

# Profiling and Conditional Processing in DITA CMS

## Working Instructions

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# 1 Profiling and Conditional Processing

Conditional attributes together with centrally or locally managed profiling values allow tailoring of content for different audiences and products.

Content in DITA CMS is profiled by applying one of four DITA Attributes and assigning a value to that attribute. This allows comparatively minor edits to a single topic, instead of producing multiple topics.

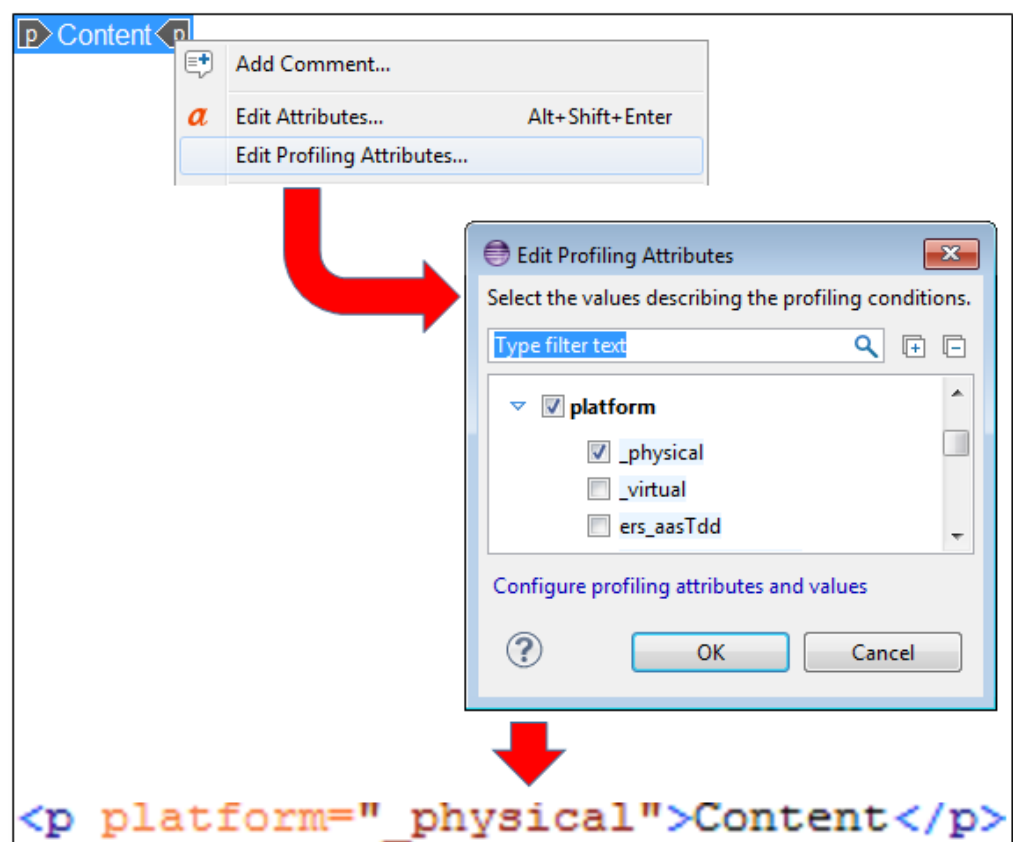


Figure 1 Example: Attribute Platform with Value \_physical Set on Element <p>...</p>

Profiling on a topic inside a bookmap is not possible unless the bookmap is also profiled and document variants are created from the bookmap.

All DITA elements can be profiled, as long as the DITA XML is still valid if that element is removed by the conditional processing filtering when the document variant is created. If the DITA XML is not valid after the conditional processing filtering, it is detected by the DXP validation when generate output to a DXP is performed. For more information about generating output and about DXP validation errors, refer to [Generate Output from DITA CMS](#).



Values for DITA attributes can be created either by ordering centrally managed values or by defining locally managed values in a subjectScheme. It is not possible to use centrally defined values together with values defined in a subjectScheme. Instead the relevant centrally defined values can be copied into a subjectScheme.

### Centrally Defined Profiling Values for DITA Attributes

Centrally managed profiling values are for global use, profiling values for an area or product are locally defined.

It is not possible to create own values for centrally managed DITA Attributes, but new values can be ordered. If the values are approved, they are configured for their corresponding DITA attribute in the DITA CMS. Long lists of values for centrally managed DITA attributes cannot be supported. Labels can be used instead for some scenarios, see [Metadata in DITA CMS](#).

For information about how to order centrally managed values for DITA Attributes, see [Ordering New Centrally Managed Profiling Values](#) on page 5.

### Locally Defined Profiling Values Using a subjectScheme

Creating and maintaining a subjectScheme map with locally defined values for profiling is the responsibility of the Information Architect (IA).

For proper output generation from DITA CMS, the following rules apply when using profiling values locally defined in a subjectScheme:

- Only one reference to a subjectScheme per fully resolved Bookmap is supported.
- A subjectScheme cannot reference another subjectScheme.

To reuse profiled information from another product that uses a subjectScheme, copy the relevant profiling value definitions from that products subjectScheme to the local subjectScheme.

When a DRM Version containing a subjectScheme is cloned, a new instance of the subjectScheme is created in the clone just like with other map objects.

For information about how to create a subjectScheme, see [Defining Locally Managed Profiling Values in a subjectScheme](#) on page 6.

A subjectScheme must be added to a bookmap before the bookmap or any of the content in the bookmap can be profiled with the values defined in the subjectScheme, see [Add a subjectScheme to a Bookmap](#) on page 9.



## 2 About Conditional Attributes and Profiling Values

Conditional attributes together with centrally or locally managed profiling values allows tailoring content for different audiences and products.

DITA CMS use the following DITA attributes as conditional attributes for profiling content:

Table 1 DITA Attributes for Profiling and Conditional Processing

DITA Attribute	Description	Example Values
@audience	Indicates the intended audience for the profiled content.	_customer _future _future_exclude _support
@platform	Specifies the HW or SW platform to which the content applies.	_physical _virtual ers_wcdma ers_gsm ipos_evr
@product	Indicates the name of the product (including version if needed) to which the content applies.	ers_air32_14 ers_air32_20 ers_power6302 ers_rbs6401 mwn_m16352
@otherprops	Used for specific information types, product releases, system areas, standards, or components.	LTE WCDMA Alarms Counters 18_Q1 M18_Q2

New DITA attributes for profiling cannot be ordered.



All locally defined profiling values for DITA attributes in a subjectScheme shall consist of two parts separated by an underscore character:

- The value begins with *<area>* which should reflect the product or technology area. Do not use PDU name, organization name, customer name or similar.
- It ends with the profiling value.

For example:

Table 2 Example: DITA Attributes with Corresponding Profiling Values, Where area=ers

DITA attribute	Value
@platform	ers_wcdma
@platform	ers_gsm
@product	ers_rbs6101
@product	ers_radio2217

Centrally managed profiling values can be with or without "\_" as first character, for example `_physical` and `WCDMA`.

Almost all DITA elements can be profiled. In the editor, apply the DITA attributes and preconfigured values as any other attribute. These same DITA attribute values can then be used in Ditaval files during output generation, see [Using Ditaval Files for Conditional Processing](#) on page 29.

### Preview Conditional Content in a Topic

Once DITA Attributes with profiling values have been applied to topic elements, use the **Preview view** to see how these elements appear in the topic. See [Preview a Topic in DITA CMS Core](#) on page 27.





## 3 Select and Implement a Profiling Strategy

The Information Architect must select and implement a profiling strategy before content can be profiled.

There are two profiling strategies:

### Centrally Managed Profiling Values

If the already defined centrally managed profiling values for global use suit your profiling scenarios, there are no further preparations needed. It is also possible to propose new centrally managed defined profiling values, see [Ordering New Centrally Managed Profiling Values](#) on page 5.

### Locally Managed Profiling Values

If a more specific profiling scenario is needed for your area or product, use locally defined profiling values in one or more subjectSchemes.

The first step is to create one or more subjectSchemes, see [Defining Locally Managed Profiling Values in a subjectScheme](#) on page 6.

Then the relevant subjectScheme must be added to a bookmap before that bookmap can be profiled, see [Add a subjectScheme to a Bookmap](#) on page 9.

### 3.1 Ordering New Centrally Managed Profiling Values

New centrally managed DITA attributes cannot be ordered but a new centrally managed profiling value for a DITA attribute can be proposed. Centrally managed profiling values are for global use.

**Note:** Product-specific centrally managed profiling values cannot be ordered. Use locally managed profiling values in a subjectScheme instead.

The DITA attribute can be one of the four alternatives described in [About Conditional Attributes and Profiling Values](#) on page 3.

The proposed new centrally managed profiling values for DITA attributes are submitted for evaluation by your Information Architect using the [DITA CMS support form](#). Choose the following component in the support form: **Change Information Model**. In the request, state the proposed profiling value and which DITA Attribute to use it with.

After the centrally managed profiling value has been approved and configured, it can be used in DITA CMS.



**Note:** Centrally managed profiling values for DITA Attributes cannot be used together with profiling values defined in a subjectScheme. Instead the relevant centrally defined values can be manually copied into a subjectScheme.

## 3.2 Defining Locally Managed Profiling Values in a subjectScheme

Locally managed profiling values for DITA Attributes can be created in a subjectScheme map.

Creating and maintaining a subjectScheme with locally defined values for profiling is the responsibility of the Information Architect (IA).

For information about possible DITA Attributes to use for profiling, see [About Conditional Attributes and Profiling Values](#) on page 3.

### Prerequisites

The subjectScheme must be created in the same DRM structure as the Bookmaps where it will be used. For more details and for recommendations about using subjectScheme with Delivery Track Trigger (DTT), see [Use Ditaval and subjectScheme Efficient in DRM](#) on page 56.

### Steps

1. Select **DITA CMS > Create Map**.

**Result:** The **Create Map** window appears.

2. Select **subjectScheme.ditamap**.
3. Type a name for the subjectScheme map in the **Map Title** textbox. For example, **sS\_Productname** or **sS\_Areaname**. Do not use PDU or organizational names. Click **Next** to continue.

The name can be changed later by editing the <title> tag in the subjectScheme.

**Result:** The **Select Versions** window appears.

4. Select one DRM Version to create the subjectScheme in. Click **Create** to continue

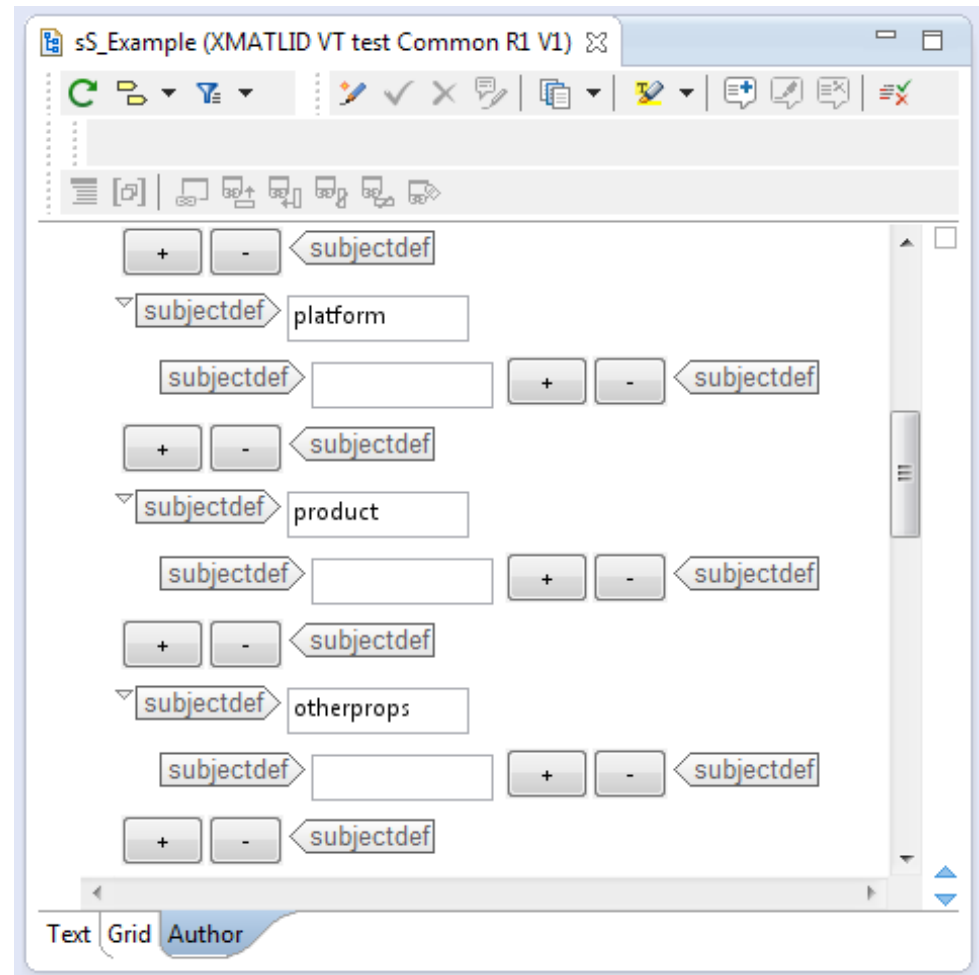
**Result:** The subjectScheme is created in the selected DRM Version.

