

How-To

Fileupload in Nextcloud via Typo3 Forms

1. PURPOSE

This document uses an example to describe how to implement a **TYPO3** form with file upload in the **HTU Nextcloud**.

2. PREPARATIONS

Before creating the form, you must set up the upload folder. To do this, first go to the HTU Cloud and log in with your HTU credentials.

<https://cloud.htugraz.at>

The next step is to create the folder into which the file will later be uploaded. Alternatively, you can, of course, use an existing folder.

Figure 1 shows how to create a new folder in **HTU Nextcloud**. To do this, first click the **+ New** button. In this specific example, "File Uploads" is selected as the folder name. Click the **→** icon to create the folder.

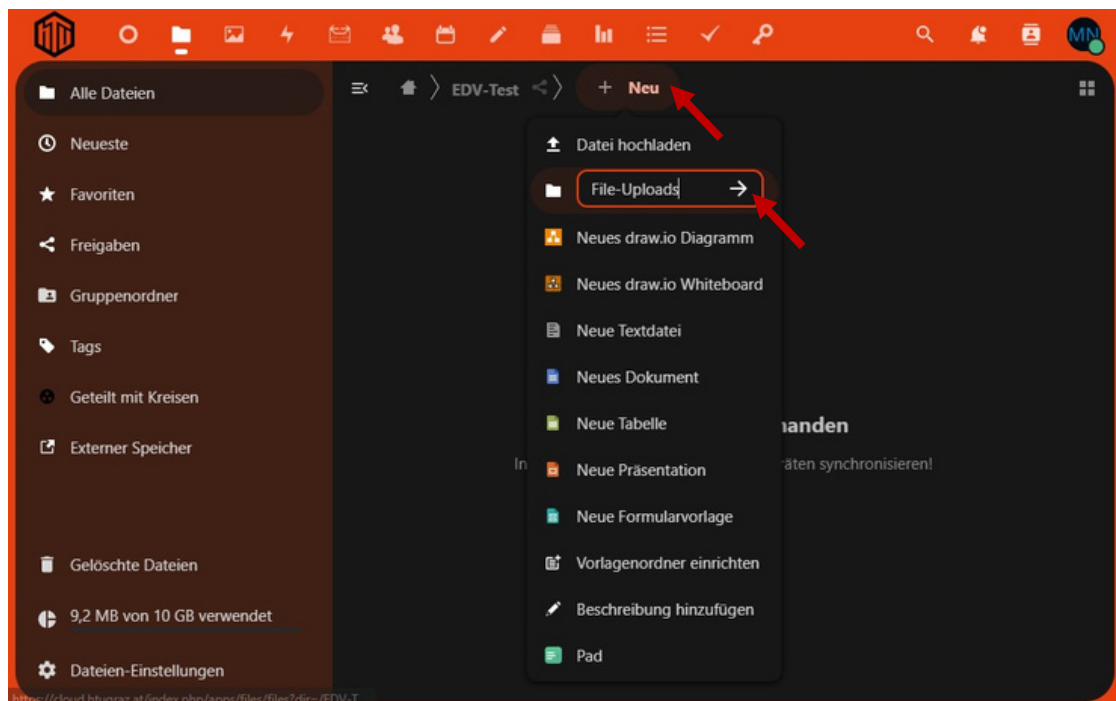


Figure 1: Creating a New Folder in the Cloud

To ensure that the form can later save files to the folder you just created, you must first create a share link.

To do this, click the **Share icon**. This will display a new menu on the right-hand side, as shown in Figure v2. Click the **+** icon to create a new share link for this folder..

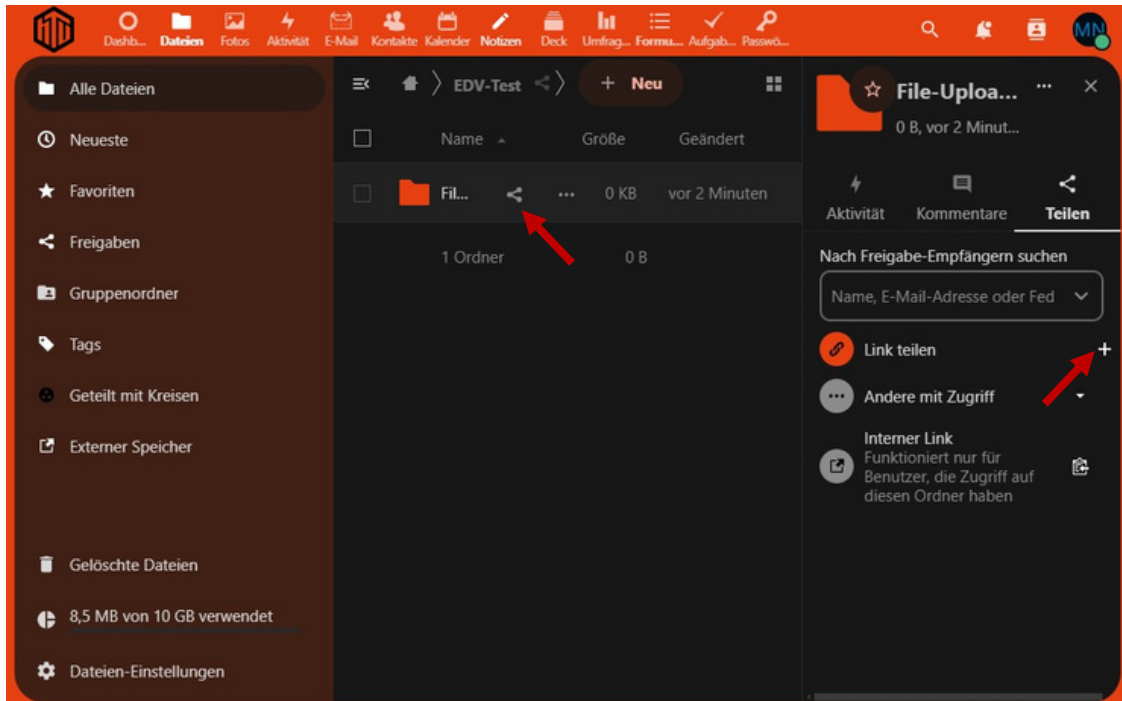


Figure 2: Sharing a Folder

The folder icon with a chain link indicates that this folder is shared. The share link itself can be copied to the clipboard by clicking on the icon. 

