



# Vulnerability Assessment & Penetration Testing Report

For

***hathw@y***

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## Introduction

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As a part of the ongoing security audit of **HATHWAY** Web Application at locations, **HATHWAY** contracted Sequaretek to carry out a Vulnerability Assessment and Penetration Testing exercise on Website belonging to **HATHWAY**.

The scope for the assessment was communicated prior to the exercise by **HATHWAY** to Sequaretek consultants. The objective of this assessment was to identify security vulnerabilities and weaknesses on the publicly exposed assets and exploit the same using the set of commercial and open-source tools and scripts.

The assessment was carried out with an aim to simulate a hacker attack from the public network on the target system identified in the scope. It is to be noted that the results of this activity may provide a feeling of security to the management, but there is no information system in this world that can be rated as secure. The system is secured till the extent a vulnerability that can be exploited is discovered. During the present assessment, "**High, Medium and Low**" severity vulnerabilities were identified, details of which have been presented further in the document.

### 1.1 Objective & Outcome

The objectives of the assessment were

To provide information on any newly identified vulnerabilities security risk, if any.

To provide evidence that verifies the possibility of exploiting the security issues identified.

To recommend measures to mitigate the identified set of vulnerabilities on the target systems.

To ensures that your Infrastructure component is appropriately designed to protect internal critical vital resources, information and prevents any unauthorized access.

## Engagement Scope

Sr. No	Asset Description	Criticality of Asset	Internal IP Address	URL	Public IP Address	Location	Hash Value (in case of applications)	Version (in case of applications)	Other details such as make and model in case of network devices or security devices.
1	Web Application	High	-	https://isp.hathway.net:7404/self-care_beta/index.php?r=qp/enterdetails https://isp.hathway.net:7404/self-care_beta/index.php?r=qp/plansPurchase		Maharashtra	--	--	

## Details of Auditing Team

Sr. No	Name	Designation	Email Id	Professional Qualifications/ Certifications	Whether the resource has been listed in the Snapshot information published on CERT-In's website(Yes/No)
1	Sayli Zunjarao	Consultant	sayli.zunjarao@se quaretek.com	Certified Ethical Hacker	Yes

## Audit Activities and Timelines

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Type of Audit	From	End	Auditee
Web Application Audit	July 2025	July 2025	Hathway/DEN

## Audit Methodology and Criteria / Standard referred for audit.

Sequaretek regards Vulnerability Assessment and Penetration Testing activity as an important subset of overall security lifecycle management. The goal here is to identify and demonstrate possibility of unauthorized access to the critical assets that require authorized access, extract the information about the target hosts which may be available to a malicious or an unauthorized user. The aim of the External Penetration Testing is to find vulnerabilities at the Service, Operating System, and Application level and exploit the identified known set of vulnerabilities.

### 2.1 Step 1: Information Gathering

During this phase of testing, information about the target hosts is gathered to identify the behavior of websites, systems, network devices, firewalls etc. This information will help in building a picture or footprint of what the target network looks like.

#### Thorough Port Scanning

- Port scans attempt to identify both TCP and UDP ports opened closed filtered on the target system. A scan of all possible ports TCP (1–65535) is performed

#### System and Service Identification

- The objective of this phase is to examine the active services listening behind the services ports.

#### Operating System Fingerprinting

- The next objective is to determine the type of operating system. Different OS finger printing techniques along with reconnaissance tools.

### 2.2 Step 2: Vulnerability Assessment

The objective of this step is to identify various vulnerabilities associated with the hosts. This can be achieved by using various automated tools; the input to tools will be target host details like host OS or service details wherein the scan can be customized specifically for those applications services running on the hosts. During this step, multiple automated tools are used and the outputs from these tools are correlated to ascertain the existing vulnerabilities and to reduce the number of false positives.

**Vulnerability Research**

- The objective of this phase is to identify, understand and research upon the vulnerabilities identified during the vulnerability identification phase.

**Vulnerability Verification**

- The objective of this phase is to refine the list of various vulnerabilities associated with the target hosts using manual methods, need to be verified again to reduce any false positives and to increase the accuracy of assessment.

### 2.3 Step 3: Vulnerability Exploitation

**Mapping Exploit**

The objective of this phase is to find and map exploits associated with various vulnerabilities.

**Exploitation**

The vulnerabilities discovered in the previous phase are exploited using various exploit method and tools, both open source and commercial.

**Recording Evidence**

The logs or proof of successful exploitation (if any) will be recorded as screenshots.

### 2.4 Step 4: Reporting & Documentation

This report provides details about VAPT activity conducted and the successful penetration assessment along with the proof of exploitation (if any) and mitigation strategies recommended against the security issues identified

### 2.5 Tools

OPEN source and commercial tools (not limited to) were used by Sequretek during PT assessment like:

- Burp Suite Professional: Burp Suite is an integrated platform for performing security testing of applications.
- Nessus Professional edition: A security vulnerability scanning tool.
- Kali Linux: An Advanced Penetration Testing Linux distribution used for Penetration Testing, Ethical Hacking and network security assessments.

## Tools / Software used

S. No	Name of Tool/Software used	Version of the tool /Software used	Open Source/Licensed
1	Burp suite	v2024.3.4	Licensed
2	Nessus Professional	10.6.1 (#21) WINDOWS	Licensed
3	Kali Linux	--	Open Source

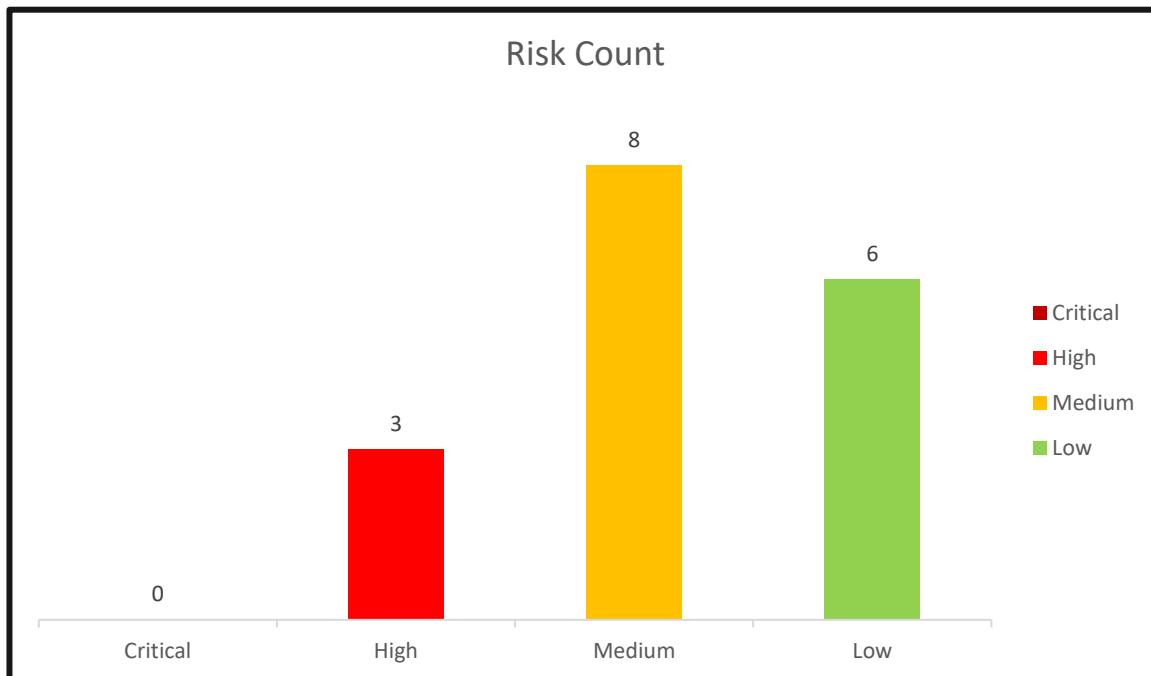
## Executive Summary

This current assignment has been focused on risk assessment and the OPEN vulnerabilities exposure in the public domain (internet). This testing did not explicitly attempt full scale Denial of Service (DOS) attacks or any other destructive attacks. We performed the security assessment of the **application** as an unauthorized user and an authorized User. A Grey box test simulating a typical external hacker's view of the organization was performed.

