

Engine Webhooks

Webhooks can be configured for engine-level events.

To select an engine-level **Webhooks** event, select **Settings > Webhooks** from the left-hand menu under **Organization Settings**. Then select **Event** to reveal the drop-down menu with all engine-related webhook events.

Figure 1. The Webhooks button under Organization Settings

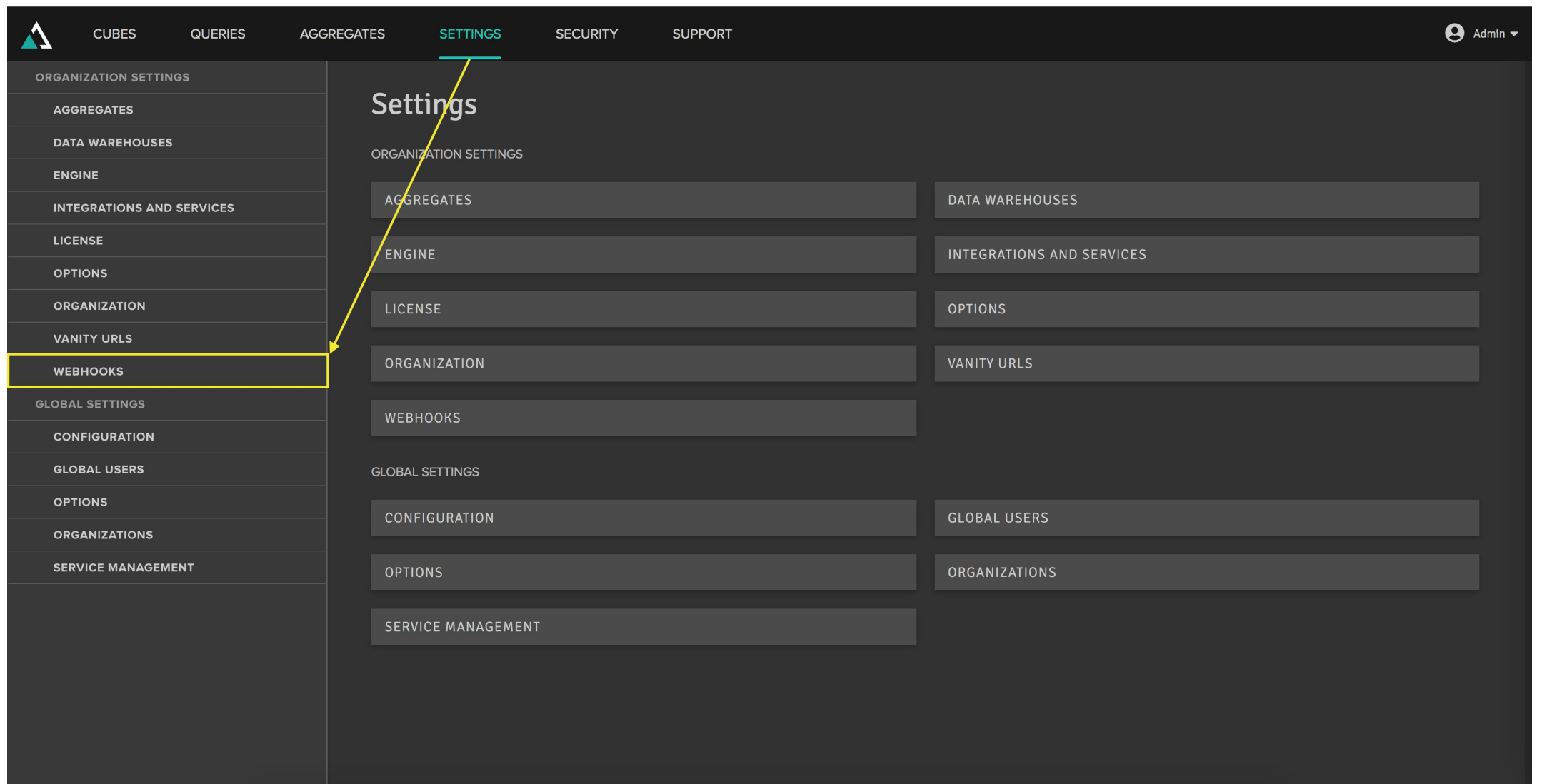


Figure 2. The engine webhook for Aggregate Batch Start

 A screenshot of the 'Webhooks' configuration form. The form has a title 'Webhooks' and a section 'Add Webhook'. It contains a 'URL' input field, an 'EVENT' dropdown menu with 'Aggregate Batch Start' selected, and a 'SAVE' button at the bottom right.

You can configure engine-level webhooks for the following events from the **Event** drop-down menu:

- ▲ Aggregate Batch Start
- ▲ Aggregate Batch Success/Failure
- ▲ Aggregate Prune Result
- ▲ Schema Publish
- ▲ Slow Query
- ▲ Slow Agg Builds
- ▲ Project Unpublish

For details, see the sections below.

Common Parameters

The following POST parameters are used for most of the webhooks:

- ▲ `id` - UUID of the batch
- ▲ `org_id` - UUID of the organization
- ▲ `project_id` - UUID of the project
- ▲ `cube_id` - UUID of the cube; if not available, the value in the payload is 'null'
- ▲ `event_type` - unique value for each event type

Event: Aggregate Batch Start

Purpose of webhook: To send a callback upon the initiation of a process to build instances of the aggregate tables for a published cube.

POST parameters:

- ▲ Common parameters: `id`, `org_id`, `project_id`, `cube_id`
- ▲ `is_full_build` - The value `true` indicates that all aggregate instances are being fully build. The value `false` indicates that aggregate instances are being built incrementally.
- ▲ `event_type` - For this event type, the value is `aggregate_batch_started`.

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request:

```
{
