

What is new in Oxygen XML Web Author 25.0

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An Oxygen XML webinar

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About us

- Who are we?
 - oxygenxml.com
- What do we do?
 - create XML-related solutions (for over 20 years)
 - (full spectrum, from editing to publishing)



About webinar

- questions policy
- tip: pay attention to the capitalized and underlined text

Prerequisite knowledge (ideal, not mandatory)

- Extensible Markup Language (XML)
 - at least basic syntax rules.
- Darwin Information Typing Architecture (DITA)
 - at least the concepts of map, topic and topicref
- Oxygen Framework (Oxygen Document Type)
 - at least the concept of document type customization

Agenda

- new features and improvements:
 - import content with the improved Smart Paste
 - insert content with the new Floating Toolbar Actions
 - create new DITA document with the new Inline Insertion Actions
 - explore and edit DITA map document with the Outline view
- extensibility demonstration:
 - edit on Git without conflicts, concurrently and together

About Web Author (1)


- Oxygen XML Web Author (Web Author) UI:

The screenshot displays the Oxygen XML Web Author interface. The main editor area shows a document titled 'gardenia.dita' with the following content:

Gardenia

From Wikipedia, the free encyclopedia.

Gardenia (*flowers(summer(gardenia))*) is a **genus** of about **250** species of flowering plants in the coffee family, **Rubiaceae**, native to the tropical and subtropical regions of Africa, southern Asia, Australasia and Oceania. Several species occur on [the island of Hawaii](#), where gardenias are known as [na'ū or nani](#).



The genus was named by **Carl Linnaeus** after **Dr. Alexander Garden (1730-1791)**, a **Scottish-born American naturalist**.

They are evergreen shrubs and small trees growing to 1–15 metres (3.3–49 ft) tall. The leaves are opposite or in whorls of three or four, 5–50 centimetres (2.0–20 in) long and 3–25 centimetres (1.2–9.8 in) broad, dark green and glossy with a leathery texture. The flowers are solitary or in small clusters, white, or pale yellow, with a tubular-based corolla with 5-12 lobes (petals) from 5–12 centimetres (2.0–4.7 in) diameter. Flowering is from about mid-

On the right side, there is a 'Review' panel with a search filter and a list of review items:

- Mary** (Feb 8, 2022): @John, could you verify the number is correct?
- Mary** (Feb 13, 2019): [the island of](#)
- Mary** (Feb 13, 2019): [er-nani](#)
- Tom** (Feb 13, 2019): Someone should double-check these facts.
- Mary** (Feb 13, 2019): I will ask John to check this.

At the bottom of the review panel, there are 'Accept All' and 'Reject All' buttons.



About Web Author (2)




- Web Author handles and hides XML complexity.

