A PDF Production Handbook

This handbook captures a generic workflow that you can use to produce PDF files from FrameMaker documents in a team authoring environment. It is assumed that a version control system such as Perforce is in use to control access to the shared source files.

The following sections are included in this handbook:

Relevant scenario

A typical scenario where this workflow will come handy is as follows:

- Your team uses single-sourcing to produce output in multiple formats from the same FrameMaker source files.
- The documentation set under consideration consists of multiple files shared across several books.
- The source files have multiple text insets.

Prerequisites

Before you get started with creating a PDF, ensure the following:

- Your peers have checked in the latest source files into the version control repository.
- You have complete access to all the files and folders.

Important considerations

Cross references

Cross-references are not updated automatically when the reference destinations are within text insets.

- Cross-references are not updated automatically when the reference destinations are within text insets.
- Application of conditional tags drastically alters cross-references.

  Make sure that a cross-reference destination is not hidden in your book because of conditional text. In such cases, you'll get many unresolved cross-references when you update the book.

Variables and special characters

- You cannot search in FrameMaker for text that appears as variables in your document. To search for such content, generate a makeshift PDF and search in it.
- You can't search for special formatting and nonprinting characters, such as non-breaking space, the usual way in FrameMaker.

  For example, if you used a non-breaking space or non-breaking hyphen in a long product name so that it doesn't break across lines, typing the product name in plain text as it appears in the **Find** dialog will return no results.

  See About typing in dialog boxes in FrameMaker Help to see how you can input special characters in the **Find** dialog box. If you suspect that the product name is not returned in searches, turn on the text indicators. Alternatively, create a PDF, even by ignoring the warnings about pagination, and so on, to search for special formatting and nonprinting characters.

Change bars

When you are creating the final PDF for publication, remove the change bars. Note that change bars appear again if you flatten the text insets in a book after you have cleared all change bars across the book.

If you want to preserve the change bars in the source, you can set their color to white in the **Change Bar Properties** dialog (Format > Document > Change Bars), so that they are not visible in the PDFs. Later, if required, you can set the change bar color again to a visible color. See Identify revised text with change bars in FrameMaker Helpfor more information.

If you choose to make the change bars white, ensure that you don't have a black background for the page numbers in the header/footer. Otherwise, white change bars will be visible alongside changed page numbers in the PDF.
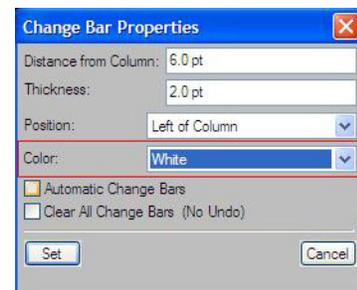
Latest patches, service packs, and fixes

Install a Microsoft hotfix from http://bit.ly/18312x if you are facing problems while trying to generate PDFs from FrameMaker 7.2 or FrameMaker 8.0 files.

Download and install the patches for FrameMaker from Adobe.com and other patches from Microsoft.com.

In particular, install a Microsoft hotfix from http://bit.ly/18312x if you are facing problems while trying to generate PDFs from FrameMaker 7.2 or FrameMaker 8.0 files.

Equip yourself with relevant details

Gather as much editorial and production information from your publishing team and editors as possible.

- **Book Conditional Text settings.** If you don't have a set already, create one yourself.
  - Create a table with a list of books and their corresponding conditional tags to show/hide. Take a printout of this table and pin it to your cubicle wall so that you have an easy reference.
- **Document metadata**

Consult your editor for standard PDF settings such as the following that your organization applies to PDF documents:

- Document information such as the correct document title, copyright, author information, etc.
- File naming conventions.
- How the PDF should open, how navigation should be, and what to show on the Acrobat or Adobe Reader title bar.
- Document security. Understand the security settings that your organization applies to published PDFs, such as allowing users to print, extract text, etc.

- **PDF settings** (*joboptions* file)

  Specify the PDF settings for Adobe Distiller.

  - Specify the PDF settings for Adobe Distiller.

- Style guide and production instructions

  - For quick reference to verify paragraph formats, naming conventions, etc.

- **Template files.** You may have to import and reapply the variables, paragraph, character, and cross-reference formats with the standard definitions from the template files.

