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About XML Documentation for Adobe Experience Manager

XML Documentation for Adobe Experience Manager (referred to as XML Documentation solution later in this guide) is a powerful, enterprise-grade component content management solution (CCMS). It enables native DITA support in Adobe Experience Manager, empowering AEM to handle DITA-based content creation and delivery. It empowers authors to create content using any offline DITA authoring tool, such as Adobe FrameMaker or an easy-to-use built-in web editor.

XML Documentation solution provides all core CCMS functions, such as collaboration, review, translation, search, and reports for DITA content, enabling authors to do more in less time through efficient content reuse and powerful workflows. Moreover, users can leverage its best-in-class, single-click publishing capability to generate DITA-based output for the most popular formats - Experience Manager Sites, PDF, HTML5, EPUB, and custom output through DITA-OT.

With XML Documentation solution, enterprises can deliver seamless and personalized experiences to end users and ensure consistency and uniformity in pre- and post-sales content. Complete control over content integrity can be achieved easily. What's more, localization time and costs also reduce significantly.

Benefits at a glance

- Uniform pre- and post-purchase content experience for end users
- One-touch publishing experience to Experience Manager Sites, PDF, HTML5, EPUB, and custom output through DITA-OT
- Familiarity with existing Adobe tools/systems and opportunity to consolidate with one partner
- Single CMS for managing marketing and technical content end-to-end
- Faster go-to-market with efficient content reuse
- Powerful review, collaboration, and translation workflows
- Reduced localization time and costs
- Reduced maintenance overheads
How XML Documentation solution works

The following diagram illustrates how XML Documentation solution works with AEM and any DITA editor to enable content management, reuse, translation, and review in an enterprise scenario.

Key XML Documentation solution features

Powerful DITA authoring and content management

Significantly improve authoring productivity through single-sourcing of modular information optimized for effective reuse at a granular level (modules, components, words, graphics, multimedia, and translations).

The built-in web-based editor or any offline DITA editor, such as Adobe FrameMaker helps you easily author and effectively manage DITA topics, maps, and DITAVAL files. The built-in editor has a simple and intuitive word-processing interface, which provides easy entry for subject matter experts, casual contributors, and reviewers who might not be trained to use DITA. With the intelligent Insert Element functionality, you don’t have to worry about placing an element at correct location. An element is always inserted at the next available valid location.

You can also check-out and check-in files from the new options made available in AEM toolbar and web editor. The seamless interoperability between the web editor and FrameMaker makes it easier for you to check-out file through the web editor and check-in through FrameMaker.
If your organization uses specialized form of DITA, the web editor can be customized to create and edit specialized DITA documents. For more details about using DITA specialization, see *Use custom DITA-OT and DITA specialization* in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

Currently, the built-in editor supports the following DITA standards:

- DITA 1.2
- DITA 1.3
- Lightweight DITA

*NOTE: Lightweight DITA is still under the proposal state, and has not yet become a DITA standard.*

**Next-gen collaboration through web-based review**

Ensure that multi-author, multi-reviewer distributed teams collaborate smoothly through powerful review workflow, minimizing the scope of manual errors in the process.

XML Documentation solution provides powerful yet easy-to-use web-based review capabilities. You can send multiple DITA topics for review simultaneously. The review capability helps ensure that the document content is reviewed efficiently. Authors and reviewers can effortlessly collaborate on changes during ongoing reviews. Reviewers can monitor the differences from previous versions to identify if feedback has been incorporated correctly. Administrators can track the review task history using the feature-rich management dashboard.

Every document in your DAM now gets a document status. This document status helps you identify what state in the documentation process the document is. You as an administrator of the system can define the document states, default start and end states, and document state transition for your documents.

**Industry-leading translation management and localization support**

Get significant savings on translation time and costs, and ensure that published content is free of translation errors.

Adobe Experience Manager comes with built-in connectors for leading translation providers. Leverage these connectors to manage locale-specific content. Make full use of the detailed out-of-the-box translation reports to identify untranslated content before publishing and take appropriate corrective actions. You can manage the status of translated content with respect to master language updates to carry out translation only for the updated DITA files. Time-consuming, manual identification of files to send for translation is not required.

**Best-in-class multichannel publishing of DITA content**

Streamline enterprise content publishing with a seamless, one-touch approach that accelerates time to market.

With the native DITA support added to Experience Manager, generate output for Experience Manager Sites, PDF, HTML5, EPUBS, or custom output through DITA-OT. You can leverage the fully configurable output to deliver highly personalized, relevant, and immersive content experiences for end users. You can also easily perform batch generation or use Baseline to publish a specific version of your documentation.
Comprehensive search and content usage data

Find and select relevant content faster, maximizing the ROI on content with every reuse. Perform basic and advanced searches using content attributes and topic metadata across the entire repository through a simple interface inside the DITA authoring tool. Results are tagged with content usage data to help you easily identify and select the right content for optimal reuse.

In-depth publishing readiness reports

Make publishing error-free by easily checking and correcting content before it goes live. Keep a close watch on system health by easily accessing various reports at the DITA map level. You can check the number of missing topics, broken links or references, and the status of reviews, and translations for all topics. You can also use the reports to perform comprehensive sanity checks in the final stages before publishing.

Extensive tag management support for personalized output

Drive deeper end user engagement and content adoption through highly relevant content experiences. With XML Documentation solution, you can leverage the extensive tag management support in Experience Manager to apply relevant tags on DITA source content. Use these tags to provide highly personalized content experiences to end users.

Native integration with Adobe FrameMaker

Enjoy a fast and seamless experience while working with Experience Manager and FrameMaker (2015 release) Update 4 or later.

The tight integration of Experience Manager and FrameMaker through a built-in connector helps you work seamlessly with the Experience Manager content repository. Leverage the connector to quickly get started with authoring, reviewing, and searching DITA content.

Using the AEM connector in FrameMaker, you can manage your FrameMaker files. The AEM connector allows you to easily upload your DITA and other FrameMaker documents (.book and .fm) on AEM. The XML Documentation solution also allows you to publish FrameMaker documents directly from AEM. In case your FrameMaker book file contains a combination of DITA and .fm files, the XML Documentation solution can publish such documents as well. Currently, you can publish FrameMaker's .book and .fm files into PDF, HTML5, and EPUB formats.
Manage content using DITA project

Before you start with the actual content creation, you must familiarize yourself with some basic concepts of content management in XML Documentation solution. Then, start with creating DITA project to group all your project resources into one logical entity.

Basic AEM concepts

The following articles in AEM documentation will help you understand the authoring environment’s user interface, how to upload existing assets on AEM repository, and concepts of projects in AEM:

- Understanding the user interface
- Managing Assets in AEM
- Projects in AEM

Content management fundamentals

Following are some fundamentals of content management that you should familiarize yourself with:

Digital asset management

The XML Documentation solution uses AEM’s digital asset management (DAM) to manage your DITA files. The files that you upload or check into the DAM are stored as digital assets.

Maintaining structure of DITA files

The topics or maps are maintained in the format in which a writer checks in or uploads them. This implies that the XML Documentation solution does not perform any conversion or transformation of these files.

Link management

Move or rename files or change folder structure in the content repository, without worrying about broken references. All references to and from the impacted content are automatically updated. Get warnings when deleting content which is referenced from elsewhere, to prevent unintentional breakages.

Managing versions

The XML Documentation solution provides version management for your digital assets. You can easily enable this functionality from a DITA authoring application of choice. Allowing your writers to perform the standard version control functions such as check-in, check-out, and undo check-out.

For more information, see Asset versioning in AEM documentation.
Native DITA handling

While the XML Documentation solution maintains the structure of your DITA files, it also enables AEM to natively handle DITA using element mapping to map the DITA elements to AEM components. The native DITA handling is used in features such as topic preview, AEM Sites publishing, and the review workflows.

Uploading existing DITA files

The bulk upload procedure allows you to quickly upload a large number of DITA files to DITA project in your AEM repository. This is convenient if you have previously authored DITA content that you want to move into the AEM DAM. After you are done with the upload, your writers can then continue authoring the documents in the application of choice and check-in and check-out the files as required.

Create a DITA project

A project in AEM lets you group different resources into a single entity. You would need to create a project to manage your resources used in the project. For example, a project for XML Documentation solution documentation can be created that would contain - people who would work on this project (authors, reviewers, publishers), source files for content and media (also known as Assets), tasks that would be executed in this project (review, translation), and more. The types of resources you can associate with a project are referred to in AEM as Tiles. Tiles may include project and team information, assets, workflows, and other types of information as described in details in the Project Tiles article in AEM documentation.

With each project, you can associate different types of information such as digital assets, experiences, team members, landing pages, and more. For more information about projects in AEM, see Projects.

The XML Documentation solution adds a DITA project template that you can use to create and manage your project tasks. You can add team members to this project who could then be assigned various roles. By default, DITA project creates three roles - Authors, Reviewers, and Publishers. Each of these roles have specific permissions associated with them that would allow the users to perform relevant tasks. For more information about these roles, see User groups created by XML Documentation solution. Similarly, Whenever an author initiates any workflow (like review) the selected members of project get an email notification. To configure email notifications, see Customize email templates in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

Perform the following steps to create a DITA project:

1) Open Projects console.
   You can also access the Projects console using the following URL:
   http://<server name>:<port>/projects.html
2) In the toolbar, click Create.
The Create Project page appears.

3) On the Create Project page, select **DITA Project** template and click **Next**.

4) On the Project Properties page, enter the following details:

**Information in the Basic tab:**

- Enter your project’s **Title**, **Description**, and **Due Date**.
- You can, optionally, choose a thumbnail for the project.
– By default, you are made the owner of the project. To add more users to this project:

a) Enter or choose a user from the User drop-down list.

b) Choose a user type - Authors, Reviewers, or Publishers.

**NOTE:** You will see other user types in this drop-down list, but for a DITA project you should only choose from Authors, Reviewers, or Publishers user type. Even if you add a user of different type, those user will not be able to access any DITA-specific feature available in the XML Documentation solution. For more information about roles, see *User groups created by XML Documentation solution*.

c) Click Add.

– *(Optional) Select a DITA map file to resolve key references for topic editing, preview and review workflows.

**Information in the Advanced tab:**

– Enter a name for the project. This name is used to create the URL for this project.

5) Click Create.

*The Project Created dialog appears.*

6) Click Open Project to open your project page.

**Add assets to a DITA project**

Once you have created a project, a folder with your project’s title is created within the *projects* folder in DAM. If you have already uploaded your content on DAM and you want to associate with your project, perform the following steps:

1) Open the Project page.

2) In the Assets tile, click Configuration.

![Image of DAM interface](image)

**NOTE:** If you do not see the Assets tile, click Add and choose the Assets tile to add it to your project. You can add multiple Assets tiles to your project and each asset tile can be configured to point to a different resource in DAM.

3) In the Configure Asset Pod, browse to and select the folder that you want to associate with your project.

4) Click Accept.
For more information about uploading existing content on DAM, see *Upload existing files*.

**User groups created by XML Documentation solution**

XML Documentation solution provides three out-of-the-box groups (or roles) to manage different tasks in a DITA project. These roles are - Authors, Reviewers, and Publishers. Depending upon the role a user is associated with, they are allowed to perform specific tasks. For example, publishing task can be performed only by a publisher, but not by an author or a reviewer. Similarly, an author can create a new topic, and a reviewer can only review a topic.

By default, there are user roles created by AEM, such as Owners, Editors, and Observers. XML Documentation solution maps the Owners role with Publishers and Editors role with Authors. This way all users who are a part of Owners or Editors role in AEM, they get all privileges available to the Publishers and Authors role in XML Documentation solution.

**TIP:** See *Permissions* for best practices around setting user permissions.

The following table lists the various tasks and role that can perform those task:

<table>
<thead>
<tr>
<th>Task</th>
<th>Authors or Editors</th>
<th>Reviewers</th>
<th>Publishers or Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create DITA Topic(^1)</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Create DITA Map</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Map Collections</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Create Review Task</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Review Topic(^2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Key Resolution</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Open in FrameMaker</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Check-out/Check-in</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Edit Topic</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Move Topic</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Edit Topic Properties</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Copy</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Delete</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Share</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Features available in DITA map console (Output Presets tab)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generate</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Edit</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Upload existing files

Most likely you would have a repository of existing DITA content that you would like to use with the XML Documentation solution. For such existing content, you can use any of the following two approaches to bulk upload your content into AEM repository:

#### Use FrameMaker for bulk upload

Adobe FrameMaker comes with a powerful AEM connector that allows you to easily upload your existing DITA and other FrameMaker documents (.book and .fm) into AEM. You can use various file upload functionalities such as uploading a single file, uploading a complete folder with or without dependencies (like content references, cross-references, and graphics).

For more details about using bulk upload feature in FrameMaker, see the section *Create a CRX folder and upload files* in FrameMaker User Guide.
Use WebDAV for bulk upload

If you are authoring your topics and maps in any other DITA editor, you can use WebDAV to check your files into your project.

For details on how to check your files into your project, see WebDAV Access in AEM documentation.
Work with the Web Editor

The XML Documentation solution comes with an easy-to-use web-based Web Editor for creating and editing structured documents. The editor hides all the complexities of the DITA structure from the writer. The editor provides a list of DITA elements that a user would usually need to work within a document.

Also, the Web Editor is DITA-aware and it supports DITA 1.3, 1.2 standards, lightweight DITA, and also specialized DITA. This implies that it will not allow you to place elements at locations that are not compliant with the DITA definition. The Web Editor also allows you to work with the most commonly used block and in-line elements.

The Web Editor also works as the file management system by providing the following capabilities:

- Single or multiple files check-in and check-out.
- Check-out a file from the Web Editor and check-in from FrameMaker.
- If a file is checked out, the status is reflected in the FrameMaker Resource Manager window.
- Assign a document state. For more information about document states, see Document state.

Create topic

The XML Documentation solution editor allows you to create DITA topics of type - topic, task, concept, reference, and DITAVAL. Apart from creating topics based on the out-of-the-box templates, you can also define your custom templates. For more information about using your custom DITA templates, see Configure templates and tags for authoring in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

Perform the following steps to create a topic:

1) In the Asset console, navigate to the location where you want to create the topic.
2) To create a new topic, click Create > DITA Topic.
3) On the Blueprint page, select the type of DITA document you want to create and click Next.
XML Documentation solution provides five out-of-the-box DITA topic templates. You can configure more topic templates as per your organizational requirements, see Configure templates and tags for authoring in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

**NOTE:** In the list view, the DITA topic type is shown in the Type column as Topic, Task, Concept, Reference, or DITAVAL. The Ditamap is shown as Map.

4) On the Properties page, specify the document Title and Name.

**NOTE:** The name is automatically suggested based on the Title of your document. If you want to manually specify the document name, then ensure that the Name does not contain any spaces, apostrophe, or braces and ends with .xml or .dita. See File names for best practices around naming DITA files.

5) Click Create. The Topic Created message appears.

You can choose to open the topic for editing in the Web Editor, or the save the topic file in the AEM repository.

**NOTE:** Every new topic that you created from the Web Editor is assigned a unique topic ID. Also, a new document is saved as the latest working copy of the topic in DAM. Until you do save a revision of a newly created topic, you will not see any version in the Version History.

**NOTE:** If your administrator has configured your Web Editor to automatically check out file on editing, then you get an exclusive write permission on the checked out file.

### Preview topic

Once a topic is created, XML Documentation solution generates a preview of the topic. The Preview mode provides various features that you can use to work with your document.

Perform the following steps to preview a topic:

1) In the Asset console, navigate to the topic that you want to view.

   **NOTE:** Ensure that you have not enabled the asset Select mode.

2) Click on the topic you want to view.

   *A preview of the topic is displayed in the Asset console.*

### Features available in preview mode

You can perform the following operations from the toolbar in the preview mode:
View Properties

View the topic properties of the selected topic. Based on your AEM version, you could see properties like metadata, schedule (de)activation, references, document state and more.

NOTE: A topic’s title property is auto-populated from the title tag of the DITA topic or map. If you make any change in the title using the properties window that change is lost. If you want to update the title property, you should do it using the Web editor.

Conditional Filtering (A/B)

If your topic has conditional content, then you will see the A/B icon on the toolbar. Clicking on this icon opens a pop-up that allows you to filter the content as per the available conditions in the topic.

NOTE: The conditional content is highlighted using light background color in the Web Editor.

Edit

Open the topic for editing in the XML Documentation solution Web Editor.

Open in FrameMaker

Open the topic for editing in FrameMaker.

NOTE: You will see the Open in FrameMaker button only if your administrator has enabled this feature.

Adobe FrameMaker comes with an updated AEM connector. This connector allows you to perform operations such as syncing review comments on a topic shared for review. You can post new comments or reply to existing comments from the Review Comments pod in FrameMaker. For more information, see the Review section in the FrameMaker User Guide.

Using the FrameMaker-AEM connector, you can check-in and check-out files on the AEM repository. For more information, see the Adobe Experience Manager section in the Content Management Systems chapter in FrameMaker User Guide.

The connector also provides search functionality that allows you easily search within DITA content in your AEM repository. You can also use attribute search to search for DITA content based on element’s attribute. For more information, see the section Searching in the AEM repository in FrameMaker User Guide.

