



# Oxygen JSON Editor

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JSON Schema  
LESS  
YAML  
JSON  
SHELL  
PHP  
JS DOCKERFILE  
CSS JSONL  
POWER SHELL



# Agenda

- New product: **Oxygen JSON Editor**
- **Editing** JSON and YAML documents
- **Design** mode for JSON Schema development
- **Validating** JSON and YAML documents
- **Tools** for JSON, JSON Schema, YAML, and OpenAPI documents
- **OpenAPI/AsyncAPI** Support
- **HTML, CSS**, and more



# Oxygen JSON Editor

- A specialized tool designed for editing JSON documents

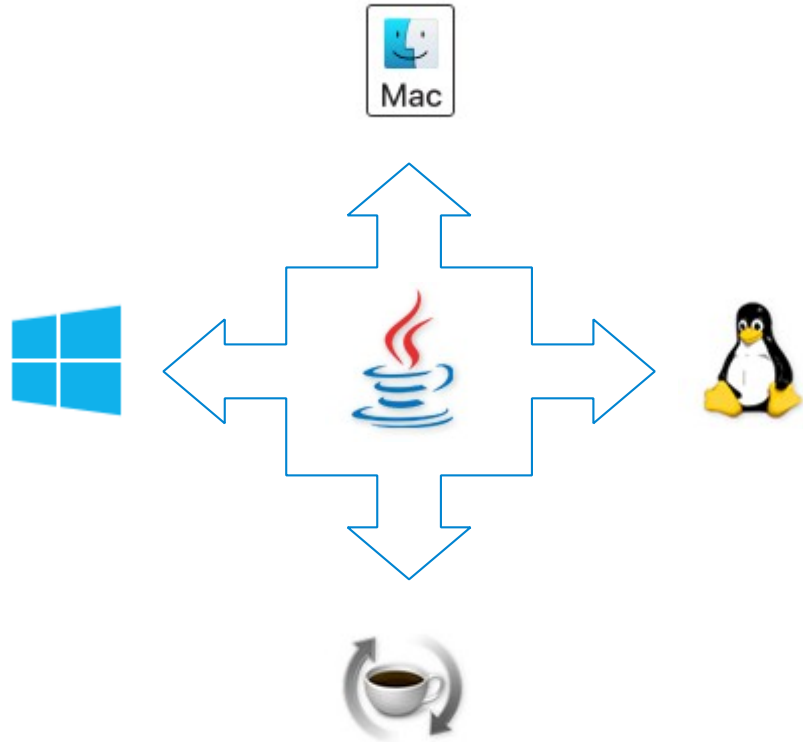


# Oxygen JSON Editor - Features

- **JSON** – editing, validation, conversion
- **JSON Schema** – editing, validation, design, refactoring, documentation
- **YAML** - editing, validation, conversion
- **OpenAPI/AsyncAPI** – editing, validation, documentation, testing
- **HTML/CSS** – editing, validation, query, minification/compression
- **Compare Tools** - file and folder comparisons
- **Git/Subversion Client** – for collaboration
- and more ...

# Availability on Multiple Platforms

- Is a cross-platform application
- Ideal for organizations that need to manage large projects
- Can be run on:
  - OS X
  - Windows
  - Linux
  - All (Windows, Linux/Unix, etc)



# Batch Process a List of Files

- Conversion between XML, JSON, and YAML
- Validate and check well-formedness
- Find and replace in files
- XPath in files
- Format and indent
- Check spelling in files



# Subscription License

- 12 Months Subscription
- 6 Months Subscription
- 30-day trial license



[https://www.oxygenxml.com/json\\_editor/buy.html](https://www.oxygenxml.com/json_editor/buy.html)

# Why Oxygen JSON Editor?

- User-friendly interface
- Great support for JSON
- Auto-complete
- Search and replace
- Batch Processing
- Affordable pricing





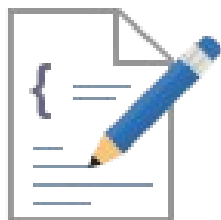
Question: Do you use Oxygen for JSON editing?

- ❑ Yes. I use Oxygen
- ❑ Yes. I intend to use Oxygen
- ❑ No. I use other tools



## Editing JSON

- JSON Text, Grid, Author Editing Mode
- JSON Outline View
- Validation and Content Completion Assistant based on JSON Schema



## Text Editing Mode

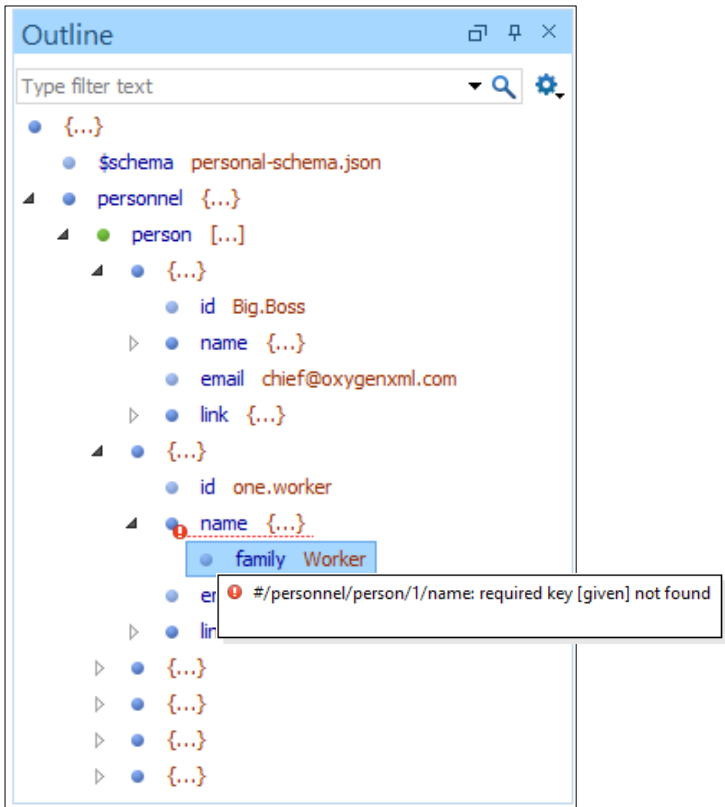
- Syntax Highlights
- Structure Folding
- Format and Indent
- New Document Templates

