

# DITA Workshop



## Learning Objectives

After the training, you should be able to

- demonstrate familiarity and application with the DITA authoring environment
- develop technical content using DITA authoring elements

## Topics

- Introduction to DITA
- Content Models and Information Types
- DITA Map and Bookmap
- DITA Authoring Elements
- Graphics
- Cross-references
- Reuse
- Publishing

## Prerequisites

Ensure that you have installed the following tools prior to attending the training.

- Oxygen XML Author
- SDL Tridion Docs



# DITA Workshop

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As more and more companies implement DITA to simplify the development of technical content, the demand for technical communicators with DITA knowledge is growing. This three-hours hands-on-workshop is designed to teach you the basics of DITA.



# Introduction to DITA

- What is DITA?
- The purpose of DITA
- History of DITA
- Who uses it now?

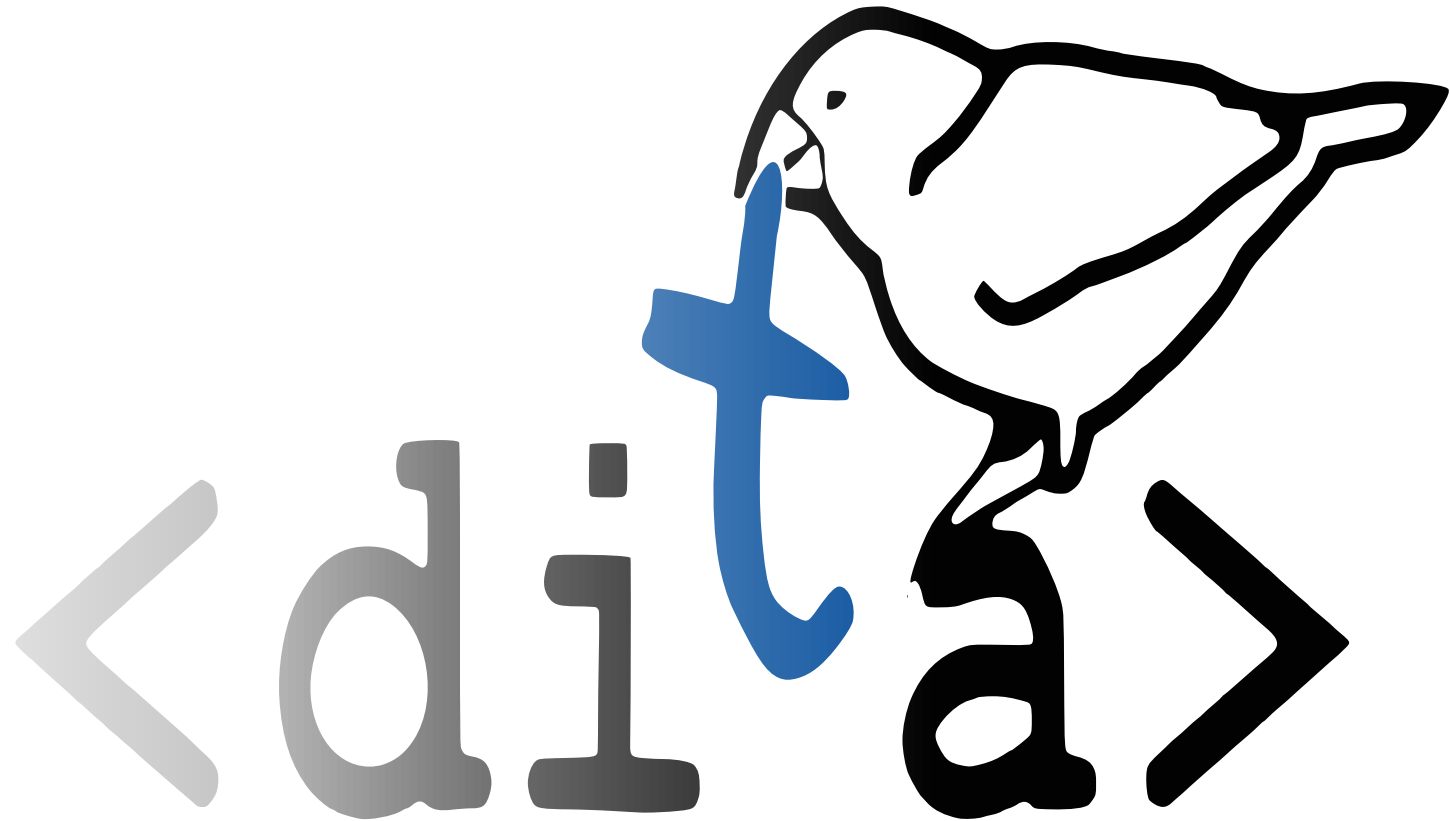


## What Is DITA?

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DITA, or *Darwin Information Typing Architecture*, is a W3C standard for organizing content by concept, topic, and task.

