

**BURP SUITE FOR PENTESTER**

# **PAYLOAD PROCESSING**



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# Abstract

Today we are going to discuss the “Payload Processing” option of Burpsuite which is advanced functionality comes under the **Intruder Tab** in order to perform fuzzing or a brute force attack. However, you might be aware about how fuzzing is done with the Intruder tab, so let’s explore some of its advanced techniques, such that it could enhance our bug hunting methodologies.

# Payload Processing

Payload Processing can be defined as when payloads are generated using **payload types**, they can be further **manipulated or filtered** using various **processing rules** and **payload encoding**.

## Payload Processing Rules

These rules are defined to perform a various processing task on each payload before it is used. These rules are executed in a sequence, and they can be used to help debug any problem with the configuration. Payload processing rules are useful in situations where you need to generate different payloads, or where we want to wrap payloads within a wider structure or encoding scheme.

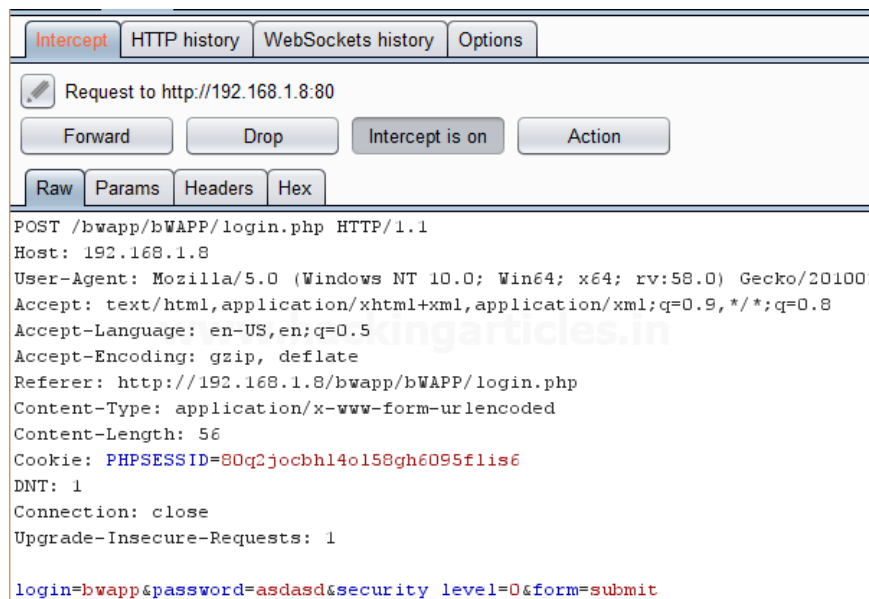
There are 12 types of payload processing rules available:

- **Add prefix**
- **Add suffix**
- **Match / Replace**
- **Substring**
- **Reverse substring**
- **Modify case**
- **Encode**
- **Decode**
- **Hash**
- **Add raw payload**
- **Skip if matches regex**
- **Invoke Burp extension**

## Add Prefix

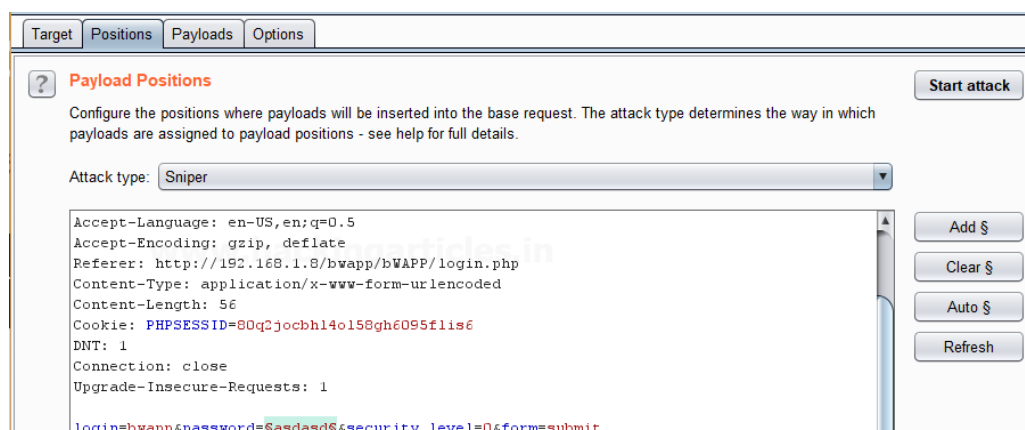
This processing rule adds up a prefix before the payload.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.

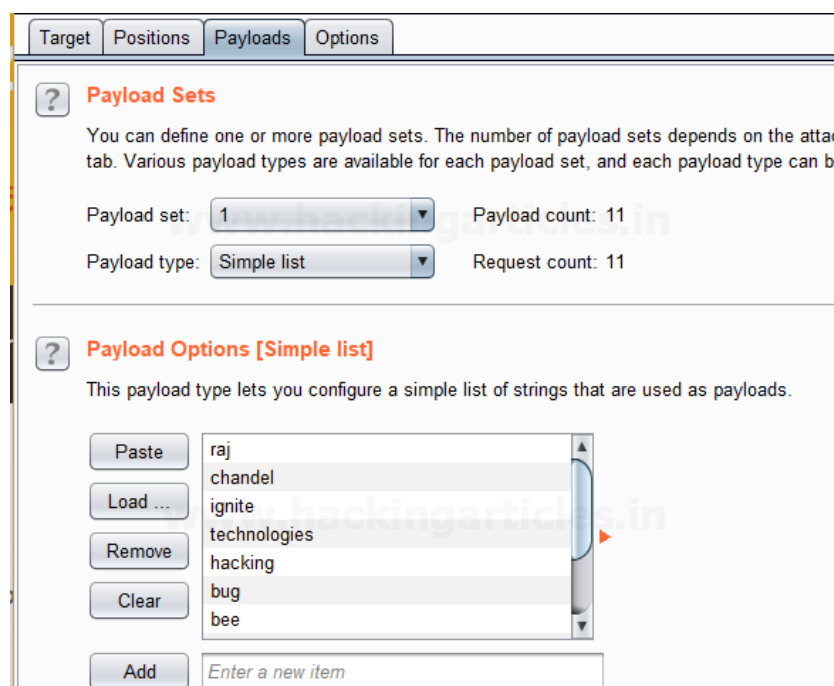


Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

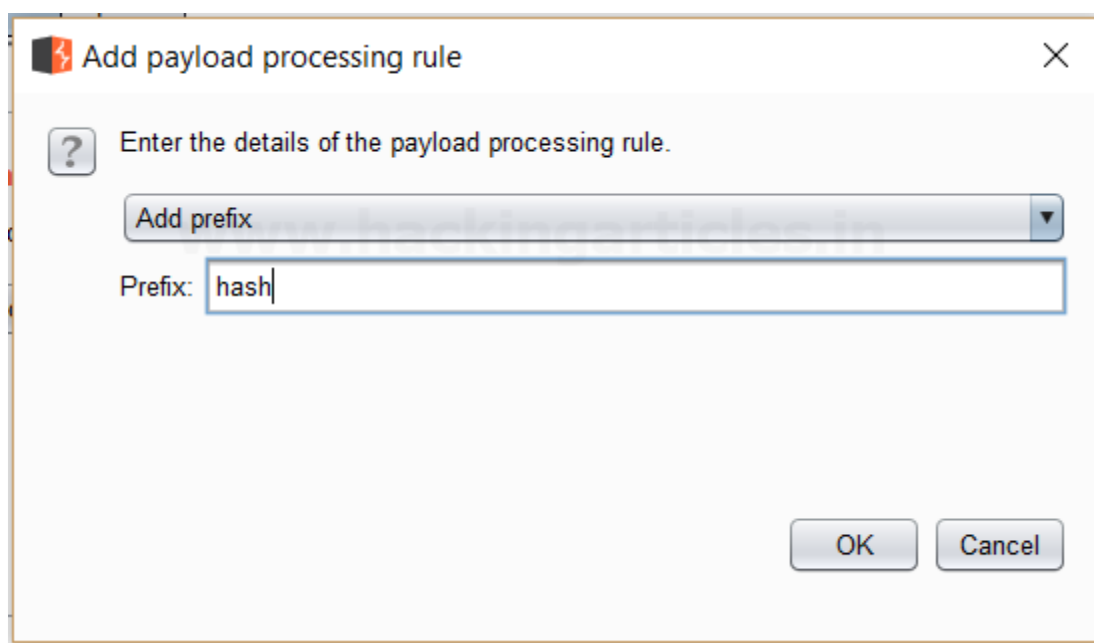
- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as a **sniper**
- In the given below image, we have selected a password that means we will need one dictionary files for a password.