Specify the PDF settings for Adobe Distiller.

- **Fonts.** If you are creating the PDF on a machine different from the one where you created the documents, ensure that you have all the required fonts on your machine.

  If you are creating the PDF on a machine different from the one where you created the documents, ensure that you have all the required fonts on your machine.

  FrameMaker displays the list of missing fonts when you open such documents. Copy such fonts to your machine. Typically, fonts such as *dingbats* used in bullet styles may be missing.
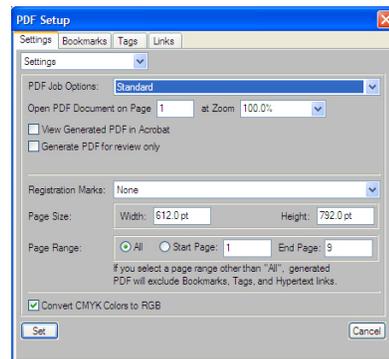
Stage 0: Prepare the content

From the following list, carry out all the steps that are required:

- Spell check. Use the spell-checking guidelines of your organization. Do remove all the spell-checking overrides:

  a In FrameMaker 9, click **Edit > Spelling Checker**.

  b Click **Options**.

  c In the **Spelling Checker Options** dialog, ensure that no options are selected under **Ignore**.

Text insets and variables within the text are not spell-checked at this stage. To spell-check the insets, check out the inset files from the version-control repository, spell-check them, and check your changes back in.

Note: Preferably, spell check after applying the required conditional text show/hide settings. For example, hide all editorial comments and author notes before you spell check. If you applied word-or character-level conditional text settings, there could be words running into each other that may be incorrectly flagged as misspelt words.

*Note: If you have **Straight Quotes** selected under **Find** in the **Spelling Checker Options** dialog, ensure that you do not change straight quotes in code snippets. This step is especially relevant for administrator and developer documentation where readers can use the code as-such by copy-pasting it.*

- Show all conditional text except comments and other editorial remarks.
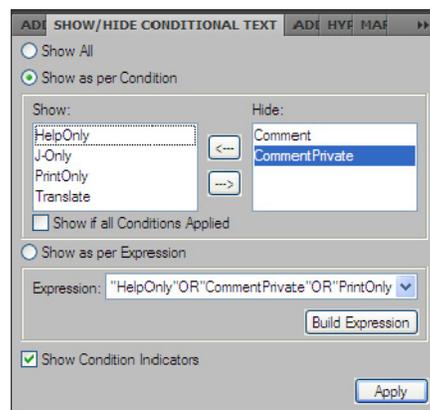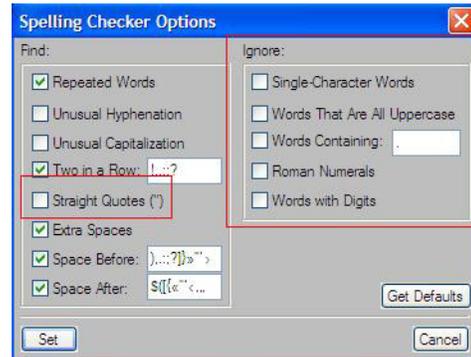
- Check linked files

 Ensure that linked/referenced files such as images are present.

- Ensure that linked/referenced files such as images are present. Use the **Insets** pod in FrameMaker 9 to quickly wade through text and image references and resolve them.
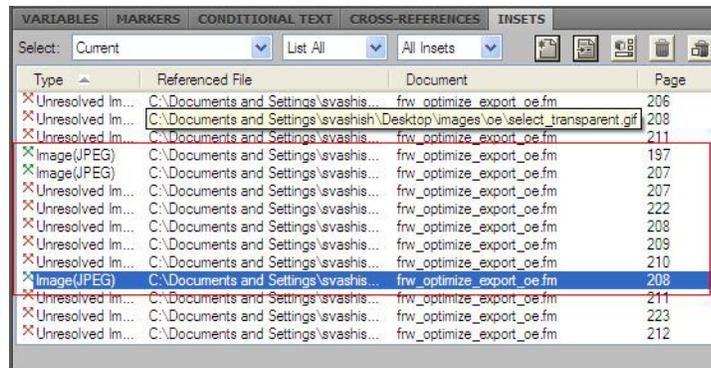

- If you are using a version control system, update the links (or get the latest version of the files)

- Remove format overrides. See About format overrides in FrameMaker Help for more details.

