Authoring Guidelines and Procedures

PRIMARILY FOR 3RD-PARTY AUTHORS – REV 2.0

ROOK WATTERS

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Executive Summary

This document covers the best practices and workflows that will help your team present acceptable authoring to the Peterbilt Manuals Team. If followed, these documents should highlight expectations, and reduce administrative dialog and rework. The Authoring Guidelines And Procedures document was primarily written for third-party, non-PACCAR authors; however, many of the practices in this document will also apply for PACCAR authors.

Though some style questions are addressed, this document does not completely describe PACCAR's authoring style. Consult the **PACCAR Style Guide** (linked below) for the standards that must be observed to author PACCAR content.

This document also presumes some familiarity with DITA, DITA syntax, and DITA/XML authoring software (e.g. Oxygen). Consult the **User Guide for IXIASOFT CCMS Desktop 6.3** (linked below) for more information on how to use DITA in the madcap IXIACCMS environment.

Your team should be presented with:

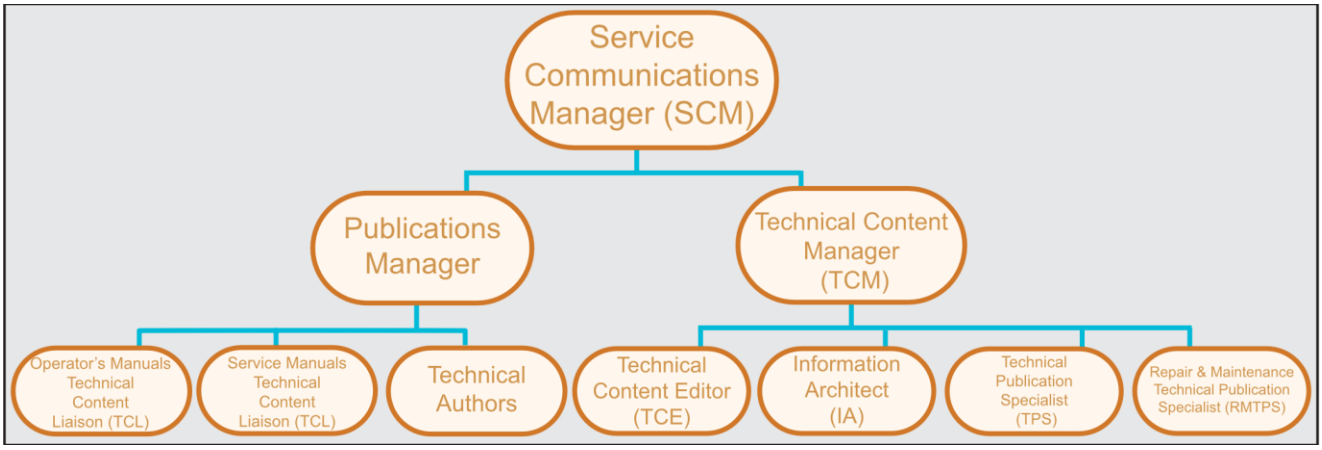
- The time, invite, and platform for regular project meetings.
- Accesses and permissions for the PACCAR VPN.
- The Log-in syntax and location for the IXIASOFT CCMS (Component Content Management System).
- A link to the IXIASOFT component content management system (CCMS) Desktop User Guide: User guide for IXIASOFT Desktop 6.3.
- Access and instructions on how to update progress in Smartsheet (SS).
- Access to the PACCAR Style Guide: PACCAR Style Guide.
- Authoring Guidelines and Procedures (this document).
- A location to upload PDF submissions.

New authors that are added to existing and future projects will need to be granted the access above. Please notify the Technical Content Liaison (TCL) and Information Architect (IA) when new authors will be working on PACCAR projects.

Peterbilt Technical Publications Team Roles

The Peterbilt Technical Publications (Tech Pub) Team includes the following roles:

- Service Communications Manager (SCM)
- Publications Manager
- Technical Content Liaison(s) (TCL)
- Technical Content Editor (TCE)
- Aftersales Technical Publication Specialist (TPS)
- Repair & Maintenance Technical Content Specialist (RMTPS)
- Technical Content Manager (TCM)
- Technical Authors
- Information Architect (IA)



Service Communications Manager (SCM)

The SCM manages the Tech Pub team. The SCM handles the business and forward-facing aspects of technical publications and works with their corresponding manager in our sister division to determine PACCAR's overall technical authoring direction. During your authoring, you should not need to communicate with the SCM.

Technical Content Manager (TCM)

The Technical Content Manager is responsible for developing processes that enhance content excellence and sustainability. During your authoring, you should not need to communicate with the TCM.

Publications Manager

The Publications Manager leads the Peterbilt Manuals Team, prioritizing and delegating authoring projects as well as handling manuals-related business concerns. Resource deployment (time and personnel) is determined by the Publications Manager and all manuals-related metrics and financing communications should be sent to them.

Technical Content Liaison (TCL)

The TCLs coordinate, track, and facilitate authoring efforts and will be your primary points of contact with the Peterbilt Publications Team:

- **Operator's Manuals TCL** – Responsible for operator's and supplemental manuals
- **Service Manuals TCL** – Responsible for service manuals and programming guides.

Authoring assignments will be distributed by a TCL, so please update the TCL assigned to your authoring project regularly. Most questions relating to your authoring assignment should be communicated to the TCLs. The biweekly Authoring Best Practices meeting also provides the opportunity to raise general authoring questions.

Aftersales Technical Publications Specialist (TPS)

The TPS collaborates with PACCAR engineering, the RMI Technical Content Specialist (TCS), and global publication teams to help deliver technically accurate content. The TPS also generates and localizes repair and maintenance information, operator manuals, programming guides, and other service information in print, PDF, and HTML formats.

Technical Content Specialist (TCS)

The TCS is responsible for ensuring the accuracy of technical content. Interfacing across divisions and departments, the TCS is available as a resource to answer product-related questions. Communication with the TCS should take place after first exhausting initial authoring resources.

Information Architect (IA)

The IA organizes PACCAR's technical publications content, oversees content reuse, and champions authoring in PACCAR's component content management system (CCMS or just CMS). The IA works with the TCL and Publications Manager during authoring projects and will help you with issues that might arise when using PACCAR's authoring platform IXIASOFT.

Technical Content Editor (TCE)

The Technical Content Editor examines technical content for adherence to the PACCAR style guide. The TCE also facilitates decision making in authoring situations where the best grammatical direction is uncertain. The TCE should be considered a subject matter expert (SME) as it concerns PACCAR's style, grammar, mechanics, and terminology. You might need to communicate with the TCE during your authoring.

Technical Authors

Technical Authors are in-house, PACCAR technical writers. You might need to communicate with them during your authoring.

Using the PACCAR Authoring Client - IXIASOFT

PACCAR uses Oxygen XML editor (hosted within the IXIASOFT client) to author PACCAR's technical content. Your team will use the IXIASOFT desktop client. The IXIASOFT desktop client (also called Eclipse) is a remotely accessed platform (using Remote Desktop Protocol (RDP)) that allows your team to author PACCAR technical documentation. Authoring using the IXIASOFT client requires an OXYGEN license.

Before attempting to access the IXIASOFT client you must have been:

- Added to the PACCAR system.
- Granted access to the PACCAR VPN.
- Added as a profile in the IXIASOFT client.
- Added to the IXIASOFT Microsoft user groups.

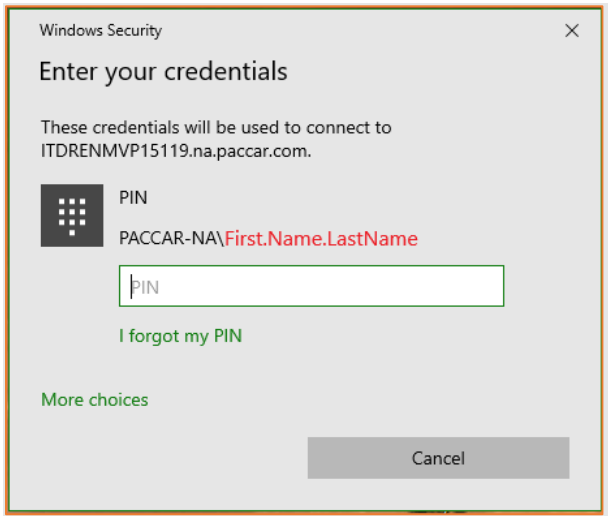
All the above are performed by the PACCAR Publications team.

IXIASOFT Desktop

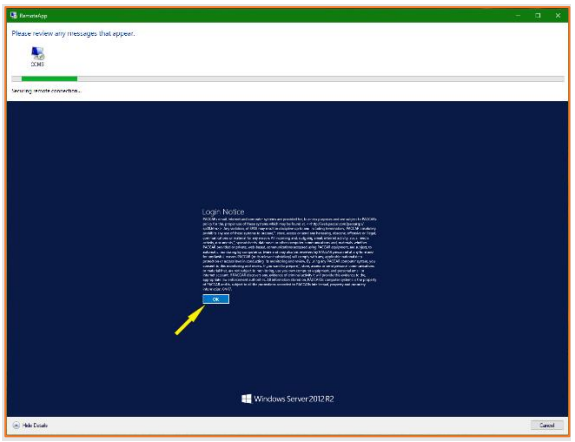
The IXIASOFT Desktop client uses a remote desktop protocol (RDP) to create and connect to a virtual instance of the IXIASOFT client (sourcing our content from a cloud, PACCAR server). This procedure walks you through the connection process for the first time. You will need to "cut & paste" the content from your OXYGEN license.

What follows are instructions on how to download the IXIASOFT client and input your license; however, due to platform upgrades and personal computer (PC) idiosyncrasies, we suggest you contact the TCL and IA to help set up your IXIASOFT desktop client for the first time.

1. Open this webpage https://ixiardp.na.paccar.com/rdweb
2. Enter your PACCAR window credentials. When you log into the desktop application for the first time and occasionally when your credentials need to be reestablished, you need to submit the domain name before your log-in name: “PACCAR-NA\first.last name".
3. Double-click on CCMS.
4. Open the downloaded file. This will create a remote desktop session to the IXIASOFT Desktop client (sourcing PACCAR’s PROD server).
   a. Add to taskbar for easy access later.
5. Enter the PIN you selected during account creation:



6. The CCMS Login Notice dialog box will appear. Select OK



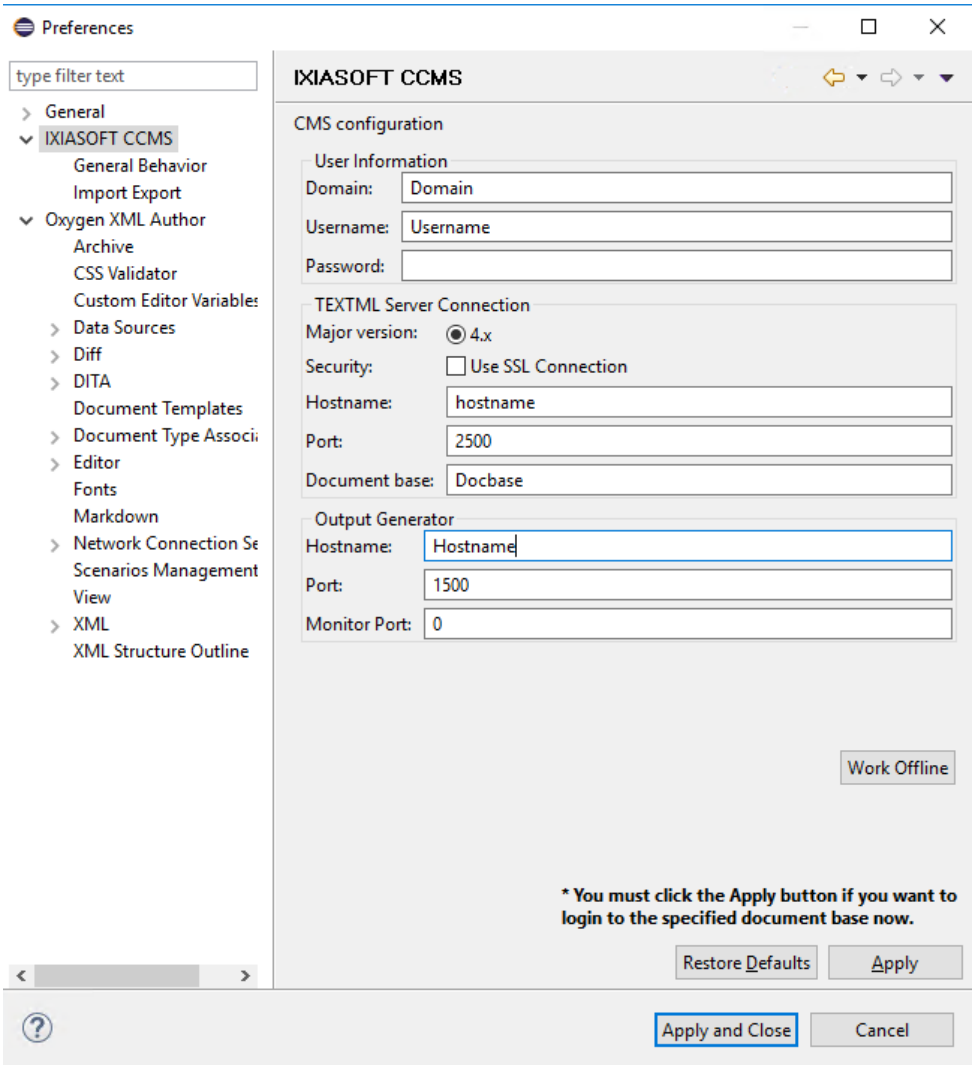
IXIASOFT Login Screen

IXIASOFT Desktop Client Splash Screen

7. A login page will ask for your username and password. Put in your PACCAR email and password to login to your desktop. If unable to log in, contact the TCL and *cc* the IA.

8. The IXIASOFT platform will populate via a Remote Desktop Connection.
9. From the IXIASOFT menu, select **Window-->Preferences**.
10. In the **Preferences** window, select **IXIASOFT CCMS**.

The IXIASOFT CCMS configuration panel is displayed:



IXIASOFT Desktop - Properties

Enter the following information:

- **Domain = "paccar-na" (all lower case)**
- **Username = Use windows login username (All lower case)**

  This is the same as the email address without the @paccar.com

- **Password**: Use windows login password (optional)
- TEXTML Server Connection:
  - **Hostname**: Enter itdrenmvp15120

- **Port**: Keep the default value (2500).
- **Document base**: Enter “prod”

- Output Generator:
  - **Hostname**:
    - Enter itdrenmvc15120 for generating service manuals
    - Enter itdrenmvp15120 for generating operator’s manuals
  - **Port**: Keep the default value (1500).
  - **Monitor Port**: Enter **0**.

11. Click **Apply**.

You need to click Apply to connect to the TEXTML Server. If you click OK without clicking Apply, you are not connected to the TEXTML Server.

The DITA CMS tries to connect to the TEXTML Server. When it has connected successfully, the following message is displayed:

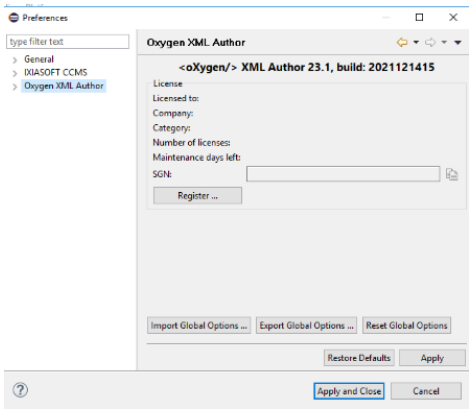
Login was done successfully.

12. Click **OK** to close the Login message.
13. Click **OK** to close the Preferences window.

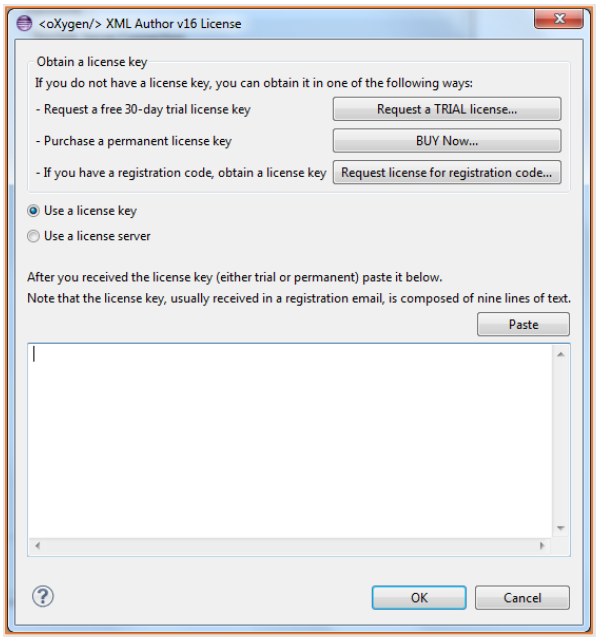
Insert Your OXYGEN License

You need to acquire an active Oxygen license. Contact your TCL to acquire your license.