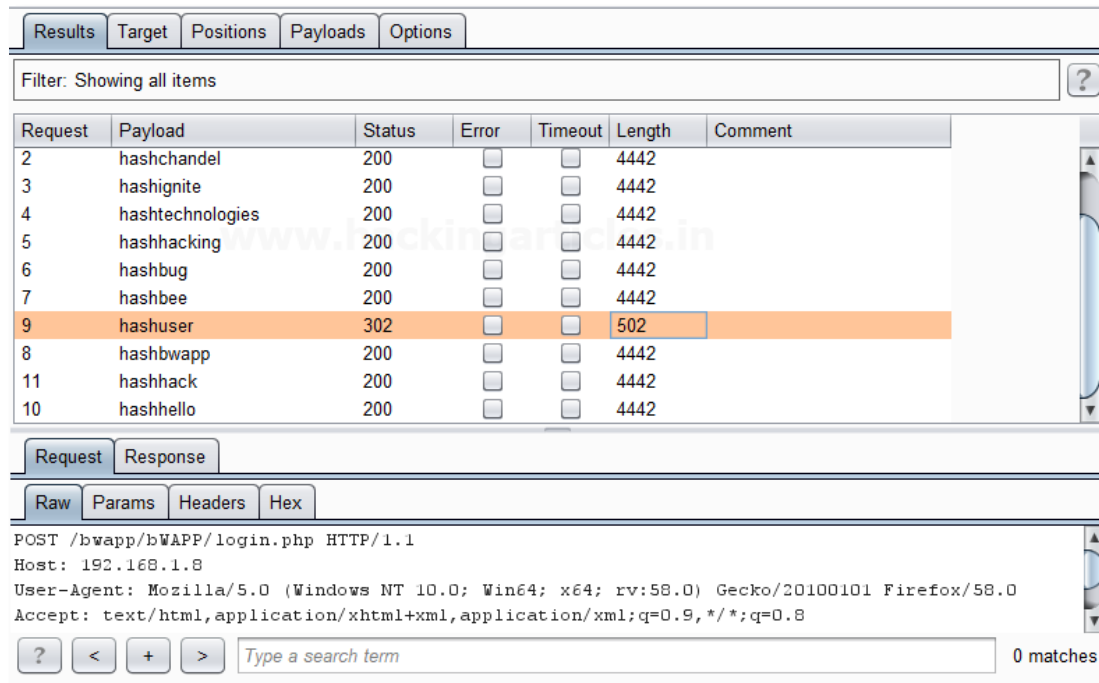
Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add button** in the **payload options** as shown in the image.



Before executing the attack we have added a **payload processing rule** to the payload type which is **Add Prefix** and we have given an input string "hash" which is added as a **prefix** with every input strings in the dictionary, as shown in the **result window** of the **attack**. Select **Start Attack** in the **Intruder menu** as shown in the image.



Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

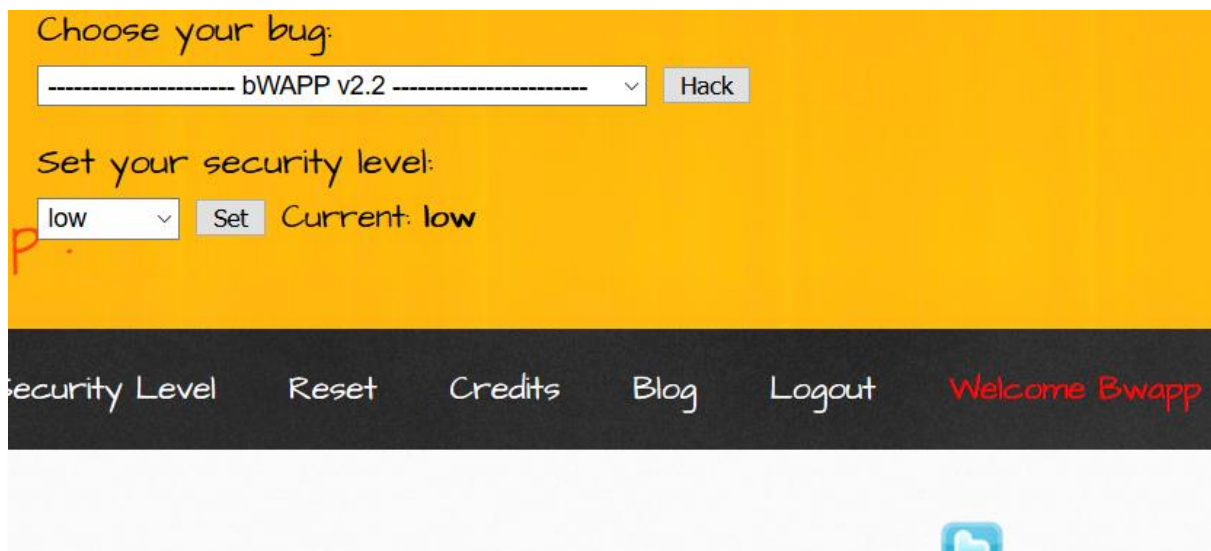


Request	Payload	Status	Error	Timeout	Length	Comment
2	hashchandel	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3	hashignite	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
4	hashtechnologies	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
5	hashhacking	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
6	hashbug	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
7	hashbee	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
9	hashuser	302	<input type="checkbox"/>	<input type="checkbox"/>	502	
8	hashbwapp	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
11	hashhack	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
10	hashhello	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	

Request	Response
Raw Params Headers Hex	
POST /bwapp/bWAPP/login.php HTTP/1.1	
Host: 192.168.1.8	
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0	
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8	

And to confirm the **password matched**, we will give the password in the **Bwapp LAB login page**, which will successfully log us into the **Bwapp lab**. This shows our success in the attack as shown in the image.



Choose your bug:

----- bWAPP v2.2 ----- Hack

Set your security level:

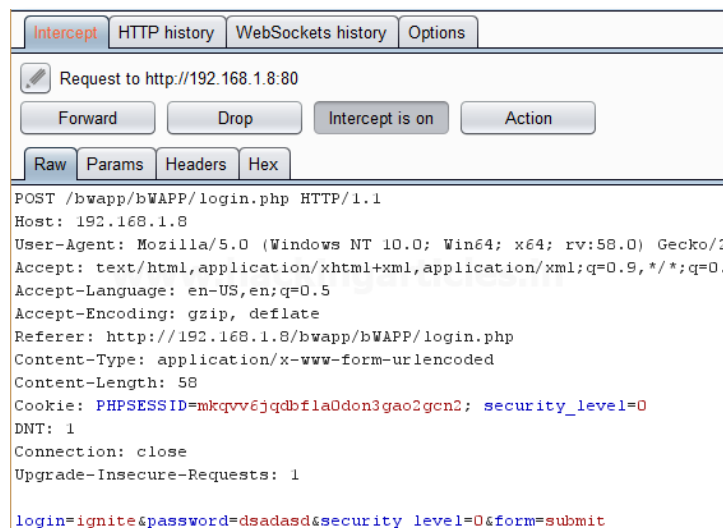
low Set Current: low

Security Level Reset Credits Blog Logout Welcome Bwapp

## Add Suffix

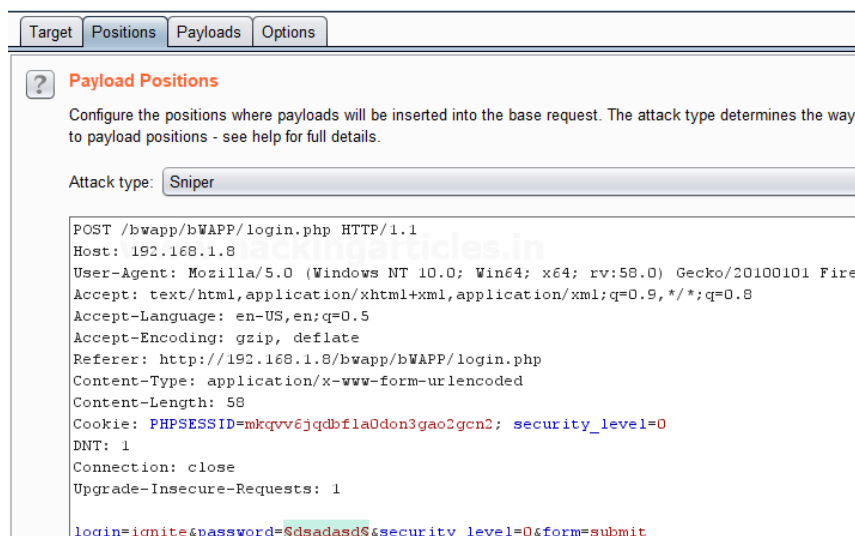
This processing rule adds up a suffix after the payload.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



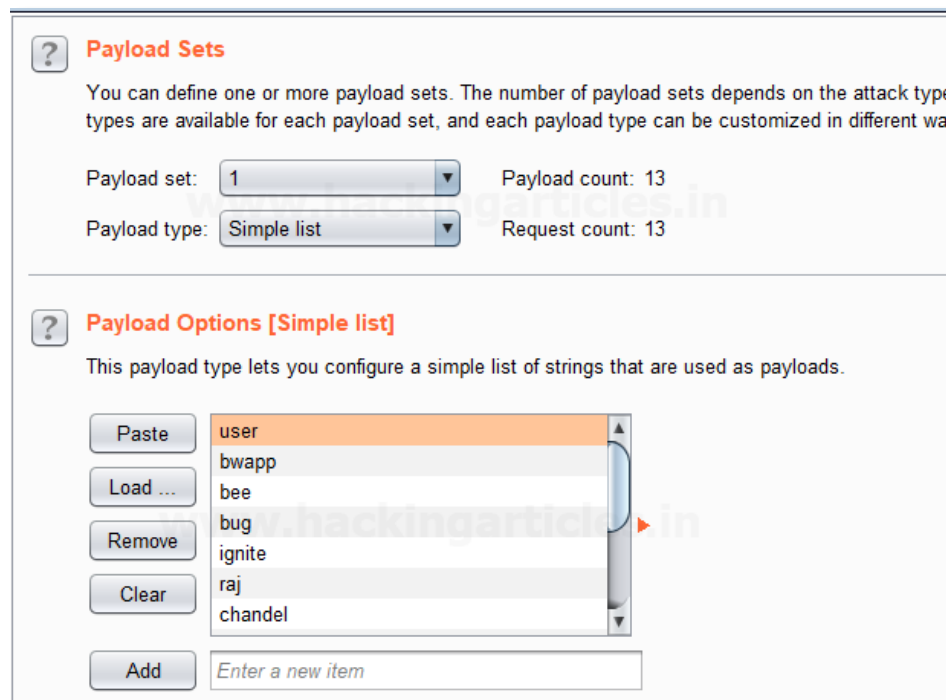
Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as a **sniper**
- In the given below image, we have selected a password that means we will need one dictionary files for a password.





Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add button** in the **payload options** as shown in the image.



Before executing the attack we have added a **payload processing rule** to the payload type which is **Add Suffix** and we have given an input string "1234" which is added as a **suffix** with every input strings in the dictionary, as shown in the **result window** of the **attack**.

Select **Start Attack** in the **Intruder menu** as shown in the image.



Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

Use this combination of username and password for login to verify your brute force attack for the correct password.

Filter: Showing all items

Request	Payload	Status	Error	Timeout	Length	Comment
3	bee1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
4	bug1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
5	ignite1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
6	raj1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
7	chandel1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
8	hacked1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
9	admin1234	302	<input type="checkbox"/>	<input type="checkbox"/>	502	
10	source1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
11	access1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
12	password1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
13	hello1234	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	

Request Response

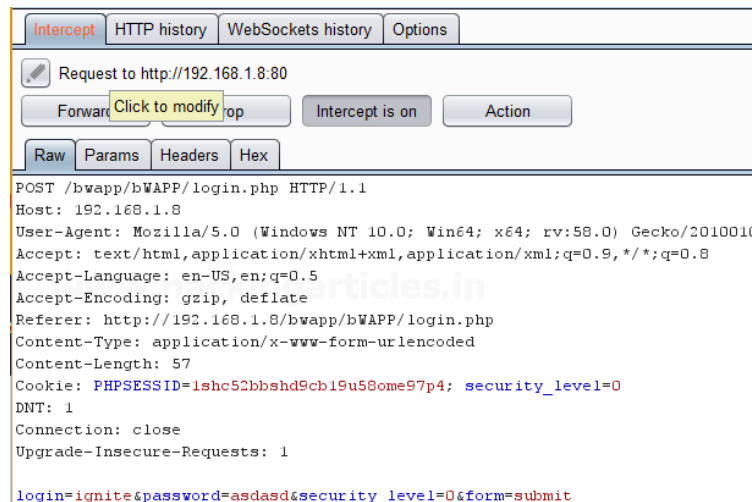
Raw Params Headers Hex

```
POST /bwapp/bWAPP/login.php HTTP/1.1
Host: 192.168.1.8
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
```

## Match / Replace

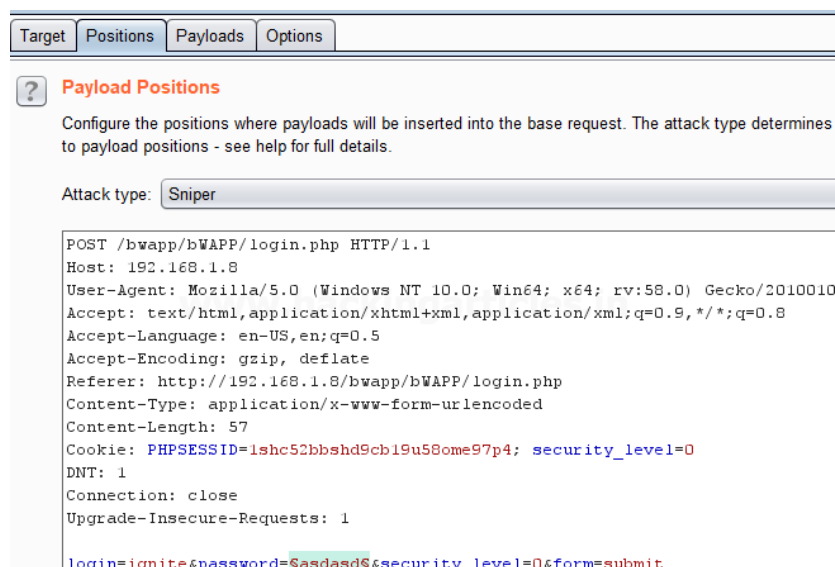
This processing rule is used to replace any part of the payload that match a specific regular expression, with a string.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as the **sniper**
- In the given below image, we have selected a password that means we will need one dictionary files for the password.



Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add** button in the **payload options** as shown in the image.

The screenshot shows a configuration window for payload sets. The top section, titled "Payload Sets", includes a description and two dropdown menus: "Payload set:" with value "1" and "Payload count:" with value "8"; "Payload type:" with value "Simple list" and "Request count:" with value "8". The bottom section, titled "Payload Options [Simple list]", includes a description and a list of strings: "ignite", "bee", "bug", "raj987", "chandel456", "admin", and "admin9876". To the left of the list are buttons for "Paste", "Load ...", "Remove", and "Clear". Below the list is an "Add" button and a text input field with the placeholder "Enter a new item". At the bottom is an "Add from list ..." dropdown menu.

Before executing the attack we have added a **payload processing rule** to the payload type which is **Match / Replace** and we have given an input "9870" in the **Match Regex** which will match the input given with the input strings in the dictionary, if there is a certain match then it will replace it with the input "1234" given in the **Replace with** as shown in the image. Select **Start Attack** in the **Intruder menu**.

The screenshot shows a dialog box titled "Edit payload processing rule". It contains a dropdown menu with "Match/replace" selected. Below this are two text input fields: "Match regex:" with the value "9870" and "Replace with:" with the value "1234". At the bottom right are "OK" and "Cancel" buttons.

Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

Use this combination of username and password for login to verify your brute force attack for the correct password.

Filter: Showing all items ?

Request	Payload	Status	Error	Timeout	Length	Comment
0		200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
1	ignite	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
2	bee	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3	bug	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
4	raj987	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
5	chandel456	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
6	admin	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
7	admin9876	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
8	admin1234	302	<input type="checkbox"/>	<input type="checkbox"/>	502	

RequestResponse

RawParamsHeadersHex

POST /bwapp/bWAPP/login.php HTTP/1.1  
Host: 192.168.1.8  
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0  
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8  
Accept-Language: en-US,en;q=0.5  
Accept-Encoding: gzip, deflate

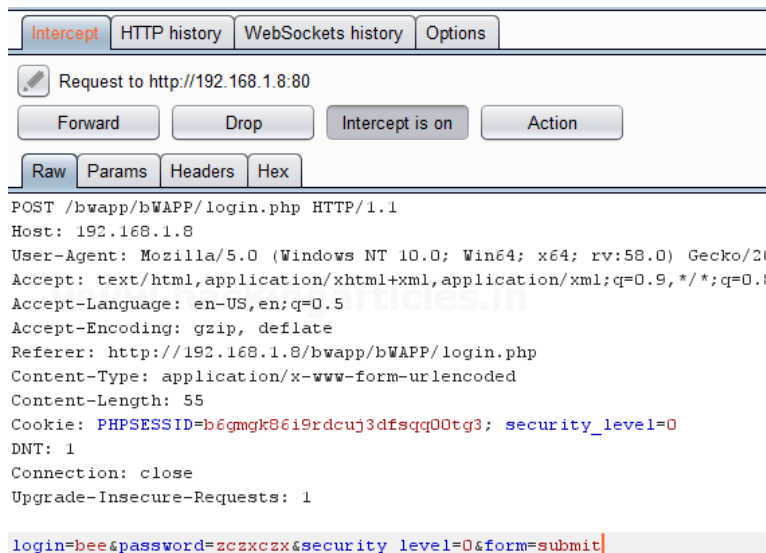
? < + >  0 matches

Finished

## Substring

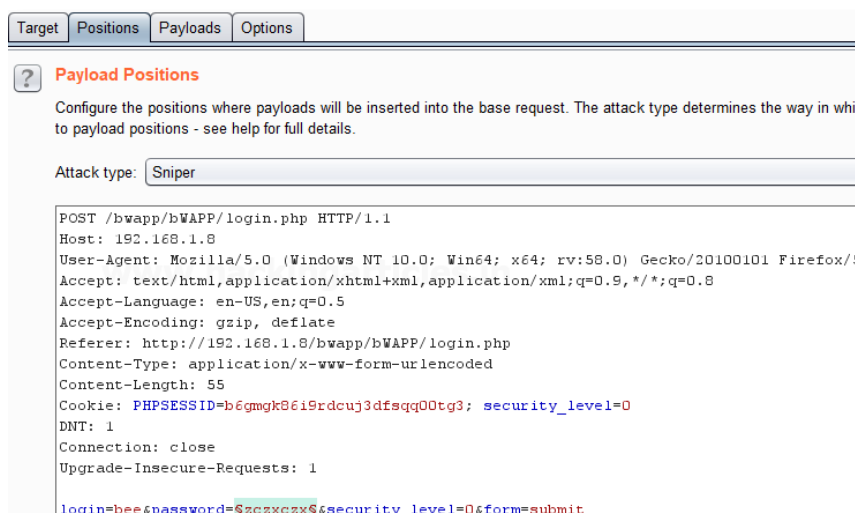
This processing rule is used to extract a sub-portion of the payload, starting from a specified offset up to a specified length. Here the offset and length are counted from the front.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.