First created by IBM, DITA is now an open-source standard that has wide support across many different industries.



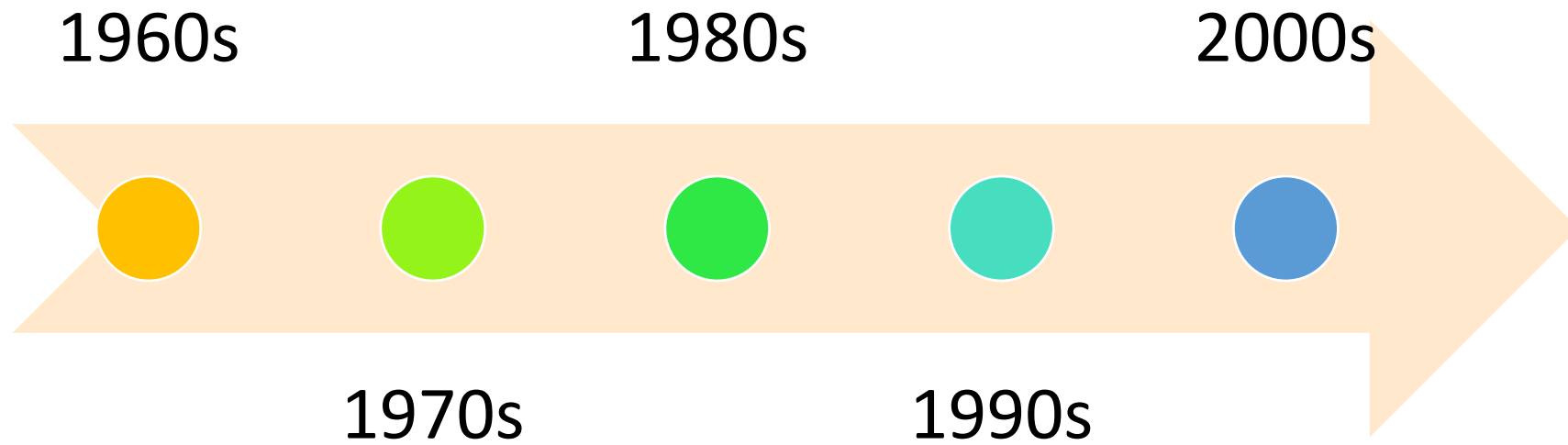
## The Purpose of DITA

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- Create modular, topic-based content.
- Single-Sourcing
- Multiple Delivery Points