1. From the IXIASOFT menu, select **Window-->Preferences-->Oxygen XML Author.**



2. The above image comes up, click **Register**, then the below image pops up.

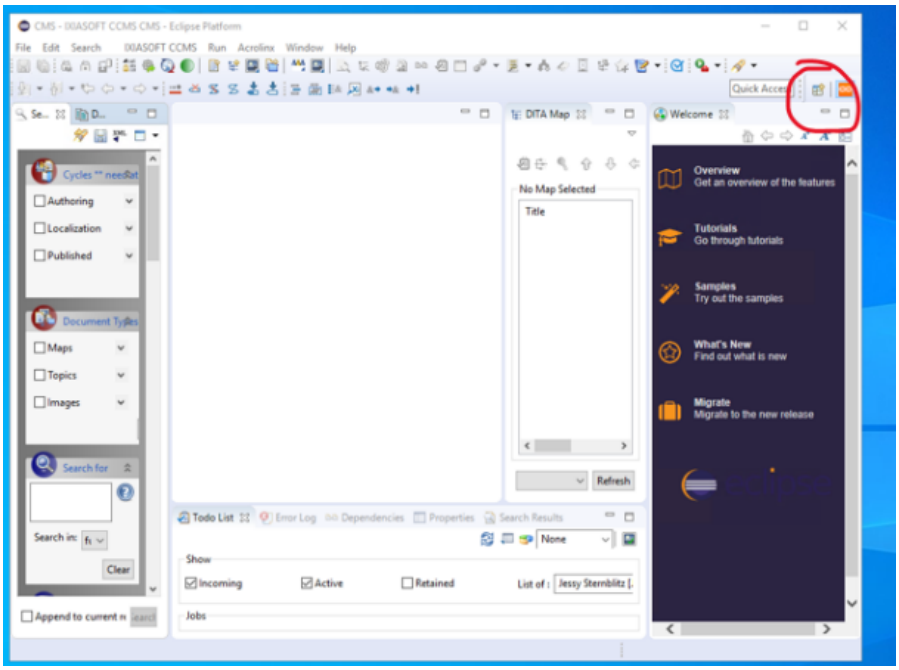


3. Copy the license key into this dialog box and select **OK.**

Selecting a Perspective

Complete the following steps to select a perspective:

1. Click the symbol button to the right of the "Quick Access" in the top right-hand corner.



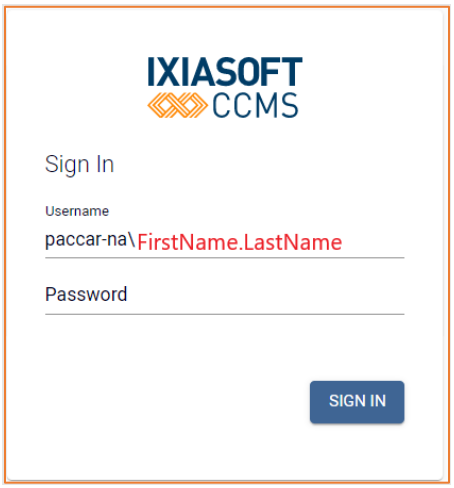
2. Choose DITA. The format will adjust accordingly.

IXIASOFT Web-based Client

The web-based IXIASOFT client is a browser-based platform that interfaces with PACCAR's technical content. The web-based client is better suited when exclusively authoring content. Use the desktop client to accomplish organization of content, conditionalization, keying, metadata, and batch processing.

1. Open this webpage Login | IXIASOFT CCMS
2. Enter your PACCAR credentials: paccar-na\"First Name"."Last Name"

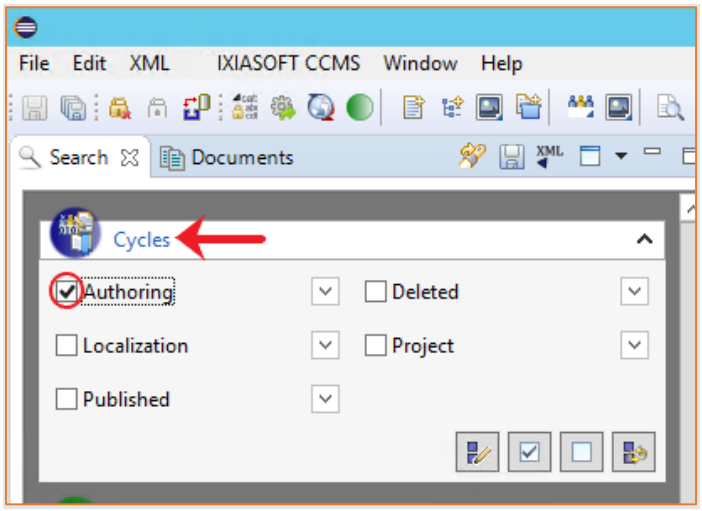
You do not need a password. Just click sign-in.



Cycles

Documents go through several phases of development. Each phase of document development has a unique set of people who are responsible for the document in that phase. The Cycles dialog box is located at the top of the Search tab. There are five cycles -- Authoring, Localization, Published, Deleted and Project.

Your team will only use the Authoring cycle located in the top left side. Ensure only the Authoring radio box is selected.



IXIASOFT Search Tab - Authoring Cycle Selected

All work by authors will use files in the Authoring cycle. **No other box should be selected.**

Authoring Cycle Workflows

Authoring cycles are status categories applied to content. Different cycles are applied based on whether the content is newly created, reviewed, revised, translated, or published. The following are common terms used during authoring cycle workflows:

1. Authoring: **work** – Topics should only be in Work if the topic is new or is being worked on.
2. Authoring: **review** – After initial authoring, topics submitted to the TCL for review use this cycle.
3. Authoring: **complete** – Place a topic into Complete once **all** review feedback (there may be several reviews) has been affected to the topic.
4. Authoring: **done** – Most topics in your project's bookmap should be in Done**.** ***Topics should not be moved out of Done unless the author needs to alter the topic.*** Once the project is complete, and only after you have received permission from the TCL should you move CCMS objects into (or back

into) Done.

Objects, Topics, Maps and Graphics

The following defines some terms you'll see frequently in this document:

Object

An object is any item in the CCMS: topic, graphic, key definition, map, glossary term, etc.

Topic

A topic is the basic storage container for information in the CCMS. All topics have a Topic ID (ex. nem1636639794395.xml) and can be located using that ID with the search feature. Most authoring will be accomplished in topics. See Topic Types and Uses.

Graphic

A graphic (or graphic object) is a CCMS container that holds one of three graphic types: LowRes (PNG), HiRes (SVG), and a "source graphic" (usually an EPS or AI file). A graphic object has a Topic ID (so it can be located) and other than the graphic format type, contains only graphic metadata. See Graphics.

Map

A map is a container for topics. There are only two types of maps you will use in your authoring:

DITAmap

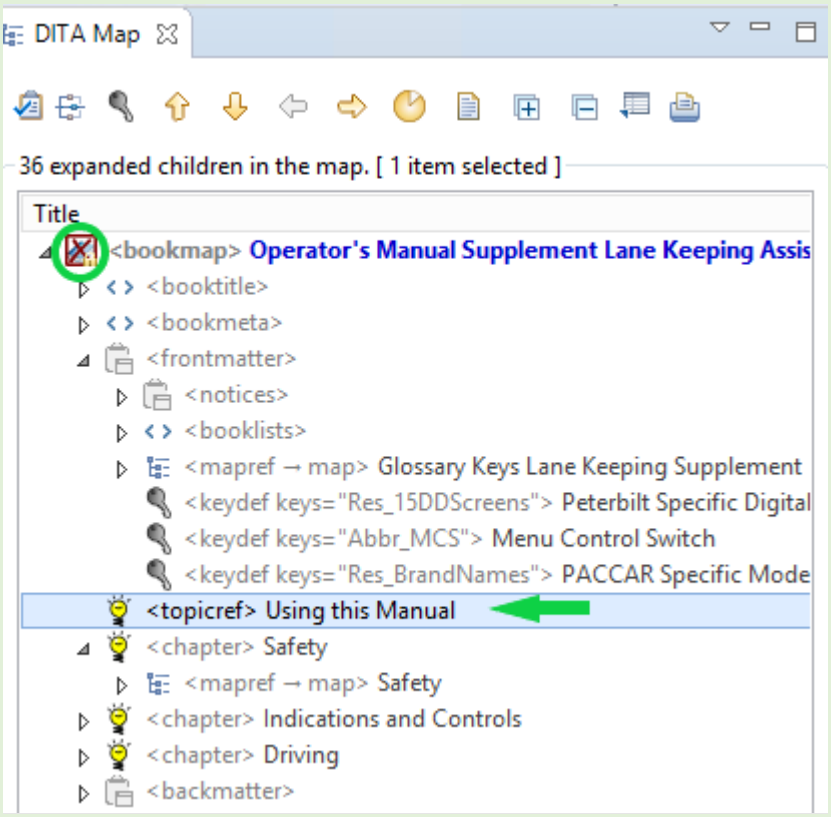
A DITAmap is an organizational container for CCMS objects that share something in common (i.e. a map containing all Air System topics, or a map containing all HVAC Warnings). DITAmaps can be nested within other DITAmaps or bookmaps. DITAmaps are never generated as stand-alone outputs.

Bookmap

A bookmap is an organizational container intended to be generated as an output. Unlike a DITAmap,

Broken Bookmap

It is possible to "break" a bookmap's organizational structure. The DITAmap view indicates this with a ☒ over the bookmap icon (ex. ○ below). In this particular case, the cause is the <topicref> inserted at the <chapter> level: ←. Once a bookmap's structure has been broken, it can be difficult to find what structural element has been violated and fixing the issue may require **Replacing with Server Revision** (from the drop-down menu).



Save your bookmaps frequently to avoid losing work.

Only move a topic out of Done if your authoring assignment demands it. This is to best preserve the security of PACCAR data. *Also, move topics into Done with forethought and deliberation to prevent having to move them out of Done to update your work.*

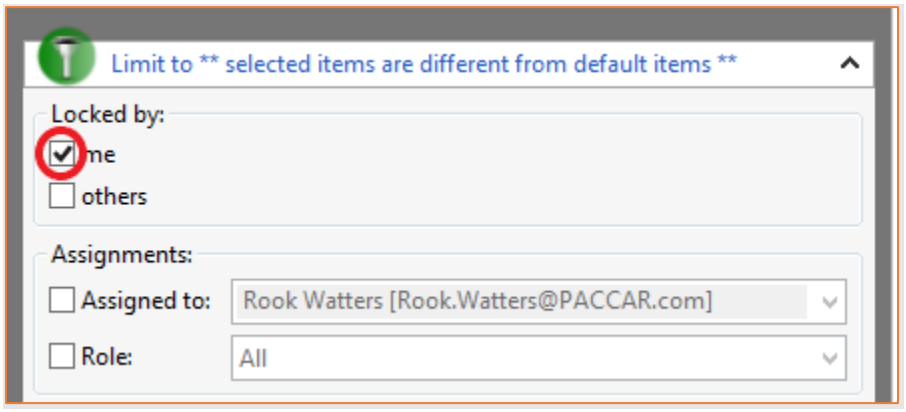
Locking and Releasing

- Try not to leave CMS objects locked over the weekend.
- Release all CMS objects if you know that you won't be logging into work for a while (i.e. vacation).
- When you release a topic, comment ***briefly*** as to what has been added or changed in the Release dialog box under the Comment space. **Always** cite whether the changes were motivated by a Change Log request:
    1. Example: Added new graphic in accordance with (IAW) Change Log (CL) 458.
    2. Example: Changed procedure due to 2023 software update IAW CL 444.

Locating Locked CCMS Objects

To locate objects you have locked in the CCMS, perform the following:

1. In the Search tab (usually on the left), select the **Maps**, **Topics**, and **Images** radio boxes in the **Document Types** section.
2. Clear the **Search for** box.
3. Select the **Locked by: me** radio box in the **Limit to** section:



Search Tab: Limit to Section: Locked by me selected.

4. Select **Search.**

CCMS objects currently locked to you will show in the Search Results tab.

Remember to uncheck the "Locked by" radio box when you've completed this search or future searches will be limited to only those objects you have locked!

Updating Your Progress

The Publications team needs to track the progress of assigned work. This is accomplished on the Smartsheet (SS) platform as well as during weekly TEAMs meetings.

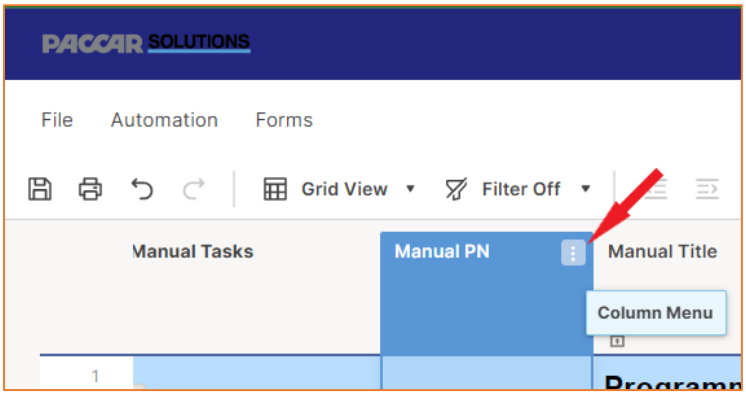
Every authoring project's document will have a name and part number. The TCL should provide you with this information. This part number allows a document to be located and tracked during various PACCAR processes.

Updating Smartsheet

To update your progress, you will need to know the part number associated with your document.

Locating Your Document

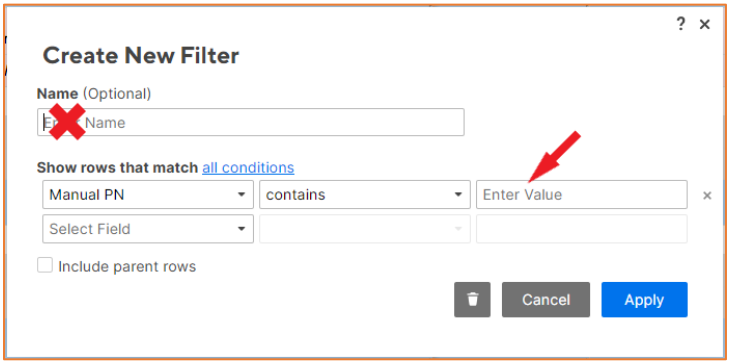
1. Locate the **Manual Status** sheet where your project is listed.
2. Along the top ribbon, look for the **Manual PN** column (you may have to scroll a bit, there are many columns).
3. In the **Manual PN** heading, select the column menu icon and then select **Filter** from the drop-down menu:



Smartsheet - Column Menu

a. The **Create New Filter** dialog box will appear.

4. You do not need to put a name in the **Name** box. Under **Show rows that match** section the first box should already be selected to **Manual PN.** In the far-right box (Enter Value), input the part number you were given for the project. Then hit **Apply**:



Smartsheet - Create New Filter

a. Your assigned project should populate on the sheet.

Updating Document Progress

Your team is responsible for updating the **Task Completion** and **Status** columns on the **Author Status** row.

Authoring

When your team is authoring, update the **Authoring** row weekly:

1. In the **Author Status** column of the **Authoring** row, change the cell value from “Not Started” to “In Process.” This is the only time your team will update this column.
2. In the **Task Completion** column, estimate the total authoring completed (as a percentage) for this project.
3. Select the save icon at the upper left to save your input.

If there is any additional information your team would like to communicate on this sheet concerning your research or authoring, add this information in the **Comments** column.

Remove any filter you applied to the **Manual PN** column.

Once Initial Authoring is Complete

Once your team has researched the project (reaching out to SMEs, reading any existing documentation), and completed your initial authoring, submit your deliverable to the TCL. See Creating a PDF.

Soliciting Feedback For Your Authoring

To maximize the efficacy of each phase of authoring, we try to involve the right team members at the right time. Formal reviews and meetings ensure that each team member's efforts are efficient and cumulative.

Authoring Meetings

Meetings allow quick, direct, informal conversation to initiate required research or approval.

Technical Knowledge and Product Touchbase

This meeting with the Repair and Maintenance Technical Content Specialist (RMTCS) and the Aftersales Technical Content Specialist (TCS) occurs *prior* to authoring, during the research phase.

Content Structure Planning and Initial Content Alignment

This meeting with the IA occurs when authoring begins. The IA can identify structural concerns or opportunities for reuse.

New Terminology Identification Meeting

New terminology, if it is required, should be identified early during the authoring process. When new terms are required or questions about terms arise, the author should begin a conversation with the TCE via chat or email. If the conversation is not quickly resolved, a meeting should occur.

New and updated terminology is frequently introduced. This can be a result of new products, branding changes, updated industry-specific language, or updates to reader-expected terminology. The TCE presents (usually an email) these new and updated terms periodically. A complete and up-to-date listing, however, can be found at this location: Acrolinx - PACCAR Terminology.

Reviews

Reviews provide an opportunity for tracked conversations and formal feedback. The review cadence depends on the authoring timeline. A review is almost always collaborative and conducted on a PDF using the Adobe Acrobat platform. Make sure that all the requirements for creating a PDF for submission are followed, including draft comments and the What's New? topic. See Creating a PDF.

The reviewers required for each stage of the review process depend on the deliverable: operator's manual or service manual/programming guide. The Technical Content Liaisons know which SMEs must see each PDF in this process.