From the Preview mode of a topic, you can open that topic directly in FrameMaker for editing by clicking the Open in FrameMaker icon.
TIP: See *FrameMaker integration* for best practices around using FrameMaker for editing documents.

If you want to open a topic for editing in FrameMaker from the Assets console, perform the following steps:

1) In the Asset console, navigate to the topic that you want to edit.
2) Switch to asset selection mode and select a topic.
3) In the toolbar, click **Open in FrameMaker**.

   *The Launch Application dialog appears.*

4) Choose Adobe FrameMaker `<version>` from the **Send To** list and click **Open Link**.
5) The **Connection Manager dialog** appears in FrameMaker.

   *Establish a connection with the AEM server and click Connect. The selected file is opened in FrameMaker for editing.*

### Key Resolution

By default, at the time of creating a project, you specify the keyspace file. If you want to use a different keyspace file for the topic, click the **Key Resolution** icon. You can then choose a different key space from the **Key Resolution pop-up**.

### Check Out/Check In

Toggles the Check Out and Check In features. When a file is checked out, the current user gets an exclusive write permission on the file. A checked out file can be opened in the Web Editor or FrameMaker for editing. Once you have made the required changes, click the **Check In** icon to save the file in DAM.

When you check out a topic, the status of the file is shown as checked out in the card view and in the list view of the folder.

**TIP:** See *Versioning of content* for best practices around working with file check-out and check-in.

### Web-based version difference

If your topic has undergone some changes, you can easily find out the changes made in different versions of that topic. To find out changes in different versions of a topic:

1) Open the topic in Preview mode.

2) Click **Version History** and select a version.

3) From the listed versions, select the one that you want to use as the base version and click **Preview Version**. The preview of the selected version is shown in the Version Preview window.
4) From the **Show Diff** list, select the version with which you want to compare the base version.

*The changed content is highlighted in the topic preview. Content highlighted in green signifies the newly added content and content in red is the deleted content.*

**Search and filter**

You can use filters and search a topic in the repository. Perform the following steps to search topics:

1) Open the Asset console.

2) Click **Search** button.
3) Enter your search keyword in the Search bar.
4) Apply the required filters from the left rail.
   *Your search result is displayed.*

**Edit topic**

Perform the following steps to edit a topic in Web Editor:

1) In the Asset console, navigate to the topic that you want to edit.
   
   **NOTE:** Ensure that you have not enabled the asset Select mode.

2) To get an exclusive lock on the topic, select the topic and click **Check Out**.

3) Close the asset selection mode and click on the topic you want to edit.
   *The topic's preview is displayed.*

   **IMPORTANT:** If you want to open multiple topics for editing, select the desired topics from the Asset console and click Edit. Ensure that your browser does not have pop-up blocker enabled, else only the first topic in the selected list is opened in the edit mode.

4) Click **Edit** to open the topic in XML Documentation solution Web Editor.

5) To make changes in your topic, click within the text boundary of the required element and start making changes.

6) To insert a specific element, click at the end of the element after which you want to insert the new element and click the required element icon in the toolbar. You can also use the keyboard shortcut **Alt+Enter** to invoke the **Insert Element** popup.

   *A list of element appears that can be used in the topic. XML Documentation solution does an intelligent placing of elements as per their valid location in the topic.*

   **NOTE:** You can also choose which icon to be displayed in the toolbar by configuring the **ui_config.json** file located at **/etc/designs/fmdita/clientlibs/xmleditor/**. For more information about customizing features, contact your system administrator.

7) Once you have finished editing your document, click **Save**.

   **NOTE:** If you do not wish to commit changes into AEM repository, click **Close**, and then click **Close Without Saving** in the Unsaved Changes dialog.
Know the Web Editor toolbar

This section walks you through the features that you can work with using the Web Editor’s toolbar.

A: Toggle Left Panel

Toggle the left panel view. If you have opened a topic through DITA map, the map is shown in this panel. Also, you can open any document from the repository. For more information about opening a topic through DITA map, see Edit topics through DITA map.

B: Save

Saves the changes you have made in the topic. Whenever you create a new topic, a version-less working copy the topic is created in DAM. Doing a simple save on this version does not create a new version of a topic. If your topic is under review, saving a topic does not give your reviewers access to your changed topic content.

C: Save Revision

Saves the changes you have made in your topic and also creates a new version of your topic. If you are working on a newly created topic, doing a Save Revision creates the first version of the topic in DAM which also becomes the currently active version of your topic. Later, if you revert to an older version of the topic, then that becomes your current active version of the topic.

At the time of saving the topic, you can add a comment specifying the changes that you have made in the topic. This comment is shown in the topic’s Version History.
If your topic is under review, your reviewers will get a notification saying that a newer version of the topic is available. They can easily access the latest revision of your document and continue reviewing the latest version of your topic.

The current version number of the document is displayed in the right corner of the editor.

When you hover your pointer over the filename, you are shown the file path and the version number.

**NOTE:** Once a version of your topic is available, you can also add labels to your topic. These labels can then be used to create a baseline for publishing a specific version of your document. For more information about using labels in your topics, see *Use label*.

**D: Key Resolution**

If you want to use a different keyspace file for the topic, click the Key Resolution icon. You can then browse to and choose a different key space from the Set Keyspace pop-up.

**E: Find and Replace**

Find and replace text in your topic using the Find and Replace pod. You can perform a case-sensitive search, whole word search, and repeat search from the beginning of the document once the end of document is reached.
Similarly, for replacing a text in your topic, enter the search term and its replacement in the respective fields and click the Replace or Replace All button.

![Find and Replace dialog box]

F: Toggle Partial Tags View

If your topic contains inline elements such as `<b>`, `<i>`, `<codeph>`, they are highlighted using solid open and close arrows. The following screenshot highlights a few inline elements used in the topic.

![XML Web Editor screenshot]

When you click on the opening or closing arrows, it selects the text within the inline element. You can then easily copy and paste the select element without having to manually drag and select the desired text. You can view the element name when you hover over the opening or closing arrows.
G: Insert Element

Inserts a valid element at the current or next valid location. If you are working in a block element like a note, then use the Insert Element icon to insert a new element after the note element. In the following screenshot a note element has been inserted inside the p (paragraph) element:

If you press Enter in the note element, a new paragraph is created within the note element itself. To insert a new element outside note, click the p element (highlighted in screenshot) in the elements breadcrumb and click on the Insert Element icon or press Alt+Enter to open the Insert Element pop-up. Then, select the desired element and press Enter to insert the selected element after the note element.

You can also add an element between two elements when a blinking block cursor appears.

For example, if you are working on a DITA topic, and the block cursor is blinking between the short description and the body, you can add prolog element and then add copyright, author and other details.

Another way of entering new element is by using the context menu. Right-click at any place in your document to invoke the context menu. From this menu choose Insert Element After or Insert Element Before to insert the new element at the desired location.

H: Insert Snippet

Inserts a snippet at the current or next valid location. For this feature to work, your administrator must have defined the snippets in a JSON file. Then, the location of that file has to be configured in
the Snippets Config Path in the XmlEditorConfig bundle. For more information about adding a snippet file, see Configure snippets section in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

When you click the Insert Snippet icon, you are shown the Insert Snippet catalog. The catalog is context-sensitive, which indicates that it will show the snippets only if they are allowed at the current location.

The following example shows two pre-configured snippets - Warning and Error that can be inserted at the current location in the document.

When you choose a snippet from the list, it gets inserted at the current or next valid location in the document. The following screenshot shows the Error snippet inserted in the document:

I: Insert/Remove Numbered List
Creates a numbered list at the current or next valid location. If you are on a numbered list and click this icon, the item is converted into a normal paragraph.

J: Insert/Remove Bulleted List
Creates a bulleted list at the current or next valid location. If you are on a bulleted list and click this icon, the item is converted into a normal paragraph.
K: Insert Table

Inserts a table at the current or next valid location. Click the Insert Table icon to open the insert Table dialog:

![Insert Simple Table dialog](image)

You can specify the number of rows and columns required in the table. If you want to keep the first row as table header, select the Set First Row As Header option.

Once a table is inserted, you can modify table using the context menu.

![Table context menu](image)

Using the table’s context menu, you can:

- Add or remove cells, rows, or columns
- Merge or split cells
- Delete table
- Change table properties
• Change cell’s properties, such as cell’s width and height, word wrapping in cell, horizontal and vertical alignment, cell type (as normal data cell or header cell), row and column span, background and border color.

![Cell Properties dialog box](image)

**L: Insert Image**

Inserts an image at the current or next valid location. Click the Insert Image icon to open the Insert Image dialog and then search and select the image you want to insert.

![Insert Image dialog box](image)
You can add image title and alternate text for the image in the Insert Image dialog.

You can search for the required image file by entering the file name in the Type to Search bar at the top and also filter the search results by Path (to search in), Collections, File Type, and Tags. Once you have found the required image file, select the file and click Select to insert the image in your document. You can insert various formats of image files, such as .png, .svg, .gif, .jpg, .eps, .ai, .psd, and more.

Once you have inserted an image, you can change the height, width, placement, and attributes from the Image Properties panel. Click on the image file and make changes in the Properties panel in the right rail.

You can resize an image by providing either Height or Width value for the image file. The aspect ratio of the image is maintained automatically. If you want, you can also choose not to maintain the aspect ratio of the image file by deselecting the Preserve Aspect Ratio option (the lock icon) and providing Height and Width values.

**M: Insert Paragraph**

Insert paragraph element at the current or next valid location.
N: Insert References

Insert references of type - Content Reference, Content Key Reference, File Reference, Web Link, or Email Link.

A link of the selected reference is added in the document.

**TIP:** See *References* for best practices around referencing content.
O: Reuse Content

Reuse content that exist within any other document in your project. You can insert content by directly linking to the content in a file or by using a key references, see Resolve key references. When you click the Reuse Content icon, you get the Reuse Content dialog:

In the Reuse Content dialog, select DITA file for file references or the DITA map file that contains the key references. Once selected, the topic or key references are shown in the dialog. You can select the ID/key of the topic that you want to insert and click Done to insert the content within your topic.

NOTE: To add content before or after the referred content, use Alt+Left Arrow or Alt+Right Arrow keys to move the cursor to the desired location.

You can also embed the referred content within the topic by right-clicking on the referred content and choosing Replace Reference With Content from the context menu.
P: Insert Keyword

Insert keyword defined in your DITA map. Click the Insert Keyword icon to open the Select Key Reference dialog.

The keywords defined in your DITA map are listed in this dialog. Choose the keyword that you want to insert and click Done. You can also change the attributes of the inserted keyword by right clicking on the keyword and selecting the Attributes option. The Attributes for Keyword dialog opens:

You can change the keyword’s attributes or add a new attribute to the keyword.

Q: Toggle Right Panel

The right panel contains the information about the type of currently selected element in the document and its attributes. You can also add attributes by clicking on the Add icon, selecting the attribute, and specifying the attribute’s value.
NOTE: Even if your topic contains referenced content, you can add attributes on it using the properties panel.

If your administrator has created a profile for attributes, then you will get those attributes along with their configured values. Using the properties panel you can choose those attributes and assign them to relevant content in your topic. This way you can also create conditional content, which can then be used to create conditional output. For more information about generating output using conditional presets, see Use condition presets.

If your document is shared for review, you will see the Review and Changes tabs. Clicking the Review tab opens the comments panel wherein you can view and post replies on the comments given on the topic. For more information, see Addressing review comments using the Web editor.

## Keyboard shortcuts in the Web Editor

There are many operations in the Web Editor that you can perform using the keyboard shortcuts. The following table lists these keyboard shortcuts:

<table>
<thead>
<tr>
<th>Operation in Web Editor</th>
<th>Keyboard shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply bold formatting on selected text</td>
<td>Ctrl+B</td>
</tr>
<tr>
<td>Apply Italics formatting on selected text</td>
<td>Ctrl+I</td>
</tr>
<tr>
<td>Apply underline formatting on selected text</td>
<td>Ctrl+U</td>
</tr>
<tr>
<td>Save document in Author and Source view</td>
<td>Ctrl+S</td>
</tr>
<tr>
<td>Show Insert Element dialog</td>
<td>Alt+Enter</td>
</tr>
<tr>
<td>Show Insert Element dialog to insert element before the selected element</td>
<td>Alt+Shift+Enter</td>
</tr>
</tbody>
</table>
Other useful features in the Web Editor

There are some other useful features in the Web Editor that you can make use of:

- XML Documentation solution uses the in-built spell-checking feature of the browser. All misspelled words are highlighted using the red underline. You can correct a misspelled word by pressing...
Ctrl+right click on the word to see the possible corrections. You can select a correct word from the presented options.

- You can easily copy paste content within and across topics. The source element structure is maintained at the destination. Also, if the copied content contains content references, then even those are copied.
- The Web Editor support DITA glossary terms that you can insert by adding `term` or `abbreviated-form` elements.
- Use DITA `subjectSchema` maps to create custom controlled values that can be used for classifying content. `subjectSchema` maps creation is supported by Web Editor. For more information, see *Work with subjectScheme*.
- Insert footnote in your content by using the `fn` element. In the authoring mode, the footnote value is shown inline with the content. However, when you switch you the Preview mode or publish your document, the footnote appears at the end of the topic.
• The conditional content is highlighted using light background color for easy identification.

• DITA elements that contain line break and spaces are supported and rendered as per their definition in the Author, Source, Preview modes, and also in the final published output. The following screenshot shows the content within the msgblock element wherein the line breaks and spaces (indentation) have been preserved:

• You can automatically generate IDs for the elements that you add in your DITA topic. These IDs are unique within a DITA topic. For example, if you generate IDs for a paragraph element, the IDs will be p0, p1, p2, and so on.

  Do the following to automatically generate the ID for an element:
  a) Open the topic in the Web editor
  b) Move the cursor to the element where you want to add the ID, right-click and select Generate IDs

  Alternatively you can right-click in the breadcrumb and select Generate IDs.
Web Editor views

The XML Documentation solution Web Editor supports viewing documents in three different modes or views:

**Author**

This is a typical What You See is What You Get (WYSIWYG) view of the Web Editor. You can edit topic as you would do in any regular rich-text editor. In the Author view, you have the options to save a revision of the document, find and replace content, insert element, insert hyperlink, insert content reference, and more.

**NOTE:** When you use the content reference, the referred content is also displayed in Author view in blue color. The referred content is non-editable.

**Source**

The Source view displays the underlying XML that makes up the topic. If your author has strong understanding of XML, then they would find this view easy to work with. In addition to making regular text edits in this view, an author can also add elements and attributes using the Smart Catalog.

- To invoke the Smart Catalog, place the cursor at the end of any element tag and enter “<“. The editor will show a list of all valid XML elements that you can insert at that location.
• If you want to add an attribute to an element, place the cursor inside the element tag and press the Space bar. A list of valid attributes for that element are shown in the Smart Catalog.

• In the Source view, there is an Auto Indent option that reorganizes the XML code in presentable and easily readable format. Also, if you select any text and switch from Author to Source or from Source to Author view, the selected text is also highlighted in the other view.

• Another powerful feature in the Source view is the XML validation in your document. If you open a document containing invalid XML, it is opened in the Source view with the information about invalid XML. For example, in the following screenshot the exact information about the erroneous XML is given in the Parse Error pop-up.

   ![Parse Error Pop-up](image)

   In the above screenshot, a cross highlight is used to point the line containing erroneous XML.

Preview

Opening a topic in Preview shows how your topic will be displayed when it is viewed by a customer in their own web browser.
Document state

To manage the readiness of the documents, XML Documentation solution provides document state property to indicate the current state of the document. Document states help you quickly find out whether a document is new, in review, or review is completed.

Types of document states

A document can have any of the document state defined in the Document State Profile. For example, a document may have any one of the following Document States:

- **Draft** - Indicates that the document is created and saved with new changes.
- **In-Review** - Indicates that a review workflow has been initiated for the document.
- **Reviewed** - Indicates that the document has been reviewed by the intended user(s).

These states are set manually or automatically according to the Document States profile settings. For example, if the Document State profile has default start state as draft, when you create a new document, the document state will be set to Draft. If you initiate a review task, then you can change the state to In-Review from the properties panel of the document depending on the rights that are assigned to you.

**NOTE:** A document can exist in only one state at a time.

Change the document state

To change the state of a document, perform the following steps:

1) In the Asset console, select a document for which you want to change the document state.
2) In the main toolbar, click **Properties**.
3) Select the new state from the **Document State** drop-down.
   
   **NOTE:** You can select only those document states that are allowed in the State Transition section of the Document State profile.
4) Click **Save & Close**.

View the document state

The card view of the Assets console shows the current state along with the creation date and size of the respective DITA topic or DITA map.
Use label

The XML Documentation solution allows you to add labels to different versions of a file. You can use these labels to specify the version that you want to include in a baseline for publishing. For more information about using labels to create a baseline, see Use Baseline for publishing.

For example, if you want to use version 1.0 of a topic in release 1.0 and version 1.1 of the same topic in release 2.0, you can add release 1.0 label on the version 1.0 and release 2.0 label on the version 1.1.