# History of DITA





## Who Uses It Now?

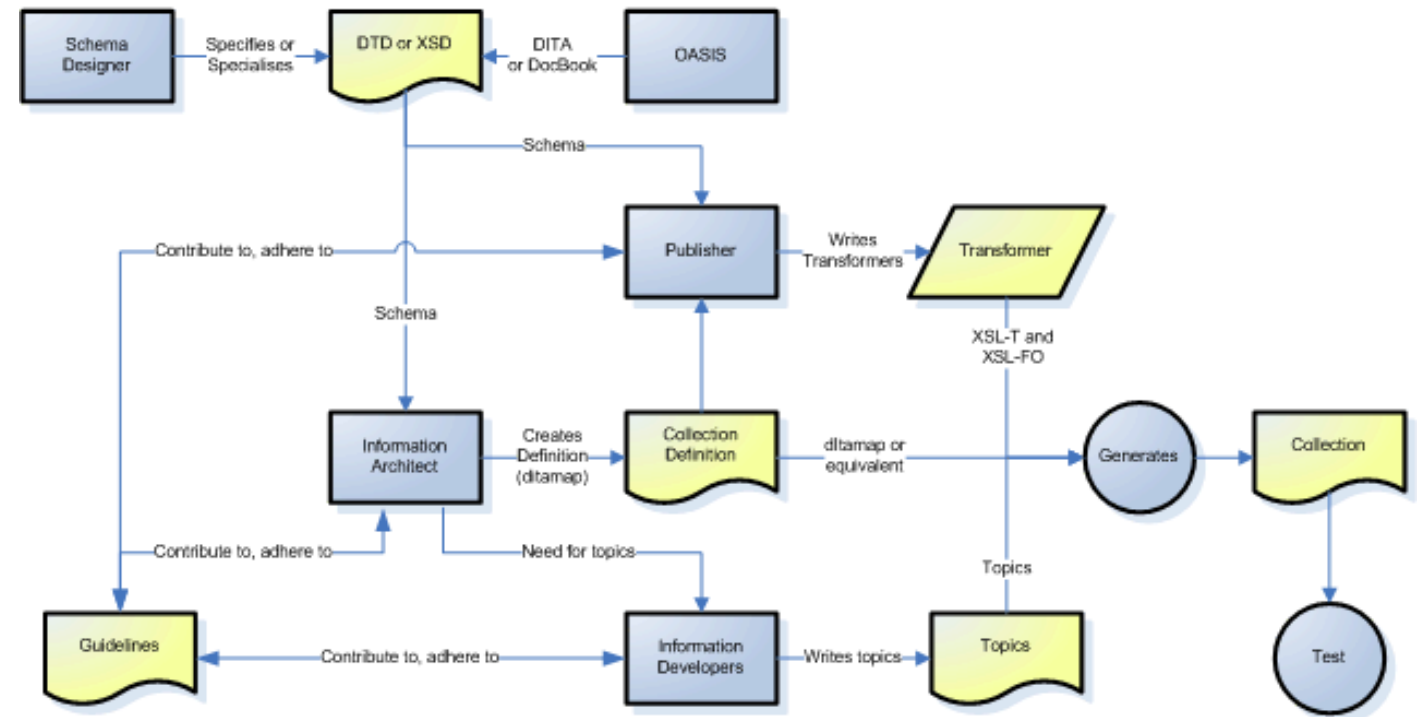
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DITA is used primarily in the technical writing and publishing communities, where it receives a great deal of support.

However, in recent years the DITA standard has received attention from the training industry, from which the DITA Learning Specialization is a result.

## Workflow in a DITA authoring environment

- Documents are never displayed to the reader in DITA; DITA is not a presentation format. Content is almost completely separated from presentational form and delivery format.
- Wherever possible, context is also separated from content.







# Content Model and Information Types

- What is a content model?
- Discuss different types of information types
  - Concept
  - Task
  - Reference
  - Topic
- Identifying the information type



# Create DITA Content

Discussions about DITA often include questions about writing topics, tasks, concepts, and references. Initial content creation include:



Identify the  
audience



Create an idea  
list



Identify topics  
by types



Develop the  
topic

# Create DITA Content – Bare Bones

- The first line (which begins with `<?xml`) is an XML declaration, which is a standard part of all XML files.

`<?xml version="1.0" encoding="UTF-8"?>`

- The second line is the DOCTYPE declaration, which tells DITA editors or DITA output generators that this is a DITA topic. The programs then use that information when validating the content of the topic. The DOCTYPE will be specific to each topic type that you create.

Topic Type	DOCTYPE
Concept	<code>&lt;!DOCTYPE concept PUBLIC "-//OASIS//DTD DITA Concept//EN" "concept.dtd"&gt;</code>
Task	<code>&lt;!DOCTYPE task PUBLIC "-//OASIS//DTD DITA General Task//EN" "generalTask.dtd"&gt;</code>
Reference	<code>&lt;!DOCTYPE reference PUBLIC "-//OASIS//DTD DITA Reference//EN" "reference.dtd"&gt;</code>

- The third line contains the opening tag of the topic element.
- The fourth line contains the `<title>` element.

