

# SenseIT Back-end RESTful API

## A RESTful API for Automatic Accessibility Testing

| Revision | Author | Date     |
|----------|--------|----------|
| 0.1      | Eytan  | 25/08/19 |

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# **Abstract**

This is a documentation of the RESTful API provided by the SenseIT automated accessibility testing service.

The API is provided to allow users to develop their own application that utilizes the tool for scanning websites and discovering accessibility issues.

## General

Prefix – The prefix for all endpoints is: **api/v1**.

Example url: <server domain>/api/v1/<endpoint>

All endpoints allow access to authenticated users only.

## Endpoints

### Login

This is required in order to use the rest of the API.

|                  |  |
|------------------|--|
| URL              | api/v1/auth/login  |
| Method           | POST   |
| URL Parameters   | None   |
| Data Parameters  | {“username”: <existing user name>, “password”: <the relevant password>}  |
| Success Response | Code: 200<br>Content:<br>{“key”: <text – authentication key>}<br><br>Example:<br>{<br>“key”: “078027a1883eb765173fe796d0c1f005ad955ee5”<br>} |
| Error Response   | Code: 400<br>Content:<br>{<br>“non_field_errors”: [<br>“Unable to log in with provided credentials.”<br>]<br>}                               |

# Logout

|                  |   |
|------------------|---|
| URL              | api/v1/auth/logout  |
| Method           | POST  |
| URL Parameters   | None  |
| Data Parameters  | N   |
| Success Response | Code: 200<br>{<br>"detail": "Successfully logged out."<br>} |
| Error Response   |   |

# Scan List

Provides a list of scans for the current user (owned by current user)

|                  |  |
|------------------|--|
| URL              | api/v1/  |
| Method           | GET, POST  |
| URL Parameters   | None   |
| Data Parameters  | None   |
| Success Response | <p>Code: 200<br/>Content:</p> <pre>[   {     "id": &lt;number&gt;,     "url": &lt;url&gt;     "start": &lt;date &amp; time&gt;,     "end": &lt;date &amp; time&gt;,     "status":&lt;"ready"   "loading"   "scanning"&gt;   } ... ]</pre> <p>ready - results are available.<br/>scanning - still running results not available yet.<br/>loading - results are being loaded not available yet.</p> <p>Example:</p> <pre>[   {     "id": 117,     "https://cnn.com",     "start": "2019-08-25T11:09:01Z",     "end": "2019-08-25T11:13:12Z",     "status": "loading"   },   {     "id": 116,     "https://www.fnx.co.il",     "start": "2019-08-25T10:209:01Z",     "end": "2019-08-25T11:24:12Z",     "status": "ready"   } ]</pre> |
| Error Response   | <p>Code: 401<br/>Content: Unauthorized</p>   |

## Start Scan

Starts a new scan

|                  |   |
|------------------|---|
| URL              | api/v1/scan   |
| Method           | GET, POST   |
| URL Parameters   | None  |
| Data Parameters  | <pre>{ "url": &lt;url&gt;, "type": &lt;"one"   "full"&gt;</pre> <p>one – single page only.<br/>Full – whole website</p> <p>Example:<br/><pre>{ "url": "https://apple.com", "type": "full" }</pre></p> |
| Success Response | <p>Code: 200<br/>Content:<br/><pre>{ "scan_id": &lt;number&gt; }</pre></p> <p>Example:<br/><pre>{ "scan_id": 122 }</pre></p>  |
| Error Response   | <p>Code: 401<br/>Content: Unauthorized</p> <p>Code: 400<br/>Content: Invalid Form</p>   |

# Scan Status

Returns scan status

|                  |  |
|------------------|--|
| URL              | api/v1/status/<scan id>  |
| Method           | GET, POST  |
| URL Parameters   | <number> - Scan id<br>Example: 122   |
| Data Parameters  | None   |
| Success Response | Code: 200<br>Content:<br>{“scan”: <number>, “status”: <“ready”   “loading”   “scanning”>}<br><br>ready - results are available.<br>scanning - still running results not available yet.<br>loading - results are being loaded not available yet.<br><br>Example:<br>{“scan”: 122, “scanning”} |
| Error Response   | Code: 401<br>Content: Unauthorized   |