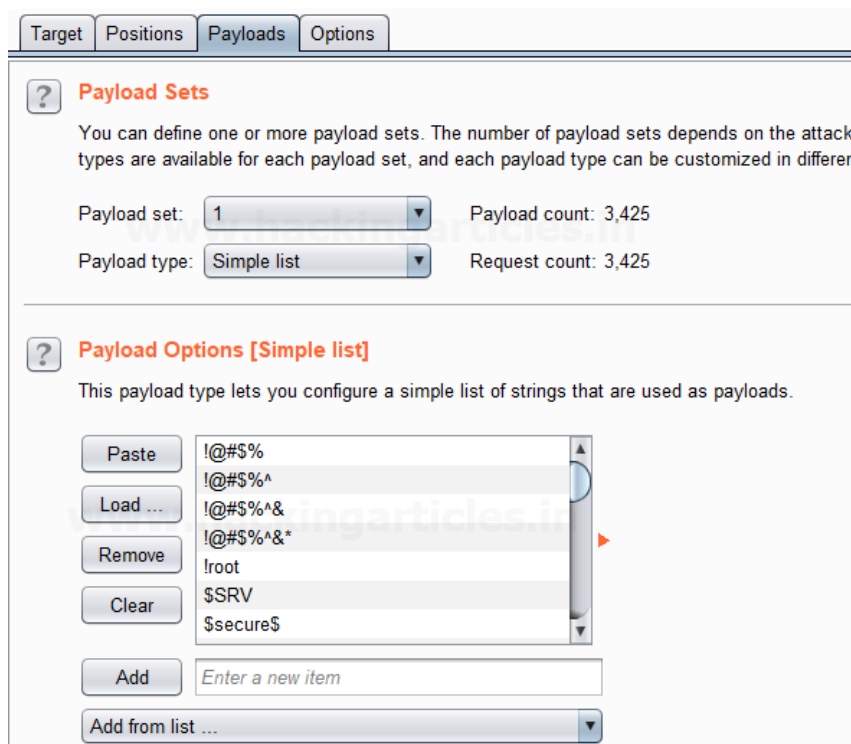


Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as a **sniper**
- In the given below image, we have selected a password that means we will need one dictionary files for the password.



Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. Here we had added dictionary using the option “**Add from list**” as shown below in the given image.

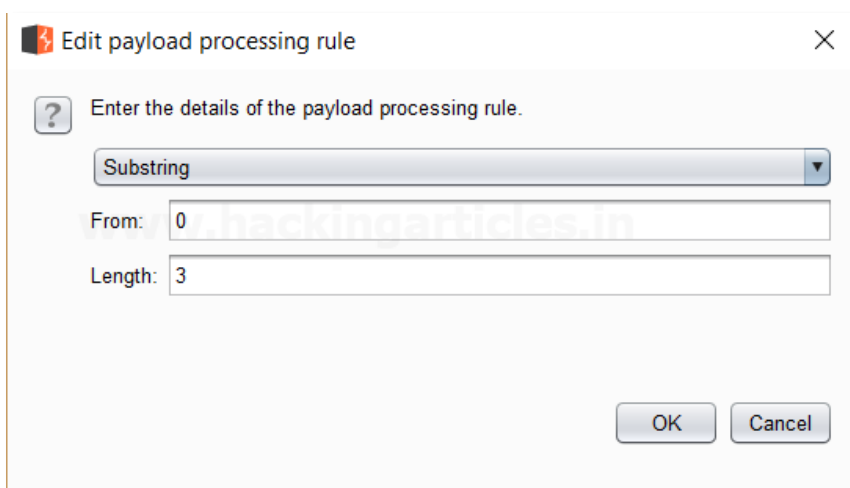


Before executing the attack we have added a **payload processing rule** to the payload type which is **Substring** and we have given an input “0” in **From option** which specifies the offset and an input “3” in the **Length option** which specifies the length of the input strings.

For example, if “password” is a word in a dictionary and we had applied above filter so it will place alphabet **p = 0; a = 1; s = 2 and s = 3** hence it will read only **pass** from whole word “password”.

The length specified will select only those inputs having the specific length and other lower or greater length inputs are discarded as shown in the result window of the attack.

Select **Start Attack** in the **Intruder menu**.



Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

Use this combination of username and password for login to verify your brute force attack for the correct password.

Results Target Positions Payloads Options

Filter: Showing all items

Request	Payload	Status	Error	Timeout	Length	Comment
3415	zep	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3416	zeu	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3417	zho	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3418	zig	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3419	zim	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3420	zja	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3421	zmo	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3422	zom	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3423	zor	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3424	zxc	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3425	bug	302	<input type="checkbox"/>	<input type="checkbox"/>	502	

Request Response

Raw Params Headers Hex

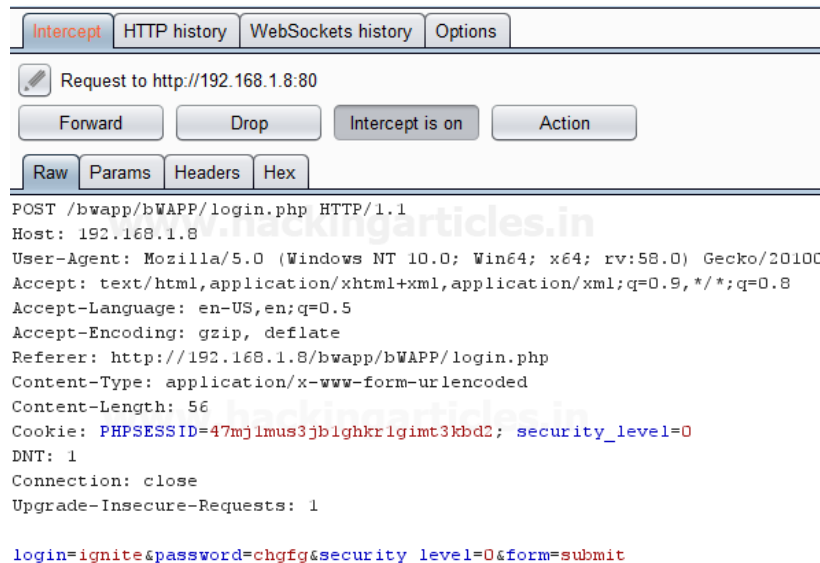
```
POST /bwapp/bWAPP/login.php HTTP/1.1
Host: 192.168.1.8
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
```



## Reverse Substring

This processing rule is used as a substring rule, but the end offset is specified counting backward from the end of the payload, and the length is counted backward from the end offset.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as the **sniper**
- In the given below image, we have selected a password that means we will need one dictionary files for a password.



Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. Here we had added dictionary using the option “**Add from list**” as shown below in the given image.

The screenshot shows two sections of a web application interface. The top section, titled "Payload Sets", contains a description and two dropdown menus. The first dropdown, "Payload set:", is set to "1" and shows a "Payload count: 3,429". The second dropdown, "Payload type:", is set to "Simple list" and shows a "Request count: 3,429". The bottom section, titled "Payload Options [Simple list]", contains a description and a list of strings. On the left of the list are buttons: "Paste", "Load ...", "Remove", "Clear", "Add", and "Add from list ...". The list itself contains the following strings: "!@#\$\$%", "!@#\$\$%^", "!@#\$\$%^&", "!@#\$\$%^&\*", "!root", "\$SRV", and "\$secure\$". Below the list is an input field with the placeholder text "Enter a new item".

Before executing the attack we have added a **payload processing rule** to the payload type which is **Reverse Substring** and we have given an input “2” in **From option** which specifies the offset and an input “9” in the **Length option** which specifies the length of the input strings and they are similar to the Substring rule but it works from backward of an offset and the length is counted backward where the offset ends.

For example if “admin123456” is word in dictionary and we had applied above filter so it will place alphabet 4 = 0; 3 = 1; 2 = 2; 1 = 3; n = 4; i = 5; m = 6; d = 7; d = 8; a = 9 hence it will read only ‘admin1234’ from whole word “admin123456”.

The length specified will select only those inputs having the specific length and other lower or greater length inputs are discarded as shown in the result window of the attack.

Select **Start Attack** in the **Intruder** menu.

Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

Use this combination of username and password for login to verify your brute force attack for the correct password.