Here is a minimal valid topic:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE topic PUBLIC "-//OASIS//DTD DITA Topic//EN" "topic.dtd">
<topic id="myfirsttopic">
  <title>Hello world</title>
</topic>
```

This topic is valid, but it is not particularly useful because it doesn't have any body content. To make a topic useful, you need something more like this:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE topic PUBLIC "-//OASIS//DTD DITA Topic//EN" "topic.dtd">
<topic id="myfirsttopic">
  <title>Hello world</title>
  <body>
    <p>Here is a paragraph</p>
    <ul>
      <li>bulleted lists are nice</li>
      <li>especially if you have at least two items</li>
    </ul>
    <note>And don't forget the notes.</note>
  </body>
</topic>
```

# Create DITA Content - Example

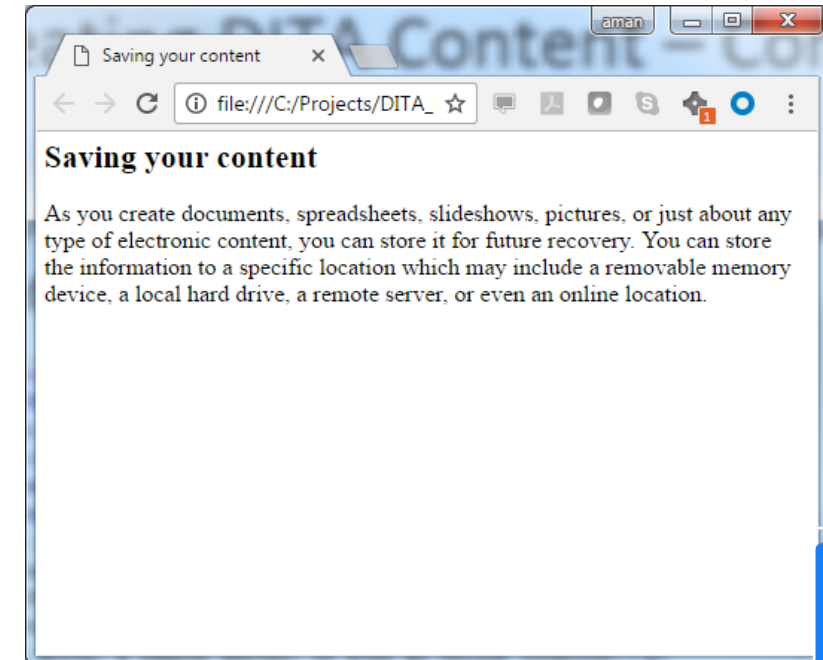
The development team told me that there is a new product and it allows users to save content. Based on the discussion, I created a list of topics that includes:

- Saving your content (**concept** describing what happens when the user performs a task)
- Save a file (a **task** with core ideas of how the user accomplishes a goal)
- File types (**reference** information that the user may choose to look up)

