

indicio
proven®

v1 API Tutorial

This tutorial goes through a series of steps to exercise the key features of the Proven API and help you begin to construct your own workflows.

The three major features which will be exercised are:

1. Connecting
2. Issuing a credential
3. Verifying a credential

Call the Invitation API

In order to connect, one agent needs to issue an invitation to the other. Generally, the server agent issues an invitation to the mobile agent by displaying an invitation URL encoded in a QR code.

You can request an invitation URL from the Proven API using the invitations API.

Use the following API endpoint: <https://proven-intro.indiciotech.io/api/v1/invitations>

Set your x-api-key header to: 9^2m@qw2w885dKXxaup6TQ&CQT4@=RNW (or your production API key)

Submit the following as the POST body:

```
{
  "contact_id": "",
  "alias": "API Invitation",
  "invitation_type": "CV1",
  "invitation_mode": "once",
  "accept": "auto",
  "public": false,
  "invitation_role": "Holder",
  "invitation_label": "CV1",
  "invitation_status": "active",
  "invitation_description": "Invitation created through API",
  "invitation_active_starting_at": null,
  "invitation_active_ending_at": null,
  "uses_allowed": ""
}
```

The API will respond with something similar to the following:

```
{"invitation_url": "https://proven.mediator.indiciotech.io?c_i=eyJAdHlwZSI6ICJkaWQ6c292OkJ6Q2JzTlloTXJqSGlxWkRUVUFTSGc7c3BlYy9jb25uZW50aW9ucy8xLjAvaW52aXRhdGlvbiIsICJAaWQiOiAiNmQ0Y2QxZjYtNWJmMi00MjQ3LTg1ZmQtY2UxNzk5MjYyNDY3IiwgInJlY2lwaWVudEtleXMiOiBbIkFjOTFEWHE2ZEZzWXBZcmMyVlMzWDRrUnhHWGZtaGhaVXo1NUpsUkdSdkF5Il0sICJyb3V0aW5nS2V5cyI6IFsiRXJLRGVkNkQ1Tm9nUXpMVlBwczlrcFNXYWdxTndiVlE4RXpIcGdoTHE4UlQiLCAiMkRBQjZNU2V2bnFjc2ZomzJIOEFrdlBIcHNzVmY3Wnl0UlZHOTHdXZXUjUiXSXSwgImxhYmVsIjogIlByb3ZlbiIsICJzZXJ2aWNlRW5kcG9pbmQiOiAiaHR0cHM6Ly9wcm92ZW4ubWVkaWF0b3IuaW5kaWNpb3RlY2guaW8ifQ==", "invitation_id": 52, "contact_id": ""}
```

Establish the Connection

Once you have an invitation, you can use it to establish a connection between the two agents.

Take the invitation_url from the API response and pass it to/display it for the connecting agent

When working with Postman, you can copy the invitation_url and use a website such as <https://www.qr-code-generator.com/> to create and display a QR code that mobile agents like Holdr+ can read.

Use Holdr+ to read the QR code by clicking on “Connect” in the middle of the bottom menu and pointing the camera at the QR code.

After the connecting agent reads the QR code and connects, you should be able to see the most recent connection in the Proven UI under “Contacts.”

Issue a Credential

After establishing a connection, one of the two key operations you can perform is to issue a credential.

You can request a credential be issued to a particular contact using the credentials API.

Use the following API endpoint: <https://proven-intro.indiciotech.io/api/v1/credentials>

Set your x-api-key header to: 9^2m@qw2w885dKXxaup6TQ&CQT4@=RNW (or your production API key)

Submit the following as the POST body (notice the invitation_id OR contact_id should match what you used in the invitations API call above):

```
{
  "invitation_id": 52,
  "contact_id": "",
  "schema_id": "Gj39gdivhMneKBaamMsX7P:2:User:1.0",
  "attributes": [
    {
      "name": "user_email",
      "value": "mike@indicio.tech"
    },
    {
      "name": "username",
      "value": "mike.ebert"
    },
    {
      "name": "user_id",
      "value": "1"
    },
    {
      "name": "user_roles",
      "value": "admin"
    }
  ]
}
```

```
}
```

The API will respond with the following message if things work:

```
{  
  "success": "Credential was offered"  
}
```

And you will receive a credential offer in the connected agent. In Holdr+, you will see a notification on the home screen that you can click to view the offer details and to click “Accept” or “Decline.”