### 3.1 Engagement Scope

As per the scope of the activity Sequaretek has performed complete Grey Box Penetration Testing for the client. As an initial enumeration step Sequaretek has gathered all components and modules in given Web application scope related to **HATHWAY**. Therefore, the finalized scope for the Grey Box assessment is as mentioned below:

Sr.no	Domain IP	Testing Method
1	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a> <a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/plapurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/plapurchase</a>	Grey box



Sr. No	Vulnerability URL	Vulnerability Name	Risk	Status
1	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	IDOR	High	OPEN
2	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate</a>	Parameter Tampering	High	OPEN
3	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Weak Authentication Mechanism	High	OPEN
4	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	User Enumeration via Default Credential Pattern	Medium	OPEN
5	<a href="https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php">https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php</a> <a href="https://isp.hathway.net:7404/selfcare_beta/.git/config">https://isp.hathway.net:7404/selfcare_beta/.git/config</a> <a href="https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace">https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace</a> <a href="#">Log_20131225.txt</a>	Information Disclosure	Medium	OPEN
6	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Default Credentials	Medium	OPEN
7	<a href="https://isp.hathway.net:7404/selfcare_beta">https://isp.hathway.net:7404/selfcare_beta</a>	Host Header Injection	Medium	OPEN
8	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Improper Captcha validation	Medium	OPEN
9	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Session Fixation	Medium	OPEN
10	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Session Timeout Misconfiguration	Medium	OPEN
11	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Concurrent Session	Medium	OPEN
12	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Missing Content Security Policy (CSP) Header	Low	OPEN
13	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Outdated jQuery and Bootstrap Version	Low	OPEN
14	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Cookie Attribute Missing	Low	OPEN
15	<a href="https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js">https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js</a>	Internal IP Address Disclosure	Low	OPEN
16	<a href="https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails">https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Application is accessible over IP Address	Low	OPEN
17	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	TLS 1.1 & Weak Ciphers	Low	OPEN

S. No	Affected Asset i.e. IP/URL/Application etc	Observation/ Vulnerability title	CVE/CWE	Control Objective	Control Name	Audit Requirement	Severity	Reference	New or Repeat observation
1	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	IDOR	CWE-639	To ensure that users can access only the resources they are authorized to access and prevent unauthorized object references.	Access Control Enforcement	Verify that the application validates object ownership on the server side before serving data related to user identifiers	High	OWASP Web Top 10, SANS25	New
2	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate</a>	Parameter Tampering	CWE-472	To ensure that sensitive business logic parameters such as price, discount, or amount cannot be altered by the client.	Server-Side Input Validation	Confirm that the application does not rely on client-side parameters for sensitive transactional values like amount.	High	OWASP Web Top 10, SANS25	New
3	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Weak Authentication Mechanism	CWE-287	To ensure robust user authentication by implementing multi-factor authentication (MFA).	Identification and Authentication	Verify that the authentication mechanism includes at least two factors.	High	OWASP Web Top 10, SANS25	New

4	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	User Enumeration via Default Credential Pattern	CWE-203	To prevent unauthorized actors from determining the existence of user accounts by restricting identifiable server responses.	Display generic authentication failure messages	Review all authentication, password reset, and OTP workflows to confirm uniform response messages.	Medium	OWASP Web Top 10, SANS25	New
5	<a href="https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php">https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php</a> <a href="https://isp.hathway.net:7404/selfcare_beta/.git/config">https://isp.hathway.net:7404/selfcare_beta/.git/config</a> <a href="https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace">https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace</a> Log_20131225.txt	Information Disclosure	CWE-200	Prevent unauthorized access to sensitive information within the application or system.	Information Access Control	Information Review: Identify endpoints or features that expose sensitive information.	Medium	OWASP Web Top 10, SANS25	New
6	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Default Credentials	CWE-521 CWE-798	Ensure that all default credentials are changed and secure password policies are enforced.	Credential Management	Audit systems to check for any remaining default credentials	Medium	OWASP Web Top 10, SANS25	New
7	<a href="https://isp.hathway.net:7404/selfcare_beta">https://isp.hathway.net:7404/selfcare_beta</a>	Host Header Injection	CWE-345 CWE-74	Validate and sanitize Host headers in incoming	Input Validation and Sanitization Control	Review and test web applications to ensure that	Medium	OWASP Web Top 10, SANS25	New

				requests to prevent injection.		Host headers are properly validated.			
8	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Improper Captcha validation	CWE-601	Ensure that CAPTCHA validation occurs server-side for all sensitive or authentication-related requests.	Server-Side CAPTCHA Validation and Anti-Bot Protection	Review server-side code to ensure CAPTCHA verification is enforced and checked on every request.	Medium	OWASP Web Top 10, SANS25	New
9	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Session Fixation	CWE-384	Ensure session IDs are securely generated, properly managed.	Secure Session Management	Verify that session IDs are regenerated upon successful login.	Medium	OWASP Web Top 10, SANS25	New
10	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Session Timeout Misconfiguration	CWE-613	Ensure that sessions automatically expire after a reasonable period of inactivity to minimize the risk of hijacking or unauthorized use.	Session Timeout and Inactive Session Expiration	Review session management configurations in the application and web server.	Medium	OWASP Web Top 10, SANS25	New
11	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>	Concurrent Session	CWE-384	Ensure that the application effectively	Concurrent Session Control	Verify that the application restricts the	Low	OWASP Web Top 10, SANS25	New

				manages concurrent sessions		number of concurrent sessions per user.			
12	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Missing Content Security Policy (CSP) Header	CWE-346 CWE-693	Ensure that the application enforces a Content Security Policy to mitigate code injection attacks.	Content Security Policy (CSP)	1. CSP Policy Review: Check if a CSP header is implemented and properly configured for security.	Low	OWASP Web Security Top 10, SANS25	New
13	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Outdated jQuery and Bootstrap Version	CWE-94	Ensure that the latest, secure versions of jQuery and Bootstrap are used in the application.	Software Component Updates	Library Version Review: Audit the application to identify any outdated versions of jQuery and Bootstrap.	Low	OWASP Web Top 10, SANS25	New
14	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Cookie Attribute Missing	CWE-614	Ensure cookies are only transmitted over secure (HTTPS) connections by enforcing the Secure attribute in cookie settings	Cookie Security Control	Regularly review and audit web applications to ensure all sensitive cookies are flagged with the Secure attribute.	Low	OWASP Web Top 10, SANS25	New

