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Automation v4 API (BETA)

Overview ▼

You can use the automation v4 API to fetch data from existing [workflows](#) , create new workflows, as well as delete workflows you no longer need.

The sections below provide a walkthrough of how to use the v4 endpoints. For a full reference of the available endpoints and their required fields, click the **Endpoints** 1  the top of this article.

Please note: This API is currently in beta and is subject to change based on testing and feedback. By using these endpoints you agree to adhere to HubSpot's [Developer Terms](#) & [Developer Beta Terms](#). You also acknowledge and understand the risk associated with testing an unstable API.

Fetch specific workflow by ID

account.

For example, if you made a GET request to `/automation/v4/flows/585051946` to get the workflow with an ID of `585051946`, the resulting response would be:

JSON

Copy

```
3  "id": "585051946",
4  "isEnabled": true,
5  "flowType": "WORKFLOW",
6  "revisionId": "7",
7  "name": "New form submission workflow",
8  "createdAt": "2024-06-07T17:27:08.101Z",
9  "updatedAt": "2024-06-07T17:31:11.263Z",
10 "startActionId": "1",
11 "nextAvailableActionId": "3",
12 "actions": [
13   {
14     "type": "SINGLE_CONNECTION",
15     "actionId": "1",
16     "actionTypeVersion": 0,
17     "actionTypeId": "0-13",
18     "connection": {
19       "edgeType": "STANDARD",
20       "nextActionId": "2"
21     },
22     "fields": {
23       "operation": "ADD",
24       "list_id": "178"
25     }
26   }
27 ]
```

The response above includes the specification for a contact-based workflow with two actions, and contacts are enrolled if they filled out a form on your website.

You can consult the sections below on how actions and enrollment criteria are specified.

Action types

actionId : a unique ID that identifies this action, provided as a string.

actionTypeId : a predefined value that specifies the action type (e.g., "0-1" designates a `DELAY` action). A full list of actions and their associated **actionTypeId** is provided in the section below.

actionTypeVersion : a number that designates the version of the action. For all built-in action types (e.g., a delay, email notification, etc.), the **actionTypeVersion** will be 0.

connection : for non-branching actions, this property is an object that specifies the subsequent action, and contains two nested properties:

edgeType : to proceed directly to the next action, this property should be set to "STANDARD". If you have a branch in your workflow, you can go to an action in a different branch by setting the **edgeType** to "GO-T0".

nextActionId : the ID of the subsequent action in the workflow.

type : for non-branching actions, this should be set to `SINGLE_CONNECTION`.

fields : an object that specifies the data required by the action (e.g., how long to delay an enrolled object for a `DELAY` action). The structure of this property depends on the action type. Consult the sections and example actions below for the fields each action type expects.

Action type IDs



The table below details the available action types along with the associated **actionTypeId**:

ACTION	ACTION TYPE ID	DESCRIPTION
Delay until a specific date or date-based property	0-35	Delay until a preconfigured calendar date or date property of the enrolled record.
Delay a set amount of time, until a specific day of the week, or time of day.	0-1	Delay for a preconfigured amount of time (e.g., 3 hours, 5 days, etc.), until a specific day (e.g., Tuesday), or time of day (12:00 AM EST).