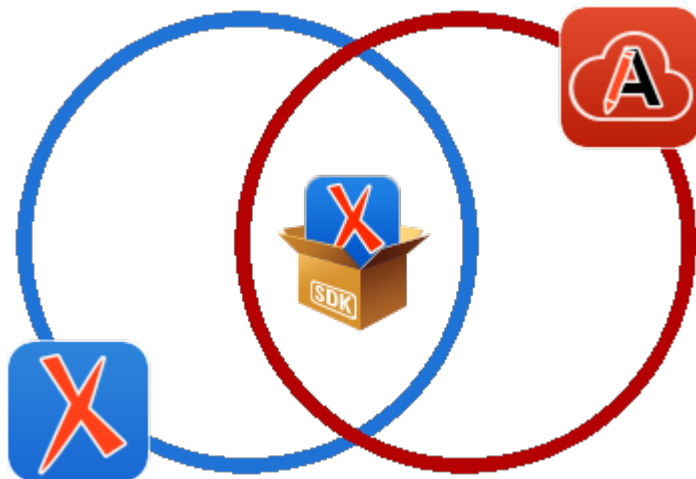
```

1 <?xml version='1.0' encoding='UTF-8'?>
2 <!DOCTYPE topic PUBLIC "-//OASIS//DTD DITA Topic//EN" "topic.dtd">
3 <topic id="gardenia">
4   <title>Gardenia</title>
5   <body>
6     <p><i>From Wikipedia, the free encyclopedia.</i></p>
7     <p><b>Gardenia</b></i><indexterm>flowers</indexterm><indexterm>summer</indexterm></i></p>
8     is a <xref keyref="genus" format="dita">genus</xref> of about
9     <oxy_comment_start author="Mary" timestamp="202202081073505+0000" comment="@quot;John&quot;; could you verify the number is correct?>
10    >250</oxy_comment_end>
11    species of flowering plants in the coffee family, <b>Rubiaceae</b>, native to the tropical and subtropical
12    regions of Africa, southern Asia, Australasia and Oceania. Several species occur on
13    <oxy_insert_start author="Mary" timestamp="20190213T115708+0000">the island of
14    <oxy_insert_end>Hawaii, where gardenias are known as
15    <ina "uk"/><oxy_delete author="Mary" timestamp="20190213T115732+0000" content=" &lt;i&gt;nanu&lt;/i&gt;?></p>
16    <p><image href=".../images/Gardeniaflower.jpg"/></p>
17    <p>The genus was named by
18    <oxy_comment_start author="Tom" timestamp="20190213T115921+0000" comment="Someone should double-check these facts." id="hvs_k4x_tgb"><?
19    oxy_comment_start author="Mary" timestamp="20190213T120035+0000" comment="I will ask John to check this." parentID="hvs_k4x_tgb" mid="2"><?
20    oxy_comment_start author="John" timestamp="20190213T120047+0000" comment="I checked the facts and they are correct." parentID="hvs_k4x_tgb" mid="1"><?
21    Linnaeus after Dr. Alexander Garden (1730-1791), a Scottish-born American
22    naturalist</oxy_comment_end mid="1"></oxy_comment_end mid="2"></oxy_comment_end></p>
23    <p>They are evergreen shrubs and small trees growing to 1-15 metres (3.3-49 ft) tall. The
24    leaves are opposite or in whorls of three or four, 5-50 centimetres (2.0-20 in) long and
25    3-25 centimetres (1.2-9.8 in) broad, dark green and glossy with a leathery texture. The
26    flowers are solitary or in small clusters, white, or pale yellow, with a tubular-based
27    corolla with 5-12 lobes (petals) from 5-12 centimetres (2.0-4.7 in) diameter. Flowering
28    is from about mid-spring to mid-summer and many species are strongly scented.</p>
29    <p><b>Gardenia</b> plants are prized for the strong sweet scent of their flowers, which can
30    be very large in some species.</p>
31    <p><b>Gardenias</b> have a reputation for being difficult to grow. Because they originated
32    in warm humid tropical areas, they demand high humidity to thrive. They flourish in
33    acidic soils with good drainage and thrive on [68-74 F temperatures (20-23 C)] during
34    the day and 60 F (15-16 C) in the evening. Potting soils developed especially for
35    gardenias are available.</p>
36    <p>In Japan and China, <b>Gardenia jasminoides</b> is called <i>Kuchinashi</i> (Japanese)
37    and <i>Zhi zi</i> (Chinese); the bloom is used as a yellow dye, which is used for
38    clothes and food (including the Korean mung bean jelly called hwangpomuk).</p>
39    </body>
40    <related-links>
41    <link href="lilac.dita#lilac"/>
42    </related-links>
43 </topic>
44
    
```



Oxygen XML Author vs. Oxygen XML Web Author

-  Oxygen XML Editor/Author = desktop app
-  Oxygen XML Web Author = web app
-  both share Oxygen SDK



Document Type (1)

Document type

Name: Priority: Low

Description:

Storage: Internal External

[Read more about Document Type sharing and how the storage mode affects it](#)