A screenshot of the Oxygen JSON Editor interface. The window title is "personal.json". The editor shows a JSON document with syntax highlighting and structure folding. The JSON content is as follows:

```
1 {
2   "$schema": "personal-schema.json",
3   "personnel": {
4     "person": [
5       {
6         "id": "Big.Boss",
7         "name": {
8           "family": "Boss",
9           "given": "Big"
10        },
11        "email": "chief@oxygenxml.com",
12        "link": {
13          "subordinates": [
14            "one.worker",
15            "two.worker",
16            "three.worker",
17            "four.worker",
18            "five.worker"
19          ]
20        }
21      }
22    ]
23  }
24 }
```

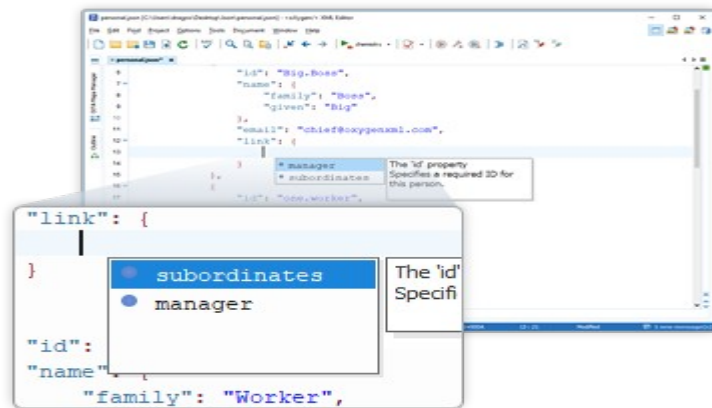
# JSON Outline View

- Document Overview
- Synchronization with Editor
- Filtering
- Error Markers



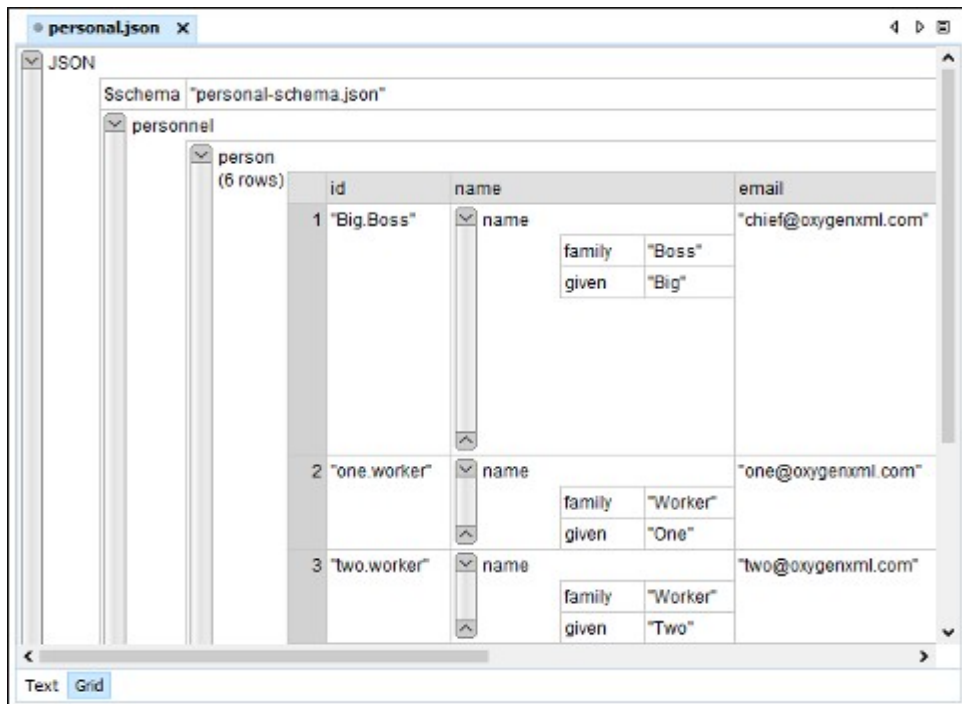
## Content Completion

- Context-Sensitive
- Valid Proposals
- Documentation from Schema
- Code Templates