Peterbilt hosts three *collaborative reviews,* each requiring a PFD from your team, ending in a collaborative approval: Internal Content Excellence, SME1, SME2, and the Approval.

Internal Content Excellence Review

This review attempts to address technical, grammatical, and formatting inaccuracies before the content is seen by the rest of the organization. Content structure and reorganization that did not take place during the *Content Structure Planning and Initial Content Alignment* meetings might also occur.

SME Review 1 (SME1)

This review captures most of the technical, safety, and legal feedback associated with the deliverable. The purpose of this review is to correct technical content and organization-expected terminology as well as ensure safety and legal-inspired requirements are upheld. The SME Review 1 also allows for a dialog between the reviewers and the Technical Content Specialist (TCS and RMTPS) when disagreements arise concerning technical content.

SME Review 2 (SME2)

This review presents changes to content inspired by feedback from the first SME review, presenting those changes to many of the same reviewers. This is to ensure that the requested changes have been sufficiently communicated. Additionally, efforts to perfect content syntax, grammar, and terminology are addressed. This review is also where the information architect evaluates the content for future reuse, organizing the content's file locations, and evaluating that content for opportunities to synthesize it into existing content, promoting reuse.

The SME2 attempts to present the content as it might be seen by the end user.

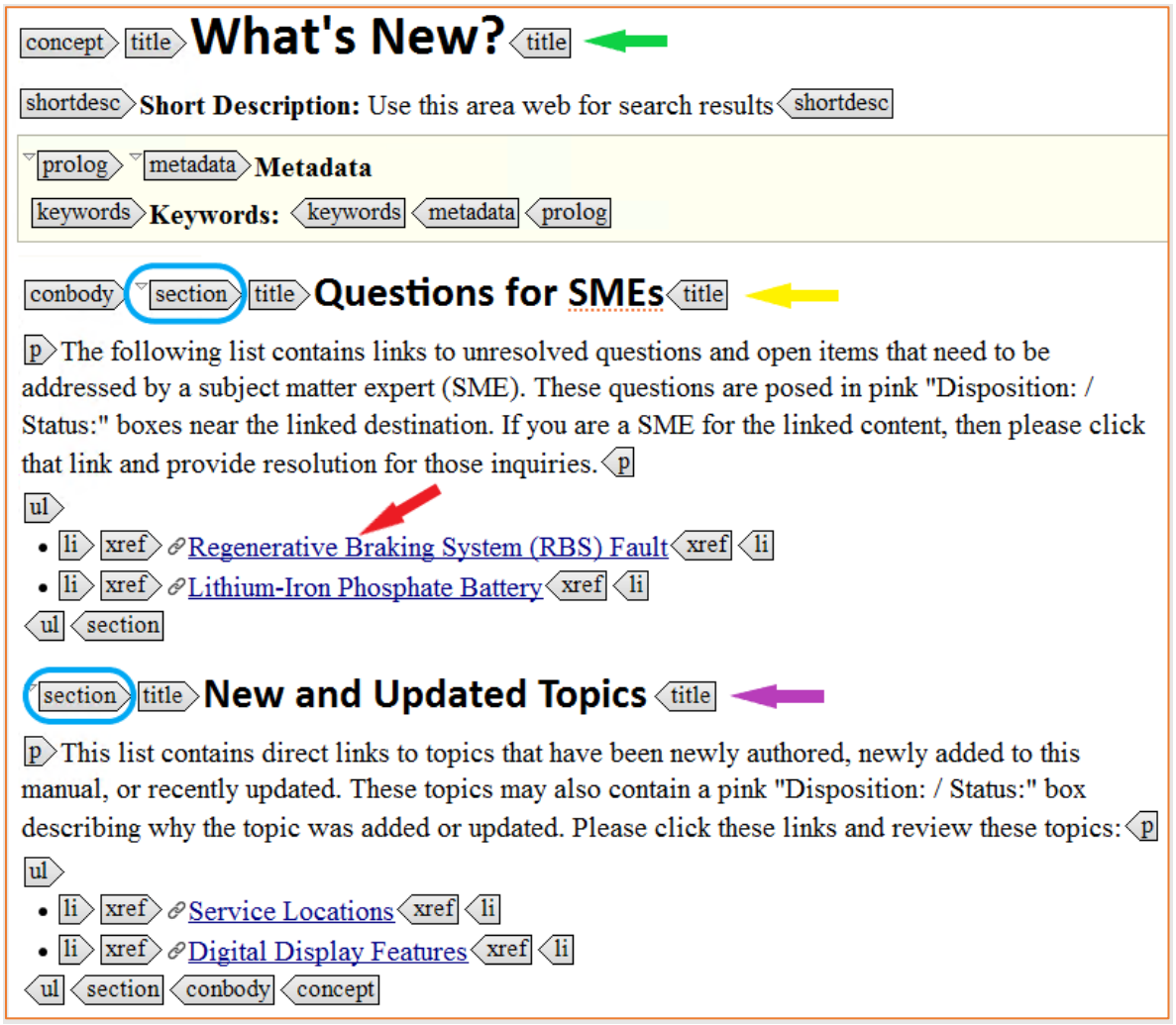
Approvals

Though technically not a review, this collaborative viewing of the document will require a PDF containing a What's New? topic and draft comments concerning new or changed content. The approval is the presumed final disposition of the content and ideally should not contain much feedback. Whether the feedback from an approval needs to be authored and then included prior to publication of the document will be determined by the TCL.

The "What's New?" Topic

The *What's New?* topic is an administrative topic (use the Concept topic type) placed in a bookmap prior to a review and is generated with the PDF. The What's New? contains links to topics in that PDF that are new or have been altered since the bookmap was last published. It also provides links to topics that contain draft-comments asking questions that went unanswered during the authoring process (see Draft Comments). The *What's New?* allows reviewers to leap directly to the information that needs to be reviewed, saving SMEs the effort of leafing through a PDF, topic-by-topic, searching for draft comments.

The What's New? is broken into two sections: **Questions for SMEs** and **New and Updated Topics**.



The What's New? topic as seen in Oxygen.

The What's New? topic:

- Is titled "What's New?"
- Provides a boilerplate introduction for both the **Questions for SMEs** and **New and Updated Topics** sections.
- Contains two sections that use the <section> tag set
- Uses bulleted lists.
- Uses <xref> to link directly to the topics that are new, have been altered, or require a question to be answered by a SME.
- Is placed before the first topic in the first <chapter>.

The What's New? topic has no utility after the manual has been fully approved and should be removed and deleted at that time.

What's New? Boilerplate Text

Copy the content that follows into your first "What's New?" Concept topic.

- **Title:** Questions for SMEs
- **Boilerplate Text:** The following list contains links to unresolved questions and open items that need to be addressed by a subject matter expert (SME). These questions are posed in pink "Disposition: / Status:" boxes near the linked destination. If you are a SME for the linked content, then please click that link and provide resolution for those inquiries.
- **Title:** New and Updated Topics
- **Boilerplate Text:** This list contains direct links to topics that have been newly authored, newly added to this manual, or recently updated. These topics may also contain a pink "Disposition: / Status:" box describing why the topic was added or updated. Please click these links and review these topics:

Authoring in the CCMS

Every authoring project is different and may require differing degrees of research, authoring, and organization in the CCMS. Some authoring projects will only need you to update existing documentation, requiring few if any new topics; other projects might require authoring from scratch (or repurposing OEM or engineering documentation) and require altering an existing manual structure to best present the new content.

Relevant content will probably be provided when you receive your authoring project. If that is not the case, a quick search of our CCMS may yield relevant images, maps, or topics.

Altering Existing CCMS Content

When altering existing content in the CMS, do the following:

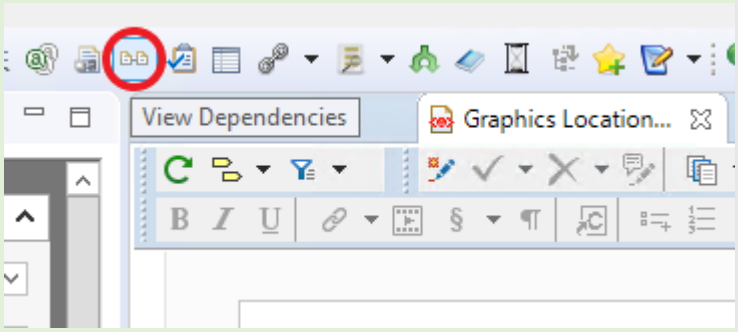
- Always **View Dependencies** before altering content. If the topic or image exists in more the one location, the changes you make **must be applicable at each location where that topic or image resides.** Ask your SME whether the changed content is applicable at all locations the content resides. **Asking this question is part of the authoring process.** This will typically mean determining if a change for one model vehicle is applicable for others as well. If, after an appropriate amount of inquiry, either that information is not forthcoming or the altered content *isn't* applicable at all locations, the topic should be cloned before altering the content.

If you clone content, reach out to your information architect and let them know about the cloned object. This is a valuable step because if later discovered that the content was applicable for all models, the information needs to be inserted into the original topic and the clone deleted.

- Always **View Dependencies** before adding or removing content from an existing DITAmap (obviously, this doesn't apply to maps newly created by the author). If your DITAmap exists in more than one manual, changes you make **must be applicable for every bookmap that contains this DITAmap.**

View Dependencies

To view all parent topics or maps of a CCMS object, populate the topic in the Oxygen view (center area) and select the View Dependencies icon in the top bar ribbon:

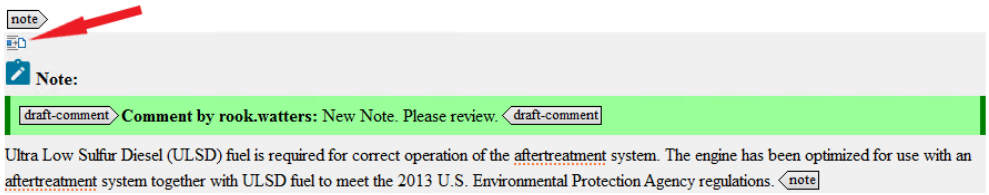


Or select View Dependencies from an object's right-clicked, drop-down menu.

- ***Only remove topics from Done that need to be changed.*** Do not "preemptively" move topics out of Done under the assumption that the topic will need to be changed.
- Information which you could use in your authoring might already exist in the CCMS and *was not* provided to your team as a resource. ***Searching the CCMS for bookmaps or topics associated with your authoring assignment can prove valuable.*** If you find content that was not provided or suggested for your project that you want to include, please present that information to the TCL prior to inclusion.
- Add a draft comment to altered (or new) topics (see Draft Comments).

Altering Referable Content

Referable content (RC) is information included in your topic that is sourced from (and actually exists in) another topic. RC can be identified in the IXIASOFT-Oxygen client surrounded by a gray box. The actual location of that content can be populated by selecting the RC icon at the top left corner of the box ↙. This will take you to the location where the RC resides.



For more information about altering referable content, see Referable Content.

Authoring New CCMS Content

Newly authored content must be in accordance with the PACCAR style guide. Ensure proper use of the following:

- Topic usage (see Topic Types and Uses)
- DITA tags (see PACCAR DITA Tags)
- Titling (see Naming CCMS Objects)

- Metadata (see Adding Metadata)
- Organization

Newly authored content should also contain a draft comment stating that the content is "new." See Draft Comments.

Topic Types and Uses

Topic types and their uses are covered in the PACCAR style guide. The following provides some additional advice:

Do not create topics that exist only to create a category heading for the topics which follow. For example, the topic <title> is present, but the topic doesn't include any information. Use a <topichead> or <chapter> element instead.

Concept Topics

Use concept topics for

- Features
- Components
- Concept descriptions

Pro Tip

- If a component shows only a graphic, with maybe a callout list, but no descriptive information, then a reference topic might be a better choice – connectors, tools topics.

Example Concept Topics

- Adaptive Cruise Control (ACC) – Topic ID ddi1657026973146
- Tips to Remember When Starting Vehicle in Cold Weather – Topic ID bil1438106788164
- MSB Identification – Topic ID usi1521215271033

Concept topics are frequently used when a reference topic would be a better choice. Read both topic types and know when to use each!

Reference Topics

Use reference topics for:

- Data
  - Setpoints
  - Measurements
- Maintenance Intervals

Pro Tips

- Reference topics can have one or two lead-in sentences but no more.
- Reference topics almost always use tables to hold the information.
- Title a reference topic but not the table contained in that topic. If more than one table is required, consider creating a new reference topic for the additional table. Use your best judgement.

Example Reference topics

- Wheel Cap Nut Torque Specifications – Topic ID dyi1448398064377.xml
- Every 750,000 mi / 1,200,000 km / 8 years – Topic ID iqv1560453958711.xml
- Ride Height Gauge – Topic ID hvr1674246918767.xml
- J00F <this is a connector topic> -- Topic ID gfx1608128117046.dita

Task Topics

Use task topics to create a process or task.

Pro Tips

- If the task you're authoring only has one step, use the <steps-unordered> tag instead of the <steps> tag.
- Use the <prereq> tag and an <ul> to list any special tools or tools used in an unusual way required for the task.
- Use <prereq> to list any processes or conditions that must be completed prior to performing the task. A link to those processes might be appropriate.
- Use the <context> tag to include preliminary images, safety messages, and introductory information (occasionally, safety messages should be included in the <prereq>).
- Try to avoid topic titles like "How to Open the Hood," or "What to Do When You Have a Flat." Instead, use "Opening the hood," and "Changing a tire." Sometimes this isn't possible, however.

Example Task Topics

- Opening the Hood – Topic ID lfq1601476277830.xml
- High Beam Operation – Topic ID bil1438106782252
- Replacing Headlight Bulbs – Topic ID wng1554147671235

Troubleshooting Topics

Use a troubleshooting topic to describe a troubleshooting processes for service manuals and troubleshooting guides:

- PACCAR uses a "diagnostic" approach when constructing troubleshooting topics, omitting use of the <cause> element.
- The <condition> element is used to provide context for the diagnosis – much like the <context> element in a concept topic – and one or more <remedy> elements.
- Each <remedy> presents a series of steps (like a task topic). At the end of that series a "yes or no" question is presented, that when answered, eliminates from consideration *potentially* faulty components or settings. Using this "daisy chain" of yes/no questions eventually arrives at the component (or setting) creating the symptomatic condition.

Because of the above construction, troubleshooting topics daisy-chain from remedy to remedy, with each remedy ending in a Choice Table <choicetable> to determine whether the technician should:

- Move to another remedy in that topic (usually the next one).
- Move to another troubleshooting topic.
- Stop the diagnosis at the current remedy.

PACCAR troubleshooting topics almost always attempt to diagnose the component presented in the title. The diagnostic tree sometimes starts with the technician having a diagnostic trouble code (DTC) or the failure mode indicator (FMI) part of the DTC. Checking the parent component that indicated an issue and following the troubleshooting steps for the component (or controller area network (CAN)) will lead the technician to the specific component that needs to be replaced.

Pro Tips

Only used in service manuals and troubleshooting guides.

Example Troubleshooting Workflow:

Remedy One

- Is value on CAN ≠ "XX" setpoint (yes/no)?
    - **If "YES," go to Remedy Two.**
    - **If "NO," do repair, then go to Remedy Two –** *interestingly, many troubleshooting topics don't assume the fault is corrected at this step.*

Remedy Two

- Remove component. Is value on component above "YY" setpoint?
    - **If "YES," go to Remedy Three.**
    - **If "NO," do repair, then go to Remedy Three.**

Remedy Three

- Reinstall component. Is value on CAN ≥ "ZZ" setpoint?
    - **If "YES," problem solved. No further action.**
    - **If "NO," go to "New Troubleshooting Topic."**

Referable *Content (RC) Topics*

RC topics contain elements meant to be inserted (conrefed) into other topics. Do not place RC topics directly into bookmaps. RC topics are organized and there are processes involved in their use and how they can be altered should they need to be.

RC topics are covered under Referable Content.

PACCAR DITA Tags

DITA tags (both elements and attributes) and their uses will soon be added to the PACCAR Style Guide. Because not all DITA tags are used in PACCAR authoring, familiarize yourself with the tag sets used by PACCAR and how PACCAR uses them.

Body tags (block elements) comprise a topic's structure and inline tags (or phrase elements) are mostly concerned with styling. Below, we list many tag sets used by PACCAR and any idiosyncratic uses they may have.

Standard Elements

Tag sets (elements) used in PACCAR topics	
<title>	Title -- titles topics, maps, and figures. ***Do not title tables in reference topics.***
<shortdesc>	Short Description – topic synopsis (see Short Description)
<fig>	Figure – container for images. See Graphics.