Once you have added the labels, you can create a baseline and specify which version of the topic should be included for publishing using that baseline. To see what version should be included or excluded in a baseline, you can use the Version History option.

Add a label

Perform the following steps to add a label to your topic:

1) Do one of the following in the Asset console:
   - Click a topic to open the preview mode.
   - Click Select in the toolbar and then click a topic.
   
   The version history of the topic is shown in the left rail.

2) In the Version History, click a version where you want to add a label.

3) Enter a label for the selected version and press Enter. For example, 2.6 Release.

   NOTE: You cannot add same label to the different versions of a topic. However, you can add multiple labels to the same version of a topic.
The labels are displayed in the Version History of the selected topic. The following screenshot displays the labels User Guide and 2.6 Release added to the version 1.2 of the selected topic.

NOTE: Using a baseline, you can add a label to multiple topics. For more information about adding labels using baseline, see Add a label to a Baseline.

Delete a label

Perform the following steps to delete a label:

1) Do one of the following in the Asset console:
   • Click a topic to open the preview mode.
   • Click Select in the toolbar and then click a topic.

2) In the Version History, you will see all the versions of a topic and the labels attached to them. The following image shows an example of three versions of a topic and one of the versions has labels added to it.
3) Click delete button (X) to delete a label.
**Work with the Map Editor**

Using the XML Documentation solution’s Map Editor you can create and edit DITA maps. The Map Editor gives you two out-of-the-box map templates - DITA map and bookmap. You can also create your own map templates and create maps based on your custom template. For more information about using your custom DITA templates, see *Configure templates and tags for authoring* in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

**TIP:** See *Map Editor* for best practices around working with the Map Editor.

**Create a map**

The Map Editor provides easy drag-and-drop feature to add topics from your AEM repository to create the DITA map or bookmap. You can add nested topics, relationship tables (reltable), attributes and metadata information, and also validate the map for correctness.

Perform the following steps to work with the Map Editor:

1) In the Asset console, navigate to the location where you want to create the map file.
2) To create a new map, click **Create > DITA Map**.
3) On the Blueprint page, select the type of map templates you want to use and click **Next**.

**NOTE:** The way the topics are referred in a map file depend on the map template. For example, if you select the Map template, then the topic references (*topicref*) are used to refer to topics. In case of a Bookmap, topic references are created using the *chapter* element in DITA.

4) On the Properties page, enter a **Title** and **Name** for the map and click **Create**.

**NOTE:** The name is automatically suggested based on the Title of your document. If you want to manually specify the document name, then ensure that the Name does not contain any spaces, apostrophe, or braces and ends with `.ditamap`.

5) Click **Create**. The Map Created message appears.

*You can choose to open the map for editing in the Map Editor, or save the map file in the AEM repository.*
Add topics to a map file

Once a map file is created, you need to add topics to the map file. Using the Map Editor, you can add topics, relationship tables, or other map files. Perform the following steps to build your map file:

1) In the Asset console, navigate to the map file that you want to edit.
   NOTE: Ensure that you have not enabled the asset Select mode.

2) To get an exclusive lock on the map file, select the map file and click Check Out.
   NOTE: Once you have an exclusive lock on a map file, other users would not be able to edit the map. However, they would be able to work on the topics within the map file.

3) With the map file selected, click Edit.
   The map file is opened for editing in the Map Editor. Using the Map Editor, you build a map by using the currently available topics that are displayed in the References rail.

4) Using the References rail, navigate to the folder that contains the topics or sub-maps that you want to add.
   NOTE: You can add topics or sub-maps from any folder in the References rail.

5) To add the first topic to the map, drag-and-drop the topic onto the Map Editor.
   NOTE: After adding the first link, the Add New Reference link is available when you hover your mouse over an existing topic in the map.

6) To add subsequent topics or a sub-map, drag-and-drop the topic or sub-map to the required location in the map.
   If you add a sub-map to your DITA map, the sub-map is shown as a link in the DITA map. To view all the topics of the sub-map, click the sub-map link. The content of the sub-map are shown in a new tab.
   NOTE: If you drop a new topic on an existing topic in the map, you get a message about replacing the topic. Click Yes if you want to replace the topic, click No if you do not want to replace the topic. You can use CTRL+Z and CTRL+Y to undo or redo any change in the map.

7) Click Save.
Features available in the Map Editor’s toolbar

The main toolbar in the Map Editor allows you to perform the following tasks:

A: Search
You can search for and include the required topics from DAM. Clicking on this icon displays the Search dialog:

Enter the keywords you want to search for, these keywords are matched in the topic’s filename, content, and even attribute values. Once the search results are available, select the desired topic(s) and click the Check button to add the selected files at the end of your map structure. You can filter your search results by specifying Modify Date parameters.

B: Group
Click the checkbox to the left of the topics and click Group in the toolbar to group the selected topics. For more information about grouping topics, see the topicgroup documentation in OASIS DITA Language Specification.

C: Delete
Click the checkbox to the left of a topic and click Delete in the toolbar to remove the selected topics from the map.

D: Show Numbers and Hide Numbers
Display (or hide) numbering for the topics in the map.
E: Validate
Check whether the map is valid or has errors.

F: Default Mode/XML Mode
In the Default Mode, clicking a topic link shows the preview of the topic in a new tab. Clicking on the Default Mode icon changes its mode to XML Mode. In XML Mode, clicking anywhere in a topic row shows the underlying XML of topic references within the topic. In the source XML view, there is an Auto Indent option that reorganizes the XML code in presentable and easily readable format. In case you are editing a map manually, the source view also performs validation checks. In case your XML contains errors, the same gets highlighted in the XML Mode and you are not allowed to save the DITA map file. If you want to view the XML for the entire map, click anywhere outside the topic boundary.

NOTE: In the Default Mode you can use the keyboard shortcuts to undo (Ctrl+z) or redo (Ctrl+y) the last action.

G: Map Properties
Display the Map Properties dialog wherein you can set the attributes and metadata information for the map. To add an attribute, click the Add button at the bottom-left corner of the dialog to get the Attribute drop-down list. From the list, select the attribute that you want to add. If the selected attribute has pre-defined values specified in the DTD, then those values would be presented in a
new drop-down list. You can select the desired value from the drop-down list. If there is no pre-defined value, then you will be presented a text box to enter a value for the selected attribute.

Features available at a topic-level in the Map Editor

When you hover your mouse pointer over a topic or a sub-map file in the Map Editor, you can perform the following tasks:

A: Move Left or Move Right
   Hover your pointer over a topic and click the left or right arrow to move the topic left or right. Moving a topic in such a way makes it a child (nest) or sibling (remove nesting) with respect to the topic above it.

B: Properties
   Hover your pointer over a topic and click Properties to open the Topicref Properties dialog. Using this dialog, you can set the topic attributes and metadata information. For more information about
the standard topic attributes and metadata, see the `topicref` documentation in OASIS DITA Language Specification.

![Topicref Properties](image)

### C: Add New Reference

Hover your pointer over a topic and click the add new reference icon to add a new reference as a sibling of the current topic.

### D: Add New Key Definition

Hover your pointer over a topic and click the Key icon to add a new key definition. Any overridden key or a key that has been already defined in the map, appears in red. If you click the Properties icon on a key definition, you get the Keydef Properties dialog.

### Work with relationship tables

The XML Documentation solution Map Editor comes with a powerful feature that allows you to create and edit relationship tables in your DITA map.

Perform the following steps to work with relationship tables in your map:

1) In the Asset console, navigate to and click on the map file in which you want to create the relationship table.

2) Click **Topics**.
   
   *A list of topics in the map file are displayed.*

3) Click **Edit** in the toolbar.
4) Select Reltable from the toolbar.

5) Drag-and-drop topics from the topic list to the Reltable editor.
   **NOTE:** You can add topics from any folder in the References rail.

6) To add a header to your relationship table, click **Add Relheader**.
7) To add a column to your relationship table, click **Add a Column**.

8) Click **Save**.

You can also perform the following actions from the relationship table editor:
Delete rows or columns

If you want to delete a column from your table, select the checkbox in the column header and click Delete. If you want to remove a row from table, select the checkbox in the first column of the respective row and click Delete.

Delete a topic

If you want to delete a topic from your table, click the cross icon next to the topic.

Delete the relationship table

If you want to delete the relationship table, click anywhere outside the relationship table and click Delete.

Resolve key references

A DITA content key reference, or `conkeyref`, is a mechanism for inserting a part of content from one topic into another. This mechanism uses key to locate the content to reuse rather than the direct content referencing mechanism. For more information about direct and indirect referencing in DITA, see DITA addressing in OASIS DITA Language Specification.

If the DITA topic has associated key references, then they need to be resolved before previewing, editing or reviewing a topic. The key references can be stored within a DITA map file or a separate DITA file. In XML Documentation solution, you can specify key references either at the project level or a session level.

If a root map is already defined for the user session, then it is used for resolving the keys. Else, the default root map for that folder is used. In case a default root map is not configured, then the missing key references are highlighted to the user.

There are several ways to resolve key references in a DITA topic by defining the DITA map to be used at the following locations:

**Project properties** - You can define a root map for resolving key references while creating a Project in the Project Properties section.

This root map will be applicable for all assets (folders and sub-folders) associated with that project. For content that is referenced in multiple projects, an alphabetical list of projects is maintained and the default root map associated with the first project is used. You can also choose the DITA map to be used from the list for resolving key references.

**Topic preview** - In the topic preview mode, click on the Key Resolution icon in the toolbar and select the DITA file to be used for key references.

**Topic edit view** - Click on Key Resolution icon while editing a DITA topic and select the DITA file to use for resolving the key references.

**Edit topics through DITA map**

Editing an individual topic doesn’t give the complete context to the author. An author would have no information about where a topic is placed in a DITA map. Without this contextual information, it becomes a bit difficult for authors to create content.
XML Documentation solution allows authors to open a DITA map in the Web Editor and see the placement of topics within the map. This helps authors to get where exactly the topic is placed within the map and create more relevant content. Also, if there are multiple authors working on a project, they can know what all topics are available in the map and reuse content, wherever required.

To edit topics through a DITA map, perform the following steps:

1) In the Asset console, navigate to the DITA map that contains the topics that you want to edit.
   
   NOTE: Ensure that you have not enabled the asset Select mode.

2) Click on the DITA map to open it in DITA map console.

3) Click Topics to see a list of topics available in the DITA map.

4) In the main toolbar, click Edit Topics.

   The DITA map opens in the Web Editor.

   NOTE: You can also select the DITA map file in the Asset console and click Edit Topics in the main toolbar to launch the web editor.

5) (Optional) You can also select a topic from the map and get a lock on the file before editing. To get a lock, select one or more files from the left pane and click Checkout and Lock. You can also release the lock on any file by selecting the checked out file and clicking on the Cancel Checkout and Unlock icon.
The following screenshot highlights the icons for Checkout and Lock (A), Cancel Checkout and Un-lock (B), Save Revision (C), different icons showing different DITA file types (D), and files that are checked out (E).

6) Click on any topic link to open it in the Web Editor for editing. You can open multiple topics in the editor and each topic is opened in a new tab. Even if your DITA map contains sub-maps, topics from the sub-maps are also opened in a new tab for editing. If you want to view the topics under a sub-map, you can click and expand the sub-map.

If you click a map file, the map is opened in a new tab of the web browser.

7) Once you have finished editing the topics, you can do the following:
You can save them individually. If you click on **Close Without Saving** your topics, you will see a dialog prompting you to save the unsaved topics:

![Unsaved Changes Dialog](image)

You can choose to save all selected topics, or deselect the topics that you do not want to save.

You can check in the topic using the **Save Revision** button. When you save a revision of the topic, a new revision is created and it is unlocked for editing.

**Work with subjectScheme**

subjectScheme maps are a specialized form of DITA maps that are used to define taxonomic subjects and controlled values. Depending upon your requirements, you can create a subjectScheme map and reference it within your topic file. The following example shows how to use subjectScheme in XML Documentation solution.