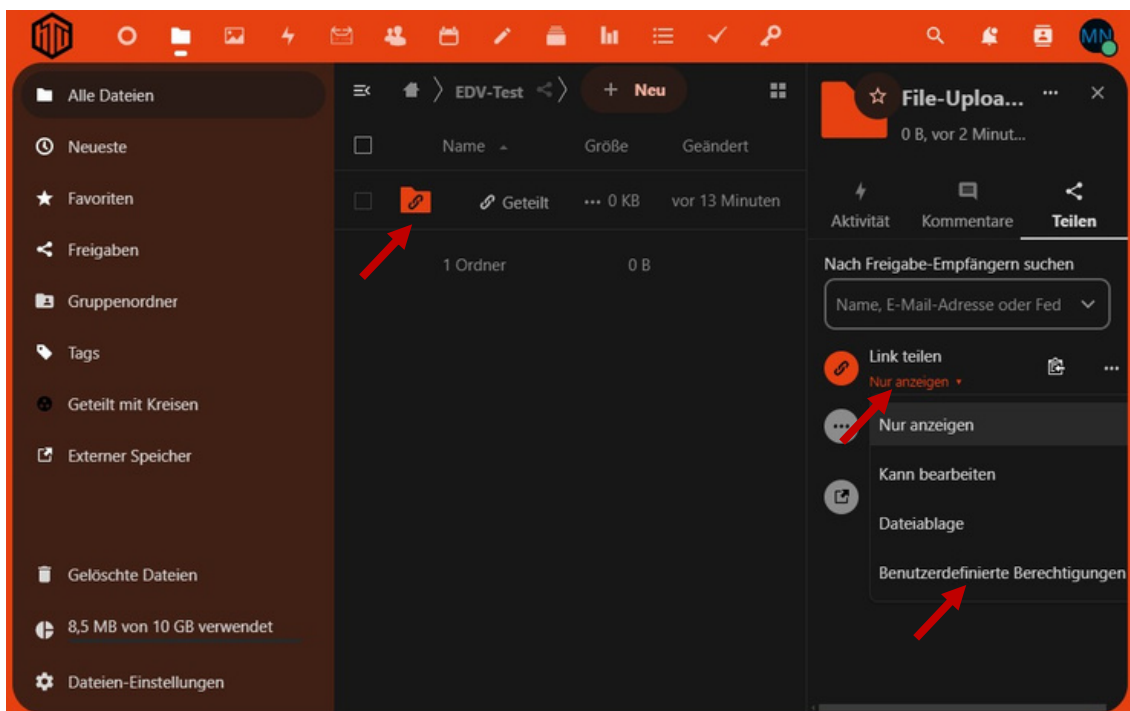


Figure 3: Setting Permissions for the Shared Folder

In theory, anyone who knows this link has access to all the files in this share, so the next step is to set a password. To do this, click on the red text that says **“View only”** and then select **“Custom permissions”**, as shown in Figure 3.

A new menu will open where you can select various sharing settings. First, select **“Allow uploading and editing”** (see also Figure 4). If you check the **“Set Password”** box, a new field will appear displaying a pre-generated password. You can choose any password you like. It is recommended that you use a password that is as secure as possible (at least 12 characters, preferably a combination of numbers, letters, and special characters), since sensitive data may be uploaded.

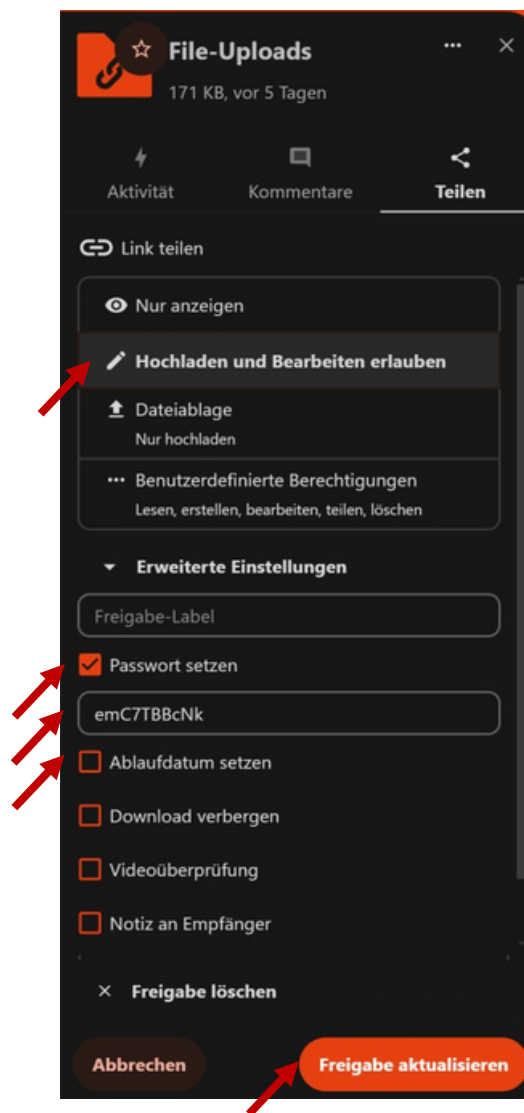


Figure 4: Configuring the Correct Settings for Sharing

It's best to uncheck the **“Set expiration date”** box, otherwise the upload will fail once the set time has elapsed. Finally, save the new settings by clicking **“Update Share”**. Keep the share link and password in a safe place; we'll need both of them again a little later.

3. CREATING A NEW FORM IN TYPO3

This chapter provides a step-by-step guide on how to create forms in *Typo3*. First, navigate to the *HTU Typo3 instance* and log in using your HTU credentials. Make sure you have permission to manage the websites and forms for your department or student council in *Typo3*.

<https://web.htugraz.at/typo3/>

After logging in, click “**Forms**” in the left-hand navigation menu to go to the *Form Management* section.

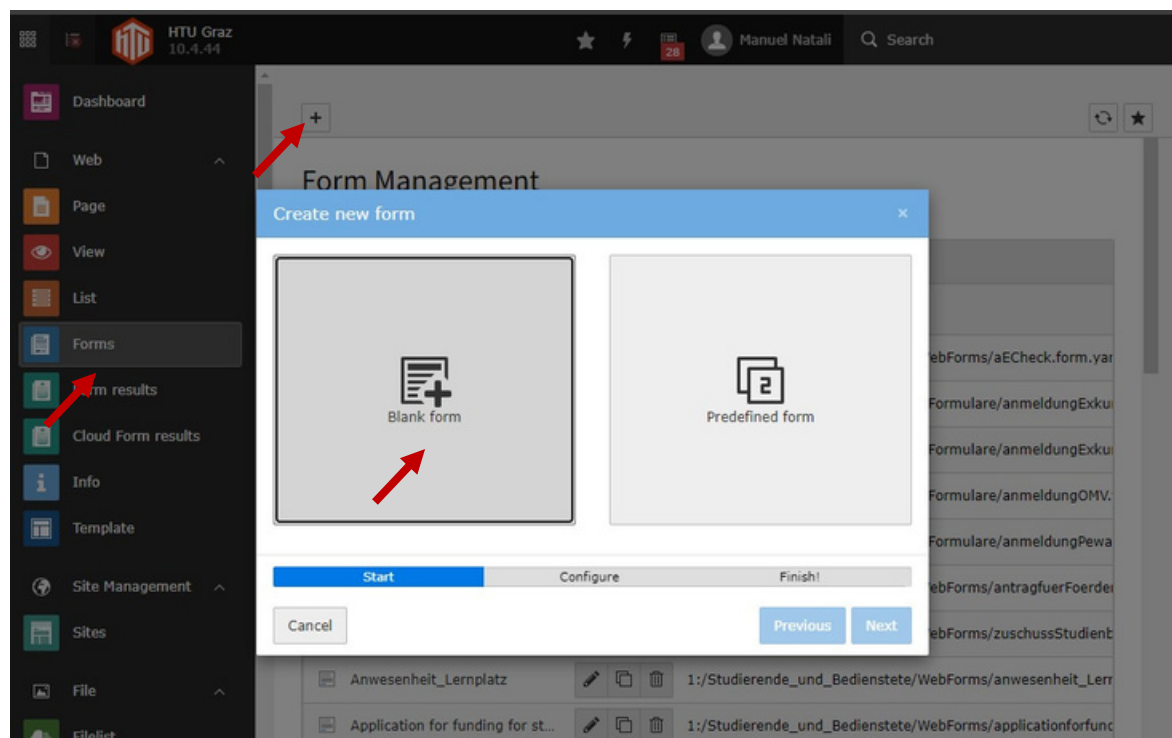


Figure 5: Forms section in Typo3

Click the **+** icon to create a new form; see Figure 5. In the Create New Form window, select the **Blank form** option.

In the next step, give the form a suitable name by filling in the **Form name** text field. In the Form Storage drop-down menu, select **WebForms (1:/Students_and_Staff/WebForms/)** and click **Next** to proceed to the next step (see Figure 6).

