Setting up the Authoring and Publishing Environment for your Project

Contents

Chapter 1. Introduction

Use this document to install the required authoring and publishing tools on your computer to develop and publish your very first technical documentation project.

Environment set up

Setting up the environment consists of:

- Setting up the XML authoring environment.

  You will install the trial version of the Oxygen XML editor (version 25 or later) on your system.
- Setting up the GitHub environment.

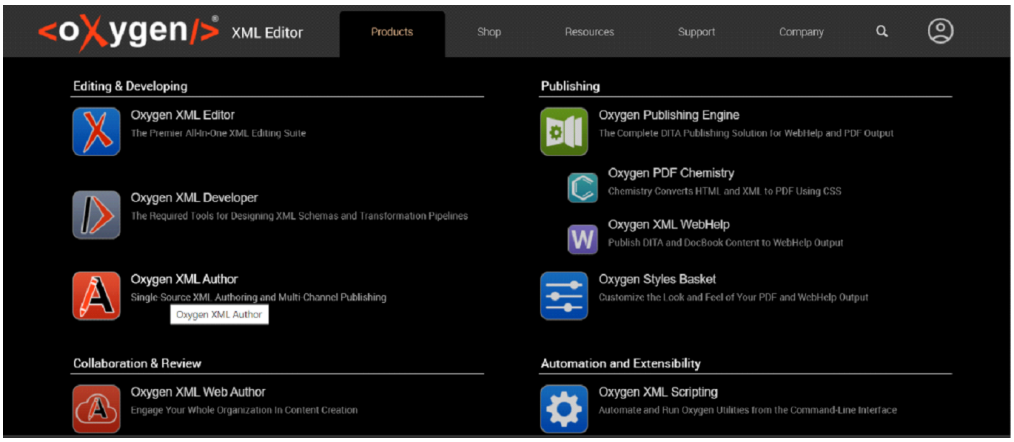
Chapter 2. Setting up the XML Authoring Environment

Installing the Oxygen XML Authoring Tool

Installing the Oxygen XML authoring tool.

Use this procedure to install the trial version of the Oxygen XML authoring tool. Install version 25.0 or later. The trial period is 30 days.

1. On a browser instance, navigate to www.oxygenxml.com.
2. From the menu, click **Products > Oxygen XML Author**.

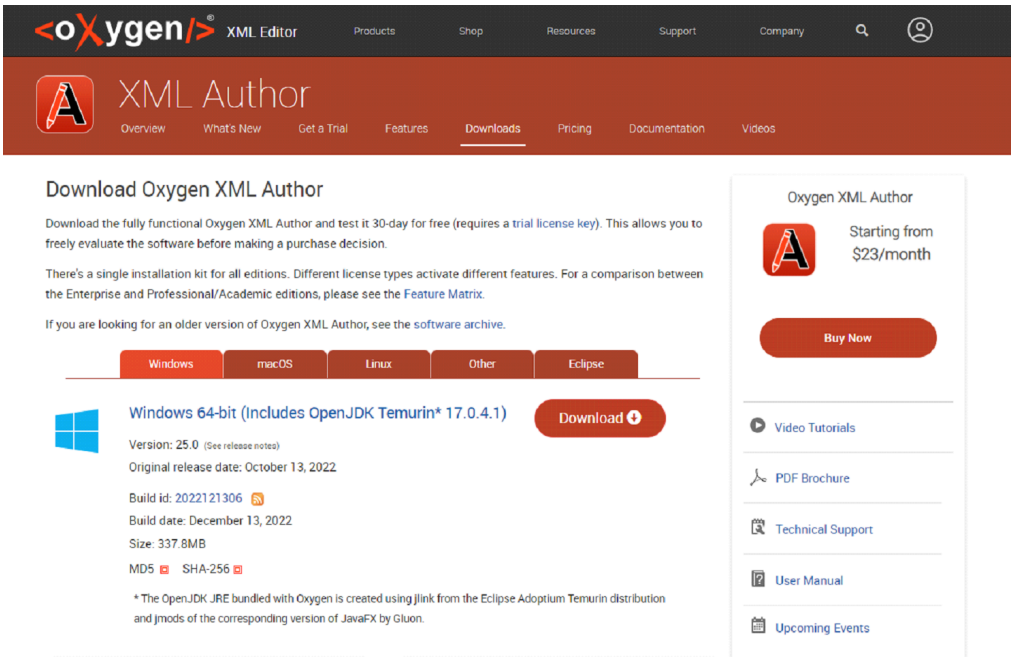


The following web page displays:

3. Click **Downloads > Download**.

The following page displays:

