

# Survey Question Logic

Configure display options and skip logic for survey questions using the Survey Question API. These settings correspond to options on the **Logic** tab in the question builder.

## Endpoints

Logic settings are configured via the standard survey question methods. Use the appropriate endpoint depending on whether you are reading, creating, or updating a question.

**GET** v5/survey/{survey\_id}/surveyquestion/{question\_id}

**PUT** v5/survey/{survey\_id}/surveypage/{page\_id}/surveyquestion

**POST** v5/survey/{survey\_id}/surveyquestion/{question\_id}

Requires authentication

## Display Options

The following parameters control how a question is displayed or hidden.

### properties

*object*

Display and behavior settings for the question.

- ▼ child attributes

#### save\_logic\_data

*string*

Save question data even if the question is hidden after an initial display. Pass the

`save_logic_data` parameter to enable.

#### hide\_after\_response

*string*

Hide the question after the respondent has answered it. Pass the `hide_after_response`

parameter to enable. To disable, pass an empty string.

#### hidden

*boolean*

Hide the question by default. Typically used with custom scripting. Accepted values: `true`,

`false` .

### **admin\_question**

*boolean*

Show the question only to admin users. Accepted values: `true` , `false` .

### **disabled**

*boolean*

Disable the question entirely. Accepted values: `true` , `false` .

### **randomizer\_ignore**

*boolean*

Always include this question when showing a random selection of questions. Accepted values: `true` , `false` .

### **fixed\_placement**

*boolean*

Fix this question's position when page shuffling is enabled. Accepted values: `true` , `false` .

## **shortname**

*string*

Alias or short name for the question. Used in merge codes and as an alternate key when submitting response data.

## **varname**

*string*

SPSS variable name for the question.

## Skip Logic

**Note:** Setting or updating skip logic via the PUT and POST endpoints is not currently supported. The `show_rules` parameter is documented here for reference and for use once support becomes available. To read existing skip logic on a question, use the GET endpoint — the full `show_rules` object is returned in the response. Skip logic should be configured through the Alchemer web interface in the meantime.

Skip logic (display conditions) is set using the `show_rules` parameter. All values should be passed as strings.

**Tip:** The quickest way to learn the correct logic structure for a given scenario is to configure it using

the web interface first, then retrieve the question via the API. The response will include the full `show_rules` object, which you can use as a reference.

**Note:** The question details response also includes a `show_rules` id and `same_page_skus`. These do not need to be supplied when setting `show_rules` via the API.

## show\_rules

*object*

Defines the display condition for the question. Contains three components: the primary condition entity, the logical operator, and the secondary condition entity or expected value.

- ▼ child attributes

### atom

*object*

The primary condition entity — typically a question or respondent metadata. Corresponds to the "select a condition" dropdown in the builder interface.

- ▼ child attributes

#### type

*string*

The condition type ID. For a question-based condition, use `"3"` (`SGLogicAtom_TYPE_QUESTION`). See the Condition Types table below for all available values.

#### value

*string*

The ID of the entity the condition applies to. When `type` is `"3"` (Question), this is the question's numeric ID passed as a string.

### operator

*string*

The logical condition ID (e.g. `"20"` for ANSWERED). Valid operators vary by question type — see the Operators by Question Type reference below.

### atom2

*object*

The secondary condition entity or expected value.

- ▼ child attributes

#### type

*string*

Use "17" ( `SGLogicAtom_TYPE_QUESTION_OPTIONS` ) for questions with predefined answer options (e.g. radio buttons, checkboxes). Use "2" ( `SGLogicAtom_TYPE_VALUE` ) for free-text questions (e.g. textbox, essay). For text-based questions, always use "2" regardless of operator, including ANSWERED and NOTANSWERED.

### **value**

*string / array*

The expected answer value. Pass an empty string "" for operators that don't require a specific value (e.g. ANSWERED, NOTANSWERED). For option-based conditions, pass an array of identifiers formatted as `{question_id}-{option_id}` (e.g. `show_rules[atom2][value][]=2-10003` ). For text-based conditions, pass the string value to match.

## Condition Types ( `show_rules[atom][type]` )

The `show_rules[atom][type]` value identifies what entity the condition is based on.

Type ID	Constant
3	<code>SGLogicAtom_TYPE_QUESTION</code>
6	<code>SGLogicAtom_TYPE_CURRENTDATE</code>
21	<code>SGLogicAtom_TYPE_MOBILE</code>
5	<code>SGLogicAtom_TYPE_IP</code>
8	<code>SGLogicAtom_TYPE_COUNTRY</code>
9	<code>SGLogicAtom_TYPE_REGION</code>
19	<code>SGLogicAtom_TYPE_POSTAL</code>
10	<code>SGLogicAtom_TYPE_CITY</code>
4	<code>SGLogicAtom_TYPE_URLVAR</code>
36	<code>SGLogicAtom_TYPE_SSOVAR</code>
13	<code>SGLogicAtom_TYPE_INVITEFIELD</code>

## Operators by Question Type

Valid operators and the required `show_rules[atom2][type]` vary by question type. Use the tables below to identify the correct values for your condition.

**Unsupported question types:** File Upload, Drag and Drop, Ranking Grid, Signature, Continuous Sum, Textbox List, Slider List, Video Sentiment, Audio Sentiment, Grouping (Open Card Sort), Dropdown

Menu Grid, Textbox Grid, Max Diff, Custom Table. Actions and Text/Media elements are also excluded.

