

Item attribute: price equals

4. Enter or select the target value for the comparison. The field automatically lists the different values tracked for the specified item attribute.

Item attribute: price is less than or equal to

The target value can be either a regular string or, for **one of** and **any one of** operators, an array of strings. For regular expressions, use the [RE2 syntax](#).

If the target value is an array of strings, use the **Add** button to individually enter the string values. You can remove a value from the array by clicking **X** for the value.

Item attribute: brand is one of

Cakita Wakita

Dawelt Add

Editing a rule

You can change the attribute, operator, and value of a rule.

Removing a rule

To remove a rule, click **X** for the rule.

Item attribute: price is less than or equal to 100 X

Filter examples

Here are some examples showing how to create filters with different operators and how those filters get evaluated:

- [Filter examples: equals, less than, greater than](#)
- [Filter examples: contains, begins with, ends with](#)
- [Filter examples: is one of, is not one of, begins with any one of](#)
- [Filter examples: includes, any one of contains/begins with/ends with](#)
- [Filter examples: during, not during](#)
- [Filter examples: exists, does not exist](#)
- [Filter examples: regular expressions](#)

Filter examples: equals, less than, greater than

Return all items from the category "Books"

Item attribute	type	▼	equals	▼	Books
----------------	------	---	--------	---	-------

Filter evaluation examples

```
type: "Books" -> TRUE
type: "BOOKS" -> TRUE
type: "books" -> TRUE
type: "Book" -> FALSE
type: "Magazines" -> FALSE
```

Return all items from the category "Books", except ones from a specific company

Item attribute	type	▼	equals	▼	Books	×
AND						
Item attribute	company	▼	does not equal	▼	Vanity Press	×

Filter evaluation examples

```
type: "Books", company: "Random House" -> TRUE
type: "Books", company: "Vanity Press" -> FALSE
type: "Magazines", company: "Random House" -> FALSE
```

Return books that cost less than 30 currency

Item attribute	type	▼	equals	▼	Books	×
AND						
Item attribute	price	▼	is less than	▼	30	×

Filter evaluation examples

```
type: "Books", price: 29.99 -> TRUE
type: "Books", price: 39.99 -> FALSE
type: "Magazines", price: 19.99 -> FALSE
```

Filter examples: contains, begins with, ends with

Return items whose name contains "cheetah"

Item attribute	name	contains	cheetah
----------------	------	----------	---------

Filter evaluation examples

```
name: "Cheetah Plushy" -> TRUE
name: "Living with cheetahs, as told by a cheetah lover" -> TRUE
name: "Operation C.H.E.E.T.A.H." -> FALSE
```

Return items whose name does not contain "cheetah"

Item attribute	name	does not contain	cheetah
----------------	------	------------------	---------

Filter evaluation examples

```
name: "Cheetah Plushy" -> FALSE
name: "Living with cheetahs, as told by a cheetah lover" -> FALSE
name: "Operation C.H.E.E.T.A.H." -> TRUE
```

Return movies whose name starts with "A"

Item attribute	type	equals	Movies	X
AND				
Item attribute	name	begins with	A	X

Filter evaluation examples

```
type: "Movies", name: "Aliens" -> TRUE
type: "Movies", name: "aliens" -> TRUE
type: "Movies", name: "Tenet" -> FALSE
type: "Movie", name: "Argo" -> FALSE
```

Return books whose title ends with "for dummies" and that cost less than 30 currency

Item attribute equals ×

AND

Item attribute ends with ×

AND

Item attribute is less than ×

Filter evaluation examples

```

type: "Books", name: "JavaScript For Dummies", price: 29.99 -> TRUE
type: "Books", name: "Windows 10 For Dummies", price: 39.99 -> FALSE
type: "Books", name: "The Complete Idiot's Guide to JavaScript", price: 19.99 -> FALSE

```

Filter examples: is one of, is not one of, begins with any one of

Return hotels located in Cairo, Kochi, or La Paz

Item attribute is one of

× ×

AND

Item attribute is one of

× × ×

Filter evaluation examples

```

type: "Hotel", city: "Cairo" -> TRUE
type: "Hotels", city: "Kochi" -> TRUE
type: "Hotels", city: "LaPaz" -> FALSE

```

Return beach volleyball events in Finland, except those in Tampere and Turku

✕
 Item attribute is one of
Beach Volleyball ✕ BVB ✕
 Add

AND

✕
 Item attribute equals

AND

✕
 Item attribute is not one of
Tampere ✕ Turku ✕
 Add

Filter evaluation examples

```
mainCategory: "Beach Volleyball", country: "Finland", city: "Helsinki" -> TRUE
mainCategory: "Beach Volleyball", country: "Finland", city: "Tampere" -> FALSE
mainCategory: "BVB", country: "Finland", city: "Turuku" -> TRUE
```

Return movies whose name starts with "A", "B", or "C"

✕
 Item attribute equals

AND

✕
 Item attribute begins with any one of
A ✕ B ✕ C ✕
 Add

Filter evaluation examples

```
type: "Movies", name: "Aliens" -> TRUE
type: "Movies", name: "aliens" -> TRUE
type: "Movies", name: "Tenet" -> FALSE
type: "Movies", name: "Babe" -> TRUE
type: "Movie", name: "A Clockwork Orange" -> FALSE
```

Filter examples: includes, any one of contains/begins with/ends with

Return any item one whose categories is "slots"

Item attribute

Filter evaluation examples

```
categories: ["jackpot", "slots"] -> TRUE
categories: ["jackpot", "slot"] -> FALSE
categories: ["poker", "stud"] -> FALSE
```

Return any item one whose categories contains "jack"

Item attribute

Filter evaluation examples

```
categories: ["jackpot", "slots"] -> TRUE
categories: ["JACKPOT", "slot"] -> TRUE
categories: ["blackjack", "cards"] -> TRUE
```

Return any item one whose categories starts with "slot"

Item attribute

Filter evaluation examples

```
categories: ["jackpot", "slots"] -> TRUE
categories: ["jackpot", "slot"] -> TRUE
categories: ["poker", "stud"] -> FALSE
```

Filter examples: during, not during

Return items that have been created in the past 24 hours

Item attribute

Filter evaluation examples

```
If the current time is: 2022-01-20 18:00:00 UTC+2
created_at: 2022-01-19T09:53:31+02:00 -> FALSE
created_at: 2022-01-20T13:23:03+02:00 -> TRUE
```

Return items that have not been updated in the past 30 days

Item attribute

Filter evaluation examples

If the current time is: 2022-01-20 18:00:00 UTC+2

updated_at: 2021-11-11T00:03:54+02:00 -> TRUE
updated_at: 2022-01-20T14:52:16+02:00 -> FALSE

Filter examples: exists, does not exist

Return items without a name (either the name attribute is missing or the attribute has an empty value)

Item attribute

Filter evaluation examples

("name" attribute not found) -> TRUE
name: undefined -> TRUE
name: null -> TRUE
name: "" -> TRUE
name: "Aliens" -> FALSE

Filter examples: regular expressions

 The platform supports the [RE2 syntax](#) for regular expressions.

Return movies whose name starts with "A" or "a" and ends in "s"

Item attribute ×

AND

Item attribute ×

Filter evaluation examples

type: "Movies", name: "Aliens" -> TRUE
type: "Movies", name: "aliens" -> TRUE
type: "Movies", name: "ALIENS" -> FALSE
type: "Movies", name: "Alien" -> FALSE