<menucascade>	Menu Cascade –describes a succession of menu/drop-down menu selections.
<note>	Note – used for safety messages and notes. See Safety Messages and Notes.
and	Unordered List – Itemizes with bullets when the list order is not important.
and	Ordered List – List items when the order is important. Also used for callout lists.
<table>	Table – PACCAR uses only CALS tables. ***Do note use simple or prop tables.***
<p>	Paragraph – Standard "block tag" container for text. Do not use <ph> phrase tags. ***Do not include block tags*** (, <table>, <note>, <fig>, etc.) ***inside of a <p>.***
<xref >	Cross reference – hyperlink to another topic, element within a topic, or URL.
<term> and <abbreviated-form>	Term – used for PACCAR trademarked features and components as well as glossary objects. Check with your TCL before tagging new PACCAR features or components using a term tag.
<image>	Image – basic graphic container
<fn>	Footnote – "caveat" information not essential to understand the meaning or purpose of the content it footnotes. In PACCAR authoring, footnotes usually list exceptions due to model, options, or vehicle configuration.
<Info>	Information – PACCAR uses information tags for <fig> and <image> tags within task topics. There are also sometimes used to include <note> within a task.
<tm>	Trademark – ©, ®, or ™ symbols.
<sup>	Superscript – Content will be superscripted (e.g. $E=mc^2$)
<sub>	Subscript -- Content will be subscripted (e.g. N_2O)
<u> <b> <i>	Underline, bold and Italics – These inline stylings should be used infrequently or not at all. The PACCAR stylesheet handles inline styling.

Task Elements

<steps> and <step>	Steps and Step – Basic task topic structure.
<steps-unordered>	Steps Unordered – Use for single-step tasks and any task that is essentially a "check list" where the order for the steps is not essential.
<substeps> and <substep>	Substeps – Used for steps within a step; however, substep does not allow another level of nested steps. Nest either or when this is required.
<context>	Context – necessary situational information, safety messages, and preliminary (contextual) graphics for the task.
<prereq>	Prerequisites – List any special tools or tools used in non-intuitive way or processes that must be performed prior to starting the procedure. Use an . Add the words "Before you begin" as this doesn't show on the output.
<result>	Results – Present links or topic titles indicating follow-up tasks ***that will necessarily*** need to be performed after the task. Also, include any **non-obvious** outcomes of the task that might be valuable to the reader. This tag is used infrequently.
<stepresult>	Used when the outcome of the step presents a condition that would be useful to the reader (i.e. If completing a step results in a telltale appearing on the digital display). Typically use for text only.

Concept Elements

<section>	Section – Use a section when the concepts or components of a large topic do not merit existing as a "stand alone" topic. ***Knowing whether your authoring should use <section> or a new concept topic requires a strong understanding of PACCAR'S product.*** For example: when describing the cycles of an internal combustion engine – intake, compression, combustion, exhaust – each process might be a separate section instead of a separate topic *because* the individual stages have no value as individual topics in the context of PACCAR's authoring database. Odds are there won't be a need to reuse a "compression" topic. ***Use the Section tags very infrequently*** as often a <section> should probably exist as a separate topic. Feel free to reach out to the Technical Content Editor if you are uncertain as to whether a Section tag should be used.

*Tag Sets That PACCAR **DOES NOT** Use:*

The following tag sets may be seen in PACCAR authoring, but which we no longer use, or our current stylesheet doesn't render usefully:

- <example>
- <sl> -- Simple List – Do not use simple lists. Use the CALS list as they provide more versatility.
- <stepxmp> – Step Example – PACCAR does not use the <stepxmp> tag.
- <stepsection> -- Though this is a useful tag, our current stylesheet erroneously enumerates this tag. There are few situations where using the <stepsection> tag will prove useful in PACCAR authoring.

Naming CCMS Objects

Because PACCAR doesn't currently employ a robust taxonomy, naming objects accurately is essential so that these objects can be located for reuse.

Topics

Avoid using language like "How to open the hood," or "What to do when you have a flat" when titling the topic; instead, use "Opening the hood," and "Changing a tire." Sometimes this is not possible, however.

Example Task Topics

- Opening the Hood – Topic ID lfq1601476277830.xml
- High Beam Operation – Topic ID bil1438106782252
- Replacing Headlight Bulbs – Topic ID wng1554147671235

If a component or feature is "optional," add (option) at the end of the title. If the topic is reused in multiple manuals and is optional for some but not for others, reach out to the Information Architect on how best to proceed.

Graphics

Component Graphics:

- **Title** -- Component Name & Viewing angle or context if applicable – Division (if known specific)

- ***Title Examples***
    1. Hood Mirror Side View – KW
    2. DEF tank Access Panel Open
    3. TX-12 with drain ports -- PB

Component Process Graphic

- **Title** -- Component Name & Action – Context (if applicable) – Division (if known specific)
    - ***Title Examples***
        1. Medium DEF Tank Install – HD
        2. Side Turn Indicator Removal/Installation – HD -- KW
        3. Dash Installation – LCF -- PB

Diagram or Schematic

- **Title** – Name & Diagram Type – Governing System (preferably in this order)
    - ***Title Examples***
        1. Battery Monitor in Charge Start Schematic -- VMUX
        2. VMUX CAN Schematic landscape – 1.9m
        3. Steering Wheel Switch Boundary Diagram – VMUX HD/MD

Vehicle Graphics

- **Title** -- Model Name (use language instead of model number if possible: Heavy Duty (HD) instead of 567, 579 or MLU; LCF instead of 520; MD instead of the MD model numbers) & Viewing Angle – Division (if known specific)
    - ***Title Example***
        1. LCF Cab Structure Rear Left Side
        2. Conventional Cab and Sleeper Driver-side – PB
        3. Heavy Duty Cab Front - KW

Connector

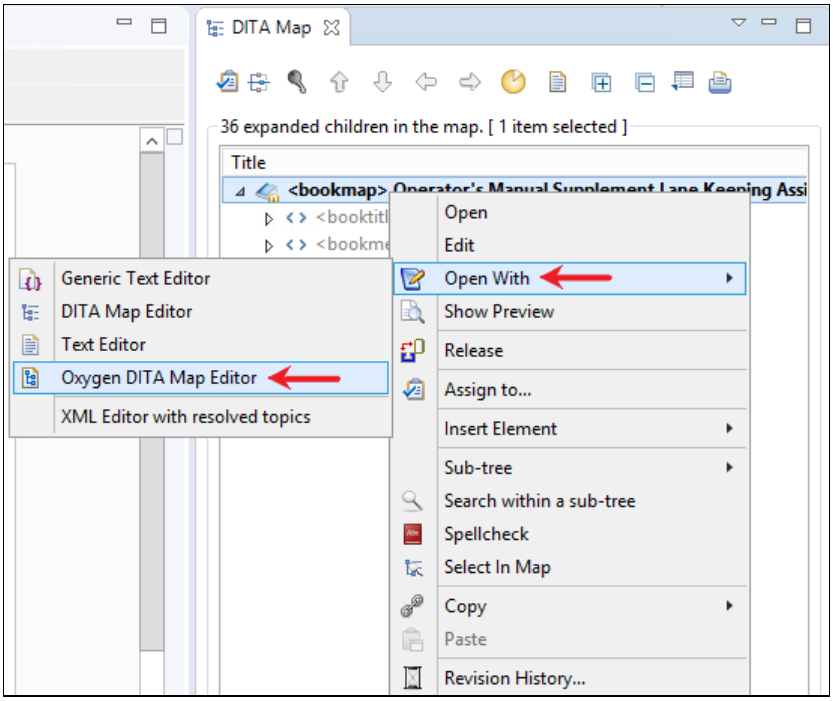
- **Title –** "Connector" Part Number
    - ***Title Example***
        1. Connector P20-1258-1416-99304
        2. Connector K333-562-202-1

Telltale or Indicator

- **Title --** Indication Name "Symbol" -- Division (if known specific)
    - ***Title Example***
        1. Second Work (Load) Light Symbol
        2. Fog Lights Symbol – PB

Bookmaps

Bookmap titles will be provided by your TCL. They are also located in the PACCAR Style Guide under **Content Formatting and Layout > Formatting > Standardized Naming for Documents.** The bookmap title metadata is nested under the <booktitle> element at the top of the bookmap. The bookmap must be locked and opened in the Oxygen DTIA map editor (the center window) for the bookmap metadata to be altered.



Opening a bookmap in the Oxygen DITA Map Editor

When titling a bookmap:

- Place the manual type (e.g. Service Manual, Operator's Manual, or Programming Guide) in the <booklibrary> tag set.
- Place the manual title (e.g. Lane Keeping Assist & Torque-assisted Steering) within the <mainbooktitle> tag set.

DITAmaps

A DITAmap title should convey its use and should only be as specific as necessary. Here is a breakdown of the characteristics associated with the DITAmap **Key Map - VMUX 1.9m HD Electrical SM:**

Function	Electrical architecture	Vehicle model	Vehicle classification	System	Manual type
Key Map	**VMUX**	**1.9m**	**HD**	**Electrical**	**SM**

All the above designations alert the authoring platform user to which manuals should use this DITAmap. However, if the above example was used *in all* VMUX electrical service manuals, and isn't 1.9m HD specific, perhaps this is a better title: Key Map - VMUX Electrical SM.
Once a map no longer applies to all of a particular map's designations, ***then*** specificity should be added to the title and a separate map created.

Tables

Do not title a table contained in a reference topic. Reference topic titles usually end up *also* being the title for the table creating an awkward duplication of the topic's title. Additionally, our current style

sheet presents table titles in a very large font, making them sometimes unsuitable in certain authoring situations.

Abbreviations in Titles

The terms used to describe a specific DITAmap can be lengthy. Here is an example of an existing map title:

Chassis Module Primary Troubleshooting - 2.1m Heavy Duty and New Medium Duty Vehicle Multiplex System

A better title, using approved PACCAR abbreviations, would be:

CMP Troubleshooting - 2.1m HD NMD VMUX

Approved abbreviations should be used when titling maps and are listed in the PACCAR Style Guide. These additional abbreviations should be used when titling maps:

1. OM – Operator's Manual
2. SM – Service Manual
3. PG – Programming Guide
4. KW – Kenworth
5. PB – Peterbilt
6. HD – Heavy Duty
7. MD – Medium Duty
8. LCF – Low Cab Forward

Adding Metadata

Add Metadata to new topics and evaluate the current metadata for existing topics. It might have changed. Needed metadata for your project should be provided by the Information Architect.

Keywords

A list of keywords to add to new or altered topics should be provided to your team. If not, please reach out to the TCL for this information.

Indexterms

Always add the topic title as the <indexterm>. If the topic title changes, remember to change the <indexterm> as well.

Short Descriptions

Short Description use is covered in the PACCAR style guide; however, it is repeated here due to a recent change in policy.

Short descriptions should be added to all newly authored topics.

A *short description* presents a brief synopsis (one or two sentences) of a specific DITA topic. It also defines for the reader why they would want to read that topic.

The purpose and syntax for a *short description* changes slightly for each DITA topic type:

- Concept – What is the topic teaching? Why should the reader care?
- Task – What is the purpose of the task? Why would I want to perform this task?

- Reference – What information is being presented to the reader? What makes this information important?
- Troubleshooting – What scenario requires this process? What value does this topic bring to the troubleshooting process?

To understand why a different type of *short description* is required for each DITA topic type, you will first need to familiarize yourself with the DITA topic types (concept, reference, task, and troubleshoot). This information is in the PACCAR Style Guide.

Where to Place a Short Description

A *short description* is added after the topic Title – <title> — and before the Topic Prolog – <prolog>.

Concept Topic Short Descriptions

A concept topic *short description* elaborates on the information provided in the title and explains how users will benefit from reading the concept topic.

Ask yourself:

- What is the topic teaching (briefly)?
- Why should the reader care?

For Example:

The PACCAR Engine Brake topic (Topic ID - lid1582293320929.xml) describes how engine braking accomplishes "braking," and why engine braking is beneficial for the driver (as opposed to using the standard service brakes). The *short description* for this topic might say:

> *Engine braking **uses engine compression to slow the vehicle, instead of the service brakes**, **reducing brake wear** and **providing greater vehicle control when slowing.***

This satisfies the requirement of "What the topic teaching?"– engine braking (and what it is) – and presents "Why should the reader care?" – reducing brake wear and providing greater vehicle control when slowing.

Authoring "what the topic is teaching" – engine braking – is easier than authoring "why the readers should care," but it is essential that the reader know why the topic is necessary or they may not read it. PACCAR does not author unnecessary content.

Task Topic Short Descriptions

A task topic *short description* explains the purpose of the task and if possible, why the task should (or must) be performed.

When writing the short description, ask yourself:

- What is the purpose of the task?
- Why should I to perform this task?

For Example:

The **Engine Oil Level topic** (Topic ID - bil1442947842470.dita) outlines the process an operator should use when checking the engine oil level. The *short description* for this topic might say:

> ***How to check your MX-11/MX-13 engine oil level*** *to* ***know if oil needs to be added or changed.***

Authoring the "purpose is of the task" – How to check your MX-11/MX-13 engine oil level – is often stated in the title (and can sometimes be omitted but not in our example), but "why the task should be performed" is potentially more important – to know if oil needs to be added or changed.

The reason to check the oil might be obvious to the author but not to the reader. In the example above, you could infer that checking the oil with a dipstick (an instrument of measurement) might determine if the oil is "low." Determining if the oil is unacceptably dirty, however, might not be as obvious.

Reference Topic Short Description

A reference topic *short description* should explain what an object does, how it works, and why it is useful.

When writing the *short description*, ask yourself:

- What information is being presented to the reader?
- What makes this information important?

For Example:

The **Torque Specifications** topic for the PACCAR TX-12 transmission (Topic ID - lzo1644934982765.dita) contains the acceptable torque ranges for fasteners on the TX-12 transmission. The *short description* for this topic might say:

> *Table of acceptable torque ranges for TX-12 fasteners that should be observed to prevent component failure or inutility.*

Authoring what the topic "presents to the reader" – table of acceptable torque ranges for TX-12 fasteners – is easier to author than "what makes it important" – to prevent component failure or inutility. If you are unsure as to why the information is used or what makes it important, concentrate on "What information is being presented to the reader?"

Troubleshooting Topic Short Descriptions

A Troubleshooting topic *short description* describes the situation that would use this troubleshooting topic and the governing "scenario" (assuming a single or few scenarios) that would include this troubleshooting process.

First, let's define a troubleshooting topic:

A troubleshooting topic is a special kind of task topic. A *PACCAR* troubleshooting topic presents a series of steps that eventually end in a "yes/no" question. When that question is answered, the answer

eliminates *possibly* faulty components and progressively presents potentially faulty components (or setting) until the faulty component or system is addressed.

When writing the *short description*, ask yourself:

- What scenario requires this process (to be performed)?
- What value does this (specific) topic bring to the troubleshooting process?

For Example:

The **Diagnosing the F-CAN** topic (Topic ID - hsr1654533616815.xml) provides a sequential diagnostic of the Frame Controller Area Network (CAN). This is a circuit that allows certain components to contact each other and the truck's computer. This troubleshooting procedure checks the physicality of the CAN (connectors, wire-runs and resistors) as well as the components on the circuit. The *short description* for this topic might say:

> ***Initial Frame CAN troubleshooting**, **checking the CAN's physical integrity** and **eliminating working components from the troubleshooting process**.*

For this topic, we're addressing "the initial process" or the "first step" in determining the problem; specifically, the Initial Frame CAN troubleshooting would be considered the "scenario." The "specific value this topic brings to the troubleshooting process" was more easily defined: checking the CAN's physical integrity and eliminating *working* components from the troubleshooting process.

In traditional (non-PACCAR) and non-initial troubleshooting topics, defining the scenario is easier. In these situations, we may have determined what the faulty component or system is. That component would be the scenario. For example, an incorrect output from a CPU or low voltage from the power distribution center (PDC*).* PACCAR troubleshooting topics are structured to diagnose a system or component. They are not usually structured to know what brings the technician to the topic like high beam headlights not turning on or cruise control deactivating below 20mph. So, concentrate on the "specific value this topic brings to the troubleshooting process."

Reusing Content

Reusing content can take many forms. Content that is used in multiple locations is an example of content being reused. That content can be an image, an element in a topic (like a paragraph), or an entire topic. The following provides some general authoring advice that promotes content reuse:

- Try to use existing content.
- Do not clone unless absolutely necessary. ***Cloning is not reusing***.
- Content that exists in an operator manual **may not** be appropriate for a service manual (and vice versa). Check with your TCL prior to including operator's manual content in a service manual or service manual content in an operator's manual.
- Check that your topic has either the Service Manual or Operator Manual <keyword> in the <prolog> section. If it is not there, ***add the appropriate one or both*.**
- If only a graphic need be changed in an existing topic, ***don't create a new topic***. Contact the IA for a path forward. The answer may be to create conditionalized image at the same location.

- If only an (<xref>) needs to be changed in a topic, ***don't create a new topic*****.** Contact the IA.. Again, like adding a new, conditionalized image above, a conditionalized <xref> or a keyed <xref> might be the best path forward.

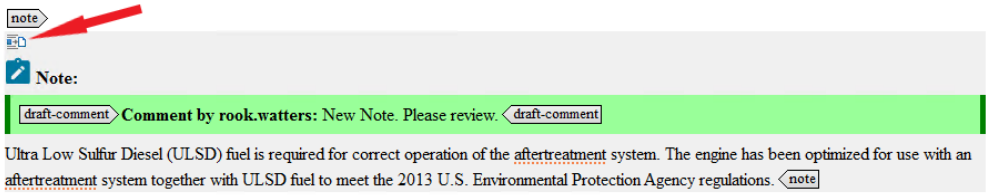
Referable Content (RC)

Referable content (RC) is used to refer to information included in a topic that is sourced from (and actually exists in) another topic. Referable Content is *also* a topic type (see Referable Content Topic). Both uses of the term referable content are used frequently in this document and in the technical publications group.