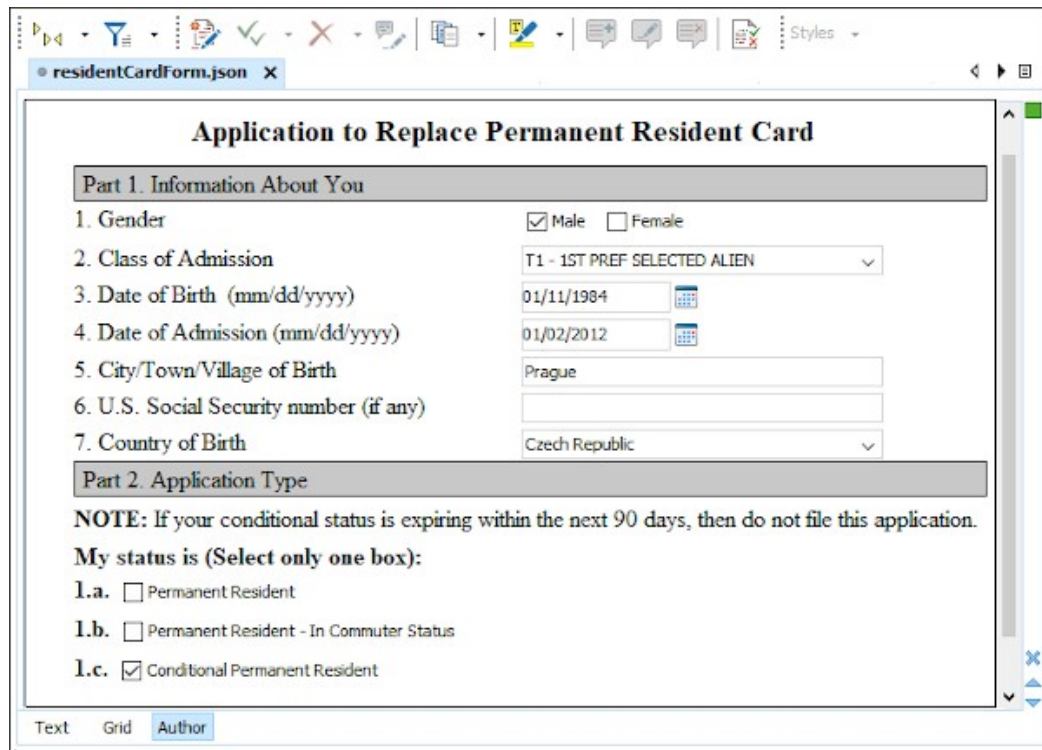
## Grid Editing Mode

- JSON content is represented in Grid mode
- JSON data and structure can be easily manipulated
- Table-specific operations or drag-and-drop operations



# JSON Visual Author Editing Mode

- JSON document is opened in Author mode
- Create your own JSON framework
- Customize using CSS



The screenshot shows the Oxygen JSON Editor interface in Author mode. The main window displays a form titled "Application to Replace Permanent Resident Card". The form is divided into two parts: "Part 1. Information About You" and "Part 2. Application Type".

**Part 1. Information About You**

1. Gender	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
2. Class of Admission	T1 - 1ST PREF SELECTED ALIEN
3. Date of Birth (mm/dd/yyyy)	01/11/1984
4. Date of Admission (mm/dd/yyyy)	01/02/2012
5. City/Town/Village of Birth	Prague
6. U.S. Social Security number (if any)	
7. Country of Birth	Czech Republic

**Part 2. Application Type**

**NOTE:** If your conditional status is expiring within the next 90 days, then do not file this application.

**My status is (Select only one box):**

1.a.	<input type="checkbox"/> Permanent Resident
1.b.	<input type="checkbox"/> Permanent Resident - In Commuter Status
1.c.	<input checked="" type="checkbox"/> Conditional Permanent Resident

The interface includes a toolbar at the top with various editing tools and a bottom navigation bar with "Text", "Grid", and "Author" modes. The "Author" mode is currently selected.





# YAML

- Editor – syntax highlight, outline view, content completion
- Validation - well-formedness checks, validate YAML against JSON Schema
- Tools - YAML to JSON and JSON to YAML, batch conversions

personal.yaml [D:\OxygenJSONEditor\Samples\yaml\personal.yaml] - <oxygen/> JSON Editor

File Edit Find Project Options Tools Git Document Window Help

Outline

Type filter text

- {...}
- \$schema ../json/personal-schema.json
- personnel {...}
- person [...]
  - id Big.Boss
  - name {...}
  - email chief@oxygenxml.com
  - link {...}
  - {...}
  - {...}
  - {...}
  - {...}
  - {...}
  - {...}

```

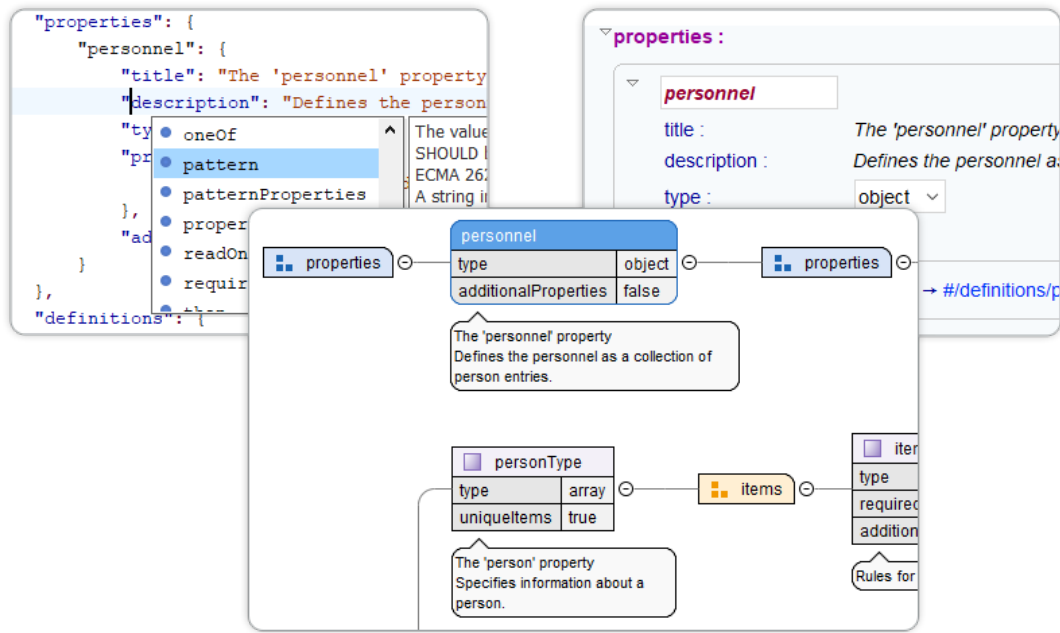
1 ---
2 $schema: ../json/personal-schema.json
3 personnel:
4   person:
5     - id: Big.Boss
6       name:
7         family: Boss
8         given: Big
9         email: chief@oxygenxml.com
10      link:
11        subordinates:
12          - one.worker
13          - two.worker
14          - three.worker
15          - four.worker
16          - five.worker
17     - id: one.worker
18       name:
19         family: Worker
20         given: One
21         email: one@oxygenxml.com
22       link:
23         manager: Big.Boss
24     - id: two.worker
25       name:
  