A summary of the basic settings you have configured will appear; you can confirm them by clicking **Finish**.

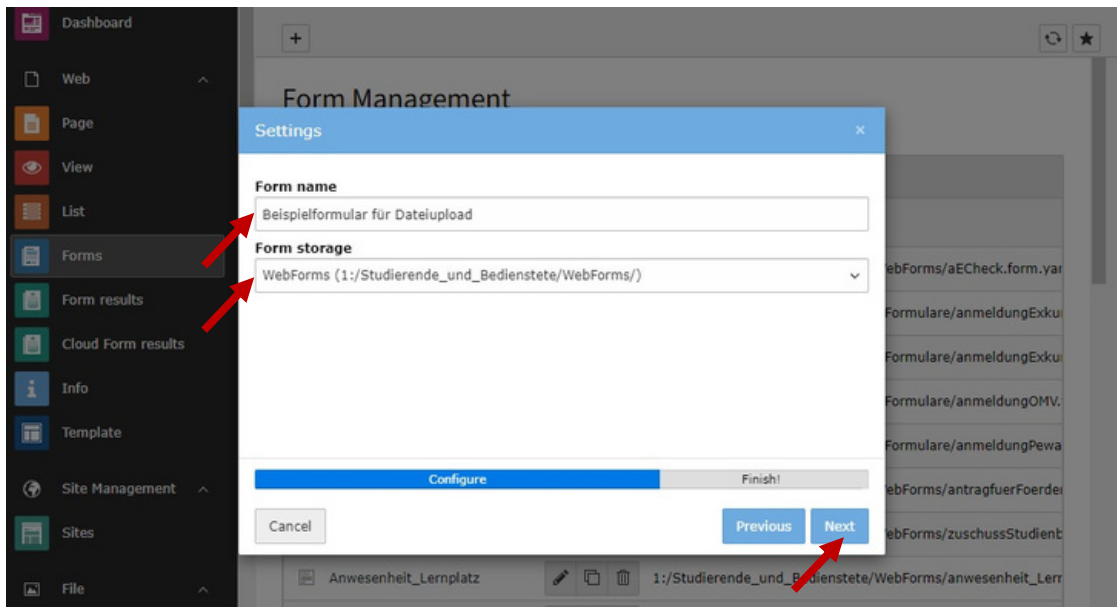


Figure 6: Basic Settings for the New Form

4. FILLING OUT A FORM

This chapter uses an example to explain how to configure the form you just created so that attached files can be uploaded to the **HTU Nextcloud** share you created earlier.

A form generally consists of at least one **step**; TYPO3 automatically creates the first **step** when a form is created. **Steps**, in turn, can contain various **elements** such as input fields, static text, date pickers, number fields, and so on. A form also always has a so-called “**finisher**,” which defines what should happen to the data that has been entered.

The example form will have the following structure:

STEP 1

- **Static text element** for introductory text
- **Input element** for the file name
- **File upload element** for the actual file upload

STEP 2

- **Static text element** for closing remarks



To create static text, select **Create New Element** → **Static Text**. On the right-hand side, you can now define the **header** and **text** for this element; see

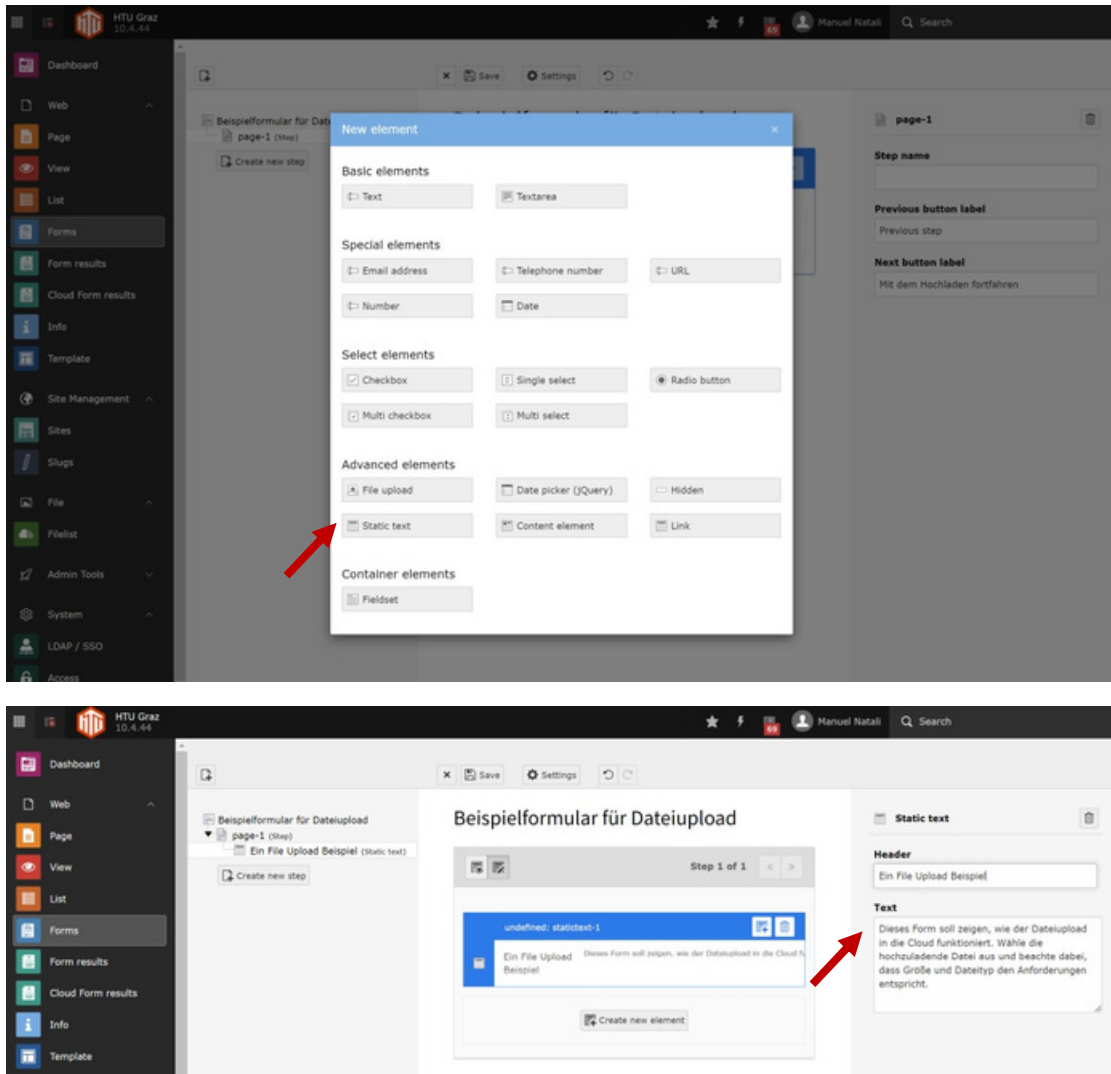


Figure 7: Creating static text

Next, create a **text field** element, the text content of which will later be used as the folder name. To do this, click on **Create New Element → Text**. The field should be set as a **required field**. This means that it must be filled in.