# Scan Errors

Returns scan results

|                  |   |
|------------------|---|
| URL              | api/v1/errors/<scan id>   |
| Method           | GET, POST   |
| URL Parameters   | <number> - Scan id<br>Example: 122  |
| Data Parameters  | None  |
| Success Response | <p>Code: 200<br/>Content:</p> <pre>[   {     "severity": &lt;"critical"   "serious"   "moderate"&gt;,     "name": &lt;text - error name&gt;,     "criterion": &lt;list of comma separated numbers&gt;,     "description": &lt;text&gt;,     "fix": &lt;text - how to fix recommendation&gt;,     "avoid": &lt;text - how to avoid recommendation&gt;,     "source": &lt;       "Unknown"         "Global errors"         "HTML errors"         "Text errors"         "Link errors"         "List errors"         "Language errors"         "Table errors"         "Frame errors"         "Image errors"         "Form errors"         "JS errors"         "Other errors" &gt;,      "errors":     [       {         "url": &lt;url - where occurred&gt;,         "lines": &lt;comma separated list of line numbers,                     when available&gt;       },       ...     ]   },   ... ]</pre> <p>Example:</p> <pre>[   {</pre> |

```

    "severity": "Critical",
    "name": "This page uses JavaScript with the
'object.write' method to add content to a page .",
    "criterion": "1.3.1",
    "description": "The 'object.write' method does not
work with XHTML when served with the correct MIME type
(application/xhtml+xml). Assistive Technologies will miss it
and it should be avoided.",
    "fix": "Please remove the 'object.write' shown in the
references below. To create elements within the DOM, you
may use the 'createElement' function or any other valid
option, associated with an 'aria-live' attribute.",
    "avoid": "For pages that dynamically create new
content, do not use the 'object.write' method.",
    "source": "JS errors",
    "errors": [
        {
            "url": "https://d2z0twhaibasxg.cloudfront.net/js/
za_widget_354a.js",
            "lines": ""
        },
        {
            "url":
"https://www.google-analytics.com/analytics.js",
            "lines": ""
        }
    ]
}, {
    "severity": "Serious",
    "name": "This page has at least one form field with a
<button> tag missing a 'type' attribute.",
    "criterion": "1.1.1",
    "description": "A <button> tag can vary in many
ways, depending on the 'type' attribute. Hence, it is
important to specify and identify the button's purpose for
all users.",
    "fix": "Please add a 'type' attribute to the <button>
tags shown in the references below.",
    "avoid": "Each <button> tag must have a 'type'
attribute specifying it's purpose.",
    "source": "Form errors",
    "errors": [
        {
            "url": "https://www.fnx.co.il",
            "lines": "741,742"
        },
        {
            "url": "https://www.fnx.co.il",
            "lines": "1906,1907"
        },
        {

```

|                |  |
|----------------|--|
|                | <pre>         "url": "https://www.fnx.co.il",         "lines": "1992,1993"       },       {         "url": "https://www.fnx.co.il",         "lines": "2090,2091"       },       {         "url": "https://www.fnx.co.il",         "lines": "2136,2137"       },       {         "url": "https://www.fnx.co.il",         "lines": "2190,2191"       },       {         "url": "https://www.fnx.co.il",         "lines": "2220,2221"       },       {         "url": "https://www.fnx.co.il",         "lines": "3181"       }     ]   },   {     "severity": "Serious",     "name": "This page has at least one &lt;iframe&gt; tag with a 'src' attribute with no value set to it.",     "criterion": "4.1.1",     "description": "A 'src' attribute with no valid content in it, in an &lt;iframe&gt; tag, means nothing will be shown in it.",     "fix": "Please add valid content to the 'src' attribute to the &lt;iframe&gt; tags in the references shown below.",     "avoid": "Each &lt;iframe&gt; tag must have a 'src' attribute with valid content in it.",     "source": "Frame errors",     "errors": [       {         "url": "https://www.fnx.co.il",         "lines": "2329"       }     ]   }, ], }, </pre> |
| Error Response | <p>Code: 401</p> <p>Content: Unauthorized</p>  |

# Documentation

Open this file.

|                  |   |
|------------------|---|
| URL              | api/v1/auth/documentation   |
| Method           | GET   |
| URL Parameters   | None  |
| Data Parameters  | None  |
| Success Response | Code: 200<br>Content: This file   |
| Error Response   | Code: 403<br>Content: Not Authorized<br>Code: 404<br>Content: Not Found |