Conrefing

If the content you'd like to include in your topic resides in another topic (an RC topic, more on that below), that content must be *conrefed* into your topic. Conref stands for *"content reference"* and refers to a DITA element that presents in a topic but whose source location resides outside of that topic. Conref also refers to the mechanism used to place that content into a topic: conref-ing.

Content that has been conrefed into a topic can be identified as a conref by the gray box that surrounds it. The actual topic that contains that content (usually an RC topic) can be populated in the Oxygen window by selecting the RC icon at the top left corner of the box ↙. This will take you to the location where the RC resides.



As an example, if you had a table of commonly used fastener torques you might want to reuse this table numerous times throughout our documentation. You wouldn't want to recreate this table multiple times in various topics. Instead you would have this table exist in one location and have the various topics that require this table "point" to that information (as well as show that information within the topic). For more information on conrefs, please see User guide for IXIASOFT Desktop 6.3.

Safety messages should be conrefed into a topic unless the safety message is new or changed (and thus needs to be approved).

Because referable content can be "content referenced" into many different topics, their use is regulated and should only be altered in specific conditions and with the oversite of the Information architect. For more information on these conditions, see Referable Content or "Conref" Governance.

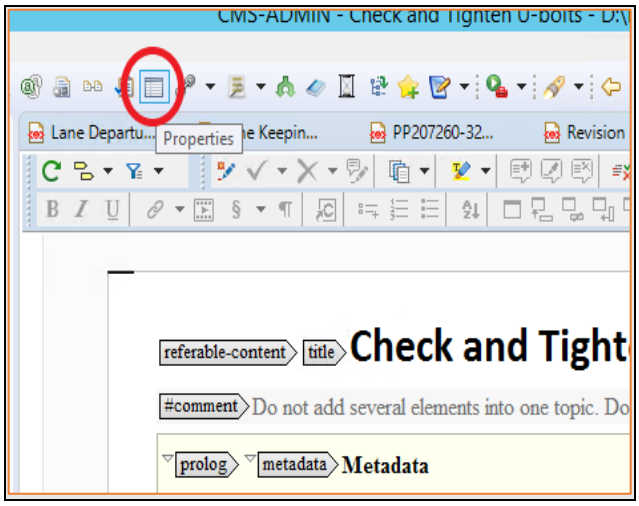
Conrefing Content into a Topic

This can be accomplished in a variety of ways, and we will describe one:

There are easier ways to insert referable content, but they are less reliable. Reach out to the IA if you want those methods described.

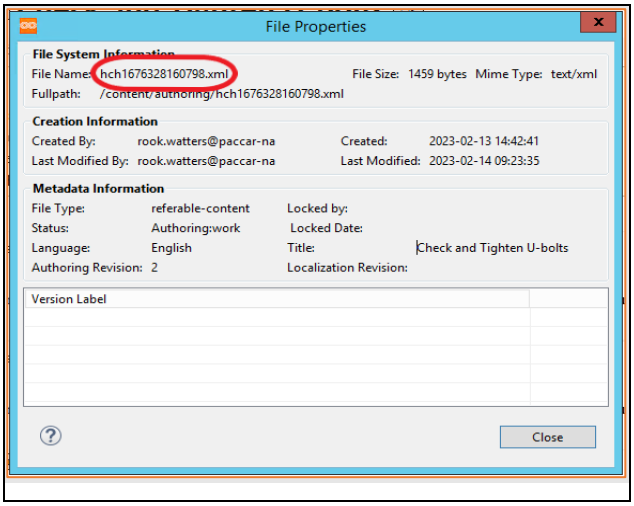
1. Find and copy the **File Name** of the topic containing the information you want to insert (conref):

   a. Select the Properties icon:



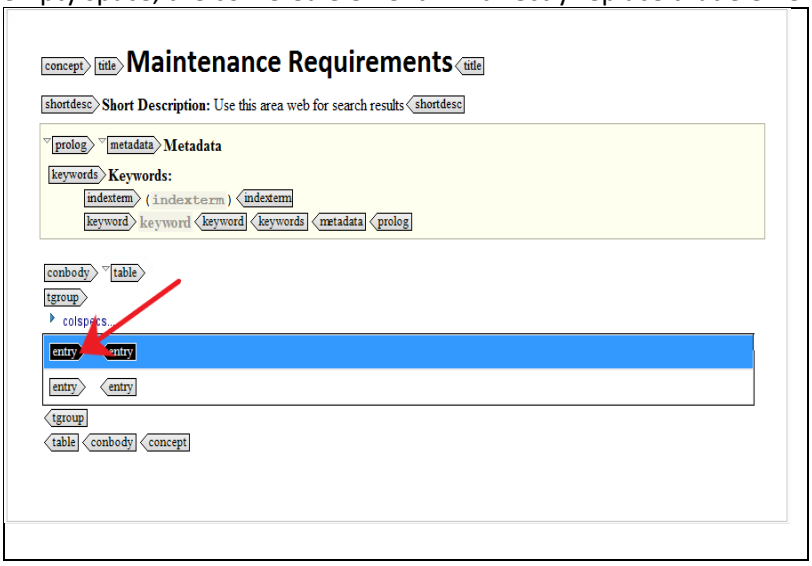
Properties Icon

   b. Copy the **File Name**:



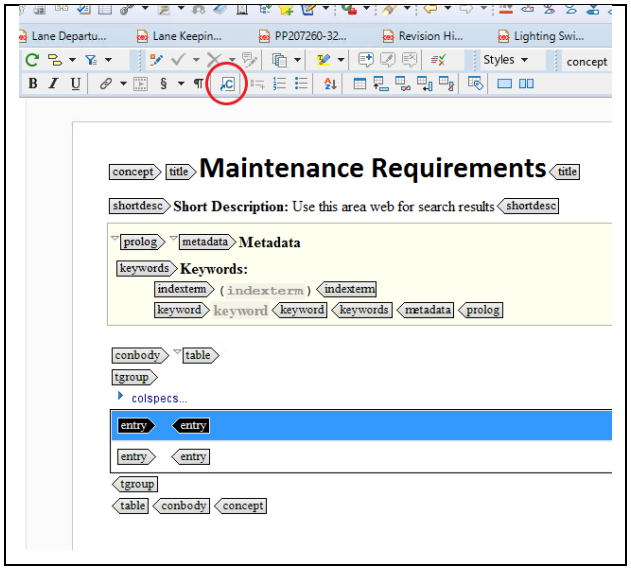
File Name

2. Lock the topic that requires the inserted (conrefed) information.
3. Select the area (or element) where you want the information inserted (if you select an element instead of empty space, the conrefed element will directly replace that element):



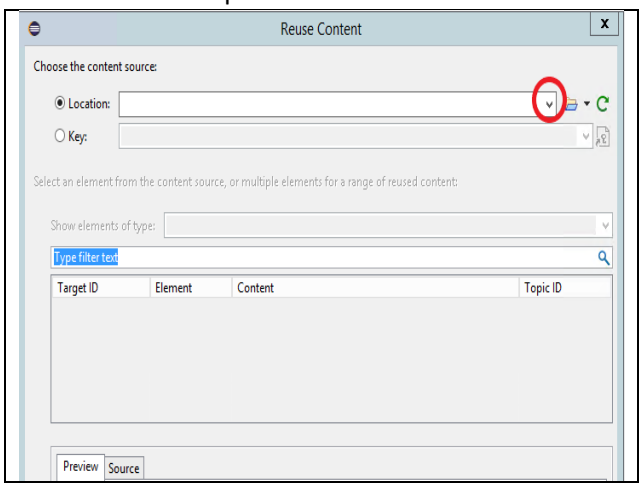
*An element is selected (**<entry>**) to replace the empty **entry** element.*

4. Select the **Content reference** (Conref) button in the task bar:



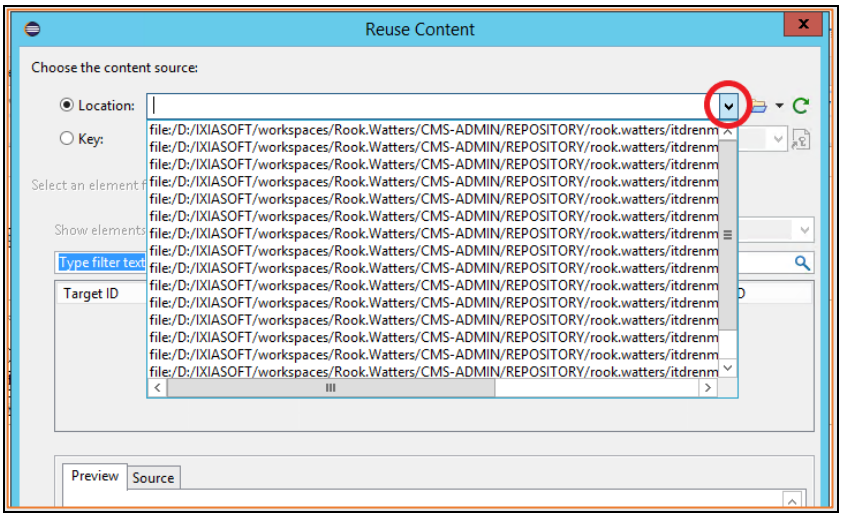
Content reference (Conref) icon

a. The **Reuse Content** dialog box will open.



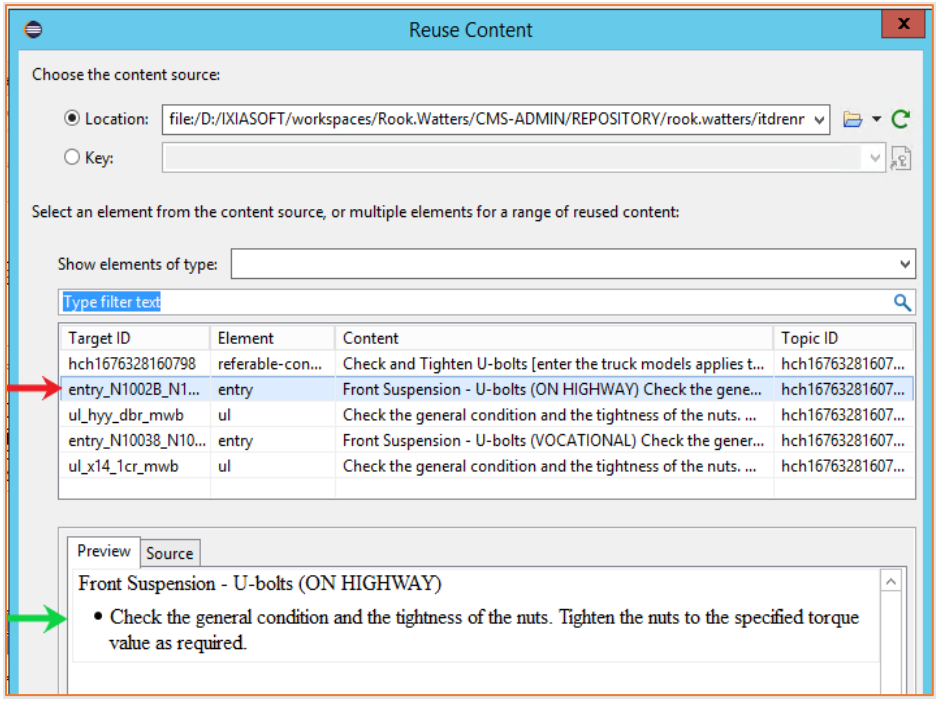
Reuse Content dialog box with drop-down menu circled

5. In the **Location** entry box, using the drop-down menu, select **any** content source selections:



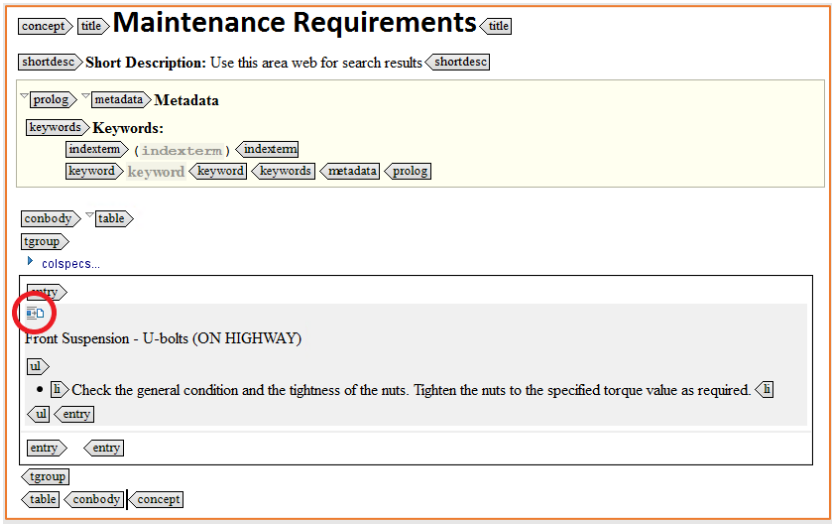
Reuse Content dialog box with drop-down menu circled.

6. Replace the **File name** (see graphic) with the **File Name** that you copied in step 1:
7. In the Reuse Content dialog box, select the row with the element you want to insert:



← row with selected element (**entry**). ← Preview of element to be conrefed

8. Select **Insert** or **Insert and close** at the bottom to conref in that element.
9. **Results**: Conrefed elements are surrounded by gray boxes:



Original topic with conrefed element. Select circled icon *to open topic containing element.*

Substantive changes (changes that are more than grammar, capitalization, or punctuation) should not be made to the RC directly. If a substantive change needs to be made to RC, propose the change after the RC using the same element (i.e. a <note> following a <note>) and add a draft comment. Reference the PACCAR Style Guide for appropriate draft-comment syntax. If you are unsure how to proceed concerning RC, contact the Information Architect.

Referable Content Topic

Referable content the topic type is a non-standard-DITA, IXIASOFT specialty topic. An RC topic typically contains only one DITA element, and that element is intended to be conrefed into other topics. The RC topic object should not be included in a Bookmap. Do not insert RC topics into bookmaps. Authors should not create RC topics and should only alter RC under specific circumstances (see Referable Content or "Conref" Governance).

Referable Content Authoring

Because referable content is intended to be conrefed into a variety of different locations it must be applicable in all those locations; therefore, it is important that referable content be only as specific as necessary to be valuable. This might mean using an authoring tactic referred to as "responsible ambiguity"

Responsible ambiguity means authoring only as specific as is necessary to impart value to the reader, or being "responsibly ambiguous." In the case of a safety message (a commonly conrefed element), this might mean:

- Referring to a broader category instead of a specific type if the concern applies to all items in that category. For example if we want the operator to maintain attention to their driving environment when using Advanced Driver Assistance Systems (ADAS) vs. only listing a specific system, like Lane Departure Warning or Adaptive Cruise Control.
- If a concern would apply "generally" to various activities that would fall under one category, address the category instead of the specific action. For example if a special tool should be used to install the windshield or else it might be scratched, perhaps state in a caution that this tool be used when installing *any* glass on the vehicle instead of just the windshield. This will allow that caution to be used in many more places.

Referable Content or "Conref" Governance

Because referable content (RC) exists in many different topics, changes to that content can sometimes go unnoticed in some locations. Because of this, when creating or making changes to RC:

- Inform the IA of new or potential changes to RC ***prior*** to the Internal Content Excellence review. This allows anticipation of the impact of the change prior to reviewers viewing the proposed change.
- If the changes to RC are "non-substantive" (spelling, grammar, punctuation, or capitalization) and are requested during the Internal Content Excellence review, the change can be made directly to the content **and the IA need not be informed.**
- If new RC or a change to existing RC is requested during a review or during approvals, the IA must be informed prior to proposing a change. This includes changes to RC that are "hand routed" and not subjected to a full collaborative review cycle.

Updating or creating referable content

1. If the author believes a conref should be changed or created, suggest the change or addition to the IA. The author should know the dependencies of the conref *prior* to contacting the IA and reach out to past authors or SMEs to gauge the appropriateness of the intended change.
2. If the IA agrees a change or addition is appropriate, then the IA will create a draft of the conrefable content to be used by the author. Like any change to existing referable content the change must be proposed after the original content with an associated draft comment (see Draft Comments).
3. If any review results in a suggestion for new RC or changes to existing RC, then the author should contact the IA before changing or creating new content.
4. Once the change or addition has been approved, the IA will implement it in the content.

Safety Messages and Notes

Authoring Safety Messages and Notes content can be found in the PACCAR Style Guide in **Chapter 5: Content Formatting and Layout**, in the **Formatting** section, under **Safety Messages (Warnings and Cautions) and Notes**. Please read that section before authoring or updating safety messages. The following addresses best practices and the approval process when working with safety messages.

Locating

The PACCAR CCMS contains many safety messages, most of which are organized in DITAmaps by component, process, or condition.

Before creating a new safety message, perform a search of the CCMS for a safety message that might address the safety message you wish to author.

Construction

Safety Message construction is covered in the PACCAR Style Guide. However, we will reproduce those guidelines here as the PACCAR Style Guide is currently being revised.