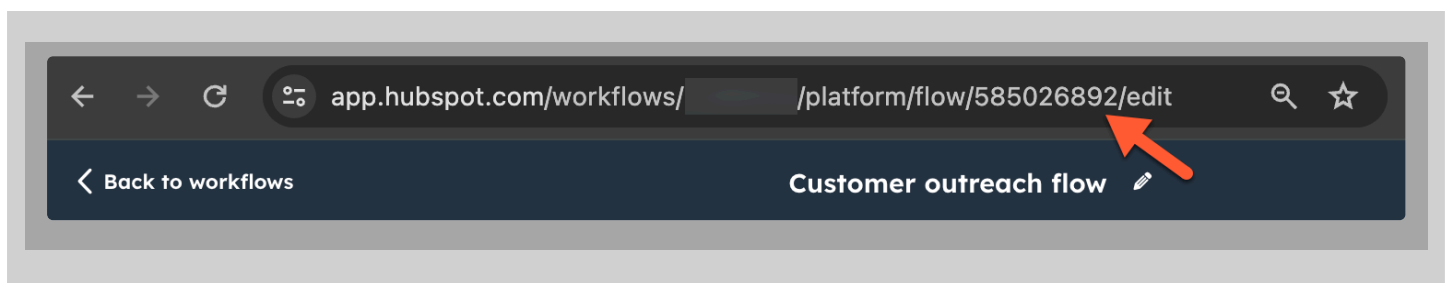
Add enrolled object to list or remove from list	0-13	Add or remove an enrolled contact to/from a static list.
Send automated email to a contact associated with the enrolled record	0-4	Send an automated marketing email to the enrolled record.
Send email notification to a user or team	0-8	Send an internal email notification to a user or team in your account.
Send an in-app notification to a user or team	0-9	Trigger an in-app notification to a user or team in your account.
Set property	0-5	Set a property on an enrolled object.
Create task	0-3	Create a new task.
Create a new record	0-14	Create a new record (contact, company, deal, ticket, or lead).

Action fields

The `fields` property of your action depends on the corresponding action type.

The actions available depend on your account subscription. Learn about all available actions in [this knowledge base article](#).

To confirm the fields required for a specific action, you can [create the workflow](#) with that action using the workflows tool, then make a GET request to `/automations/v4/flows/{flowId}` for that workflow. You can find the `flowId` of the workflow by editing the workflow then checking the URL for the second ID in the URL path, or you can make a GET request to `/automations/v4/flows` to get all workflows and filter the resulting response by the name of your workflow.



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Delay until a specific date or date-based property

The code below specifies an example delay action until a specific date. Based on whether you're delaying until a preconfigured date or a date-based property of the enrolled record, you'll need to specify the sub-properties of the `date` field accordingly:

If you're delaying until a specific calendar date, provide `STATIC_VALUE` for the `type` sub-property, then provide the calendar date for the `staticValue` sub-property as a unix timestamp.

To delay until a date-based property of the enrolled record, provide `OBJECT_PROPERTY` for the `type` sub-property, then specify the property to use as the `propertyName`.

JSON

[Copy](#)

```
1 // Example of a delay action to delay until a specific date o
2 {
3   "type": "SINGLE_CONNECTION",
4   "actionId": "5",
5   "actionTypeVersion": 0,
6   "actionTypeId": "0-35",
7   "connection": {
8     "edgeType": "STANDARD",
9     "nextActionId": "7"
10  },
11  "fields": {
12    "date": {
13      "type": "STATIC_VALUE",
14      "staticValue": "1719446400000"
15    },
16    "delta": "0",
17    "time_unit": "DAYS",
18    "time_of_day": {
19      "hour": 12,
20      "minute": 0
21    }
22  }
23 }
```

The code below specifies an example delay action for a preconfigured amount of time.

JSON

Copy

```
1 // Example of a delay action to delay for a specific amount of ti
2 {
3   "type": "SINGLE_CONNECTION",
4   "actionId": "5",
5   "actionTypeVersion": 0,
6   "actionTypeId": "0-35",
7   "connection": {
8     "edgeType": "STANDARD",
9     "nextActionId": "7"
10  },
11  "fields": {
12    "delta": "720",
13    "time_unit": "MINUTES"
14  }
15 }
```

Send an automated marketing email to an enrolled contact

The following example action demonstrates how to send an automated marketing email with an ID of 113782603056 to an enrolled contact.

JSON

Copy

```
// Example action to send an automated marketing email to an enr
{
  "type": "SINGLE_CONNECTION",
  "actionId": "4",
  "actionTypeVersion": 0,
  "actionTypeId": "0-4",
  "fields": {
    "content_id": "113782603056"
  }
}
```

Set property

The action definition below provides an example of setting the `hs_lead_status` property to `"IN_PROGRESS"`.