15	<a href="https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js">https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js</a>	Internal IP Address Disclosure	CWE-200 CWE-201	Ensure that internal network details are not exposed to unauthorized users.	Information Exposure Prevention	Identify instances where internal IP addresses are exposed in headers, responses, or error messages.	Low	OWASP Web Security Top 10, SANS25	New
16	<a href="https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails">https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	Application is accessible over IP Address	CWE-284	Ensure that application access is properly controlled through domain-based security policies and that SSL/TLS encryption is enforced.	Domain Name and Access Control Management	Audit server and firewall configurations to verify that IP-based access is restricted, and traffic is forced through domain names.	Low	OWASP Web Security Top 10, SANS25	New
17	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>	TLS 1.1 & Weak Ciphers	CWE-327	Ensure the use of strong cryptographic ciphers to secure data in transit.	Secure Cryptographic Practices	Vulnerability Assessment: Identify systems using CBC mode for encryption.	Low	OWASP Web Security Top 10, SANS25	New

## Detailed Observation

1	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>
Vulnerability title / Observation	IDOR	
Severity	High	
Status	OPEN	
Vulnerability point /Impact	The application uses an account number passed in the request to identify users without validating ownership of the object. This allows attackers to manipulate the account number parameter to access data of other users. The lack of server-side validation for CAPTCHA also facilitates automated account enumeration using tools like Burp Suite Intruder. Unauthorized access to other user accounts and sensitive data, violating data confidentiality and leading to potential full account takeover.	
CVE /CWE	CWE-639	
Control Objective	To ensure that users can access only the resources they are authorized to access and prevent unauthorized object references or data exposure by validating all input and enforcing proper access control.	
Control Name	Access Control Enforcement	
Audit Requirement	Verify that the application validates object ownership on the server side before serving data related to user identifiers (e.g., account numbers).	
Recommendation	Implement server-side access control checks to verify that the logged-in user is authorized to access the account number or resource requested. Confirm CAPTCHA is enforced server-side and cannot be bypassed by removing it from the request. Ensure rate-limiting and logging mechanisms are in place for repeated access attempts using enumeration patterns.	
Reference	OWASP Mobile Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
0		200	1197			397416	
67	1066	200	1063			390398	
45	1044	200	738			389175	
193	1192	200	723			388962	

Request Response

Pretty Raw Hex

```

1 POST /selfcare_beta/index.php?r=qp/planpurchase HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=d0JsuQw2EdwAAAAZhuMsiDB; JSESSIONID=dkJU5iDBrIrnATOUuhpan40dbH9cD6onchHykolf5Lopx0YrYf3h!404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded
9 Content-Length: 240
10 Origin: https://isp.hathway.net:7404
11 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails
12 Upgrade-Insecure-Requests: 1
13 Sec-Fetch-Dest: document
14 Sec-Fetch-Mode: navigate
15 Sec-Fetch-Site: same-origin
16 Sec-Fetch-User: ?1
17 Priority: u=0, i
18 Te: trailers
19 Connection: keep-alive
20
21 loginfield=2&ContactForm%5BaccountNo%5D=1334451066&contactForm%5BmobileNo%5D=&ContactForm%5Bhiddencaptcha%5D=&ContactForm%5Bpromo_accountno%5D=&ContactForm%5Bpromo_bill_when%5D=&ContactForm%5Bpromo_plan_name%5D=

```

3. Intruder attack of <https://isp.hathway.net:7404>

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
0		200	1197			397416	
67	1066	200	1063			390398	
45	1044	200	738			389175	
193	1192	200	723			388962	

Request Response

Pretty Raw Hex Render

3. Intruder attack of https://isp.hathway.net:7404

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
45	1044	200	738			389175	
193	1192	200	723			388962	
89	1088	200	779			387670	

Request Response

Pretty Raw Hex Render

Welcome, **Mr. ARTLINE ARTLINE** Account No: 1334451192 Mobile No: XXXXXX5252 Email ID: arXXXXXXXXXdio21@gmail.com

Activate Autopay Make Payment/Pay Other Pay

3. Intruder attack of https://isp.hathway.net:7404

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
45	1044	200	738			389175	
193	1192	200	723			388962	
89	1088	200	779			387670	

Request Response

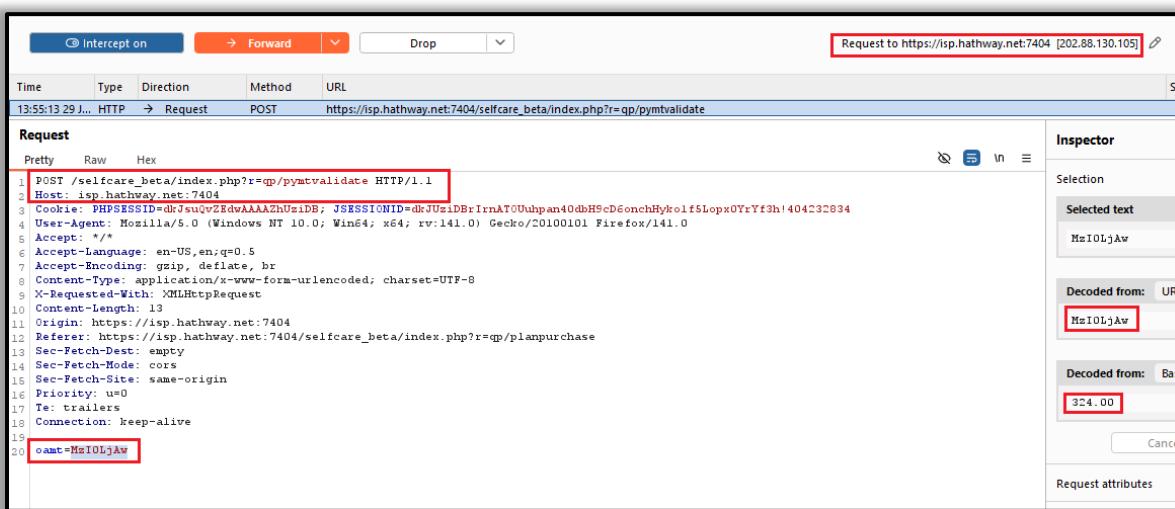
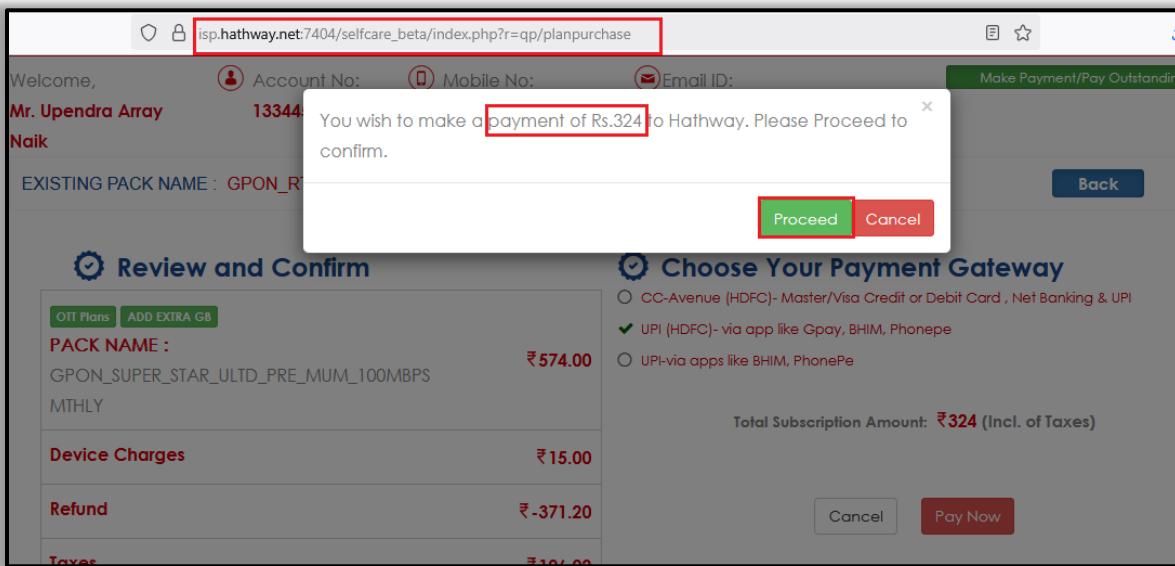
Pretty Raw Hex Render