```

D:\... \Samples\yaml\personal.yaml Validation successful U+0069 9 : 14

# JSON Schema Editor

Design, develop, and edit JSON Schemas in:

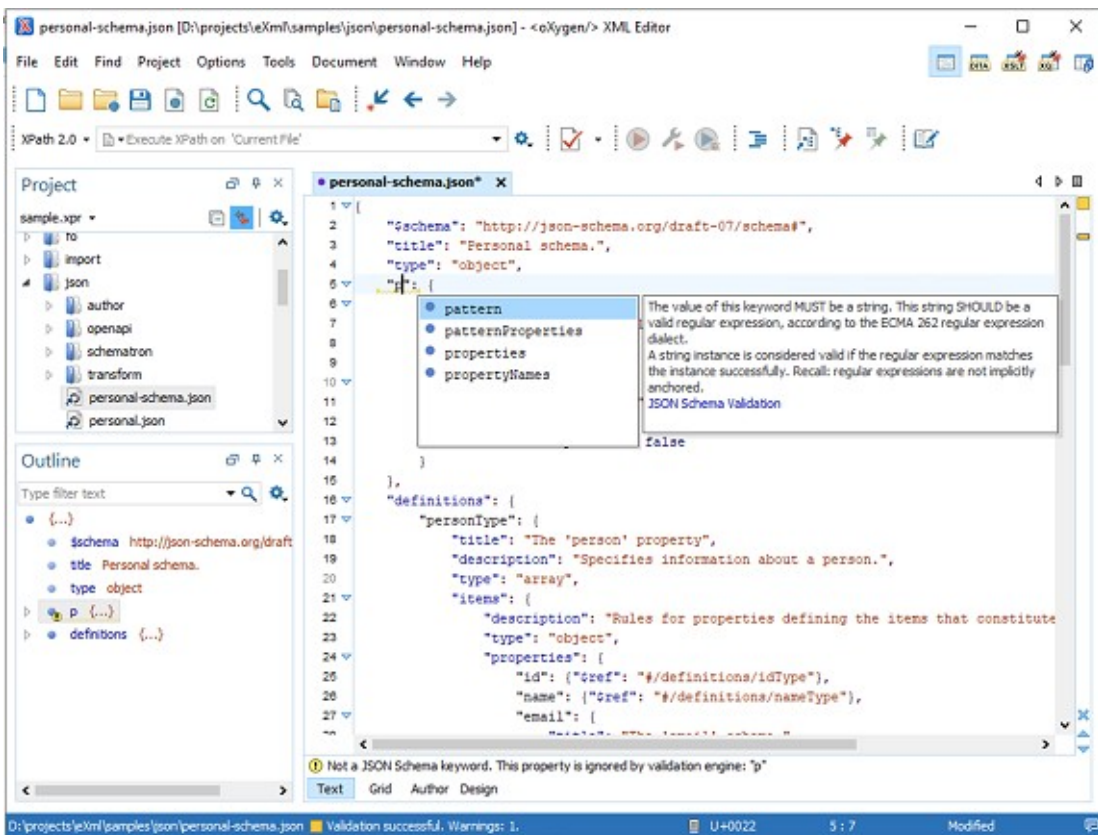
- Text Editing Mode
- Author Editing Mode
- Schema Design Mode