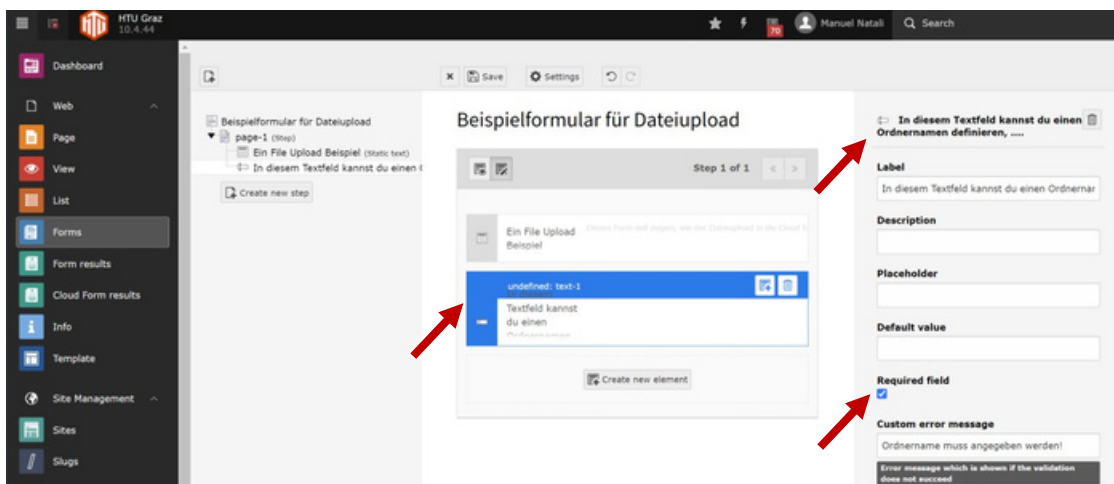
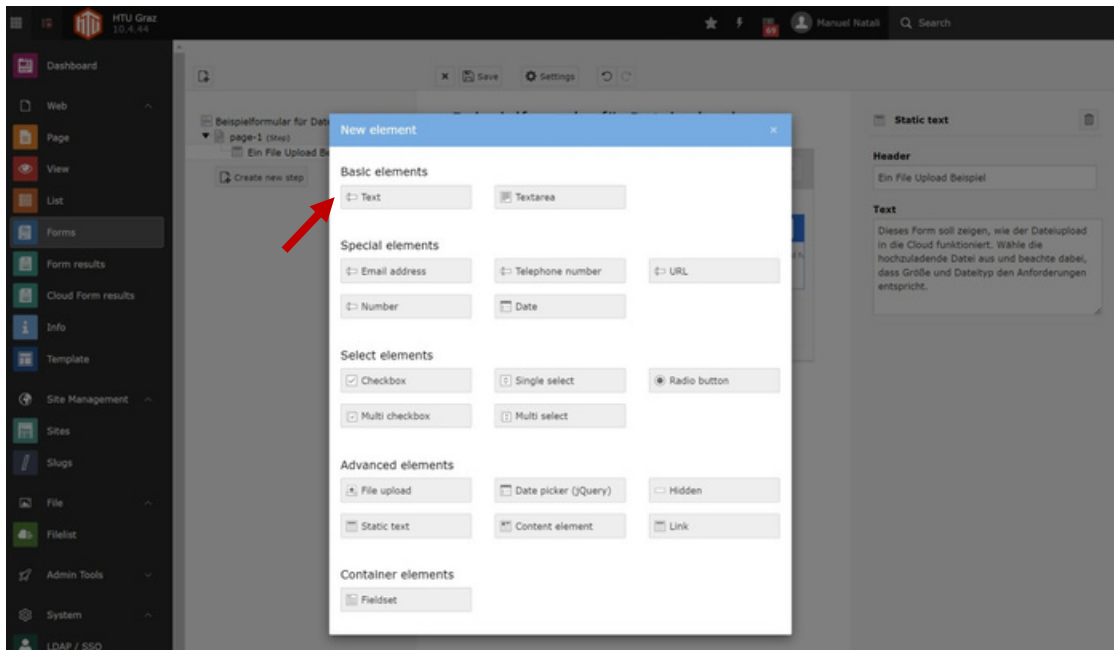
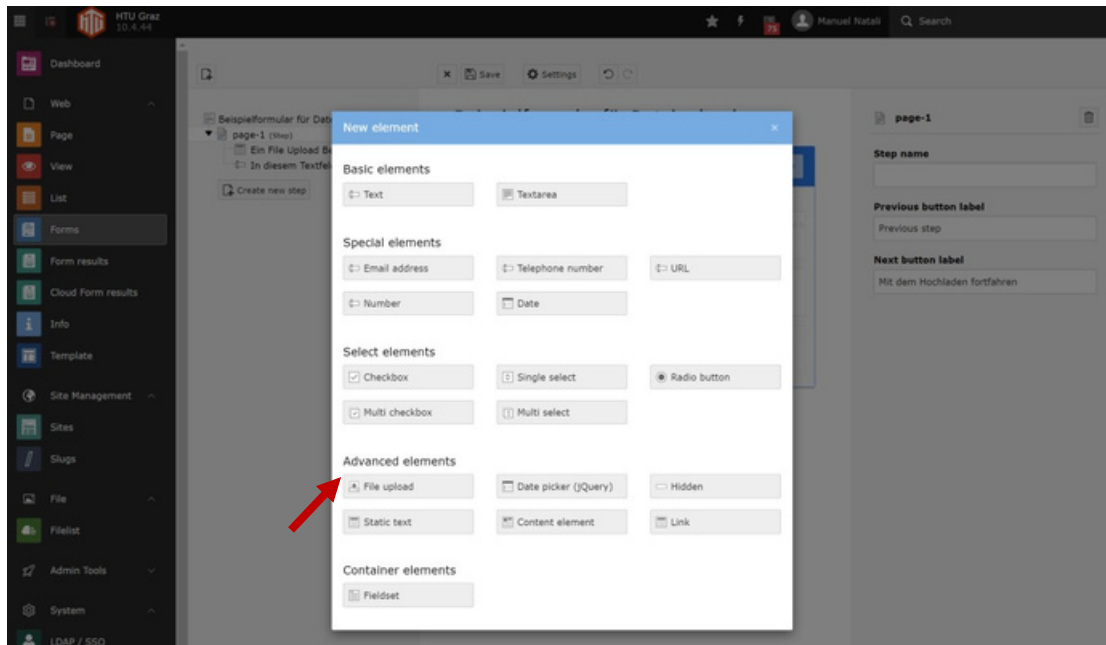


Figure 8: Inserting a text element as a required field

Next, we make a note of the ID of the text field – in this example, **'text-1'** (see the blue box in Figure 8) – as we'll need this later for the **finisher**.

The element for uploading files to the cloud can be found under **Create New Element → File Upload**. Figure 9 shows where the element is located in the selection menu and where the settings can then be configured.



Beispielformular für Dateiapload

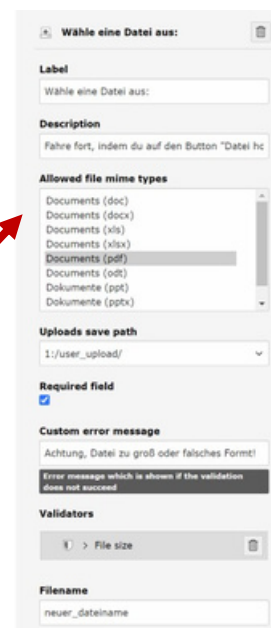
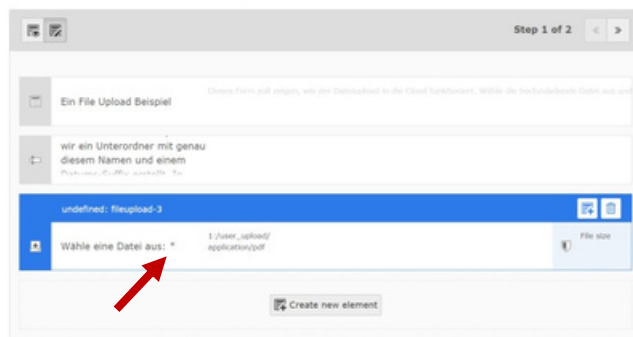


Figure 9: Top: the element to be selected. Bottom: possible settings when selecting the upload element just created

In our example, only **PDF files** are permitted for upload. However, it is of course also possible to allow multiple file formats at the same time; to do so, select all the desired formats using **Shift+click**.