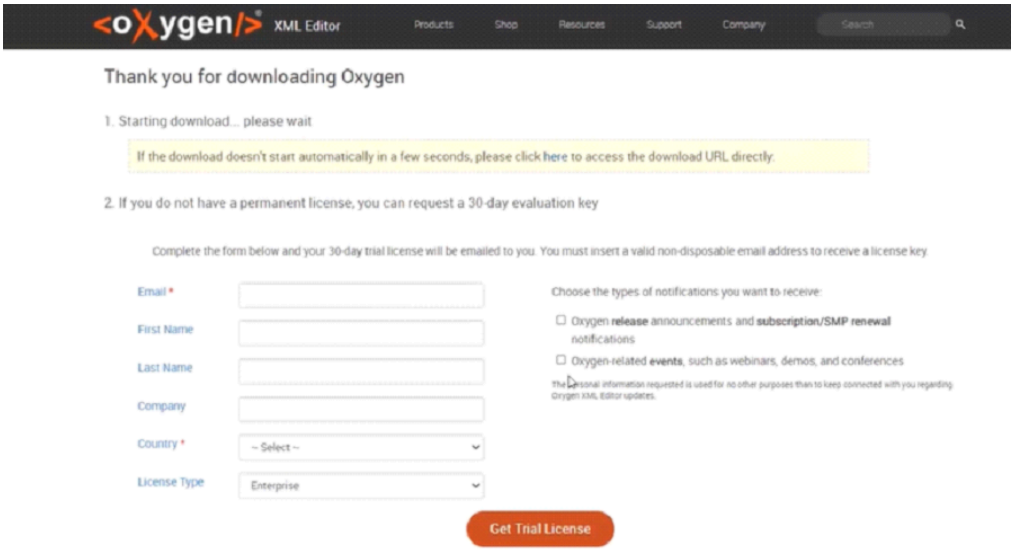
Figure 1. Oxygen XML Download



4. Select the tab that corresponds to your operating system (here, **Windows**), and click the **Download** button.

   The executable (.exe) file downloads to your system.
5. In the page that displays, enter the required details to obtain your 30-day trial license.

Figure 2. Oxygen XML Installation -- Getting the trial license



6. Double-click the .exe file to invoke the installation wizard for Oxygen XML author.

Follow the defaults to complete the installation and click **Finish** when done.

7. Double-click the shortcut on your desktop to nvoke an instance of the Oxygen XML author.
8. When prompted, enter the 9-line license text in the space provided.

As a next step, to learn more about the Oxygen XML Author, visit: https://www.oxygenxml.com/doc/versions/25.0/ug-author.

Chapter 3. Developing Content in the Oxygen XML Authoring Tool

What is DITA?

Briefly describes DITA.

The Darwin Information Typing Architecture (DITA) specification defines a set of *document types* for authoring and organizing topic-oriented information. It is an open standard. that is defined and maintained by the OASIS DITA Technical Committee.

The name derives from the following components:

- **Darwin**: because it uses the principles of *specialization* and *inheritance*, which is analogous to Charles Darwin's concept of evolutionary adaptation.
- **Information Typing**: which means each topic has a defined primary objective and structure.
- **Architecture**: DITA is an extensible set of structures.

What are DITA Topics?

Briefly explains DITA topics.

What are Topics?

A topic is a unit of information with a title and content, short enough to be specific to a single subject or answer a single question, but long enough to make sense on its own and be authored as a unit. Topics are the basis for high-quality information.

Information typing is the practice of identifying *types* of topics that contain distinct kinds information, such as concepts, tasks, and reference information. Topics that answer different kinds of questions can be categorized under different information types. The base topic types provided by DITA (a generic topic, plus concept, task, and reference) provide a starter set that can be adopted for immediate authoring.

What are the DITA Topic Types?

DITA includes three main topic types: Task, Concept, and Reference.

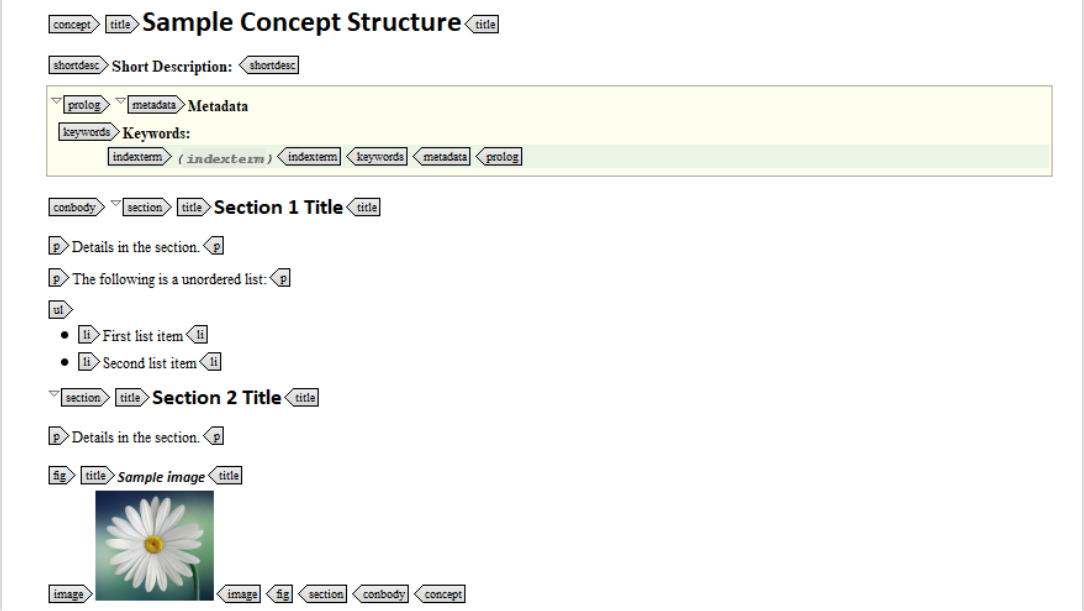
- Tasks are used to describe *how* to perform a procedure, for example, to install a product.
- Concepts present descriptive information to understand the *background* or *context* of a product.
- Reference topics provide *detailed facts* such as product specifications, often in a table.

What is the structure of a topic?

The DITA standard defines how each topic type is structured. All topics have the same *basic* structure, regardless of the topic type.

Every topic contains some common elements, like *Title*, *Prolog (for metadata like audience, category, keywords)*, *Short Description*, as well as some that are unique.