# Create DITA Content – Concept Example

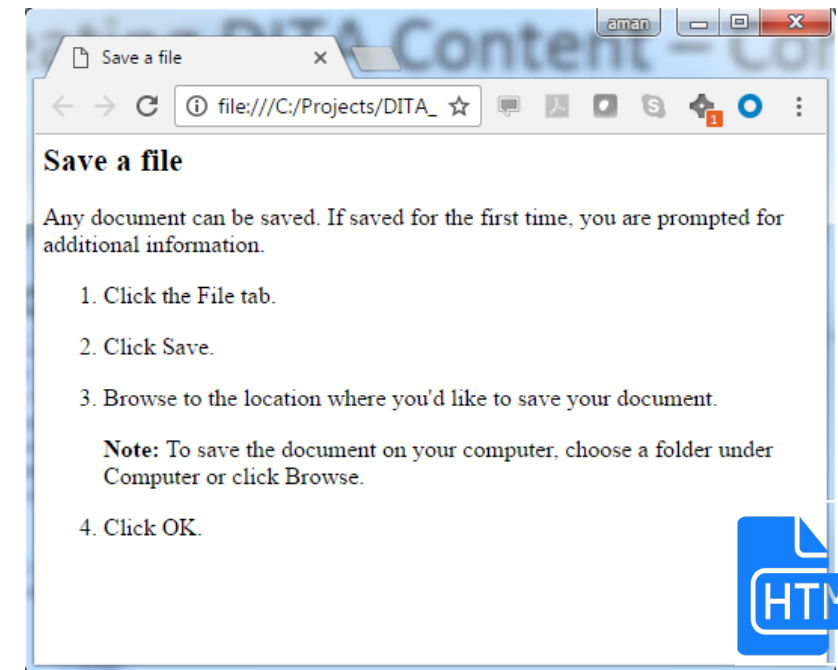
Saving your content (**concept** describing what happens when the user saves content)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE concept PUBLIC "-//OASIS//DTD DITA Concept//EN" "concept.dtd">
<concept id="concept_sy1_fjv_ry">
  <title>Saving your content</title>
  <shortdesc/>
  <conbody>
    <p>As you create documents, spreadsheets, slideshows, pictures,
      or just about any type of electronic content, you can store it
      for future recovery. You can store the information to a specific
      location which may include a removable memory device, a local
      hard drive, a remote server, or even an online location.</p>
  </conbody>
</concept>
```



# Create DITA Content – Task Example

Save a file (a **task** with core ideas of how the user accomplishes a goal)



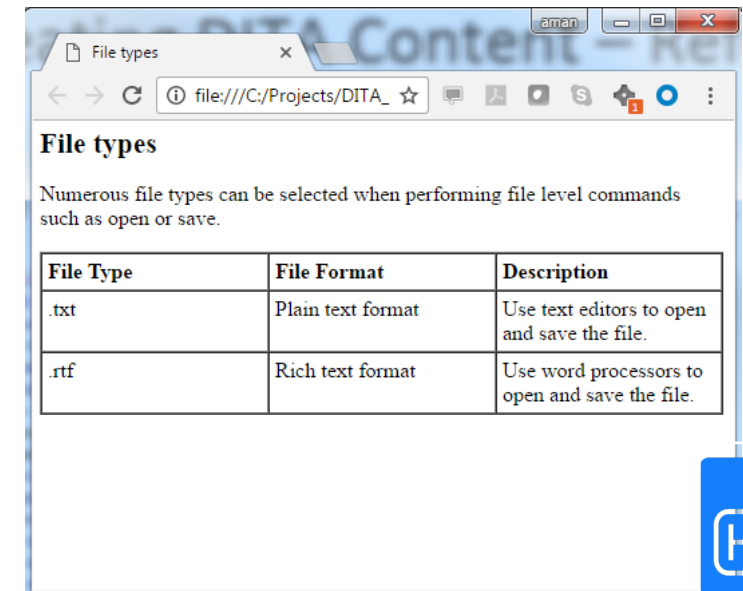
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE task PUBLIC "-//OASIS//DTD DITA General Task//EN" "generalTask.dtd">
<task id="task_djb_mlv_ry">
  <title>Save a file</title>
  <shortdesc/>
  <taskbody>
    <context>
      <p>Any document can be saved. If saved for the first time,
        you are prompted for additional information.</p>
    </context>
    <steps>
      <step>
        <cmd>Click the File tab.</cmd>
      </step>
      <step>
        <cmd>Click Save.</cmd>
      </step>
      <step>
        <cmd>Browse to the location where you'd like to save your document. </cmd>
        <info><note>
          To save the document on your computer, choose a folder under Computer
          or click Browse.
        </note></info>
      </step>
      <step>
        <cmd>Click OK.</cmd>
      </step>
    </steps>
  </taskbody>
</task>
```