Welcome, **Mr. RAMKUMAR V** Account No: 1334451088 Mobile No: XXXXXX6177 Email ID: giXXXXXXXXXeedom@gmail.com

Activate Autopay Make Payment/Pay Other Pay

2	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate</a>
Vulnerability title / Observation	<b>Parameter Tampering</b>	
Severity	High	
Status	OPEN	
Vulnerability point /Impact	The application fails to enforce server-side validation of critical parameters such as amount. A user can modify the amount field (e.g., in a payment request, discount claim, or recharge amount) by intercepting the request with tools like Burp Suite. The server trusts the client-supplied value without verifying whether the amount is valid or authorized. Attackers can manipulate the amount to pay less, get unauthorized discounts, bypass pricing rules, or commit fraud.	
CVE /CWE	CWE-472	
Control Objective	To ensure that sensitive business logic parameters such as price, discount, or amount cannot be altered by the client, and that all such values are validated and enforced on the server side.	
Control Name	Server-Side Input Validation	
Audit Requirement	Confirm that the application does not rely on client-side parameters for sensitive transactional values like amount.	
Recommendation	Validate all such parameters on the server side against expected values (e.g., using session data, server-side calculations, or database lookups). Implement server-side recalculation of amounts based on product ID, quantity, and authorized pricing/discount policies. Use server-side validation for all parameters, encrypt or hash sensitive parameters, and avoid trusting any client-side data.	
Reference	OWASP Top 10, SANS 25	
New or Repeat Observation	New Observation	

## Proof of Concept:



Request to https://isp.hathway.net:7404 [202.88.130.105]

Time	Type	Direction	Method	URL
13:55:13 29 J...	HTTP	→ Request	POST	https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate

**Request**

```

1 POST /selfcare_beta/index.php?r=qp/pymtvalidate HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=dKJsuqv2RdvAAAA2hUz1DB; JSESSIONID=dKJu5zibDrIrnATOUuhpan40dbH9cD6onchHykolf5Lopx0YrYf3h!404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: /*
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded; charset=UTF-8
9 X-Requested-With: XMLHttpRequest
10 Content-Length: 13
11 Origin: https://isp.hathway.net:7404
12 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase
13 Sec-Fetch-Dest: empty
14 Sec-Fetch-Mode: cors
15 Sec-Fetch-Site: same-origin
16 Priority: u=0
17 Te: trailers
18 Connection: keep-alive
19
20 oamt=MS4wMA==
```

**Inspector**

- Selection
- Selected text: MS4wMA==
- Decoded from: URL: MS4wMA==
- Decoded from: Base64: 1.00

Request to https://isp.hathway.net:7404 [202.88.130.105]

Time	Type	Direction	Method	URL
13:55:13 29 J...	HTTP	→ Request	POST	https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate

**Request**

```

1 POST /selfcare_beta/index.php?r=qp/pymtvalidate HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=dKJsuqv2RdvAAAA2hUz1DB; JSESSIONID=dKJu5zibDrIrnATOUuhpan40dbH9cD6onchHykolf5Lopx0YrYf3h!404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: /*
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded; charset=UTF-8
9 X-Requested-With: XMLHttpRequest
10 Content-Length: 13
11 Origin: https://isp.hathway.net:7404
12 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase
13 Sec-Fetch-Dest: empty
14 Sec-Fetch-Mode: cors
15 Sec-Fetch-Site: same-origin
16 Priority: u=0
17 Te: trailers
18 Connection: keep-alive
19
20 oamt=MS4wMA==
```

**Inspector**

- Selection
- Selected text: MS4wMA==
- Decoded from: URL: MS4wMA==
- Decoded from: Base64: 1.00

Response from https://isp.hathway.net:7404/selfcare\_beta/index.php?r=qp/pymtvalidate [202.88.130.105]

Time	Type	Direction	Method	URL
13:55:13 29 J...	HTTP	← Response	POST	https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/pymtvalidate

**Request**

```

1 POST /selfcare_beta/index.php?r=qp/pymtvalidate HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=dKJsuqv2RdvAAAA2hUz1DB; JSESSIONID=dKJu5zibDrIrnATOUuhpan40dbH9cD6onchHykolf5Lopx0YrYf3h!404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: /*
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded; charset=UTF-8
9 X-Requested-With: XMLHttpRequest
10 Content-Length: 13
11 Origin: https://isp.hathway.net:7404
12 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase
13 Sec-Fetch-Dest: empty
14 Sec-Fetch-Mode: cors
15 Sec-Fetch-Site: same-origin
16 Priority: u=0
17 Te: trailers
18 Connection: keep-alive
19
20 oamt=MS4wMA==
```

**Response**

```

1 HTTP/1.1 200 OK
2 Cache-Control: no-store, no-cache, must-revalidate, post-check=0,
3 Date: Tue, 29 Jul 2025 08:26:11 GMT
4 Pragma: no-cache
5 Content-Length: 8
6 Content-Type: text/html
7 Expires: Thu, 19 Nov 1981 08:52:00 GMT
8 Strict-Transport-Security: max-age=31536000 ; includeSubDomains
9 X-Content-Type-Options: nosniff
10 X-XSS-Protection: 1; mode=block
11 Vary: Accept-Encoding
12 X-Frame-Options: SAMEORIGIN
13
14 FZ1vFR==
```

secure.ccavenue.com/transaction/transaction.do?command=initiateTransaction

Pay with **PAYZAPP** and Grab an Assured ₹100 **SWIGGY Voucher\***

\*T&C Apply. Offer valid on min. txn of ₹5,000, till 30th June.