Sample Concept Structure



Sample Task Structure

task title **Sample Task Structure** title

shortdesc **Short Description:** shortdesc

prolog metadata **Metadata**

keywords **Keywords:**

indexterm *(indexterm)* indexterm keywords metadata prolog

taskbody prereq **Before you begin:** Enter a prerequisite to the task here. prereq

context **About this task:**

p Describe the task here. p context

steps

1. step cmd This is the first step of the task (command to the user). cmd

   info This contains more information about the first step.

   fig title ***Sample image for the first step*** title

   image image fig info

   stepresult **Result:** Step result for the first step. stepresult step

2. step cmd This is the second step. cmd step

steps

example Example for the task or procedure. example

postreq **What to do next:** Post requirement or instructions to the user on what to do next. postreq taskbody task

Sample Reference Structure

reference title **Sample reference structure** title

shortdesc **Short Description:** Short description. shortdesc

prolog metadata **Metadata**

keywords **Keywords:**

indexterm *(indexterm)* indexterm keywords metadata prolog

refbody table title **Simple CALS table** title

tgroup

colspecs...

entry **First column** entry	entry **Second column** entry
entry First row entry	entry First row entry
entry Second row entry	entry Second row entry

tgroup

table

simpletable

stentry **Header entry** stentry	stentry **Header entry** stentry
stentry First row stentry	stentry First row stentry

simpletable

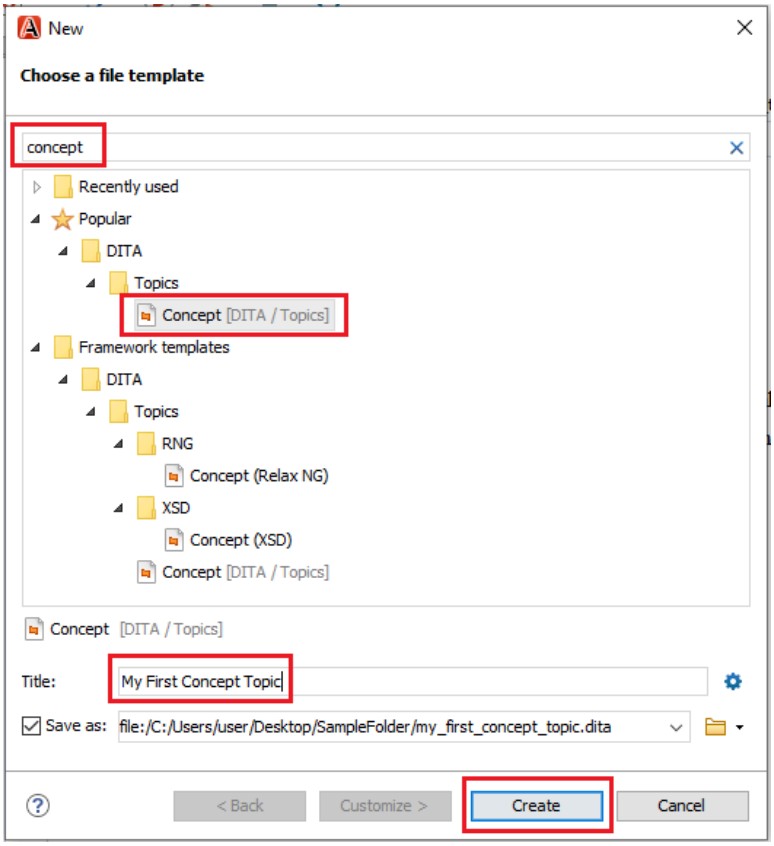
refbody reference

Creating a Concept Topic

Create a concept topic using Oxygen XML Author.

A concept topic provides background that helps readers understand essential information about a product, a task, a process, or any other conceptual or descriptive information. Use this procedure to create a concept topic using Oxygen XML Author.

1. Open an instance of Oxygen XML Author.
2. Frm the top left hand corner, click **File > New**
   The **Choose a file template** dialog box displays.
3. Create a concept topic as follows:



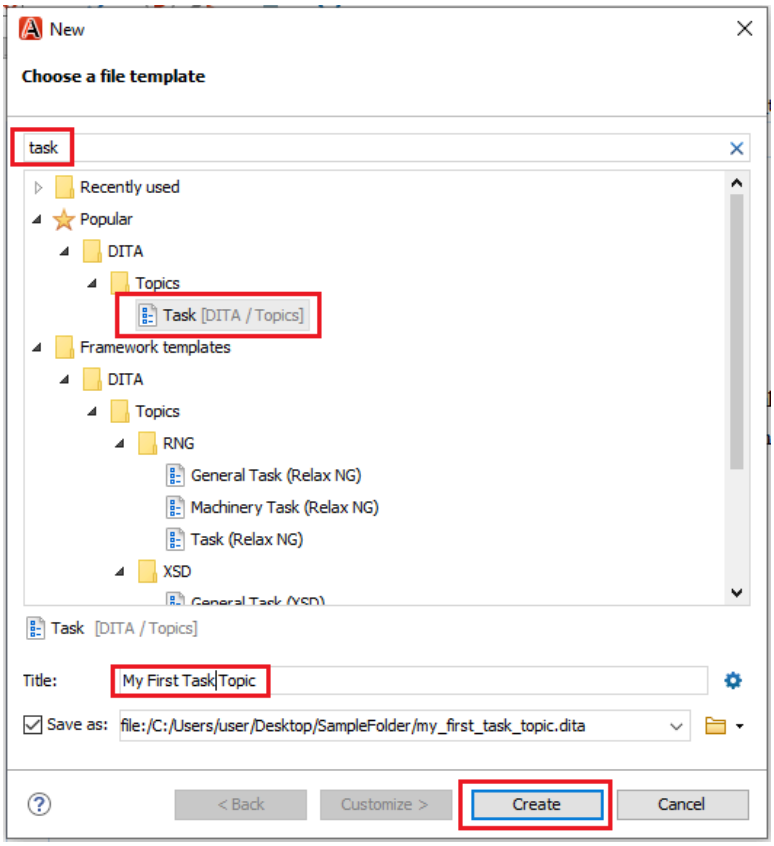
   a. In the field provided, type concept.
   b. Choose **Concept [DITA / Topics]**
   c. In the **Title** field, enter a name for your concept topic.
   d. Observe the path on your computer where the file is being created. Ensure that the path is correct.
   e. Click **Create**.

