activu
vis|ability™ REST API: User's Guide

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Document Conventions

Text Formatting Standards

Table 1: Text Formatting Standards

Text Type	Appearance
Chapter Heading	Font: Calibri, 20 points, Bold, Color: Blue-Grey Hex #425A69, RGB: 66,90,105, Left; Line spacing: 21-point, Space Before: 3 points. Example: Chapter Heading
Chapter Sub-Heading	Font: Calibri, 18-point, Font Color: Blue-Grey Hex #425A69, RGB: 66,90,105, Line spacing: Multiple 1.08 Example: **Chapter Sub-Heading**
Section Heading	Section Headings are used to label a series of terms or sub-sections within a Chapter or Chapter Sub-Heading. Example: **Section Heading** This section describes the process of….
Body Text	Font: Callibri, Regular, 10.5 point. **Example**: This is body text.
Titles and Names: Screen Titles, Field Names, Product Names, Table Column Titles, Command Names, Menu Titles	Titles are capitalized and in **bold**. Example: Figure 1: Main **System Tree** screen of the **System Administration Client**
Task or step-by-step instructions	Task instructions are usually numbered and often preceded by the statement, "To execute this task, complete the following steps:" **Example**: To perform this task, complete the following steps: 1. Step 1 2. Step 2
Buttons	**Example**: Buttons within body text, such as this Remove button, are relatively the size shown, and in line with the text baseline, as this **Share** button is also displayed.
Activu product names are capitalized, appear in bold, followed by the Trademark symbol: ™	Example: **Activu vis|ability™**

Hyperlinks	Text that is underlined in a blue color are links to cross-referenced topics in another area of the document. If the link is active, when the mouse is hovered over it, a tag pops up instructing the **User** to press **CTRL+ Click** to follow the link, as in the example below: Example: **Error! Reference source not found.** or **Error! Reference source not found.**

Warnings, Tips, Cautions, and Important Notes

The following message boxes may appear within the text to call special attention to the information being described:

💡	**Tip:** a note to provide insight about the software and its operation.
⚠️	**Warning:** improper execution can cause unwanted operational effects.
🚧	**Caution:** similar to warning, but results will not be non-operational, or dire, if improperly followed.
⭐	**Important:** part of a process that needs to be completed to ensure changes or updates are completed.

Defining vis|ability API Authentication Key

A REST API key is required when authenticating access in REST API calls. API keys are included in the request URL query as a query parameter **key** or in request headers as a header parameter **x-api-key**.

Example: REST API key - query parameter

  https://{vis-ability_system_address}:59081/api/v1/groups?**key=oAseOSDXvkupKzwxcTtxQw**

Example: Curl REST API key - header parameter

  curl -X 'GET' \

   'https:// {vis-ability_system_address}:59081/api/v1/groups' \

   -H 'accept: application/json' \

   -H **'x-api-key: oAseOSDXvkupKzwxcTtxQw'**

REST APIs are implemented in the vis|ability Nexus component running as a Windows Service in the System Server computer.

Obtaining REST API Authorization Keys

API keys are defined in the vis|ability Administration Client (VAC).

To generate an API key:

1. Navigate to the **API Key VAC** folder.
2. Select **Add New Key**.
3. Define a **Key** name.
4. Add the Key to a security user group.

An API authorization key is automatically generated. You can add the key to the Windows clipboard for future use in REST APIs.

The REST API call has access to vis-ability resources (sources, devices, scripts, layouts, etc.) based on user group rights associated with the API key. You can define multiple REST API keys that belong to different groups in the VAC.

In the figure below, a REST API key named **TestKey** is included in the **Administrators** group and has the following key value: **oAseOSDXvkupKzwxcTtxQw**
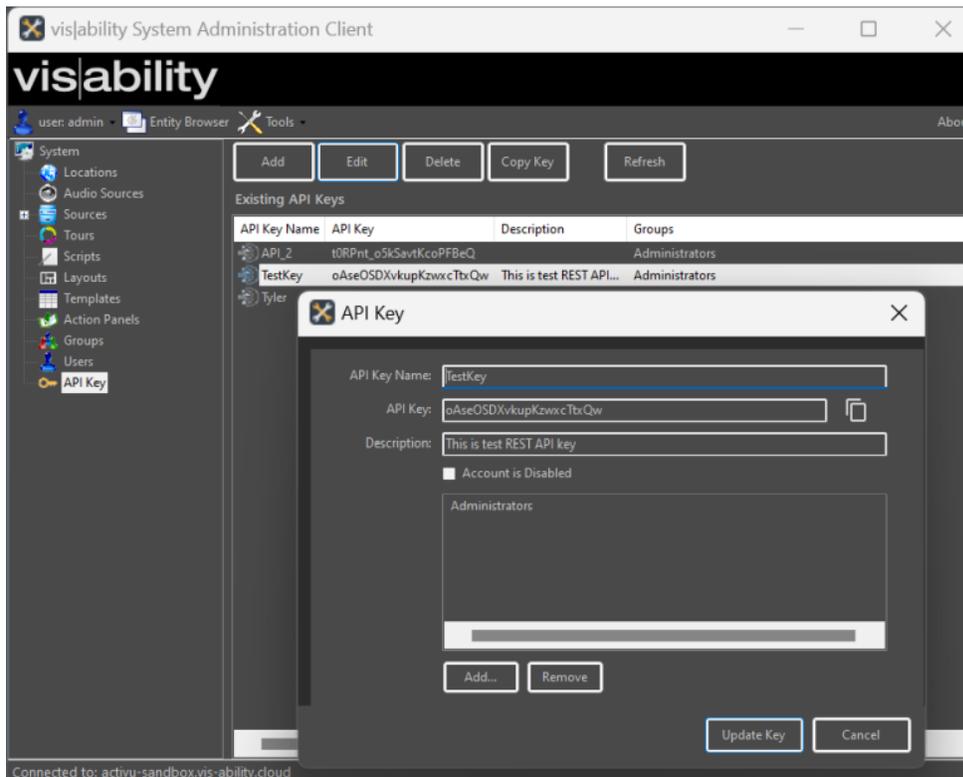