# Create DITA Content – Reference Example

File types (**reference** information that user may choose to look up)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE reference PUBLIC "-//OASIS//DTD DITA Reference//EN" "reference.dtd">
<reference id="reference_s3z_xnv_ry">
  <title>File types</title>
  <shortdesc></shortdesc>
  <refbody>
    <section>
      <p>Numerous file types can be selected when performing file level
        commands such as open or save.</p>
    </section>
    <properties>
      <prophead>
        <proptypehd>File Type</proptypehd>
        <propvaluehd>File Format</propvaluehd>
        <propdeschd>Description</propdeschd>
      </prophead>
      <property>
        <proptype>.txt</proptype>
        <propvalue>Plain text format</propvalue>
        <propdesc>Use text editors to open and save the file.</propdesc>
      </property>
      <property>
        <proptype>.rtf</proptype>
        <propvalue>Rich text format</propvalue>
        <propdesc>Use word processors to open and save the file.</propdesc>
      </property>
    </properties>
  </refbody>
</reference>
```





# DITA Map and Bookmap

- DITA Map
- Bookmap

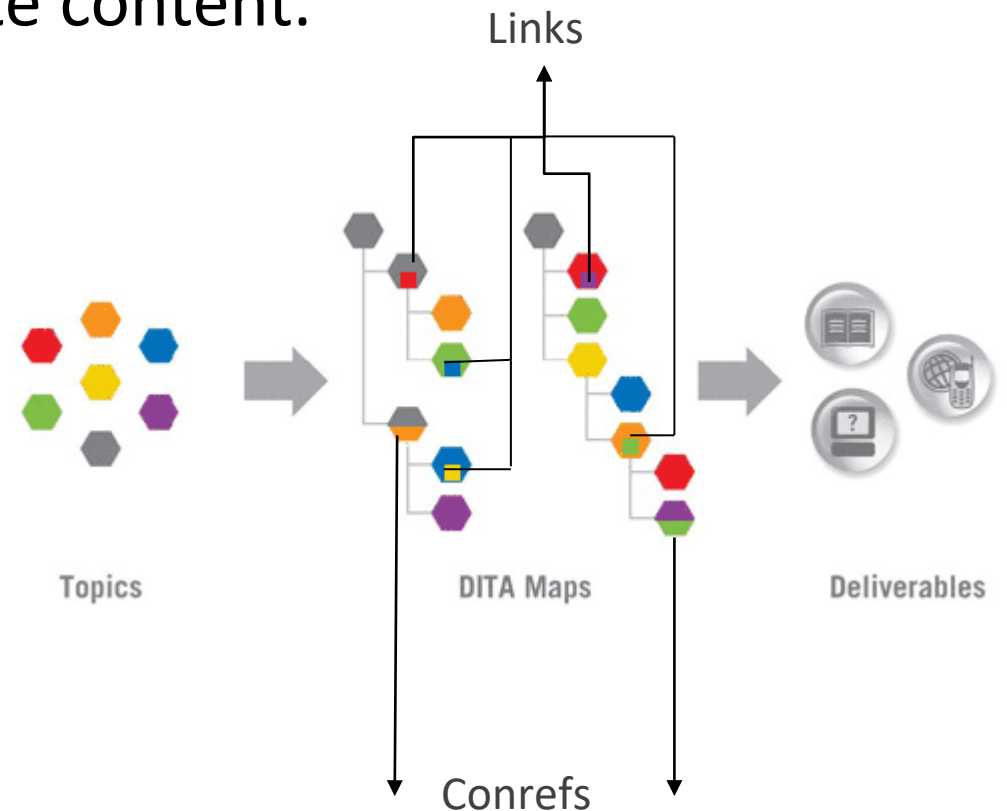




# Create Relationships Among Topics

Once the outline of your content is created, topics populated, and content reviewed, you can start to populate content.

- Use a map in DITA to publish topics that are related.
- Use links in DITA to associate one piece of content with another.
- Use content re-use to eliminate repetition of phrases, blocks of text, topics, and even collections of topics.



# Create Relationships Among Topics – Map Files

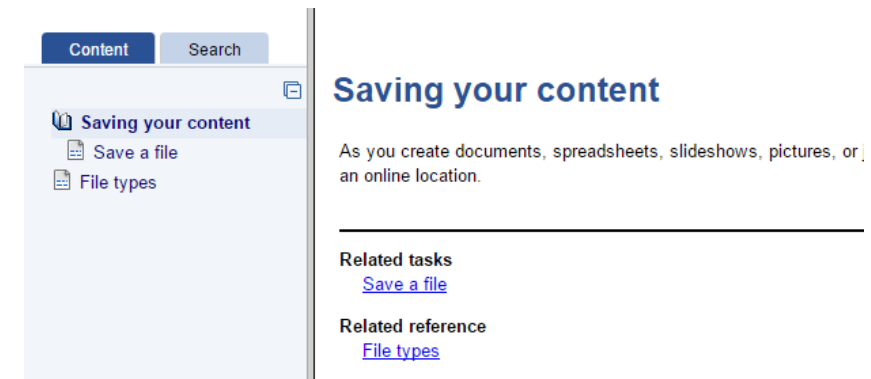
Map files are how you organize content for delivery. They are like a table of contents: they create sequence and hierarchy among topics.

Map files are made up mainly of the following components:

- Hierarchy – define sequence of topics in output
  - `topicref` elements, which provide a link to a specific topic
  - `mapref` elements, which provide a link to another map
- Relationship table – define relationships to generate related topic links

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE map PUBLIC "-//OASIS//DTD DITA Map//EN" "map.dtd">
<map>
  <title>Saving your content</title>
  <topicref href="concept_save_content.dita">
    <topicref href="task_choice_table.dita"/>
  </topicref>
  <topicref href="reference_file_types.dita"/>

  <reltable>
    <relrow>
      <relcell>
        <topicref format="dita" href="concept_save_content.dita" type="concept"/>
      </relcell>
      <relcell>
        <topicref format="dita" href="task_choice_table.dita" type="task"/>
      </relcell>
      <relcell>
        <topicref format="dita" href="reference_file_types.dita" type="reference"/>
      </relcell>
    </relrow>
  </reltable>
</map>
```





