

IBM Cúram Social Program Management

Setting Up Swagger UI for a Development Environment

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REVISION HISTORY

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30 June 2015	1.0	[initials]	[comments]

1 Setting Up Swagger UI for a Cúram Development Environment

1.1 Introduction

This article details the steps required to install and configure the Swagger UI tool on a Tomcat server so that you can view and test a Cúram REST API in a development environment.

This article is intended for developers of Cúram REST APIs who want to use the Swagger UI tool to view and test their API resources in a development environment.

1.2 Pre-requisites

- A Cúram application (version 6.1 or later), which includes a REST application, must be running on a Tomcat server in the development environment.
- Ensure the Swagger specification for the API, which is automatically generated by the Rest application, is accessible through a URL. This article assumes that v1 of the API is being used, and that Tomcat is running on port 8080. The Swagger specification should be available at
`http://<hostname>:8080/Rest/api/definitions/v1`

1.3 Downloading and Installing Swagger UI

- Download the Swagger UI tool from the swagger-api GitHub repository at `https://github.com/swagger-api/swagger-ui`.
Note: Ensure that the Swagger UI version downloaded is compatible with Swagger Spec 2.0, as this is the Swagger spec version that is generated by the Rest application.
- Extract the downloaded swagger.zip file. Copy the 'dist' folder that is inside the swagger.zip file to a new location. This is the only folder that is required. It contains pre-built files that are ready to use out of the box.
- Rename the 'dist' folder to 'swagger'.
- In the 'swagger' folder, open the index.html file with a text editor. Modify the following line, which specifies the default value for the 'url' property, from:
`url = http://petstore.swagger.io/v2/swagger.json;`
to
`url = http://<hostname>:8080/Rest/api/definitions/v1;`
Note: If this step is not performed, when the Swagger UI tool starts up, it will display the API resources for the Swagger pet store sample application, and the URL for the Swagger spec for the Cúram REST API will have to be manually entered each time.
Note: An alternative to using the URL for the Swagger spec is to use a JSON file containing the Swagger spec. Open the URL for the Swagger spec,

`http://<hostname>:8080/Rest/api/definitions/v1`, in a browser and save the content as a file named `swagger.json`. Copy this file into the 'swagger' folder. In the `index.html` file, change the following line:

```
url = http://petstore.swagger.io/v2/swagger.json;

to:

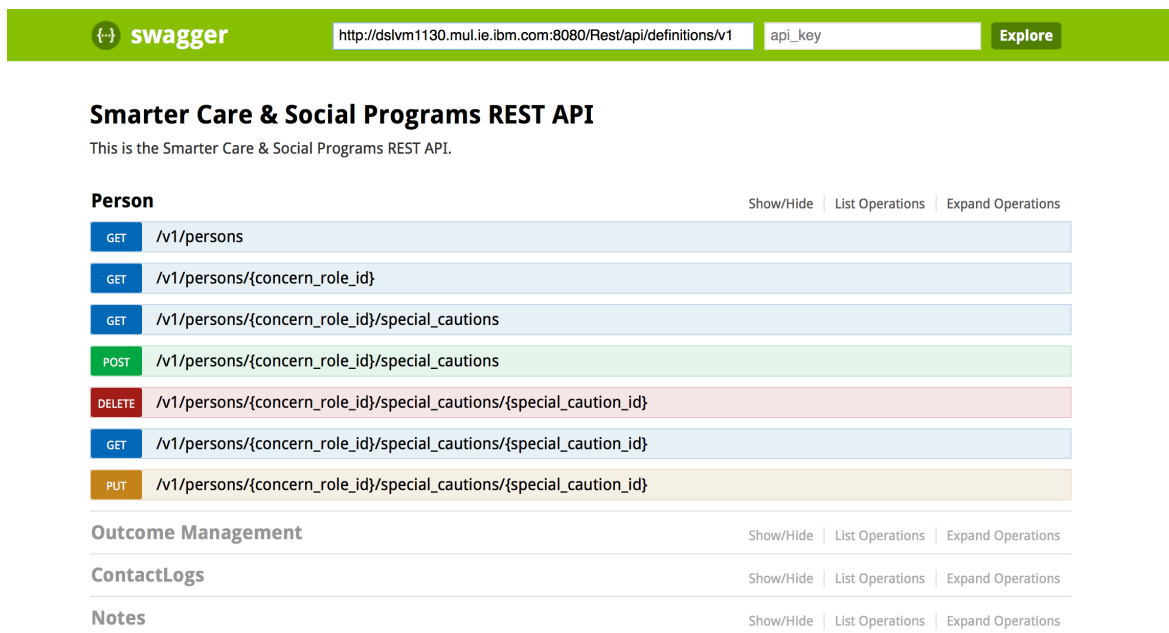
url =
http://<hostname>:8080/swagger/swagger.json;
```