In our example, the upload element is defined as a **required field**, just as with the text field previously; this means that the user must upload a file in order to submit the form.

In the '**Custom Error Message**' field (optional), you can define a message that will be displayed to the user if the form contains incorrect information, for example, if a file with the wrong file extension is uploaded.

The '**File Size Validator**' (optional) can also be used to limit the file size. Please note that the server accepts a maximum file size of **25 MB**. In our example, only files between 10 kB and 1 MB in size may be uploaded.

Figure 10 shows a detailed view of the configuration options for the upload element.

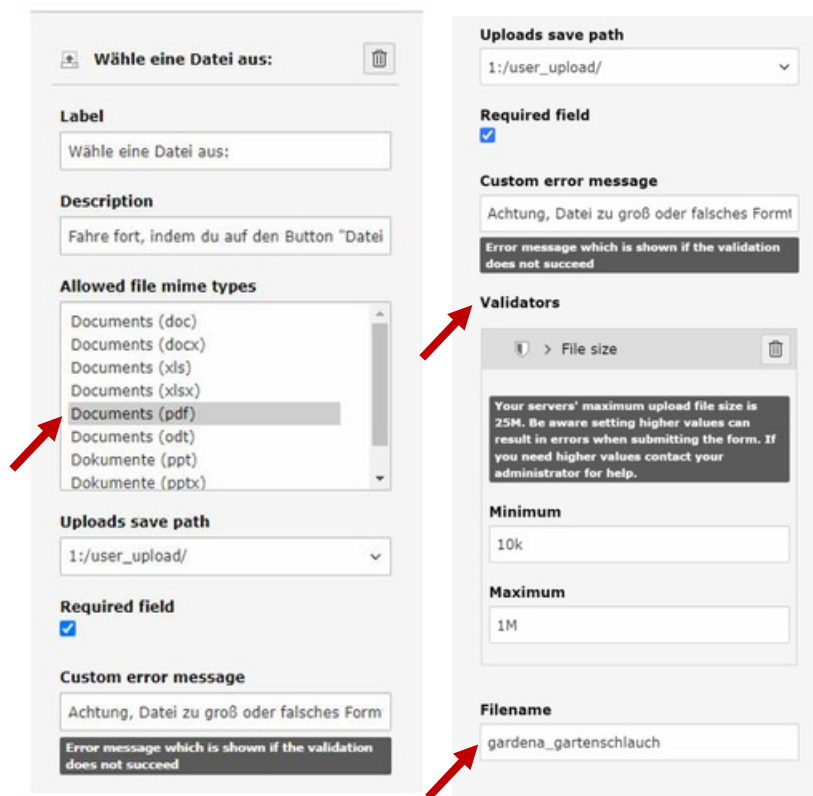


Figure 10: Possible settings for the upload element

You can overwrite the file name using the '**Filename**' field. If this field is left blank, the original file name will be retained.

Next, we'll create another **step** in which we'll add a static text element containing a closing text.

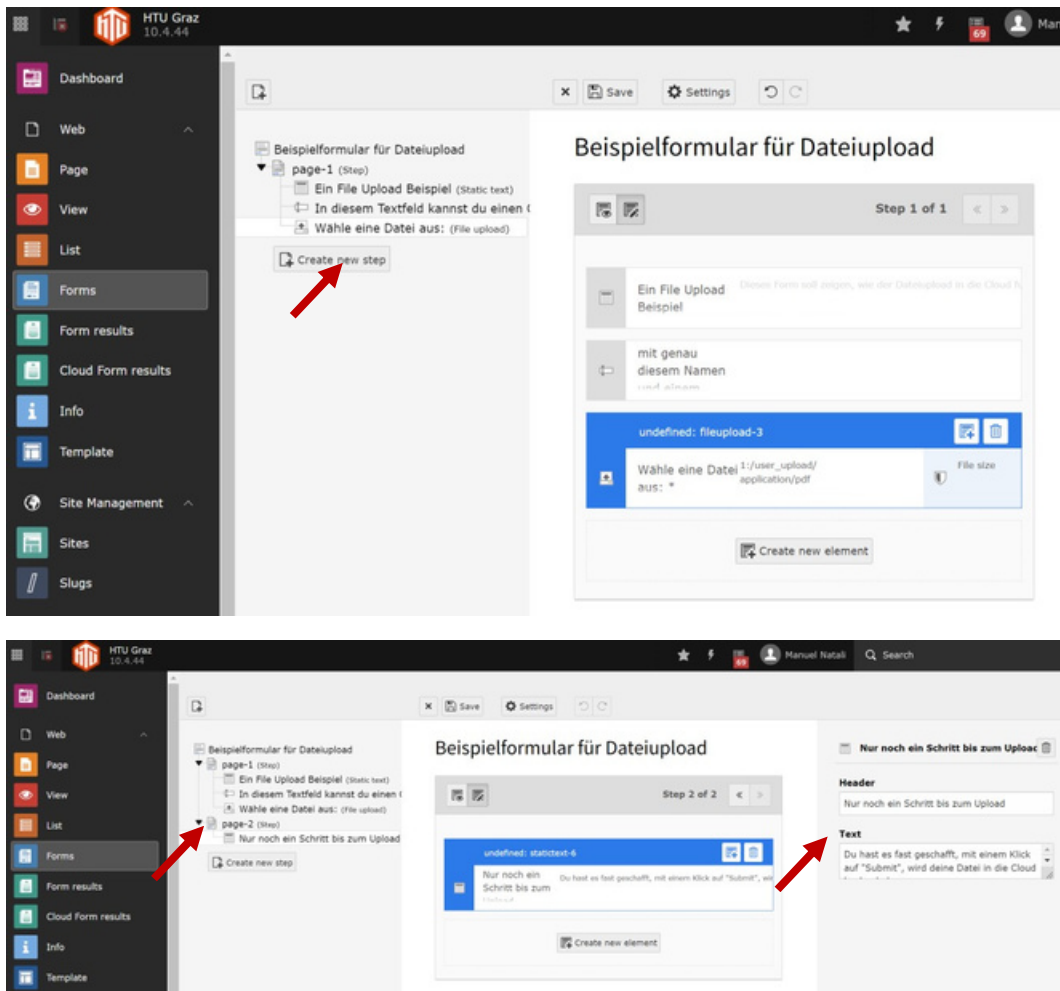


Figure 11: Creating another step with a static text element

Finally, the **finisher** needs to be configured. To do this, click on the top-level element in the left-hand menu. On the right-hand side, you can now use the drop-down menu to select the '**Store Form Data to Cloud**' finisher; see Figure 12.