# Text Editing Mode

Text editing mode is packed full of editing helpers

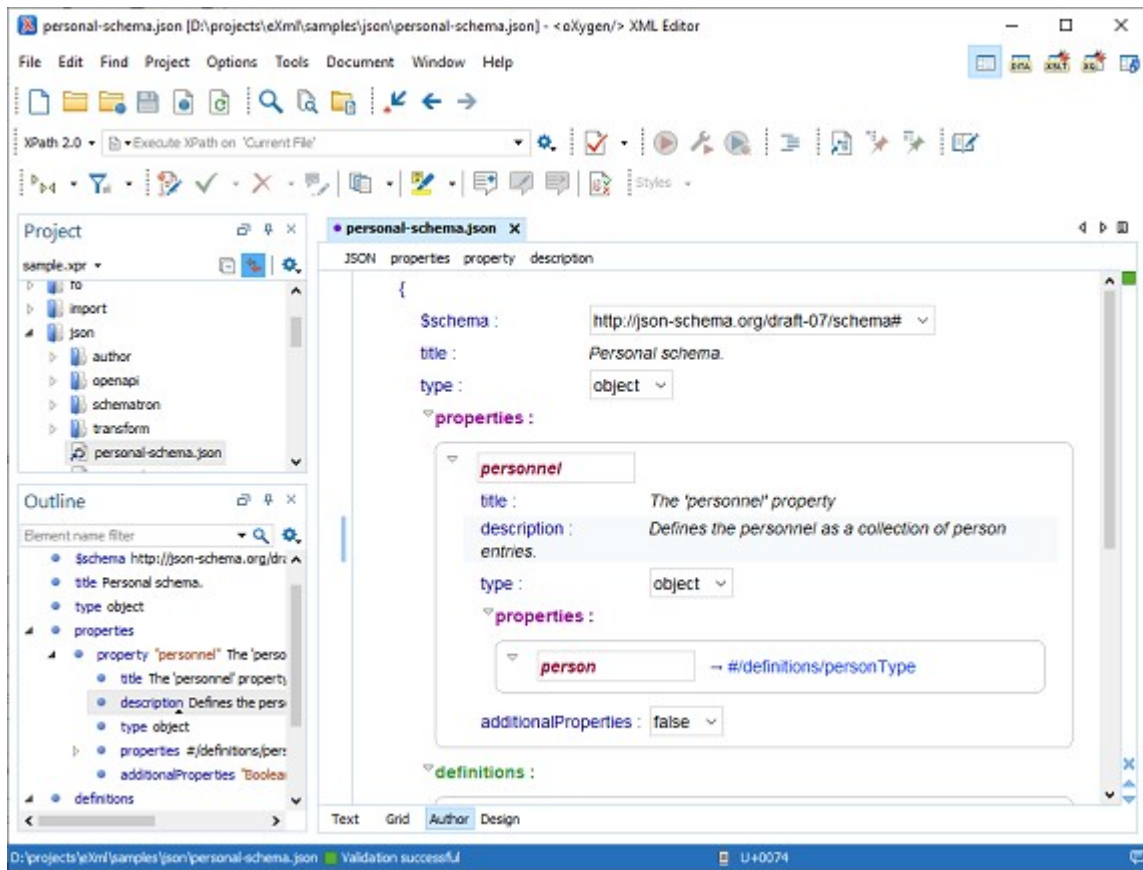
- JSON **Outline View**
- JSON-specific **Syntax Highlighting**
- Search and **Find/Replace**
- **Drag and Drop**
- **Validation**
- **Format and Indent (Pretty Print)**



# Author Editing Mode

Visual editing mode for JSON Schema documents:

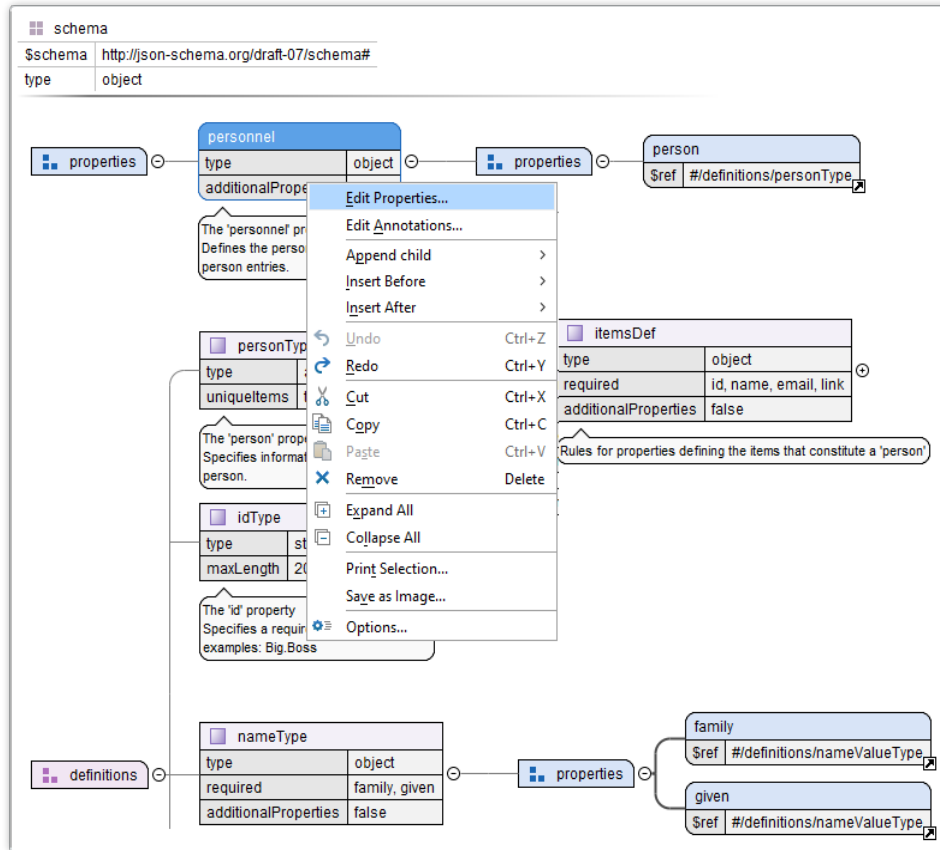
- JSON Schema **framework**
- **Content completion** support
- **Validation**
- Specific **CSS for rendering**
- Create your own **custom JSON framework**