Creating a Task Topic

Create a task topic using Oxygen XML Author.

A task topic contains a single procedure, which is made up of a series of steps. Each step describes a single action or command for the user to take. A step can also describe the step results. One or more task topics typically follow each concept topic. Use this procedure to create a task topic using Oxygen XML Author.

1. Open an instance of Oxygen XML Author.
2. Frm the top left hand corner, click **File > New**
   The **Choose a file template** dialog box displays.
3. Create a task topic as follows:



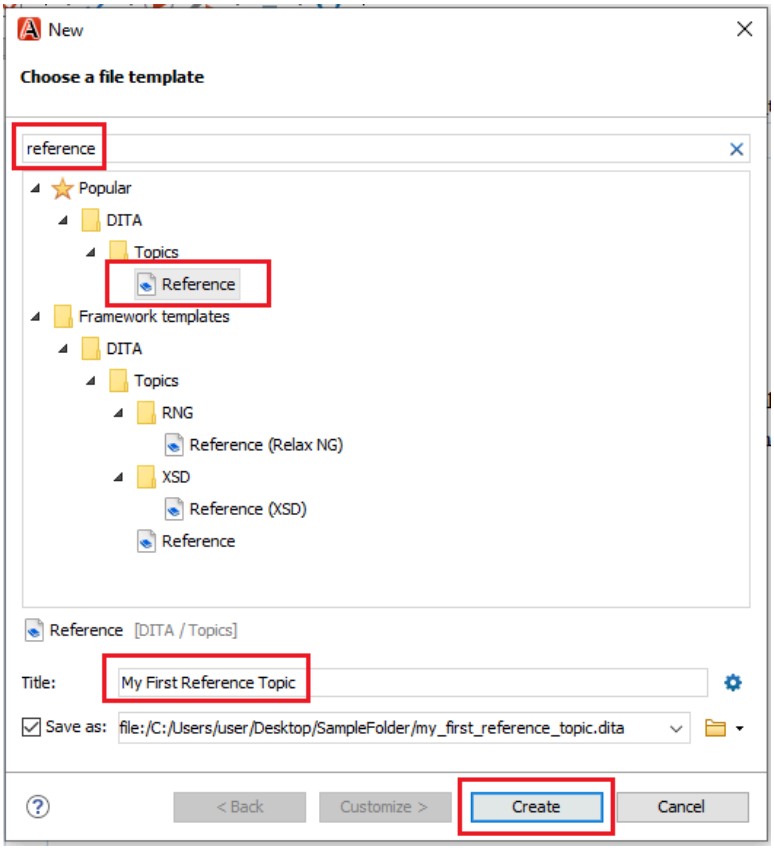
   a. In the field provided, type task.
   b. Choose **Task [DITA / Topics]**
   c. In the **Title** field, enter a name for your task topic.
   d. Observe the path on your computer where the file is being created. Ensure that the path is correct.
   e. Click **Create**.

Creating a Reference Topic

Create a reference topic using Oxygen XML Author.

Reference topics provide quick access to fact-based information. In technical information, reference topics are used to list product specifications and parameters, provide essential data, and provide detailed information on subjects such as the commands in a programming language. Use this procedure to create a task topic using Oxygen XML Author.

1. Open an instance of Oxygen XML Author.
2. Frm the top left hand corner, click **File > New**
   The **Choose a file template** dialog box displays.
3. Create a task topic as follows:



   a. In the field provided, type task.
   b. Choose **Reference**
   c. In the **Title** field, enter a name for your reference topic.

d. Observe the path on your computer where the file is being created. Ensure that the path is correct.
e. Click **Create**.

What are DITA maps?

Explains DITA maps at a high level.

DITA maps are XML documents that organize topics and other resources into structured collections of information. DITA maps specify hierarchy and the relationships among the topics. DITA maps typically have . ditamap file extensions.

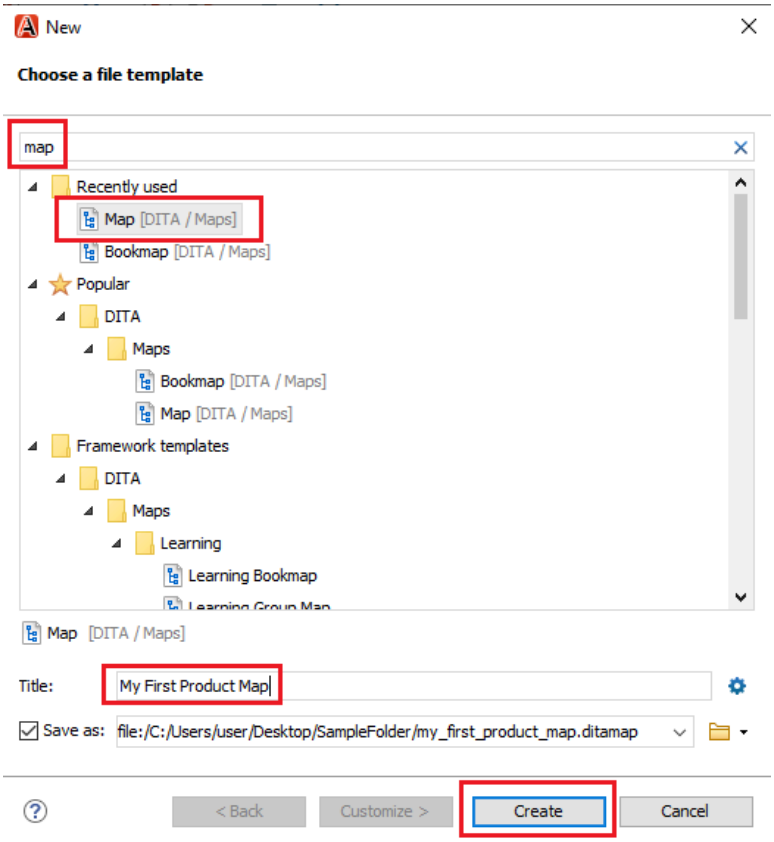
DITA maps are key components for authoring DITA content. Managing these files and their referenced topics is an important feature of a DITA editor. The **DITA Maps Manager** in Oxygen enables you to view and edit DITA map files.