Safety Messages (Warnings and Cautions)

Safety messages are warnings and cautions that identify hazards, indicate how to avoid them, and advise of the probable consequences of not avoiding those hazards. For the content of the safety messages, comply with the following authoring construction. Safety messages (Warnings and Cautions) should:

- Be concise (usually less than four sentences).
- Use basic vocabulary (language below the 8th-grade reading level).
- Avoid non-traditional punctuation (mainly the semicolon).

Additionally, safety messages must define the:

- Evasive or avoidance actions to be taken – this can often be an initial "call to action" statement.
- Type of hazard – this often describes the "why" of the safety message, that justifies the "call to action" sentence.
- Potential consequences of the hazard – this will always be the boilerplate, final sentence.

Consult the PACCAR Style Guide for definitive information concerning safety message construction.

Coding

Safety Message coding is covered in the PACCAR Style Guide.

Placement

Safety Message placement is covered in the PACCAR Style Guide.

Note for service and supplemental manuals: If a safety message you are authoring might be a concern for all processes in your manual, notify the technical content liaison (TCL), so that they can consider whether the safety message should be included in the service manual's **Specific Safety Messages** topic.

Approval

Because safety messages must be approved at a minimum by a SME and Safety and Compliance, it is essential that new or changed safety messages be seen and thoroughly vetted by these stakeholders. Small, seemingly insignificant changes **might** change the character of these statements. ***Make sure that draft comments are added to safety messages*** (see Draft Comments) and that a link is created to the topic containing the changed message in the "What's New?" topic. See The "What's New?" topic.

For more on how to add a draft comment to a safety message, see Altering Referable Content.

Altering a Safety Message

Safety Messages are almost always referable content (RC) so altering a safety message uses the same process as is used when altering RC. Please read Updating or creating referable content. Once the IA determines that a change is merited, the author will create a new <note> tag with the appropriate <type> attribute (i.e. warning, caution) that should be added after the RC safety message with a draft-comment stating that this new safety message will replace the one above. ***Do not alter the RC topic containing the original message.*** Consult the PACCAR Style Guide for the exact draft comment syntax used with updating safety messages. When the updated message has been fully reviewed and approved

(usually via a collaborative review -- SME, Safety and Compliance (S&C), and Legal) the Information Architect will replace the original safety message content with the revised content.

See Altering Referable Content to better understand this process.

Tables

Tables and their construction are located in the PACCAR style guide. Here we provide some additional information concerning tables:

- Use only CALS tables. Do not use simple tables <simpletable> or prop tables <properties>.
- Do not nest tables within block tags.
- Do not add <p>s to table entries.
- The <entry> element

You might encounter situations that will require both text and images within the same <entry>. Our stylesheet acts oddly when presented with this type of situation. You will need to address each case separately.

Glossary

PACCAR authoring requires glossary terms for components, features, and acronyms that may not be common knowledge for a technician. Guidelines on how to author a glossary term is in the PACCAR Style Guide. Glossary terms should avoid technical language (if possible) and be only as specific as is necessary so that the term can be used in a variety of manuals.

- Only service manuals and troubleshooting guides currently use glossaries.

Requirements

Glossary term functionality requires:

- The term to exist as a **glossentry** topic type.
- The **glossentry** to be included in a bookmap's <backmatter>.
- Referencing the **glossentry** using either the <term> or <abbreviated-form> tag set and assigning that <term> or <abbreviated-form> a key (using the <keyref> attribute).
- The key be defined somewhere in the bookmap (PACCAR assigns all keys in a bookmap's <frontmatter>).

Authoring Glossary Entries

- Glossary entries should be as generic as possible. Avoid setpoints or data.
- Create Glossary Terms for new service manual components. If you are questioning creating a new glossary term, then reach out to the TCL for clarification.

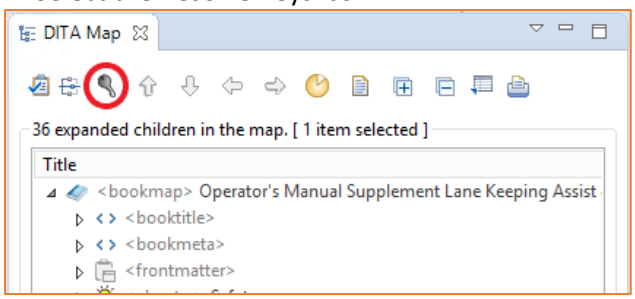
Preparing a Bookmap for Glossary Entries

- Place new glossary terms into the glossary DITAmap specific for that manual.
    - This map probably already exists. Search the CCMS for a DITAmap associated with the manual's component:

- ***Example***, if you are authoring the **HVAC Service Manual** and need to add glossary terms to this manual, look for a DITAmap called **Glossary – HVAC SM** or **Glossary - HVAC Service Manual**. A variety of service manuals or programming guides can potentially use the same **Glossary – HVAC** DITAmap.

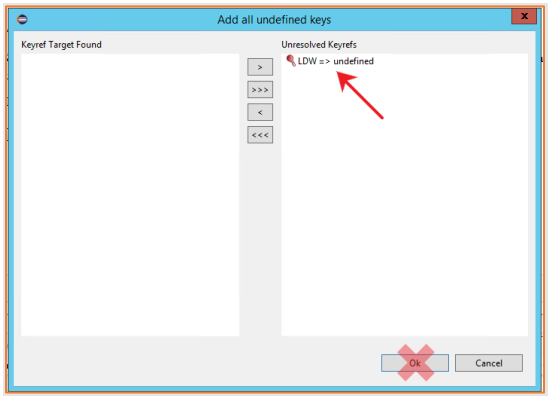
- If the glossary DITAmap cannot be located, create a DITAmap. Place glossterms in this DITAmap and insert this DITAmap in the bookmap: Backmatter > Booklists> glossarylist.
- Check that the glossary terms referenced by topics in your bookmap are contained in that manual's glossary (use the "Resolve keys" icon located in the DITA map view to determine this).

1. Select the Resolve Keys icon



Resolve Keys Icon

2. If there are missing keys, record which keys are missing and then select Cancel. **Do not select OK.**



- Ensure that the key map for your glossary is added (or already exists) in the manual's front matter. For example, it might be labeled **Key Map - HVAC Glossary.**
- Make sure new glossary terms are assigned in the glossary key map.

Do not create a new glossary term or change an existing one without informing the Information Architect first. The IA needs awareness that the new terms have been created because he/she maintains a roster of the used keys.

- ***Example*** – if you add the term "LDW" to the glossary, make sure that you also add "LDW" in the key map glossary. If you have difficulty doing this, reach out to the Information Architect for help.

Adding Glossary Terms into Topics

Service manual PDFs provide links to new terms or technical terms that might be useful to a technician. To create this functionality, use glossary tag sets in service manual topics.

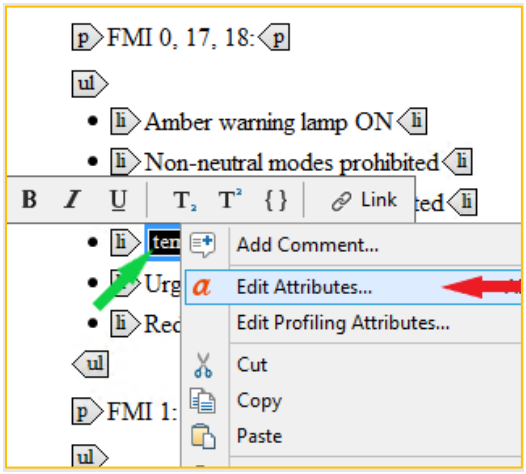
Many trucking industry features and components are highly technical and multisyllabic; therefore, many easier-to-use acronyms are preferred when discussing these features and components. However, due to the potential for a topic (with a glossterm) to be used in numerous, hundred-paged manuals, it is

possible for an acronym's meaning to be lost when seen in a particular topic. Therefore, PACCAR has adopted the following glossary-tagging philosophy:

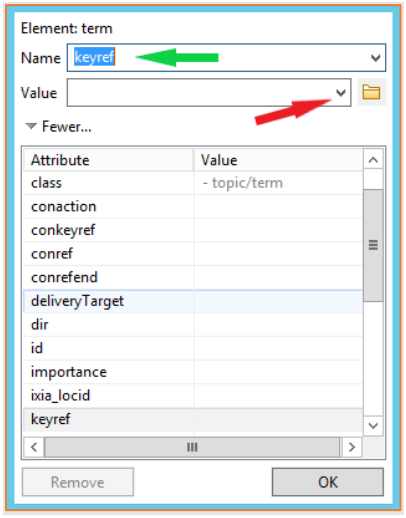
- Do not place glossary term links in table headers or titles.
- The first time a glossary term is used in a topic use the <term> tag.
- Any subsequent use of that term can use the <abbreviated-form> tag ***if*** there is an abbreviation for that term.
- When using a list format (<ol>, <ul>) use the expanded form (using the <term> tag) of a glossary term instead of the <abbreviated-form>.

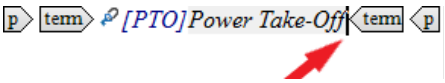
Adding the First <term>

1. Ensure the map that includes the topic you're adding a glossary term to is populated in the DITA Map view and that the requirements in **Preparing a Bookmap for Glossary Entries** have been met.
2. Select where you wish to place the glossary term and create a <term> tag set:
3. Left click on a <term> tag until the tag set turns blue ↗ and then right click on one of the tags. *The right-click drop-down menu appear*s:

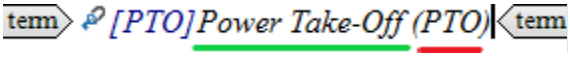


4. Select Edit Attributes ←
    a. *The element dialog box will appear.*
5. In the **Name** blank, using the drop-down menu, select Keyref ←
6. In the **Value** blank, using the drop-down menu, select the Key associated with the glossterm you want to add ←



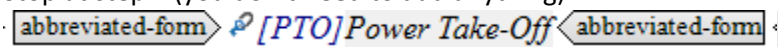
7. Select OK.
    a. The correct glossary entry will populate within the term.
8. To include the acronym within the first use of the <term> tag, left-click within the <term> tag set:


9. Do not backspace, but instead start typing (I typed the letter "P"):


10. Continue to type out the expanded term 0and acronym0


Adding subsequent acronyms

Every subsequent use of that glossterm in that topic should use the <abbreviated-form> tag:

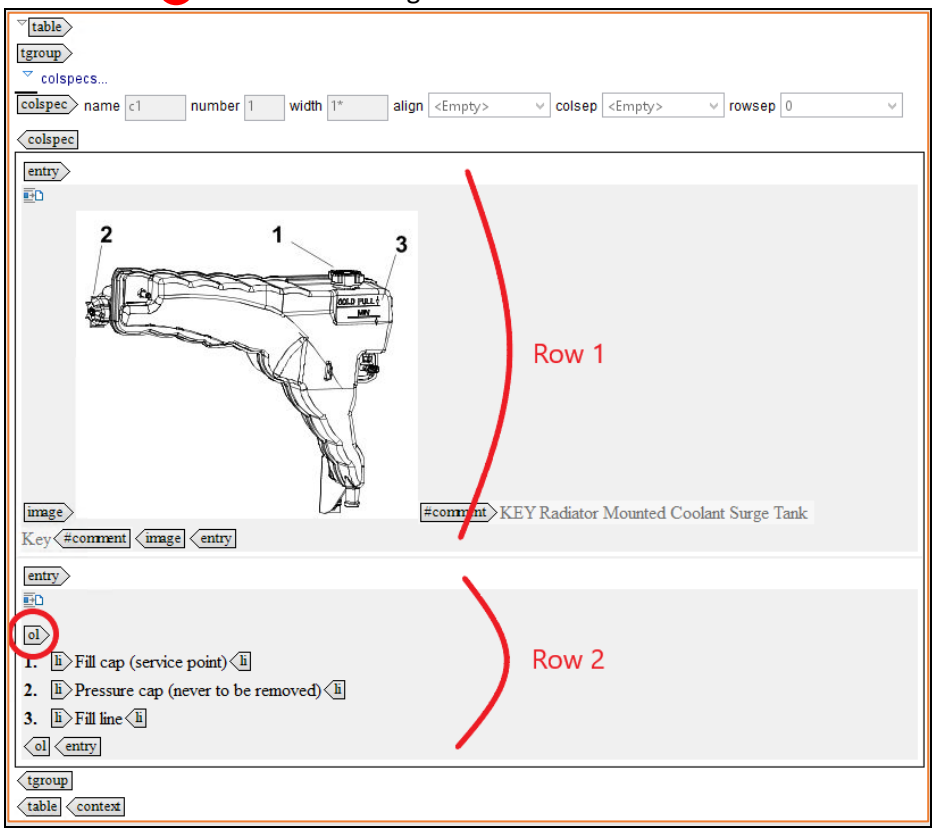
1. Perform like ***Adding the first <term>*** except select abbreviated-form instead of term in step 2.
2. Stop at step 7 (you don't need to add anything):


Graphics

Graphic file type(s), resolution, shading, and callout standards are covered in the PACCAR Style Guide under chapter 5: Art (Illustrations). The following provides additional expectations concerning graphic generation and placement.

- Nest all images within <fig> tags.
    a. In almost all cases, place each image in a separate <fig>.) is referenced in the below image.
- If two graphics need to be viewed side-by-side, create a one-row, two-column table, and place the graphics in each of the columns. Assign the Frame attribute for the table to "none" to eliminate lines around the images (unless lines around the images are desired).

- Title *most* graphics (add <title> to the <fig> element). Sometimes the framing of the graphic (usually when in a table) would make this redundant, like for connector graphics.
- If a list of callouts needs to accompany the graphic, then create a table (either two rows, one column or two column, one row) and place an ordered list in one of the cells that define the callouts: ○ are shown in images as reference.



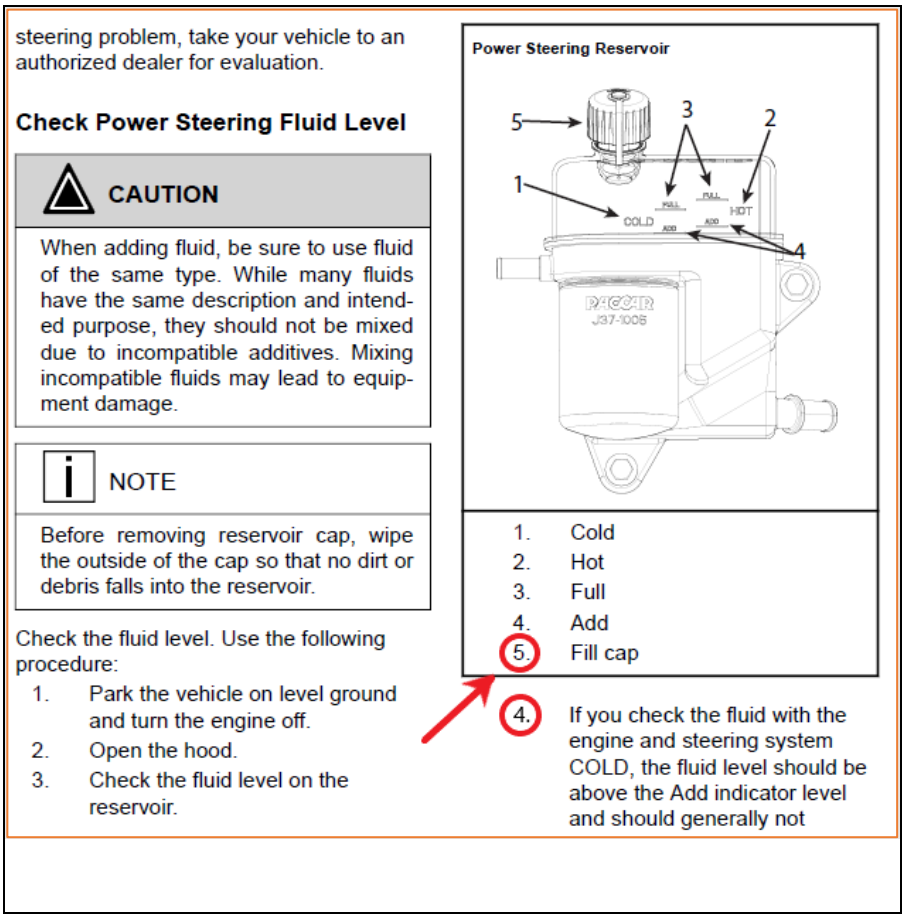
Graphic and Callouts in a Two-row Table

- Images placed in tables need to have the attribute <placement> set to the value to "break." If this takes place in an operator's manual (3-column format) then the alignment for those images need to be set to "center."
- ***When inserting text into an entry, do not add <p>s to table entries*.**

You might encounter situations that will require both text and images within the same <entry>. Our stylesheet acts oddly when presented with this situation and each of these situations must be addressed separately.

- Determine if the needed resolution for an image requires one column or the entire page. If the entire page is needed, create a table which will house the graphic. Add the attribute **outputclass** to the table tag and assign the value "span" to this attribute.
- Label graphics in accordance with the graphic section in this document.
- Graphics required in a <step> require a parent <info> prior to inserting a <fig> and <img>. This is a workaround due to our style sheet.