# Schema Design Mode

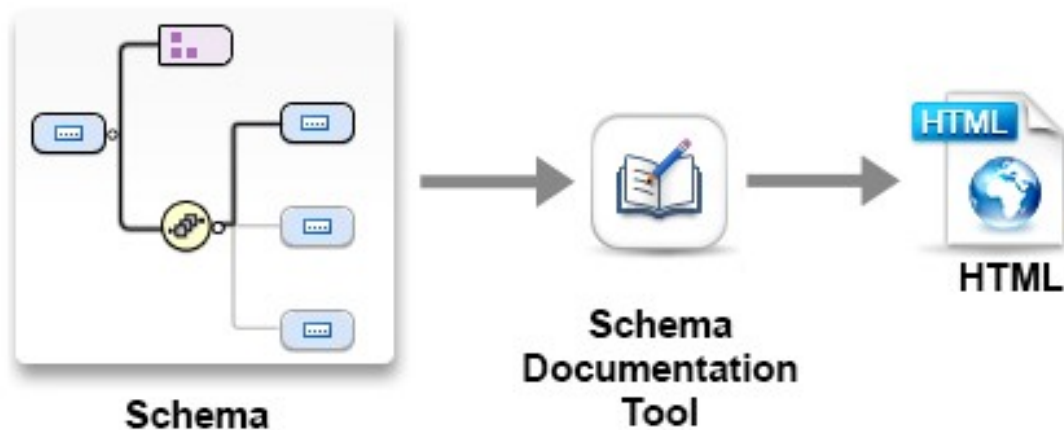
Visualize, edit, and understand JSON Schemas

- In-Place Component Editing
- Edit Properties
- Edit Annotations
- Schema Editing Actions
- Move Component Up/Down Actions
- Print/Save as Image



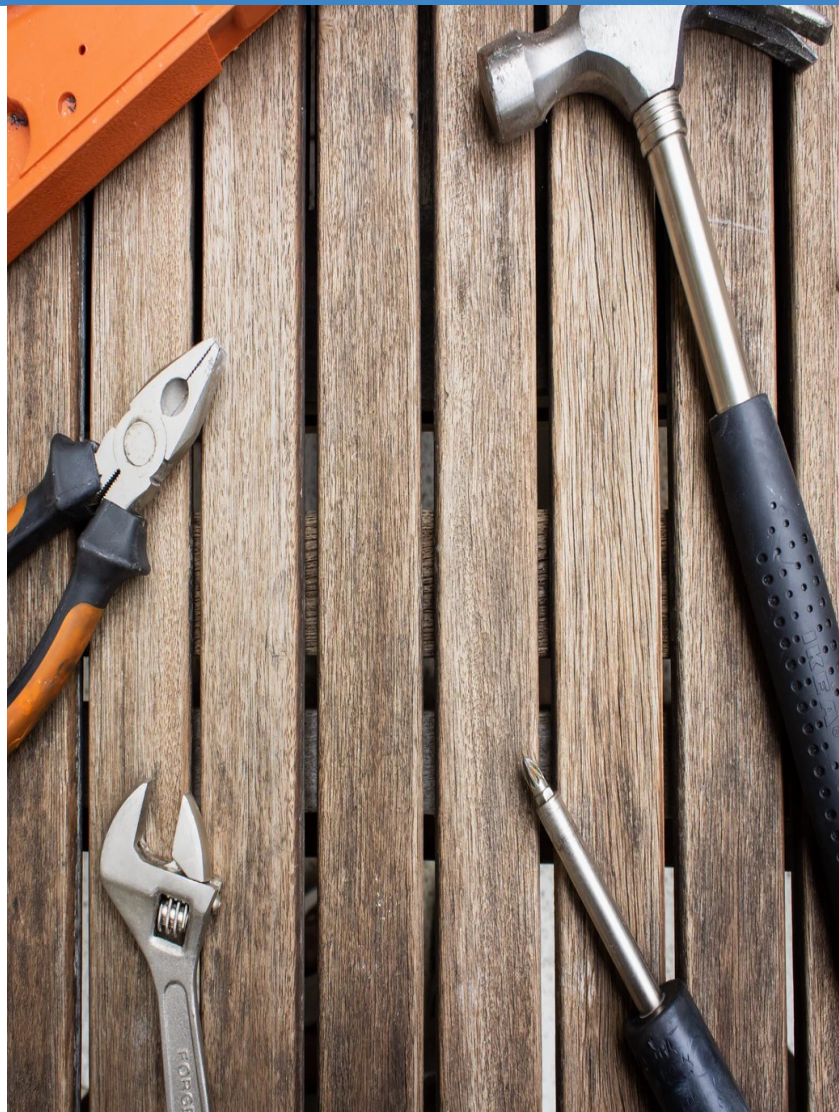
## Generate JSON Schema Documentation

- Tool for generating detailed documentation for a JSON Schema file in HTML format



## JSON Tools

- Convert between [JSON and XML](#)
- Convert between [JSON and YAML](#)
- Generate [sample JSON files](#) from JSON Schema
- [Generate JSON Schema](#) from a JSON instance
- [XSD to JSON Schema](#) converter
- Convert JSON Schema to [latest versions](#) (2020-12, 2019-09)



## OpenAPI/AsyncAPI Documents

- Can be written in JSON or YAML
- Describe the inputs and outputs of an API
- Include information such as:
  - where the API is hosted
  - what authorization is required to access it
  - details for consumers and producers





# OpenAPI/AsyncAPI Editor

- Syntax highlights
- Validation conforms with the schema
- Content completion based on the schema
- Outline view
- Search and replace



# OpenAPI/AsyncAPI Visual Editor

- Edit documentation
- Form controls to change values
- Collapsible sections
- Customize interface with CSS