Creating a ditamap

Create a ditamap using Oxygen XML Author.

DITA maps are documents that organize topics and other resources into structured collections of information. DITA maps specify hierarchy and the relationships among the topics; they also provide the context in which keys are defined and resolved. DITA maps should have . ditamap file extensions. Use this procedure to create a ditamap using Oxygen XML Author.

1. Open an instance of Oxygen XML Author.
2. Frm the top left hand corner, click **File > New**
   The **Choose a file template** dialog box displays.
3. Create a map as follows:



a. In the field provided, type map.
b. Choose **Map [DITA / Topics]**
c. In the **Title** field, enter a name for your map.
d. Observe the path on your computer where the file is being created. Ensure that the path is correct.
e. Click **Create**.

Chapter 4. Publishing DITA XML outputs in Oxygen

Publishing outputs from DITA XML using Oxygen

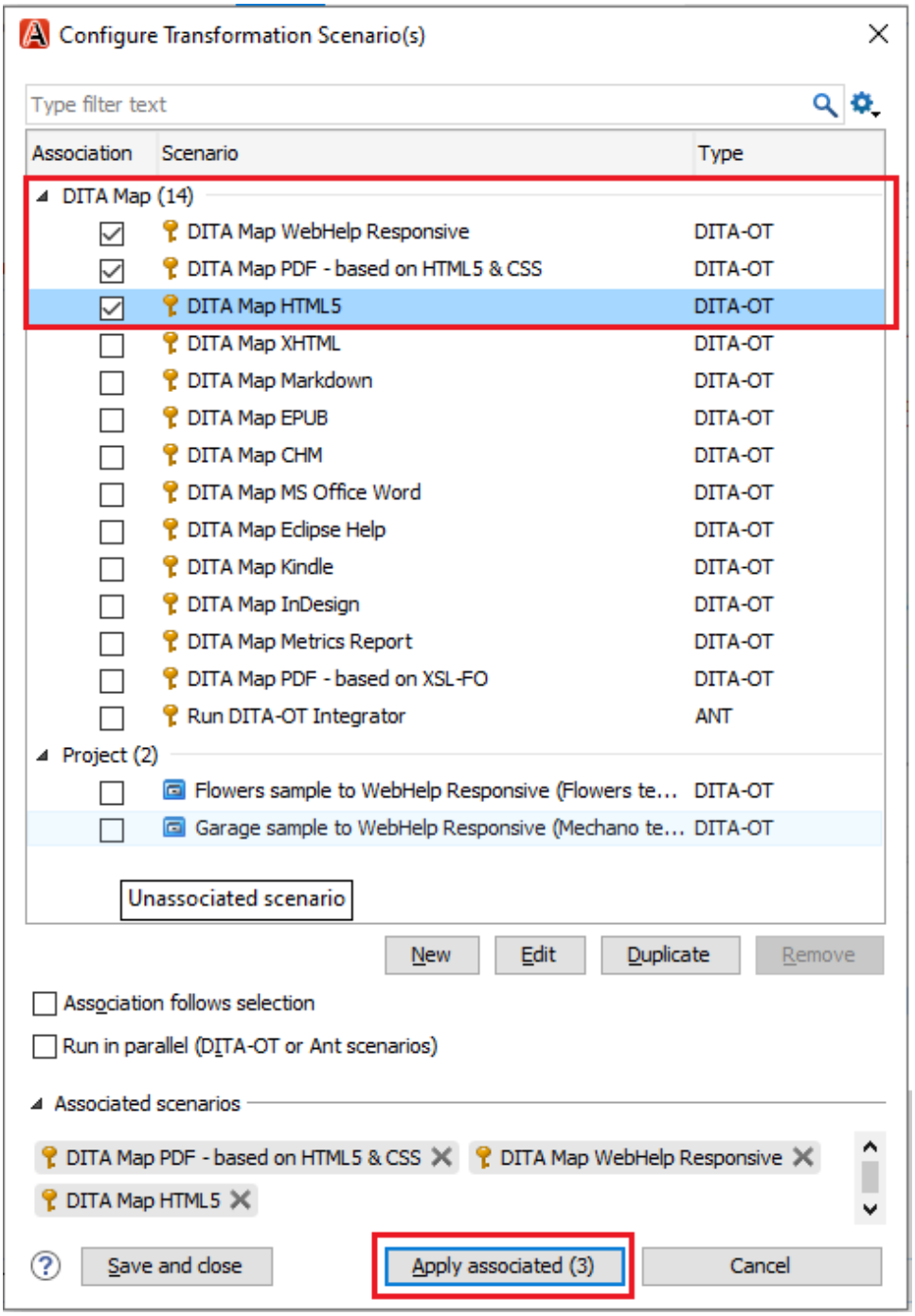
Use this procedure to publish outputs using the built-in default XSL transforms available with the Oxygen XML authoring tool.