ResultsTargetPositionsPayloadsOptions

Filter: Showing all items

Request	Payload	Status	Error	Timeout	Length	Comment
3419	zimmerm	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3420	zjaaa	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3421	zmod	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3422	zomb	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3423	zor	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3424	zxcvb	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3425	admin1234	302	<input type="checkbox"/>	<input type="checkbox"/>	502	
3426	admin123	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3427	dmin12345	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3428	admin987	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
3429	admin12	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	

RequestResponse

RawParamsHeadersHex

POST /bwapp/bWAPP/login.php HTTP/1.1  
Host: 192.168.1.8  
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0  
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8  
Accept-Language: en-US,en;q=0.5

## Modify Case

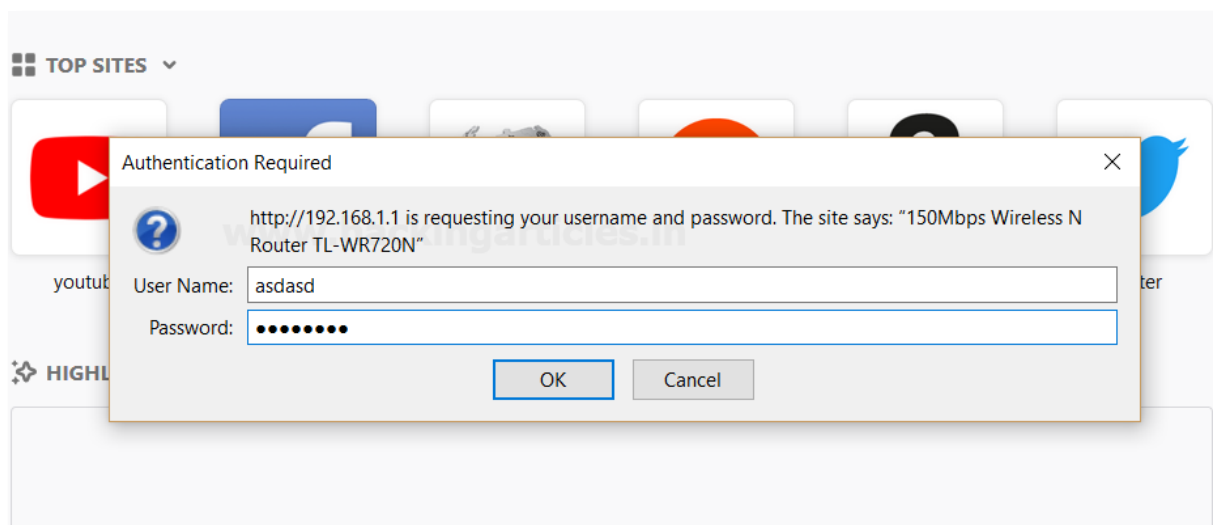
This processing rule can be used to modify the case of the payload if needed. This rule has the same options available for the **Case Modification** payload type.

## Payload Encode

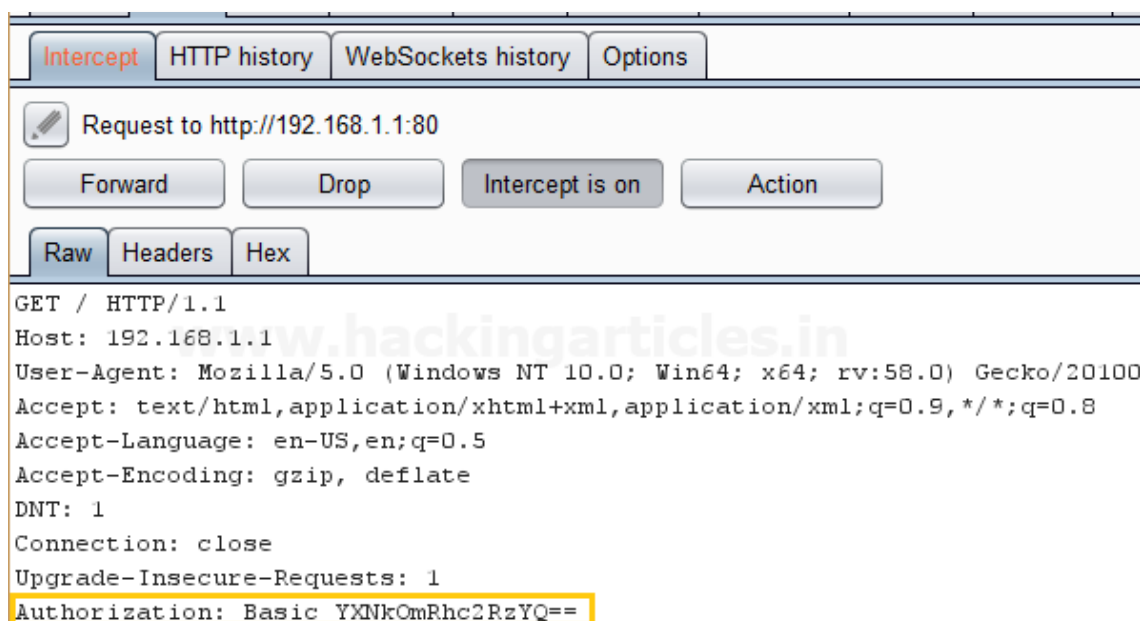
The processing rule can be used to encode the payload using various schemes such as URL, HTML, Base64, ASCII hex or constructed strings.

Let's start!!

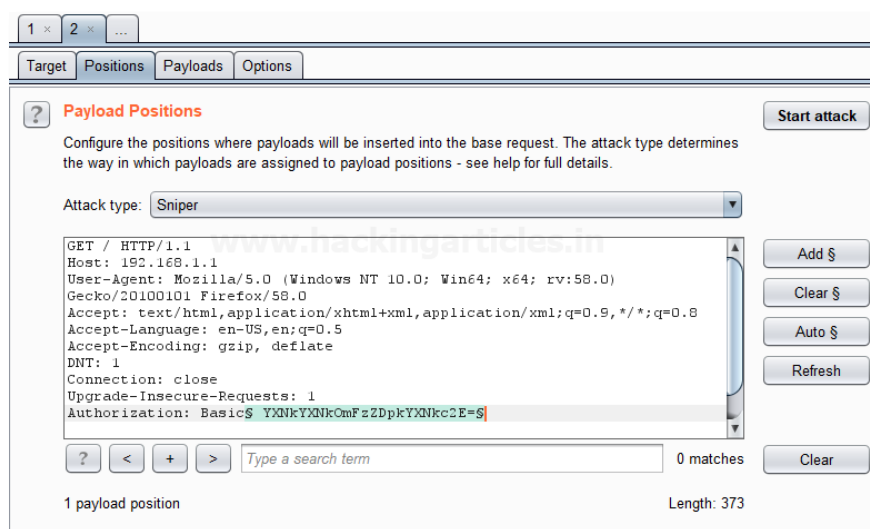
First, we have intercepted the request of the login page of the router by giving its default IP which is **192.168.1.1**, where we have given an invalid username and password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



Thus the sent request will be captured by burp suite which you can see in the given below image. In the screenshot, I had highlighted some value in the last line. Here it tells the type of authentication provided by the router is **basic** and if you have read above theory of basic authentication I had described that it is **encoded in base 64**

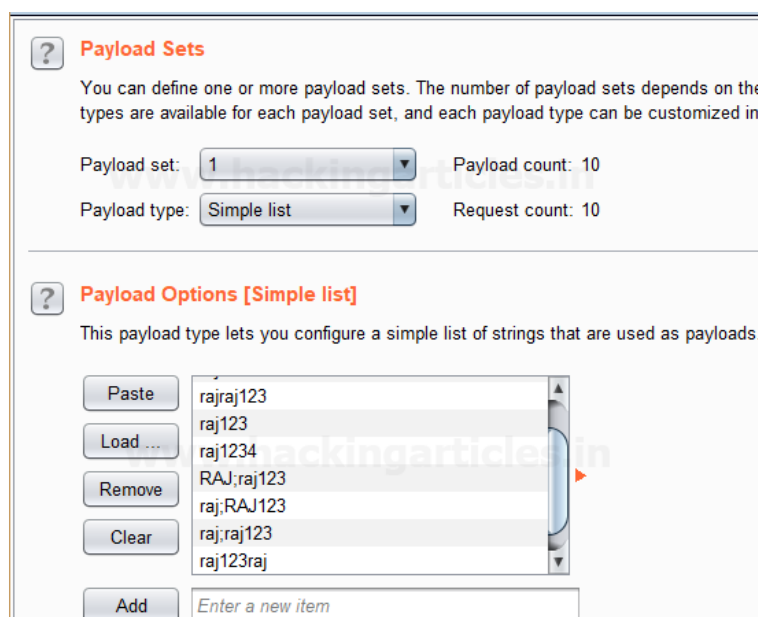


Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position. Press on the **Clear** button given at right of the window frame. Now **select the encoded value of authentication** for payload position and **click to ADD** button on the left side of the frame. Choose the **Attack type** as



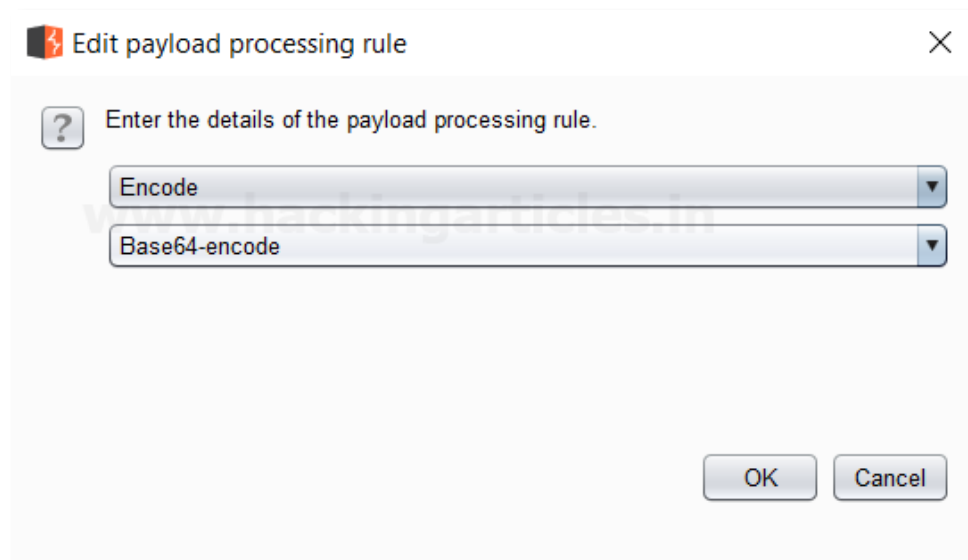
Now click on **payloads option** after selecting payload position. Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add** button in the **payload options** as shown in the image.