  "event_type": "aggregate_batch_started",
  "id": "378f70a0-9d1f-4591-b64f-89008b079075",
  "context": {
    "org_id": "default",
    "project_id": "91db9aa1-8947-4e7a-b613-af2ea485990d"
  },
  "is_full_build": false,
  "cube_id": "48d6ad30-f139-4f77-517f-36158d7b032b"
}
```

Event: Aggregate Batch Success/Failure

Purpose of webhook: To send a callback when the build process for the aggregate tables of a published cube ends.

POST parameters:

- ▲ Common parameters: `id`, `org_id`, `project_id`, `cube_id`
- ▲ `error` - If the build process failed, this parameter gives a description of the error. If the build process is successful, the value of this parameter is `null`.
- ▲ `event_type` - For this event type, the value is `aggregate_batch_result`.

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request:

```
{
  "event_type": "aggregate_batch_result",
  "id": "378f70a0-9d1f-4591-b64f-89008b079075",
  "context": {
    "org_id": "default",
    "project_id": "91db9aa1-8947-4e7a-b613-af2ea485990d"
  },
  "error": null,
  "cube_id": "48d6ad30-f139-4f77-517f-36158d7b032b"
}
```

Aggregate Prune Result

Purpose of webhook: To send a callback when the Cubes in a published project are exceeding their configured limits on the number of active aggregates.

POST parameters:

- ▲ Common parameters: `id`, `org_id`, `project_id`, `cube_id`

- ▲ `event_type` - For this event type, the value is `aggregate_prune_result` .

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request:

```
{
  "event_type": "aggregate_prune_result",
  "id": "378f70a0-9d1f-4591-b64f-89008b079075",
  "context": {
    "org_id": "default",
    "project_id": "91db9aa1-8947-4e7a-b613-af2ea485990d"
  },
  "cube_id": "48d6ad30-f139-4f77-517f-36158d7b032b"
}
```

Event: Schema Publish

Purpose of webhook: To send a callback when a project is created by the pasting or uploading of a `project.xml` or JSON file on the **New Project** page of the Design Center.