5. Locate the subjectScheme, right-click on it and select **Lock**.



6. Right-click on the subjectScheme and select **Open with > <oXygen/> DITA Map Editor**.

**Result:** The subjectScheme is opened in oXygen DITA Map Editor:



7. Do not edit the text in the main **subjectdef** text boxes (the audience, platform, product, and otherprops texts). And do not edit or remove any of the **enumerationdef** information in the subjectScheme map. Add new profiling values in the empty **subjectdef** text boxes below the corresponding DITA Attribute **subjectdef**. Click a + button to the right of a **subjectdef** text box to add another **subjectdef** for another profiling value.

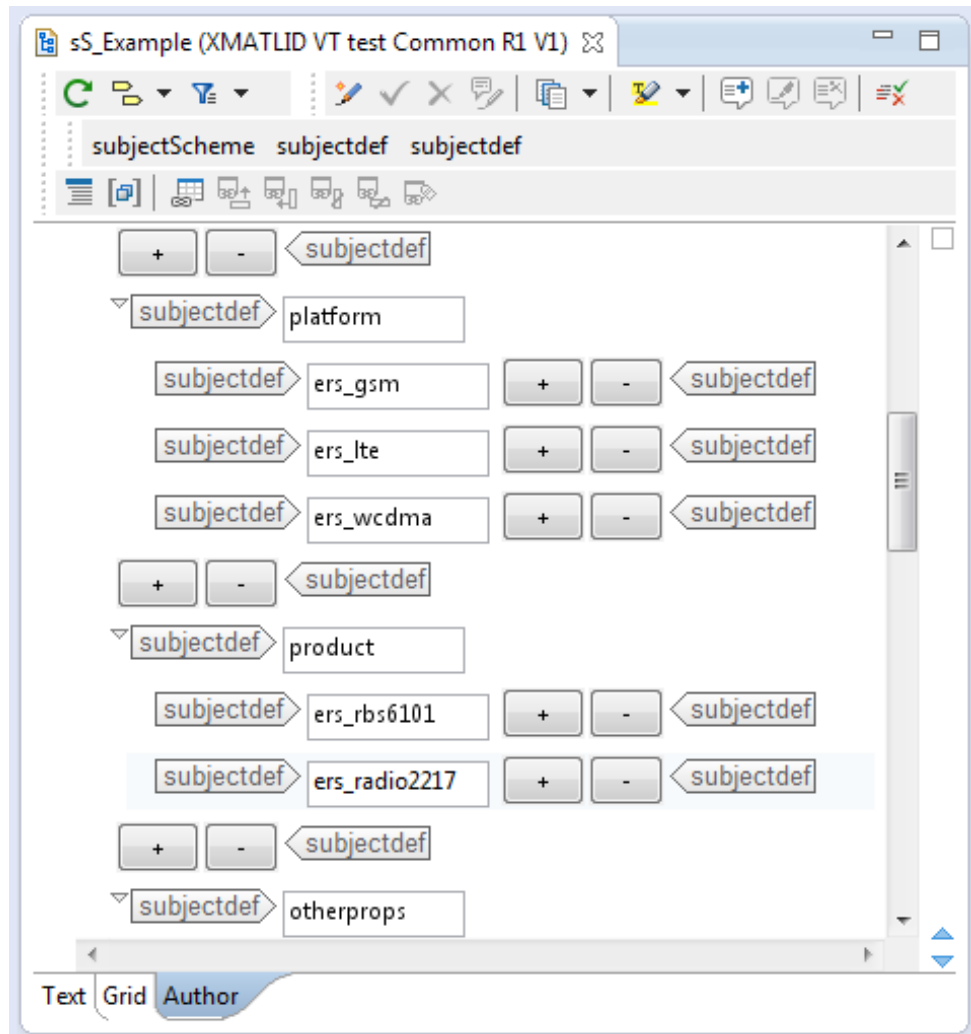


Figure 2 Profiling Values "ers\_xxx" Added for the "platform" and "product" DITA Attributes

8. Release the subjectScheme map to save the changes.

### After This Task

A subjectScheme must be added to a bookmap before the bookmap or any of the content in the bookmap can be profiled with the values defined in the subjectScheme, see [Add a subjectScheme to a Bookmap](#) on page 9.



### 3.3 Add a subjectScheme to a Bookmap

A subjectScheme must be added to a bookmap before the bookmap or any of the content in the bookmap can be profiled using the locally managed profiling values defined in the subjectScheme.

**Note:** For proper output generation from DITA CMS, only one reference to a subjectScheme per fully resolved Bookmap is supported.

If only centrally managed profiling values are needed, there is no need to add a subjectScheme to the bookmap.

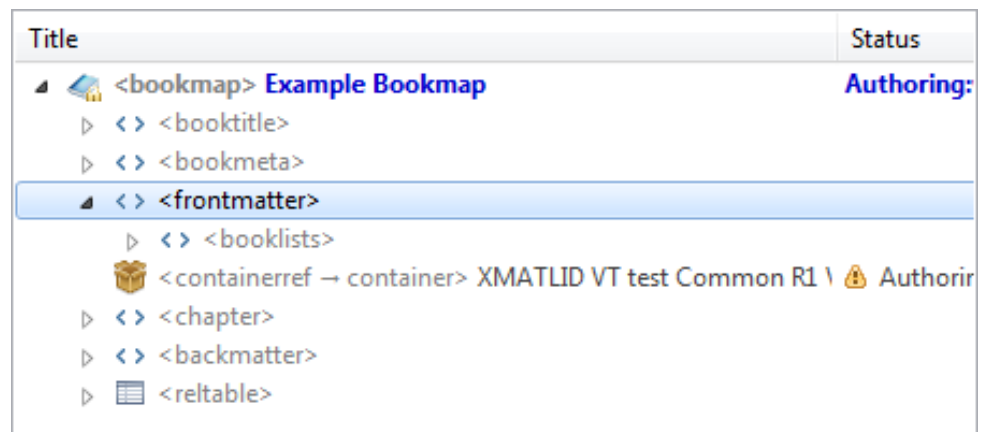
**Note:** Centrally defined profiling values and locally defined profiling values in a subjectScheme cannot be used at the same time. Instead, required profiling values defined centrally must be copied to the subjectScheme.

#### Prerequisites

The subjectScheme must be in the same DRM structure as the Bookmap. For more details and for recommendations about using subjectScheme with Delivery Track Trigger (DTT), see [Use DitaVal and subjectScheme Efficient in DRM](#) on page 56.




#### Steps

1. Locate and open the bookmap in the **DITA Map** view.
2. Lock the bookmap.
3. Expand frontmatter.







4. If `<preface>` does not already exist under frontmatter: right-click on frontmatter and select **Insert Element > preface**.

**Result:**

Title	Status
 <bookmap> <b>Example Bookmap</b>	<b>Authoring:</b>
▷ <> <booktitle>	
▷ <> <bookmeta>	
▲ <> <frontmatter>	
▷ <> <booklists>	
<> <preface>	
 <containerref → container> XMATLID VT test Common R1 \ ⚠ Authorir	
▷ <> <chapter>	
▷ <> <backmatter>	
▷  <reltable>	








5. Locate the subjectScheme and drag-and-drop it on top of the <preface> element. Release the mouse button when the subjectScheme is marked blue and is centered vertically on top of the <preface> element:

Title	Status
 <bookmap> <b>Example Bookmap</b>	<b>Authoring:</b>
▷ <> <booktitle>	
▷ <> <bookmeta>	
▲ <> <frontmatter>	
▷ <> <booklists>	
<> <preface>  sS_Example	
 <containerref → container> XMATLID VT test Common R1 \ ⚠ Authorir	
▷ <> <chapter>	
▷ <> <backmatter>	
▷  <reltable>	

**Result:** The subjectScheme is added under the <preface> element in the bookmap.

6. Expand the <preface> element to verify that the subjectScheme was properly placed under the <preface> element:



Title	Status
 <bookmap> Example Bookmap	Authoring:
▶ <> <booktitle>	
▶ <> <bookmeta>	
▶  <frontmatter>	
▶ <> <booklists>	
▶  <preface>	
▶  <mapref → subjectScheme> sS_Example	Authoring:
 <containerref → container> XMATLID VT test Common R1 \  Authorir	
▶ <> <chapter>	
▶ <> <backmatter>	
▶  <reltable>	

7. Release the bookmap to save the changes.



## 4 Create Document Variants

Document variants with different document numbers must be configured before output can be generated for a bookmap with multiple profiles.

Use conditional processing in DITA CMS to add variant codes to create variants.

Follow these rules:

- Use the `option` tag inside the `booknumber` tag (document number) in the bookmap.
- Set it up so that only one or no variant code is used in the output for each document variant.
- Set it up so that the `booknumber` tag cannot become empty.
- Create it with the leading dash character inside the `option` tag.

Add the variants in number order (-V1, -V2, -V3, -V4 etc.).

Examples displaying the DITA XML:

Follow the instructions in [Configure Document Variants in a Bookmap](#) on page 13 to configure variants in a bookmap.

### Example 1 DITA XML Examples for Document Variants

Multiple profiling values for the same DITA Attribute are added with a space between:

```
<booknumber>1/234 56-CXP 789 0123/4
  <option platform="ers_gsm ers_lte">-V1</option>
  <option platform="ipos_sp ipos_ssr ipos_evr">-V2</option>

null</booknumber>nullnullnullnull</option>
  <option audience="internal">-V2</option>
</booknumber>
```

Multiple DITA Attributes for profiling can also be added:

```
null<booknumber>1/234 56-CXP 789 0123/4
  <option platform="ers_gsm ers_lte" audience="external">-V1</option> →
  <option platform="ers_gsm ers_lte" audience="internal">-V2</option> →
```





```
<option platform="ipos_sp ipos_ssr ipos_evr" audience="external" →  
1">-V3</option>  
  <option platform="ipos_sp ipos_ssr ipos_evr" audience="internal" →  
1">-V4</option>  
</booknumber>
```

## 4.1 Configure Document Variants in a Bookmap

Configure document variants in a bookmap using profiling values.

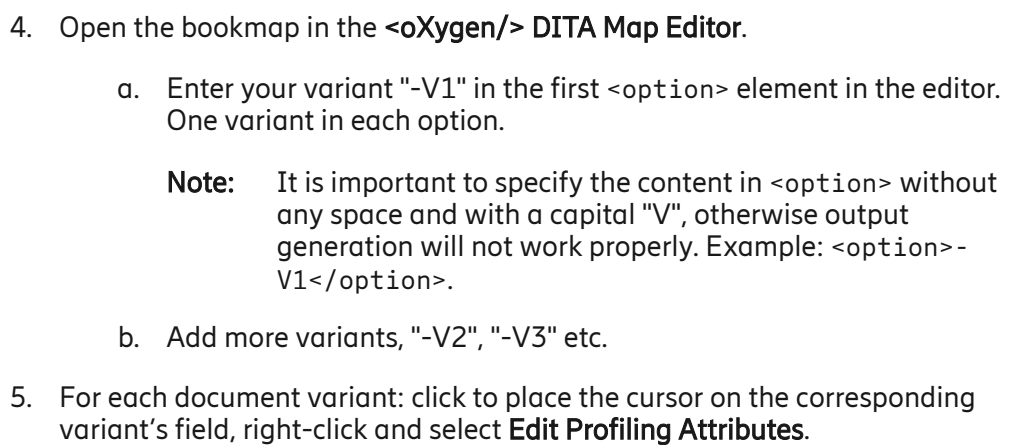
A bookmap's metadata contains the information connected to the variants included. The variants must be configured before generation of output.

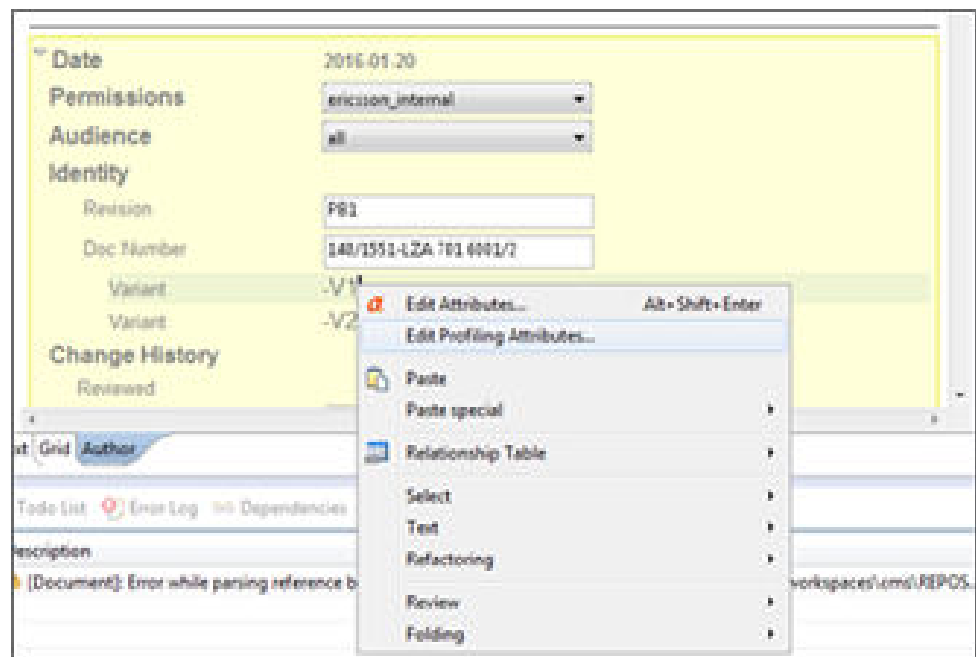
### Prerequisites

If locally defined profiling values in a subjectScheme are to be used, the subjectScheme must be added to the bookmap first. For more information, see [Add a subjectScheme to a Bookmap](#) on page 9.