The base64 encoded value of Authentication is a combination of username and password now the scenario is to generate the same encoded value of authentication with help of user password dictionary, therefore I have made a **dictionary**.



Before executing the attack we have added a **payload processing rule** to the payload type which is **Encode** and we have selected "**Base64 encode**" scheme because we know router takes the value in **Base64**.

Select **Start Attack** in the **Intruder menu** as shown in the image.



Sit back and relax because this will start brute force attack and try to match string for user authentication. In the screenshot, you can see the **status** and **length** of the **highlighted value** is **different** from the rest of the values. This means we can use this encoded value to bypass the user authentication which occurs from request number 10. Now check the username and password of 10th line in the dictionary.

And to confirm the **username** and **password matched**, we will give the password in the **Router's Login Page**, which will successfully log us into the **Router's Configuration Page**. This shows our success in the attack as shown in the image.

Results

Target

Positions

Payloads

Options

Filter: Showing all items

Request	Payload	Status	Error	Timeout	Length	Comment
0		401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
1	UkFKOIJBSjEyMw==	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
2	cmFq	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
3	cmFqcmFqMTIz	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
4	cmFqMTIz	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
5	cmFqMTIzNA==	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
6	UkFKO3JhajEyMw==	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
7	cmFqO1JBSjEyMw==	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
8	cmFqO3JhajEyMw==	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
9	cmFqMTIzcmFq	401	<input type="checkbox"/>	<input type="checkbox"/>	1778	
10	cmFqOnJhajEyMw==	200	<input type="checkbox"/>	<input type="checkbox"/>	1742	

Request

Response

Raw

Headers

Hex

GET / HTTP/1.1

Host: 192.168.1.1

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8

## Decode

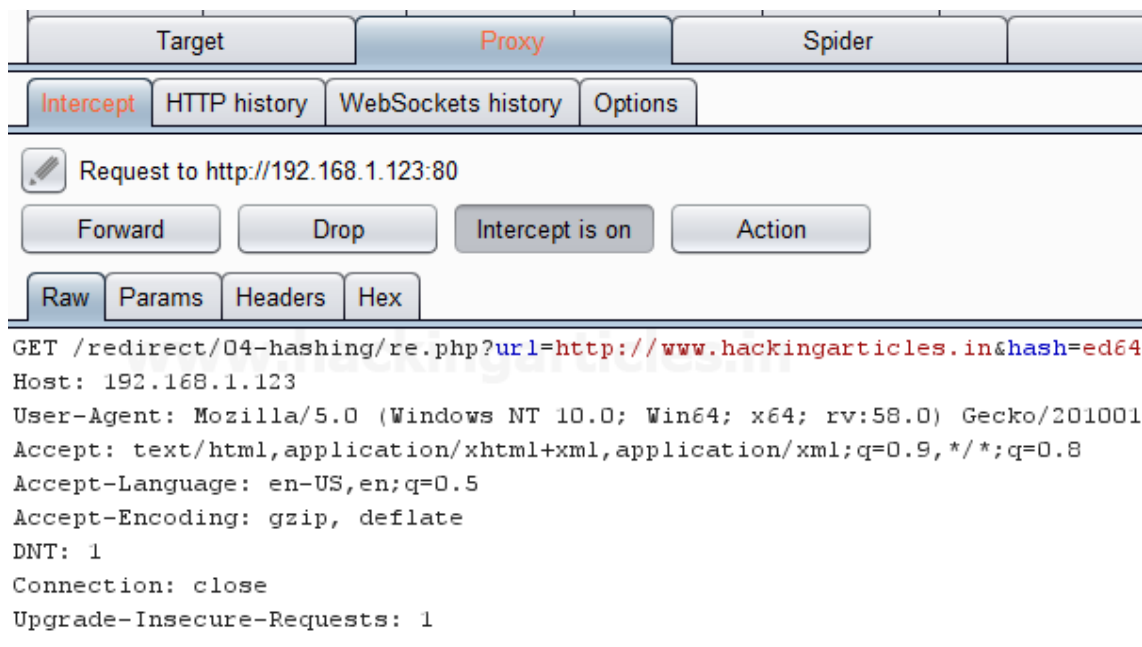
This processing rule can be used to decode the payload using various schemes: URL, HTML, Base64 or ASCII hex. As we know decoding is nothing but reversing the encoding. It can be used in the opposite way in which encoding is carried out.

## Hash

This processing rule can be used to carry out a hashing operation on the payload. There are 7 types of hashing algorithms are available in this payload processing rule which is as follows:

- SHA-384
- SHA-224
- SHA-256
- MD5
- MD2
- SHA
- SHA-512

First, we have intercepted the request of the **Redirection Link** designed to find **redirection vulnerabilities** in the **LAB** created by us and in the hash value of the URL we have given a wrong hash value of **HTTP://www.google.com** in place of the **actual hash value** of the **HTTP://www.hackingarticles.in** in the **URL** of the redirecting page. We have simply clicked on the Redirection link as shown in the image; the burp suite will capture the request of the redirecting page in the intercept tab.



Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack which is the **hash** value of the redirecting page and then click on the **Add** button.
- Choose the **Attack type** as a sniper.

**Payload Positions**

Configure the positions where payloads will be inserted into the base request. The attack type determines the way in which payloads are assigned to payload positions - see help for full details.

Attack type:

```
GET
/redirect/04-hashing/re.php?url=http://www.hackingarticles.in
&hash=Sed646a3334ca891fd3467db131372140$ HTTP/1.1
Host: 192.168.1.123
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64;
rv:58.0) Gecko/20100101 Firefox/58.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0
```

Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add** button in the **payload options** as shown in the image.

**Payload Sets**

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payload types are available, and each payload type can be customized in different ways.

Payload set:  Payload count: 8

Payload type:  Request count: 8

**Payload Options [Simple list]**

This payload type lets you configure a simple list of strings that are used as payloads.

Paste Load ... Remove Clear Add

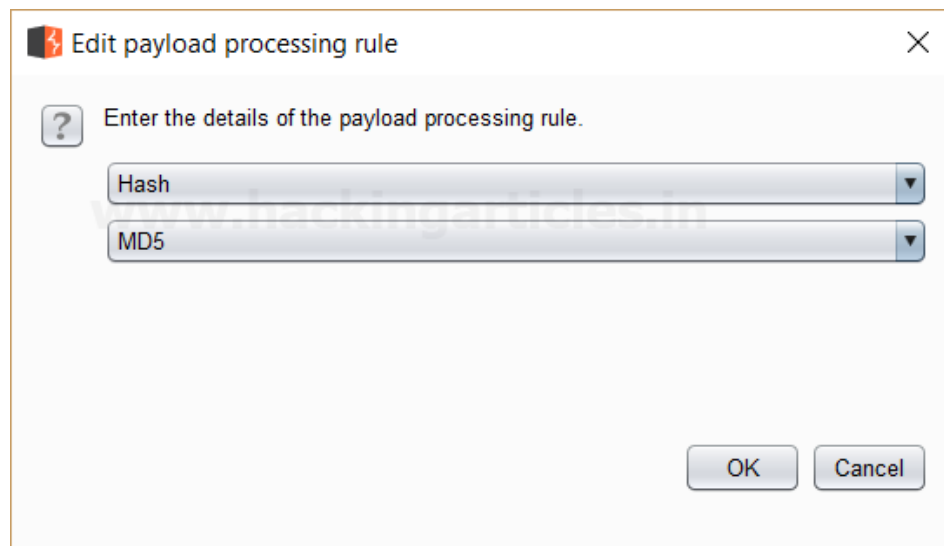
- http://www.google.com
- http://www.aol.com
- http://www.hotmail.com
- http://www.gmail.com
- http://www.hackingarticles.in
- http://www.orkut.com
- http://www.lockerroom.com

Enter a new item



Before executing the attack we have added a **payload processing rule** to the payload type which is **Hash** and then we have selected **MD5** which is a commonly used algorithm for converting URL of the websites into a Hash MD5 value. As you can see the **input strings** of the dictionary are in a simple text form, but this processing rule converts it into Hash MD5 values which can be seen in **result window** of the **attack**.

Select **Start Attack** in the **Intruder menu** as shown in the image.



Sit back and relax because now the burp suite will do its work, match the Hash MD5 of the Redirecting Page which will give you the correct MD5 value. The moment it will find the correct value, it will change the value of length as shown in the image.