1) Create a subjectScheme file in a tool of your choice. The following XML code creates subjectScheme that binds values for the `platform` attribute.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE subjectScheme PUBLIC "-//OASIS//DTD DITA Subject Scheme Map//EN" "subjectScheme/dtd/subjectScheme.dtd">
<subjectScheme>
  <subjectdef keys="os" navtitle="Operating system">
    <subjectdef keys="linux" navtitle="Linux">
      <subjectdef keys="redhat" navtitle="RedHat Linux"/>
      <subjectdef keys="suse" navtitle="SuSE Linux"/>
    </subjectdef>
    <subjectdef keys="mswin" navtitle="Windows"/>
    <subjectdef keys="zos" navtitle="z/OS"/>
  </subjectdef>
  <enumerationdef>
    <attributedef name="platform"/>
    <subjectdef keyref="os"/>
  </enumerationdef>
</subjectScheme>
```

2) Save the file with `.ditamap` extension and upload it to any folder in DAM.

**NOTE:** You can add the subjectScheme file to the parent DITA map.

3) In the Web Editor, open the file where you want to use the subjectScheme definitions.

4) Click the **Key Resolution** icon to open the Key Resolution dialog.
5) Browse to and select the subjectScheme file and click **OK**.

6) From the breadcrumb, select the element to which you want to apply the **platform** attribute.

7) Right-click on the selected text and choose **Attributes**.

8) In the Attributes For selection dialog, enter or choose the **platform** attribute. The **Value** field changes to a drop-down list containing the permissible values.

9) Select the desired attribute value and click **Done** to assign the value to the selected element.

**Bulk tagging of DITA content**

Tags allow you to group or classify content within your content repository and also in the published output. If you have applied tags on your content, you can easily find related topics within a DITA map that can help you while authoring content. With the published output, end users will be able to locate the right content faster with proper tags in place.
XML Documentation solution allows you to tag DITA content in a few clicks. You can use the bulk tagging feature to apply multiple tags on multiple topics, a DITA map, or on a sub-map. Or, you can also apply tags on an individual topic. Tagging is the native feature in AEM, you can find more details about creating and managing tags in the Administering Tags section in AEM documentation.

Tags creation and management is a feature that is restricted only to the users belonging to the "tag-administrators" group. This implies that the default roles (Authors, Reviewers, and Publishers) in XML Documentation solution cannot create tags, they can only use tags created by the tag administrators.

**NOTE:** If you want to create a new tag, contact your system administrator

### Apply bulk tags

Use the bulk tagging feature to apply multiple tags at once. Perform the following steps to apply tags to your topics in a DITA map:

1) In the Assets console, navigate to and click on the DITA map file. 
   *The DITA map console appears showing the list of Output Presets available to generate output.*

2) Click **Topics**.
   *A list of topics available in the DITA map are displayed.*

3) Select the topics or sub-map on which you want to apply tags.
   
   ![Select Tags dialog](image.png)
   
   **NOTE:** The above screenshot shows a sub-map selected and expanded. On selecting the sub-map, all the topics under the sub-map are also selected.

4) Click **Apply Tags**.
   *The Select Tags dialog appears.*

5) Select one or more tags that you want to apply on the selected topics.
6) Confirm your selection.

_The selected tags are applied on the topics and shown next to the topic title._

**NOTE:** After adding tags to your topics, if you move or delete a topic, then the tags for those topics are also removed. However, that topic remains in the map until you remove it.

### Apply tags on an individual topic

Perform the following steps to apply tags to an individual topic:

1) In the Assets console, navigate to and select the topic file on which you want to apply tags.
2) In the toolbar, click **Properties**.

_The topic's properties page appears._

3) In the Basic tab, click the Browse icon next the **Tags** field.
4) Select one or more tags that you want to apply on the selected topic.
5) Confirm your selection.
6) Click **Apply Tags**.

_The selected tags are applied on the topic and shown in the Tags field._

7) Click **Save & Close**.

### Remove tags

As per your business needs, you can change the tagging information for any DITA topic. You can easily remove all tags at once or remove only those tags that are no valid on the topic.

Perform the following steps to remove all tags from one or more topics:

1) In the Assets console, navigate to and click on the DITA map file.

_The DITA map console appears showing the list of Output Presets available to generate output._

2) Click **Topics**.

_A list of topics available in the DITA map are displayed._

3) Select the topics from which you want to remove tags.
4) Click **Remove Tags**.

**NOTE:** If the Delete Tags icon is not visible, ensure that you have not enabled the Hide Tags feature.

5) On the Confirm Delete dialog, click **OK** to remove tags from the selected topics.

### Show or hide tags

If you have a long list of tags applied on your topics, then you might find it a bit cumbersome to navigate. You can easily hide tags in from your DITA map console view by clicking on the Hide Tags icon. Similarly, when the tags are not visible, clicking on the Show Tags reveals all tags.
DITAVAL editor

DITAVAL files are used to generate conditional output. In a single topic, you can add conditions using element attributes to conditionalize content. Then, you create a DITAVAL file wherein you specify the conditions that should be picked up to generate content, and which condition should be left out from the final output.

XML Documentation solution allows you to easily create and edit DITAVAL files using the DITAVAL editor. The DITAVAL editor retrieves the attributes (or tags) defined in your system, and you can use them to create or edit DITAVAL files. For more details about creating and managing tags in AEM, see Administering Tags section in AEM documentation.

Create DITAVAL file

Perform the following steps to create a DITAVAL file:

1) In the Asset console, navigate to the location where you want to create the DITAVAL file.
2) Click Create > DITA Topic.
3) On the Blueprint page, select DITAVAL file template and click Next.
4) On the Properties page, specify the Title and Name for the DITAVAL file.
   NOTE: The name is automatically suggested based on the Title of your file. If you want to manually specify the file name, then ensure that the Name does not contain any spaces, apostrophe, or braces and ends with .ditaval.
5) Click Next. The Topic Created message appears.
   You can choose to open the DITAVAL file for editing in the DITAVAL editor, or the save the topic file in the AEM repository.

Edit DITAVAL file

Perform the following steps to edit a DITAVAL file:

1) In the Asset console, navigate to the DITAVAL file that you want to edit.
   NOTE: Ensure that you have not enabled the asset Select mode.
2) To get an exclusive lock on the file, select the file and click Check Out.
3) Select the file and click **Edit** to open the file in XML Documentation solution DITAVAL editor. The DITAVAL editor allows you to perform the following tasks:

**A: Toggle Left Panel**

Toggle the left panel view. If you have opened the DITAVAL file through DITA map, the map and repository are shown in this panel. For more information about opening a file through DITA map, see *Edit topics through DITA map*.

**B: Save**

Saves the changes you have made in the file. All your changes are saved in the current version of your file.

**C: Add Property**

Add a single property in your DITAVAL file.

The first drop-down lists the allowed DITA attributes that you can use in the DITAVAL file. There are five attributes that are supported - audience, platform, product, props, and otherprops. The second drop-down list shows the values configured for the selected attribute. Then, the next drop-down list shows the actions that you can configure on the selected attribute. The allowed values in the action drop-down are - include, exclude, passthrough, and flag. For more information about these values, see the definition of prop element in OASIS DITA documentation.
D: Add All Properties

If you want to add all conditional properties or attributes defined in your system with a single click, use the Add All Properties feature. **NOTE:** If all defined conditional properties already exist in the DITAVAL file, you cannot add more properties. You get an error message in this scenario.

4) Once you have finished editing your DITAVAL file, click **Save**.

**NOTE:** If you close the file without saving, the changes will be lost. If you do not wish to commit changes into AEM repository, click **Close**, and then click **Close Without Saving** in the **Unsaved Changes** dialog.

**DITAVAL editor views**

The XML Documentation solution DITAVAL editor supports viewing DITAVAL files in two difference modes or views:

**Author**

This is a typical What You See is What You Get (WYSISYG) view of the DITAVAL editor. You can add or remove properties using the simple user interface, which presents the properties, its values, and actions in drop-down list. In the Author view, you have the options to insert an individual property and insert all properties with a single click.

You can also find the version of the DITAVAL file that you are currently working on by hovering your pointer over the filename.

**Source**

The Source view displays the underlying XML that makes up the DITAVAL file. In addition to making regular text edits in this view, an author can also add or edit properties using the Smart Catalog.
To invoke the Smart Catalog, place the cursor at the end of any property definition and enter “<". The editor will show a list of all valid XML elements that you can insert at that location.
Review topics

Almost any technical document that you author needs to go through rounds of review. In most cases, the review cycle involves more than one reviewer. Addressing and responding to comments from multiple reviewers is always challenging. Also, in a multiple reviewer scenario, it is helpful if one reviewer can see the comments made by other reviewers. XML Documentation solution addresses this need by providing a collaborative review workflow.

NOTE: Adobe FrameMaker has a Review Comments pod that is integrated with the XML Documentation solution.

NOTE: See Review for best practices around creating review task.

Send topics for review

The review workflow allows for a multi-reviewer environment where the initiator specifies the list of reviewers and review timelines when initiating a review or even for an ongoing review. An online version of the topic is made available for review. The XML Documentation solution Review panel allows authors and reviewers to comment or annotate a topic in real time. The panel also allows everyone involved to view and respond to comments or annotations. In a multi-round review workflow, reviewers can easily see the difference in the content being updated, from first version to the latest.

Finally, the review management dashboard gives administrators an overall view of the review status of various topics.

With XML Documentation solution, you can create review tasks to get multiple topics reviewed.

Create a review task

To create a review task and send topics for review, perform the following steps:
NOTE: You can create a review task only if you are the author or publisher in a project.

1) Navigate to the required folder in the Assets console.
2) Click and select the topics you want to send for review.

3) In the toolbar, click **Create Review Task**. The review task creation page is displayed.

4) Enter the title for the task and select the DITA project from the drop-down list.
5) In the **Assign To** field, select from the drop-down list the reviewers to whom you want to send the topics for review.
If you are the owner of the project, then you can assign this review task to individual users of the project and also to user roles. However, if you are not an owner in this project, then you can only choose from user roles.

**NOTE:** Review workflow is project specific. When you create projects, you define the team in the project and assign them roles. So when you select the project here, you get to choose the assignees who are a part of that project. For more information about projects, see Create a DITA project.

6) Enter the description for the task. This description is used as the body of the notification email sent to reviewers.

Select the due date and time to mark the deadline for review.

**NOTE:** After the deadline is reached, an email is sent to the initiator, notifying that the review task has completed. You can also restart a closed review task from the Projects console, see Manage Reviews for more information.

7) Click Create to initiate the review.

A confirmation message is displayed when the review task is created successfully. The Document state is set to In-Review.

**NOTE:** You can also click Notifications panel at the top right of the interface and confirm that the task has been created successfully.

An email is sent to all the reviewers, notifying that they have been assigned a topic or multiple topics for review. The email contains a direct link that they can click and access the topic in a browser window.

In case multiple topics are assigned, the reviewers can view and select them in a drop-down list of topics in the web browser.

### Send multiple topics for review from a DITA map

A DITA map is an organized list of topics. It represents the logical organization of topics within a book. When you send an individual topic for review, the reviewer does not get any information about the location of that topic in the book. If a reviewer has the information about the exact location of the topic being reviewed, the reviewer gets a better context of the topic being reviewed. XML Documentation solution allows you to send one or more topics in a DITA map for review at the same time.

To send one or multiple topics in a map for review, perform the following steps:

1) Navigate to the required folder in the Assets console.

**NOTE:** Make sure the view of the console is set to either card view or list view.

2) Click and select the map from where you want to send the topics for review.

3) In the toolbar, click Create Review Task. The review task creation page is displayed.

   *This page is almost similar to the review task creation for an individual topic, except that it has a topic selection list available at the end of this page.*

4) Enter the title for the task and select the project from the drop-down list.

5) In the Assign To field, select from the drop-down list the reviewers to whom you want to send the topics for review.
If you are the owner of the project, then you can assign this review task to individual users of the project and also to user roles. However, if you are not an owner in this project, then you can only choose from user roles.

**NOTE:** Review workflow is project specific. When you create projects, you define the team in the project and assign them roles. So when you select the project here, you get to choose the assignees who are a part of that project. For more information about projects, see *Create a DITA project.*

6) Enter the description for the task. This description is used as the body of the notification email sent to reviewers.  
Select the due date and time to mark the deadline for review.  
**NOTE:** After the deadline is reached, an email is sent to the initiator, notifying that the review task has completed. You can also restart a closed review task from the Projects console, see *Manage Reviews* for more information.

7) Select the topics that you want to send for review. If your DITA map contains nested maps, then topics from the nested maps are also listed here.
NOTE: If there are topics that are already shared for review, they will appear in gray with a status of “Topic already under review”. Once a DITA map has been shared for review, it cannot be used in another review even though only a few topics from the map have been shared for review.

8) Click Create to initiate the review.

A confirmation message is displayed when the review task has been created successfully.

IMPORTANT: Once you have initiated a review, you must not move the DITA map or topics to a different location. Doing so will result in a break in the review process.

An email is sent to all the reviewers, notifying that they have been assigned a topics for review. The email contains a direct link that they can click and access the topic in a browser window. The topics along with the DITA map are opened in the review mode.

Review topics

If you are included as a reviewer in a topic review, you receive a review request in an email.

Perform the following steps to review:

1) Click the direct link given in the review request email.

   The topic can be accessed in a browser.

   NOTE: You can also access topic review link from your Inbox notifications area or from the project’s Task Details page.

2) Depending on the way the topic review is initiated, you could see any one of the following two screens:

   The following screen appears when a DITA map is used to initiate the review workflow:

   ![Screen](image-url)

   The following options are available on this screen:
– **A**: Show or hide the table of contents.
– **B**: The numbers highlighted by E can be filtered by choosing the desired filter option from here. You can filter annotations by its type, status, or reviewer. For example, if you want to see how many number deleted comments you have received in each of the under review article, click the filter icon and then choose Annotation Type > Deletion.
– **C**: A topic that is not available for review is grayed out.
– **D**: A topic that is available for your review is shown in black and is clickable.
– **E**: Number of comments received on each under review article. This number changes based on the filter that you apply.

The following screen appears when a topic or multiple topics are selected and shared for review:

3) Open the Comments panel by clicking the Comments icon at the top-right corner of the toolbar. 
   Write review comments by selecting an appropriate comment type from the toolbar and press Enter to submit your comment.

4) Click **Close** button once you complete reviewing the topic. On clicking the button, you will be redirected to the page from where you initiated the review.

**Addition notes:**
- You can add inline comments by highlighting text, striking through text, inserting text, or adding a comment note. For example, to add a highlight comment, select the text and click the Highlight icon. Or, click the Highlight icon and select the desired text:
A pop-up appears wherein you can add your comment for the highlighted content.

Similarly, if you want to suggest content removal, you can do so by selecting the content and clicking the Strikethrough icon. Or, select the desired text and click the Delete key:

If you want to insert text, click the Insert Text icon and place the cursor where you want to insert the text and type in the information. Or, place the cursor where you want to insert text and start typing. The added information appears in green colored font:

Finally, if you want to add a sticky note type of comment, click the Add Comment icon and enter the comment in the pop-up.

- You can see the comments listed in the Comments panel. This panel also lists comments from other reviewers if the topic is sent out for shared review. Hovering over a user’s icon shows when the user was last online.

- You can also add replies for the comments in the Comments panel.
- You can edit your own comment by double clicking on your commented text in the Comments panel or by double clicking on the corresponding annotation in the topic view.

- You can delete your own comments by clicking on the comment in the Comments panel and pressing the Delete key.

- Multiple reviewers will be able to leave comments or reply to comments simultaneously on the same document. You can find out who is currently reviewing the document by hovering the mouse over the user icon at the top right corner of the screen.

- All the participating users can respond to comments submitted by other users. On a comment, click Reply and press Enter to submit a comment.

- During a review, if an author makes any changes in the document and saves a new revision of the document, then all reviewers get a new version notification on their review page. Clicking on the notification opens up the latest version of the document for review.

This feature ensures that the reviewers always have access to the latest version of the document for review. Also, authors can start fixing the comments immediately after receiving them on their document.

Filter comments

You can filter comments in a document to view specific comments as required. To filter comments, click the Filter button that appears in the menu at the top right of the review panel. Select one or more of the following filtering options.

- Review Type - The comments type - Highlight, Deletion, Insertion, or Comment.

- Review Status- Status of the comment like Accept, Reject, All, or None.

- Reviewers - The comments submitted by a particular user.

- Versions - See comments received on a particular version of the document.

To remove the filter and view all the comments, click Clear All Filters.
Address review comments

As an author, you can work with the comments in a topic from the following locations:

**Web editor**

The existing comments in a document can also be viewed from the web editor mode. Visual indicators are provided indicating the text that was inserted, deleted or highlighted. Hovering the mouse over the comment gives the details of the annotation.

In the web editor mode, you have the following options available in the right panel. You get three main tabs at the top - Properties, Review, and Changes. The Review panel shows all comments made in your document by reviewers. The Changes panel shows the status of all inserted and deleted comments in your document.

- **A**: Open the side-by-side view to display the commented version of the topic. As seen in the above screenshot, the leftmost section is the latest version of the topic wherein you can make changes. The next section is the commented version of the topic. As you navigate between comments in the topic, the side view changes and displays that version of the topic on which the comment was made. You can see the version number at the top of the side view. Clicking on this icon again hides the commented version of the topic.
- **B**: Display a preview of the topic without comments.
- **C**: Accept or reject a comment.
- **D**: Move between previous and next comment.
- **E**: Search for a text within comments.
- **F**: Apply a filter on the comments. You can filter to see comments on the basis of Review Type (all, highlighted, deleted, inserted, or sticky note), Review Status (all, accepted, rejected, or none), Reviewers (all or specific reviewer(s)), or Versions of topic.
- **G**: Import the inserted and deleted (or Strikethrough) comments in the topic directly. This allows you to easily accept or reject the comments. If you want to incorporate the suggested change (insertion or deletion), simply right-click on the comment in the content and select Accept Change.
The comment is accepted and made a part of the content. Also, the status of the comment is changed in the Review tab.

You can also use the Changes tab to accept or reject comments. Clicking on any comment highlights the comment in the document.

IMPORTANT: The import comments feature works only on those documents that have not changed since they were shared for review. If you have made any change after sending the document for review, you will get an option to Force Import comments into your document. However, doing so will result in loss of all updates that you have made in your document. As and when you accept or reject a comment, it is removed from the Changes list. This also serves as an indicator of how many comments need to be addressed in the document.
Review page

When you click on the review request link in an email, it opens the review page in the browser. The review page offers the following features:

- View changes in the document at word or block level. Clicking the icon A in the following screenshot switches between word and block level differences.

In the following screenshot, the changes are shown at word level:

The text highlighted in red denotes the deleted text and the text highlighted in green denotes the newly added text. If there are a large number of such changes made in the document, then it might become a bit difficult to understand the change at the word level. The same content when seen at a block level would be displayed like:

Looking at the above screenshot, you can easily make out how the updated text block will look like.

- See the changes made in between the latest and the commented version of the document. Clicking icon B (in the first screenshot) displays the differences in between two versions of the document. The versions that are being compared is displayed at the top of the document.
- List comments and responses to comments.
- See the comment type - Highlight, Deletion, Insertion, or Comment.
- Date and time of the given comment.
- Name of the reviewer.
- Status of the comment as to whether the comment has been accepted or rejected by the author indicated by a thumbs up or down symbol.
• Clicking on a comment highlights and shows the corresponding location in the document.

**FrameMaker**

FrameMaker - AEM connector comes with a Review Comments pod that you can use to view, filter, and respond to comments.

After setting up the AEM connection, you can view the content of the repository. You can directly navigate to the topic that you got reviewed and utilize the Review Comments pod.

When you open an annotated document in FrameMaker, the inline comments appear as document level comments. For example, the comments with highlighted text, will include the "highlighted text" in the comment in FrameMaker. You can post a reply to a comment, accept or reject it, and the response can be seen by authors or reviewers in XML Documentation solution web editor or review page view.

See the topic *Review* in the *Content Management Systems* chapter of FrameMaker user guide to understand how to address review comments in FrameMaker.

**Manage Reviews**

Review management workflow can include a variety of tasks. For example, you may want to add or remove reviewers for a particular topic, extend the deadline for a review, or restart a closed review. You might also want to mark the review task as complete if you think that all the stakeholders have contributed. These tasks can be managed using the Review Management functionality.