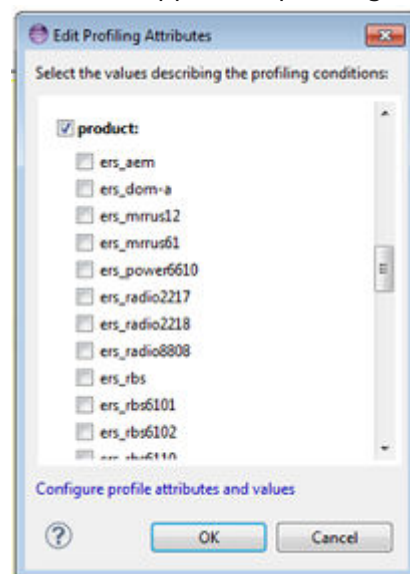
### Steps

1. Locate and open the bookmap in the **DITA Map** view..
2. Lock the bookmap.
3. In the DITA MAP view, locate the <booknumber> element and add one or more <option> elements below.





6. Select the applicable profiling value or profiling values from the list.



## Results

The bookmap is profiled for the different document variants.

## 4.2 Generate Output for Document Variants

Generate output for document variants by using Ditaval files.

Use this process to manually generate output for one document variant. Create a Build Manifest to generate output for multiple document variants at the same time, see [Understanding the Build Manifest Feature](#) on page 41.

**Note:** Information Architects are responsible for creating and maintaining Ditaval files.

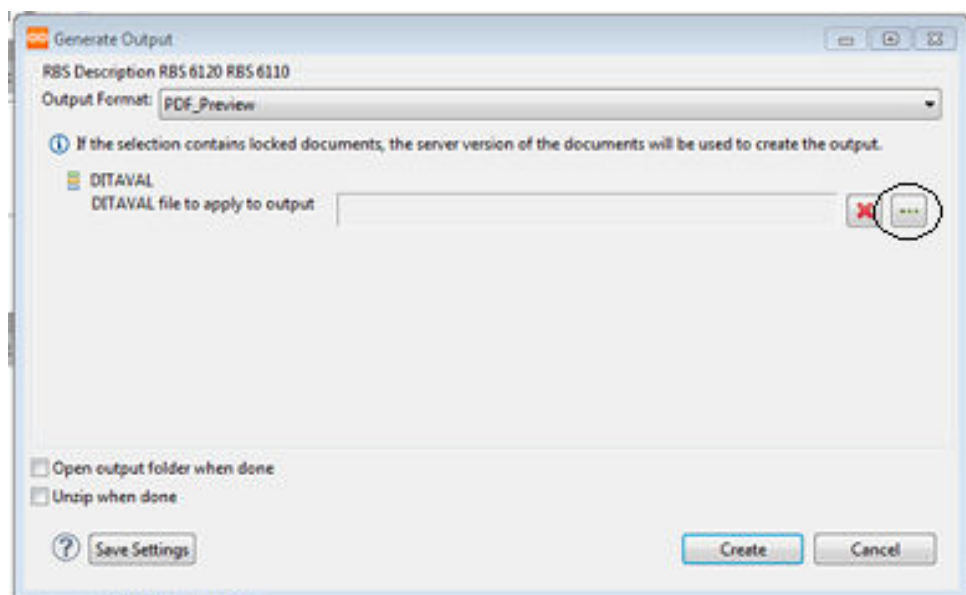
### Prerequisites

- Bookmap is profiled, see [Configure Document Variants in a Bookmap](#) on page 13.
- The relevant Ditaval file is defined, see [Create a Ditaval File](#) on page 30.

### Steps

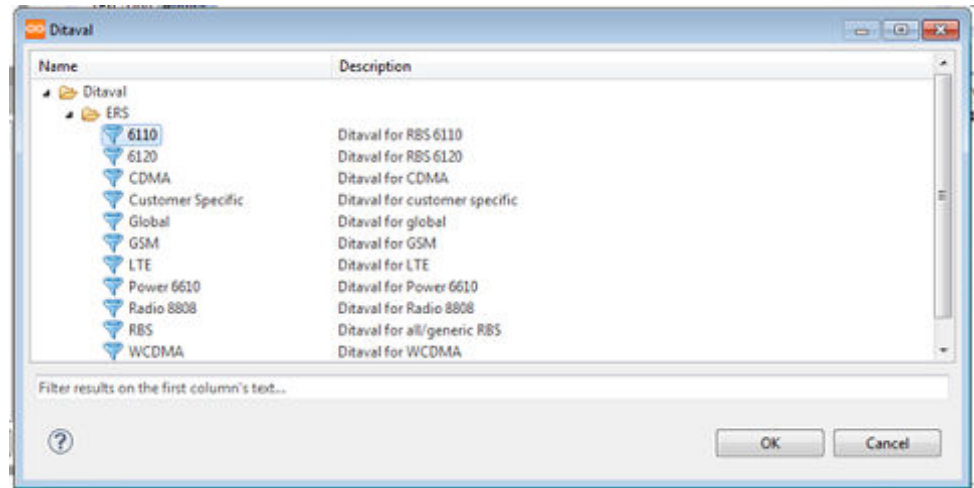
1. Right-click the bookmap file from any view, and select **Generate output**.
2. Select output format.
 

**Note:** DXP output does not result in output in a visible folder, refer to [Generate Output from DITA CMS](#).
3. Click ... to browse for the applicable Ditaval file needed to generate the document variant.





4. Select the applicable Ditaval file from the list and click **OK**.



**Tip:** Click in the list and type on the keyboard to locate a Ditaval or type text in the text-box below the list and press ENTER to filter the list.

Hoover with the mouse over a Ditaval to see a quick preview of its contents.

5. If applicable, check **Open output folder when done** and **Unzip when done** in the **Generate Output** window.
6. Click **OK** in the **Generate Output** window to start output generation.

## Results

The output generator filters the bookmap using the configuration and profiling values in the Ditaval file to generate the document variant.



## 5 Profile Maps

Profiling can be applied in a bookmap or map to exclude elements. For example topic references, map references, reltable information, and change information can be profiled.

The most common way to profile a map is to use the **DITA Map** view.

It is also possible to apply profiling values on elements in a map open in **<Oxygen/> Map Editor** by selecting an element, right-click, and select **Edit Profiling Attributes**.

A map must be locked before any profiling can be applied.

There are a few points to keep in mind when profiling elements in a map:

- If the element has any children, the profiling values are applied to all its children as well. There is no need to apply conditions to every element in the subtree. For example: if profiling values are applied on a `<chapter>` element, any `<topicref>` elements inside inherit the profiling.
- Profiling values cannot be set on the root element inside a topic to include or exclude an entire topic. The root element in a topic is the main element inside a topic, for example the `<concept>` element in a concept topic or the `<task>` element in a task topic. Instead set the profiling values on an element in the map that reference the topic to profile the entire topic. Example:

```
<topicref
  href="per1445699324969.dita"
  audience="internal">
```

- If an element in a map that reference a topic is profiled, then every reference to that topic in the entire resolved bookmap must be profiled as well. And the same must also be done for every reltable reference to the profiled topic.
- Set the corresponding profiling values and configurations in a Ditaval file to include or exclude the profiled content when generating output, see [Using Ditaval Files for Conditional Processing](#) on page 29.



## 5.1 Profile Elements in a Map

Profiles can be applied to elements in a map. For example topic references, map references, reltable information, and change information can be profiled.


The Set Conditions functionality in **DITA Map** view allows selecting one or more topic references, sub-map references or both - and then applying the required profiling values. Profiling values can also be applied on <bookevent> elements and to the <relrow> element in relationship tables in the bookmaps.

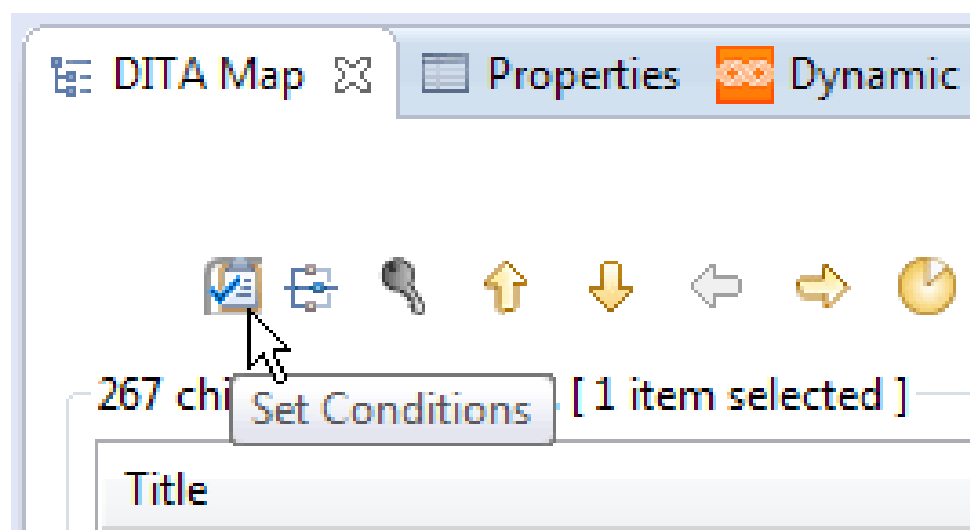
This functionality is available in DITA Map view and DITA Map Editor.

### Prerequisites

The map is locked.

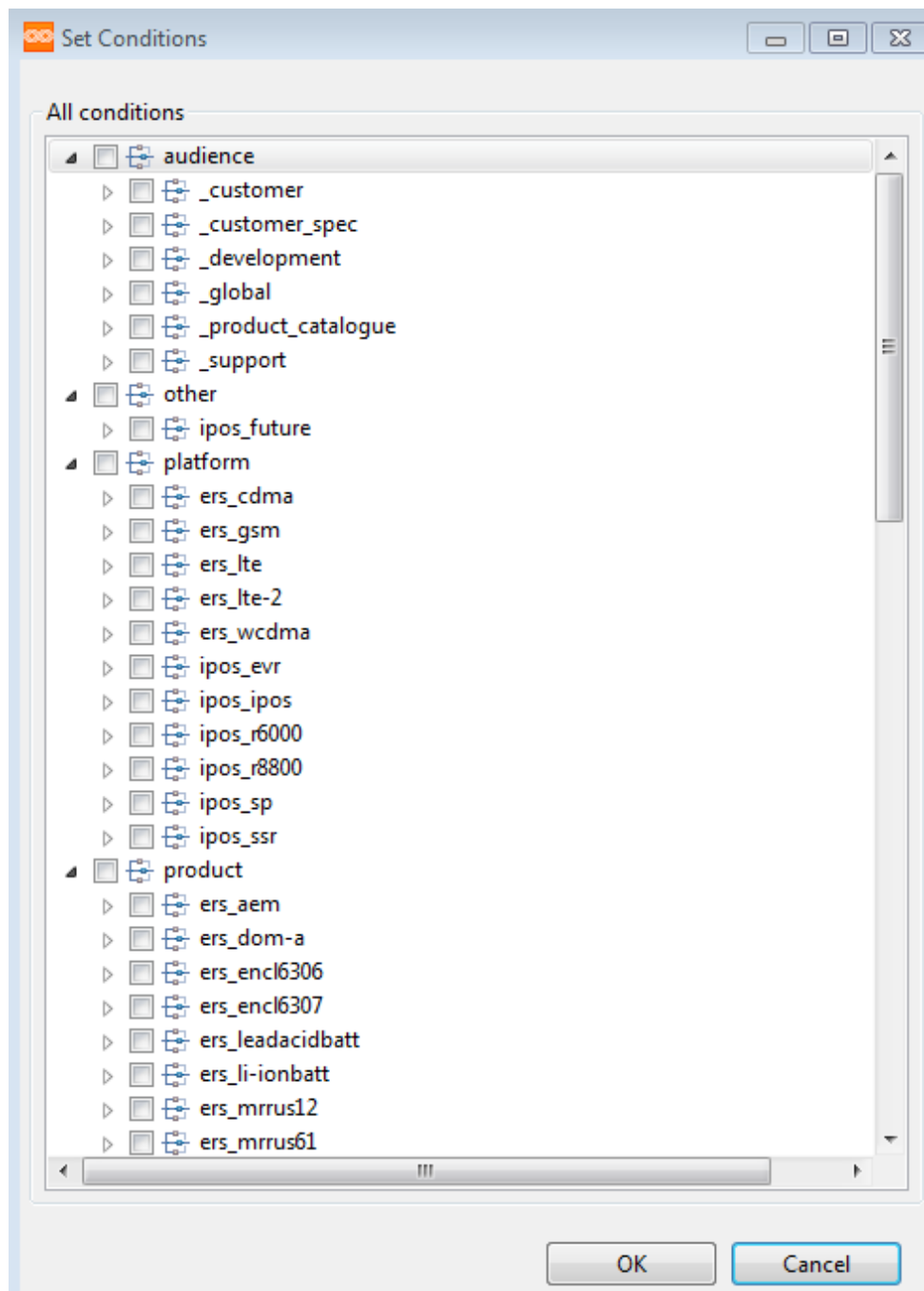
### Steps

1. Select the objects to which to apply a condition and click the **Set conditions** button 



**Result:** The **Set Conditions** dialog appears with profiling values under corresponding DITA Attribute.

- If a subjectScheme is referenced from the bookmap, it shows the profiling values defined in the subjectScheme.
- If no subjectScheme is referenced from the bookmap, it shows all centrally managed profiling values.