Stage 1: Clean up the source

At this stage, clean up the source in the repository. You must have all the files open in FM to conduct most of the production tasks laid out in this section.

Caution: Do not flatten (convert to text) any text insets right now.

1   Check out all files that are required for the book.

2   Open the book file and then open all files in it. Ignore all warning messages for the while, except for the missing files alerts.

3   Open the template file that contains the official final set of variables. Do not check out this file or any such template files.

4   Import the variables from the variables file:

    a   In the Book window, ensure that all files are selected and opened.

    b   Select **File** > **Import** > **Formats** and then select the template file that contains all the standard variable definitions.

    c   Click **Deselect All** and then select only **Variable Definitions**.
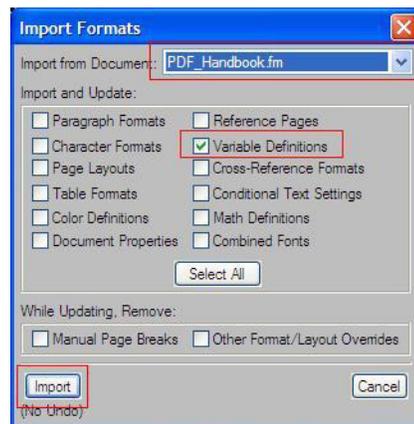

    d   Click **Import**.

5   From the Book window, select and open all files and do the following:

    a   Select all files and apply the conditional text show/hide setting:

       •   Select **View** > **Show/Hide Conditional Text.**

       •   Select the tags that you want to show.

- Clear **Show Condition Indicators** and click **Apply**.
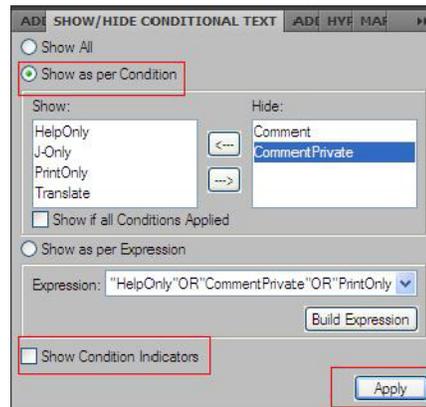
b Clear the change bars:

- Select **Format > Document > Change Bars.** As explained before, this step is only required when you're creating the final PDF.
- Select **Clear All Change Bars (No Undo)** and click **Set.**
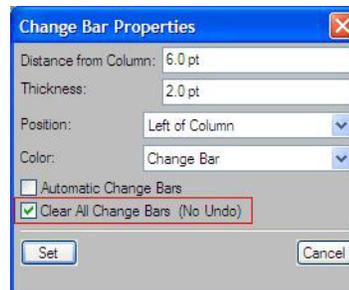
c Update the book:

- Select **Edit > Update Book.** Ignore the errors and ensure that the Table of Contents and other required files such as indexes, list of tables, list of references, etc are generated.
- Note the list of errors shown in the error log.
- Ignore errors such as mismatch in print settings of colors.

Ignore errors such as mismatch in print settings of colors.

6 Search and resolve unresolved cross-references.

a Select **Edit > Find.**

b In the **Find** pop-up menu, select **Unresolved Cross References**.

c Select **Book** for **Look In**.
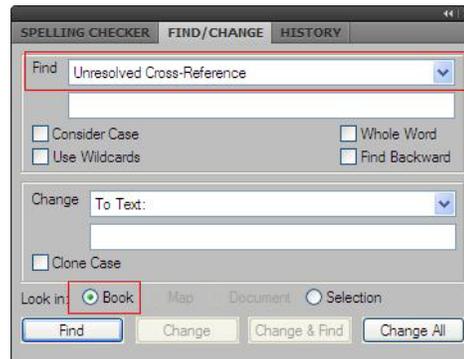
Caution: This is a partial step, as some of the cross-references may have their destinations inside text insets. Resolving such broken cross-references will necessitate flattening the insets to resolve. We will come to that step later. DO NOT flatten the text insets now.