Perform the following steps to know the tasks that you can perform using Review Management:

1) On the Project console, click the project you are working on.  
   *A Project panel with task tiles is displayed.*

2) Open the **Tasks** tile to view the task details.  
   *A page showing the tasks, priority, due date, assignee, task status, and other details is displayed.*
3) From the list of tasks, click the title of the task that you wish to modify.
   a) Perform the following under the TASK tab:
      • Modify the title of the task in the Title text box.
      • Add assignees in the Assign To drop-down.
      • Update the description of the task in the Description text box.
      • Set the priority of the task in the Task Priority drop-down.
      • Modify the Due Date. You can prepone or postpone the deadline for the completion of the task.
      • Click Update to update the modified details.
      • Click Complete, if you want to mark the task as complete before the due date. When an individual topic’s task is marked as Complete, the review of the selected topic is closed. However, in case of topics shared for review through a DITA map, marking the DITA map task as Complete will close the review of all topics within the map that were shared for review.
      • For a completed review task, click Update and Restart to restart the review process. A review link for the new review task is sent to all the assignees. Comments from the older review task are retained in the topics.
         **NOTE:** Once a topic review through DITA map is marked as Complete, you cannot restart the review for that DITA map from here.
   b) Perform the following under the CONTENT tab:
      • Add more topics to the existing task. Click Add Assets and navigate to the required topic.
Translate content

XML Documentation solution comes with powerful capabilities that enable you to translate your content into multiple languages. Both, human and machine translation workflows are supported by the XML Documentation solution.

- Human translation - Assets are sent to your translation provider and translated by professional translators. When complete, the translated assets are returned and imported into AEM.
- Machine translation - The machine translation service immediately translates your assets. By default, AEM provides the capability to connect to Microsoft Translator.

**NOTE:** Microsoft Translator is available only as a trial license.

Best practices for first time content translation

You can translate a DITA map, topic, or an entire folder. To translate DITA map and topics, use the Translate tab in a DITA map console. To translate a folder, use the AEM translation workflow.

Create a source language copy for your project folder, so that the system can identify what your source language is. For example: If your project is in English, then you must have a language copy called `en` on AEM 6.4, AEM 6.3 and AEM 6.2, and `<projectname>-en` on AEM 6.1, so that the system recognizes English as the source language. You should use this language copy for all the processes and edits, like first time translation and others. Ensure that the user tasked with initiating the translation process has Read, Modify, Create, and Delete permissions on the source and target language folders.

**NOTE:** The language copy ORIGINAL in the References > Language Copies window represents the original project folder. It should not be used for translation.

You can perform an optional check to see if there is already a source language copy that exists for your project:

1) In the Asset console, select the source project folder.
2) Open the Reference pane and click Language Copies under Copies.

![Language Copies](image)

For the selected project folder, there exists two language copies called `en` and `de`. All the translation workflows and edits should be performed on the source language copy. However, if you see any issues in the translated version of the content, you can directly edit the translated files as well.

To initiate the localization workflow, see the following procedure.
TIP: See *Translation* for best practices around translating content.

**Create a source language copy**

Perform the following steps to create a source language copy:

1) Ensure that you are currently logged into AEM. Navigate to the Assets console.
2) Click the Select button from the toolbar. The console is now ready to select the required folder.
3) Select the folder and from the toolbar, click References.
4) Click Language copies in the References rail. The *ORIGINAL* language copy is displayed. Also, if you have translated the selected content previously, language copies for each translated language is displayed after the original.
5) Click Create at the bottom of the References rail.
6) In the Create panel, select DAM Create Language Copy from the translation workflow drop-down list.
7) Select the language of your source content from the target language drop-down list.
8) Enter the title of the workflow and click Start to start the workflow.

*A source language copy with* `<project-name>-<language-root>` *is created in Assets console*

**NOTE:** This workflow does not trigger the translation job. You can start the translation job for the target language copy by following the next procedure.

**Start the translation job**

Perform the following steps to start the translation job:

1) Navigate to the Assets console.
2) Do one of the following:
   - Select the DITA map and open the DITA map console.
   - Select the source language folder and from the toolbar, click References.

**NOTE:** If you select a DITA map for translation, the current active version of the topics are sent for translation. If you select a folder, the latest working copies of the topics are sent for translation.

3) If you have selected the DITA map, perform the following steps:
   a) Click the **Translation** tab.
   b) Select the topics you want to translate.
   c) Click **Send for translation**.
   d) In the **Sync and Translate** dialog, specify the following:
      - Translation Project
      - Translation Configuration
      - Credential Configuration
   e) Click **Sync and Translate**.

*The translation starts.*
4) If you have selected the source language folder:
   a) Click Language copies in the References rail.
   b) Click Create at the bottom of the References rail.
   c) Select **DAM Create and Translate language Copy** from the translation workflow drop-down list.

   See **DAM Create and Translate Language Copy** workflow to complete the steps.

   A target language copy of the selected folder is created with the target language root as its name, in the Assets console. For example - If you set up a translation workflow in Italian for your source folder `en` containing assets with English meta-data, the language copy is named `it`. This language copy appears under the language copies section in the References rail.

   A translation project of the same name is also created in the Projects console, and the folder contents are automatically added in the translation job.

   After the translation completes, the status of the translation job changes to Ready to Review. Navigate to the target language folder in the Assets console to view the translated topics.

View translation status

You can view the translation status and the translated language copies for each topic from a folder or from a DITA map.

**View translation status of a folder**

Perform the following steps to view the translation status of a folder:

1) Navigate and select the source language copy folder in the Assets console.
2) Click **References**.
3) Click **Language Copies**. The list of languages into which the topics have been translated, is displayed.

   For example - The source language copy folder **dita-aem-en** (English) is translated into **dita-aem-de** (German) and **dita-aem-ar** (Arabic).
View translation status of a DITA map

Perform the following steps to view the translation status of a DITA map:

1) Navigate to the DITA map file of the source language copy
2) Click the Translation tab and click the arrow drop-down to see the translated copies for each topic.

The Translation tab has following options:

- **Send for Translation**: You can initiate translation for modified topics using this button.
- **Status and Language filter**: Use the Status and Languages filters on the top right to see modified copies of respective language.
- **Summary**: Shows the number of topics, out of sync copies, missing copies, and language code.
- **Details**: Shows the topic, language code of the topic, current active version of the topic, label added to the topic, and sync status.

Translate modified topics

If you make changes in some of the topics, then those topics may require re-translation. You can keep track of modified topics from DITA map. From the source language copy folder, click the DITA map file and click the Translation tab. You can see the status of each topic, if it is translated or requires re-translation.

Perform the following steps to send a modified topic for re-translation:

1) Click the DITA map file from the source language copy folder.
2) Click the **Translation** tab. You can see the translation status for each topic. The topics which have been modified show **Has Out of Sync Copies** status.

**NOTE**: The translation workflow compares the last persisted version of the topic file in the source language folder with the translated version. If the source language folder contains an updated version of a topic, then it is marked as out-of-sync.
If you click the arrow to see further details, you can see the particular language copy that is out of sync.

3) Click the check box to select the topics that you want to send for re-translation. On selecting an out of sync topic, you get the Dismiss Out of Sync Status button. You can use the Dismiss Out of Sync Status button to override the out of sync status for the topics in the DITA map. For example, if you made some changes in the English version of the topic that does not need translation, you can use this button and change the out of sync status for the selected topic.

4) Click Send for Translation from the toolbar.
5) Select your Translation Project. You can choose to include DITA map also. Click **Sync and Translate**. A confirmation message is displayed showing that the topic has been sent for translation.

6) Navigate to the translation project in the Project console. A new translation job card is created in the folder. Click the ellipsis to see the assets of the folder.

7) To start the translation, click the arrow on the translation job card and select **Start** from the list. A message notifies that the job has started. You can also view the status of the topic being translated when you click the ellipsis at the bottom of the translation job card.

8) After the translation completes, the status changes to **Ready to Review**. Click the ellipsis to see topic details and do one of the following from the toolbar:
   - Click **Reveal in Assets** to see and verify the translation.
– Click **Accept Translation** if you think that the changes have been translated correctly. A confirmation message is displayed.

– Click **Reject Translation** if you think that the job needs to be re-done. A rejection message is displayed.

**NOTE:** It is important to Accept or Reject the translated asset, else the file stays in the temporary location and does not get copied to DAM.

9) Navigate back to the DITA map file in the source language folder in Assets console. The retranslated topics are now in sync.
Output generation

The XML Documentation solution has built-in publishing capabilities to generate outputs in a variety of industry standard formats. The current version of XML Documentation solution allows you to generate output in the most widely used formats - AEM Site, PDF, HTML5, EPUB, and custom output through DITA-OT.

As a publisher, you just click a few links and the output gets generated. You can generate output for an entire DITA map or you can selectively publish only a few topics that you have updated. You can also use the Baseline publishing feature to selectively publish a specific version of your DITA map or topic. Also, you can generate output for FrameMaker documents, see *Generate output for FrameMaker documents* for more information. Once the output gets generated on your authoring instance of AEM, same can be easily pushed on to your production server using the AEM publishing workflows.

As a production specialist, XML Documentation solution also makes it east for you to automate your publishing process by creating your Publish Dashboard and running post-publishing workflows. You can create and associate your custom design templates to generate outputs in a specific layout. Also, the XML Documentation solution allows you to use custom DITA-OT plug-ins to reuse your existing PDF generation process.

Information in the following sections is for publishers who will use the output generation workflows and perform some basic troubleshooting:

- *Understanding the output presets*
- *Use condition presets*
- *Use Baseline for publishing*
- *Generate output for a DITA map*
- *Use Map Collection for output generation*
- *Basic troubleshooting*

**IMPORTANT:** Features described in this topic are available to users with Publishers or administrator privileges only.

Generate output

This section walks you through the output generation process through XML Documentation solution. Before generating the output, you need to familiarize yourself with the various options available to generate the output.

Understanding the output presets

The XML Documentation solution supports creating output in four formats - AEM Site, PDF, HTML5, EPUB and custom output through DITA-OT. Using these output formats, you can configure various output presets. An output preset represents a customized output format in which you would like the content to be published.
The following sections explain the options available for the supported output formats.

**AEM Site**

The following options are available for the AEM Site output:

**NOTE:** To open output presets for AEM Site, click on a DITA map file, then click on Output Presets, and then click on the AEM Site output option.

**TIP:** See [AEM Site publishing](#) for best practices around creating AEM Site output.

<table>
<thead>
<tr>
<th>AEM Site options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate responsive AEM Site output, choose the AEM Site option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the AEM site settings you are creating. For example, you can specify <em>Internal customers output</em> or <em>End users output</em>.</td>
</tr>
<tr>
<td>Site Name</td>
<td>A site name where the output is stored in your AEM repository. A node in the AEM repository is created with the name specified here. If you do not specify the Site Name, then the site node is created with the DITA map file name. The Site Name you specify here is also used as the title in the browser tab.</td>
</tr>
<tr>
<td>Design</td>
<td>Select the design template that you want to use to generate the output. For details about how to use custom design templates to generate output, contact your publishing administrator.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the output is stored. While generating the final output, the Site Name and Destination Path are combined. For example, if you specify the Site Name as <em>user-guide</em> and the Destination Path as <em>/content/output/framemaker</em>, then the final output is generated under the <em>/content/output/framemaker/user-guide</em> node.</td>
</tr>
<tr>
<td>Apply conditions using</td>
<td>Select one of the following options:</td>
</tr>
<tr>
<td></td>
<td>• None applied: Select this option if you do not want to apply any condition on the published output.</td>
</tr>
<tr>
<td></td>
<td>• DITAVal file: Select a DITAVal file to generate personalized content.</td>
</tr>
<tr>
<td></td>
<td>• Condition preset: Select a condition preset from the drop-down to apply a condition while publishing the output. The option is visible if you have added a condition present in the Condition Presets tab of the DITA Map console. To know more about condition preset, see <a href="#">Use condition presets</a>.</td>
</tr>
<tr>
<td>AEM Site options</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Existing Output Pages</td>
<td>Select the <strong>Overwrite Content</strong> option to overwrite content in the existing pages. This option only overwrites content present under the content and head nodes of the page. This option enables blended publishing of content. Selecting this option provides an option to select deleting orphan pages from the published output. Select the <strong>Delete and Create</strong> option to force delete any existing pages during publishing. This option deletes the page node along with its content and any child pages under it. Use this option if you have changed the design template of your output preset or if you want any extra pages already present in the destination to be removed.</td>
</tr>
<tr>
<td>Delete Orphan Site Pages</td>
<td>Selecting the Existing Output Pages option presents this option. If you select this option, then all orphan pages are deleted from the published AEM Site. For this feature to run successfully, you must publish the entire DITA map and not use the incremental publishing. Let's say you have published a DITA map which contains topics <code>a.dita</code>, <code>b.dita</code>, and <code>c.dita</code>. Before publishing the map again, you removed <code>b.dita</code> topic from the map. Now, if you have selected this option, then all content related to <code>b.dita</code> is removed from the AEM Site output and only <code>a.dita</code> and <code>c.dita</code> are published. This feature does not remove any published child map. For example, if your parent map contains a child map, and you remove the entire child map, then the child map content is not deleted from the published output. However, if you remove any topic from a child map and republish, then the removed topic’s content is deleted from the site output. Also, if there is any referenced content, and that content is removed before republishing, then the referenced content’s data is not removed. <strong>NOTE:</strong> Information about deleted orphan pages is also captured in the output generation logs. For more information about accessing the log files, see View and check the log file.</td>
</tr>
<tr>
<td>Clean DITA-OT Temporary Files</td>
<td>Select this option to clean the temporary files generated by DITA-OT. The location where DITA-OT stores temporary files can be found in the output generation log. If you are experiencing errors while generating output through DITA-OT, you can deselect this option to retain the temporary files. You can then use those files to troubleshoot output generation errors.</td>
</tr>
<tr>
<td>Generate Separate PDF for Each Topic</td>
<td>If selected, a PDF is also created for every topic in the DITA map. When you choose this option, a new Split PDF Path option is displayed. In the Split PDF Path field, specify the path to store the PDFs generated for each topic.</td>
</tr>
</tbody>
</table>
### AEM Site options

<table>
<thead>
<tr>
<th>Run Post Generation Workflow</th>
<th>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Baseline</td>
<td>If you have create a Baseline for the selected DITA map, select this option to specify the version that you want to publish. See <a href="#">Use Baseline for publishing</a> for more detail.</td>
</tr>
</tbody>
</table>

### Additional note on AEM Site

**Blended publishing**

XML Documentation solution supports publishing DITA content within your existing AEM site. For example, if you have an existing site that contains existing content, you can use the AEM Site output to publish only the DITA content on that site. In this process, the existing non-DITA content is not modified by the publishing process. For more information about setting up your site to publish only DITA content, contact your publishing administrator.

### PDF

The following options are available for the PDF Output:

**NOTE:** To open output presets for PDF, click on a DITA map file, then click on Output Presets, and then click on the PDF Output option.

<table>
<thead>
<tr>
<th>PDF options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate PDF output, choose the PDF option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the PDF output settings you are creating. For example, you can specify Internal customers output or End users output.</td>
</tr>
</tbody>
</table>
| Generate PDF Using | Select a method that you want to use to create the PDF. Choose from:  
  - DITA-OT  
    *When you choose this option, two new options are displayed - Transformation Name and Clean DITA-OT Temporary Files. See the description of these parameters later in this table.*  
  - FrameMaker Publishing Server  
    *When you choose this option, a new FMPS Preset drop-down list is displayed. In the FMPS Preset drop-down list, select a preset that you have created on the FMPS server to generate the PDF output.* |
### GENERATE OUTPUT

#### OUTPUT GENERATION

<table>
<thead>
<tr>
<th><strong>PDF options</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply conditions using</td>
<td>Select one of the following options:</td>
</tr>
<tr>
<td>• None applied: Select this option if you do not want to apply any condition on the published output.</td>
<td></td>
</tr>
<tr>
<td>• DITAVal file: Select a DITAVAL file to generate personalized content.</td>
<td></td>
</tr>
<tr>
<td>• Condition preset: Select a condition preset from the drop-down to apply a condition while publishing the output. The option is visible if you have added a condition present in the Condition Presets tab of the DITA Map console. To know more about condition preset, see <em>Use condition presets.</em></td>
<td></td>
</tr>
<tr>
<td><strong>NOTE:</strong> The DITAVAL file option is not supported for output generated through FMPS.</td>
<td></td>
</tr>
<tr>
<td>File Name</td>
<td>Specify the file name with which you want to save the PDF.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the PDF is stored.</td>
</tr>
<tr>
<td>Transformation Name</td>
<td>Specify the type of output you want to generate. This is required if you want to generate output using your own custom plug-in, which is integrated in the DITA-OT plug-in. For example, if you want to generate XHTML output, specify <code>xhtml</code>. For a list of transformations available in DITA-OT, see <em>DITA-OT transformations (output formats)</em> in OASIS DITA-OT User Guide.</td>
</tr>
<tr>
<td>Clean DITA-OT Temporary Files</td>
<td>Select this option to clean the temporary files generated by DITA-OT. The location where DITA-OT stores temporary files can be found in the output generation log. If you are experiencing errors while generating output through DITA-OT, you can deselect this option to retain the temporary files. You can then use those files to troubleshoot output generation errors.</td>
</tr>
<tr>
<td>Run Post Generation Workflow</td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow. <strong>NOTE:</strong> For more information about creating a custom post-output generation workflow, see <em>Customize post-output generation workflow</em> in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.</td>
</tr>
<tr>
<td>Use Baseline</td>
<td>If you have create a Baseline for the selected DITA map, select this option to specify the version that you want to publish. See <em>Use Baseline for publishing</em> for more detail.</td>
</tr>
</tbody>
</table>

### HTML5

The following options are available for the HTML5 output:
**NOTE:** To open output presets for HTML5, click on a DITA map file, then click on Output Presets, and then click on the HTML5 option.

<table>
<thead>
<tr>
<th>HTML5 options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate HTML5 output, choose the HTML5 option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the HTML5 output settings you are creating. For example, you can specify <em>Internal customers output</em> or <em>End users output</em>.</td>
</tr>
<tr>
<td>Generate Responsive Using</td>
<td>Select a method that you want to use to create the HTML5 output. Choose from:</td>
</tr>
<tr>
<td></td>
<td>• DITA-OT</td>
</tr>
<tr>
<td></td>
<td><em>When you choose this option, two new options are displayed - Transformation Name and Clean DITA-OT Temporary Files. See the description of these parameters later in this table.</em></td>
</tr>
<tr>
<td></td>
<td>• FrameMaker Publishing Server</td>
</tr>
<tr>
<td></td>
<td><em>When you choose this option, a new FMPS Preset drop-down list is displayed. In the FMPS Preset drop-down list, select a preset that you have created on the FMPS server to generate the HTML5 output.</em></td>
</tr>
<tr>
<td>Apply conditions using</td>
<td>Select one of the following options:</td>
</tr>
<tr>
<td></td>
<td>• None applied: Select this option if you do not want to apply any condition on the published output.</td>
</tr>
<tr>
<td></td>
<td>• DITAVal file: Select a DITAVAL file to generate personalized content.</td>
</tr>
<tr>
<td></td>
<td>• Condition preset: Select a condition preset from the drop-down to apply a condition while publishing the output. The option is visible if you have added a condition present in the Condition Presets tab of the DITA Map console. To know more about condition preset, see <em>Use condition presets</em>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The DITAVAL file option is not supported for output generated through FMPS.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the HTML5 output is stored.</td>
</tr>
<tr>
<td>Transformation Name</td>
<td>Specify the type of output you want to generate. This is required if you want to generate output using your own custom plug-in, which is integrated in the DITA-OT plug-in. For example, if you want to generate XHTML output, specify <em>xhtml</em>. For a list of transformations available in DITA-OT, see <em>DITA-OT transformations (output formats)</em> in OASIS DITA-OT User Guide.</td>
</tr>
</tbody>
</table>
### EPUB Options

The following options are available for the EPUB Output:

**NOTE:** To open output presets for EPUB, click on a DITA map file, then click on Output Presets, and then click on the EPUB option.

<table>
<thead>
<tr>
<th>EPUB Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate EPUB output, choose the EPUB option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the EPUB output settings you are creating. For example, you can specify Internal customers output or End users output.</td>
</tr>
</tbody>
</table>
| Generate EPUB Using  | Select a method that you want to use to create the EPUB output. Choose from:  
  - DITA-OT  
    *When you choose this option, two new options are displayed - Transformation Name and Clean DITA-OT Temporary Files. See the description of these parameters later in this table.*  
  - FrameMaker Publishing Server  
    *When you choose this option, the default FMPS Preset is used to generate the EPUB output.* |
