

Oxygen JSON Editor

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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





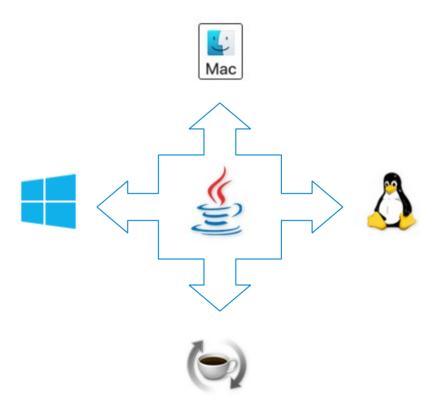
Oxygen JSON Editor - Features

- 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



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

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2	"\$schema": "personal-schema.json",			
3 🗸	"personnel": {			
4 🗸	"person": [
5 🗸	{			
6	"id": "Big.Boss",			
7 🗸	"name": {			
8	"family": "Boss",			
9	"given": "Big"			
10	},			
11	<pre>"email": "chief@oxygenxml.com",</pre>			
12 🔽	"link": {			
13 🔽	"subordinates": [
14	"one.worker",			
15	"two.worker",			
16	"three.worker",			
17	"four.worker",			
18	"five.worker"		~	×
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JSON Outline View

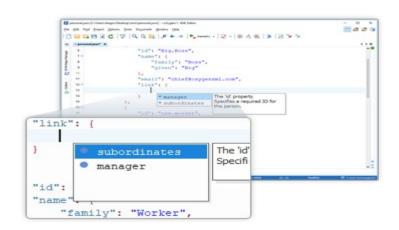
- Document Overview
- Synchronization with Editor
- Filtering
- Error Markers

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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-anddrop operations

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JSON Visual Author Editing Mode

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

Application to Replace	Permanent Resident Card	
Part 1. Information About You		
1. Gender	Male Female	
2. Class of Admission	T1 - 1ST PREF SELECTED ALIEN V	
Date of Birth (mm/dd/yyyy)	01/11/1984	
 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 applicat	ion.
My status is (Select only one box):		
1.a. Permanent Resident		
1.b. 🗌 Permanent Resident - In Commuter Status		
1.c. Conditional Permanent Resident		



JSON Lines

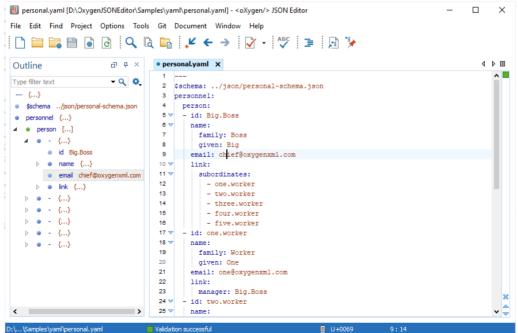
- Editing JSON Lines Documents
- Validation
- Content Completion

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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

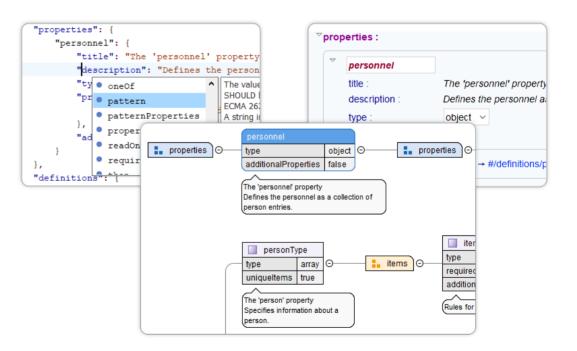




JSON Schema Editor

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)

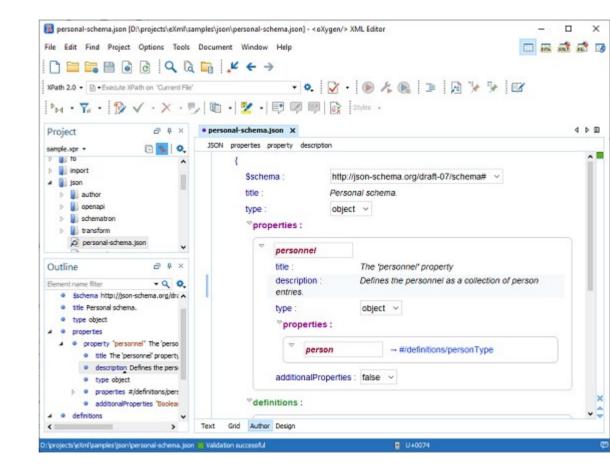
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Author Editing Mode

