

# RAML

OLA DEIBITSCH

2015-01-28 | [CALLISTAENTERPRISE.SE](http://CALLISTAENTERPRISE.SE)

## PROBLEM – RECAP...

**SOAP/WSDL**  
*Complex  
Structured*



**REST/RAML**  
*Simple  
Structured*

## RAML BY THE RAML WORKGROUP – RECAP...

*"RESTful API Modeling Language (RAML) is a **simple** and **succinct** way of describing practically-RESTful APIs. It encourages **reuse**, enables discovery and pattern-sharing, and aims for merit-based emergence of **best practices**. The goal is to help our current API ecosystem by solving immediate problems and then encourage ever-better API patterns. RAML is built on broadly-used standards such as YAML and JSON and is a non-proprietary, **vendor-neutral** open spec.", [www.raml.org](http://www.raml.org)*

## RAML TOOLING – REVISTITED...

*SoapUI RAML Plugin*

*JAXRS-to-RAML*

*RAML to HTML*

*RAML2Wiki*

*RAMLang*

*APIkit*

*Osprey*

*ATOM RAML Package*

*RAML for JAXRS*

*RAML Sublime Plugin*

*API Designer*

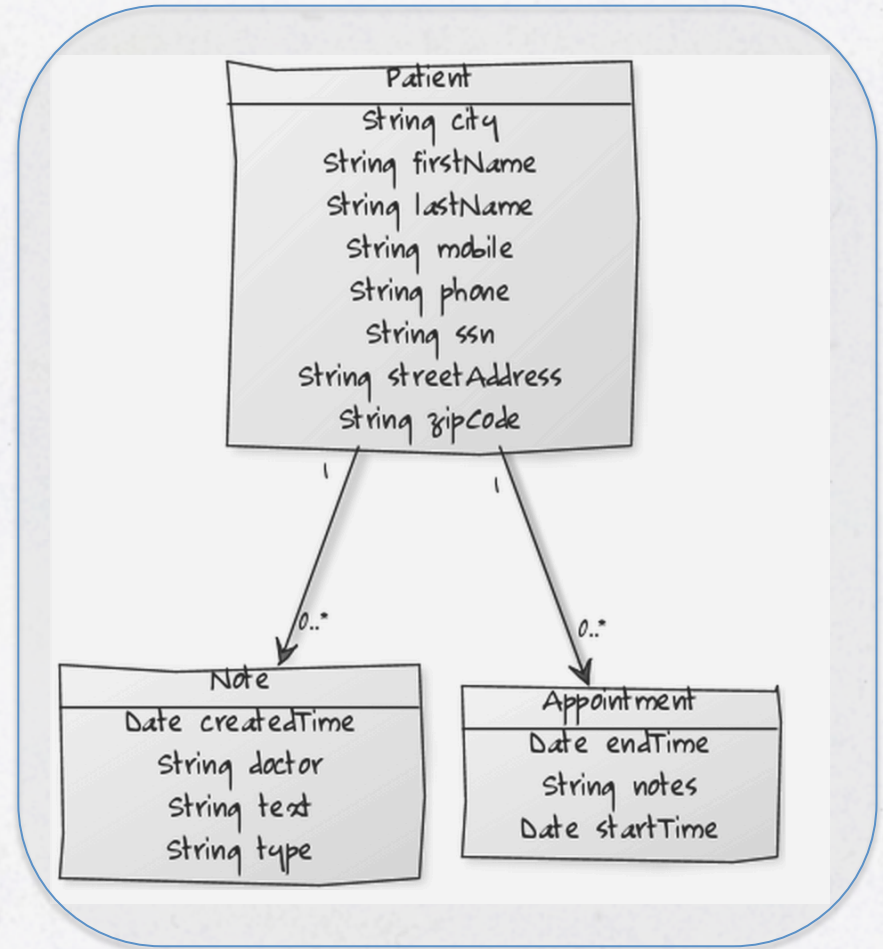
*swagger2raml*

*Restlet Studio*

...