Figure 1: REST API Key Example

Defining System Address/Port in REST API URL Queries

Each Rest API query in vis-ability consists of the following structure:

https://{vis-ability_system_address}:59081/api/v1

Where **{vis-ability_system_address}** is the DNS name, Host name or IP address of the vis|abiliy System Server. Specifically, the vis|ability system address targets the vis|ability Nexus Windows Service.

In addition, some API calls require a request body with JSON format.

Example:

POST https://10.0.0.9:59081/api/v1/layouts?key=oAseOSDXvkupKzwxcTtxQw

Body

```
{
 "name": "string",
 "path": [
 "Layouts\custom\"
 ],
 "target": "string",
```

```
"canvasSize": {
"width": 1920,
"height": 1080
},
"scaling": "True",
"sourceInstances": [
{
"id": "0123456",
"adHoc": true,
"sourceId": "001",
"name": "activu_web",
"sourceType": "www",
"label": {
"text": "activu",
"color": "black",
"background": "white",
"fontSize": 18,
"position": "TopCenter"
},
"parameters": {
"additionalProp1": "",
},
"region": {
"x": 0,
"y": 0,
"width": 600,
"height": 700
},
"viewScreen": "1",
"zOrder": 0
}
]
}
```

Referencing REST API Documentation

Detailed documentation of visIability supported REST API calls is accessible through a direct System Server query:

https:// {vis-ability_system_address}:59081/swagger

Examples:

https://10.0.0.9:59081/swagger

https://EXP-Activu:59081/swagger

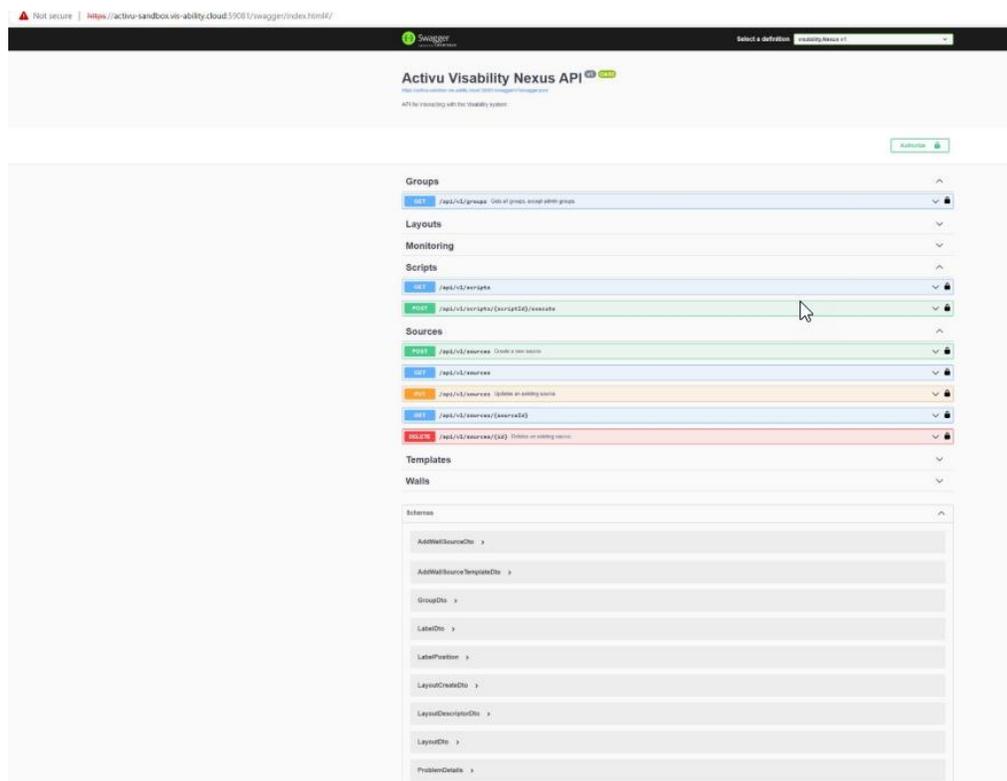Swagger is convenient REST API, browser based, interactive editor that shows all REST API calls with parameters and scheme DTOs. In Swagger, calls are tested directly from the browser.

Figure 2: Swagger REST API List