Note:

XSL Transforms (XSLT) process XML documents to convert them to HTML format. XSLT is a language originally designed for transforming XML documents into formats such as HTML for web pages, plain text etc., which may subsequently be further converted to other formats such as PDF.

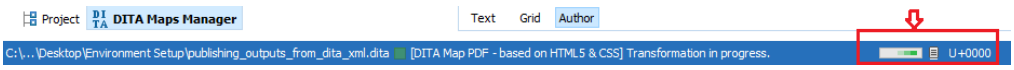
1. Invoke an instance of the Oxygen XML editor on your computer.
2. Click **FileOpen** to navigate to the location of the main ditamap (that contains other maps and topics) on your system.
3. Click **DITA Maps Manager**.
4. Click **Configure Transformation Scenario(s)**.

   The **Configure Transformation Scenario(s)** dialog box displays.
5. Select *one* or *all* the following transforms:
   - **DITA Map WebHelp Responsive** to publish a web help output.
   - **DITA Map PDF - based on HTML5 & CSS** to publish a PDF
   - **DITA Map HTML5** to publish a HTML5 output.



6. Click **Apply associated**.

   The transformation begins. You can view the progress in the progress bar at the bottom of the editor.



Once published, your system automatically displays the published outputs - namely PDF, HTML and Web help.

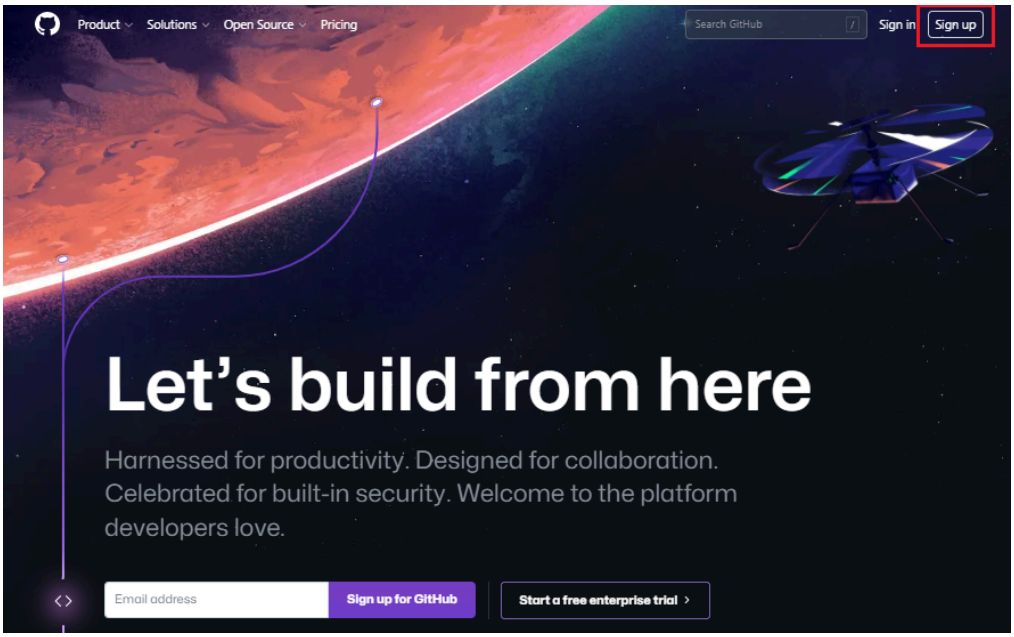
Chapter 5. Setting up the GitHub Environment

Creating a GitHub Account

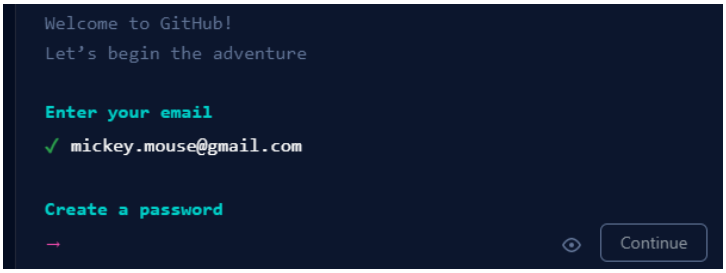
Create a GitHub account to serve as your identity on GitHub.

Before you start working on GitHub, you must first create your own personal account. Use this procedure to create your free and personal account.

1. On a browser instance, navigate to: www.github.com.
2. On the top right hand corner, click **Sign up**.



3. In the popup dialog that displays, enter your email ID and a strong password.



4. Click **Continue** to create a free personal account to sign in to GitHub.

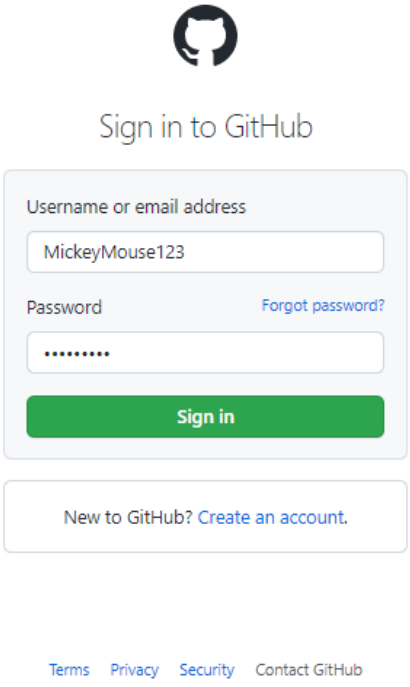
Signing in to GitHub

Sign in to GitHub to create and access project repositories.

