



SPHONIC Workflow Manager Quick Start Integration Guide JSON API

Version 2.2

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Introduction

This quick-start guide will enable you to connect to the Workflow Manager JSON API, execute workflows within the system and obtain results.

In general, the Sphonic Workflow Manager API uses HTTPS POST requests with JSON payloads and JSON responses. Request authentication is via OAuth 2.0 using the Authorization request header.

In order to proceed with implementation, the following steps should have been undertaken in conjunction with the Sphonic Professional Services team:

- Obtain API credentials
- Agree the datasets for the JSON Requests and Responses (either Test or Live depending on which phase of your implementation project you are executing)
- Have your workflow(s) set up within the Sphonic system and switched on ready for execution

API Overview

The Universal Router is the entry point to the Sphonic eco-system, sample requests and responses are provided below for illustrative purposes. The actual content of the JSON payload is however bespoke to each client and will differ from those shown.

An access token is required in order to execute transactions in line with the oauth 2.0 standard <https://oauth.net/2/>.

The bearer token is obtained via a call to the Sphonic User Management endpoint using your supplied credentials, this token is then used to authorise your transaction request to Workflow manager's Universal Routing endpoint.

Bearer tokens are set with a 10 minute expiry, and it is not therefore necessary to request one for every transaction.

Authentication

JSON requests require authentication via an OAuth2 bearer token. This token is obtained by making the following call to the User Management API using the email and password for your machine user. If you do not know these contact the Professional Services Team.

Endpoint - Test	<code>https://user-mgmt-api-stg.sphoniclabs.net/api/v1/machines/login/universal-router-stg</code>
Endpoint - Live	<code>https://user-mgmt-api.sphonic.net/api/v1/machines/login/universal-router-live</code>
Method	<code>POST</code>
Header	<code>Content-Type: application/x-www-form-urlencoded</code>
Data	<code>username={USERNAME}&password={PASSWORD}</code>

The response will be

```
{
  "access_token": "token123",
  "scope": "download:response execute:request read:response
update:request_config",
  "expires_in": 600,
  "token_type": "Bearer"
}
```

Transactions

The bearer token received within the token response is passed to the Sphonic Universal Router together with the JSON payload for your request

You will have been supplied with the endpoints for each workflow by the Professional Services Team

Example Request:

Endpoint - Test	<code>https://universal-router.stg.sphoniclabs.net/{MERCHANT_ID}/{WORKFLOW_NAME}</code>
Endpoint - Live	<code>https://universal-router.sphonic.net/{MERCHANT_ID}/{WORKFLOW_NAME}</code>
Method	<code>POST</code>
Header	<code>Content-Type: application/json authorization: Bearer {TOKEN}</code>
Example Request	<pre>{ "requestDetails": { "requestId": "SOME-RANDOM-UUID", "requestDateTime": "2019-01-21T17:32:28Z" }, "requestData": { "First_Name": "Keira", "Surname": "Tyler", "Home_Phone": "07075246088", "Email": "KeiraTyler@trashymail.com", "Mobile_Number": "07707524608", "Street": "22BullwoodRd", "City": "STANNS", "House_Number": "22", "Postcode": "DG116GJ", "IP_Address": "174.55.14.164" } }</pre>

Example Response	<pre>{ "SphonicResponse": { "data": { "First_Name": "Keira", "Surname": "Tyler", "House_Number": "22", "Street": "22BullwoodRd", "City": "STANNS", "Postcode": "DG116GJ", "Country": "GB", "Home_Phone": "07075246088", "Mobile_Number": "07707524608", "Email": "KeiraTyler@trashymail.com", "IP_Address": "174.55.14.164", "Results": { "OverallResult": "Review", "FraudResult": "Review", "BlacklistResult": "Pass", "DeviceResult": "Review", "GeoResult": "Review", "MobileResult": "Review", "EmailResult": "Review", "AddressValidationResult": "Pass", "KYCResult": "Pass", "AssociationResult": "FALSE", "Device": { "DeviceVendor": "InAuth", "DeviceId": "7f7cdb447102e1ff43052eald8573a3e", "DeviceCtry": "GHA", "DeviceNull": "FALSE", "DeviceProxy": "FALSE", "DeviceRecommended": "FALSE", "DeviceVendorScore": "823", "HighRiskDeviceCountry": "TRUE" }, "Geo": { "AddrDeviceGeoHigh": "TRUE", "AddrDeviceGeoMed": "FALSE", "AddrDeviceGeoLow": "FALSE", "GeoDistance": "7175" }, "Email": { "EAScore": "925", "EmailExists": "YES", "EmailAge": "15", "DomainAge": "15" }, "Mobile": { "MobileIsValid": "TRUE", "MobileIsRoaming": "TRUE", "MobileIsReachable": "TRUE", "IssuerCountry": "GBR", "RoamingCountry": "GHA", "HighRiskMobileCountry": "TRUE", "MobilePrepaid": "FALSE" }, "XY": { "Addresses_for_Identity": "1", "Addresses_with_device": "1",</pre>
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```
    "Devices_for_Identity": "1",
    "Mobiles_for_Identity": "1",
    "Emails_for_Identity": "1",
    "Identities_at_the_Address": "1",
    "Identities_with_Device": "1",
    "Devices_at_Address": "1",
    "Phones_at_Address": "1"
  },
  "Mismatch": {
    "DeviceMobIssCtryMM": "TRUE",
    "DeviceRoamingCtryMM": "FALSE",
    "IssuerCtryAddressCtryMM": "FALSE",
    "DeviceCtryMM": "TRUE"
  },
  "AddressValidation": {
    "AddressWasCleansed": "TRUE",
    "AddressCleansedResult": "Cleansed",
    "OverallAddressResult": "Pass"
  },
  "KYC": {
    "KYCVendor": "GBGroup",
    "Proofs_Of_Address": "2",
    "Pep_Flag": "No Match",
    "Sanction_Flag": "No Match",
    "Deceased_Flag": "No Match",
    "Dob_Validity": "Valid"
  },
  "sphonicinternal": "C"
}
```


Error Codes

The following HTTP Response codes will be returned in error conditions

Code	Meaning
400	Bad Request – malformed or unintelligible data sent
401	Unauthorised – Invalid or expired Token
403	Forbidden – Authenticated successfully but you do not have permissions to execute the requested workflow
404	The requested workflow was not found
Default/Other	An unexpected error has occurred. Please contact Sphonic Support



Symphonic Solutions Ltd.

Lower Ground Floor,
8 Hermitage Street,
London.
W2 1BE

www.sphonic.com

Thank you.