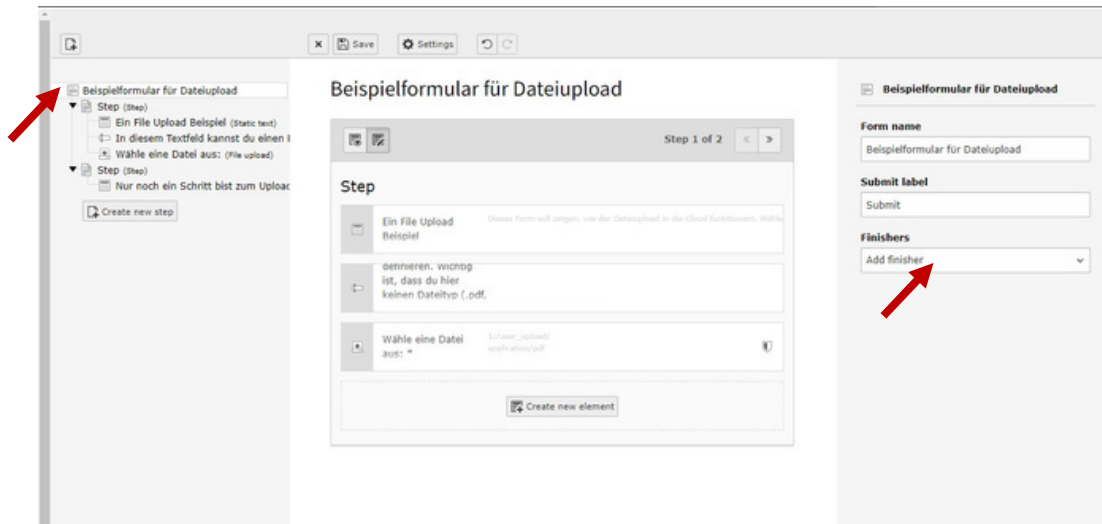


Figure 12: Selecting the finisher

The '**Form Data to Cloud**' finisher requires both the share link created in Chapter 2 and the password for sharing. In the '**Folder Name**' field, enter the text field ID you noted down earlier, enclosed in curly brackets; in our example, this is **{text-1}**.

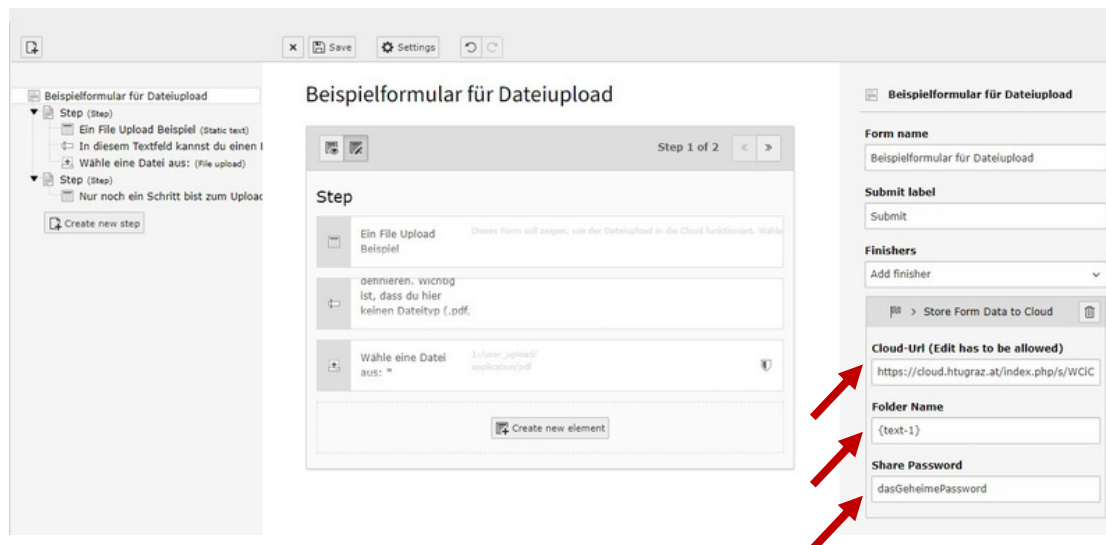


Figure 13: Finisher configuration

5. EMBEDDING THE FORM INTO A WEBSITE

This chapter explains how to integrate the form you have just created, which includes a PDF file upload function, into a Typo3 website. First, navigate to the website where you want to embed the form via the **'Page'** section. Alternatively, you can embed the form in a new website.

In the desired section (e.g. Middle), click on the **'+ Content'** button.

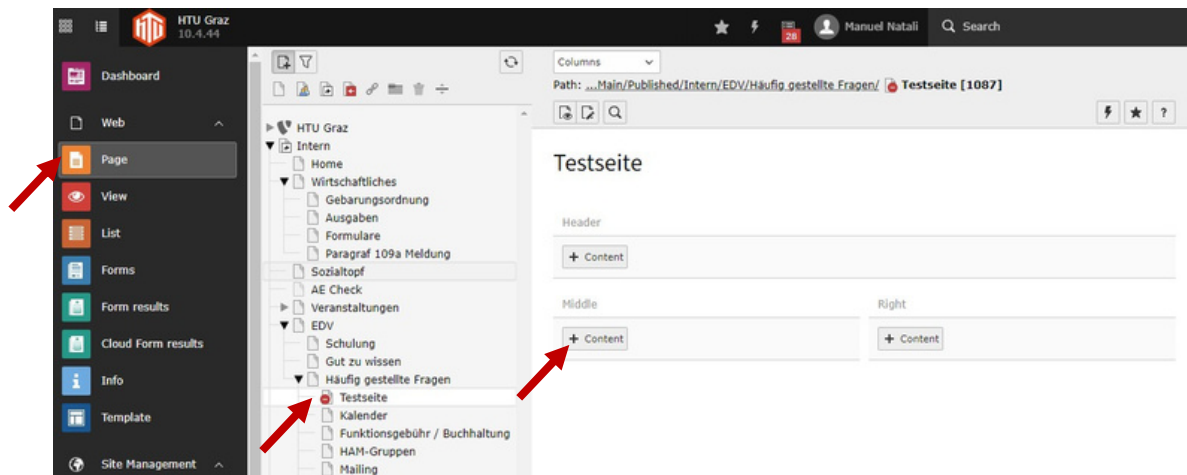


Figure 14: Selecting the website into which the form is to be embedded.

A selection window opens in which you can choose the type of content. In our example, we select the **'Regular Text'** element (Figure 15).

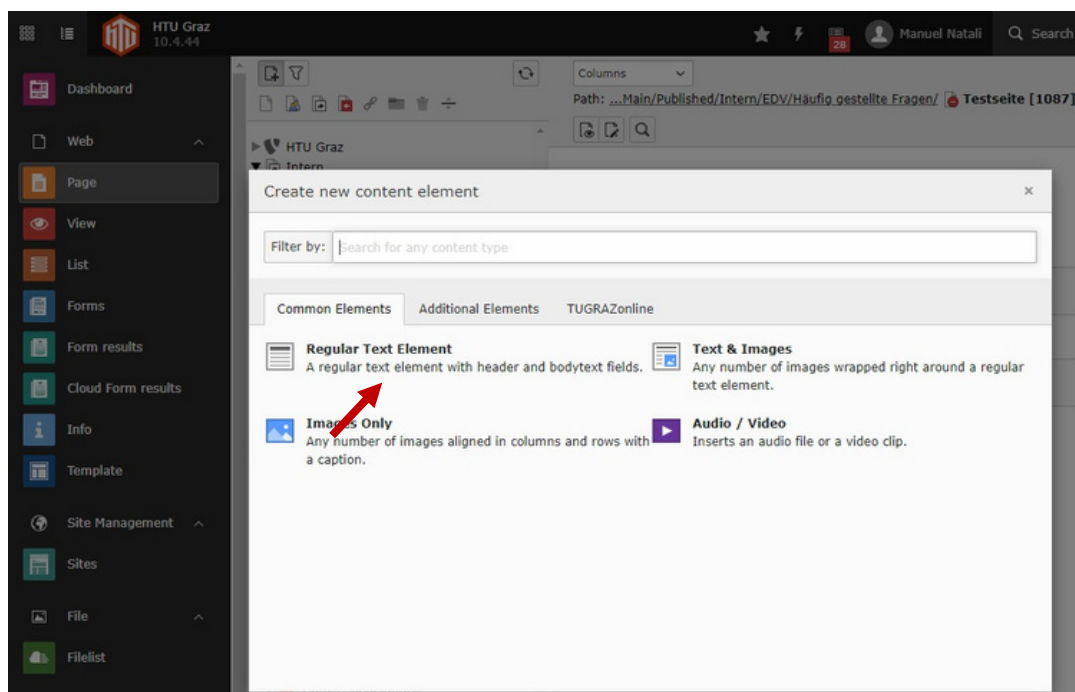


Figure 15: Selecting the content element to be inserted

Under **Type [CType]**, select the entry Form **[form_formframework]**. The pop-up window can be confirmed by clicking **OK** (Figure 16).