2. Apply the profiling values by selecting the relevant value or values under the corresponding DITA Attribute (platform, product and so on) and click **OK**.

## 5.2 Review Profiling Values on Elements in a Map

Use DITA Map view to display tooltips with the applied profiling values to review them.



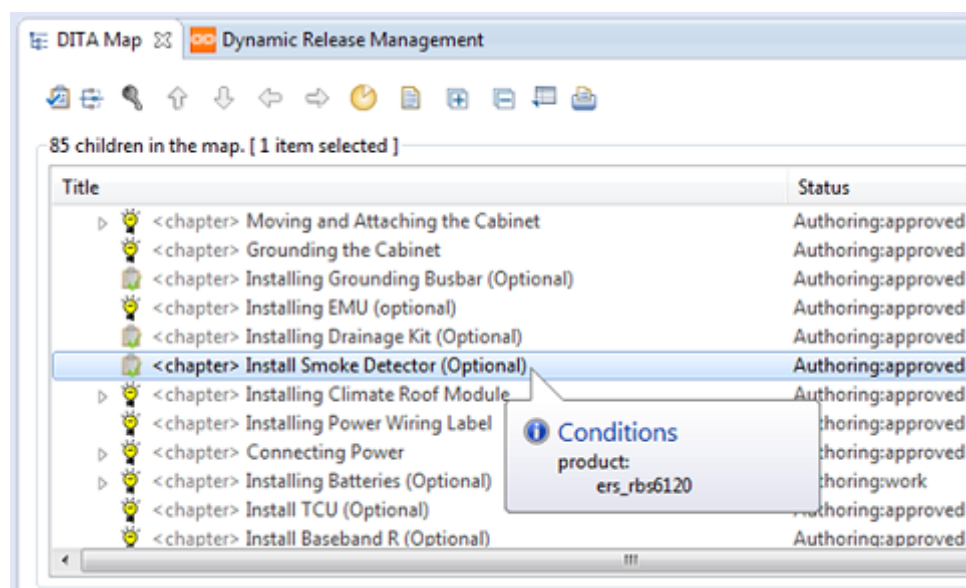


## Steps

- Open the map in DITA Map view and hover the cursor over a profiled element.

## Example


The tooltip displays the conditions.



## 5.3 Identify All Profiled Elements in a Map

It may be difficult to remember which elements have profiling values applied to them in a map with many profiled elements. Use this function to identify the profiled elements.

## Steps

1. In the DITA Map view or DITA Map Editor, click the **Show Conditions** button .

**Result:** The **Show Conditions** dialog is displayed.

2. Select the **Show all conditions** check box.
3. Click **OK**.

**Result:** All profiled elements are highlighted.

For example, the following diagram shows that two <chapter> elements are profiled in the map:

Title	Status
<chapter> Grounding the Cabinet	Authoring:approved
<chapter> Installing Grounding Busbar (Optional)	Authoring:approved
<chapter> Installing EMU (optional)	Authoring:approved
<chapter> Installing Drainage Kit (Optional)	Authoring:approved
<chapter> Install Smoke Detector (Optional)	Authoring:approved
<chapter> Installing Climate Roof Module	Authoring:approved
<chapter> Installing Power Wiring Label	Authoring:approved
<chapter> Connecting Power	Authoring:approved
<chapter> Installing Batteries (Optional)	Authoring:work
<chapter> Install TCU (Optional)	Authoring:approved
<chapter> Install Raceband R (Optional)	Authoring:approved

- To see which conditions are applied to each element, hover the cursor over the highlighted element.

## 5.4 Preview Which Elements Are Included in a Profiled Map

Use the Show Conditions feature to preview which elements are included and excluded in a map when certain profiling values are selected. This shows which elements are included and excluded when the output of a map is generated.

**Note:** This feature applies to elements in a map. It does not apply to profiling values applied inside a topic.

To preview which elements are included in a map when certain profiling values are selected:

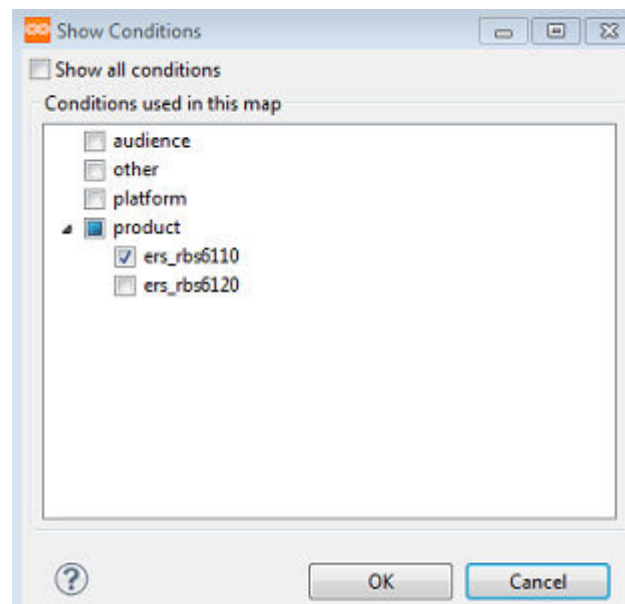
### Steps

- In the DITA Map view, click the **Show Conditions** button .

**Result:** The **Select Conditions** dialog is displayed.

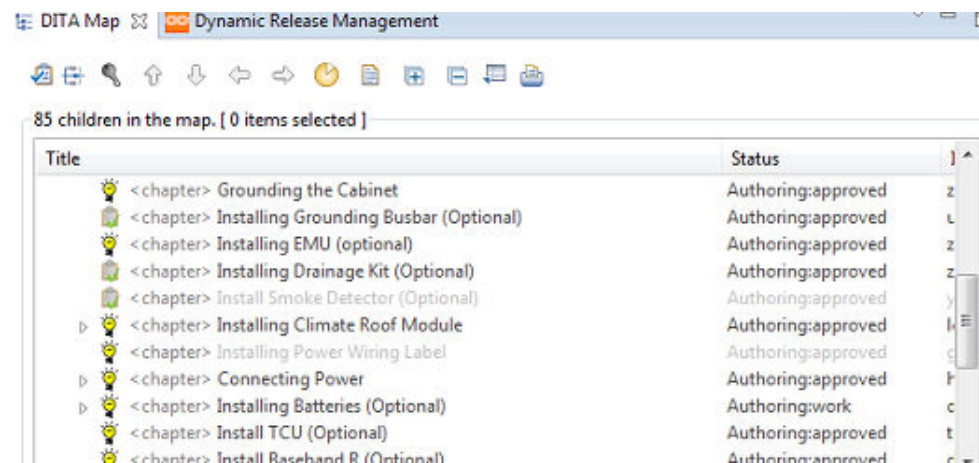
**Note:** If the **Show all conditions** check box is checked, clear it.

The list of profiling values applied on elements in the map are displayed.



2. Select the profiling values to evaluate in the map and click **OK**.

**Result:** All the elements that would be excluded from the map are grayed out.



## Results

## 6 Profile Topics

Elements inside topics can be profiled by applying DITA Attributes with profiling values.

Oxygen Author in DITA CMS Core is used for applying profiling values to elements inside topics.

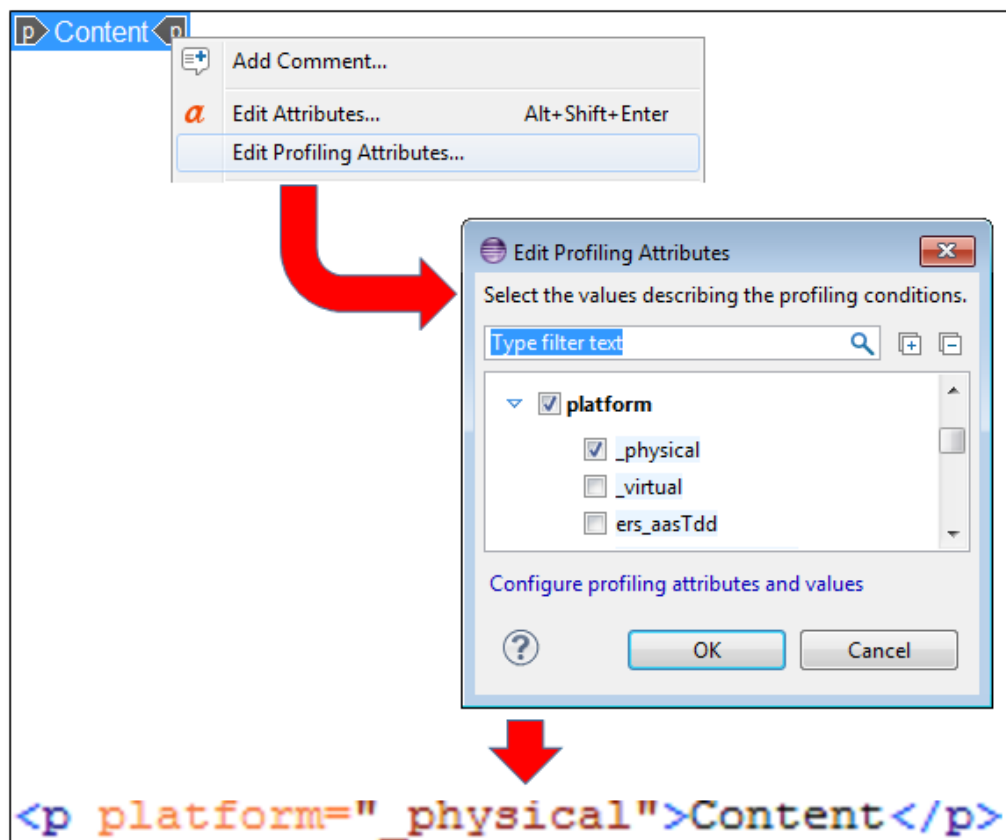


Figure 8 Example: Attribute Platform with Value `_physical` Set on Element `<p>...</p>`

The **Preview** view is used to analyze the effect of applied profiling values, see [Preview a Topic in DITA CMS Core](#) on page 27.

Profiling values cannot be set on the root element inside a topic to include or exclude an entire topic. The root element in a topic is the main element inside a topic, for example the `<concept>` element in a concept topic or the `<task>` element in a task topic. Instead set the profiling values on an element in the map that reference the topic to profile the entire topic, see [Profile Maps](#) on page 18.



## 6.1 Profile Topic Elements Using oXygen Author in DITA CMS Core

**Note:** The profiling values that are usable in oXygen and in DITA CMS are managed centrally or managed locally using subjectSchemes. Do not click **Configure profile attributes and values** in the **Edit Profiling Attributes** window to edit the local copy of the profiling values in the workspace.

To apply profiling values in the oXygen editor:

### Steps

1. In Author mode, select the element to profile.

**Note:** Only apply profiling to elements that can be removed from the topic without making the topic invalid. Invalid profiling can prevent proper output generation, refer to [Generate Output from DITA CMS](#).

2. Right-click the element and select **Edit Profiling Attributes**.

The **Edit Profiling Attributes** window is displayed:



**Edit Profiling Attributes**

Select the values describing the profiling conditions:

- ☐ **audience:**
  - ☐ \_customer
  - ☐ \_customer\_spec
  - ☐ \_development
  - ☐ \_global
  - ☐ \_product\_catalogue
  - ☐ \_support
  - ☐ development
  - ☐ public
  - ☐ support
- ☐ **other:**
  - ☐ ipos\_future
  - ☐ evrfuture
  - ☐ future
- ☐ **platform:**
  - ☐ ers\_cdma
  - ☐ ers\_gsm
  - ☐ ers\_lte
  - ☐ ers\_lte-2
  - ☐ ers\_wcdma
  - ☐ ipos\_evr
  - ☐ ipos\_ipos

[Configure profile attributes and values](#)

**OK** **Cancel**

3. Apply the profiling values by selecting the relevant value or values under the corresponding DITA Attribute (platform, product, and so on) and click **OK**.



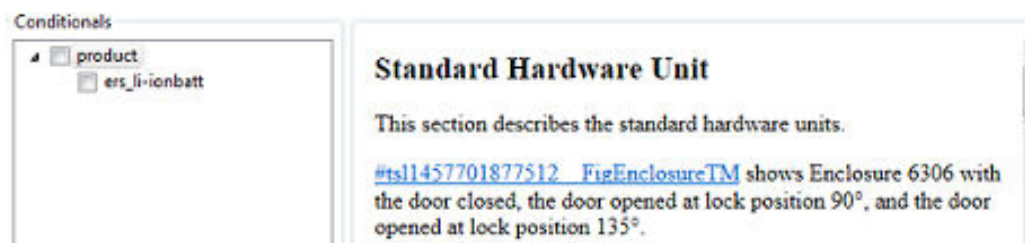
## 6.2 Preview a Topic in DITA CMS Core

Use this procedure to generate a HTML preview of a topic where profiling can be verified.

The HTML preview is generated complete with referenced images. It is displayed in the **Preview** view.

When a topic is previewed, the **Conditionals** panel is displayed if the topic has profiled contents. It shows the conditional attributes used in the topic, with check boxes for each attribute value.

The following example shows a topic that contains conditional text in the Preview window.



Use the check boxes to hide or display the portions of the topic that are tagged with these attributes.