Initial edit mode: Author

Association rules
Schema
Classpath
Author
Templates
Catalogs
Transformation
Validation
Extensions

CSS	URI	Title	Alternate
Actions	\${framework}/css/edit/style-basic.css	Basic	no
Menu	\${framework}/css/edit/style-pure.css	Pure	no
Contextual menu	\${framework}/css/edit/alternate-full-width-layout.css	+ Full width	yes
Toolbar	\${framework}/css/edit/alternate-map-print-preview-layout-force-media-...	+ Print ready	yes
Content Completion	\${framework}/css/edit/alternate-coloured-revisions.css	+ Colored revision changes	yes
	\${framework}/css/edit/alternate-syntax-highlight.css	+ Codeblock syntax highlight	yes
	\${framework}/css/edit/alternate-table-show-colspec.css	+ Show table column speci...	yes
	\${framework}/css/edit/alternate-hide-draft-comments.css	+ Hide draft comments	yes
	\${framework}/css/edit/alternate-fold-prolog.css	+ Fold prolog	yes

|

Enable multiple selection of alternate CSSs

If there are CSSs specified in the document then

ignore CSSs from the associated document type

merge them with CSSs from the associated document type

OK
Cancel

Document Type (2)

Document type

Name: Priority: Low

Description:

Storage: Internal External

[Read more about Document Type sharing and how the storage mode affects it](#)

Initial edit mode: Author

Association rules
Schema
Classpath
Author
Templates
Catalogs
Transformation
Validation
Extensions

	ID ^	Name	Description	Shortcut key
Actions	add_edit_content_...	Edit Content Reference...	Edit the current content reference.	
Menu	all.keyref.conref.r...	Replace All References with Co...	Replace all keyrefs, conrefs and conke...	
Contextual menu	apply.image.map	Apply Image Map	Apply an Image Map over the currentl...	
Toolbar	bold	Bold	Make your text bold.	Ctrl+B [M1+B]
Content Completion	cc.insert.related.li...	Related Link to Topic...	Insert a related link to content from a...	
	cc.insert.related.li...	Related Link to Web Page...	Insert a related link to a web resource.	
	conref.replace	Replace Reference with Content	Replace the conref/conkeyref with the...	
	convert.cals.table...	Convert CALS table to simple ta...	Converts the current CALS table to a ...	
	convert.simple.tab...	Convert simple table to CALS ta...	Converts the current DITA simple tabl...	
	create_reusable_c...	Create Reusable Component...	Create a reusable component using th...	
	delete.table.column	Delete Column(s)	Delete the selected table column(s).	
	delete.table.row	Delete Row(s)	Delete the selected table row(s).	
	down	Move Down	Move Down	
	edit.image.map	Image Map Editor...	Edit the image map inside a specialized...	

OK
Cancel

Document Type (3)

Document type

Action

Name: ID: Description:

Description: Name:

Menu access key:

Storage: [How to translate frameworks](#)

Large icon (24x24): **B**

Initial edit m Small icon (16x16): **B**

Association Shortcut key:

Enable platform-independent shortcut keys ⓘ

Operations

1

Activation XPath:

This XPath expression applies only to elements and attributes. [More details](#)

Operation:

Arguments:

Name	Description	Type	Value
element	The element to surround with.	Fragment	
schemaAware	This argument applies only on the surround with ele...	ConstantList	true

Operation priority:

Evaluate activation XPath expressions even in read-only contexts

How to open a document in Web Author? (1)

- by following a link from a publication:
 - OOTB by using Oxygen WebHelp
 - DIY by computing Web Author URLs



How to open a document in Web Author? (2)

- by using Web Author's files browser:
 1. open Web Author
 2. connect to the files server (e.g. GitHub, Dropbox, etc.)
 3. browse and open the file



■ Inline Insertion Actions #feature #create #dita

- create new topics with inline actions (actions inside the document).



