StackMap JSON API Specification

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Description
This document outlines a protocol for communicating with the StackMap library mapping system to be used by third-party systems. This protocol allows a third-party system to query StackMap for information regarding the location of holdings, which the API returns in the specified format. Any questions regarding this document should be sent to feedback@stackmap.com.

Overview
The StackMap API allows a system to query StackMap’s database to retrieve range maps and information. The system accepts queries for one or more holding records, and returns the data associated with each one in the format below. The data is designed to give a third-party system all the information it needs to construct a client-side interface similar to the one available within StackMap.

Technical Specification

Request URL
All requests to the API are HTTP GET requests to http://your-domain.stackmap.com/json/, where your-domain is the specific StackMap installation for your library.

GET Data
The GET request consists of JSON containing the request fields. Each node type is described below.

- “callno”
  - The text of the call number of the holding.
- “library”
  - The text of the library of the holding.
- “location”
  - A unique field used by StackMap to determine the general location of the holding. This may be a library name or ID number, as well as a floor name. Consult the StackMap team for more information on this field
- “callback”
  - To support AJAX, the API also supports callback functions through JSONP
Request Example
An example request is given below:

```json
{"callno":"ABC",
 "library":"LIBRARY",
 "location":"STACKS"
}
```

Done using AJAX (such as with jQuery's getJSON), the request might be formatted as:

http://your-domain.stackmap.com:/json/?callback=jsonp1234567890123&_=1234567890123&callno=ABC&library=LIBRARY
&location=STACKS

Response Specification
The response from the StackMap server is JSON that contains the information about the requested holdings. Each response node type is described below. Note that the response may contain additional nodes as the API is improved.

Holding
A field corresponding to the holding in the request with the following structure

- “callno”
  - The text of the call number of the holding.
- “notes”
  - The text of general notes about the given map. This field may be empty if there are no comments.
- “maps”
  - An array of maps. The specifics of each item are described below.

Map
A field describing a single map associated with the holding with the following structure

- “floorname”
  - The text of the name of the floor of the given map.
- “mapurl”
  - The text of the URL of the image image for the given map.
- “directions”
  - The text of the directions to the floor for the given map. This is potentially a multi-line string.
- “ranges”
  - An array of range. The specifics of each item are described below.

Range
A field describing a single range for a given map with the following structure
- "x"
  - An integer, the range’s x position on the map, in pixels
- "y"
  - An integer, the range’s y position on the map, in pixels
- "width"
  - An integer, the range’s width in pixels
- "height"
  - An integer, the range’s height in pixels
- "rangename"
  - The text of the name of the range in the range numbering system
- "rangename"
  - The text of the name of the range in the range numbering system
- "startcallno"
  - The starting call number of the range.
- "endcallno"
  - The ending call number of the range.

Response Example
Below is an example response for the example query given above, from the “Request Example” section.

```json
{
  "callno": "ABC",
  "notes": "...",
  "maps": {
    "map": {
      "floorname": "...", "mapurl": "...", "directions": "...",
      "ranges": {
        "range": [
          {
            "x": 10,
            "y": 10,
            "width": 10,
            "height": 10,
            "rangename": "...",
            "startcallno": "...",
            "endcallno": "..."},
        ],
      }
    }
  }
}
```