If there is only one condition in a topic, the conditional text is displayed whether or not the corresponding check box is selected. To see what the topic looks like without that single condition, create an alternate dummy condition and then select its check box.

**Note:** It is not possible to generate a preview for topics that contain conrefs or keyrefs, so either the preview view is not updated or the message "No active preview available" is shown in the **Preview** view. The preview generator cannot resolve conrefs or keyrefs even if a bookmap referencing the topic is open in **DITA Map** view.


To preview a topic:

### Steps

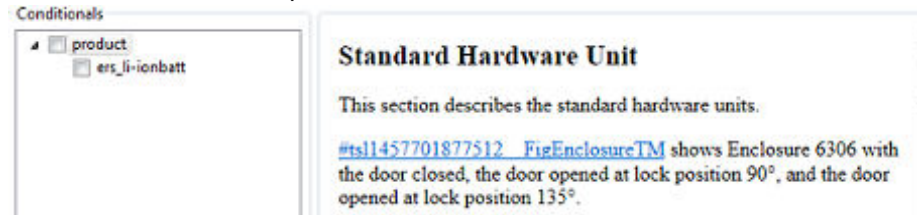
1. Locate the topic.
2. Do one of the following:



- Open the topic in the XML editor and select **Show Profiling Attributes**. The profiles are highlighted in the content.



 [Enclosure 6306](#) shows Enclosure 6306 with the door closed, the door opened at lock position 90°, and the door opened at lock position 135 product [ers\_li-ionbatt].

- Right-click the topic and select **Show Preview**. The Conditional attributes used are shown in the preview view.



- Hover over the topic.

**Note:** This opens a thumbnail view of the topic, not a preview in the **Preview** view. This functionality is not available from all views.

3. If changes are made to the topic in the XML editor, click the **Preview** view **Refresh** button  or repeat one of the previous options to display the changes.
4. If desired, click the **Print** button  to print the contents of the **Preview**.





## 7

# Using Ditaval Files for Conditional Processing

DITA CMS offers an intuitive interface for creating and organizing Ditaval files.

Ditaval files are referenced by objects in DRM Versions. Ditaval files behave like topics from a DRM perspective.

**Note:** Ditaval files created before DITA CMS 5.0 were not referenced by objects in DRM Versions, instead those old Ditaval files are now referenced by a DRM Version in the **DITAVAl Common Lib** DRM Library. Move those Ditaval files as soon as possible to the correct position in the DRM structure for the relevant product.

Use Ditaval files if profiling attributes are used in the documentation. These files specify the conditions to include and exclude when output is generated. They ensure that conditions are always applied consistently to generated output.

In DITA CMS, there is no need to code the Ditaval file manually. Instead, use the DITA CMS **Ditaval** view to create the file, then apply the needed Ditaval file when generating the output.

**Note:** Information Architects are responsible for Ditaval file management.

Create Ditaval files in Ditaval folders in the **Ditaval view**. Use the overall product area name as folder name (required) and for the Ditaval name, use a consistent name relevant for your product similar to the conditional attributes (recommendation).

Example of Ditaval files:

Name	Description
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>6101</li> <li>6102</li> <li>6110</li> <li>6120</li> <li>CDMA</li> <li>Customer Specific</li> <li>Enclosure 6306</li> <li>Enclosure 6307</li> <li>Global</li> <li>GSM</li> <li>Lead-acid Battery</li> <li>Li-on Battery</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Ditaval for RBS 6101</li> <li>Ditaval for RBS 6102</li> <li>Ditaval for RBS 6110</li> <li>Ditaval for RBS 6120</li> <li>Ditaval for CDMA</li> <li>Ditaval for customer specific</li> <li>Ditaval for enclosure 6306</li> <li>Ditaval for enclosure 6307</li> <li>Ditaval for global</li> <li>Ditaval for GSM</li> <li>Ditaval for lead-acid battery</li> <li>Ditaval for Li-on battery</li> </ul> </li> </ul> </li> </ul>



**Note:** Before creating Ditaval files, confirm with the Information Architect and product information release responsible that they are used for the product information to generate output.

For more information about using Ditaval and subjectScheme in DRM and with Delivery Track Trigger, see [Use Ditaval and subjectScheme Efficient in DRM](#) on page 56.

#### Example 2 Documentation Project with Three Conditions

- Platform: Linux or Windows
- Audience: Sys\_Admin or End\_User
- Product: Product A or Product B

Create one Ditaval file for each needed combination. For example, the following Ditaval XML shows the configuration for generating the Administration Guide for Product A on Linux for System Administrators:

```
<?xml version="1.0" encoding="UTF-8"?>
<val>
  <prop action="exclude" att="audience" val="end_user"/>
  <prop action="include" att="audience" val="sys_admin"/>
  <prop action="include" att="platform" val="linux"/>
  <prop action="exclude" att="platform" val="windows"/>
  <prop action="include" att="product" val="Product A"/>
  <prop action="exclude" att="product" val="Product B"/>
</val>
```

## 7.1 Create a Ditaval File

Use the DITA CMS **Ditaval** view to create Ditaval files that contain conditional processing conditions. The Ditaval files are used to control what profiled content is included and excluded when output is generated.

A Ditaval file is created by specifying the conditions that control what is excluded and included when generating output. The default action when creating a Ditaval file is to include all profiled content. The default action is controlled by the Ditaval **Default action**.

A condition is created by selecting a profiling value and then selecting if content profiled with that profiling value should be included or excluded.



**Tip:** To include only content that is not profiled together with content profiled with one specific profiling value: first set the default action to exclude, then select the profiling value and set it to include. This excludes all profiled content except the selected profiling value.

The **Default action** settings passthrough and flag are currently not supported and should not be used.

To create a Ditaval file:

### Steps

1. To open the **Ditaval** view, select **Window > Show View > Other**.

**Result:** The **Show view** window is displayed.

2. Expand **IXIASOFT CCMS - General**, select **Ditaval** and click **OK**.

**Result:** The **Ditaval** view is displayed.

3. Right-click the Ditaval folder for your product or area, and select **New Ditaval**.

The **Create Ditaval** dialog is displayed.

All conditions	
Title	Action (Click to select)
audience	include
_customer	include
_customer_spec	include
_development	include
_future	include
_global	include
_product_catalogue	include
_support	include



4. Enter a title for this Ditaval file.

**Note:** The Ditaval title is also used as the Ditaval filename. It must be unique.

5. Optional: Enter a description.

6. Optional: To use locally managed profiling values from a subjectScheme instead of centrally managed profiling values: check **Use a Subject Scheme** and select the relevant subjectScheme in the dropdown menu. Only one subjectScheme can be selected for one Ditaval file.

**Note:** It is only possible to select a subjectScheme from the DRM Version that is the Primary Version for the Ditaval file. For more information about Primary Version, refer to [How to Manage Content in DITA CMS](#).

7. Optional: To change the default action from `include` to `exclude`: Check **Default action** and select **exclude** in the dropdown menu.

**Note:** Change default action for the entire Ditaval file must be done before any profiling values are selected. If it is changed after a profiling value has been selected, then all profiling values under a DITA Attribute with one or more profiling values selected will not get their actions changed.

8. Create conditions by selecting profiling values and actions.

- If the default action is `include`: To create a condition that excludes content profiled with a specific profiling value, check the profiling value and click the word **include** to the right of the profiling value in the **Action** column. In the dropdown menu that is displayed, select **exclude**.
- If the default action is `exclude`: To create a condition that includes content profiled with a specific profiling value, check the profiling value and click the word **exclude** to the right of the profiling value in the **Action** column. In the dropdown menu that is displayed, select **include**.

**Note:** The actions `passthrough` and `flag` are currently not supported and should not be used.

9. When all conditions have been specified, click **OK**.

**Result:** The new Ditaval file is created. Output can now be generated using this Ditaval file.



## 7.2 Clone a Ditaval File

Instead of creating a new Ditaval file, an existing Ditaval file can be cloned and modified.

Always clone a Ditaval file using the **Ditaval** view and never from another view in DITA CMS Core (Eclipse). If cloned from outside the **Ditaval** view, the Ditaval file will not be visible in the correct position in the Ditaval structure in **Ditaval** view.

It possible to clone a Ditaval file even if it is referenced by a closed DRM Version (bug). Make sure that the Ditaval file is not referenced by a closed DRM Version before cloning it. If the Ditaval file is referenced by a closed DRM Version, create a new instance of the Ditaval file and then clone the new instance of the Ditaval file.

To clone a Ditaval file:

### Steps

1. To open the **Ditaval** view, select **Window > Show View > Other**.

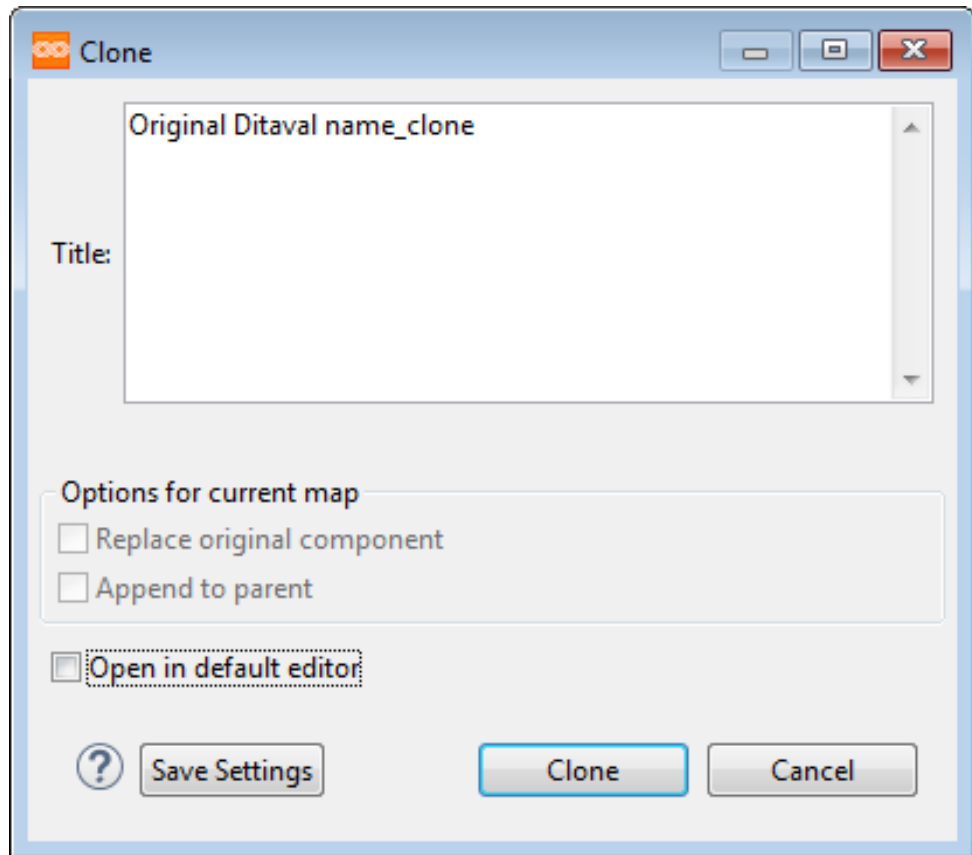
**Result:** The **Show view** window is displayed.

2. Expand **IXIASOFT CCMS - General**, select **Ditaval** and click **OK**.

**Result:** The **Ditaval** view is displayed.

3. Right-click the Ditaval file to clone and select **Clone**.

The **Clone** dialog is displayed.



4. Enter a new title for the clone of the Ditaval file.

**Note:** The Ditaval title is also used as the Ditaval filename. It must be unique.

5. Optional: Check Open in default editor to edit the clone of the Ditaval file, see [Edit a Ditaval File](#) on page 34.
6. Click **Clone**.

**Result:** The clone of the Ditaval file is added in the same position in the Ditaval structure as the original Ditaval file.

## 7.3 Edit a Ditaval File

Use the Ditaval view to add or remove conditions from a Ditaval file.

- It is possible to edit a Ditaval file even if it is referenced by a closed DRM Version (bug). Verify that the Ditaval file is not referenced by a closed DRM Version before editing it.



- It is possible to edit a Ditaval file even if it is in status approved (bug).
- Always edit Ditaval files from the Ditaval view so that they are opened in the proper GUI window where it is possible to load a subjectScheme. Selecting Edit on a Ditaval file outside of **Ditaval** view opens the Ditaval file in oXygen XML editor.
- When creating or editing a Ditaval file, it is only possible to load a subjectScheme from the DRM Version that is the Primary Version for the Ditaval file.
- If cancel is selected when editing a Ditaval file, it is still locked. Right-click and select "Replace with Server Revision" to remove the lock.

To edit a Ditaval file:

### Steps

1. In the **Ditaval** view, locate the Ditaval file to update.
2. Right-click the Ditaval file and select **Edit Ditaval**.

**Result:** The Ditaval file is locked and the edit Ditaval dialog box is displayed. The edit ditaval dialog box has the title **Create Ditaval**.

3. Optional: update the title and description.

**Note:** The Ditaval title is also used as the Ditaval filename. It must be unique.

4. Optional: If locally managed profiling values are used, check **Use a Subject Scheme** and select a subjectScheme in the drop-down list box. It is only possible to load a subjectScheme from the DRM Version that is the Primary Version for the Ditaval file.

**Note:** If the original Ditaval file was created using centrally managed profiling values, do not load a subjectScheme. If transitioning from centrally managed profiling values to using locally defined profiling values in a subjectScheme, create new Ditaval files instead of editing old Ditaval files.