ResultsTargetPositionsPayloadsOptions

Filter: Showing all items

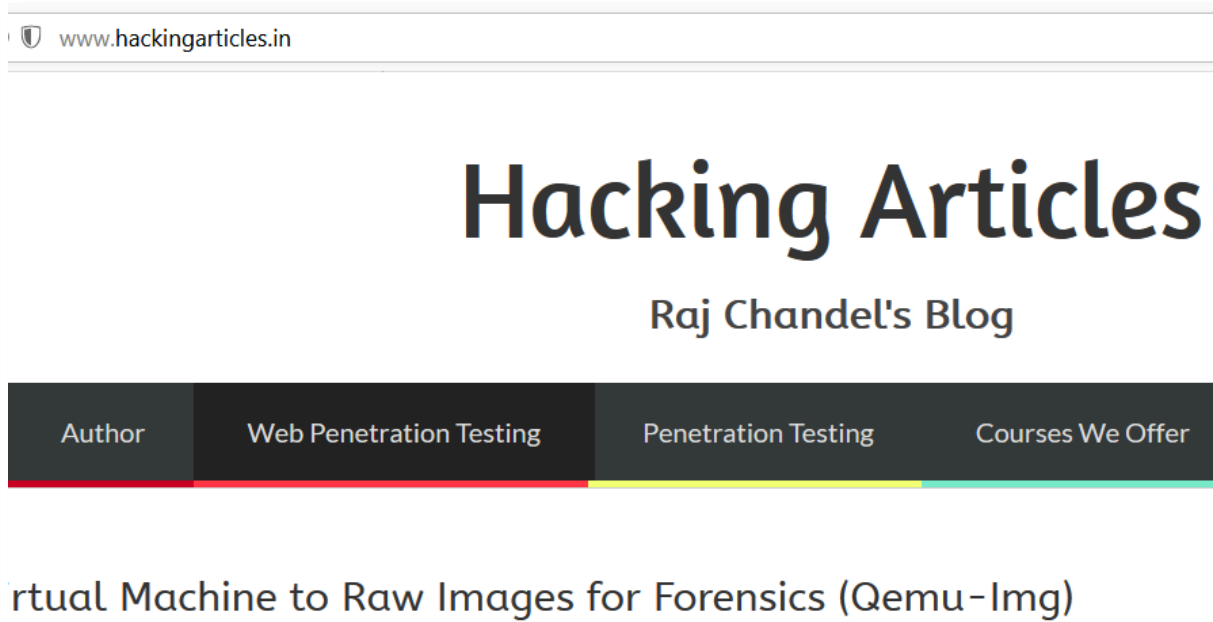
Request	Payload	Status	Error	Timeout	Length	Comment
0		200	<input type="checkbox"/>	<input type="checkbox"/>	221	
1	ed646a3334ca891fd3467d...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
2	f5413f55241d44b69156679...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
3	d52025b92d24e2229fe2c1...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
4	0242afc577259d0df1b925d...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
5	8258c1efb05943d0594761...	302	<input type="checkbox"/>	<input type="checkbox"/>	238	
6	05c5d384ad53eae64dc27...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
7	d37250cb14049637e16b7...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	
8	f80215a3cb8e803647deb5...	200	<input type="checkbox"/>	<input type="checkbox"/>	221	

RequestResponse

RawParamsHeadersHex

GET /redirect/04-hashing/re.php?url=http://www.hackingarticles.in&hash=8258c1efb059 HTTP/1.1

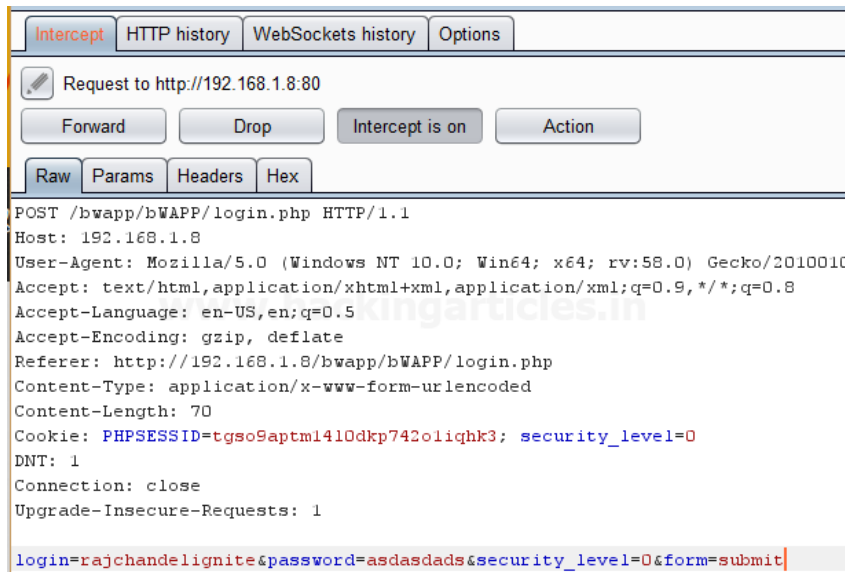
The **Hash MD5 value**, we will give the Hash value in the **URL** of the redirecting page which is **HTTP://www.hackingarticles.in**, which will successfully redirect us to **HTTP://www.hackingarticles.in**. This shows our success in the attack as shown in the image.



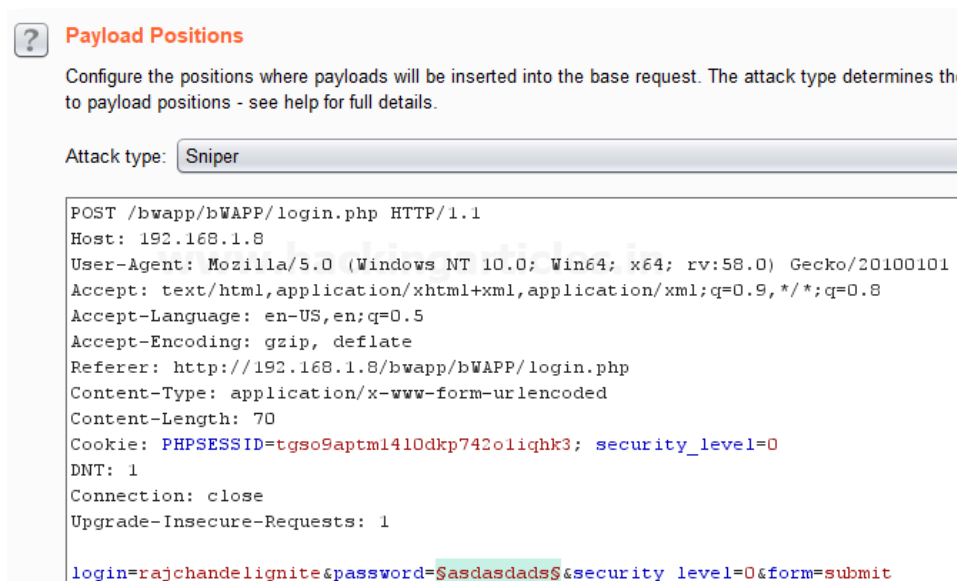
## Add Raw Payload

This processing rule can be used to add raw payload value before or after the current processed value. For example, it can come in handy whenever we want to submit the same payload in both raw and hashed form.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



Send the captured request to the **Intruder** by right-clicking on the space and selecting **Send to Intruder** option or simply press **Ctrl + i**. Now open the **Intruder** tab then select **Positions** tab and the following will be visible. Choose the **Attack type** as **Sniper**. Press on the **Clear** button as shown in the image. Now we will select the fields where we want to attack which is the password and click on **Add** button.



Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as
- In the given below image, we have selected a password that means we will need one dictionary files for a password.

**? Payload Sets**  
You can define one or more payload sets. The number of payload sets depends on the attack types are available for each payload set, and each payload type can be customized in different ways.

Payload set:  Payload count: 14  
Payload type:  Request count: 14

---

**? Payload Options [Simple list]**  
This payload type lets you configure a simple list of strings that are used as payloads.

Buttons: Paste, Load ..., Remove, Clear, Add

List of strings: raj, chandel, ignite, rajchandel, rajchandelnite, ignitetechnologies, user

Input field: Enter a new item

Before executing the attack we have added a payload processing rule to the payload type which is **Add Raw Payload** and then we have selected **Append Pre-processed Payload**. This adds a **raw payload value** before and after the **current processed value**. As you can see the **input strings** of the dictionary as a single input string is **repeated twice** which can be seen in **result window** of the attack. Select **Start Attack** in the **Intruder** menu as shown in the image.

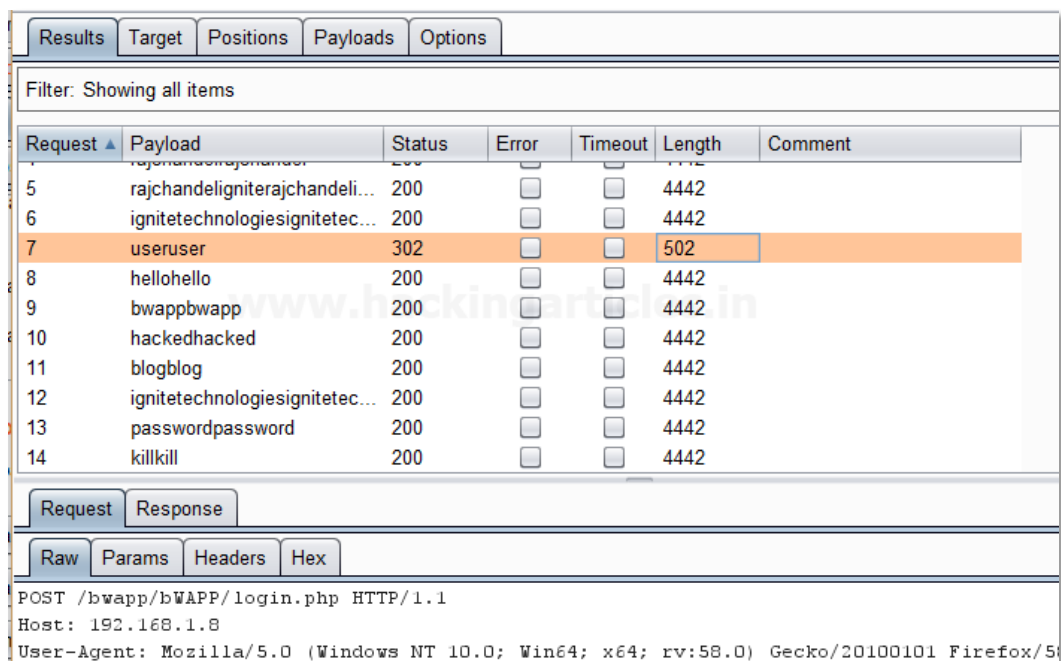
**Edit payload processing rule**

**? Enter the details of the payload processing rule.**

Dropdown 1: Add raw payload  
Dropdown 2: Append preprocessed payload

Buttons: OK, Cancel

Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.