JSON

Copy

```
1 // Example action to set the hs_lead_status property to IN_PROGR
2 {
3   "actionId": "2",
4   "actionTypeVersion": 0,
5   "actionTypeId": "0-5",
6   "connection": {
7     "edgeType": "STANDARD",
8     "nextActionId": "4"
9   },
10  "fields": {
11    "property_name": "hs_lead_status",
12    "association": {
13      "associationCategory": "HUBSPOT_DEFINED",
14      "associationTypeId": 1
15    },
16    "value": {
17      "staticValue": "IN_PROGRESS"
18    }
19  }
20 }
```



Create task

The action definition below is an example of creating an unassigned task:

JSON

Copy

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```
2  {
3    "type": "SINGLE_CONNECTION",
4    "actionId": "1",
5    "actionTypeVersion": 0,
6    "actionTypeId": "0-3",
7    "fields": {
8      "task_type": "TODO",
9      "subject": "Check in with lead",
10     "body": "<p>Remember to sync up with new lead!</p>",
11     "associations": [
12       {
13         "target": {
14           "associationCategory": "HUBSPOT_DEFINED",
15           "associationTypeId": 10
16         },
17         "value": {
18           "type": "ENROLLED_OBJECT"
19         }
20       }
21     ],
22     "use_explicit_associations": "true",
23     "priority": "NONE"
```

Create a new record

The example action below creates a new deal and associates it with the contact enrolled in the workflow:

JSON

Copy

```
// Example action definition for creating a new deal and asso
{
  "type": "SINGLE_CONNECTION",
  "actionId": "2",
  "actionTypeVersion": 0,
  "actionTypeId": "0-14",
  "connection": {
    "edgeType": "STANDARD",
    "nextActionId": "3"
```



```

13     "object_type_id": "0-3",
14     "properties": [
15         {
16             "targetProperty": "dealstage",
17             "value": {
18                 "type": "STATIC_VALUE",
19                 "staticValue": "appointmentscheduled"
20             }
21         },
22         {
23             "targetProperty": "dealname",

```

Add an enrolled object to a static list

The following action definition is an example of adding an enrolled contact to a static list, specified as the `list_id`. To remove an enrolled object from a list, switch the operation property to "REMOVE".

JSON

```

// Example action to add an enrolled contact to a list
{
  "type": "SINGLE_CONNECTION",
  "actionId": "4",
  "actionTypeVersion": 0,
  "actionTypeId": "0-13",
  "fields": {
    "operation": "ADD",
    "list_id": "178"
  }
}

```

Branching actions

Branching actions differ from other actions in that they don't follow the standard action structure. Branching action definitions don't have `fields` or `connection` properties. There are two types of branching actions: list branch actions and static branch actions.

List branch actions

List branch actions include a `listBranches` property that specifies a set of filter branches to segment enrolled objects. Each `filterBranch` is configured using the syntax and formatting outlined in the [list filters documentation](#).

JSON

```
// Example list branch action
{
  "actionId": "6",
  "listBranches": [
    {
      "filterBranch": {},
      "connection": {
        "edgeType": "STANDARD",
        "nextActionId": "7"
      }
    },
    {
      "filterBranch": {},
      "branchName": "Some branch name",
      "connection": {
        "edgeType": "GOTO",
        "nextActionId": "4"
      }
    }
  ],
  "defaultBranchName": "Fall-through branch",
  "defaultBranch": {
    "edgeType": "STANDARD",
    "nextActionId": "8"
  }
}
```



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Static branch actions include an `inputValue` definition, which supports different shapes for the input values of the branch. It also includes a list of `staticBranches`, which defines which actions come next in the branch.

JSON