Smart Paste #feature #import

- now you can better import content from external sources (HTML, PDF, Word, etc.)
- with the improved **Smart Paste** support:
 - copy code
 - copy multiple paragraphs
 - copy links
 - etc.
- imports structure (tables, sections, etc.) and styling (bold, italic, etc.)



Floating Toolbar New Actions #feature #write

- now you can add a group of actions the Floating Toolbar
- now you can even insert links from the Floating Toolbar



DITA Map Collapsed Sections #feature #dita

- now you explore a DITA map more easily because it opens with topics collapsed.



Outline view on DITA Map #feature #dita

- now you explore and edit a DITA map more easily by using the Outline view.
- the DITA framework was configured to show the Outline view.
- it can be used to reorder topicrefs.
- it shows just topics structure, even in View Topics Content.
- it can show topics titles instead of hrefs.



Edit References In Place

- activate Edit Topic Content mode to view and edit whole DITA publication.
- you can review all edits from all topics, all at once
- pro tip 1: use it together with the Outline view
- pro tip 2: “&editReferencesInPlace=true” URL param



Extensibility demonstration

- will follow:

1. analysis & technical details

- 2.1. Web Author analysis
 - 2.1.1. concurrent editing support.
 - 2.1.2. edit DITA map with expanded refs support.
- 2.2. Git analysis

2. demo

Web Author Extensibility (1)

- Web Author is highly extensible:
 - Java API (Oxygen SDK)
 - JavaScript API
 - Oxygen Framework

Web Author Extensibility (2)

- backed by us:
 - [Customization Manual](#)
 - [Oxygen XML Blog](#)
 - [web-author-sample-plugins](#) repository
 - [oxygen-sample-frameworks](#) repository
 - [Technical Support](#), see [Testimonials](#)
- backed by community:
 - [Oxygen XML Forum](#) (over 50K posts, over 18K members)
 - open source community; see [Radu's blogpost](#)
 - ...

Web Author Extensibility (3)

“One can even write a plug-in to turn Oxygen XML Web Author into a semanticless Markdown editor” - Bogdan Dumitru, 2023

Web Author Concurrent Editing Support

- enables editing a document together, concurrently.
- documents can be edited in a Room by multiple Peers.
- peers within a room see each other's changes.

Web Author Concurrent Editing API

- API to create a concurrent Room.
- API to join an existing Room.
- API to choose Saving Strategy.
- API to intercept each save.

Web Author Concurrent Editing Save Invariant

- the invariant:
 1. save requests (e.g.: commit and push) fired by Web Author to the file server (e.g.: GitHub) are sequential, even if peers edited the document at the same exact time

About Git

- what is Git?
 - a technology
- why Git?
 - it's popular.
- what Git?
 - GitHub, but it can be applied to any.
- what is the fuss?
 - Git conflicts do scare many and they bother us all.