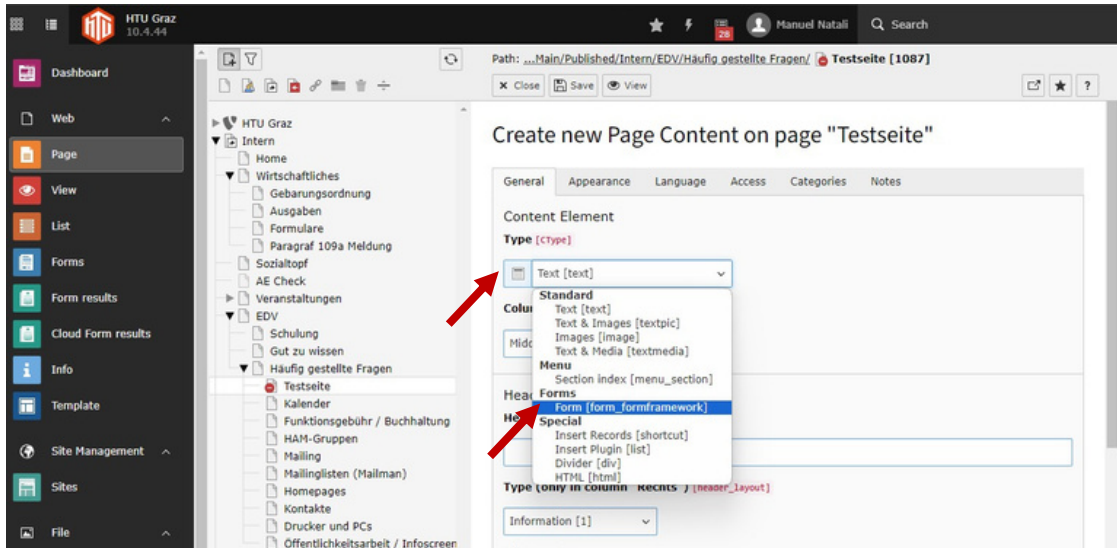


Figure 16: Selecting a type when inserting a content element

Next, we need to switch to the **'Plugin'** tab to integrate our form. It can be found under the form name defined in Chapter 3; in our example, this is 'Sample form for file upload' (Figure 17).

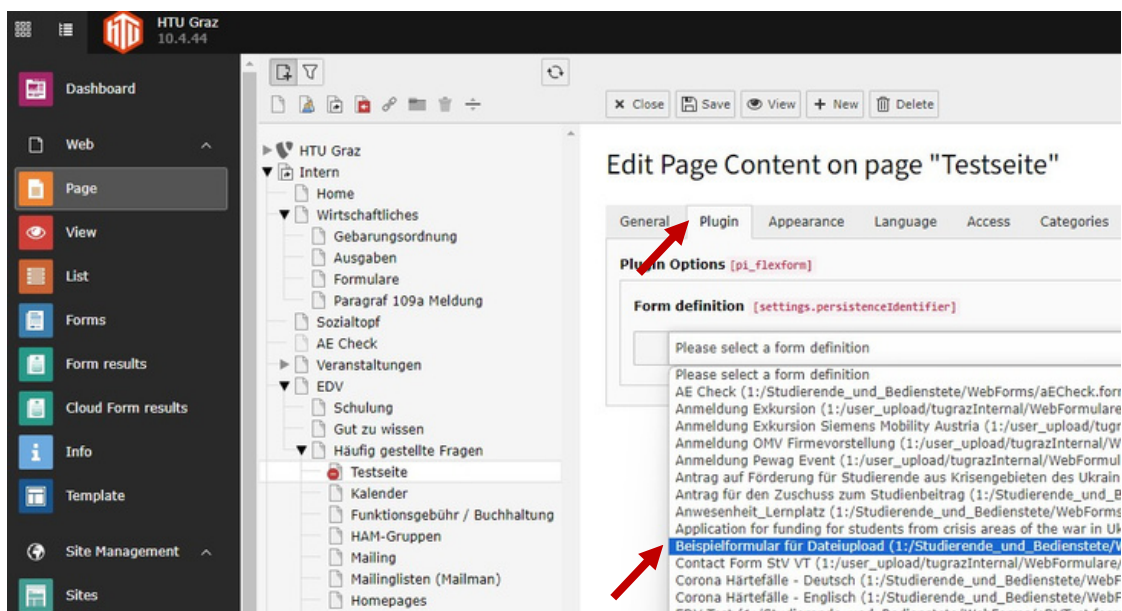


Figure 17: Choosing the right form

In the final step, you need to save the changes to the website. To do this, click the **Save** button. Clicking the **View** button opens a preview of the website where you can test the form you have created (Figure 18).

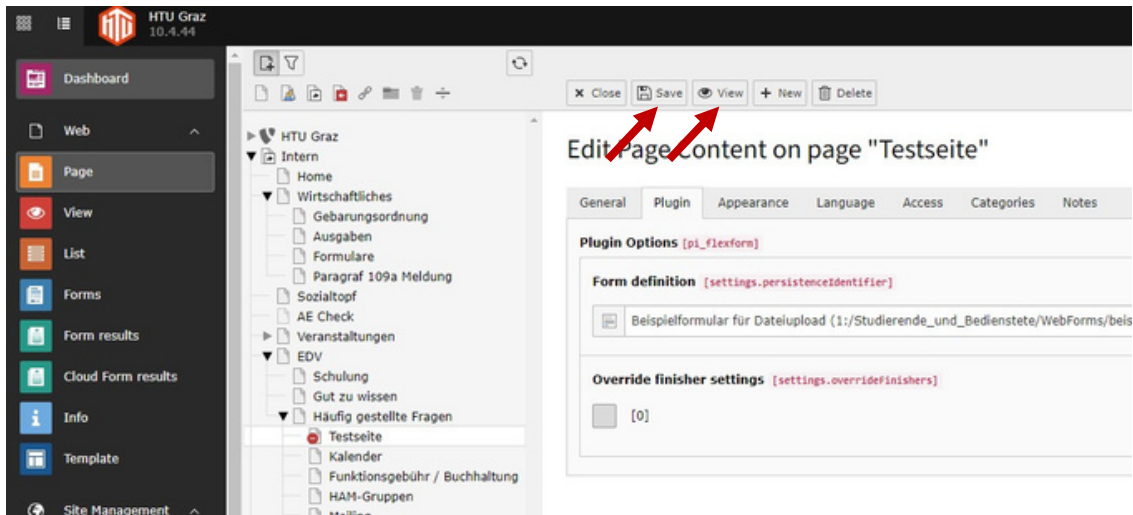


Figure 18: Saving and previewing the website with the embedded form

6. RESULT

Figure 19 shows how the form in our example is ultimately displayed on the website. Elements marked with an asterisk (*) indicate that the field is mandatory, e.g. the name of the folder to which the file is being uploaded.

HTU Internes zu EDV, Wirtschaft, etc.