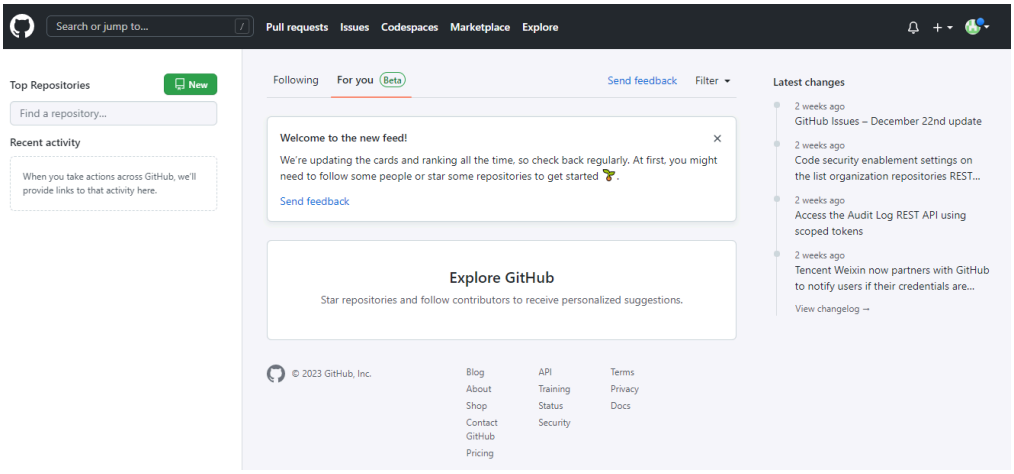
Before you begin, ensure that you first create a GitHub account.

Use this procedure to sign in to GitHub, to create and access your project repositories anytime.

1. On a browser instance, navigate to github.com. Type www.github.com.
2. On the top right hand corner, click **Sign in**.
3. Enter your credentials in the pop up dialog that displays, and click **Sign in**.



The GitHub landing page displays:



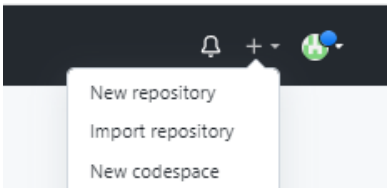
Creating a Public GitHub Respository

Create a public GitHub repository to serve a common location for your audience to view and access your DITA XML source files and published outputs.

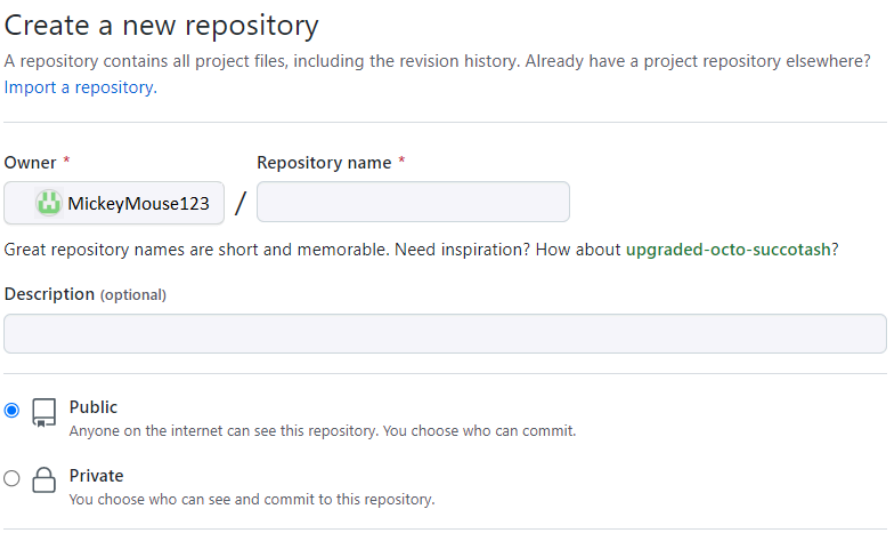
Sign in to your personal GitHub account. For more information, see: Signing in to GitHub *(on page 19)*.

Use this procedure to create a public GitHub repository.

1. On an instance of a web browser, type www.github.com.
2. Sign in using your credentials.
3. On the top right corner of the page, click the drop-down arrow next to the plus (+) sign, and click **New repository**.



The **Create a new repository** page displays. Note that the user ID with which you sign in to GitHub appears as the Owner.



4. Create a GitHub repository.

    a. In the **Repository name*** field, type a name for your repository of project files. This field is mandatory.
    For example, type: *DITA-XML sample*.

    b. **Optional:** Enter a description for the repository.

    c. Select **Public**.

    > **Important:**
    > Ensure that your repository is a public one. That way anyone who has the URL to the repository can access it.

    d. Click **Create repository**.