A screenshot of the OpenAPI/AsyncAPI Visual Editor interface. The interface is divided into several sections: 'info', 'description', 'Terms of service', 'Swagger API Team', 'Apache 2.0', 'SERVERS', 'PATHS', and 'paths'. The 'SERVERS' section is expanded to show a single server with the URL 'http://petstore.openapi.io/api'. The 'PATHS' section is also expanded to show three paths: '/pets', '/pets/{id}', and '/pets/{id}'. Each path has a corresponding method (get, post, delete) with a description. The interface is clean and modern, with a light blue and white color scheme.

info description

A sample API that uses a petstore as an example to demonstrate features in the OpenAPI 3.0 specification

[Terms of service](#)

[Swagger API Team](#)

[Apache 2.0](#)

**SERVERS**

▾ [

url : <http://petstore.openapi.io/api>

]

**PATHS**

▾ /pets :

▶ **get** : Returns all pets from the system that the user has access to

▶ **post** : Creates a new pet in the store. Duplicates are allowed

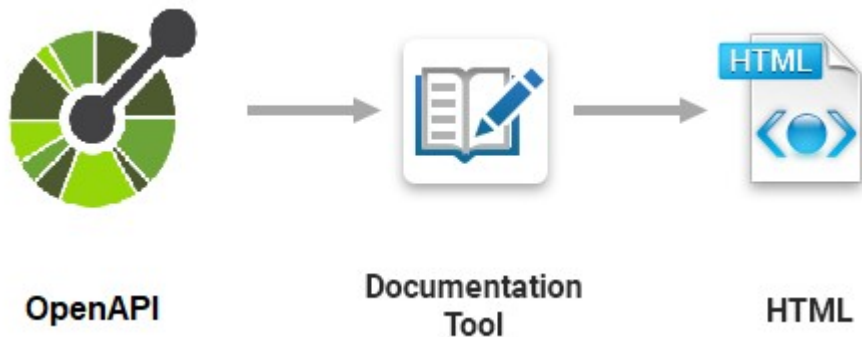
▾ /pets/{id} :

▶ **get** : Returns a user based on a single ID, if the user does not have access to the pet

▶ **delete** : deletes a single pet based on the ID supplied

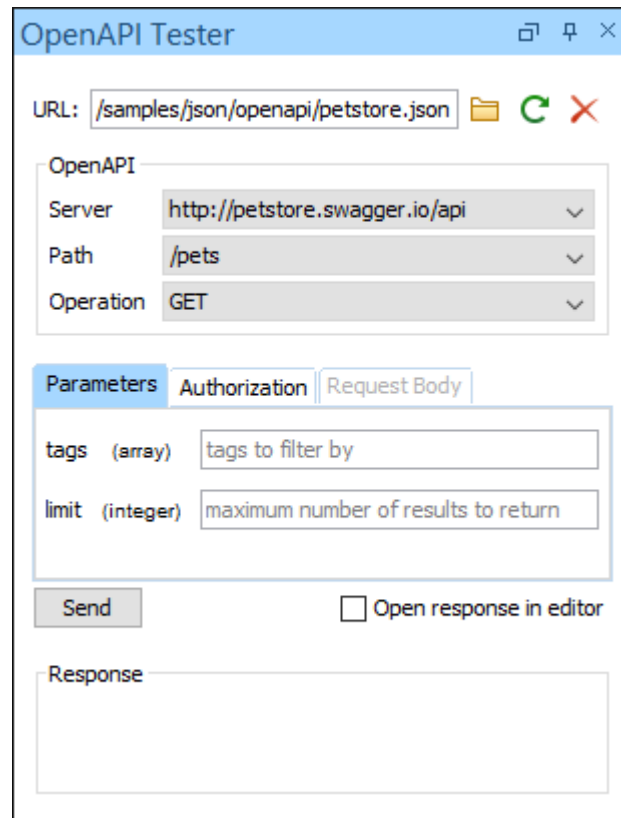
## OpenAPI Documentation

- Tool for generating detailed documentation for OpenAPI documents in HTML/DITA format



## OpenAPI Tester Tool

- GUI interface testing tool for OpenAPI files
- Execute API requests and validate responses on the fly
- OpenAPI files in JSON or YAML format
- Run a test scenario



## Other Frameworks

- JSON-LD - is a lightweight Linked Data format
- OpenAPI Test Scenario – test suite for an OpenAPI
- Travel Guide – sample
- Application Form – sample
- Personal – sample
- *framework for any JSON*

Enabled	Document type	Storage	Priority
<input checked="" type="checkbox"/>	AsyncAPI 1.x [extension of: AsyncAPI]	External	Normal
<input checked="" type="checkbox"/>	AsyncAPI 2.x [extension of: AsyncAPI]	External	Normal
<input checked="" type="checkbox"/>	OpenAPI 2.0 (Swagger) [extension of: OpenAPI]	External	Normal
<input checked="" type="checkbox"/>	OpenAPI 3.0 [extension of: OpenAPI]	External	Normal
<input checked="" type="checkbox"/>	OpenAPI 3.1 [extension of: OpenAPI]	External	Normal
<input checked="" type="checkbox"/>	Application Form (Sample-JSON)	External	Low
<input checked="" type="checkbox"/>	AsyncAPI	External	Low
<input checked="" type="checkbox"/>	JSON Schema [extension of: JSON]	External	Low
<input checked="" type="checkbox"/>	JSON-LD	External	Low
<input checked="" type="checkbox"/>	OpenAPI	External	Low
<input checked="" type="checkbox"/>	OpenAPI Test Scenario	External	Low
<input checked="" type="checkbox"/>	Personal (Sample-JSON)	External	Low
<input checked="" type="checkbox"/>	Travel Guide (Sample-JSON)	External	Low
<input checked="" type="checkbox"/>	XHTML	External	Low
<input checked="" type="checkbox"/>	HTML [extension of: XHTML]	External	Lowest
<input checked="" type="checkbox"/>	JSON	External	Lowest