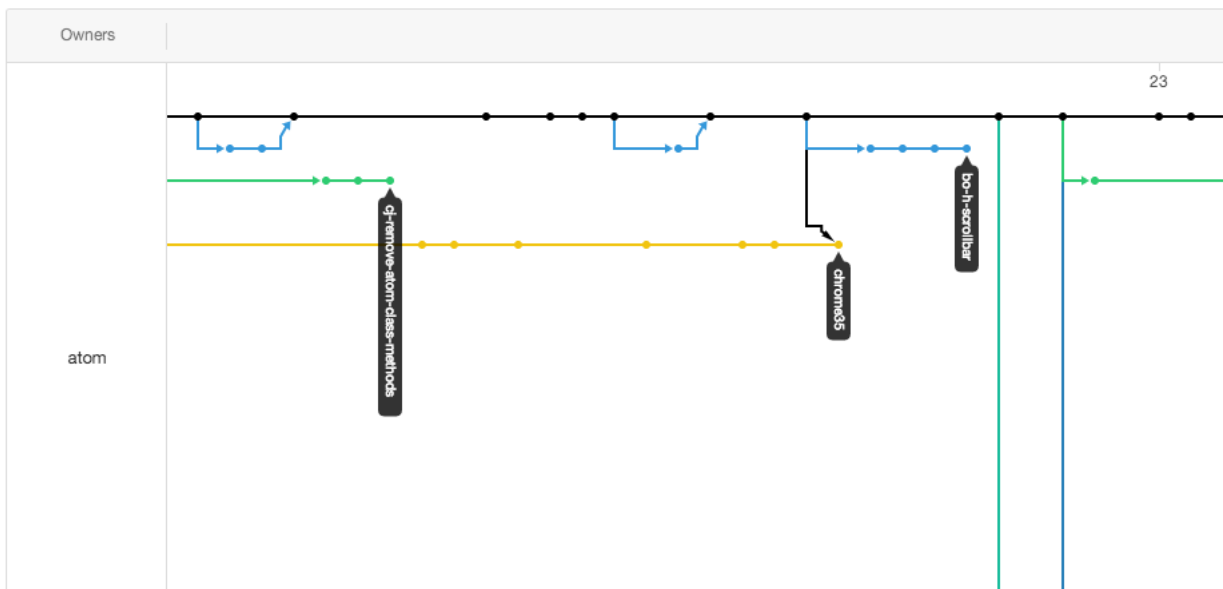
How Git works

- Git Repository ~ project
- Git Commit ~ files snapshot
- Git Commit Hash (SHA) ~ files snapshot's *unique* ID
- Git Branch ~ named files snapshot (pointer to a commit)

Git Commit

- Git Commit = data (files) + metadata
- Git Commit metadata contains:
 - date
 - committer
 - author
 - parent Commit ID(S)
- Git Commit committer vs commit author

Git commits visualization



Source: docs.github.com

Git conflict timeline

- T0: GitHub has “main” branch pointing to SHA-111
- T1: John opens “main” found at SHA-111
- T2: Marry opens “main” found at SHA-111
- T3: Marry requests GitHub to update “main” from SHA-111 to SHA-112
 - GitHub accepts and updates “main” pointer to SHA-112
- T4: John requests GitHub to update “main” from SHA-111 to SHA-121
 - GitHub rejects to update “main”
 - in order not to override Marry's changes
 - because “main” points to SHA-112, not to SHA-111 as John knew

The solution for conflicts

- **if** Merry + John edit inside a concurrent session,
- **then** Web Author fires GitHub push requests in a strict sequential order,
- **so** Web Author can update the base SHA after each push,
- **in such** preventing conflicts to happen.

Commit timeline without conflict

- T0: GitHub has “main” branch pointing to SHA-111
- T1: John opens with Web Author “main” found at SHA-111
- T2: Marry ~~opens “main” found at SHA-111~~ joins the room created for John
- T3: ~~Marry~~ Web Author requests GitHub to update “main” from SHA-111 to SHA-112
 - GitHub accepts and updates “main” pointer to SHA-112
 - Web Author takes note that “main” is now at SHA-112
- T4: ~~John~~ Web Author requests GitHub to update “main” from SHA-~~111~~ 112 to SHA-121
 - GitHub accepts.

Limitation

1. push commits only through Web Author, otherwise conflicts may happen.

Demo Git conflicts solution

- now let's demonstrate the solution for Git conflicts!



Worthy mentions about the demo

- 1. current status = proof-of-concept (not built-in)
- 2. made possible by Web Author Concurrent Editing Support
- 3. there are two Concurrent Save Strategies available
- 4. it blends well with other features like Edit References In Place
- 5. the Web Author Outline view not yet editable in concurrent sessions

Worthiest mention

Oxygen Content Fusion.

- **Integrates Web Author with concurrent editing for you. Just turn it on.**
- oxygenxml.com/content_fusion.html

THANK YOU!

Any questions?

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