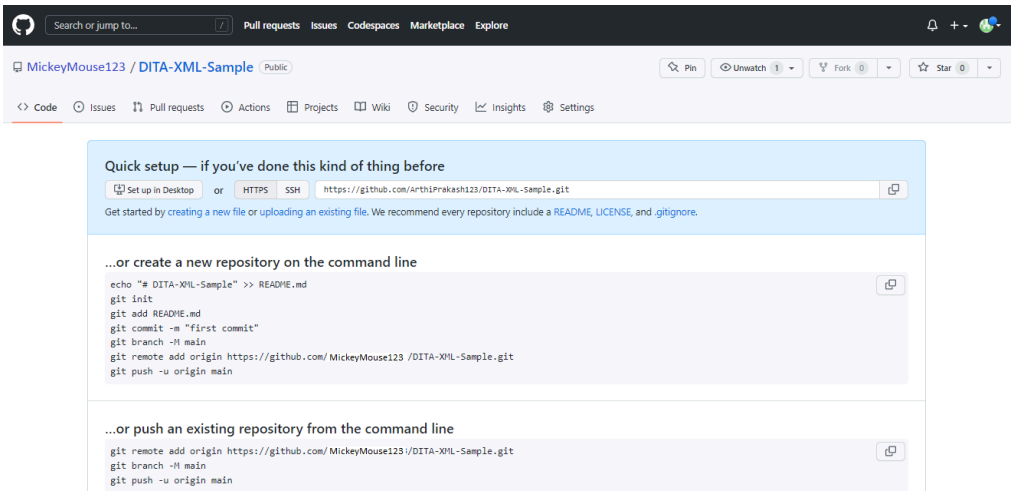
Chapter 6. Sharing your HTML5 or WebHelp outputs

Uploading DITA XML source files to GitHub repository

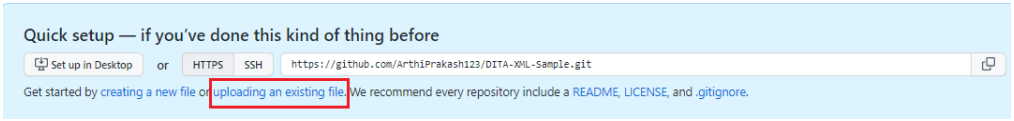
Before you begin, ensure that you create a public GitHub repository to upload the DITA XML source files.

You must upload DITA XML source files from the locally stored folder on your computer to the GitHub repository, so that the files and the published outputs can be viewed publicly.

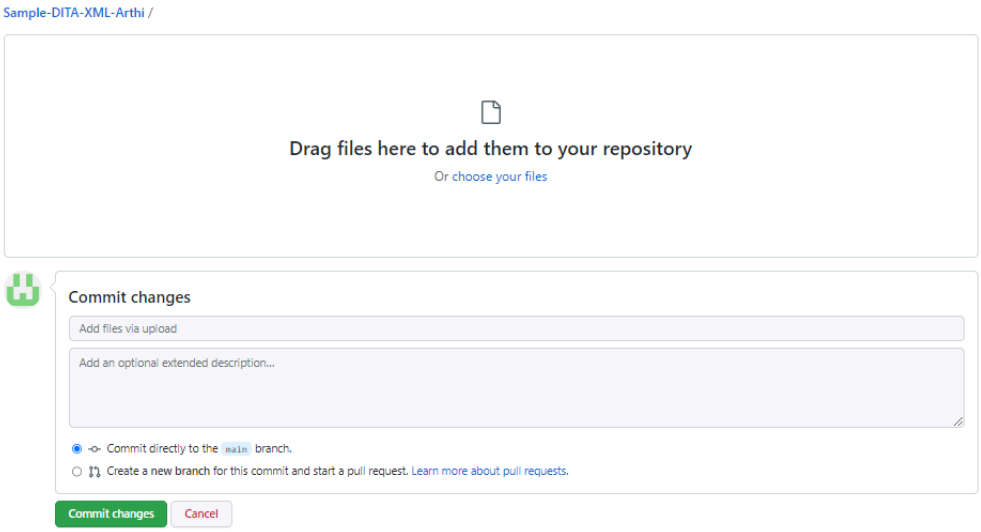
1. Go to http://www.github.com.
2. Click the link to your public repository (for example, *DITA-XML sample*) under **Top repositories** on the left hand side of the web page.
   The repository opens up in the web page as follows:



3. Click **uploading an existing file**.



4. Drag and drop the **entire folder** from your local folder to the repository, in the space provided.



Attention:
Ensure that you upload the entire folder with all the supporting files like images etc., to the repository.

5. Click **Commit Changes**.
   All your source files are committed to GitHub.

Sharing outputs using the public GitHub Repository

Share your published documentation with your audience.

Ensure that you have uploaded the entire folder containing the XML source files from your computer to the GitHub public repository.

Important:
When you upload the folders from your computer to the GitHub repository, ensure that you preserve the same folder structure. You will typically notice the following sub folders within the **out** folder containing the outputs you want to share with your audience.

- html5 - containing the files required for the HTML5 output.
- pdf-css-html5 - containing the files required for the PDF output.
- webhelp-responsive - containing the files required for the web help output.

The GitHub repository enables you to access the source code for your content, but not the content itself. Use this procedure to enable your audience to access your published outputs (HTML, PDF or WebHelp) using the public GitHub repository.

1. On an instance of web brower, type http://www.github.com, and sign in.
2. From the top left hand side corner, navigate to your pubic repository on GitHub.
3. Double-click the **out** folder to view its contents.
4. Do the following to share the HTML5 output from GitHub.

    a. Double-click the **html5** folder on GitHub.

    b. Click the **index.html** file.

    The file opens in the browser, and the URL will be something like this:

    ```
    https://github.com/MickeyMouse123/SampleFolder/blob/main/out/html5/index.html
    ```

    c. To enable your audience to view the content on GitHub:

    Prefix the above URL with:

    ```
    https://htmlpreview.github.io/?
    ```

    so that the URL finally becomes:

    ```
    https://htmlpreview.github.io/?
    https://github.com/MickeyMouse123/SampleFolder/blob/main/out/html5/index.html
    ```

    d. Share this URL with your audience.