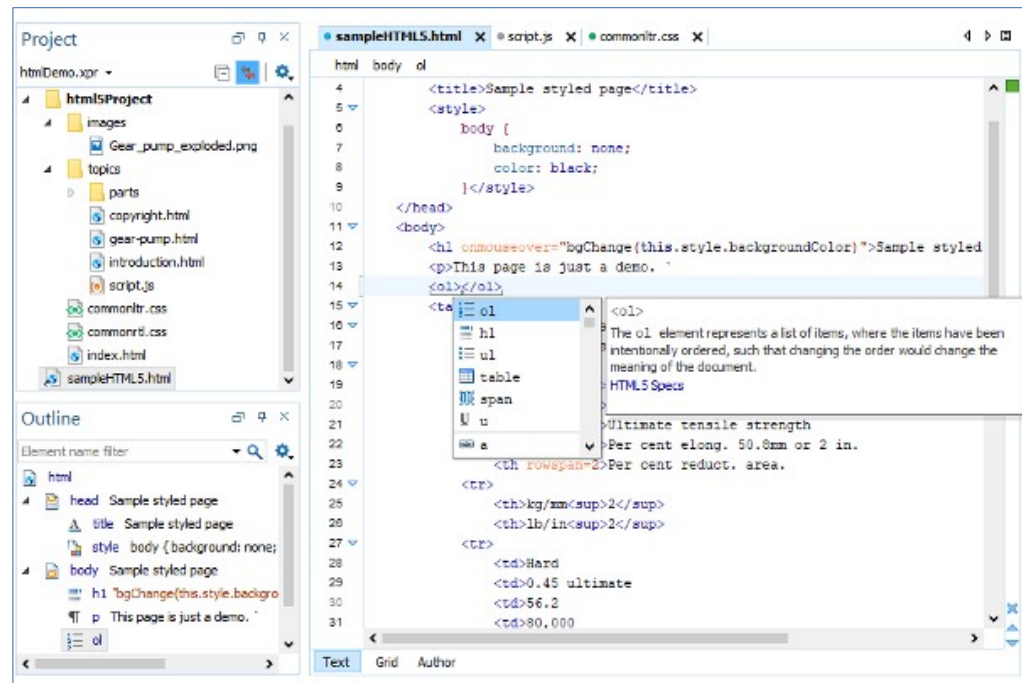
Question: What features do you consider more important?

- ❑ JSON
- ❑ YAML
- ❑ JSON Schema
- ❑ OpenAPI/AsyncAPI
- ❑ Other (use the questions panel)



# HTML/CSS

- HTML5/CSS editing support
- Validation of HTML5/CSS using W3C “Nu Html Checker”
- Query using XPath
- Compress HTML5 and CSS
- Emmet snippets



## XML Documents Supported

- Editor – syntax highlight, content completion, outline view
- Validation – with schema associated in the editor
- Tools – conversion between XML and JSON





## Other File Types Supported

- JavaScript documents
- Markdown documents
- Python documents
- Text, Java, SQL, Properties, Batch, Shell, Power Shell, Dockerfile, and PHP.

# Compare

- Compare and merge files (2-way and 3-way)
- Compare and merge directories (2-way and 3-way)
- Generate comparison report



## Versioning Systems

- Git Client – add-on that contributes a built-in Git client directly in Oxygen JSON Editor
- Subversion (SVN) Client



## Conclusion

### **Oxygen JSON Editor**

- Tool specialized for JSON
- Great features
- Cross-platform application
- Affordable pricing



## Future Plans

- JSON Transformation with XSLT/XQuery
- Improve OpenAPI/AsyncAPI support
- JSON5 support
- Support for ChatGPT fine-tune files
- *feedback is welcome*



## Question: What future developments would you like to see?

- ❑ JSON Transformation with XSLT/XQuery
- ❑ Improve OpenAPI/AsyncAPI support
- ❑ JSON5 support
- ❑ Support for ChatGPT fine-tune files
- ❑ Other (use the question panel)



## Resources

- [oxygenxml.com/oxygen\\_json\\_editor.html](https://oxygenxml.com/oxygen_json_editor.html)
- [oxygenxml.com/json\\_editor/whats\\_new.html](https://oxygenxml.com/json_editor/whats_new.html)
- [oxygenxml.com/doc/ug-json/](https://oxygenxml.com/doc/ug-json/)
- [oxygenxml.com/json\\_editor/videos.html](https://oxygenxml.com/json_editor/videos.html)
- [oxygenxml.com/json\\_editor/buy.html](https://oxygenxml.com/json_editor/buy.html)



## Video Demos

- [oxygenxml.com/demo/json\\_schema\\_palette.html](https://oxygenxml.com/demo/json_schema_palette.html)
- [oxygenxml.com/demo/introducing\\_the\\_json\\_schema\\_design.html](https://oxygenxml.com/demo/introducing_the_json_schema_design.html)
- [oxygenxml.com/demo/json\\_author.html](https://oxygenxml.com/demo/json_author.html)
- [oxygenxml.com/demo/json\\_tools.html](https://oxygenxml.com/demo/json_tools.html)
- [oxygenxml.com/demo/json\\_validation.html](https://oxygenxml.com/demo/json_validation.html)
- [oxygenxml.com/demo/json\\_editing.html](https://oxygenxml.com/demo/json_editing.html)
- [oxygenxml.com/demo/json\\_query.html](https://oxygenxml.com/demo/json_query.html)





Questions?

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