**7** Set the document properties. Select **File > File Info.** Fill in the details according to the metadata information that your organization requires.

For final production, once the content is already frozen, find the editorial and self-note character tags and delete them.

8 For final production, once the content is already frozen, find the editorial and self-note character tags and delete them.

For interim builds, such as for beta release, comments or other such conditional text would be hidden in the PDF. Here's an easy way to find such character tags:

a Select a word and apply the **Comment** conditional tag to it.

b Select **Edit > Copy Special > Copy Conditional Text settings.**

c Select **Edit > Find** and then do the following:

• Select **Character Tag** and type the name of the character tag (for example, checkthis, "Author Note", or "Author Question").
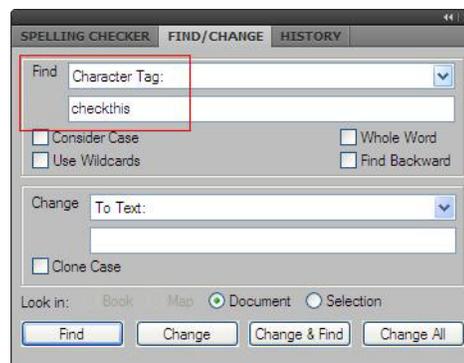
• To change all occurrences, in the **Change** pop-up menu, select **By Pasting** and then click **Replace All**.

• To find each occurrence and manually change, click **Find** and then press Ctrl+V to apply the Comment conditional tag to the highlighted text.

**9** Check all the files back to the version control system.

Stage 2: Prepare the book and create PDF

After you have made the necessary changes in the source, create a local copy on which you will carry out the production tasks.

After you have made the necessary changes in the source, create a local copy on which you will carry out the production tasks. This is necessary because the production processes involve altering the source files permanently. For example, you would be flattening the text insets.

1 **Create a local copy for production.** After checking in all files, complete the following tasks:

a Copy the entire folder from your local repository to a local location.

b Right-click the folder in Windows Explorer and click **Properties**.

c Clear the Read Only attribute and click **OK**.

2 **Flatten the text insets.** Do the following tasks:

a In FrameMaker 9, select a text inset from the **Insets** pod.

b Double-click the first text inset and click **Convert to Text**.

c Repeat this for all files in the book.

You can also find text insets using the Find/Change pod. See the screenshot to the right.
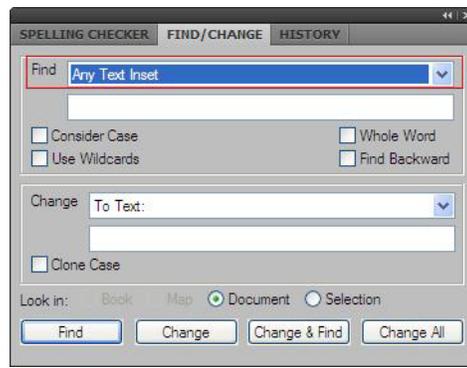
Note: Do not save the FrameMaker documents after flattening text insets. If more PDFs or output files need to be produced from the same source, the cross-references relevant for a different set of condition tags may not work after you save the FrameMaker documents.

3 **Apply conditional tags.** In the **Book** window, select all files and apply the conditional tag required for the book.

a Select all files (Ctrl+A).

b Select **View > Show/Hide Conditional Text.**

c Set the conditional text to **Show/Hide**. Deselect **Show Condition Indicators.**

d Click **Set.**

4 Update the book. Click **Edit > Update Book.** Make sure that all necessary options are selected.

5 Once more, resolve cross-references. This time, you will be able to resolve the broken cross-references in the text insets you flattened.

6 Ensure that the page numbering properties for the different files in the book are set correctly.

7 Clear the change bars.

a In the Book window, select **Format > Document > Change Bars.**

   b   Click **Clear All Change Bars** and then
        click **Set.**

8   Update the book again.

9   Click **File** > **Save As** and select **PDF**.

10   Set the required PDF settings.

11   Click **Set**.
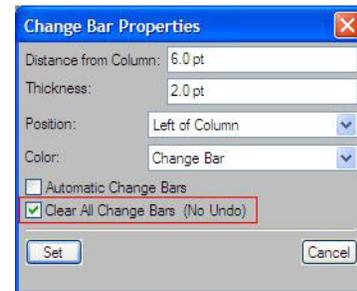
Stage 3: Test the PDF

Because you can't search for text inside
variables or text insets in FrameMaker, you search for such text in the PDF to check if
the text to be hidden through conditional tags actually shows up in the PDF.