- Images nested in task topics which contain ordered lists should always have the <frame> shown to separate the steps from the callouts:



Separating Callouts from Steps using the Frame attribute

Conditionalization

Conditionalization is a way of creating multiple versions of a topic or map when different content is required by the reader. Primarily, PACCAR conditionalizes manuals based on division – Peterbilt, Kenworth, or PACCAR – and for service manuals, based on vehicle class / electrical architecture – ex. Medium Duty VMUX, HD VMUX, HD BEV.

These conditions fall into three categories:

- Audience
- Platform
- Product

Audience

PACCAR does not regularly use the Audience condition. You will not conditionalize by Audience.

Platform

The Platform condition defines PACCAR's divisions – Peterbilt and Kenworth – as well as engine-specific content (which is only used in Engine manuals).

Product

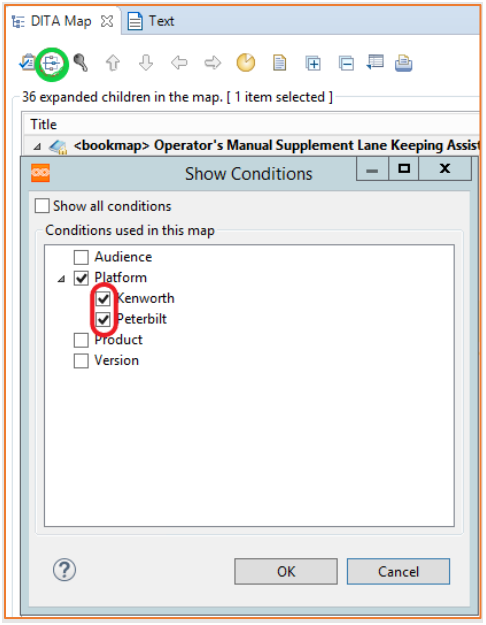
The Product condition is used to define the "cab width and vehicle class" combination – 2.1m Medium Duty (MD), 2.1m Heavy Duty (HD), Low Cab Forward (LCF), LFNA – or is used to define the PACCAR engine type – MX-11, MX-13, PX-7, PX-9.

Conditionalization can occur within a topic as well as at the bookmap level. ***Almost all Conditionalization you use will be at the map level.***

Showing Map Level Conditionalization

First, set the DITAmap view so that conditionalized topics are flagged:

1. Select **Show Conditions** in the DITA Map view ○:



1. Select the conditions you want highlighted ○.

Only those Conditions in use (by the map in the DITA Map view) will show up as options in the **Show Condition** dialog box.

Conditionalizing Objects in a Map

Objects (topics, metadata tags, keys) are usually conditionalized when one needs to ***exclude*** an object from being considered during output generation. Typically in your authoring, only division-conditionalized content will need to be excluded: Kenworth or Peterbilt. Topics that *are not* division specific, but are applicable for both Peterbilt and Kenworth, should not need to be conditionalized at the topic level.

The PACCAR Condition

Do not use the PACCAR condition for topics that are applicable for both divisions. Topics which should populate for both divisions should use **no conditionalization** at the map level.

There are exceptions to this rule, but they are rare. Consult the IA if you are unsure of what to do regarding the exceptions.

Applying Conditions to Objects in a Map

The TCL (in coordination with the IA) should inform you as to which conditions will need to be applied to your authoring. Knowing this information will allow you to choose the appropriate DITAval for your output.

DITAvals

A DITAval allows you to include or exclude specially tagged content contained within a map or topic.

The DITAval is selected during the Output Generation process.

For example, PACCAR has a variety of Peterbilt DITAvals that will exclude all Kenworth information. The instructions in most of these Peterbilt DITAvals will generate output for all Product types, but exclude any output tagged with the Kenworth Platform conditionalization.

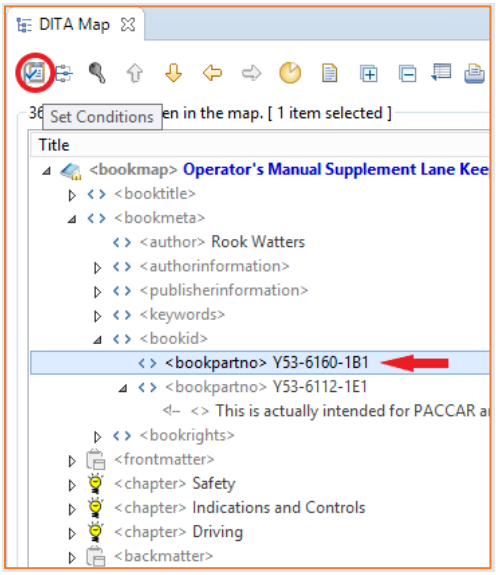
Another, more specific example is the KW 2.1m HD (2.1 meter Heavy Duty) DITAval. This DITAval will exclude all non-Kenworth Platform tagged content as well as any Product tagged content that is not "2.1 meter Heavy Duty" (such as 2.1m Medium Duty or Low Cab Forward (LCF) content).

DITAvals are useful when the same bookmap or DITAmap will be used for multiple purposes. Generally, PACCAR maps contain only Platform conditionalization (Peterbilt and Kenworth), so the following DITAvals will be the most useful when generating output.

Operator Manuals	Service Manuals
PB Operator Manual	KW Vehicle Service Manual
KW Operator Manual	PB Vehicle Service Manual
PACCAR Aftertreatment – non LFNA	
PACCAR Aftertreatment - LFNA	

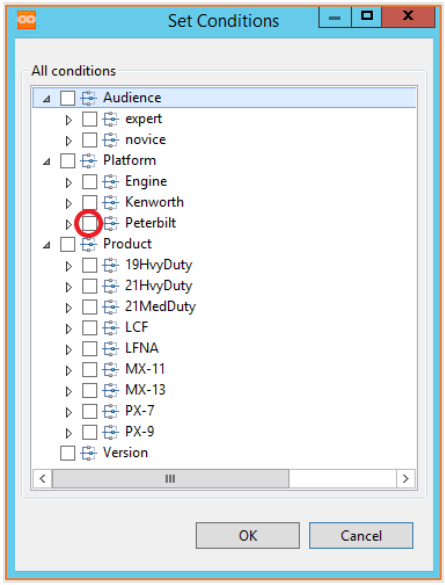
1. Lock the map.

2. Click on the object ← and then select Set Conditions ○.



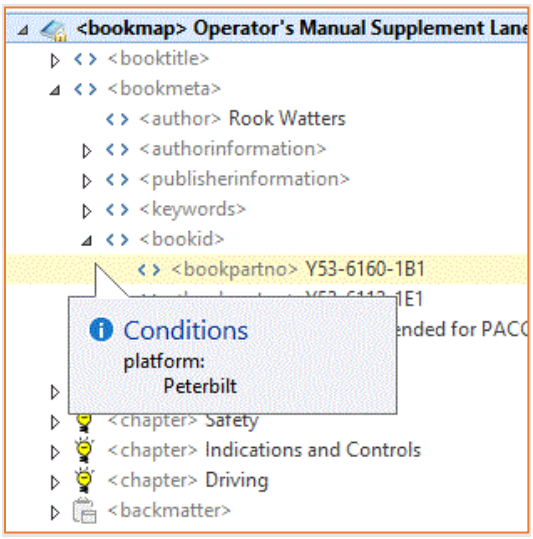
Part number Object and Set Conditions Icon

3. Select the Condition you want to apply ○:



Set Conditions dialog box - Peterbilt Platform Condition

4. Observe the conditionalized object:



5. Release the map to save the conditionalization.

It's a good practice to generate a PDF (with the appropriate DITAval) after you add a conditionalization to make sure the desired conditionalization has been achieved.

Applying Conditions Within a Topic

Conditionalizing within a topic should be performed only with deep consideration and the foreknowledge of the IA.

Draft Comments

A draft comment is a DITA element that can be seen on the output (like in a PDF or html) and is used to signal important information to a reviewer or to other authors. Draft comments present in a green box when using the IXIASOFT desktop client but in a pink box on the output, starting with the words "Disposition / Status."

Our authoring team groups draft comments into two categories: static and temporary.

- Static Draft Comments – These comments have lasting importance to the topic. They could be used to caution against changing the content (maybe due to an exact legal wording) or when the topic's content was authored using a non-obvious source that a future reviewer or author might find difficult to validate. Static draft comments should be used sparingly and only be removed with some deliberation.
- Temporary Draft Comments – These comments are signals to content reviewers and other authors that the topic is not yet suitable for publication. They might communicate that the topic should be reviewed, is "in process" authoring, contains dubious information, or requires an answer to a specific question. Once the ask of a temporary draft comment is addressed, in most cases the author who added it is also responsible for removing it.

In addition to these two main categories, draft comments are often referred to as either being *current*, an *inquiry*, *legacy*, or *conrefed*. These categories are useful when determining if a draft comment should be removed and who by:

- A current draft comment is a standard draft comment demarking new or changed content.
- An inquiry draft comment poses a question to the reviewer.
- A legacy draft comment was added by a former author or reviewer who may not currently be employed by PACCAR.
- A conrefed draft comment exists *within* a conrefed element and should only be removed by an information architect. These should occur rarely.

Removing Draft Comments

All temporary draft comments should be removed once the topics that contain them have been subjected to a sufficient review. The responsibility of removing (or having them removed) is assigned as follows:

- Current draft comments should be removed by the author who added them. The team the author belongs to can also remove their draft comments but it might be valuable if only the author who inserted the comment remove it as they should have a better understanding as to whether the reason the draft comment was included has been sufficiently addressed.
- Inquiry draft comments should be removed by the team responsible for the content's publication, assuming that the question has been sufficiently answered.
- Legacy draft comments should be removed by the team responsible for the content's publication. Divisional resources should be assigned to delete legacy draft comments and the person assigned should use their best judgment regarding their deletion. A good guideline for deleting legacy draft comments is if the draft-comment is pre-2020 and appears to be

"temporary," remove it. When possible, reach out to the person who added the legacy comment prior to deletion.

- Conrefable draft comments should only be removed by an information architect.

The required syntax for draft comments can be found in the PACCAR Style Guide.

Authoring Best Practices Meeting

The Authoring Best Practices meeting is a 30-minute biweekly meeting that serves as an opportunity for continuous author training as well as a platform to bring questions concerning authoring to the group. The meeting agenda consists of:

- Best Authoring Practices – taking up to 10 minutes, this will demo an authoring practice, a system feature, or a system interface.
- "Fix of the Week" – taking about 5 minutes, this will quickly address discovered issues or poor authoring habits
- Q&A – taking the remaining 15 minutes, the Q&A opens up the floor for authors' questions or concerns.

Even though new policy should not be presented during these meetings, try to attend as authoring short cuts and corrective instructions will be presented.

Creating a PDF

At various stages during document creation, you will want to generate a PDF of your document.

Creating a PDF "Generally"

If you are generating a PDF just to look at your document, you do not need to change the statuses of the map objects. See PDF Creation.

Creating a PDF for Submission

If you have completed your project's authoring or are submitting the document for review, there are some additional steps that must be taken prior to submitting your document. The following requirements apply **only to those topics, maps, and images authored by your team:**

Flag New and Changed Information

1. Ensure Draft Comments are added to new topics, changed topics, and topics containing questions to SMEs. See Draft Comments.
2. Create a **What's New?** topic and add it at the front of the bookmap. See The "What's New?" Topic.

Check Spelling and Metadata

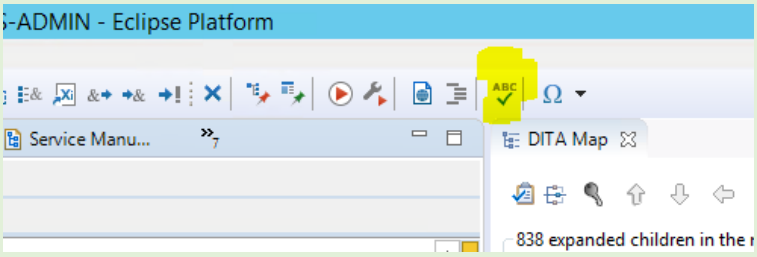
The process below will soon be replaced using the Acrolinx feature.

1. Spellcheck the document:
2. Make sure the bookmap title, part number, and date reflect the latest revision.

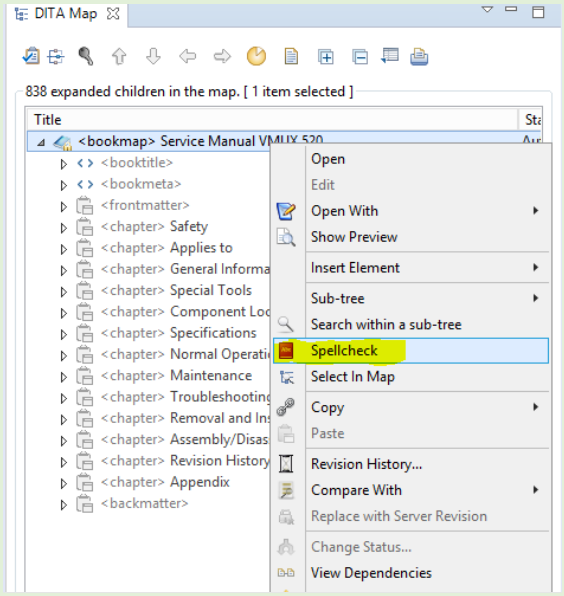
Spell Check

There are two methods to perform this.

1. You can spell check an individual topic using the "ABC✓" button in the Oxygen view upper tool bar:



2. You can spell check an entire map by right clicking the map in the DITAmap view and selecting "Spellcheck."



Because these features are "less than ideal," use both. Sometimes, the Spellcheck feature will incorrectly change technical words, abbreviations, and proper names because they don't exist in IXIASOFT's Spellcheck dictionary, so check each correction instead of allowing the feature to correct all occurrences.

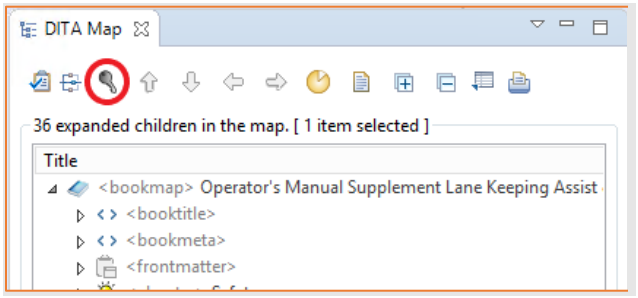
- If you are unsure what the title, PN, or date should be, ask your TCL.

Check Links and Keys

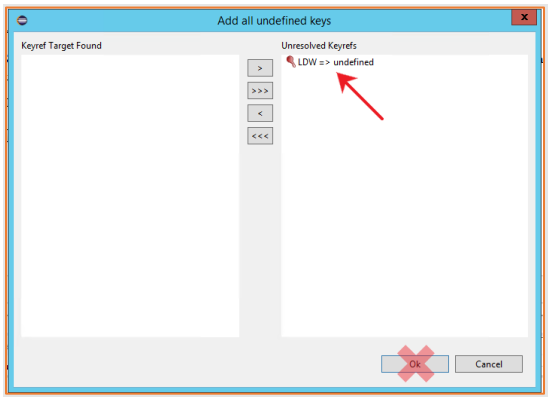
Resolving Keys

Resolve any keys before submitting your document.

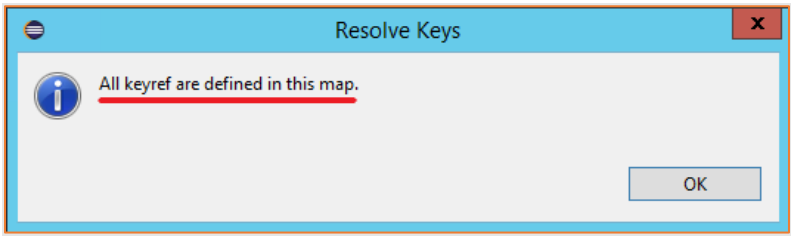
1. Populate your bookmap in the DITA Map view.
2. Select the Resolve Keys icon.



3. If there are missing keys, record which keys are missing and then select Cancel. ***Do not select OK.***



4. ***Contact the Information Architect if you encounter unresolved keys.*** If all keys resolve normally, proceed to the next step**.**
5. Once all keys are resolved, the Resolve Keys dialog box will appear:

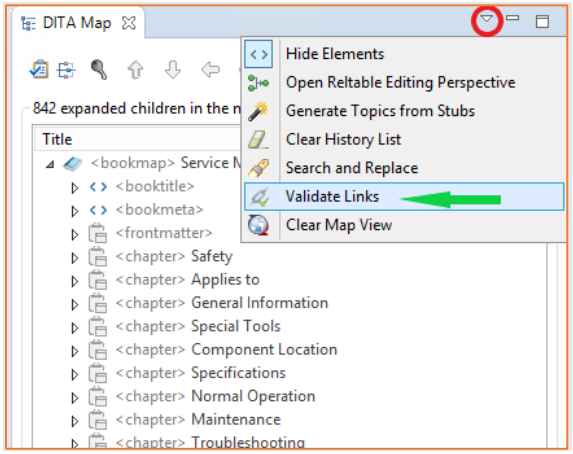


6. Select "ok."

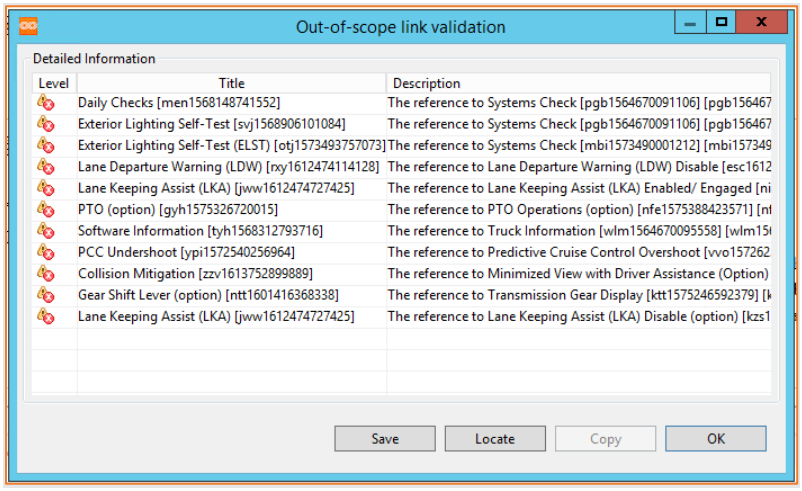
Validating Links

Validate links before submitting your document.