- Copy the 'swagger' folder into the `%CATALINA_HOME%/webapps` directory, and re-start the Tomcat server, where `%CATALINA_HOME%` is the location where Tomcat is installed.
- Open a browser and access the Swagger UI tool at `http://<hostname>:8080/swagger/index.html`

1.4 Using Swagger UI

All resources for the API are now viewable through the Swagger UI tool. They are grouped together based on the tags that they have been configured with. If no tags have been included in the configuration of a resource, then the Swagger UI tool automatically groups these under a 'default' tag .

- Click on any tag name to expand the list of resources that have this tag.



The screenshot shows the Swagger UI interface for the 'Smarter Care & Social Programs REST API'. The top bar includes the Swagger logo, the API URL (`http://dslvm1130.mul.ie.ibm.com:8080/Rest/api/definitions/v1`), an API key field, and an 'Explore' button. Below the header, the API title 'Smarter Care & Social Programs REST API' is displayed, followed by the description 'This is the Smarter Care & Social Programs REST API.'.

The main content area shows a list of API endpoints grouped by tags. The 'Person' tag is expanded, showing a list of resources with their respective HTTP methods and endpoints. Other tags like 'Outcome Management', 'ContactLogs', and 'Notes' are also visible.

Method	Endpoint
GET	/v1/persons
GET	/v1/persons/{concern_role_id}
GET	/v1/persons/{concern_role_id}/special_cautions
POST	/v1/persons/{concern_role_id}/special_cautions
DELETE	/v1/persons/{concern_role_id}/special_cautions/{special_caution_id}
GET	/v1/persons/{concern_role_id}/special_cautions/{special_caution_id}
PUT	/v1/persons/{concern_role_id}/special_cautions/{special_caution_id}

Other tags visible: Outcome Management, ContactLogs, Notes.

Figure 1 Expanding a tag name, in this case the 'Person' tag name, shows a list of resources.

- Click on any resource, e.g. `/v1/persons`, to show all details about the resource and its parameters. There is also an option to try out the resource.

Person Show/Hide List Operations Expand Operations

GET **/v1/persons**

Implementation Notes
Returns a list of persons that match the search filters specified. The returned list is sorted by name, in alphabetical order.

Response Class (Status 200)
Model | **Model Schema**

```
{
  "data": [
    {
      "photo": "string",
      "dateOfBirth": "string",
      "full_name": "string",
      "email": "string",
      "concern_role_id": "string",
      "primaryAddress": {
        "displayText": "string",

```

Response Content Type application/json

Parameters

Parameter	Value	Description	Parameter Type	Data Type
full_name	<input type="text" value="(required)"/>	The person's full name. The full name includes the person's first and last names	query	string

Response Messages

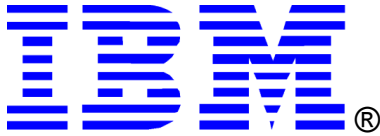
HTTP Status Code	Reason	Response Model	Headers
400	The data request is invalid. Check the error message for further information and resend the request with the corrected data.	Model Model Schema <pre>{</pre>	

Figure 2 Expanding a resource gives detailed information about that resource

- Click 'Try It Out'. The details of the request and the response are displayed.

REFERENCES

Swagger.io, (2015). *Swagger UI / Swagger*. [online] Available at: <http://swagger.io/swagger-ui/> [Accessed 2 Jul. 2015].



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