

API documentation

Cristian Talau

cristi_talau@oxygenxml.com

https://github.com/ctalau/





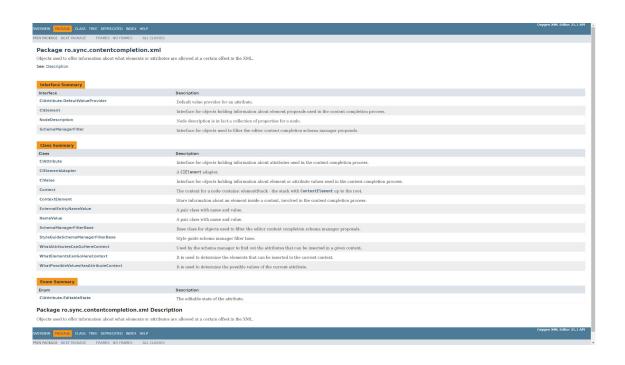


Types of APIs

	REST API	Code API
End-user product	GitHub, Google Drive	Plugin for Firefox
Software component	Spell checking service	React - a web framework



Types of docs - reference guide

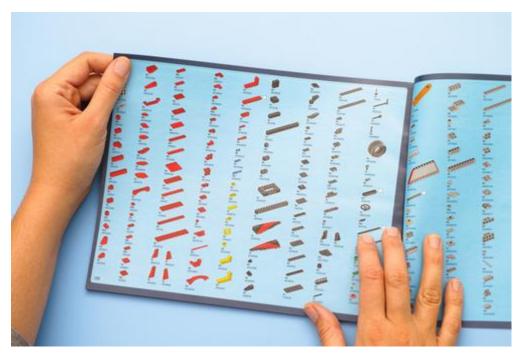


POST /api/	review/tasks/{id}/comment			Adds a comment on a particular review to	
сет /арі/	/api/review/tasks/{id}/download/modified/{filename}			Downloads the current content of a particular review ta	
сет /арі/	review/tasks/{id}/download/original		Download	the original version of a particular review to	
gет /api/	/review/tasks/{id}/download/original/zip			Download original to	
рост /арі/	/review/tasks/{id}/read		Marks the	activity in particular review task as being re	
роѕт /арі/	/review/tasks/{id}/settings		Ch	anges the settings for a particular review to	
Parameters					
Parameter	Value	Description	Parameter Type	Data Type	
body		The settings to be applied	body	Model Example Value	
				{ "forceTrackChanges": false, "contextMap": "string" }	
	Parameter content type: application/json ▼				
id	(required)	id of the review task	path	string	
Response N		sponse Model		Headers	
default	successful operation				
Try it out!					
GET /api/	/review/tasks/{taskId}/files		Determ	a list of files attached a particular review t	



Types of docs - topical guide

- Presents concepts
- Oriented on use-case and on user-profile



VS.





Types of docs - topical guide

- API overview
- API getting started
- API general technical details
 - authentication and authorization
 - status and error codes
 - rate limiting and thresholds
- API quick reference
- API glossary
- API best practices



Types of docs - user manual

- Not applicable for software components
- Targeted to end-users, but developers should also know the concepts



Unified content experience

- Devs need to read
 - User Guide to know what the product is doing
 - Topical Guide to find solutions to their problems
 - Reference Guide to understand the technical details



Topical guides

- Markdown
 - Can be used for simple topics
 - Can be converted to DITA to use advanced structure.
 - Validation according to styleguide
- DITA
 - Advanced support for tables, definition lists, etc.
 - Special elements for describing programming constructs
 - Can re-use content from user-guide
 - Support for review & change tracking



Topical guides - code

- Multi-language code block
- Interactive code blocks, e.g. CodePen
- Test your code samples!

```
JavaScript Bash

http.request('https://oxygenxml.com/api/login', {
  method: 'POST',
  headers: {'Authorization', 'Bearer' + personal_access_token}});
```

```
API documenation manual
   Search
Home / Embedding code snippets
Embedding code snippets

∨ Codepen 
∂

   HTML JS
                                    Result
                                                     C@DEPEN
  Resources

∨ Gist ∂
     <?xml version='1.0' encoding='UTF-8'?>
      <!DOCTYPE topic PUBLIC "-//OASIS//DTD DITA Topic//EN" "topic.dtd">
      <topic id="gardenia">
         <title>Title</title>
             <section id="section_uxd_mgb_y3b">
                 <title>Some section</title>
             </section>
 repro.xml hosted with 9 by GitHub
```