Outstanding Amt English ▾

**Payment Information**

**UPI** **Bharat QR**

**Pay through UPI QR Code** BHIM UPI

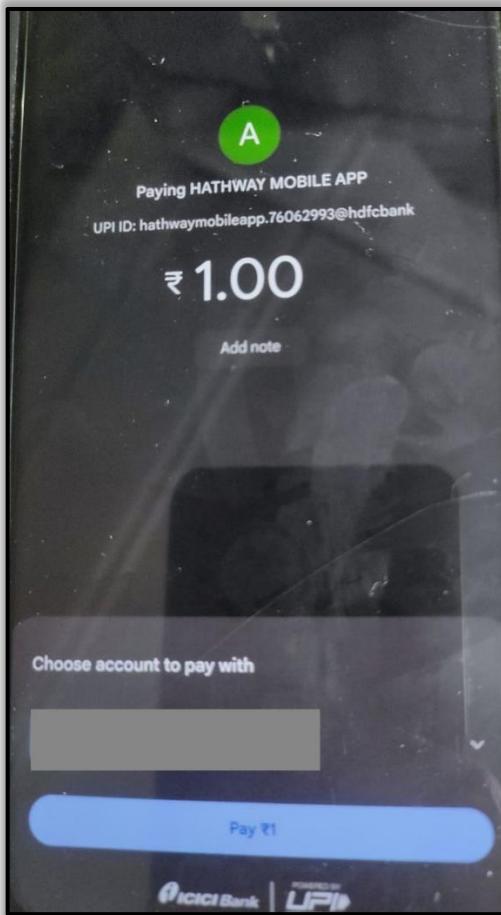
**Scan and Pay**  
Scan the QR code using any UPI app on your phone

Paytm UPI BHIM QR Expires in mins.

**ORDER DETAILS**

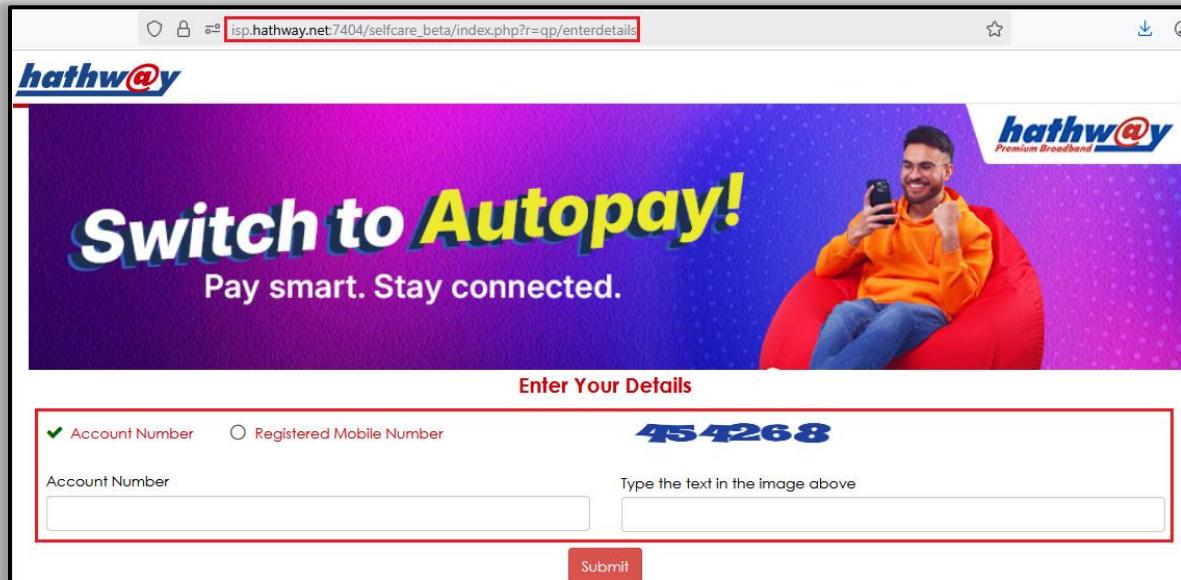
Order #: 1334456677\_1753777601\_87493664

Order Amount	1.00
<b>Total Amount</b>	<b>INR 1.00</b>



3	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Weak Authentication Mechanism</b>	
Severity	High	
Status	OPEN	
Vulnerability point /Impact	<p>The application allows users to authenticate using only an account number and CAPTCHA, without any password, OTP, or other secure factors. Since the account number is often predictable or enumerable (e.g., sequential or public), and the CAPTCHA is only a minor hurdle (often bypassable or poorly implemented), an attacker could automate login attempts, gain unauthorized access to user accounts, and compromise sensitive information. This increases the risk of account takeover, identity theft, and unauthorized transactions.</p>	
CVE /CWE	CWE-287	
Control Objective	<p>To ensure robust user authentication by implementing multi-factor authentication (MFA) or at least strong, unpredictable credentials that verify user identity securely before granting access to protected resources.</p>	
Control Name	Identification and Authentication	
Audit Requirement	<p>Verify that the authentication mechanism includes at least two factors (e.g., something the user knows and something the user has).</p>	
Recommendation	<p>Add multi-factor authentication (e.g., OTP via SMS/email or authenticator app). Implement rate-limiting, account lockouts after failed attempts, and CAPTCHA validation on the server side. Ensure account identifiers are not easily guessable (avoid using sequential or public identifiers).</p>	
Reference	OWASP Top 10, SANS 25	
New or Repeat Observation	New Observation	

Proof of Concept:



4	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>User Enumeration via Default Credential Pattern</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	The application allows enumeration of multiple user accounts by inputting common or default mobile numbers (e.g., 9999999999, 1234567890, or known test data). This reveals whether an account exists based on different server responses (error messages, OTP sent, or success messages). This leads to user enumeration, enabling attackers to perform targeted attacks such as credential stuffing, account takeover, or phishing. It also increases the risk of privacy violations by exposing the presence of users in the system.	
CVE /CWE	CWE-203	
Control Objective	To prevent unauthorized actors from determining the existence of user accounts by restricting identifiable server responses and validating user input securely and uniformly. The goal is to protect user identity and system enumeration vectors.	
Control Name	Display generic authentication failure messages	
Audit Requirement	Review all authentication, password reset, and OTP workflows to confirm uniform response messages (e.g., “If this number is registered, an OTP will be sent”).	
Recommendation	Implement generic responses for all authentication-related flows: avoid confirming whether a mobile number exists. Add rate limiting and CAPTCHA to prevent automated mobile number enumeration.	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

Proof of Concept:

isp.hathway.net:7404/selfcare\_beta/index.php?r=qp/enterdetails

**hathw@y**

# Switch to Autopay!

Pay smart. Stay connected.