5. Optional: To set a default action: Check **Default action** and select a default action in the drop-down list box.

**Note:** Changing the **Default action** setting in a cloned Ditaval file will only change actions for profiling values under a DITA Attribute where no profiling value is selected. All profiling values under a DITA Attribute with one or more profiling values selected will not get their actions changed. If a different default action is needed, create a new Ditaval file instead of cloning an existing Ditaval file.



The Default action settings **passthrough** and **flag** are currently not supported and should not be used.

6. Create or change conditions by selecting profiling values and then selecting actions.
  - If the default action is selected and set to **include**:

To create a condition that excludes content profiled with a specific profiling value, check the profiling value and click the word **include** to the right of that profiling value in the **Action** column. In the drop-down list that is displayed, select **exclude**.
  - If the default action is selected and set to **exclude**:

To create a condition that includes content profiled with a specific profiling value, check the profiling value and click the word **exclude** to the right of the profiling value in the **Action** column. In the drop-down list that is displayed, select **include**.
  - To change a condition:

Click the action in the **Action** column. In the drop-down list that is displayed, select a different action.
7. Click **OK** to save changes and close the dialog box.
8. In the **Ditaval** view, right-click on the edited Ditaval file and select **Release Ditaval XML** to release the edited Ditaval file.

**Result:** The edited Ditaval file is released and can be used when generating output.

## 7.4 Review Ditaval Conditions

The conditions in created Ditaval files can be reviewed to verify them and ensure that they are complete.

To review Ditaval values:

### Steps

- In the **Ditaval** view, hover the cursor over a Ditaval file.

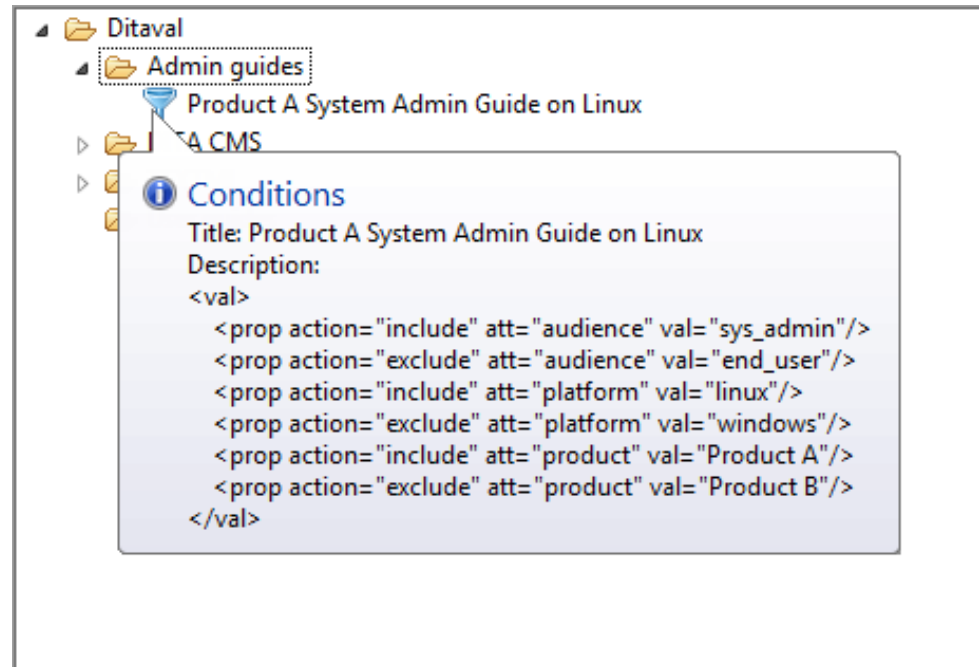
#### Example

The following example shows the conditions in the **Product A System Admin Guide on Linux** Ditaval.





### Example



## 7.5 Copy the reference of a Ditaval file

Copy a reference to a Ditaval file to find the location of the Ditaval file in the DITA CMS.

To copy the reference of a Ditaval file:

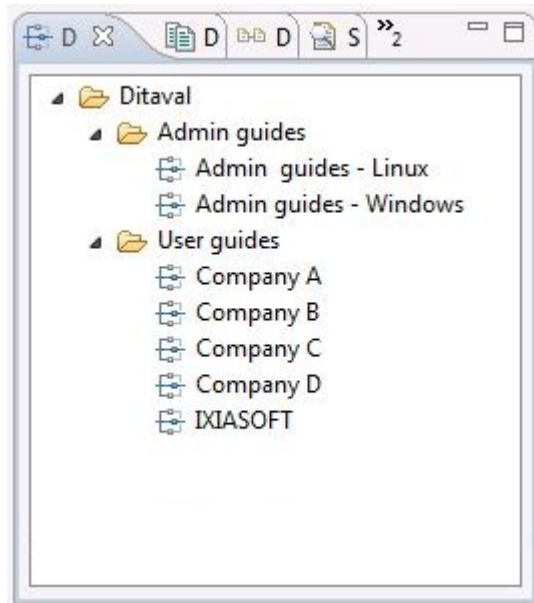
### Steps

1. In the Ditaval view, right-click the file and select **Copy Ditaval Reference**.

## 7.6 Create a Ditaval folder

Multiple Ditaval files can be organized in folders.

For example, Ditaval files can be organized in admin and user guides, as shown below.



Then drag and drop Ditaval files to the created folders.

**Note:** Locked Ditaval files cannot be dragged and dropped.

### Steps

1. In the Ditaval view, right-click the folder where to create the new folder and select **New Ditaval Folder**.

Select the **Ditaval** folder if there are no subfolders.

**Result:** The **New Ditaval Folder** dialog is displayed.

2. Enter the name of the new folder and click **OK**.

**Note:** The folder name must be unique.

**Result:** The new folder is displayed in the Ditaval view.

## 7.7 Delete a Ditaval file or folder

Use this method to remove unnecessary items from the Ditaval view.

To delete a Ditaval file or folder:

### Steps

1. In the Ditaval view, locate the file or folder to delete.



**Result:** If necessary, expand the Ditaval folders.

2. Right-click the Ditaval file or folder to delete and select **Delete**.

**Result:** The **Delete Ditaval** dialog is displayed, asking for confirmation.

3. Click **OK**.

**Result:** The file or folder is deleted.

## 7.8 Edit the XML contents of the Ditaval file

View and edit the XML contents of a Ditaval file to update it manually.

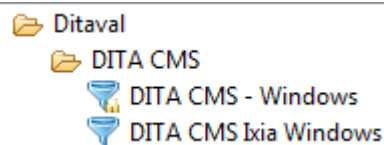
**Note:** For more information about the XML structure of a Ditaval file, see the *Dita Specification* documentation.

To edit the XML contents of a Ditaval file:

### Steps

1. In the Ditaval view, right-click the file to edit and select **Edit Ditaval XML**.

A lock appears on the Ditaval file icon, indicating that the file is checked-out, as shown below:



**Note:** If the **Edit Ditaval XML** option is greyed out, the Ditaval file was created before this feature was implemented, and the file needs to be converted to a new format. To solve this issue:

- a. In the Ditaval view, right-click the file and select **Edit Ditaval**.
- b. Click **OK** (there is no need to modify the values).
- c. The **Edit Ditaval XML** option is now available for the file.

The Ditaval is displayed in the Eclipse XML editor.

2. Update the file as necessary.
3. Press **Ctrl+S** to save the changes.



4. To export the contents of the Ditaval file, select **File > Save As** and save the file locally on the system.
5. To commit the changes, in the Ditaval view right-click the file and select **Release Ditaval XML**.

If the changes are not to be kept, in the Ditaval view right-click the file and select **Replace with Server Revision**.

## 7.9 Compare Two Ditaval Files

Two Ditaval Files can be compared in the Eclipse Compare tool.

**Note:** It is not possible to initiate a compare from the **Ditaval** view.

### Steps

1. Locate the two Ditaval files to compare using the **Search** view.
2. Select two Ditaval files in the **Search Results** view.
3. Right-click the selected Ditaval files and select **Compare With > Compare with Each Other**.

**Result:** The two selected Ditaval files are compared in the Eclipse Compare tool.

For more information about using DITA CMS file comparison utilities, refer to [How to Manage Content in DITA CMS](#).



## 8 Understanding the Build Manifest Feature

A Build Manifest is a DITA CMS file that makes it possible to configure a list of different outputs for a map.

**Note:** Build manifests are currently not functioning properly and should not be used.

One Build Manifest file is referenced by one map object in one DRM Version. Build manifest files behave like maps from a DRM perspective.

Build Manifests can be used to generate PDF or HTML previews for multiple variants of a profiled bookmap. It can also be used to create DXP for multiple variants of a profiled preliminary or approved bookmap. For more information about generating output, refer to [Generate Output from DITA CMS](#).

For each map, it is possible to specify the following information:

- Types of output to generate (for example PDF, HTML).
- Languages to output; it is possible to specify default languages for all the output types or specify them per output type.
- Ditaval file to use; it is possible to specify a default Ditaval file for all output types or specify it per output type.
- User parameters that must be applied; these are the user parameters that are defined in the transformation scenario for the output type. It is possible to specify default parameters for all the output types or specify them per output type.

### Build Manifest Workflow

Just like any object, the Build Manifest goes through a DITA CMS workflow. When a Build Manifest object is created, it is in **Authoring:work**. The Build manifest file must be locked before it can be edited, and it must be released when the work is completed.

It is also possible to create a snapshot of a Build Manifest object.

### Overview: Create a Build Manifest for a Map



When creating Build Manifest files, consider the naming of the file, to be consistent and applicable for the bookmap, use the bookmap title. Also recommended is to add, for example, an overall product area that these Build Manifest files belong to (in example ERS).

Naming convention: `product area optional identifier bookmap title PDF/DXP`.



Example of Build Manifest files connected to bookmap:

Results List page 1 of 1 ( 2 results found )

Title	Status
 ERS: RBS Description 6110, 6120 DXP	Authoring:work
 ERS: RBS Description 6110, 6120 PDF	Authoring:work

Create one file for each bookmap and output type:

1. Create a Build Manifest file.
2. Set default values for Ditaval files, languages, and user parameters.
3. Create and configure all the output types.
4. Output the Build Manifest with the Output Generator, which generates all the outputs configured in the Build Manifest.



## 9 Create a Build Manifest

The first step is to create the Build Manifest file.

**Note:** Build manifests are currently not functioning properly and should not be used.

The Information Architect is responsible for the Build manifests. Before creating or editing Build manifest files, confirm with the Information Architect and product information release responsible that they are used for the product information to generate output.

To create a Build Manifest for a map:

### Steps

1. In a view that lists the map, right-click the map and select **Create Build Manifest**.

**Result:** The Create Build Manifest window is displayed:



**Create Build Manifest**

Id: mhc1540208155497

Title:

Description:

Mode: PRODUCTION

Notify:

Mapref: ggg1539779063194.ditamap

Language: ☐ en-US - English

Template: ☒ build-manifest.bmanifest

☐ Open build manifest in default editor

? Save Settings Create Cancel

Figure 12 Build Manifest Window

The following table describes the fields in the **Build Manifest** window:

Table 3 Build Manifest Window

Field	Description
Id	Id of the Build Manifest object. This field is generated automatically and cannot be modified.
Title	Name of the Build Manifest.