Accept the credential offer so that you can use it in the verification step.

Request a Verification

After establishing a connection, the second key operation you can perform is to verify a credential. In this tutorial, we will verify the credential we just issued in the previous step.

You can request the verification of a credential from a particular contact using the verifications API.

Use the following API endpoint: <https://proven-intro.indiciotech.io/api/v1/verifications>

Set your x-api-key header to: 9^2m@qw2w885dKXxaup6TQ&CQT4@=RNW (or your production API key)

Submit the following as the POST body (notice the invitation_id OR contact_id should match what you used in the invitations API call above):

```
{
  "invitation_id": 52,
  "contact_id": "",
  "schemas": [
    {
      "schema_id": "Gj39gdivhMneKBaamMsX7P:2:User:1.0",
      "schema_attributes": [
        "user_email"
      ]
    }
  ],
  "timeout": "10",
  "rule": "no rule"
}
```

The API will respond with something similar to the following:

```
[
  {
    "verification_id": 3,
    "connection_id": "27194181-8bf5-4207-aad3-51e7ad7bbee5",
  }
]
```

```
"contact_id": null,
"invitation_id": 52,
"schema_id": "Gj39gdivhMneKBaamMsX7P:2:User:1.0",
"schema_attributes": [
  "user_email"
],
"timeout": 10,
"rule": "no rule",
"meta_data": null,
"complete": false,
"result": false,
"result_string": "Pending",
"result_data": null,
"presentation_exchange_id": [
  "911fe7d1-1485-4997-99d8-ef858c9eab64"
],
"error": "",
"created_at": "2024-01-16T21:05:23.816Z",
"updated_at": "2024-01-16T21:05:27.000Z"
}
]
```

And you will receive a presentation request in the connected agent. In Holdr+, you will see a notification on the home screen that you can click to view the request details and to click “Accept” or “Decline.”

Accept the request to send your credential information so that you can see it in the next step.

Request the Status of the Verification(s)

After requesting the presentation of a credential from the connected agent (and sharing it if you are the one controlling the connected agent), you can request the result of that verification. If the user is really quick or you have a long time out, you sometimes get the data back in the verification request itself, but usually you have to request the data later because of the human factor.

You can request the result of a verification from the verifications API using the GET method and a URL that contains the ID number of the verification. For example, the ID from the verification request in the last step is 3

Use the following API endpoint with the correct ID in the URL:

<https://proven-intro.indiciotech.io/api/v1/verifications/3>

Set your x-api-key header to: 9^2m@qw2w885dKXxaup6TQ&CQT4@=RNW (or your production API key)

The API will respond with something similar to the following:

```
{
  "verification_id": 3,
  "connection_id": "27194181-8bf5-4207-aad3-51e7ad7bba5",
  "contact_id": null,
  "invitation_id": 52,
  "schema_id": "Gj39gdivhMneKBaamMsX7P:2:User:1.0",
  "schema_attributes": [
    "user_email"
  ],
  "timeout": 10,
  "rule": "no rule",
  "meta_data": null,
  "complete": true,
  "result": true,
  "result_string": "Verified",
  "result_data": [
    {
      "name": "user_email",
```

```
        "value": "mike@indicio.tech"
    }
],
"presentation_exchange_id": [
    "911fe7d1-1485-4997-99d8-ef858c9eab64"
],
"error": "",
"created_at": "2024-01-16T21:05:23.816Z",
"updated_at": "2024-01-16T21:05:33.964Z"
}
```

The important thing to notice here is the `result_data`. You can now see the value of each of the attributes that you requested and use them for other credentials or in other parts of your existing or new systems.