Enter Your Details

Account Number     Registered Mobile Number

218128

Registered Mobile Number

1234567895

Type the text in the image above

218128

Submit

isp.hathway.net:7404/selfcare\_beta/index.php?r=qp/planpurchase

**hathw@y**

Logout

# INTERNET OF TOMORROW, **TODAY!**

Choose an Account

#	Account Number	Name	Select
1	1125078855	RAMESH H ROHRA	Select
2	1124209550	MAHESH N. SUCHAR	Select
3	1125103588	ARIF FAZLANI	Select

5	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php">https://isp.hathway.net:7404/selfcare_beta/themes/views/payment/manual_reconcile.php</a> <a href="https://isp.hathway.net:7404/selfcare_beta/.git/config">https://isp.hathway.net:7404/selfcare_beta/.git/config</a> <a href="https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace">https://isp.hathway.net:7404/selfcare_beta/icici/transaction.logtrace</a> <a href="#">Log_20131225.txt</a>
Vulnerability title / Observation	<b>Information Disclosure</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	Sensitive information (e.g., server configurations, user data) is exposed to unauthorized users.	
CVE /CWE	CWE-200: Information Exposure	
Control Objective	Prevent unauthorized access to sensitive information within the application or system.	
Control Name	Information Access Control	
Audit Requirement	Information Review: Identify endpoints or features that expose sensitive information.	
Recommendation	Implement proper access controls, sanitize error messages, and limit information exposure.	
Reference	OWASP Top 10, SANS 25	
New or Repeat Observation	New Observation	

## Proof of Concept:

The screenshot shows a web browser window with the URL `isp.hathway.net:7404/selfcare_beta/index.php?r=qp/ccaresponse` highlighted in red. The page features a blue banner with the text "OF TOMORROW, TODAY!" and an illustration of people using laptops. Below the banner, a red box highlights the "Transaction Summary" section. This section contains the message "Payment Failed" and a note: "Please quote your Transaction ID & Reference ID for any queries pertaining to this transaction". A larger red box covers the "Transaction Details" section, which lists the following information:

Transaction Details	
Account Number :	1334456677
Transaction ID :	113876001008
Txn Date :	30/07/2025 16:23:00
Email ID :	ravikumar37439@gmail.com
Name :	Upendra Naik
Amount :	340.00
Mobile Number :	9773669390
Status :	Failed

The screenshot shows a web browser window with the URL `isp.hathway.net:7404/selfcare_beta/.git/config` highlighted in red. The page displays the contents of a Git configuration file (`.git/config`). The visible portion of the file includes the following sections:

```
[core]
repositoryformatversion = 0
filemode = true
bare = false
logallrefupdates = true
[remote "origin"]
url = git@172.20.20.54:TCS/quickpay.git
fetch = +refs/heads/*:refs/remotes/origin/*
[branch "master"]
remote = origin
merge = refs/heads/master
```

```
[2013-12-25 12:01:33.603] <PostLib><postData><TxnNo-->1><Entered>
[2013-12-25 12:01:33.61] <PostLib><postSSL><TxnNo-->1><MrtTxnID-->389355906<Entered>
[2013-12-25 12:01:33.61] <PostLib><buildMerchantBillShip><TxnNo-->1><MrtTxnID-->389355906<Entered>
[2013-12-25 12:01:33.613] <PostLib><buildMerchantBillShip><TxnNo-->1><MrtTxnID-->389355906<Exiting>
[2013-12-25 12:01:33.615] <PostLib><postData><TxnNo-->1><MrtTxnID-->389355906<Entered>
[2013-12-25 12:01:33.659] <PostLib><postData><Created URL object><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:33.815] <PostLib><postData><Opened URL Connection><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:34.175] <PostLib><postData><Written data on the output stream><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:34.202] <PostLib><postData><IOException while reading response : java.io.FileNotFoundException: https://payseal.icicibank.com/mpi/Ssl.jsp><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:34.205] <PostLib><postData><Close the URL connection><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:34.206] <PostLib><postSSL><SFApplicationException>Error while reading data. Transaction cannot be processed<><TxnNo-->1><MrtTxnID-->389355906>
[2013-12-25 12:01:34.206] <PostLib><postSSL><TxnNo-->1><MrtTxnID-->389355906<Exiting>
[2013-12-25 12:24:35.821] <PostLib><postSSL><TxnNo-->1><Entered>
[2013-12-25 12:24:35.821] <PostLib><postSSL><TxnNo-->1><MrtTxnID-->929572922><Entered>
[2013-12-25 12:24:35.821] <PostLib><buildMerchantBillShip><TxnNo-->1><MrtTxnID-->929572922<Entered>
[2013-12-25 12:24:35.822] <PostLib><buildMerchantBillShip><TxnNo-->1><MrtTxnID-->929572922<Exiting>
[2013-12-25 12:24:35.847] <PostLib><postData><TxnNo-->1><MrtTxnID-->929572922<Entered>
[2013-12-25 12:24:35.848] <PostLib><postData><Created URL object><TxnNo-->1><MrtTxnID-->929572922>
[2013-12-25 12:24:35.888] <PostLib><postData><Opened URL Connection><TxnNo-->1><MrtTxnID-->929572922>
[2013-12-25 12:24:36.299] <PostLib><postData><Written data on the output stream><TxnNo-->1><MrtTxnID-->929572922>
[2013-12-25 12:24:36.382] <PostLib><postData><Total transaction Response string value><RespCode=000&message=Successful&TxnID=929572922&RedirectionTxnID=9D>
[2013-12-25 12:24:36.382] <PostLib><postData><Read response on the stream><TxnNo-->1><MrtTxnID-->929572922>
[2013-12-25 12:24:36.382] <PostLib><postData><Close the URL connection><TxnNo-->1><MrtTxnID-->929572922>
[2013-12-25 12:24:36.383] <PostLib><postSSL><TxnNo-->1><MrtTxnID-->929572922<Entered>
[2013-12-25 12:31:25.287] <PostLib><postSSL><TxnNo-->2><Entered>
[2013-12-25 12:31:25.287] <PostLib><postSSL><TxnNo-->2><MrtTxnID-->1403177280><Entered>
[2013-12-25 12:31:25.287] <PostLib><buildMerchantBillShip><TxnNo-->2><MrtTxnID-->1403177280<Entered>
[2013-12-25 12:31:25.287] <PostLib><buildMerchantBillShip><TxnNo-->2><MrtTxnID-->1403177280<Exiting>
[2013-12-25 12:31:25.289] <PostLib><postData><TxnNo-->2><MrtTxnID-->1403177280<Entered>
[2013-12-25 12:31:25.289] <PostLib><postData><Created URL object><TxnNo-->2><MrtTxnID-->1403177280>
[2013-12-25 12:31:25.468] <PostLib><postData><Opened URL Connection><TxnNo-->2><MrtTxnID-->1403177280>
[2013-12-25 12:31:25.787] <PostLib><postData><Written data on the output stream><TxnNo-->2><MrtTxnID-->1403177280>
[2013-12-25 12:31:25.787] <PostLib><postData><Total transaction Response string value><RespCode=000&message=Successful&TxnID=1403177280&RedirectionTxnID=9D>
[2013-12-25 12:31:25.787] <PostLib><postData><Read response on the stream><TxnNo-->2><MrtTxnID-->1403177280>
[2013-12-25 12:31:25.787] <PostLib><postData><Close the URL connection><TxnNo-->2><MrtTxnID-->1403177280>
[2013-12-25 12:31:25.788] <PostLib><postSSL><TxnNo-->2><MrtTxnID-->1403177280<Exiting>
[2013-12-25 12:31:25.788] <PostLib><postSSL><TxnNo-->3><Entered>
[2013-12-25 12:32:04.927] <PostLib><postSSL><TxnNo-->3><MrtTxnID-->306487980><Entered>
[2013-12-25 12:32:04.927] <PostLib><buildMerchantBillShip><TxnNo-->3><MrtTxnID-->306487980<Entered>
[2013-12-25 12:32:04.927] <PostLib><buildMerchantBillShip><TxnNo-->3><MrtTxnID-->306487980<Exiting>
```

6	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Default Credentials</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	Use of default credentials can lead to unauthorized access as attackers may exploit publicly known default usernames and passwords.	
CVE /CWE	CWE-521 CWE-798	
Control Objective	Ensure that all default credentials are changed and secure password policies are enforced.	
Control Name	Credential Management	
Audit Requirement	Audit systems to check for any remaining default credentials	
Recommendation	Disable or change default credentials immediately, enforce strong password policies, and implement multifactor authentication where possible.	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

Proof of Concept:

isp.hathway.net:7404/selfcare\_beta/index.php?r=qp/enterdetails

**hathw@y**

# Switch to Autopay!

Pay smart. Stay connected.