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Ein File Upload Beispiel

Dieses Form soll zeigen, wie der Dateiupload in die Cloud funktioniert. Wähle die hochzuladende Datei aus und beachte dabei, dass Größe und Dateityp den Anforderungen entspricht.

In diesem Textfeld kannst du einen Ordernamen definieren. Vor dem Upload wird ein Unterordner mit genau diesem Namen und einem Datums-Suffix erstellt. In diesen Unterordner wird die Datei letztendlich gespeichert.*

test-upload

Wähle eine Datei aus: *

gardena_gartenschlauch.pdf.pdf

Datei auswählen Keine ausgewählt

Fahre fort, indem du auf den Button "Datei hochladen" klickst.

Mit dem Hochladen fortfahren

Figure 19: Step 1 of the example form in Typo3

Figure 20 shows the second step of the form; clicking ‘Submit’ uploads the file to the cloud.

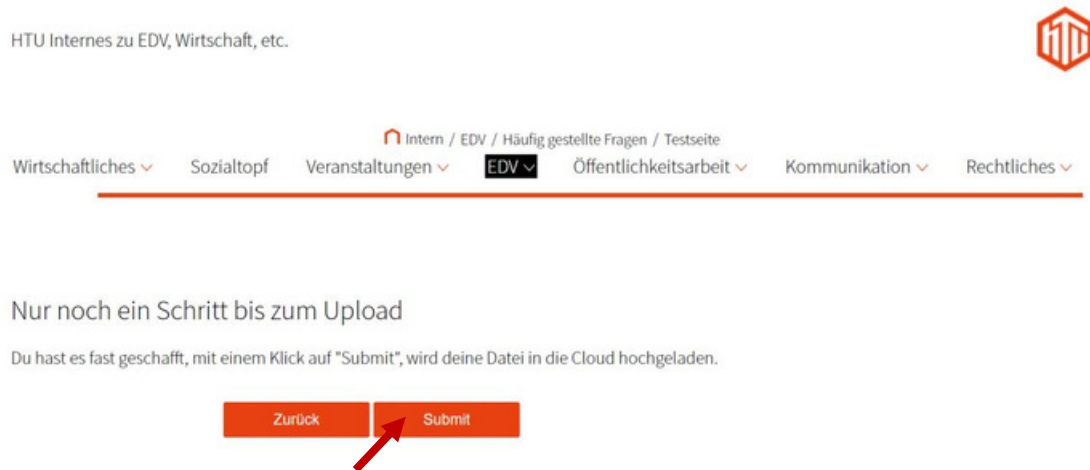


Abbildung 20: Step 2 des Upload-Formulars

Ultimately, you’ll find the file in the cloud folder you specified earlier. In our example, the file **gardena_gartenschlauch_01.pdf** is located in the subfolder **test-upload_2024_04_08_21_15_59**. If you look closely, you’ll see that a sequential number is appended to the file name and a suffix consisting of the date and time (of the upload) is appended to the folder name.

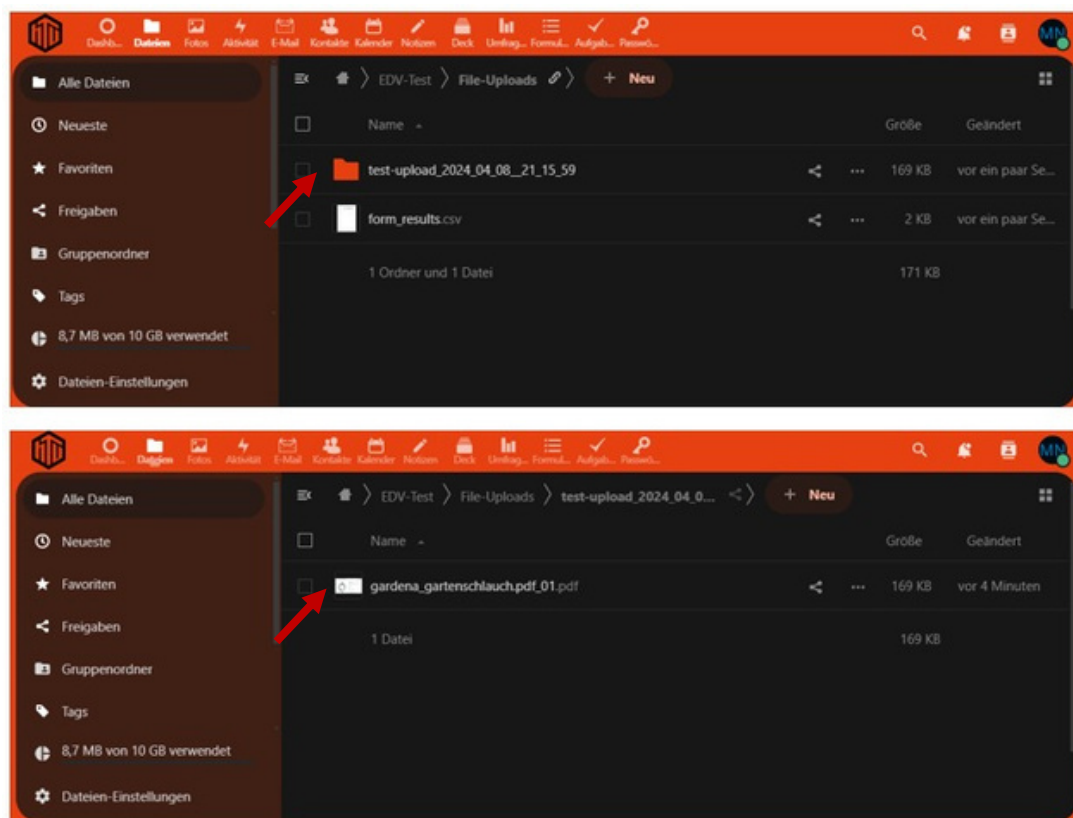


Figure 21: Top: automatically created folder. Bottom: uploaded file

7. COMMON ERRORS

If, after submitting the form, an exception appears containing the keyword '**Forbidden**' (see Figure 22), this indicates that the form does not have permission to upload the file to the cloud.

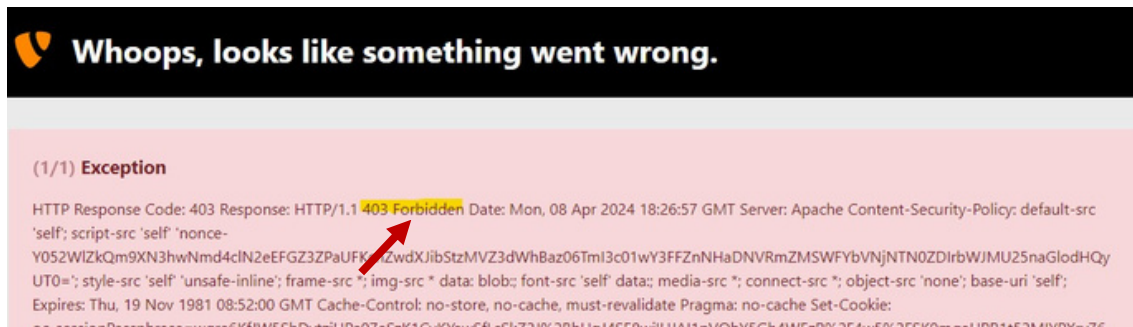


Figure 22: Possible error message after submitting the form

Possible solutions:

- Check that the password and sharing link are correctly entered in the **Finisher**.
- Check that you have selected '**Allow uploading and editing**' in the cloud sharing options.

8. SUPPORT

If you need help or have any questions about forms in Typo3, simply contact us at **edv-support@htugraz.at**.