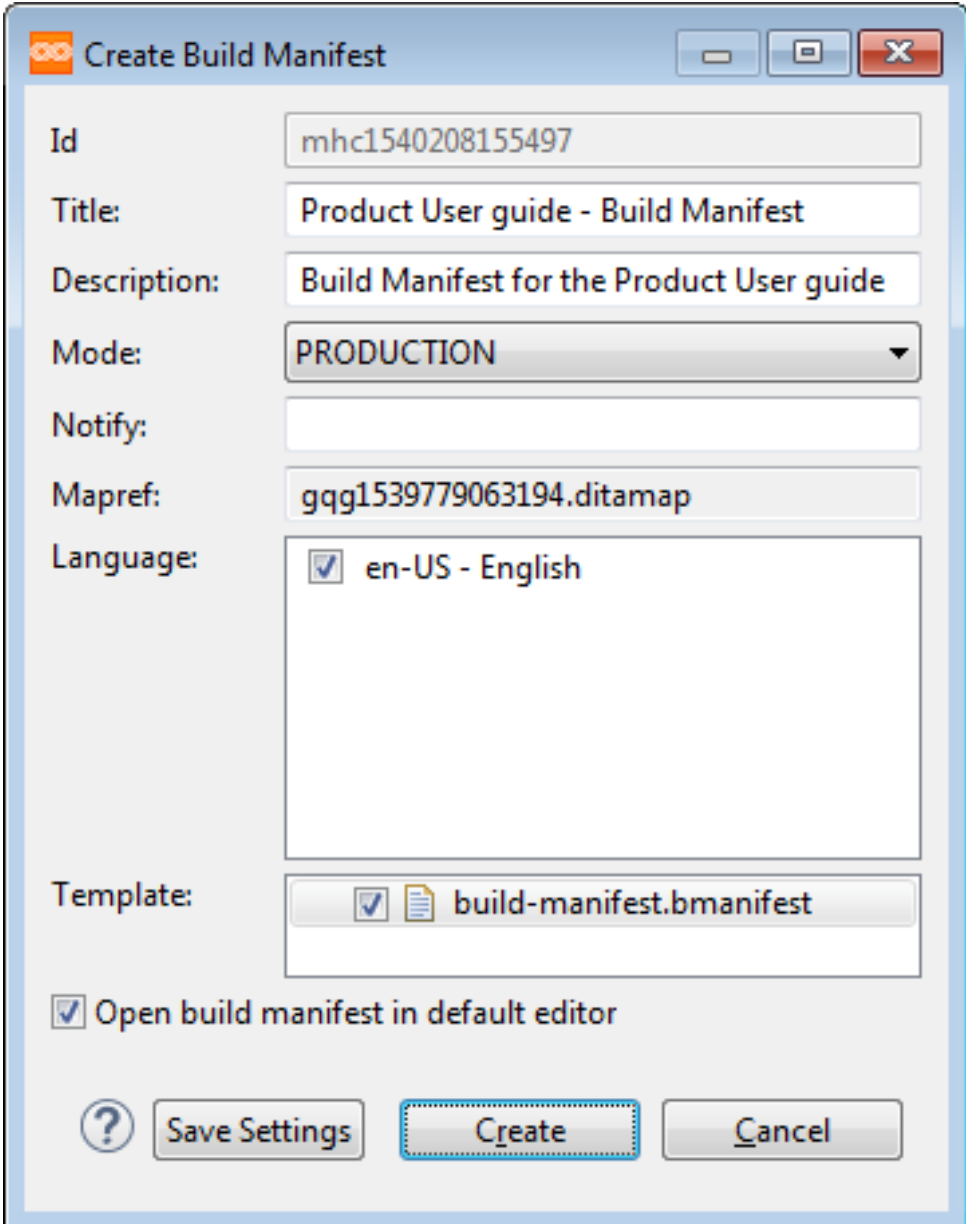




Field	Description
Description	Description of the Build Manifest object. The description will be added to the shortdesc element of the object.
Mode	<ul style="list-style-type: none"> <li>— Mode=Debug: For debugging only, do not use.</li> <li>— Mode=Production: Use for all normal scenarios.</li> </ul>
Notify	<p>Email address of the person to notify when the build is completed. This does not have to be a DITA CMS user.</p> <p>It is possible to enter multiple addresses, separated by either a space or a comma. The addresses can take any of the following forms:</p> <ol style="list-style-type: none"> <li>1. address@xyz.com</li> <li>2. name &lt;address@xyz.com&gt;</li> <li>3. &lt;address@xyz.com&gt; name</li> <li>4. (name) address@xyz.com</li> <li>5. address@xyz.com (name)</li> </ol>
Mapref	ID of the map to generate.
Language	List of default languages into which to generate the outputs.
Template	Template to use to create this Build Manifest object.

2. Enter the fields as appropriate for your Build Manifest.

For example, the following diagram shows the window for the DITA CMS User Guide:



The image shows a 'Create Build Manifest' dialog box with the following fields and options:

- Id:** mhc1540208155497
- Title:** Product User guide - Build Manifest
- Description:** Build Manifest for the Product User guide
- Mode:** PRODUCTION (dropdown menu)
- Notify:** (empty text field)
- Mapref:** gqg1539779063194.ditamap
- Language:** ☒ en-US - English
- Template:** ☒ build-manifest.bmanifest
- ☒ Open build manifest in default editor
- Buttons:** ? (help), Save Settings, Create (highlighted with a red dashed border), Cancel

Figure 13 Build Manifest Window with Information Entered

3. Check **Open build manifest in default editor** to open the Build Manifest.
4. Click **Create**.

**Result:** The Build Manifest file is created. If the **Open build manifest in default editor** option was selected, the Build Manifest object is opened in the DITA CMS, as shown below, and the values entered in the Create Build Manifest window are displayed:



**Product User guide - Build Manifest**

**General informations**

Title: Product User guide - Build Manifest

Description: Build Manifest for the Product User guide

Mode: PRODUCTION

Mapref: BM 1 [hqe1539774737769] R1 DEL

Notify:

Ditaval:

**Languages**

☒ en-US - English

**User parameters**

Key	Value

Default values | **Outputs** | XML Preview

Figure 14 Build Manifest Main Window

The Build Manifest window has the following tabs:

- **Default values:** Specifies general information about the Build Manifest. It also makes it possible to configure default values for Ditaval files, languages, and user parameters. The default values are used for all the output types defined in the Build Manifest, unless they are overridden for a specific output type.
- **Outputs:** Specifies the different types of output into which to transform the source map. It is possible to override the default Ditaval, language, and user parameter values for an output type in this tab.
- **XML Preview:** Provides the XML preview of the Build Manifest object. It is not possible to modify the XML source.

## Results

The next step is to set default values for Ditaval files, languages, and user parameters.



## 9.1 Set default values for Ditaval files, languages, and user parameters

A Ditaval file, languages, and user parameters can be set that will apply to all the output types defined in the Build Manifest.

When a Ditaval file, languages, or user parameters is set in the Default values tab, they will be used for all outputs that do not have Ditaval, languages, or user parameters values defined.

When values for a specific output type are defined, the default values are ignored for that output type.

To define default values for the output types:

### Steps

1. In the Build Manifest window, select the **Default values** tab.
2. To set a default Ditaval file, in the Ditaval field, click the ... button. Select the Ditaval file to use and click **OK**.
3. To set default languages, select them in the **Languages** area.
4. To set default user parameters, in the User parameters area, right-click the area and select **Add**.

The User parameters window is displayed.

5. In the **Key** field, enter the name of the user parameter.

**Note:** The name specified in the Key must exactly match the name of the user parameter as defined in the `preprocessors.xml` file of the Output Generator. The `preprocessors.xml` file is managed centrally.

6. In the **Value** field, enter the value for this user parameter.
7. Click **OK**.

The parameter is added to the window.

8. Repeat for every default user parameters that must be set.
9. Save the Build Manifest.

### Results

The next step is to add and configure output types.



## 9.2 Add and Configure Output Types

Adding and configuring output types in the **Outputs** tab of the **Build Manifest** window.

For each output type, it is possible to define the following information in the **Output type information** area:

- **Type:** Name of the output type from the Output Generator.
  - Note:** The user must be connected to a running Output Generator before output types can be defined. The Build Manifest feature retrieves the list of available output types from the running Output Generator.
- **Status:** Specifies whether the output type is enabled or not. This can be useful if an output type is to be configured without generating it right away. When set to **DISABLED**, the output type will not be generated when outputting the Build Manifest.
- **Description:** Description of the output type.

The following values can be overridden for the output type:

- **Ditaval:** Ditaval file that will be used for this output type. If a Ditaval file is specified for the output type, the default Ditaval file specified in the **Default values** tab (if any) will be ignored. Connect one Ditaval file for each output for profiled bookmaps with several variants, see [Manage a Build Manifest for All Variants](#) on page 53.
- **Languages:** Languages that will be used for this output type. If a language is specified for the output type, the default language(s) specified in the **Default values** tab (if any) will be ignored.
- **User parameters:** User parameters that will be used for this output type. These are the user parameters that are defined in the transformation scenario for the output type. If parameters are specified for the output type, the default parameters specified in the **Default values** tab (if any) will be ignored. The name specified in the Key must exactly match the name of the user parameter as defined in the `preprocessors.xml` file of the Output Generator. The `preprocessors.xml` file is managed centrally.
  - Note:** User parameters are not cumulative. For example, if parameter values are set at the Default level and then other parameter values are set at the Output type levels, only the parameters set at the Output type level will be used.

To add output types:



## Steps

1. In the Build Manifest window, click the **Outputs** tab.

The Output types tab is displayed:

Figure 15 Build Manifest Main Window - Output Tab

2. To add a new output type, right-click in the Output types area and select **Add**.

A new output type is added in the Output types area. By default, the output type is enabled, meaning that it will get generated.

3. Select the new output type and specify the information for this type in the **Output type information** area, as follows:

Option	Description
Type	Select the output type  <b>Note:</b> If the Type field is displayed in red and it is not possible to select an output type, this means that there is no Output Generator running. The user must connect to a running Output Generator before an output type can be configured.
Status	Select one of the following:



Option	Description
	<ul style="list-style-type: none"> <li>— To generate this output type when generating the build manifest, select <b>Enabled</b>.</li> <li>— Otherwise, select <b>Disabled</b>.</li> </ul>
Description	Enter a description for this output type.

4. To configure a Ditaval file, user parameters, or languages specifically for this output type, select the output type and click **Override default ditaval/languages/parameters**.

The **Overridden output values** area appears.

5. To override a Ditaval file, in the Ditaval field, click the ... button and select the Ditaval file to use and click **OK**. This step is done to connect each output type to each Ditaval file used in the bookmap.
6. To override languages, select the languages in the **Languages** field.
7. To override user parameters, In the User parameters area, right-click the area and select **Add**.

8. In the **Value** field, enter the value for this user parameter.

9. Click **OK**.

The parameter is added to the window.

10. In the **Key** field, enter the name of the user parameter.

**Note:** The name specified in the Key must match *exactly* the name of the user parameter as defined in the `preprocessors.xml` file of the Output Generator; for example, `ixia.args.rellinks`.

11. Repeat this procedure for every output type to generate.
12. Close the Build manifest and save changes.
13. Locate the Build Manifest and release it.

**Result:** Output can now be generated from the Build Manifest.

### After This Task

For information about how to generate output using a Build Manifest, see [Output a Build Manifest](#) on page 52.



## 9.3 Search for a Build Manifest

Build Manifests are categorized as other document types in the DITA CMS Search view.

To search for a Build Manifest:

### Steps

1. In the **Dynamic Release Management** pane of the **Search** view, click clear.
2. In the **Cycles** pane of the **Search** view, select **Authoring**.
3. In the **Document Types** panel, deselect all document types.
4. Click the drop-down arrow to the right of **Others**.
5. Select only **build-manifest**.
6. Click the **Search** button.

## 9.4 Output a Build Manifest

To output a Build Manifest, the Build Manifest output generator type is used.

**Note:** The Build Manifest must be released to get the most recent content.

This procedure describes how to output a Build Manifest using the Generate Output command in the DITA CMS Eclipse Client.

Generating a Build Manifest can take a long time, depending on the size of the maps and the number of output types configured. It is recommended that an output directory is created and that the Auto-Save option is selected so that the Build Manifest outputs are saved automatically when the operation is completed.

When generating output with Build Manifests that has many variants or for large documents, follow these guidelines:

- Do not send Build Manifest output generation to background in DITA CMS client since this makes it hard to know if the output generation is progressing.
- Never start the same Build Manifest generate output until the first has completed.
- Never run two different Build Manifest generate output in parallel from the same DITA CMS client.





- If possible, start large Build Manifest output generation at the end of working hours.

To output a build manifest in the DITA CMS Eclipse Client:

### Steps

1. Right-click the Build Manifest to output and select **Generate Output**.  
The Generate Output window is displayed.
2. Select the BuildManifest output type and click **Create**.

### Results

The outputs are generated for this map.

**Note:** This operation may take hours, depending on the number of output type/languages and map sizes.

When the output is completed, it is saved in a file called:

```
<build_manifest_title>.BuildManifest.<authoring_language>.zip
```

The zip file includes the following:

- The Build Manifest file in XML format (for example, mte1425048934103.bmanifest)
- A log file for the output operation (for example, mte1425048934103.build.html)
- Directories for all the output types

## 9.5 Manage a Build Manifest for All Variants

For profiled bookmaps with several variants, the build manifest file is used to create output for all variants at the same time. It is recommended to create one build manifest file for all PDF outputs for all variants and one build manifest file for all variants for DXP outputs.

### Prerequisites

The bookmap has all the variants for the profiling attributes mapped in the metadata. Ditaval files are created for each variant in the bookmap.

### Steps

1. Create a Build Manifest file and set the values in **default values** tab. Leave the default Ditaval empty.



2. In the Build Manifest window, select the **output tab** to connect all the Ditaval files, one for each output.
3. To add a new output type, right-click in the **Output types** pane and select **Add**.

A new output type is added in the Output types area. By default, the output type is enabled, meaning that it will get generated.

- a. Select the type for the output, for example PDF or DXP.
  - b. Write a short description for the output.
4. To configure a Ditaval file, user parameters, or languages specifically for this output type, select output type in the **Output type** pane and select **Override default ditaval/languages/parameters** below the **Output type** pane.

The **Overridden output values** pane appears.

5. Click the ... button and select the Ditaval file to use and click **OK**.

The screenshot shows the 'Output types' pane with a table containing one entry: 'jxa1458288538576' of type 'DXP\_Upload' and status 'ENABLED'. Below the table is a checkbox labeled 'Override default ditaval/languages/parameters' which is checked. To the right is the 'Output type informations' pane showing the same entry with fields for Id, Type, Status, and Description. Below these panes is the 'Overridden output values' pane, which contains a 'Ditaval' field with a dropdown menu showing 'Li-ion Battery [bjc1457950061210]' and a button with three dots. Below the 'Ditaval' field is a 'Languages' section with a checkbox for 'en-US - English' which is checked. To the right of the 'Overridden output values' pane is a 'User parameters' table with columns 'Key' and 'Value'.

Id	Type	Status
jxa1458288538576	DXP_Upload	ENABLED

☒ Override default ditaval/languages/parameters

**Overridden output values**

**Ditaval**

Li-ion Battery [bjc1457950061210] ...

**Languages**

☒ en-US - English

**User parameters**

Key	Value

6. To override languages or user parameters add the information in each field. Not needed if the default values are applicable.



