

The `enctype` attribute

A WORD ABOUT THE ENCTYPE ATTRIBUTE OF THE `<FORM>` ELEMENT

The `enctype` attribute existed before HTML5. It is often used together with forms that contain file input fields. For sending files to a remote server, we use **"multipart" forms**. This special encoding of forms needs to be specified using the `enctype` attribute, as shown in the example below:



[Online example at JS Bin](#)

```
<!DOCTYPE html>
<html lang="en">
<body>

  <form action="default.php"method="post" enctype="multipart/form-
data">
    First name: <input type="text"name="fname"><br>
    Last name: <input type="text"name="lname"><br>
    <input type="submit"value="Submit">
  </form>
</body>
10. </html>
```

Note that when you send form content using Ajax, this attribute is not needed, as you will specify the type of data sent to the remote server in JavaScript, using for example the new `FormData` object.

USED AS AN ATTRIBUTE OF THE `<INPUT TYPE="SUBMIT" ENCTYPE=...>` ELEMENT

Since HTML5, this attribute can also be used in `<input type="submit">` input fields.

If an `<input type="submit">` field has this attribute, then, **when submitted using `method=POST`**, the browser will send the form content encoded with the method specified by the `formenctype` attribute. And this overrides the value of the `enctype` attribute specified in the `<form enctype=...>` element (or its default value, if not present).

TYPICAL USE

```
<form action="defaultAction.php">
  ...
  <input type="submit"formenctype="multipart/form-data"
        value="Submit as Multipart/form-data">
</form>
```

The possible values for this field are:

- `application/x-www-form-urlencoded`: all characters are escaped/encoded before submission, for example, spaces become "+", accentuated characters are transformed into hexadecimal, etc.
- `multipart/form-data`: encoding is not done. Usually we use this value for submitting binary data such as images, files, etc.
- `text/plain`: some encoding is done on standard characters like space (that becomes a "+"), nothing is done for special characters.

EXAMPLE

[Try this online example at JS Bin](#)

First name:

Last name:

Note: The formenctype attribute is not supported in IE.

Source code:

```
<!DOCTYPE html>
<html>
<body>
  <form action="defaultAction.php" method="post"
    enctype="application/x-www-form-urlencoded">
    <label for="firstName">First name:</label>
    <input type="text" name="firstName" id="firstName"><br>
    <label for="lastName">Last name:</label>
    <input type="text" name="lastName" id="lastName"><br>
    <input type="submit" value="Submit">
    <input type="submit"
      formenctype="multipart/form-data"
      value="Submit as Multipart/form-data">
  </form>
15. <p><b>Note:</b> The formenctype attribute is not supported by
    all browsers.</p>
  </body>
</html>
```

Explanations and how to see the difference between the two submissions

If you run this example in the JS Bin standalone mode (click the black arrow on the top right of the output tab, in JS Bin), you should see this:

The screenshot shows a web browser window with the address bar displaying `output.jsbin.com/vobasa`. The page contains a form with two input fields: "First name: Michel" and "Last name: Buffa". Below these fields are two buttons: "Submit" and "Submit as Multipart/form-data". A red arrow points to the "Submit as Multipart/form-data" button, with the text "Click this button to submit!" written in red. Above the buttons, the text "JS Bin in standalone mode!" is displayed in red. Below the form, the browser's DevTools interface is visible, with the "Network" tab selected. The Network tab shows a table with columns "Name", "Method", and "Status". The table is currently empty, and a message at the bottom of the tab reads: "No requests captured. Reload the page to see detailed information on the network activity." Below the message, there are several file icons and names: `formdata1.png`, `multiples.gif`, `regex.png`, `usbrowsershare.jpg`, and `list.gif`.

First name: Michel
Last name: Buffa
Submit Submit as Multipart/form-data

JS Bin in standalone mode!

Click this button to submit!

Elements Network Sources Timeline Profiles Resources Audits Console NetBeans

View: Options: ☐ Preserve log ☐ Disable cache

Name	Method	Status
------	--------	--------

No requests captured. Reload the page to see detailed information on the network activity.

formdata1.png multiples.gif regex.png usbrowsershare.jpg list.gif

Then, open the devtools and go to the "Network" tab, click on the POST request. Once done, click on the right on the "Header" tab to see the HTTP headers, and scroll down, you should see the form-data entries in the header, like in this screenshot:

**This is normal,
we called a fake server**

Something went wrong!

Click here

**the HTTP
request header
shows "parts"
The form-data
values...**

defaultAction.php
static-page.css?3.29.20
dave.m...

Request Payload

-----WebKitFormBoundarybpEIqw03IG35b0W9
Content-Disposition: form-data; name="firstName"

Michel
-----WebKitFormBoundarybpEIqw03IG35b0W9
Content-Disposition: form-data; name="lastName"

Buffa
-----WebKitFormBoundarybpEIqw03IG35b0W9--

formdata1.png multiples.gif regexp.png usbrowsershare.jpg list.gif

And if you start again and click on the left submit button, the one without the formenctype attribute, you should see that the form content has been submitted "normally" (default value is "urlencoded", spaces are replaced by "+", etc.). Here is a screenshot of what you should see:

Q Elements Network Sources Timeline Profiles Resources Audits Console NetBeans

View: Options: ☐ Preserve log ☐ Disable cache

Name

- defaultAction.php
- static-page.css?3.29.20
- dave.min.svg?3.29.20
- inject.js

4 formenctype!nsferred | Fin...

Headers Preview Response Cookies Timing

00Z%22%2C%22updated%22%3A%222015-04-05T10%3A21%3A41.000Z%22%
ta%22%3Anull%2C%22last_seen%22%3A%222015-06-24T12%3A11%3A14.
n%22%3A%222015-04-05T10%3A21%3A41.000Z%22%7D%7D.i%2FKCKvbnVx

Host: output.jsbin.com
Origin: http://output.jsbin.com
Referer: http://output.jsbin.com/vobasa
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_3
ome/43.0.2357.124 Safari/537.36

Form Data view source view URL encoded

firstName: Michel
lastName: Buffa

formdata1.png multiples.gif regexp.png usbrowsershare.jpg list.gif

If we clicked on
the button without
formenctype!