# Syntax and Markup

- DITA Elements
- Element Domains
- Lists
- Paragraphs
- Procedures and Steps
- Tables
- Special Characters





# Graphics and Figures

- Figures
- Images





# Cross-References

- Types of cross-references



# Create Relationships Among Topics – Cross-References

- Cross-references allow you to create links from text to other locations in text, to figures or tables, or to web sites.
- All cross-references use the <xref> element. The href attribute specifies the target of the cross-reference.
- The <xref> element can optionally contain text. If text is provided, it is used as the hotspot text for the link.

## Saving your content

As you create documents, spreadsheets, slideshows, pictures, or just about any type of electronic content, you can store it for future recovery. You can store the information to a specific location which may include a removable memory device, a local hard drive, a remote server, or even an online location.

For more details, visit [Xilinx](http://www.xilinx.com) official website.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE concept PUBLIC "-//OASIS//DTD DITA Concept//EN" "concept.dtd">
<concept id="concept_sy1_fjv_ry">
  <title>Saving your content</title>
  <shortdesc/>
  <conbody>
    <p>As you create documents, spreadsheets, slideshows, pictures, or just about any type of electronic content, you can store it for future recovery. You can store the information to a specific location which may include a removable memory device, a local hard drive, a remote server, or even an online location.</p>
    <p>For more details, visit
    <xref href="http://www.xilinx.com" scope="external" format="html">Xilinx</xref> official website.</p>
  </conbody>
</concept>
```



# Content Re-use

- Conref
- Variables



# Create Relationships Among Topics – Conrefs

- Means of improving efficiency by eliminating repetition of phrases, blocks of text, topics, and even collections of topics.
- *conref* allows DITA content to be used in any number of different places in a collection.
- content referencing, is the ability to identify a chunk of content using a simple naming structure.  
conref="topicfilename#topicid/elementid"

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE task PUBLIC "-//OASIS//DTD DITA General Task//EN"
"generalTask.dtd">
<task id="task_djb_mlv_ry">
  <title>Save a copy of your file</title>
  <shortdesc/>
  <taskbody>
    <context>
      <p>Any document can be saved. If saved for the first time,
        you are prompted for additional information.</p>
    </context>
    <steps>
      <step conref="task_choice_table.dita#task_djb_mlv_ry/save1">
        <cmd/>
      </step>
      <step id="save2">
        <cmd>Click Save As.</cmd>
      </step>
      <step conref="task_choice_table.dita#task_djb_mlv_ry/save3"
        conrefend="task_choice_table.dita#task_djb_mlv_ry/save4">
        <cmd/>
      </step>
    </steps>
  </taskbody>
</task>
```

## Save a copy of your file


Any document can be saved. If saved for the first time, you are prompted for additional information.

1. Click the File tab. The options available on the File tab are listed below:

Option	Description
New	Click to create a new file.
Open	Click to open an existing file.
Save	Click to save the file.
Save As	Click to save a copy of the file.

2. Click Save As.

3. Browse to the location where you'd like to save your document.

 **Attention:** To save the document on your computer, choose a folder under Computer or click Browse.

4. Click OK.





# DITA Publishing Process





# Additional Resources

- Tutorials
  - [LearningDITA](#) - E-learning for individuals who want to explore DITA
- Blogs
  - [Think DITA](#) - Blog of Magda Caloian about DITA and information architecture
  - [Scriptorium](#) - Blog of the publishing and content strategy consulting company Scriptorium.
  - [Dr. Macro's XML Rants](#) - DITA blog written by Eliot Kimber
  - [I'd Rather Be Writing](#) - Information architecture and API documentation blog written by Tom Johnson.
  - [oXygen XML Blog](#) - Official blog of the oXygen XML editor.
- Style Guides
  - [The Dita Style Guide: Best Practices for Authors \(Tony Self\)](#) - Contains best practices and real-world DITA examples and comprehensive, practical explanations of DITA elements and attributes.



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# Thank You

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