POST parameters:

- ▲ Common parameters: `org_id` , `project_id`
- ▲ `schema_id` - UUID of the project.
- ▲ `status` - Indicates whether the creation of the project succeeded or failed. The values are `success` and `failure` .
- ▲ `event_type` - For this event type, the value is `publish_schema_response` .

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request:

```
{
  "event_type": "publish_schema_response",
  "callback_url": "http://localhost:10502/webhooks/debug/test-callback",
  "created_by_user": "vpareto"
}
```

Event: Slow Query

Purpose of webhook: To send a callback when the runtime of the queries meet or exceed a user defined cutoff threshold. A slow query execution is four seconds or more by default.

POST parameters:

- ▲ Common parameters: `org_id`, `project_id`, `cube_id`
- ▲ `query_success` - T/F flag for whether or not the query was successful.
- ▲ `query_id` - The UUID of the query.
- ▲ `time_taken` - The total time the query ran.
- ▲ `finished_at` - The datetimestamp of when the query completed.
- ▲ `event_type` - For this event type, the value is `slow_query_event`.

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request

```
{
  "event_type": "slow_query_event",
  "query_id": "04dd09c8-4cfd-47b6-9dba-caf970880d6e",
  "finished_at": "2021-12-07T15:44:07.077397Z",
  "org_id": "default",
  "query_success": true,
  "time_taken": 3.7080559730529785,
  "project_id": "91db9aa1-8947-4e7a-b613-af2ea485990d",
  "cube_id": "48d6ad30-f139-4f77-517f-36158d7b032b"
}
```

Event: Slow Agg Builds

Purpose of webhook: To send a callback when a slow aggregate build occurs, including successful, running, and failed builds. A slow aggregate build is four seconds or more by default.

POST parameters:

- ▲ Common parameters: `org_id`, `project_id`, `cube_id`
- ▲ `type` - The type of slow aggregate build event. For example, `aggregate-build-completed-event`.
- ▲ `instance_id` - The UUID of the aggregate instance.
- ▲ `definition_id` - The UUID of the aggregate definition.
- ▲ `triggering_query_id` - The UUID of the query that triggered the aggregate build.
- ▲ `user_defined_id` - The UUID of the aggregate, if it is a user-defined aggregate.
- ▲ `user_defined_name` - The name of the aggregate, if it is a user-defined aggregate.

- ▲ `message` - An optional message associated with the aggregate.
- ▲ `status` - Indicates the current status of the event. For example, `done`.
- ▲ `duration` - The duration of the event, in milliseconds.
- ▲ `event_type` - For this event type, the value is `slow_agg_builds`.

Example URL for a POST request:

```
http://ATSCALE_ENGINE_HOST:10502/webhooks/orgId/default/envId/prod
```

Example payload in POST request:

```
{
  "type": "aggregate-build-completed-event",
  "status": "done",
  "duration": 7623,
  "instance_id": "b4a8bc98-ea83-4167-8dd4-7f6e8eb0e439",
  "definition_id": "f314e8da-2d54-4297-93e7-aa5b957751e4",
  "triggering_query_id": "8958cebf-8350-4fff-8347-ecec4b06ac88",
  "org_id": "default",
  "project_id": "91db9aa1-8947-4e7a-b613-af2ea485990d",
  "event_type": "slow_agg_builds",
  "cube_id": "48d6ad30-f139-4f77-517f-36158d7b032b"
}
```

Event: Project Unpublish

Purpose of webhook: To send a callback when a project is unpublished from the Engine.

POST parameters: None.

Example URL for a POST request:

```
http://MY_WEBHOOK_RECEIVER_HOST/atscale/unpublish-schema
```

Example payload in POST request:

```
{
  "event_type": "unpublish_schema_success",
  "context": {
    "org_id": "default",
    "project_id": "161d6ee9-7548-4004-46e7-89b15d70cd5b"
  }
}
```

More Information

[Example Code for a Webhook Receiver Server](#)