Visual editing mode for JSON Schema documents:

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

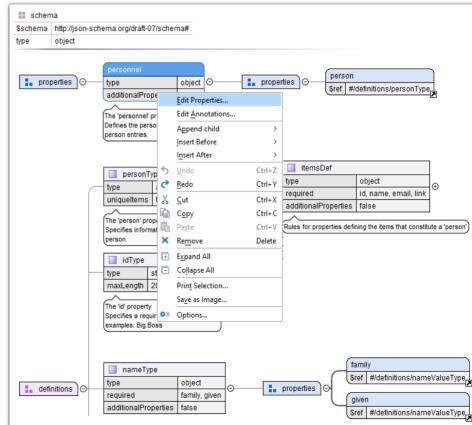


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Schema Design Mode

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

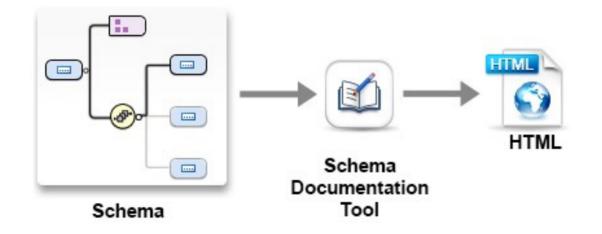






Generate JSON Schema Documentation

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



Oxygen JSON Editor



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

1 🗸 {	A
2	"openapi": "3.0.0",
3 🗸	"info": {
4	"version": "1.0.0",
5	"title": "Petstore",
6 7	"description": "A sample API that uses a petstore as an example to de "termsOfService": "http://swagger.io/terms/",
8 🗢	"contact": {
9	"name": "Swagger API Team",
10	<pre>"email": "apiteam@swagger.io",</pre>
11	"url": "http://swagger.io"
12	},
13 🔽	"license": {
14	"name": "Apache 2.0",
15	"url": "https://www.apache.org/licenses/LICENSE-2.0.html"
16	},
17	"\$comment": "This sample file's original source is available at OpenA
18	\mathbf{h}_{i}
19 🔽	"server": [
20	<pre>externalDocs tstore.openapi.io/api"}</pre>
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24 🗸	
25	"description": "Returns all pets from the system that the use
26	"operationId": "findPets",
27 🗢	"parameters": [
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29	"name": "tags",
30	"in": "query",
31 32	"description": "tags to filter by",
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OpenAPI/AsyncAPI Visual Editor

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

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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

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Send					
Response					

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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
	AsyncAPI 1.x [extension of: AsyncAPI]	External	Normal
\checkmark	AsyncAPI 2.x [extension of: AsyncAPI]	External	Normal
\checkmark	OpenAPI 2.0 (Swagger) [extension of: OpenAPI]	External	Normal
\checkmark	OpenAPI 3.0 [extension of: OpenAPI]	External	Normal
\checkmark	OpenAPI 3.1 [extension of: OpenAPI]	External	Normal
\checkmark	Application Form (Sample-JSON)	External	Low
\checkmark	AsyncAPI	External	Low
\checkmark	JSON Schema [extension of: JSON]	External	Low
\checkmark	JSON-LD	External	Low
\checkmark	OpenAPI	External	Low
\checkmark	OpenAPI Test Scenario	External	Low
\checkmark	Personal (Sample-JSON)	External	Low
\checkmark	Travel Guide (Sample-JSON)	External	Low
\checkmark	XHTML	External	Low
\checkmark	HTML [extension of: XHTML]	External	Lowest
\checkmark	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

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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

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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
- oxygenxml.com/json_editor/whats_new.html
- oxygenxml.com/doc/ug-json/
- oxygenxml.com/json_editor/videos.html
- oxygenxml.com/json_editor/buy.html





Video Demos

- oxygenxml.com/demo/json_schema_palette.html
- oxygenxml.com/demo/introducing_the_json_schema_design.html
- oxygenxml.com/demo/json_author.html
- oxygenxml.com/demo/json_tools.html
- oxygenxml.com/demo/json_validation.html
- oxygenxml.com/demo/json_editing.html
- oxygenxml.com/demo/json_query.html

Questions?

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