•   Search for product names that shouldn't be there in the document.

Search for inline comments that may not have been tagged conditional.

•   Search for inline comments that may not have been tagged conditional.

   If you followed some of the best practices in inserting comments in the source,
   search for the distinct comment placeholders. For example, if you inserted the
   comments within double angular brackets <<comment>>, search for << to locate
   any such inline comments.

   Abstract¶

   This document captures a generic workflow that you can use to produce PDF files from
   FrameMaker documents in a team authoring environment. It is assumed that a version
   control system such as Perforce is in use to control access to the shared source files.¶

   <<This is a sample comment. -SV>>¶

Locate external hyperlinks and ensure that they work

•   Locate external hyperlinks (such as to web pages) and ensure that they work. Use
   the following conventions:

   •   If you inserted fully qualified web page address (those starting with http://),
      then search for http:// and ensure that those links are live.

   •   Use a production checklist. You can create a spreadsheet and then convert it to
      a PDF form.

Stage 4: Prepare the PDF for publication

After the PDF is created, open it in Acrobat Professional and then do the following
tasks:

1   Press Ctrl+D to open the **Document Properties** dialog box.

2   In the **Description** tab, update the document properties, if necessary. If you had
   entered the document information in FrameMaker, those details are shown here.

3   In the **Security** tab, set the document security options, if necessary.

4   In the **Initial View** tab, set the following and click OK.

   a   **Navigation Tab:** Bookmarks Panel and Page

   b   **Page Layout:** Single Page

   c   **Magnification:** Fit Page

   d   Set the **Open to Page** option to the first content page of the document.

e   (Optional) Under the **Window Options** group, select **Show: Document Title** This option will display the document title in the window title instead of file name**.**
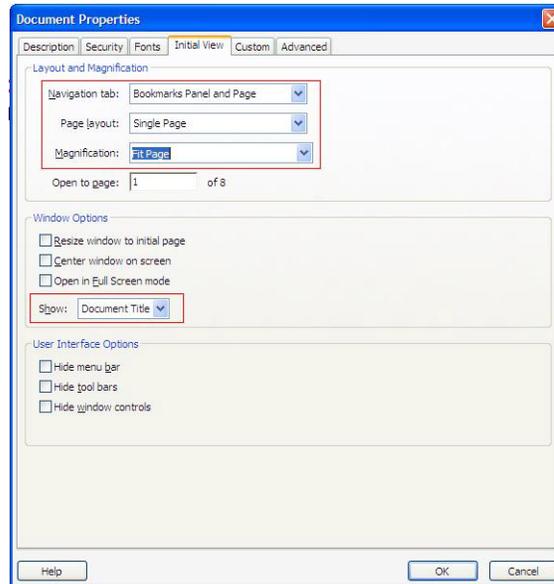
5   Set any required watermarks.

6   Click **OK** and then save the PDF.

Stage 5: Optimize the PDF in Acrobat

After generating the PDF, make the following changes to it in Adobe Acrobat 9 Pro Extended:

If there are any broken cross-refer-ences in the PDF you created, you can fix them using Adobe Acrobat.

•   **Fix cross-references:** If there are any broken cross-references in the PDF you created, you can fix them using Adobe Acrobat. Do the following tasks:

•   In Acrobat. click **Tools** > **Advanced Editing** > **Link Tool** in Acrobat.

•   Double-click a highlighted cross-reference.

•   On the **Action** page in the **Link Properties** dialog, select **Go to a page view** from the **Select Action** drop-down menu. Click **Add**.

•   Scroll to the destination page for the link and click **Set Link.**

See Create a link in Acrobat Help for more information.

•   **Touch up text:** You can also touch up text to correct minor typos, punctuation errors, and other issues that do not require significant shifting of text.