### Custom

The Custom output presets are available for custom DITA-OT plug-ins. You can create a custom DITA-OT output preset to publish output using your custom DITA-OT plug-in.

The following options are available for the Custom output preset:

<table>
<thead>
<tr>
<th>EPUB options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apply conditions using</strong></td>
<td>Select one of the following options:</td>
</tr>
<tr>
<td></td>
<td>• None applied: Select this option if you do not want to apply any condition on the published output.</td>
</tr>
<tr>
<td></td>
<td>• DITAVal file: Select a DITAVAL file to generate personalized content.</td>
</tr>
<tr>
<td></td>
<td>• Condition preset: Select a condition preset from the drop-down to apply a condition while publishing the output. The option is visible if you have added a condition present in the Condition Presets tab of the DITA Map console. To know more about condition preset, see <em>Use condition presets.</em></td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The DITAVAL file option is not supported for output generated through FMPS.</td>
</tr>
<tr>
<td><strong>Destination Path</strong></td>
<td>The path within your AEM repository where the EPUB output is stored.</td>
</tr>
<tr>
<td><strong>Transformation Name</strong></td>
<td>Specify the type of output you want to generate. This is required if you want to generate output using your own custom plug-in, which is integrated in the DITA-OT plug-in. For example, if you want to generate XHTML output, specify <code>xhtml</code>. For a list of transformations available in DITA-OT, see <em>DITA-OT transformations (output formats)</em> in OASIS DITA-OT User Guide.</td>
</tr>
<tr>
<td><strong>Clean DITA-OT Temporary Files</strong></td>
<td>Select this option to clean the temporary files generated by DITA-OT. The location where DITA-OT stores temporary files can be found in the output generation log. If you are experiencing errors while generating output through DITA-OT, you can deselect this option to retain the temporary files. You can then use those files to troubleshoot output generation errors.</td>
</tr>
<tr>
<td><strong>Run Post Generation Workflow</strong></td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow. <strong>NOTE:</strong> For more information about creating a custom post-output generation workflow, see <em>Customize post-output generation workflow</em> in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.</td>
</tr>
<tr>
<td><strong>Use Baseline</strong></td>
<td>If you have create a Baseline for the selected DITA map, select this option to specify the version that you want to publish. See <em>Use Baseline for publishing</em> for more detail.</td>
</tr>
<tr>
<td>Custom output options</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate output using custom DITA-OT plug-in, choose the Custom option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the output settings you are creating. For example, you can specify <em>Internal customers output</em> or <em>End users output</em>.</td>
</tr>
<tr>
<td>Transformation Name</td>
<td>Specify the type of output you want to generate. This is required if you want to generate output using your own custom plug-in, which is integrated in the DITA-OT plug-in. For example, if you want to generate XHTML output, specify <code>xhtml</code>. For a list of transformations available in DITA-OT, see DITA-OT transformations (output formats) in OASIS DITA-OT User Guide.</td>
</tr>
<tr>
<td>Apply conditions using</td>
<td>Select one of the following options:</td>
</tr>
<tr>
<td></td>
<td>• None applied: Select this option if you do not want to apply any condition on the published output.</td>
</tr>
<tr>
<td></td>
<td>• DITAVal file: Select a DITAVAL file to generate personalized content.</td>
</tr>
<tr>
<td></td>
<td>• Condition preset: Select a condition preset from the drop-down to apply a condition while publishing the output. The option is visible if you have added a condition present in the Condition Presets tab of the DITA Map console. To know more about condition preset, see Use condition presets.</td>
</tr>
<tr>
<td>DITA-OT Command Line Argument</td>
<td>Specify the custom command-line arguments that are processed by the custom DITA-OT plug-in for generating the required output.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the EPUB output is stored.</td>
</tr>
<tr>
<td>Clean DITA-OT Temporary Files</td>
<td>Select this option to clean the temporary files generated by DITA-OT. The location where DITA-OT stores temporary files can be found in the output generation log. If you are experiencing errors while generating output through DITA-OT, you can deselect this option to retain the temporary files. You can then use those files to troubleshoot output generation errors.</td>
</tr>
<tr>
<td>Run Post Generation Workflow</td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow. NOTE: For more information about creating a custom post-output generation workflow, see Customize post-output generation workflow in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.</td>
</tr>
<tr>
<td>Use Baseline</td>
<td>If you have create a Baseline for the selected DITA map, select this option to specify the version that you want to publish. See Use Baseline for publishing for more detail.</td>
</tr>
</tbody>
</table>
Create, edit, duplicate, or remove an output preset

Perform the following steps to create a custom output preset:
1) In the Assets console, navigate to and click on any DITA map to open the DITA map console.
2) Ensure that the Output Presets tab is selected. Click Create in the toolbar.
   *A blank output preset creation form is displayed.*
3) Enter the required details for the type of preset you want to create.
4) Click Done to save the preset settings.

Perform the following steps to edit an existing output preset:
1) In the Assets console, navigate to and click on any DITA map to open the DITA map console.
2) Ensure that the Output Presets tab is selected.
3) Click on the output preset that you want to edit. Click Edit in the toolbar.
   *An editable output preset form is displayed with values of the selected output preset.*
4) Change the required details.
5) Click Done to save the edited preset settings.

Perform the following steps to duplicate an existing output preset:
1) In the Assets console, navigate to and click on any DITA map to open the DITA map console.
2) Ensure that the Output Presets tab is selected.
3) Click on the output preset that you want to duplicate. Click Duplicate in the toolbar.
   *An editable output preset form is displayed with values of the selected output preset.*
4) Change the required details.
5) Click Done to save the preset settings.

Perform the following steps to delete an existing output preset:
1) In the Assets console, navigate to and click on any DITA map to open the DITA map console.
2) Select the output preset you want to delete.
3) Click Delete Preset.
4) Click Delete on the confirmation prompt.
   *The preset is removed from the Output Presets list.*

Conditional attribute profiling

At an enterprise level it is extremely important to ensure that you have a standard tagging system in place. Tags or conditional attributes can be associated with digital assets in the repository, which helps in publishing output based on the chosen conditions. For example, you can create conditional attribute for Windows and Mac content. Then, you add these attributes to the relevant content in your topics. At the time of publishing content, you can choose whether you want to publish Windows or Mac only content.

XML Documentation solution allows you to easily create and associate conditional attributes using the relevant DITA attributes. You can define conditional attributes at the global level or folder level. The glob-
ally defined conditions are visible across all projects and folder-specific conditions are visible only in projects created within the specified folder. Content authors can use these conditional attributes to conditionalize content in their DITA topics or maps that they create or use. These conditions can then be used by the publisher to create conditional presets. Using the conditional presets, the publisher can decide which condition to include and exclude from the published output.

**NOTE:** You can create or edit the conditional attributes in a Folder Profile that you have access to. If your system administrator has not given you access to a folder profile, you cannot create or edit the conditional attributes in the Folder Profile.

To define conditional attributes, perform the following steps:
1) Click on the Experience Manager link, and then click **Tools**.
2) Select **XML Documentation** from the list of tools.
3) Click on the **Folder Profiles** tile and select a Folder Profile.  
   **NOTE:** You cannot edit the global profile.
4) Click on the **Conditional Attributes** tab and click **Edit**. 
   The Conditional Attributes table is shown.
5) Click **Add**.
6) Enter the **Name**, **Value**, and a **Label** for the attribute. 
   *You can save a profile with only the attribute name. However, an attribute can only be used when it has a value specified to it. If you specify both - value and label for an attribute, the Web Editor would still show only the value of the attribute. The label is shown to the publishing administrator at the time of creating conditional preset.*
   The following screenshot shows the definition for the **platform** attribute with value of **unix** and a label of **Red Hat Linux**.

7) If you want to add more values for the same attribute, click the + icon and enter additional value and label.
8) If you want to add more attributes, click **Add**.
9) Click **Save** to save the changes.
The platform attribute is stored in the system. Whenever an author decides to use the platform attribute in a DITA topic in a folder, they will see the values in the Properties tab in the Web Editor.

### Use condition presets

You can define attributes in your DITA topics and the use the condition preset to specify what happens with the attribute in the final output. For example, you can add attributes as version 1.0 and version 2.0 in your content, and use a condition preset to include version 1.0 for release 1.0 and exclude version 2.0. Similarly, you can add attributes as OS Windows and OS Linux to your content, and then include or exclude the relevant content for your final output according to the operating system.

**Create a condition preset**

Perform the following steps to create a condition preset:

1) Click **Condition Presets** tab in the DITA map console.
2) Click **Create** button.
3) Enter a name for the preset in **Name Condition**.
4) Select one of the following default action from **Set default action to** drop-down:
   - Include
   - Exclude
   - Passthrough
   - Flag

   *The action is set as default action for all the attributes whether they are added to the condition preset or not.*

   *For example, you have 15 condition attributes in your document and you have included four of them in the condition preset. If you select exclude as default action, it is applied to all 15 attributes.*

5) Do any of the following to add the attributes:
CHAPTER 8

• Click **Add** to one attribute to the condition preset. You can repeat this step to add more attributes.
• Click **Add all** to add all the attributes to the condition preset.

6) (Optional) If required, you can override the default action applied to the attributes in Step 4. Do one of the following:
   – Select multiple attributes, choose an action from **Set the action for selected conditions to**, and click **Apply**.
   – Select an action for an attribute from the **Action** drop-down.

7) Click **Save**.

**Edit a condition preset**

You can make changes in an existing condition preset to change the actions applied to the attributes in the condition preset. Perform the following steps to edit a condition preset:

1) Click **Condition Presets** tab in the DITA map console.
2) Click **Edit** button.
3) Make required changes for all the attributes in the condition preset.
4) Click **Save**.

**Create a copy of a condition preset**

You can create a copy of a condition preset and then modify it according to your requirement. Perform the following steps to create a copy of a condition preset:

1) Click **Condition Presets** tab in the DITA map console.
2) Click **Duplicate** button.
   
   **NOTE:** The default name of the preset is
   
   `<selected condition preset name>_Duplicate`
   
   You can change the name according to your requirement.
3) (Optional) Make required changes for all the attributes in the condition preset.
4) Click **Save**.

**Delete condition preset**

You can delete one or more condition presets from the **Condition Preset** tab of the DITA map console. Perform the following steps to delete condition presets:

1) Click **Condition Presets** tab in the DITA map console.
2) Select the condition preset(s) that you want to delete.
3) Click **Remove** button.
4) Click **Remove** to confirm the action.
Use Baseline for publishing

The Baseline feature allows you to create a version of your topics and assets that can then be used for publishing. For example, if your DITA map has `topicA` and `imageA`, you can create a Baseline to use the 3rd version of `topicA`, but 4th version of `ImageA`. Once you have a Baseline in place, you can publish topics of different versions with a single click.

Selecting a Baselines is optional for output presets. A DITA map can have more than one Baseline. However, each output preset within a DITA map can be associated with a single Baseline. If no Baseline is specified at the time of publishing, then the output is published using the latest version of the content.

**TIP:** See [Baseline](#) for best practices around working with Baselines.

You can access the Baseline feature by performing the following steps:

1) In the Assets console, navigate to and click on the DITA map file.
2) Go to the Baselines tab.

In Baselines, you can perform the following actions:

**Create a Baseline**

You can create Baselines with the latest version of the topics and referenced content, or a version available on a specific date, or with a label defined for a version of a topic. You can individually specify the versions of selected topics in a Baseline so that each time you apply the Baseline in publish workflow, the selected topics and their corresponding versions are included for output generation.

Perform the following steps to create a baseline:

1) On the Baselines page, click the **Create** icon.
2) Enter the Baseline name.
3) In **Set the Version of All Topics To**, select one of the following and click **Apply**:
   - Their Latest Version: Picks the latest version of the topics.
   - Version on `<time stamp>`: Picks the topics' version as on the specified date and time.
   - Label: Picks the topics according to the label applied to them. For more information about adding labels, see [Use label](#).

   *The Version* drop-down list shows the available versions of the topic or the referenced content. For the referenced content, you have the option to choose a version automatically. If you choose **Pick Automatically** for the referenced content, then the reference content is automatically picked up based on the version of the containing topic. If you create a baseline using the labels, **Pick Automatically** is applied to the version of all the referenced content.

   **NOTE:** If you want to specify a different version for any particular resource, you can do so by choosing the desired version from the **Version** drop-down list.

4) Click **Save**.
View contents of a Baseline

Once you have created a Baseline, you can view the contents of the Baseline by clicking on the Baseline tab and selecting the desired Baseline version from the list. The Baselines page is divided into two parts - topics and the referenced content. The various columns on the Baseline page are as described below:

**Name**
Lists the topic title or the name of the asset, such as the file name of an image.

**Kind**
Lists the kind or type of asset in the DITA map like DITA topic or image format.

**Version**
Lists the version of the asset.

**Version Date and Time**
Lists the creation date and time of the asset for the selected version.

**Latest**
Lists whether the latest version of the asset is used in the Baseline or not.

**Label**
Lists the label(s) applied to the version of the topic.

**Referred By**
This column is available for the referenced content only. It indicates the parent topic of the referenced asset. In case an asset is referred by multiple topics, then the topics are separated by commas.

Edit, duplicate, or remove Baselines

**Edit Baselines**
Perform the following steps to edit an existing baseline:
1) Select the Baseline and click **Edit**.
2) Make the required changes in the baseline. You can change the name, version of the topic, or referenced content.
3) Click **Save**.

**Duplicate Baselines**
Select the Baseline and click **Duplicate** to create a copy of an existing Baseline. Specify a different name for the baseline and choose the version number for the topics and referenced content and click **Save**.

**Remove Baselines**
Select the Baselines version and click **Remove** to remove a Baseline.
Add a label to a Baseline

Adding labels to every single topic can be time consuming. XML Documentation solution provides a single-click mechanism of adding labels to multiple topics in a DITA map.

Perform the following steps to add a label to multiple topics in a DITA map:

1) On the Baselines page, select a baseline containing the topics and referenced content on which you want to add a label.
   **NOTE:** Ensure that your baseline does not have the latest version of any topic or asset. A label can only be added to a versioned topic or asset.

2) Click **Add Labels**.

3) In the **Add Label** dialog, specify a label to associate with this baseline.

4) Click **Add**.
   The specified label is added with all topics in the DITA map.

**NOTE:** A label is not assigned to any referenced content.
Generate output for a DITA map

Perform the following steps to generate output for a DITA map:

1) In the Assets console, navigate to and click on the DITA map file that you want to publish. 
   The DITA map console appears showing the list of Output Presets available to generate output.

2) Select one or multiple Output Presets that you want to use for generating the output.

   ![Output Presets](image)

   **NOTE:** If you are generating the AEM Site output, then the publishing process uses the structure defined in the `.ditamap` file to create AEM Site structure.

3) Click the Generate icon to start the output generation process.

   **NOTE:** You can view the current status of the output generation request by clicking on Outputs. For more information, see View the status of the output generation task.

Incremental output generation

**NOTE:** Incremental output generation is applicable only for AEM Site output.

There could be a number of instances where you would update only a selected few topics in your DITA map and push only the selected topics live. To handle such scenarios, the XML Documentation solution allows you to create incremental outputs.

If you have updated a selected few topics, you do not need to regenerate the entire DITA map. You can select only the updated topics and regenerate them.
Perform the following steps to regenerate output for a specific topic or a group of topics:

1) In the Assets console, navigate to and click on the DITA map file.

*The DITA map console appears showing the list of Output Presets available to generate output.*

2) Click Topics.

*A list of topics available in the DITA map are displayed.*

3) Select the topics that you want to regenerate.

**NOTE:** If you have added new topics to the DITA map, you will not be able to generate those new topics from here. You must first publish the newly added topics by using the DITA map publish function.

4) Click the Regenerate icon.

*The Regenerate Selected Topics page appears.*

5) Select the output preset that you want to use to regenerate the selected topics.

6) Click the Regenerate icon to start the output generation process.

**IMPORTANT:** If you rename a topic title and regenerate the topic, the updated topic title does not reflect in the DITA map table of contents. To update the topic title in the TOC, you must regenerate the entire DITA map.

You can view the current status of the output generation request by clicking on Outputs. For more information, see *[View the status of the output generation task]*.

**View the status of the output generation task**

Once you initiate the output generation task for a map or regenerate selected topics, the XML Documentation solution sends this task to the output generation queue. This queue is updated in real time, showing the status of each output generation task in the queue.
Perform the following steps to view the output generation queue:

1) In the Assets console, navigate to and click on the map file for which you want to check the output generation status.
2) Click Outputs.

The Outputs page is divided into two parts:

- **Queued Outputs:**
  Lists the outputs that are either waiting to be generated or are under generation process. You can also find the output generation setting or preset used for the queued task, the type, user who initiated the task, time since when the task is queued, and the current status.

- **Generated Outputs**
  Lists the output tasks that have been completed. Again, the information shown here is similar to the Queued Outputs section with a few differences. You have new set of information in the form of output result icon and the output generation time.
  In this list, you could have tasks that have executed successfully, tasks that have executed with message, or failed tasks. For all the tasks, the publishing process creates a log file (logs.txt) that can be accessed by clicking the link in the Generated At column. For tasks that have failed or have messages, you can check the log file, which is explained in the section, View and check the log file.

**Use Map Collection for output generation**

In any organization, a product can have multiple types of documentation. As a publishing specialist, you would like to control what output you want to generate for which document. Also, there should be a way to batch publish multiple documents with a single click.

XML Documentation solution provides you the ability to organize your content for publishing by using a dashboard called Map Collection. A Map Collection allows you to assemble all different types of docu-
ments in a single unit. You can choose what type of output you want to generate for each document in your Map Collection. In addition, you can also generate output and see the output generation progress from the publishing dashboard.

Create a map collection and add DITA maps

To create a Map Collection and add DITA maps to the collection, perform the following steps:
1) On the assets page, click **Map Collection** in the toolbar.
2) Click **Create Map Collection**.
3) After your Map Collection is created, click the **Map Collection**.
4) Click **Add Maps**.
5) Locate and add the DITA maps that you want to add to the Map Collection.
   *By default, all the presets and locales associated with the map gets added automatically.*
6) Select the desired output by turning the sliding button on or off.
7) Click back button to go back to Map Collections page.

1)

Configure and generate the output using a Map Collection

To configure and generate the output using a Map Collection, perform the following steps:
1) Open the Map Collection.
2) (Optional) If required, change the desired output by turning the sliding button on or off.
3) Click Generate All.
   *You can check the status of the output generation in the Outputs tab.*

Delete a Map collection or a DITA map from the Map Collection

- To delete a map collection, select the Map Collection and click **Delete**.
- To delete a Ditamap from a map collection, open the Map Collection, select the DITA map, and click **Remove From Collection**.
  *This will also remove any presets or locales associated with the DITA map from the Map Collection.*

Basic troubleshooting

While working with the XML Documentation solution, you could encounter errors while publishing or opening your document. Such errors could be in the DITA map, topic, or in the XML Documentation solution process itself. This section provides information about how to access and parse information in the output generation log file. Also, if your DITA topic is too large, then you might see the JSP compilation error. This section also provides information about how to resolve the JSP compilation error.
**View and check the log file**

Perform the following steps to view and check the output generation log file:

1) Once you have initiated the output generation process, click **Outputs** in the DITA map console. *The General column of the Generated Outputs shows the icons to give a visual cue about the success or failure of the output generation.*

![Generation Setting](image)

*In the above screenshot, the first and third icons show failed output generation. The second icon shows a successful output generation but with messages. The last one is a successful output generation without any message.*

2) Click on the link in the **Generated At** column after the job is complete. *The log file opens in a new tab.*

3) Apply following filters to highlight the text in the log file:
   - **Fatal**: Highlights the fatal errors in the log file with pink color.
   - **Error**: Highlights the errors in the log file with orange color.
   - **Warning**: Highlights the warnings in the log file with purple color.
   - **Info**: Highlights the information messages in the log file with blue color.
   - **Exception**: Highlights the exceptions in the log file with yellow color.

4) Use the up and down navigation buttons to jump to the highlighted text in the log file. *Alternatively, scroll through the log file and check the messages.*
Copy and check the log file in a text editor

Perform the following steps to copy and check the output generation log file in a text editor:

1) Once you have initiated the output generation process, click **Outputs** in the DITA map console.
2) Click on the link in the **Generated At** column after the job is complete.
   *The log file opens in a new tab.*
3) Click **Copy Log** button. The log file is copied to the clipboard.
4) Open a text editor and paste the log file in the editor.
5) Scroll through the log file and check for messages.

*The following information will help you determine whether there is an error in the DITA file or XML Documentation solution process:*

- **DITA map file related error:** In case there is an error found in the DITA map file or any other file contained in the DITA map, the log file will contain a string, “BUILD FAILED”. You can check the information given in the log file to locate the erroneous file and fix the issue.
  
  *In the following sample log file snippet, you can see the **BUILD FAILED** message along with the reason for the error.*