Topical Guides – xrefs to code API

- Code API not deployed yet to its final URL
- Use "apiname" and the link is added automatically
 - At editing time, it points to a staging server
 - When published it points to the production server

<apiname outputclass="jsdoc">sync.view.ResourceDragHandler</apiname>

Here is a link to the P@ro.sync.ecss.extensions.api.AuthorExternalObjectInsertionHandler API to control the drag and drop behavior. You can also use the P@sync.view.ResourceDragHandler API if you control the source of the drag and drop operation.

https://www.oxygenxml.com/maven/com/oxygenxml/ oxygen-webapp/21.1.1.0/jsdoc/sync.view.ResourceDr agHandler.html



Reference guide

- Generated: OpenAPI, JavaDoc
 - API playground
 - Always up-to-date with code

- Hand-written: DITA, Markdown
 - Richer content model: e.g. notes
 - Consistent with other guides
 - API playground
 - with a DITA specialization



Javadoc links to topical guide

- Don't hardcode links to generated HTML
 - The topical guide is not in its final location
 - The topical guide might be moved at some point
 - The publishing format might be changed
- Use a proxy redirect gate



OpenAPI editing

- OpenAPI is the standard for REST APIs
- What to touch?
 - "description", "summary"
 - External documentation link

```
2 -
       "paths": {
           "/api/author/files": {
                    "tags": ["task"],
                    "summary": "Get the content of a file.",
                    "description": "Get the content of a file.",
                    "operationId": "getContent",
                    "parameters": [
                            "name": "url",
                           "in": "query",
                            "required": false,
                            "type": "string"
                    "responses": {
                        "default": {"description": "successful operation"}
21 -
               "put": {
                    "tags": ["task"],
                    "summary": "Get the content of a file.",
                    "description": "returns the content of the file",
                    "operationId": "setContent",
                    "produces": ["application/json"],
                    "parameters": [
                            "name": "url",
                           "in": "query",
                           "required": false,
                            "type": "string"
                    "responses": {
                        "default": { "description": "successful operation"}
           "/api/author/files/makeReviewable": {
                "post": {
                   "tags": ["task"],
                    "operationId": "makeFileReviewable",
                    "consumes": ["application/json"],
                    "produces": ["application/json"],
                    "parameters": [
                            "in": "body",
                            "name": "body",
                            "required": false,
                            "schema": {"$ref": "#/definitions/FileLocationParams"}
```

//*[local-name() = 'description' or local-name() = 'summary']



OpenAPI editing

Configurable linter based on Schematron

```
"put": {
    "tags": ["task"],
    "summary": "Get the content of a file.",
    "description": "returns the content of the file",
    "ope Validation:

    REST endpoint description should start with capital letter

    "par
                                              Press F2 for focus
             "name": "url",
             "in": "query",
             "required": false,
             "type": "string"
    "responses":
         "default": {"description": "successful operation"}
```

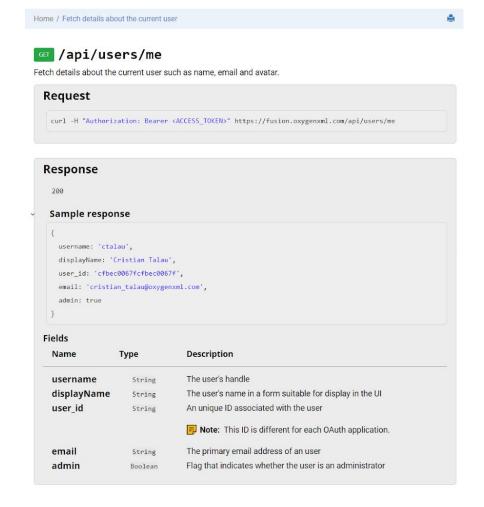
```
<sch:assert test="./description">
    REST endpoint description is missing
</sch:assert>
<sch:assert test="matches(./text(), '^[A-Z].*')">
    REST endpoint description should start with capital letter
</sch:assert>
<sch:assert test="./summary">
    REST endpoint summary is missing
</sch:assert>
```



Document REST API in DITA

- Use a DITA specialization to
 - Preserve semantics
 - Generate nice-looking output







Include OpenAPI in a DITA project

- The source of truth is still Open API
 - Do not edit generated files
 - Use cross references and stable IDs
- Links
 - Links and content references from DITA topics to generated topics
 - Relationship tables
 - Conref push



Import OpenAPI in DITA

- Convert to DITA
- Need to update each time the API is extended
 - 3 way comparison: your version, v1 generated, v2 generated

THANK YOU!

Any questions?

Cristian Talau cristi_talau@oxygenxml.com https://github.com/ctalau