The text that you add/edit will appear only in the default style of the paragraph to which you are adding it. For example, you cannot insert italicized text in the middle of a bolded paragraph. See Edit text in Acrobat Help for more details.

•   **Optimize the PDF size.** In Acrobat Professional, use the **PDF Optimizer** tool (Advanced > PDF Optimizer). See PDF Optimizer options in Acrobat Help for more information about PDF optimizer options. Keep the following tips in mind:

•   You need to optimize only the final PDF meant for delivery.

- If your PDF will only be printed and not hosted online for download by users, you do not need to optimize the PDF size.
- Any attachments to the PDF are not optimized.

Appendix: Best practices for using conditional text

Do...

Standardize

Create template files for each document type with only the relevant tags.

- Import the latest condition tags to documents from the latest template file.

- Create document-specific template files. Do not use a single template file for all document types.

  For example, conditions vary across different product lines. A general condition repository could lead to an unmanageable list of condition tags that are irrelevant to any book type.

- Name the condition tags intuitively.

  For example, if you use condition tags to separate contents for the standard, professional, and enterprise versions, name the condition tags such as `sta_<product_name_prefix>`, `pro_<prefix>`, etc.

- Create a list of housekeeping condition tags required for internal use. Text marked with these tags should not appear in the output PDF.

  For example, editorial comments, draft comments, obsolete notices, review notes, etc, are housekeeping tags. These tags should have the same text formatting and naming across your entire organization so that editors can easily recognize them.

- If you embedded web page addresses in text (such as *Go to the Downloads* page), follow a standard lead word or phrase. For example, precede all such web page addresses with *See* or *Refer to.*

Use conditions sparingly

See if you can avoid applying condition tags altogether by rewriting the content.

See if you can avoid applying condition tags altogether by rewriting the content. For example, if you are writing about installation procedures for three versions of the product, list out the differences among them from the standard procedure in a separate paragraph or topic than inserting these within the procedure itself.

This way, your entire procedure becomes unconditional, with only the differences highlighted in a separate topic or paragraph. Also, use pronouns rather than product names to refer to the product as far as possible.

Apply condition tags carefully to paragraph symbols

Do not apply conditions to the paragraph symbol if only part of the paragraph is conditional, or if more than one condition is in use in a paragraph.

Always choose to display text symbols when you work with conditional tags. Click **View > Text Symbols**.

Create paragraph formats for comments and editorial text

Create one or more paragraph formats for comments and internal, editorial text.

For example, create a text format, Author Question, that would make critical questions that you want the reviewers to notice stand out. For such as paragraph format, use red, bold, sans-serif font (if the body text is serif font such as Arial), and with 1.5 lines of vertical space above and below the para. For added effects, make the paragraph cover both columns if you have a two-column layout.

In the same vein, make the notes to self such as Author Note appear faded out, as they are for your own view. When you create a review version, hide such notes to self.

For such paragraph formats, you can set the auto numbering to Author Note/Author Question or a referenced graphic. Use auto-numbering in conjunction with a condition tag such as Author Note, so that you can show the Author Notes in the internal review PDFs to alert the reviewers to sections that you want them to focus on, ask questions, or even as a note to self.

For example, if you are sending a PDF for review with a section that would change pending a UI change, you could write thus:

Author Note: The User Management screen to change by Sprint 4. The topic "User Management" will change accordingly.

Author Question: Is 32-bit Windows Server 2003 supported as well?

Follow good housekeeping practices

Insert your initials with comments.

- **Insert your initials with comments** and if possible, the timestamp along with the comment, so that other writers or editors can easily recognize the context of the comment. For example, if you are John Doe, you could insert the comment thus: *<<JD-6/27: Will this feature be removed?>>*

- **Retain important comments** and follow up on them until the final review. For example:

  <<JD-6/27: Will this feature be removed?>>

  <<JD-7/15: Retained feature, but deprecated the backward compatibility, so removed mention of previous versions>>

- **Search for internal, inline comments and remove them:** At the time of final production, search for any inline comments that are enclosed in double angle brackets and remove them.

At the time of final production, search for any inline comments that are enclosed in double angle brackets and remove them.