```plaintext
file://E:/AEM-CCMS-DITA/AEM6.1/crx-quickstart/ditamaps/ditamap7231982760844238007/sequence.ditamap
BUILD FAILED
E:\AEM-CCMS-DITA\AEM6.1\crx-quickstart\ditact\DITA-OT\build.xml:41: The following error occurred while executing this line:
E:\AEM-CCMS-DITA\AEM6.1\crx-quickstart\ditact\DITA-OT\plugins\org.dita.base\build_preprocess.xml:42: Failed to run pipeline: [DOTJ012P] [FATAL] Failed to parse the input file 'file://E:/AEM-CCMS-DITA/AME6.1/crx-quickstart/ditamaps/ditamap7231982760844238007/sequence.ditamap':
file://E:/AEM-CCMS-DITA/AEM6.1/crx-quickstart/ditamaps/ditamap7231982760844238007/sequence.ditamap Line 27: The element type "topicref" must be terminated by the matching end-tag "</topicref>".
```

- **XML Documentation solution related error:** The other type of error that you can identify in the log file is related to the XML Documentation solution process itself. In this case, the DITA map file is parsed successfully, but the output generation process fails because of some internal error in the XML Documentation solution. For such kind of errors, you have to seek help from the technical support team.
  
  *In the following sample log file snippet, you can see the **BUILD SUCCESSFUL** message, followed by other technical error.*