### Single-Select Questions

*Applies to: Radio Buttons, Radio Button Grid, Net Promoter Score, Rating (Likert Scale), Image (Select One), Dropdown Menu List, Grouping (Closed Card Sort), Quick Sort, Semantic Differential, User Data*

show\_rules[atom2][type]: 17 — SGLogicAtom\_TYPE\_QUESTION\_OPTIONS

Operator ID	Constant
12	SGLogicUnit_LOGIC_IN_LIST
5	SGLogicUnit_LOGIC_NOTEQUAL
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED

### Multi-Select Questions

*Applies to: Checkboxes, Image (Multi-Select), Checkbox Grid, Conjoint (Choice-Based)*

show\_rules[atom2][type]: 17 — SGLogicAtom\_TYPE\_QUESTION\_OPTIONS

Operator ID	Constant
4	SGLogicUnit_LOGIC_EQUAL
22	SGLogicUnit_LOGIC_NOT_EXACTLYEQUAL
12	SGLogicUnit_LOGIC_IN_LIST
5	SGLogicUnit_LOGIC_NOTEQUAL
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED

### Text-Based Questions

*Applies to: Textbox, Essay / Long Answer*

show\_rules[atom2][type]: 2 — SGLogicAtom\_TYPE\_VALUE (use for all operators, including ANSWERED and NOTANSWERED)

Operator ID	Constant
4	SGLogicUnit_LOGIC_EQUAL
22	SGLogicUnit_LOGIC_NOT_EXACTLYEQUAL
6	SGLogicUnit_LOGIC_GT
7	SGLogicUnit_LOGIC_GTE
8	SGLogicUnit_LOGIC_LTE
9	SGLogicUnit_LOGIC_LT

Operator ID	Constant
23	SGLogicUnit_LOGIC_GTE_DATE
24	SGLogicUnit_LOGIC_LTE_DATE
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED
10	SGLogicUnit_LOGIC_CONTAINSTR
14	SGLogicUnit_LOGIC_REGEX
15	SGLogicUnit_LOGIC_NOTREGEX
28	SGLogicUnit_LOGIC_SENTIMENT_POS
30	SGLogicUnit_LOGIC_SENTIMENT_NEU
29	SGLogicUnit_LOGIC_SENTIMENT_NEG
31	SGLogicUnit_LOGIC_SENTIMENT_GT
32	SGLogicUnit_LOGIC_SENTIMENT_LT

### Email, Date, Number, Percent

show\_rules[atom2][type]: 2 — SGLogicAtom\_TYPE\_VALUE

Operator ID	Constant
4	SGLogicUnit_LOGIC_EQUAL
22	SGLogicUnit_LOGIC_NOT_EXACTLYEQUAL
6	SGLogicUnit_LOGIC_GT
7	SGLogicUnit_LOGIC_GTE
8	SGLogicUnit_LOGIC_LTE
9	SGLogicUnit_LOGIC_LT
23	SGLogicUnit_LOGIC_GTE_DATE
24	SGLogicUnit_LOGIC_LTE_DATE
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED
10	SGLogicUnit_LOGIC_CONTAINSTR
14	SGLogicUnit_LOGIC_REGEX
15	SGLogicUnit_LOGIC_NOTREGEX

Slider

show\_rules[atom2][type]: 17 — SGLogicAtom\_TYPE\_QUESTION\_OPTIONS

Operator ID	Constant
4	SGLogicUnit_LOGIC_EQUAL
22	SGLogicUnit_LOGIC_NOT_EXACTLYEQUAL
12	SGLogicUnit_LOGIC_IN_LIST
5	SGLogicUnit_LOGIC_NOTEQUAL
6	SGLogicUnit_LOGIC_GT
7	SGLogicUnit_LOGIC_GTE
8	SGLogicUnit_LOGIC_LTE
9	SGLogicUnit_LOGIC_LT
23	SGLogicUnit_LOGIC_GTE_DATE
24	SGLogicUnit_LOGIC_LTE_DATE
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED
10	SGLogicUnit_LOGIC_CONTAINSTR
14	SGLogicUnit_LOGIC_REGEX
15	SGLogicUnit_LOGIC_NOTREGEX

### Star Rating Grid

show\_rules[atom2][type]: 2 — SGLogicAtom\_TYPE\_VALUE

Operator ID	Constant
4	SGLogicUnit_LOGIC_EQUAL
22	SGLogicUnit_LOGIC_NOT_EXACTLYEQUAL
12	SGLogicUnit_LOGIC_IN_LIST
5	SGLogicUnit_LOGIC_NOTEQUAL
23	SGLogicUnit_LOGIC_GTE_DATE
24	SGLogicUnit_LOGIC_LTE_DATE
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED

### Image Heatmap, Text Highlighter, Cascading Dropdown

show\_rules[atom2][type]: 2 — SGLogicAtom\_TYPE\_VALUE

Operator ID	Constant
20	SGLogicUnit_LOGIC_ANSWERED
21	SGLogicUnit_LOGIC_NOTANSWERED

## Examples

REQUEST (CURL) — SET QUESTION HIDDEN BY DEFAULT

```
curl -X POST "https://api.alchemer.com/v5/survey/123456/surveyquestion/5?api_token=YOUR_API_TOKEN&api_token_secret=YOUR_API_TOKEN_SECRET&properties[hidden]=true"
```

REQUEST (CURL) — GET QUESTION WITH SKIP LOGIC

```
curl -X GET "https://api.alchemer.com/v5/survey/123456/surveyquestion/3?api_token=YOUR_API_TOKEN&api_token_secret=YOUR_API_TOKEN_SECRET"
```

RESPONSE — SHOW\_RULES OBJECT

```
"show_rules": {
  "atom": {
    "type": "3",
    "value": "2",
    "case_sensitive": true
  },
  "operator": "20",
  "atom2": {
    "type": "2",
    "value": "",
    "case_sensitive": false
  },
  "id": "69dd604f87828",
  "same_page_skus": []
}
```