```
// Example static branch action
{
  "actionId": "1",
  "inputValue": {
    "propertyName": "example_property"
  },
  "staticBranches": [
    {
      "branchValue": "example_value_1",
      "connection": {
        "edgeType": "STANDARD",
        "nextActionId": "2"
      }
    },
    {
      "branchValue": "example_value_1",
      "connection": {
        "edgeType": "STANDARD",
        "nextActionId": "3"
      }
    },
    // ...
  ],
  "defaultBranchName": "Fall-through branch",
  "defaultBranch": {
    "edgeType": "STANDARD",
    "nextActionId": "4"
  }
}
```



You can configure the conditions for objects to be enrolled in your workflow within the `enrollmentCriteria` property of your workflow specification.

The data you specify varies based on whether your enrollment is event-based or list-based. You can specify the enrollment type by setting the `type` of `enrollmentCriteria` to either `EVENT_BASED` or `LIST_BASED`.

You can specify the re-enrollment settings for objects enrolled in your workflow by setting the `shouldReEnroll` field to `true` or `false`.

Learn more about workflow enrollment in this [knowledge base article](#).

Event-based enrollment

Event-based workflows will enroll objects when specific events occur, such as when a form is submitted.

You can configure the criteria for which events will trigger enrollment by defining a list of `eventFilterBranches`. Each `eventFilterBranch` definition specifies a qualifying event (e.g., a form submission) using an `eventId` that corresponds to that event.

Most events will have the same values for the following fields:

`operator`: "HAS_COMPLETED"

`filterBranchType`: "UNIFIED_EVENTS"

`filterBranchOperator`: "AND"



The table below defines each `eventId` that corresponds to the event you can configure for your workflow:

EVENT	EVENT TYPE ID
Ad interaction	4-1553675
Email open	4-666440

Email reply	4-665538
Email click	4-666288
Email delivery	4-665536
Form submission	4-1639801
Form view	4-1639797
Form interaction	4-1639799
Marketing event registration	4-68559
Marketing event cancellation	4-69072
Call start	4-1733817
Call end	4-1741072
SMS shortlink click	4-1722276
CTA view	4-1555804
CTA click	4-1555805
Media play on webpage	4-675783

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The example code below defines the `enrollmentCriteria` to enroll contacts who successfully submitted a form:

JSON

```
// Example of an enrollmentCriteria definition to enroll contacts who s
"enrollmentCriteria": {
  "shouldReEnroll": true,
  "type": "EVENT_BASED",
  "eventFilterBranches": [
    {
      "filterBranches": [],
      "filters": [],
      "eventType": "4-1639801",
      "operator": "HAS_COMPLETED",
      "filterBranchType": "UNIFIED_EVENTS",
      "filterBranchOperator": "AND"
    }
  ],
  "listMembershipFilterBranches": []
}
```

Filter-based enrollment

Workflows with filter-based enrollment will enroll objects when the criteria you configure is met.

Criteria is configured setting the `listFilterBranch` field of your `enrollmentCriteria` based which objects should qualify for enrollment in your workflow. Within a `listFilterBranch`, you can define the specific filter criteria using a list of `filterBranches`.

You can learn more about the syntax and formatting for defining a `listFilterBranch` in the [list filters documentation](https://developers.hubspot.com/docs/api/automation/workflows#list-filter-branch).

JSON

// Example of an enrollmentCriteria definition to filter contacts based

```
"enrollmentCriteria": {  
  "shouldReEnroll": false,  
  "type": "LIST_BASED",  
  "listFilterBranch": {  
    "filterBranches": [  
      {  
        "filterBranches": [],  
        "filters": [  
          {  
            "property": "city",  
            "operation": {  
              "operator": "IS_EQUAL_TO",  
              "includeObjectsWithNoValueSet": false,  
              "values": [  
                "Dublin"  
              ],  
              "operationType": "MULTISTRING"  
            },  
            "filterType": "PROPERTY"  
          }  
        ],  
        "filterBranchType": "AND",  
        "filterBranchOperator": "AND"  
      }  
    ],  
    "filters": [],  
    "filterBranchType": "OR",  
    "filterBranchOperator": "OR"  
  },  
  "unEnrollObjectsNotMeetingCriteria": false,
```



Create a workflow

To create a workflow, make a `POST` request to `/automations/v4/flows` and provide a workflow specification in the body of your request.

Consult the *Action types* and *Enrollment criteria* sections above for a full reference on specifying the `actions` in your workflow and configuring the `enrollmentCriteria`.

For contact-based workflows, set the `type` to `"CONTACT_FLOW"`. For all other workflow types (e.g., deal-based, goal-based, etc.), set the `type` to `"PLATFORM_FLOW"`.

For example, if you wanted to create a workflow that executed the following:

Once a contact submits a specific form on your website, a ticket will be created in your account.

After a 1 day delay, the enrolled contact will be sent an [automated marketing email](#).

The request body of your `POST` request would resemble the following:

JSON

// Example request body for `POST` request to create a workflow

