

NFR-2006 Keelvar WebHook Registration and Orchestration

ID	NFR-2006
Name	Keelvar WebHook Registration and Orchestration
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Summary

Several single execute processes need to be completed before Keelvar is able to communicate effectively with SAP Cloud Integration Suite, because of the single execution nature of these calls (for registration) they are being considered as technical configuration but doesn't form part of official configuration documents as they are required only by the Syensqo integration build to facilitate integration.

Execution

A single execution of a authenticated webservice hosted by Keelvar outlining the what/where/when of the expected notifications is set out in the below table with sample calls using POSTMAN (screenshots) for clarity. Keelvar has a well documented API's - <https://docs.keelvar.app/webhook-api/docs/apis/> to use an official reference guide to all functionality.

Description and Technical Details

Webhook registration overview

The screenshot shows a Postman interface for a POST request to `https://test.keelvar.dev/api/webhooks`. The request body is a JSON object with the following structure:

```
1 {
2   "url": "https://dev-api.syensqo.com/status",
3   "name": "AwardFeed",
4   "description": "All WebHook SCPI DEV",
5   "triggers": [
6     "AWARD_FEED_UPDATED", "JOB_UPDATED", "SOURCING_EVENTS_FEED_UPDATED"
7   ],
8   "signing_alg": "HMAC_SHA256",
9   "signing_key": "tEnAVVNFx4YYTNAimo1ABwtfgNyndEM7yZwh8BZ4BtI="
10 }
```

The response body is also shown in JSON format:

```
1 {
2   "uuid": "e8389c18-4437-45d7-bc8c-8bbe137db54e",
3   "name": "AwardFeed",
4   "description": "All WebHook SCPI DEV",
5   "url": "https://dev-api.syensqo.com/status",
6   "triggers": [
7     "AWARD_FEED_UPDATED",
8     "JOB_UPDATED",
9     "SOURCING_EVENTS_FEED_UPDATED"
10 ],
11   "signing_alg": "HMAC_SHA256",
12   "signing_key": "8006f99f3e831ae648596b119d85c3f097628c147296c8d2d2f1a822348ec621"
13 }
```

Sample Request

```

{
  "url": "https://dev-api.syensqo.com/status",
  "name": "AwardFeed",
  "description": "All WebHook SCPI DEV",
  "triggers": [
    "AWARD_FEED_UPDATED", "JOB_UPDATED", "SOURCING_EVENTS_FEED_UPDATED"
  ],
  "signing_alg": "HMAC_SHA256",
  "signing_key": "tEnAvVNFx4YYTnAimolABwtfGNyndEM7yZwh8BZ4BrI="
}

```

Sample Request Breakdown

Elements of the registration URL

JSON Component	Value	Context	Comments
url	https://dev-api.syensqo.com/status	APIM endpoint and entry point into Syensqo Integration Landscape	This endpoint is exposed with no traditional Authentication
name	AwardFeed	Unique identifier in Keelvar	Simple descriptive name for labeling purpose only
description	All WebHook SCPI DEV	More information on the individual webhook	Simple description can be blank
triggers	AWARD_FEED_UPDATED, "JOB_UPDATED", "SOURCING_EVENTS_FEED_UPDATED	Registration of "WHEN" this hook will be triggered in Keelvar	Keelvar triggering events
signing_alg	HMAC_SHA256	signing algorithm	
signing_key	tEnAvVNFx4YYTnAimolABwtfGNyndEM7yZwh8BZ4BrI=	Initial "seeding" of signing key this is not the actual signing key	real signing key is returned in the response from Keelvar

Sample Response from Keelvar

```

{
  "uuid": "e8309c18-4437-45d7-bc8c-0bbe137db54e",
  "name": "AwardFeed",
  "description": "All WebHook SCPI DEV",
  "url": "https://dev-api.syensqo.com/status",
  "triggers": [
    "AWARD_FEED_UPDATED",
    "JOB_UPDATED",
    "SOURCING_EVENTS_FEED_UPDATED"
  ],
  "signing_alg": "HMAC_SHA256",
  "signing_key": "0006f99f3e831ae640596b119d85c3f097620c147296c8d2d2f1a022348ec621"
}

```

Sample Response Breakdown

JSON Component	Value	Context	Comments
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uuid	e8309c18-4437-45d7-bc8c-0bbe137db54e	Keelvar UUID of registered webhook	Used for other operations like delete
name	AwardFeed	confirmation	
description	All WebHook SCPI DEV	confirmation	
url	https://dev-api.syensqo.com/status	confirmation	
triggers	"AWARD_FEED_UPDATED", "JOB_UPDATED", "SOURCING_EVENTS_FEED_UPDAT ED"	trigger confirmation	
signing_alg	HMAC_SHA256	confirmation	
signing_key	0006f99f3e831ae640596b119d85c3f0976 20c147296c8d2d2f1a022348ec621	actual signing key that will be used moving forward for messages propogated by this webhook	This will be used to decrypt all future inbound webhook traffic to confirm it is legitimate

Final usage of resulting registration

The returned signing key is stored in APIM for verification of future traffic - as this is an open service on the internet this verification step is crucial to secure operation.

The screenshot shows a mobile application interface for managing Keelvar webhooks. At the top, there is a green header bar. Below it, a navigation bar contains a back arrow, the text "View Key Value Map", and the words "Transport" and "Edit" in blue. The main content area features a blue key icon followed by the text "private.keelvar". Below this, there is a section titled "Entries (1)" with a search input field on the right. A table displays one entry with the following details:

Key	Value	Action
keelvar	b926bece5333700a981dd568890c1c76465e939a0f8a 5ff1a329908356d3c17c	

Additional services against webhooks

Delete

Note - HTTP Verb (DELETE) and the URL is pathed to the UUID of the webhook

DELETE `https://test.keelvar.dev/api/webhooks/e8309c18-4437-45d7-bc8c-0bbe137db54e`

Docs Params **Authorization** Headers (8) Body Scripts Tests Settings

Auth Type

Bearer Token

Token

.....

The authorization header will be automatically generated when you send the request. Learn more about [Bearer Token](#) authorization.

List

Note - HTTP Verb (GET), Results returned are similar to original registration response but WITHOUT the signing key

GET https://test.keelvar.dev/api/webhooks

Docs Params Authorization Headers (8) **Body** Scripts Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL

Body Cookies Headers (20) Test Results

{ } JSON Preview Visualize

```
1  {
2      "count": 1,
3      "next": null,
4      "previous": null,
5      "results": [
6          {
7              "uuid": "5a455c96-d0ed-4c90-9189-eca74ed00a3f",
8              "name": "AwardFeed",
9              "description": "All WebHook SCPI DEV",
10             "url": "https://test-api.syensqo.com/v1/keelvar/status",
11             "triggers": [
12                 "AWARD_FEED_UPDATED",
13                 "JOB_UPDATED",
14                 "SOURCING_EVENTS_FEED_UPDATED"
15             ],
16             "signing_alg": "HMAC_SHA256"
17         }
18     ]
19 }
```