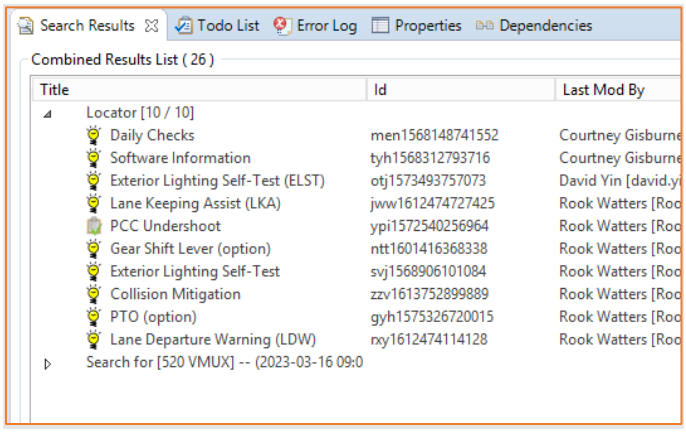
1. Populate your bookmap in the DITA Map view.
2. Select the View Menu carrot in the DITA Map view ○ and then click on Validate Links ←.



3. If any out-of-scope links are detected, select **Locate**:



4. Topics containing links to objects not located in your map (broken links) are shown in the **Search Results** tab**:**



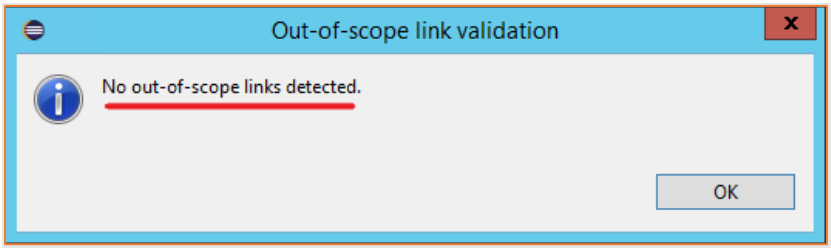
5. Check the links within each listed topic.
    a. There are many reasons why a link would be out-of-scope in your assigned topic.

Do not reassign or replace an out-of-scope link to fix your broken link. This may result in creating additional out-of-scope links in bookmaps not associated with your authoring.

    b. Since each out-of-scope link might require a different solution**.** ***Reach out to the Information Architect if you are unsure as to how to resolve the link***.

Do not clone the topic to resolve an out-of-scope link without first contacting the Information Architect.

6. Do not generate a PDF until all out-of-scope links are resolved:



Change the status of Map Objects

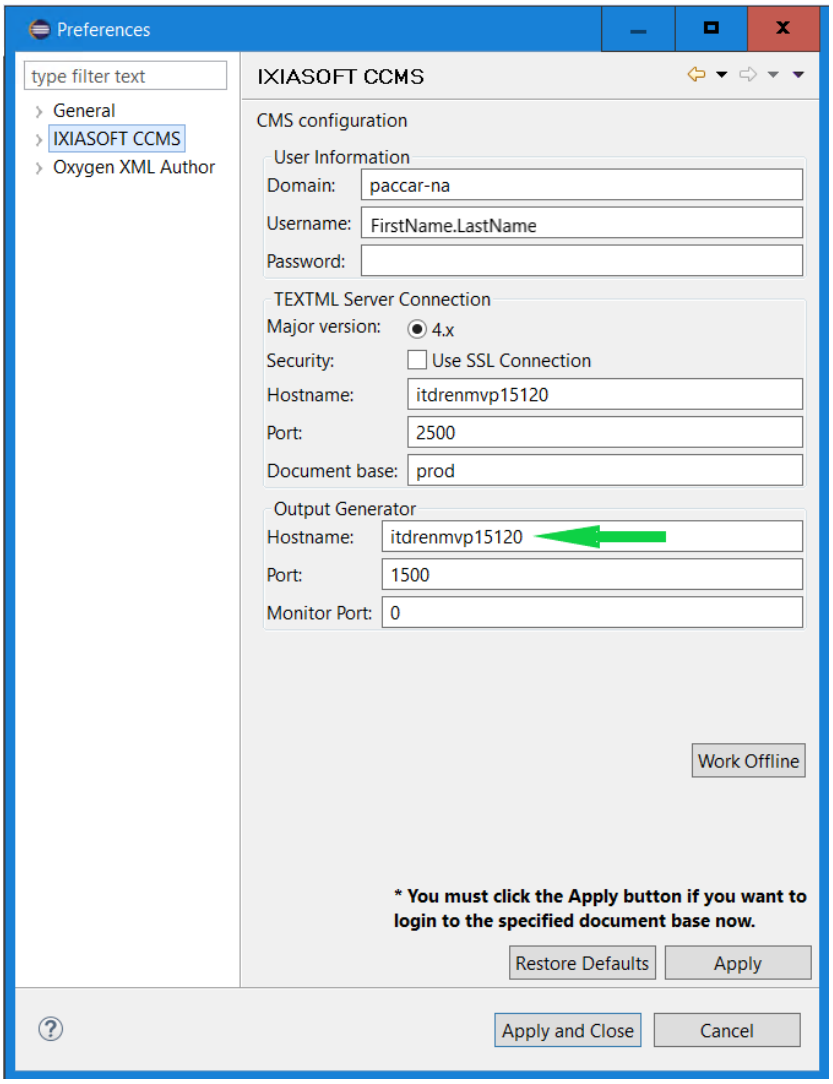
1. Populate your bookmap in the DITA Map view.
2. Ensure that no map objects are locked by you or others. If you encounter map objects locked by others not on your team, contact your TCL and IA.
3. Search your map for objects not in Done or Complete. ***Reach out to someone with experience using the IXIASOFT desktop client or the IA if you're unsure how to perform this search.***
4. For objects in your map *not already* in the **Authoring: Done** or **Authoring: Complete**, change the status of those objects using the change status function.

Either reach out to someone with experience using the IXIASOFT client or read the IXIASOFT Desktop 6.3 Users guide for an explanation on how to change an object's status:
User guide for IXIASOFT Desktop 6.3 > Working with DITA > Working with objects > Change the status of an object.

   a. Change their statuses in the following order:
      i. Images in **Done**.
      ii. Referable content topics in **Complete**
      iii. Glossary terms, concept, task, troubleshooting, and reference topics in **Complete.**
      iv. Bookmap in **Review.**
5. Your map is now ready to be generated as a PDF. See PDF Creation.

PDF Creation

Before generating a PDF output, make sure that the IXIASOFT desktop client is pointing at the correct stylesheet for your output. PACCAR has two stylesheets, one for operator's manuals and the other for service manuals and programming guides. This requires that the correct address is entered in the Output Generator section of IXIASOFT CCMS configuration dialog box ←



IXIASOFT CCMS Dialog Box – Output Generator Points at PROD (operator's manuals)

Make sure that **Hostname** under Output Generator selects either:

- itdrenmv**c**15120 for generating service manuals
- itdrenmvp15120 for generating operator's manuals

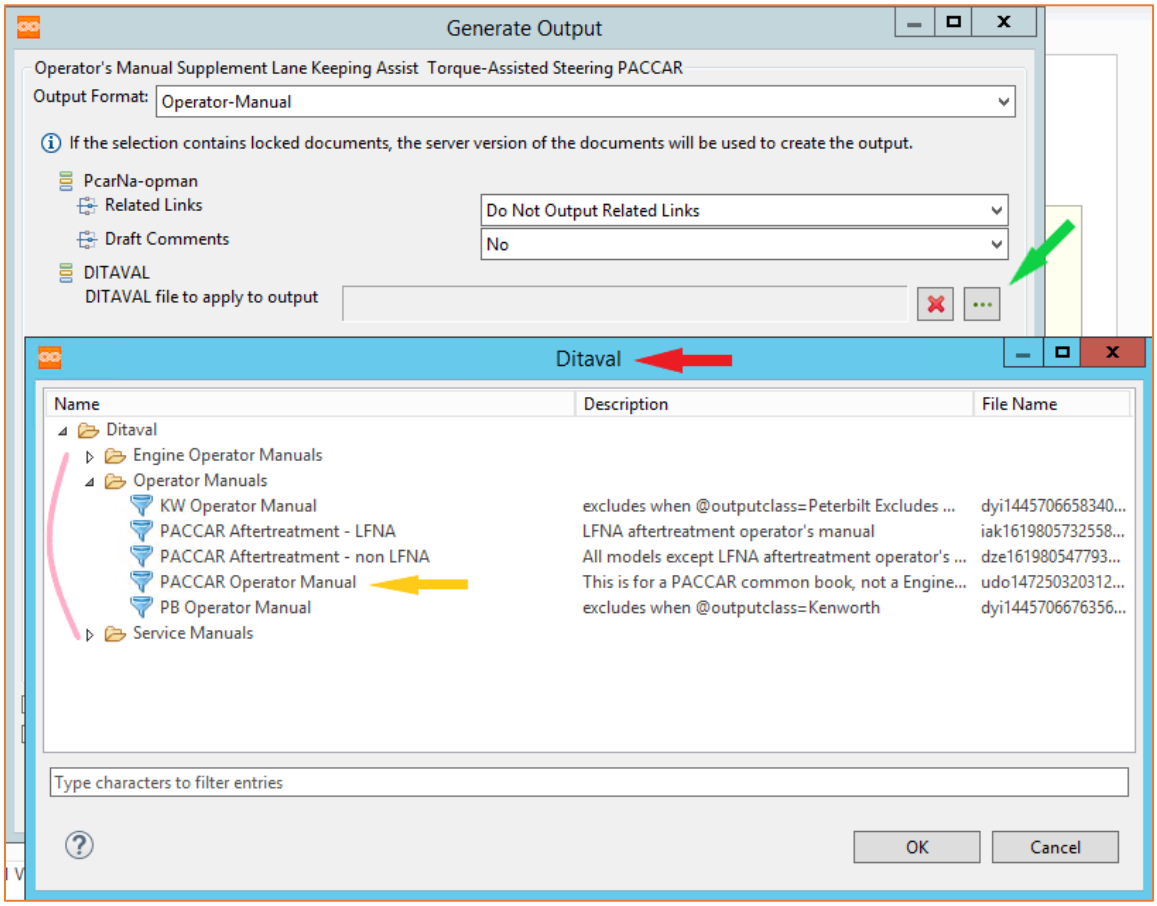
Notice the "c" or "p" difference in the above addresses

Once a stylesheet is selected and saved, it is remembered for future output generation; therefore, there is no need to reselect the stylesheet before every output generation unless you need to switch from generating a service manual to an operator's manual, or vice versa.

1. Populate your document in the **DITA Map** view.
2. Right click on the <bookmap> element (at the top) and in the drop-down menu, select Generate Output.
    a. The Generate Output dialog box will appear.
3. In the *Output Format* blank select:
    a. **Service-Manual** if your document is a service manual or programming guide.
    b. **Operator-Manual** if your document is an operator's manual.
4. In the *Related Links* blank, select Related Links Displayed in Output.
5. In the *Draft Comments* blank, select "Yes."

Select "Yes" for Draft-comments for all submissions except for the PDF created at project completion.

6. In the DITAVAL blank, select the **…**
    a. The DITAVAL dialog box will appear
7. Select the folder associated with your manual's document type: Engine, Operator, or Service: (
8. Select the DITAval appropriate for your output (contact the TCL or IA if you are unsure).



Ditaval Dialog Box - PACCAR Operator Manual selected.

   a. Select "OK."

9. Check the "Open output folder when done," and "Unzip when done" radio boxes at the lower left of the Generate Output dialog box.
10. Select "Create."
    a. The output generator is now creating the PDF (the progress can be observed at the lower-right corner of the client).
11. Once the "Save As" dialog box appears, save the output to a known location.
    a. The output generator is now sending the zipped folder to the chosen location.
12. If the radio buttons were checked in step 9, your computer will present the PDF's location in a new window (otherwise, you'll have to locate the file you generated).
13. Copy and paste the document (do not drag and drop) to an easily retrievable location if necessary – if you didn't save the file locally, this can be very helpful.

If your PDF needs to be submitted to the TCL, upload the PDF to a location accessible by both your team and the TCL – usually a shared BOX.com location. See Submitting a PDF.

Submitting a PDF

When a PDF is submitted, it should be completed to the best of the author's ability. Submitted PDFs are usually sent out for review. Authoring should not be conducted in a manner that encourages SMEs to re-author the material: authors write the content; SME's vet its accuracy.

To submit a PDF to our team, an established submission location should be negotiated. Currently, the Technical Content Liaison (TCL) prefers that documents be uploaded to box.com.

Make sure your PDF is generated correctly for submission. See Creating a PDF for Submission.

Upload the PDF

1. Upload the PDF to the location specified by the TCL – currently box.com – and in the correct folder.
2. Send an email to the TCL (CC'ing the IA) apprising them that the authoring has been completed and that a PDF has been generated and uploaded.
3. Update your progress in Smartsheet (see Updating Smartsheet).

Completing the Project

Once your document has:

1. Been fully reviewed, which usually consists of:
    a. One internal Content Excellence review
    b. One or more SME reviews
2. Incorporated all review feedback designated essential by your TCL.
3. Passed the final approval process.

The TCL will notify you to prepare the bookmap and topics for publication in the CCMS:

If content updates have been made since the last review, make sure to Spellcheck those updated topics again!

1. Delete the "What's New?" Topic

Remove the "What's New?" topic (if it's still there) from the bookmap and delete it after the review is over, before the bookmap is placed in Done.

2. Remove Draft Comments

Remove all temporary draft comments in accordance with our draft comment policy prior to placing topics into Done (see Removing Draft Comments).

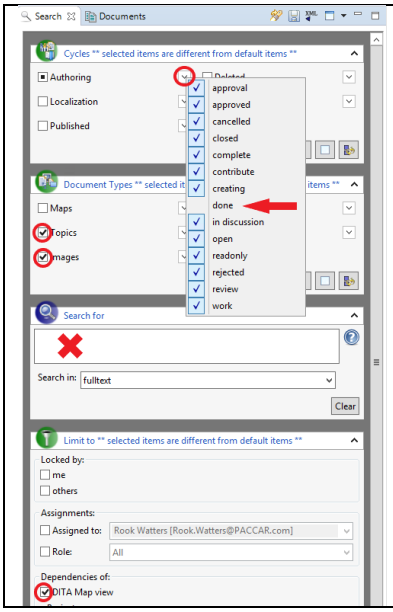
3. Place Bookmap Objects into Done (Not Maps or Bookmaps)

Bookmap objects should have their status changed to Done in the following order:

1. All graphics
2. All referable content topics
3. All glossary terms
4. All concepts, tasks, reference, and troubleshooting topics

Checking a Bookmap for Objects Not in Done

The quickest way to check a bookmap for topic status is to search the DITA map view using the IXIASOFT search feature:



1. Ensure the map you wish to search shows in the DITA Map view.
2. Select the Authoring drop-down menu from the Cycles section ○ and de-select **done** ←
3. Select both Topics and Maps in the Document Types section ○○
4. Ensure that the **Search for** section is empty ✖
5. Select DITA Mapview in the **Look to** section ○
6. Hit the Search button

All image and topic objects which are not in Done will populate in a search window.

Several CCMS objects statuses can have their statuses changed simultaneously but they all must be in the same category (the numbered list above) and they all must be in the same status (all in Work, or all in Complete, etc.).

Place objects in Done with forethought and deliberation. CCMS objects should not be moved into and out of Done frequently. Doing so creates unnecessary object history as well as administrative work for others.

4. Update Bookmaps Metadata

Make sure bookmap metadata is correct:

- Author
- Part number(s)
- Date
- Copyright date
- Keywords

Correct any incorrect metadata.

5. Place DITAmaps and Then the Bookmap into Done

Change the status of any nested DITAmaps in the bookmap into Done, then change the status of the bookmap to Done.

6. Generate a PDF for Submission

Turn off Draft Comments when generating an output for this submission. Once the PDF is generated, make any post-production corrections required by the TCL.

7. Submit the PDF

See Submitting a PDF.