```
{
  "isEnabled": true,
  "flowType": "WORKFLOW",
  "name": "New form submission from interested contact",
  "startActionId": "1",
  "nextAvailableActionId": "4",
  "actions": [
    {
      "type": "SINGLE_CONNECTION",
      "actionId": "1",
      "actionTypeVersion": 0,
      "actionTypeId": "0-14",
```




```
"nextActionId": "3"
},
"fields": {
  "object_type_id": "0-5",
  "properties": [
    {
      "targetProperty": "subject",
      "value": {
        "type": "STATIC_VALUE",
        "staticValue": "Review new form submission"
      }
    },
    {
      "targetProperty": "hs_pipeline_stage",
      "value": {
        "type": "STATIC_VALUE",
        "staticValue": "1"
      }
    },
    {
      "targetProperty": "source_type",
      "value": {
        "type": "STATIC_VALUE",
        "staticValue": "FORM"
      }
    }
  ],
  {
    "targetProperty": "content",
    "value": {
      "type": "STATIC_VALUE",
      "staticValue": "[Triage required] new form submitted. Nex
    }
  }
],
"associations": [
```



```
        "associationCategory": "HUBSPOT_DEFINED",
        "associationTypeId": 16
      },
      "value": {
        "type": "ENROLLED_OBJECT"
      }
    },
    {
      "target": {
        "associationCategory": "HUBSPOT_DEFINED",
        "associationTypeId": 339
      },
      "value": {
        "type": "COPY_ASSOCIATION",
        "sourceSpec": {
          "associationCategory": "HUBSPOT_DEFINED",
          "associationTypeId": 279
        }
      }
    }
  ],
  "use_explicit_associations": "true"
}
},
{
  "type": "SINGLE_CONNECTION",
  "actionId": "2",
  "actionTypeVersion": 0,
  "actionTypeId": "0-4",
  "fields": {
    "content_id": "113782603056"
  }
},
{
  "type": "SINGLE_CONNECTION",
```



```
"actionTypeId": "0-1",
"connection": {
  "edgeType": "STANDARD",
  "nextActionId": "2"
},
"fields": {
  "delta": "1440",
  "time_unit": "MINUTES"
}
],
"enrollmentCriteria": {
  "shouldReEnroll": false,
  "type": "EVENT_BASED",
  "eventFilterBranches": [
    {
      "filterBranches": [],
      "filters": [
        {
          "property": "hs_form_id",
          "operation": {
            "operator": "IS_ANY_OF",
            "includeObjectsWithNoValueSet": false,
            "values": [
              "2f5cc7f8-d359-4e9c-a770-dd42ea07d217"
            ]
          },
          "operationType": "ENUMERATION"
        },
        {
          "filterType": "PROPERTY"
        }
      ]
    },
    {
      "eventTypeId": "4-1639801",
      "operator": "HAS_COMPLETED",
      "filterBranchType": "UNIFIED_EVENTS",
      "filterBranchOperator": "AND"
```



```
{
  "listMembershipFilterBranches": [],
},
"timeWindows": [],
"blockedDates": [],
"customProperties": {},
"crmObjectCreationStatus": "COMPLETE",
"type": "CONTACT_FLOW",
"objectTypeId": "0-1",
"suppressionListIds": [],
"canEnrollFromSalesforce": false
}
```

Delete a workflow

To delete a workflow, make a `DELETE` request to `/automations/v4/{flowId}` using the ID of the workflow you want to delete as the `flowId`.

Please note: once deleted, you cannot restore the workflow via the automation API. You must [contact HubSpot Support](#) to get assistance with restoring your workflow.

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