```plaintext
clean-temp:
BUILD SUCCESSFUL
Total time: 18 seconds
javax.jcr.InvalidItemStateException: OakState0001: Unresolved conflicts in /content/output/sites/sequence_ditamap
  at org.apache.jackrabbit.oak.api.CommitFailedException.asRepositoryException(CommitFailedException.java:237)
  at
```
Resolve JSP compilation error

If your DITA topic is too large, then you might see the JSP compilation error (org.apache.sling.api.request.TooManyCallsException) in your browser. This error might appear when you open a topic for editing, reviewing, or publishing.

Perform the following steps to resolve this issue:

1) In the left rail, click **Tools > Web Console**.
   *The Adobe Experience Manager Web Console Configuration page appears.*
2) Search for and click on the **Apache Sling Main Servlet** component.
   *The configurable options for the Apache Sling Main Servlet are displayed.*
3) Increase the value for the **Number of Calls per Request** parameter as per your requirements.
Generate output for FrameMaker documents

Starting with XML Documentation solution 1.1, you can also publish FrameMaker documents (.book and .fm) available in your AEM repository. If a book file contains a combination of DITA and FrameMaker documents, the XML Documentation solution allows you to publish such documents as well. FrameMaker documents can be published into the following formats:

- PDF
- HTML5
- EPUB
- DITA

However, you must have FrameMaker Publishing Server to be able to publish FrameMaker documents. To configure FrameMaker Publishing Server, see Configure FrameMaker Publishing Server in XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

As an author, you just click a few links and the output gets generated. You can generate output for an entire book file or you can selectively publish individual FrameMaker files.

Information in the following sections is for publishers who will use the output generation workflows to publish FrameMaker documents:

- Understanding the output presets
- Generate output for FrameMaker documents

IMPORTANT: Features described in this topic are available to users with Publishers or administrator privileges only.

TIP: See Publishing unstructured FrameMaker documents for best practices around publishing FrameMaker documents.

Generate output

This section walks you through the output generation process through XML Documentation solution. Before generating the output, you need to familiarize yourself with the various options available to generate the output.

Understanding the output presets

The XML Documentation solution supports creating output for FrameMaker documents in PDF, HTML5, EPUB, and DITA formats. Using these output formats, you can configure various output presets. An output preset represents a customized output format in which you would like the content to be published.

The following sections explain the options available for the supported output formats.
PDF

The following options are available for the PDF Output:

**NOTE:** To open output presets for PDF, click on a FrameMaker (.fm or .book) file, then click on Output Presets, and then click on the PDF Output option.

<table>
<thead>
<tr>
<th>PDF options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate PDF output, choose the PDF option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the PDF output settings you are creating. For example, you can specify <em>Internal customers output</em> or <em>End users output</em>.</td>
</tr>
</tbody>
</table>

**Job Settings**

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate Tagged PDF</td>
<td>Select this option to generate tagged PDFs that will contain information on document’s content and structure. This information is used by the on-screen readers.</td>
</tr>
<tr>
<td>Generate PDF for Each File in Book</td>
<td>If you are generating output for a book file, select this option to generate a separate PDF for each file in the book.</td>
</tr>
<tr>
<td>Generate PDF for review Only</td>
<td>Select this option to generate PDF with commenting feature enabled.</td>
</tr>
<tr>
<td>Create Named Destination for all Elements and Paragraphs</td>
<td>Select this option to create named destinations based on elements and paragraphs.</td>
</tr>
</tbody>
</table>

**Display Settings**

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Document on Page</td>
<td>Specify the page number that should be displayed on opening the PDF.</td>
</tr>
<tr>
<td>Initial Zoom Level</td>
<td>Choose the document zoom level.</td>
</tr>
<tr>
<td>Registration Mark</td>
<td>To print a document with crop marks and registration marks, choose an option from the Registration Marks drop-down list.</td>
</tr>
<tr>
<td>Page Width and Page Height</td>
<td>Specify the width and height of the page.</td>
</tr>
<tr>
<td>Page Range</td>
<td>Choose whether you want to publish all pages in the book or a range of pages. If you choose Range, then you must specify the From and To page range.</td>
</tr>
<tr>
<td>Convert CYMK to RGB</td>
<td>Select this option to convert CYMK colors to RGB in the generated PDF.</td>
</tr>
</tbody>
</table>
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GENERATE OUTPUT FOR FrameMaker DOCUMENTS

<table>
<thead>
<tr>
<th>PDF options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate PDF Bookmarks</td>
<td>Create accessible PDF that contains bookmarks.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the PDF output is stored.</td>
</tr>
<tr>
<td>Run Post Generation Workflow</td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow.</td>
</tr>
</tbody>
</table>

**HTML5**

The following options are available for the HTML5 output:

**NOTE:** To open output presets for HTML5, click on a FrameMaker (.fm or .book) file, then click on Output Presets, and then click on the HTML5 option.

<table>
<thead>
<tr>
<th>HTML5 option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate HTML5 output, choose the HTML5 option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the HTML5 output settings you are creating. For example, you can specify <em>Internal customers output</em> or <em>End users output</em>.</td>
</tr>
<tr>
<td>Settings File</td>
<td>Specify the setting file (.sts) location in your AEM repository that should be used to generate the HTML5 output.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the HTML5 output is stored.</td>
</tr>
<tr>
<td>Run Post Generation Workflow</td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow.</td>
</tr>
</tbody>
</table>

**EPUB**

The following options are available for the EPUB output:

**NOTE:** To open output presets for EPUB, click on a FrameMaker (.fm or .book) file, then click on Output Presets, and then click on the EPUB option.

<table>
<thead>
<tr>
<th>EPUB option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate EPUB output, choose the EPUB option.</td>
</tr>
</tbody>
</table>
CHAPTER 9

DITA

The DITA output format allows you to convert any unstructured FrameMaker (.fm or .book) document into a valid DITA type document. Currently, you can convert your unstructured FrameMaker documents into DITA topic type document. The following options are available for the DITA output:

NOTE: To open output presets for DITA, click on a FrameMaker (.fm or .book) file, then click on Output Presets, and then click on the DITA option.

<table>
<thead>
<tr>
<th>EPUB option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the EPUB output settings you are creating. For example, you can specify Internal customers output or End users output.</td>
</tr>
<tr>
<td>Settings File</td>
<td>Specify the setting file (.sts) location in your AEM repository that should be used to generate the EPUB output.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the EPUB output is stored.</td>
</tr>
<tr>
<td>Run Post Generation Workflow</td>
<td>When you choose this option, a new Post Generation Workflow drop-down list is displayed containing all workflows configured in AEM. You must select a workflow that you want to execute after completion of the output generation workflow.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DITA option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Type</td>
<td>The type of output you want to generate. To generate custom DITA output, choose the DITA option.</td>
</tr>
<tr>
<td>Setting Name</td>
<td>Give a descriptive name for the DITA output settings you are creating. For example, you can specify Internal customers output or End users output.</td>
</tr>
<tr>
<td>Settings File</td>
<td>Specify the setting file (.sts) location in your AEM repository that should be used to generate the custom DITA output. See Create a .sts file for DITA conversion for more information about creating a .sts file.</td>
</tr>
<tr>
<td>Destination Path</td>
<td>The path within your AEM repository where the converted DITA files are stored.</td>
</tr>
</tbody>
</table>

Create a .sts file for DITA conversion

To be able to successfully convert your unstructured FrameMaker files into DITA format, you should consider the following points while creating a .sts file in FrameMaker:

- In the Style Mapping dialog in FrameMaker, style that your map from your document to Heading 1 (or h1) is used to create the topic title.
- Subsequent headings such as heading 2 is mapped to the section heading.
- Heading beyond heading 2 are mapped to required-cleanup DITA element. You should clean up your DITA document and apply relevant DITA elements that are marked under required-cleanup element.
• You can choose to split your DITA documents on heading 1 or heading 2.
• You don't need to explicitly map tables and images in your documents, they are automatically mapped to the correct DITA elements in the final output.
• Map numbered list style to HTML list.

IMPORTANT: If you want to specify additional settings for mapping source formats to the destination DITA formats, contact your publishing administrator. Using the style2attrMap.xml file, your administrator can map formats from your FrameMaker document to DITA elements.

To demonstrate this feature, we have used the GeneralDescription.fm file from the Samples folder in the FrameMaker install location. We will use this file to create a .sts file that will be used to convert the unstructured FrameMaker document into DITA topic type document.

1) Open the GeneralDescription.fm file in FrameMaker (2017 release).
2) Open the Publish pod (File > Publish).
3) In the Publish pod, create a new Settings File.

4) Switch to the Style Mapping tab, and open Paragraph Styles.
5) Map the paragraph styles as:

<table>
<thead>
<tr>
<th>Source Style Mapping (Paragraph Style)</th>
<th>Destination Style Mapping (Output Style)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0_Heading0</td>
<td>Heading 1</td>
</tr>
<tr>
<td>H1_Heading1</td>
<td>Heading 2 (also, select Split Into Topics Based on This Style)</td>
</tr>
<tr>
<td>H2_Heading2</td>
<td>Heading 3</td>
</tr>
<tr>
<td>H3_Heading3</td>
<td>Heading 4</td>
</tr>
</tbody>
</table>
Map any numbered style to Convert to HTML List.

6) **Save and Close** the Publish Settings dialog. If you are prompted to save the Settings.sts file, choose a location on your local disk to save the file.

7) Upload the Settings.sts file and the FrameMaker file on DAM.

8) Publish DITA output using the Settings.sts file you created.

**Generate output for FrameMaker documents**

**NOTE:** You must have FMPS to be able to publish FrameMaker documents. To configure FrameMaker Publishing Server, contact your administrator.
Perform the following steps to generate output for FrameMaker documents:

1) In the Assets console, navigate to and click on the `.book` or `.fm` file that you want to publish. The DITA map console appears showing the list of Output Presets available to generate output.

2) Select one or multiple Output Presets that you want to use for generating the output.

3) Click the Generate icon to start the output generation process.

**NOTE:** You can view the current status of the output generation request by clicking on Outputs. For more information, see View the status of the output generation task.

**View the status of the output generation task**

Once you initiate the output generation task for a FrameMaker document, the XML Documentation solution sends this task to the output generation queue. This queue is updated in real time, showing the status of each output generation task in the queue.
Perform the following steps to view the output generation queue:

1) In the Assets console, navigate to and click FrameMaker document for which you want to check the output generation status.

2) Click Outputs.

3) The Outputs page is divided into two parts:
   - **Queued Outputs:**
     Lists the outputs that are either waiting to be generated or are under generation process. You can also find the output generation setting or preset used for the queued task, the type, user who initiated the task, time since when the task is queued, and the current status.
   - **Generated Outputs**
     Lists the output tasks that have been completed. Again, the information shown in this is similar to the Queued Outputs section, with the only difference of the output generation time. In this list, you could have tasks that have executed successfully or tasks that failed. For the tasks that have completed successfully, the publishing process creates a log file (logs.txt) that can be accessed by clicking the link in the Generated At column.
Reports

In an organizational setup, you want to verify the overall completeness of your technical documentation before you push the documents live. Such a need becomes even more essential in multi-user and large scale push live environments. XML Documentation solution provides a few reports that give a useful insight into the overall health of the content in your repository and how content is being used in the documentation process.

DITA Map Report

XML Documentation solution provides your administrators the reporting capabilities to check the overall integrity of the documentation before it is pushed live or made available to end users. DITA map report in XML Documentation solution provide valuable information such as the missing topics, topics with missing elements, and review status of each topic. A detailed individual topic-level report also provides DITA content related information such as content references and missing images or cross-references.

NOTE: XML Documentation solution refreshes this report on every event that results in a change in your map file or when any reference within your topic file is updated.

Perform the following steps to view the DITA Map Report:

1) In the Assets console, navigate to and click on the DITA map file for which you want to view the report.
2) Click Reports.

### User Guide

<table>
<thead>
<tr>
<th>User Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTPUT PRESETS</td>
</tr>
<tr>
<td>OUTPUTS</td>
</tr>
<tr>
<td>TOPICS</td>
</tr>
<tr>
<td>CONDITION PRESETS</td>
</tr>
<tr>
<td>BASELINES</td>
</tr>
<tr>
<td>REPORTS</td>
</tr>
<tr>
<td>TRANSLATION</td>
</tr>
</tbody>
</table>

**Topic Summary**

<table>
<thead>
<tr>
<th>Topic Summary</th>
<th>Total Count</th>
<th>Missing Topics</th>
<th>With Missing Elements</th>
<th>In Draft</th>
<th>In Review</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Details**

- **Checkpoint a file**
  - Author: admin
  - Document State: In-Review
  - Missing Elements: 0

- **Download and install plugin**
  - Author: admin
  - Document State: Reviewed
  - Missing Elements: 0

The **Reports page is divided into two parts:**

- **Topic Summary:**
  Lists the overall summary of the selected map file. By looking at the Summary, you can quickly know the total number of topics in the map, missing topics, number of topics that have missing elements, topics are in draft, reviewed, or reviewed state.

- **Details:**
When you click on a topic, a detailed report of the selected topic is displayed.

Items highlighted under A, B, and C are described below:

**Topic**

The title of the topic specified in the DITA map.

**Author**

User who worked last on this topic.

**Document State**

The current state of the document - Draft, In-Review or Reviewed.

**Missing Elements**

Lists the number of missing images or broken cross-references, if any.

**Open in FrameMaker**

Clicking this icon opens the topic in FrameMaker.

**Open in Editor**

Clicking this icon opens the topic in web editor.

Items highlighted under D are described below:

**Images**

Path of images used in the topic. If you click on the image path, the corresponding image is opened in a pop-up window. Broken image links are listed in red color.

**Content References**

Path of the content referred in the topic. If you click on the title of the referred content, the corresponding topic is opened in Preview mode.
Cross Reference

Path of the cross-referenced content. If you click on the title of the referred content, the corresponding topic is opened in Preview mode. Broken cross-references are listed in red color.

Review

Shows the status of the review task of the topic. You can see the status (open or close), due date, and assignee for the topic under review. If you click the topic link, it opens the topic in review mode.

Used In

Shows a list of other topics or maps where the topic is used.

Besides the report for each individual topic, administrators also have access to information such as publishing history of a DITA map. For more information about the history of generated outputs, see View the status of the output generation task.

Content Reuse Report

Another useful report that you can generate is the Content Reuse Report. This report calculates the average content usage percentage, which is very useful for project managers and business owners to see the amount of content that is being reused.

TIP: To ensure proper working of the Content Reuse Report, you must enable the post-processing workflow. Contact your system administrator for enabling post-processing workflows.

Perform the following steps to view the Content Reuse Report:

1) Click on the Experience Manager link, and then click Tools.
2) Select XML Documentation from the list of tools.
3) Click on the Content Reuse Report tile.
4) Click Browse to choose a path where your topics reside or enter the path manually.

The report is generated by scanning the content in the parent and all child folders.
5) Click **Generate Report** to get the Content Reuse Report.

The report page is divided into two parts:

- **Report Summary:**
  
  *Lists the Average Content Reuse, which is calculated as Content Reuse Instances/Total Topic Count. This report takes into account all first-level direct content references and topic references for calculation. The Content Reuse Instances is calculated as the sum total of values in the Number of Times Reused field. The topic that is most widely reused is also listed in the Report Summary. Clicking on the topic’s link in the Most Reused Topic opens the topic’s preview.*

- **Details:**
  
  *The Details section contains the following columns:*

<table>
<thead>
<tr>
<th>Title</th>
<th>Size</th>
<th>Status</th>
<th>Number of Times Reused</th>
<th>Referenced By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding or editing clusters</td>
<td>4946</td>
<td>Draft</td>
<td>1</td>
<td>Integrator_admin.ditmap, master_control.ditmap</td>
</tr>
<tr>
<td>Description of jobconf command</td>
<td>3944</td>
<td>Draft</td>
<td>1</td>
<td>Integrator_admin.ditmap, master_control.ditmap</td>
</tr>
<tr>
<td>Quick Reference: basic cluster management commands</td>
<td>2970</td>
<td>Draft</td>
<td>1</td>
<td>Integrator_admin.ditmap, master_control.ditmap</td>
</tr>
</tbody>
</table>

- **Title**

  The title of the topic. Clicking on the title topic’s link opens the topic preview.

- **Size**

  Files size in bytes.

- **Status**

  The current state of the document - Draft, In-Review or Reviewed.

- **Number of Times Reused**

  Number of times the corresponding topic has been reused. This calculated as sum total of entries in Referenced By columns minus 1.
Referenced By

The topics in which the corresponding topic has been referenced. Here, only the direct (first-level) references are considered. Multiple topic are separated by comma. Clicking on the title topic’s link opens the topic preview.

NOTE: You can also export the Content Reuse Report in CSV format. To do so, click the Export to CSV link at the top left corner of the screen and choose a location to save the CSV file. You can then open this CSV file in any CSV editor.

Conversion Status Report

XML Documentation solution provides a robust conversion feature to convert documents of various formats into DITA. The Conversion Status Report provides a consolidated view of all conversion tasks executed by XML Documentation solution.

Perform the following steps to view the Conversion Status Report:
1) Click on the Experience Manager link, and then click Tools.
2) Select XML Documentation from the list of tools.
3) Click on the Conversion Status Report tile.

The Conversion Status Report is displayed for all conversion tasks executed on the system.

4) The report page is divided into two parts:
   - Filter:

You can filter the report data on the basis of File Type and conversion Status. In the File Type, you can choose to see the report data for Word document, structured HTML, XML, and DocBook type of documents. In the Status, you can choose to see the report data for tasks that have executed Successfully, Failed, Active, or Queued.
The following screenshot displays the report data for conversion tasks that have Failed, Active, and Queued status.

- **Report data:**

  *The report data contains the following columns:*

  **File Name**
  Name of the source file on which the conversion process was executed. Clicking on the File Name link takes you to the source document location.

  **File Type**
  Type of the source document, which could be Word, structured HTML, XML, and DocBook.

  **Added By**
  Name of the user who executed the conversion task.

  **Date Added**
  Date on which the task was executed. Clicking on the Date Added link downloads the log file.

  **Path**
  Complete path of the source document.

  **Status**
  Status of the conversion tasks - Success, Failed, Active, or Queued.

  **Output**
  Path of the successfully converted document. Clicking on the Output link takes you to the location where the output is saved.
Appendix

This appendix provides best practices for working with XML Documentation solution for Adobe Experience Manager. Following these best practices will help you set up, organize DITA content, publish content, and develop processes around content creation, management, and publishing.

The information in this topic is intended for the following type of audiences:

- Authors, who are responsible for creating DITA content
- Publishers, who would run the publishing task to generate output in various formats

File names

- Avoid spaces, apostrophe, or braces in filenames to simplify file references in your content. Remember that all references in DITA should be valid URLs. Having spaces in a filename will require references to be URL-encoded.
- Avoid non-ASCII characters in filenames. Use only alphanumeric filenames with underscore and hyphens.
- Avoid using .xml and instead use .dita file extension for your DITA files. Though doing this is not required, it has several benefits:
  - Using .dita file extension makes the files easier to recognize.
  - During the publish process, several other .xml files might get generated to contain the metadata related to the publishing process. Using .dita extension avoids any confusion with the generated files, and also avoids the possibility of publishing process overwriting one of the topic files.
  - Compulsorily use .ditamap or .bookmap extension for your map files. Not doing this will result in failures during publishing. For more information about DITA map, see What is DITA map? in OASIS documentation.

Folder hierarchy

- Adobe Experience Manager is designed to work best with hierarchical content repository. Having too many (say, a thousand) files at the same level or within a single folder might lead to poor user experience and performance.
- Have well-categorized folder structure for storing large number of files. For example, if your guide contains hundreds of files, then create folders for each chapter within your guide and place all chapter-related files in respective folders.

References

- Avoid having broken references.
• Broken references at top level in your DITA map hierarchy might cause complete failure of AEM Site publishing. This is because the references affects how temporary directories are created during publishing.
• It is ideal to have DITA map as the topmost entity in the entire content tree. If the content is organized such that the topics and other content is present at sibling or higher level, than DITA-OT might fail to handle such content.

\textit{DITA-OT does provide an argument} \texttt{generate.copy.outer, whose value can be set to 3 in DITA-OT command line arguments and it could successfully handle some cases. However, it does not handle all cases of up-level references.}

\textit{In such cases, it is best to define another DITA map that is a level above the highest folder level of all the referenced content and let that DITA map refer to the original DITA map. Then, use this highest level DITA map to publish your content.}

**Modular authoring**

• Use modular authoring approach wherein one topic represents one concept or subject.
• Modularized topics are easier to reuse across various documents.
• Use sub-maps to better organize your content. For example, if there is one user guide, you can have multiple sub-maps for each top-level topics, and each sub-section within a sub-map can be one DITA topic.
• Using a single large topic file becomes hard to maintain and pose challenges in reusing content.

**Versioning of content**

• For checking-in or out multiple files together, make sure all selected files are in the same state - checked-in or checked-out. Similarly, all selected files you wish to check-in should be checked-out by the same user.
• If auto check-in or check-out configuration is on, then the only way to check-in a checked-out file is by closing the file in the web editor.
• The file check-out and check-in button is always shown in toolbar even if auto-configuration is enabled. The only difference with auto-configuration enabled is when a user opens the file in the web editor, it is automatically checked-out.

**Publishing unstructured FrameMaker documents**

• The custom \texttt{.sts} file for HTML publishing should be of the same FrameMaker version as that of the FrameMaker Publishing Server.
• The \texttt{joboptions.xml} file located at /libs/fmdita/config/ should not be empty. This file specifies distiller job options to be used for PDF creation of unstructured files.
Baseline

- Do not remove a baseline that is used in any output preset. Trying to generate output using a deleted baseline would result in a failure.
- If different versions of an asset are referenced in different topics and if that referenced file is picked automatically, the latest version of the referenced file will be used while publishing. Make sure that same version for such asset is referenced everywhere to avoid undesirable results in published outputs.

AEM Site publishing

Page naming
Till XML Documentation solution version 2.0, all generated site page names were in lowercase. Starting from XML Documentation solution version 2.1, site page names have same case as the corresponding DITA filename. So anyone upgrading from 2.0 to a later version might need to modify external links to their site pages to take care of case changes.

Activation to publish instance
When AEM Site output is generated with Delete and Create option selected for the Existing Output Pages setting, then the previously generated output is first deleted and then pages are re-created. If replication agent is configured on author instance to automatically replicate all changes to AEM site pages to publish instance, then it is possible that by the time pages get re-created, page deletion event is propagated on the publish instance by the replication agent. In that case, the AEM site pages will be marked deactivated on the publish instance.

AEM Site page creation logic
If you are re-publishing some content after changing the Design Path setting to a different template, it is recommended to either publish to a different destination or select the Delete and Create setting to avoid inconsistent output.

AEM Site templates
You can customize the site template to control the structure of the created pages and also the existence of the default search and landing pages. See the Customize AEM Site output design template section in the XML Documentation for Adobe Experience Manager Installation and Configuration Guide.

Concurrent publishing of the same DITA map
This should be done only at different destination paths. If there are two or more publishing workflows writing to a common destination path, some or all of them might fail and the consistency of the published content is not guaranteed.

Guidelines on creating and overwriting output
When you publish your output in AEM Site format, then you have an option to manage existing pages in the destination. When you select Overwrite Content option in the Existing Output Pages setting, then for any existing page in the destination, XML Documentation solution recreates its
The contentnode and headnode. Then the new content is written in the newly created nodes. This option does not create any new revision of page.

The Delete and Create option in the Existing Output Pages setting deletes any existing pages in the destination path and then publishes the new content.

Sub-node publishing
XML Documentation solution supports non-destructive publishing, so that you can combine the published DITA content with content created through other means in a page. For this to work, it is important that your DITA map structure mirrors your site structure and the topic filenames match the page names (case-sensitive since version 2.1). Once you have your site structure and the corresponding DITA map hierarchy ready, you can configure the AEM Site template for this purpose:

- Use the topicContentNode and topicHeadNode properties of your AEM Site template node to specify the node paths where you want DITA content to be published.
- During publishing, XML Documentation solution cleans these nodes of any existing content and publishes new content in them without touching any other nodes in the page structure.
- You must select the Overwrite Content option in the Existing Output Pages setting in AEM Site preset so that XML Documentation solution does not delete and recreate the whole page.
- For more details about the Site template node and its properties, See the Customize AEM Site output design template section in the XML Documentation for Adobe Experience Manager Installation and Configuration Guide.
Other recommendations

This topic contains information about various other tasks and workflows that you can optimize.

Permissions

To give a user permissions to use the XML Documentation solution’s all capabilities and generate output in a specific format, you can add that user to the Publishers group created by XML Documentation solution. This ensures that the user has full access to all XML Documentation solution publishing functionalities.

In addition to above permissions, read/write access to specific DAM folders can be configured for this user as per your requirements from the useradmin interface.

Translation

- All translatable content should be placed under a valid self-contained language folder (language copy root) following the naming convention appropriate to the AEM version. For example, if there is a folder for keeping German content, then there should be no content reference from German folder to any other language folder.
- Component-based translation can be used even when the translation vendor does not support XML/DITA translation. However, asset metadata translation needs to be supported by the translation vendor.
- Any common content should be stored outside of any language folder. This ensures that references from language copies to the shared content is relative. This helps in maintaining language copies and ensures that no patching of references is required when creating or updating language copies.
- If additional attributes of XML tags need to be translated in component-based translation, they can be specified in `/etc/workflow/models/translation/dita_rules.xml`. All attribute names need to be prefixed with `-dita_`.
- When component-based translation is enabled, references to assets in the source DITA file are automatically changed to point to the same asset under the destination language folder. For this to work, the referenced asset should be under a valid language folder and the language folder must have the same language code as the source language.
- The translation tab in the DITA map console of a DITA map shows all the assets reachable from this DITA map including any non-DITA assets like images or videos.
- When translating non-DITA assets, it is necessary to make sure that the asset properties that need to be translated are present in `/etc/workflow/models/translation/translation_rules.xml`.
- When translating assets using the translation tab in the DITA map console, it is imperative to accept or reject the translated content using the Accept or Reject buttons in the translation project. This
is applicable to assets that are being translated for the very first time (when the asset with the destination language does not exist).

Map Editor

- Keys redefined in a DITA map are shown in red in the Map Editor. Clicking on the key scrolls the page to the previously defined key.
- In a normal map, DITA maps dropped from the References rail are added as a `mapref` while topics are added as `topicref`.

Review

- If you have shared a document for review and you make some updates in the same document, the changes will not be seen by the reviewers until you Save a Revision of your document.
- If you move a topic which is under review, then the links within the topic will break. You must Save a Revision of your topic after moving it, so that the links do not break.

FrameMaker integration

- Users need to have read permission on root (`/`) node of AEM repository to successfully connect to AEM repository from FrameMaker.
- The file check-in behavior in FrameMaker (2017 release) Update 1 is different from the file check-in experience in the XML web editor. In FrameMaker, when a checked out file is checked back in, the changes are not saved in the latest persisted version, but they are saved in the Latest version that does not have a version number associated with it. This behavior will be changes in the upcoming update for FrameMaker.