Enter Your Details

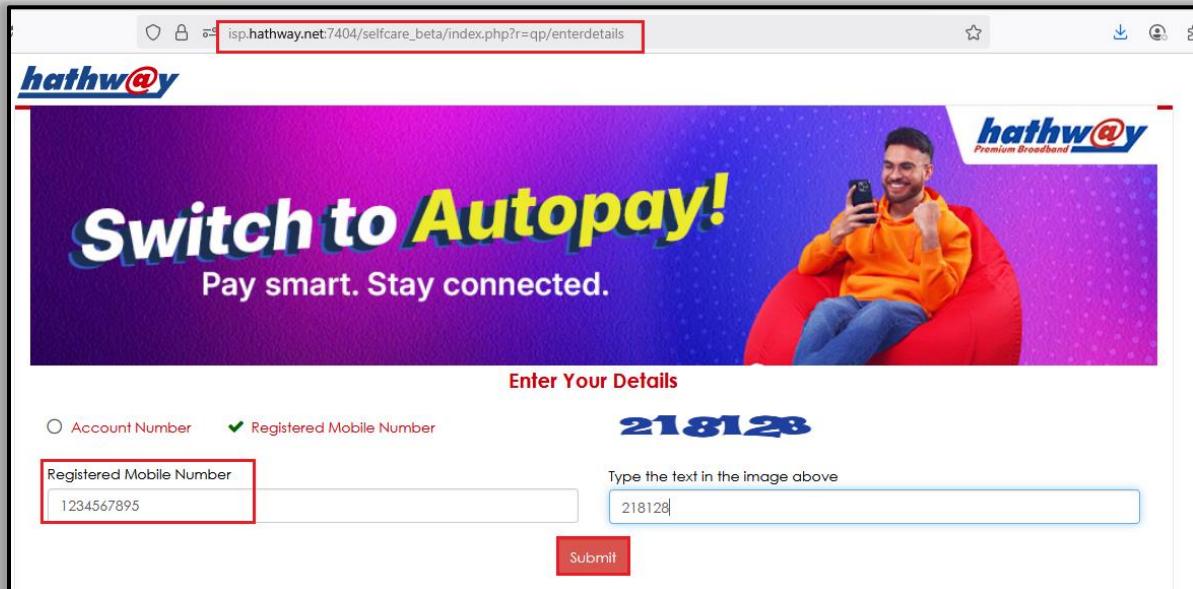
Account Number     Registered Mobile Number

218128

Type the text in the image above

1234567895      218128

Submit



isp.hathway.net:7404/selfcare\_beta/index.php?r=qp/planpurchase

**hathw@y**

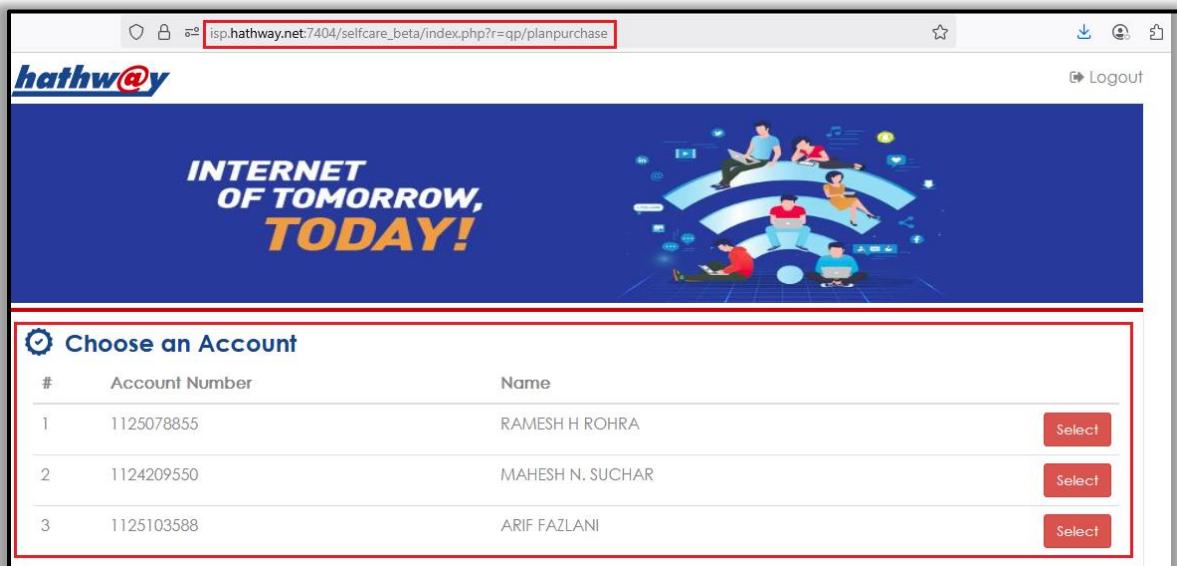
Logout

# INTERNET OF TOMORROW, TODAY!



**Choose an Account**

#	Account Number	Name	Select
1	1125078855	RAMESH H ROHRA	Select
2	1124209550	MAHESH N. SUCHAR	Select
3	1125103588	ARIF FAZLANI	Select



7	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta">https://isp.hathway.net:7404/selfcare_beta</a>
Vulnerability title / Observation	<b>Host Header Injection</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	An attacker can manipulate the Host header in HTTP requests to bypass security controls, cache-poisoning attacks, web-cache deception, and server-side request forgery (SSRF). This can lead to unauthorized access, data theft, or the ability to perform phishing attacks.	
CVE /CWE	CWE-345 (Insufficient Verification of Data Authenticity), CWE-74 (Improper Neutralization of Special Elements in Input)	
Control Objective	Validate and sanitize Host headers in incoming requests to prevent injection and ensure the application processes the correct, expected domain.	
Control Name	Input Validation and Sanitization Control	
Audit Requirement	Review and test web applications to ensure that Host headers are properly validated. Confirm that the application rejects or ignores invalid or unexpected host headers, and that no critical logic depends solely on the Host header.	
Recommendation	<ol style="list-style-type: none"> <li>1. Implement strict validation of the Host header to accept only known and expected values.</li> <li>2. Reject any requests with unrecognized or manipulated Host headers.</li> </ol>	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