7. Repeat the steps to connect all the Ditaval files for all variants for the bookmap.

Output types			Output type informations	
Id	Type	Status	Id	xpj1458288649960
jxa1458288538576	DXP_Upload	ENABLED	Type	DXP_Upload
xpj1458288649960	DXP_Upload	ENABLED	Status	ENABLED
			Description	V2 Transmission equipment

☒ Override default ditaval/languages/parameters

Overriden output values	
Ditaval	User parameters
Transmission Equipment [jbk1457950136356]	Key
	Value

Languages

☒ en-US - English

## Results

When generating output, the build manifest file is used, and all the variants connected to each bookmap is generated at the same time.



## 10 Use Ditaval and subjectScheme Efficient in DRM

Depending on selected DRM strategy, different considerations need to be made for efficient management of Ditaval and subjectScheme files.

A subjectScheme must be loaded when creating or editing a Ditaval file if locally defined profiling values are used. Only one subjectScheme can be loaded.

Ditaval files can have shine through and be referenced by multiple DRM Versions like topics. A subjectsScheme behaves like a map and can only be referenced by one DRM Version.

When creating or editing a Ditaval and loading a subjectScheme, the subjectScheme must be referenced by the DRM Version that is the Primary Version for the Ditaval file. For more information about Primary Version, refer to [How to Manage Content in DITA CMS](#).

There are also different problems, depending on scenario, with having Ditaval and subjectScheme files in Delivery Track Trigger DRM Versions where content is propagated when status is changed to approve.

For information about how to work efficient with Ditaval and subjectScheme with different DRM strategies, see:

- [Use Ditaval and subjectScheme Efficient with Delivery Track Trigger](#) on page 56
- [Use Ditaval and subjectScheme Efficient in DRM without Delivery Track Trigger](#) on page 60

**Note:** If only centrally managed profiling values are used and no subjectScheme are used, then the DRM Version referencing the Ditaval files does not need to be referenced by the DRM Versions referencing the content files (bookmaps, topics, and so on).

### 10.1 Use Ditaval and subjectScheme Efficient with Delivery Track Trigger

It is strongly recommended that a separate DRM Library is created with a DRM Version that reference the Ditaval and subjectScheme files when



locally managed profiling values in a subjectScheme are used together with Ditaval and a Delivery Track Trigger (DTT) DRM strategy.

This DRM Version can then be referenced by the DRM structure so that the subjectScheme is available in the different DRM Versions where it is needed.

**Note:** When creating or editing a Ditaval file, the subjectScheme can only be loaded from the DRM Version that is the Primary Version for the Ditaval file.

- If the DTT DRM strategy is a "true" one track where the delivery DRM Version is never cloned:
  - There is no need to clone and close the DRM Version for the Ditaval and subjectScheme. Instead, the Ditaval and subjectScheme files can be cloned and renamed if there is a need to save a copy for a certain revision of either file.
- If the DTT DRM strategy includes cloning the delivery DRM Version and later closing that clone of the DTT delivery DRM Version:
  - Clone the DRM Version for the Ditaval and subjectScheme and update the DRM references. This must be done so that the cloned Ditaval and subjectScheme DRM Version can be closed - or else the clone of the delivery DRM Version cannot be closed.

If there is a need to edit a Ditaval file after clone of the DRM Version referencing the Ditaval file:

- Create a new instance of the Ditaval file and move it to the correct position in the Ditaval structure in the **Ditaval** view. It can also be convenient to rename the corresponding subjectScheme so that it is easy to see which subjectScheme is used in the bookmap.

**Note:** If only centrally managed profiling values are used and no subjectScheme are used, then the DRM Version referencing the Ditaval files does not need to be referenced by the DRM Versions referencing the content files (bookmaps, topics, and so on).

### Example 3 DTT with One development-delivery DRM Version Pair

Scenario: One DRM Library contain one development-delivery DTT DRM Version pair:

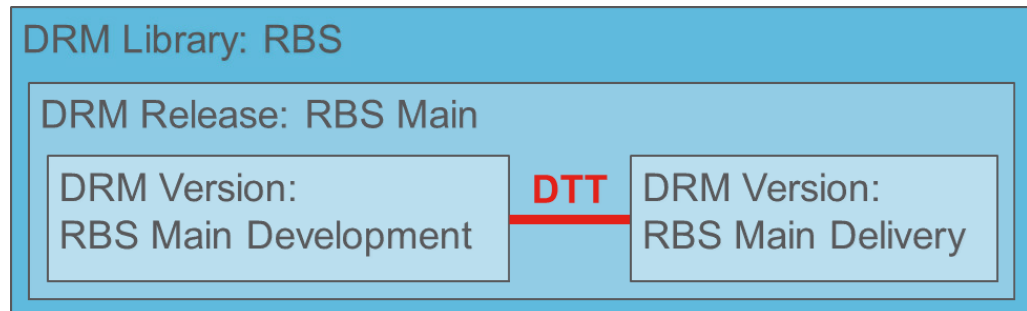


Figure 16 One DTT DRM Version Pair in One Library

Create a DRM Library for Ditaval and subjectScheme only. Add references from the DTT development and delivery DRM Versions to the DRM Version containing the Ditaval and subjectScheme:

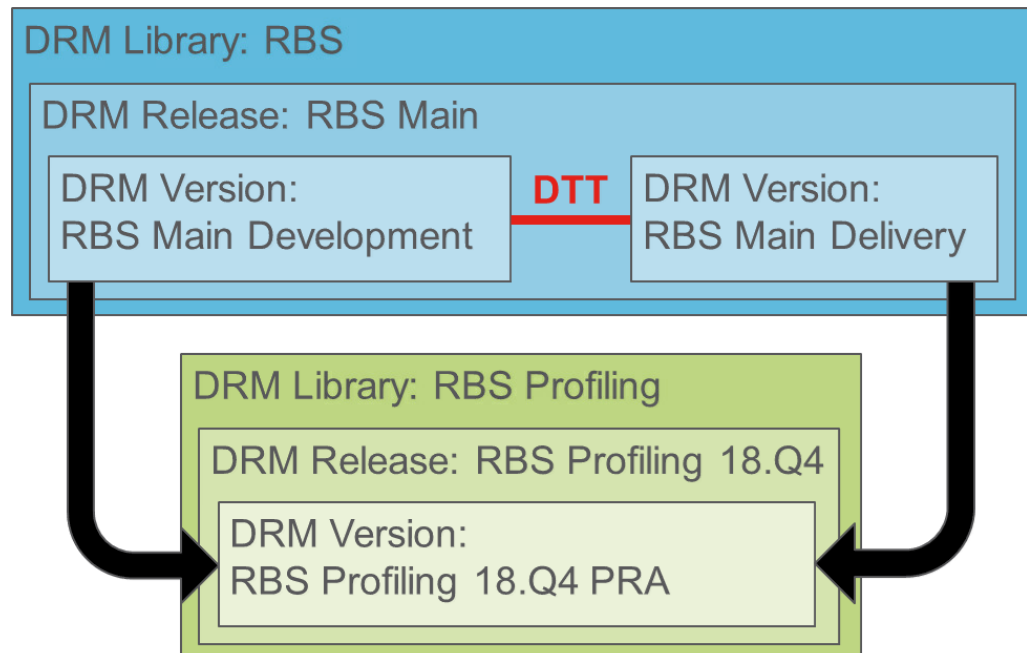


Figure 17 One DTT DRM Version Pair Referencing DRM Version with Ditaval and subjectScheme

Both DRM Versions in the development-delivery DTT DRM Version pair reference the same DRM Version.

#### Example 4 DTT with Multiple development-delivery DRM Version Pairs

Scenario:

Two DRM Libraries, one for RBS 1234 and one for RBS 5678, each contain a development-delivery DTT DRM Version pair.



Respective Development and Delivery DRM Version reference the corresponding DTT DRM Version in another library, RBS COMMON.

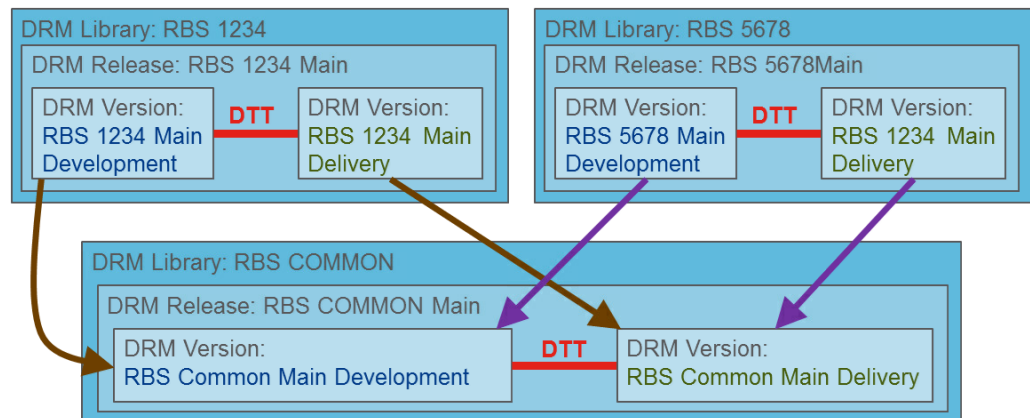


Figure 18 Three DTT Libraries in a DRM Structure

Create a DRM Library for Ditaval and subjectScheme only. Add references only from the **RBS COMMON** DTT development-delivery DRM Version pair to the DRM Version containing the Ditaval and subjectScheme:

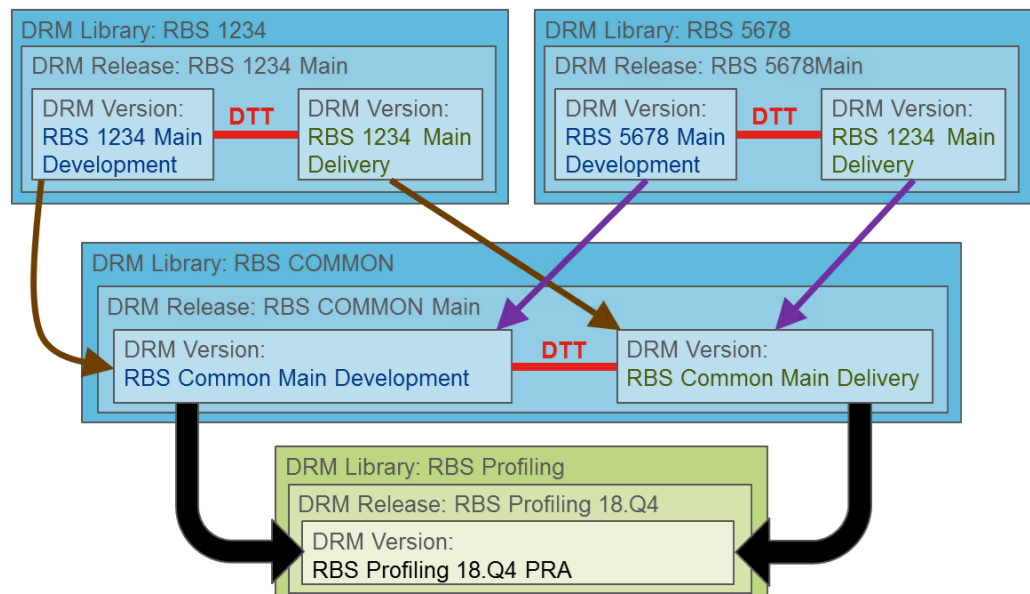


Figure 19 Three DTT Libraries Referencing DRM Version with Ditaval and subjectScheme

Both DRM Versions in the **RBS COMMON** Librarys delevopment-delivery DTT DRM Version pair reference the same DRM Version in the **RBS Profiling** DRM Library.

The DRM Versions in the **RBS 1234** and **RBS 5678** Libraries reach the subjectScheme through the DRM structure. Do not create references from them to a DRM Version in the **RBS Profiling** DRM Library.



## 10.2 Use Ditaval and subjectScheme Efficient in DRM without Delivery Track Trigger

It is strongly recommended that a separate DRM Library is created with a DRM Version that reference the Ditaval and subjectScheme files when locally managed profiling values in a subjectScheme are used together with Ditaval files.

This DRM Version can then be referenced by the DRM structure so that the subjectScheme is available in the different DRM Versions where it is needed. It is recommended to name the DRM Library for Ditaval and subjectScheme to "ProductName Profiling". For example "R6000 Profiling" for the R6000 products.

Set the Library layer for this DRM Library to layer "[10] platform". Only reference the DRM Version for Ditaval and subjectScheme from the bottom part of the DRM structure - do not create multiple parallel redundant references to the DRM Version for Ditaval and subjectScheme.

**Note:** When creating or editing a Ditaval file, the subjectScheme can only be loaded from the DRM Version that is the Primary Version for the Ditaval file.

Before the DRM Version referencing the content can be closed, all DRM Versions referenced by that DRM Version must be closed. Close the DRM Version for Ditaval and subjectScheme files, and clone it when there is a need to update the Ditaval or subjectScheme files. After cloning, update the relevant DRM references. Then create a new instance of the Ditaval file that needs to be updated and manually move the new instance of the Ditaval file to the correct position in the Ditaval tree in the Ditaval view. It is also recommended to rename the subjectScheme in the new DRM Version so that it is easy to tell them apart.

**Note:** If only centrally managed profiling values are used and no subjectScheme are used, then the DRM Version referencing the Ditaval files does not need to be referenced by the DRM Versions referencing the content files (bookmaps, topics, and so on).