- **Insert comments in new lines**: Do not bury them within paragraphs or sentences. Ensure that the complete comment text is tagged conditional, including the end paragraph symbol. To ensure this, display the text symbols.

- **Apply character tags in addition to the conditional tag.** This helps the comments stand out even when you hide the condition indicators.

- **Apply conditions at the sentence or paragraph level** and NOT at word or character levels. If you must use condition tags within paragraphs or sentences, ensure that the punctuation, spaces, paragraph symbols, and markers (index, cross-reference, etc.) are conditionalized appropriately.

- **Repeat the entire sentence for each condition** and apply the appropriate condition to each sentence if only a few words need to be different.

Don't...

Create condition tags on the fly

If you create condition tags at will, you get inconsistent condition tags in each book with resulting errors. It becomes difficult to manage the build expressions.

Depend entirely on condition tags to hide comments

Use other mechanisms to demarcate comments, especially when you insert comments within paragraphs or sentences.

- Enclose comments in double angle brackets, so that they are text searchable as well (`<<your comment >>`). At the time of final production, you can search for `<<` to see if any comments are visible in the final output. You can devise your own convention, such as prefixing all comments with `Comment:` or such distinguishable text, but do not use the following:
  - Single angle brackets: They are used in HTML and XML tags
  - Curly brackets: These are used in code samples
 - Hash (#): These are used in code samples, URLs, etc.

Condition tags are ORed and not ANDed.

Mix condition tags

As far as possible, do not apply multiple conditions to the same content. Text that has two conditions applied will appear Magenta colored as per the FrameMaker default settings.

Note that as long as one condition is set to show, the content will appear in the output, even if second and subsequent conditions are hidden. Condition tags are, thus, ORed and not ANDed.

For example, if the *Install _and_upgrade* and *Install_only* conditional tags are applied to a piece of text, the text would undesirably appear in the upgrade documentation output if *Install_and_upgrade* is in the **Show** pane in the **Show/Hide Conditional Text** dialog box, but *Install_only* is in the **Hide** pane.
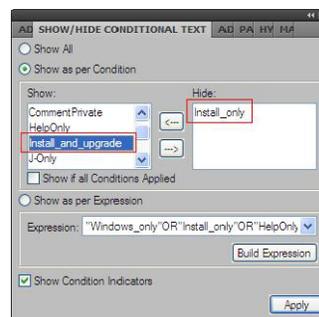
Appendix: Keeping track of content changes across versions in a collaborative environment

If you are working in a geographically dispersed team across time zones, you could run into occasional conflicts in managing content when you accidentally remove or overwrite a topic created by other writers in the team.

Use the Compare Documents feature in FrameMaker to create a consolidated document, in which changes between versions are highlighted.

If you suspect such a situation, you can use the **Compare Documents** feature in FrameMaker to create a consolidated document, in which changes between versions are highlighted with Inserted and Deleted conditional tags.

However, you might find it difficult to go through all changes, including minor editorial changes, when you want to focus only on the major content changes. For this, use a combination of paragraph formats and conditional text tags to keep track of content updates.

If you are adding, deleting, or substantially modifying a topic, add a draft note about the nature of change and apply special paragraph format and a relevant conditional text. Ensure that the paragraph format that you define for such purposes stand out from the rest of the content in fonts, weight, and color. If your body text is in sans-serif fonts (for example, Arial 10 pt), use a serif font such as Times New Roman for the paragraph format, and use italics for the body text. Then, to ensure that this text doesn't appear in your final document, apply a special conditional text to it.

For example, if you add a new topic about upgrading the software version, add a note thus:

<<JD: 9/27: Added section "Upgrading considerations".>>

Note that you need to add the author initials and the date of change too.

In this example, the following are used:

Paragraph Format Name: Author Note

Default Font: Times New Roman, 12 point, Italic

Space Above and Below: One line each (ensures that the author note stands out from the rest of the body)

And then, the conditional tag:

Conditional Text Tag: Author Note

Format: Default Font, Color: Muave

After you have added such housekeeping information, you can add a table of contents (TOC) to the book before the first document in the book (usually, the cover page) itself, so that other authors can quickly see what has changed. Because the new TOC contains only the links to notes from the authors, it is easy to navigate to their respective changes.