## REQUIREMENTS: CALLISTA CARE API – RECAP...

- Resources:
  - /patients
  - /patients/{patientId}
  - /patients/{patientId}/notes
  - /patients/{patientId}/appointments
  - ...
- Verb
  - Get/Post/Put/Delete...
- Metadata
  - Authorization Header
  - Filtering
- Representations:
  - JSON, XML, ?.



# CALLISTA CARE API - RECAP

```
1  #%RAML 0.8
2  title: Callista Care
3  version: v1
4  ▼ documentation:
5  ▼   - title: Getting started
6  ▼     content: |
7       A kickstart with [Callista](http://callistaenterprise.se) Care API by using describing our API
8       ***MARKDOWN SYNTAX!!!***
9
10      Text attributes *italic*,
11      **bold**, `monospace`.
12
13     - title: Security
14       content: !include callista-care-api-security-documentation.md
15 ▼ /patients:
16   description: A collection of patients.
17   get:
18     description: Get a collection of patients.
19     queryParameters:
20       ssn:
21         displayName: SSN (Social Security Number)
22         description: Filter by SSN
23         example: 191212121212
24     headers:
25       Authorization:
26         type: string
27         description: Basic *Authorization* header
28         example: |
29           Authorization: Basic QWxhZGRpbjpvYVUHNlc2FtZQ==
30     responses:
31       200:
32         description: OK
33         body:
34           application/json:
35             example: !include example/patients.json
36   post:
37     description: Create a patient.
38     body:
39       application/json:
40         example: !include example/patient.json
41     responses:
42       201:
```

# RAML TOOLING – SOAPUI RAML PLUGIN - DEMO

The screenshot displays the SoapUI 5.0.0 interface. On the left, a project tree shows the configuration for a REST client named 'Request 1' targeting the endpoint 'http://localhost:8080/patients'. The main workspace shows the request configuration with a GET method and a table of headers:

| Name          | Value | Style  | Level  |
|---------------|-------|--------|--------|
| ssn           |       | QUERY  | METHOD |
| Authorization | 123   | HEADER | METHOD |

The response pane shows the following details:

HTTP/1.1 200 OK  
Content-Type: application/json  
Content-Encoding: gzip  
Transfer-Encoding: chunked  
Server: Jetty(6.1.26)

```
{
  "patients": [
    {
      "phone": "031-123456",
      "city": "Lindome",
      "firstName": "Kalle",
      "id": 1,
      "mobile": "070-1234567",
      "notes": [
      ],
      "civicRegNr": "121212-1212",
      "streetAddress": "Bjornekarrsvagen 4A",
      "zipCode": "43741",
      "lastName": "Kula"
    }
  ]
}
```

At the bottom, a log window shows the following debug messages:

```
Sun Jan 25 20:40:35 CET 2015:DEBUG:<< "[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "GET /patients HTTP/1.1[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "Accept-Encoding: gzip,deflate[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "Authorization: 123[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "Host: localhost:8080[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "Connection: Keep-Alive[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "User-Agent: Apache-HttpClient/4.1.1 (java 1.5)[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:>> "[\r\n]"
Sun Jan 25 20:40:37 CET 2015:DEBUG:<< "HTTP/1.1 200 OK[\r\n]"
```

The status bar at the bottom indicates a response time of 3ms (321 bytes).

# RAML TOOLING – RAML2HTML- DEMO

## Callista Care API documentation version v2

/patients

### Getting started

A kickstart with [Callista Care API](#) by using describing our API with **MARKDOWN SYNTAX!!!**

Text attributes *italic*, **bold**, `monospace` .

Shopping list:

- apples
- oranges
- pears

### Security

yada yada...

/patients

A collection of patients.

/patients

GET

POST

/patients/{patientId}

GET

PATCH

PUT

DELETE



## RAML 1.0

RAML 1.0 spec is out and waiting for feedback!

**See <https://github.com/raml-org/raml-spec/milestones/v1.0>**

## SUMMARY

- API Explosion
- It is clear that we need a modeling language!!
- RAML is a clean, simple and contract-first development approach.
- Tool support begins to mature...
- Slowly, we begin to see momentum...  
...and RAML 1.0 is upcoming...