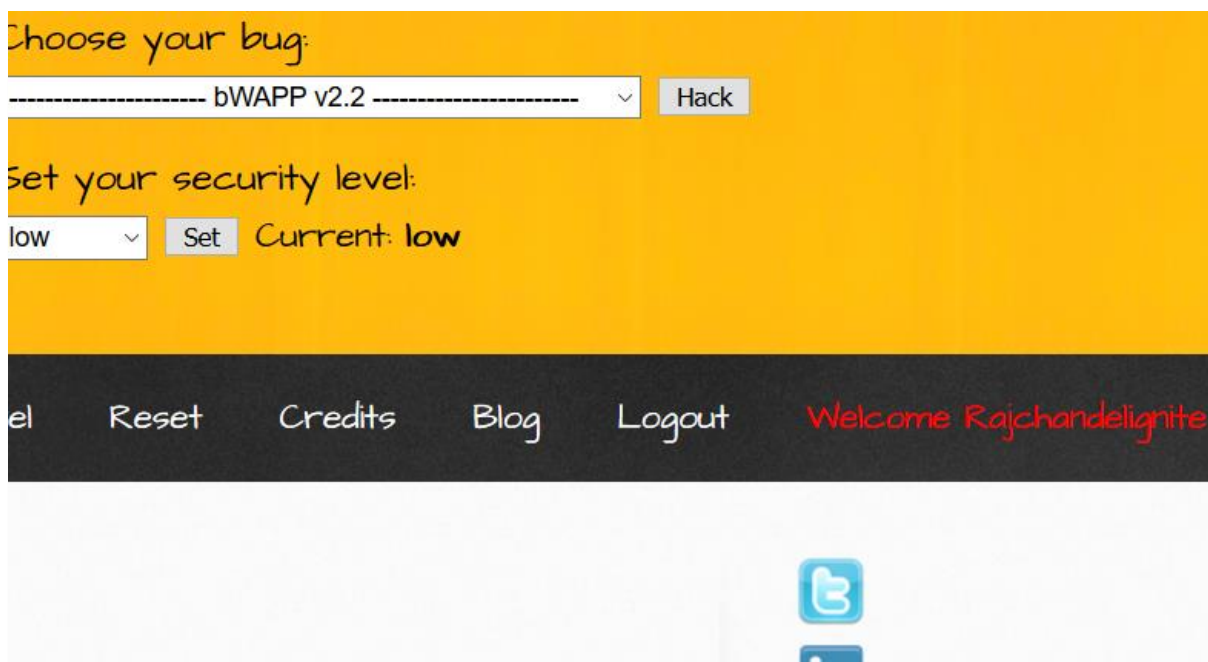
Request	Payload	Status	Error	Timeout	Length	Comment
5	rajchandeligniterajchandel...	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
6	ignitetechnologiesignittec...	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
7	useruser	302	<input type="checkbox"/>	<input type="checkbox"/>	502	
8	hellohello	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
9	bwappbwapp	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
10	hackedhacked	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
11	blogblog	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
12	ignitetechnologiesignittec...	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
13	passwordpassword	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
14	killkill	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	

Request Response

Raw Params Headers Hex

POST /bwapp/bWAPP/login.php HTTP/1.1  
Host: 192.168.1.8  
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0

And to confirm the **password matched**, we will give the password in the **Bwapp LAB login page**, which will successfully log us into the **Bwapp lab**. This shows our success in the attack as shown in the image.



Choose your bug:

----- bWAPP v2.2 ----- Hack

Set your security level:

low Set Current: low

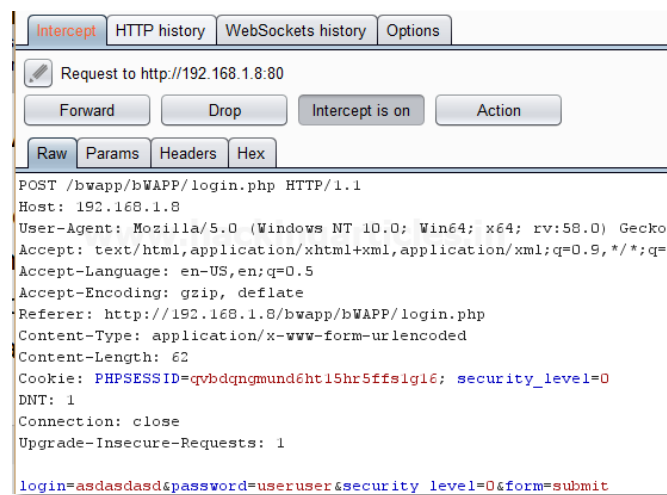
Reset Credits Blog Logout Welcome Rajchandelignite

Twitter

## Skip if Matches Regex

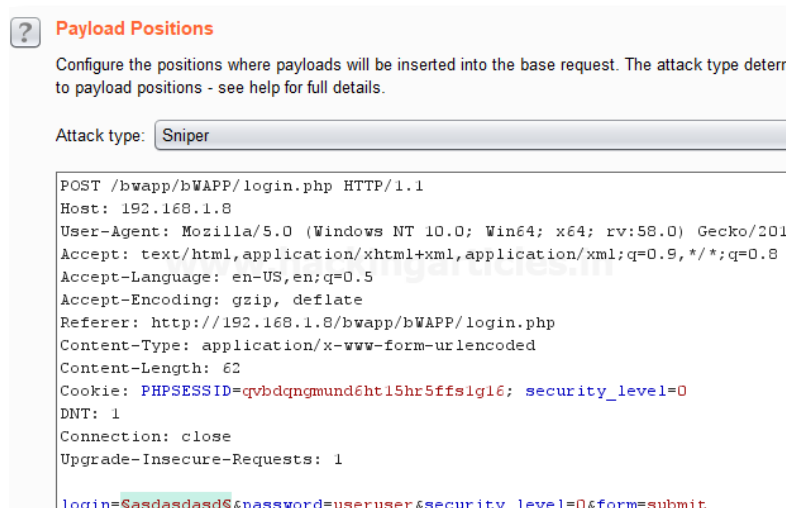
This processing rule can be used to check the current processed value matches a specified regular expression, and if it matches it will skip the payload and will move onto the next one. For example, Suppose we have a parameter value that has a minimum length and want to skip values in the list that are shorter than the minimum length defined.

First, we have intercepted the request of the login page in the **Bwapp LAB**, where we have given default username and wrong password. Then click on login, the burp suite will capture the request of the login page in the intercept tab.



Send the captured request to the **Intruder** by clicking on the Action Tab and follow given below step. Now open the **Intruder** tab then select **Positions** tab and you can observe the highlighted password and follow the given below step for selecting payload position.

- Press on the **Clear** button given at right of the window frame.
- Now we will select the fields where we want to attack and i.e. the password field and click on **Add** button.
- Choose the **Attack type** as
- In the given below image, we have selected a password that means we will need one dictionary files for a password.



Then select the **Payload type** as **Simple list**, where we have added a dictionary by clicking on **Load** button. We can either load the dictionary or we can manually add input strings using the **Add** button in the **payload options** as shown in the image.

The screenshot shows two sections of a configuration window. The top section, titled "Payload Sets", contains a description and two dropdown menus: "Payload set:" with the value "1" and "Payload type:" with the value "Simple list". To the right of these are labels "Payload count: 34" and "Request count: 34". The bottom section, titled "Payload Options [Simple list]", contains a description and a list of email addresses: josephw@yahoo.ca, rahul@gmail.com, mohan@gmail.com, raj@gmail.com, rajchandel@hotmail.com, chandel@hotmail.com, and rajc@gmail.com. To the left of the list are buttons for "Paste", "Load ...", "Remove", "Clear", and "Add". Below the list is an "Add" button and a text input field with the placeholder "Enter a new item".

Before executing the attack we have added a payload processing rule to the payload type which is **Skip if Matches Regex** where we have given an input of **{@}** in the **match regex** field. Here we see that as per this rule if the input is given matches with any of the input strings in the dictionary it simply skip that value and move on to next.

Now Select **Start Attack** in the **Intruder menu** as shown in the image.

The screenshot shows a dialog box titled "Edit payload processing rule". It contains a description "Enter the details of the payload processing rule." and a dropdown menu with the value "Skip if matches regex". Below this is a text input field labeled "Match regex:" with the value "@". At the bottom right are "OK" and "Cancel" buttons.

Sit back and relax because now the burp suite will do its work, match the password which will give you the correct password. The moment it will find the correct value, it will change the value of length as shown in the image.

Results	Target	Positions	Payloads	Options		
Filter: Showing all items						
Request	Payload	Status	Error	Timeout	Length	Comment
4	raj	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
5	chandel	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
6	rajchandel	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
7	ignite	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
8	ignitetechnologies	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
9	hacked	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
10	user1	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
11	rajchandelnignite	302	<input type="checkbox"/>	<input type="checkbox"/>	502	
12	bee	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
13	bug	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	
14	bwapp	200	<input type="checkbox"/>	<input type="checkbox"/>	4442	

Request	Response
Raw	Params
Headers	Hex
POST /bwapp/bWAPP/login.php HTTP/1.1	
Host: 192.168.1.8	
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0	
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8	



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