The screenshot shows the Network tab of a browser developer tools interface. It displays two requests: a 'Request' and a 'Response'. The Request is a GET to '/selfcare\_beta' with various headers including Host: isp.hathaway.net:7404. The Response is a 302 Moved Temporarily to https://isp.hathaway.net:7404/selfcare\_beta, with a status message '302 Moved Temporarily' and a body containing HTML code for a temporary redirect.

```
1. GET /selfcare_beta HTTP/1.1
2. Host: isp.hathaway.net:7404
3. Cookie: PHPSESSID=d8JeuQ2iEdwAAAZhUsiDB; JSESSIONID=diJUzidBfRnT0Uuhpan40dHHSCh6onchHykoi5lOpwGTYf3H1404C32834
4. User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5. Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
6. Accept-Language: en-US,en;q=0.5
7. Accept-Encoding: gzip, deflate, br
8. Upgrade-Insecure-Requests: 1
9. Sec-Fetch-Dest: document
10. Sec-Fetch-Mode: navigate
11. Sec-Fetch-Site: none
12. Sec-Fetch-User: ?1
13. Pragma: no-cache, i
14. Te: trailers
15. Connection: keep-alive
16.
17.

1. HTTP/1.1 302 Moved Temporarily
2. Date: Tue, 29 Jul 2025 06:25:52 GMT
3. Location: https://isp.hathaway.net:7404/selfcare_beta/
4. Content-Length: 383
5. Content-Type: text/html
6.
7. <html>
8.   <head>
9.     <title>
10.       302 Moved Temporarily
11.     </title>
12.   </head>
13.   <body bgcolor="#FFFFFF">
14.     <p>
15.       This document you requested has moved
16.       temporarily.
17.     </p>
18.     <p>
19.       It's now at <a href="https://isp.hathaway.net:7404/selfcare_beta/">
20.         https://isp.hathaway.net:7404/selfcare_beta/
21.       </a>
22.     </p>
23.   </body>
24.
25.
```

The screenshot shows the Network tab of a browser developer tools interface. A red box highlights the URL in the 'Target' field, which is <https://isp.hathway.net:7404>. The response body is also highlighted with a red box, showing the 302 Moved Temporarily status code and the new location header.

```
Request
Pretty Raw Hex
1 GET /selfcare_beta HTTP/1.1
2 Host: bing.com
3 Cookie: PHPSESSID=dJbSuVz2RdwAAAZhUzIDB; JSESSIONID=diJUmsIdIrnTOUhpan40dH5cb6cnchHywif15opxOTYf3h404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Upgrade-Insecure-Requests: 1
9 Sec-Fetch-Dest: document
10 Sec-Fetch-Mode: navigate
11 Sec-Fetch-Site: none
12 Sec-Fetch-User: ?1
13 Priority: u=0, i
14 Te: trailers
15 Connection: keep-alive
16
17

Response
Pretty Raw Hex Render
1 HTTP/1.1 302 Moved Temporarily
2 Date: Tue, 28 Jul 2025 06:26:10 GMT
3 Location: https://bing.com/selfcare_beta/
4 Content-Length: 239
5 Content-Type: text/html
6
7 <html>
8     <head>
9         <title>
10            302 Moved Temporarily
11        </title>
12    </head>
13    <body bgcolor="#FFFFFF">
14        <p>
15            This document you requested has moved
16            temporarily.
17        </p>
18        <p>
19            It is now at <a href="https://bing.com/selfcare_beta/">
20                https://bing.com/selfcare_beta/
21            </a>
22        </p>
23    </body>
24 </html>
25
```

8	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase</a>
Vulnerability title / Observation	<b>Improper Captcha validation</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	<p>The application has implemented CAPTCHA on the client-side, but does not validate CAPTCHA tokens server-side. As a result, an attacker can remove or tamper with the CAPTCHA field in the request and still gain access or perform actions. Automated attacks can bypass CAPTCHA protection. Increased risk of unauthorized access and abuse of application resources.</p>	
CVE /CWE	CWE-601	
Control Objective	Ensure that CAPTCHA validation occurs server-side for all sensitive or authentication-related requests. This prevents attackers from bypassing CAPTCHA via client-side manipulation.	
Control Name	Server-Side CAPTCHA Validation and Anti-Bot Protection	
Audit Requirement	Review server-side code to ensure CAPTCHA verification is enforced and checked on every request.	
Recommendation	Implement server-side validation of CAPTCHA tokens with the CAPTCHA service	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
0	null	200	1345		397417		
1	null	200	1617		397417		

Request Response

Pretty Raw Hex

```

1 POST /selfcare_beta/index.php?r=gp/plampurchase HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=d8Jsuqv2EdwAAAA2hUz1dB; JSESSIONID=d8JUz1DBrIrnATOUhpan40dbH9cD6onchHykolt5Lopx0YrYf3h404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Content-Type: application/x-www-form-urlencoded
9 Content-Length: 240
10 Origin: https://isp.hathway.net:7404
11 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=gp/enterdetails
12 Upgrade-Insecure-Requests: 1
13 Sec-Fetch-Dest: document
14 Sec-Fetch-Mode: navigate
15 Sec-Fetch-Site: same-origin
16 Sec-Fetch-User: ?1
17 Priority: u=0, i
18 Te: trailers
19 Connection: keep-alive
20
21 loginfield=2&ContactForm$BaccountNo$5D=13344566774&ContactForm$BmobileNo$5D=&ContactForm$Bhiddencaptcha$5D=&ContactForm$Bpromo_accountno$5D=&ContactForm$BContactForm$Bpromo_bill_when$5D=&ContactForm$Bpromo_plan_name$5D=

```

Results Positions

Capture filter: Capturing all items

View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
0	null	200	1345		397417		
1	null	200	1617		397417		

Request Response Render

Pretty Raw Hex Render

The screenshot shows the hathw@y website homepage. At the top, there's a navigation bar with 'Logout' and the hathw@y logo. Below the navigation, a large blue banner features a man using a laptop and text advertising 'Experience more for less with our exclusive offers', 'pay for 06 months and get 15 Days FREE', and 'Limited Period Offer AVAIL NOW'. At the bottom of the page, there's a footer with fields for 'Welcome' (Mr. Upendra, Array Naik), 'Account No.' (1334456677), 'Mobile No.' (XXXXXX0141), 'Email ID' (raXXXXXXXXX37439@gmail.com), and a 'Make Payment/Pay Outstandings' button.

Results Positions

Capture filter: Capturing all items View filter: Showing all items

Request	Payload	Status code	Response received	Error	Timeout	Length	Comment
18	null	200	1923			397417	
19	null	200	1760			397417	
20	null	200	4021			397417	

Request Response

Pretty Raw Hex Render

Logout

Welcome, Mr. Upendra Array Naik

Account No: 1334456677    Mobile No: XXXXXX0141    Email ID: raXXXXXX37439@gmail.com

Make Payment/Pay Outstandings

9	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Session Fixation</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	Attackers can hijack user sessions and gain unauthorized access. If an attacker fixes a session ID for a privileged user, they may gain administrative access. Attackers can access sensitive information within a compromised session.	
CVE /CWE	CWE-384	
Control Objective	Ensure session IDs are securely generated, properly managed, and regenerated upon authentication to prevent attackers from hijacking user sessions.	
Control Name	Secure Session Management	
Audit Requirement	Verify that session IDs are regenerated upon successful login. Ensure session cookies use HttpOnly, Secure, SameSite=Strict, and Domain restrictions. Check that inactive sessions expire and are invalidated upon logout.	
Recommendation	<ol style="list-style-type: none"> <li>1. It is recommended to regenerate the session ID upon successful login to ensure session integrity and prevent fixation attacks.</li> <li>2. Invalidate and delete old session cookies when a new session is created to eliminate any previously fixed session IDs.</li> <li>3. Implement strict session timeout and re-authentication policies, especially for sensitive actions.</li> </ol>	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

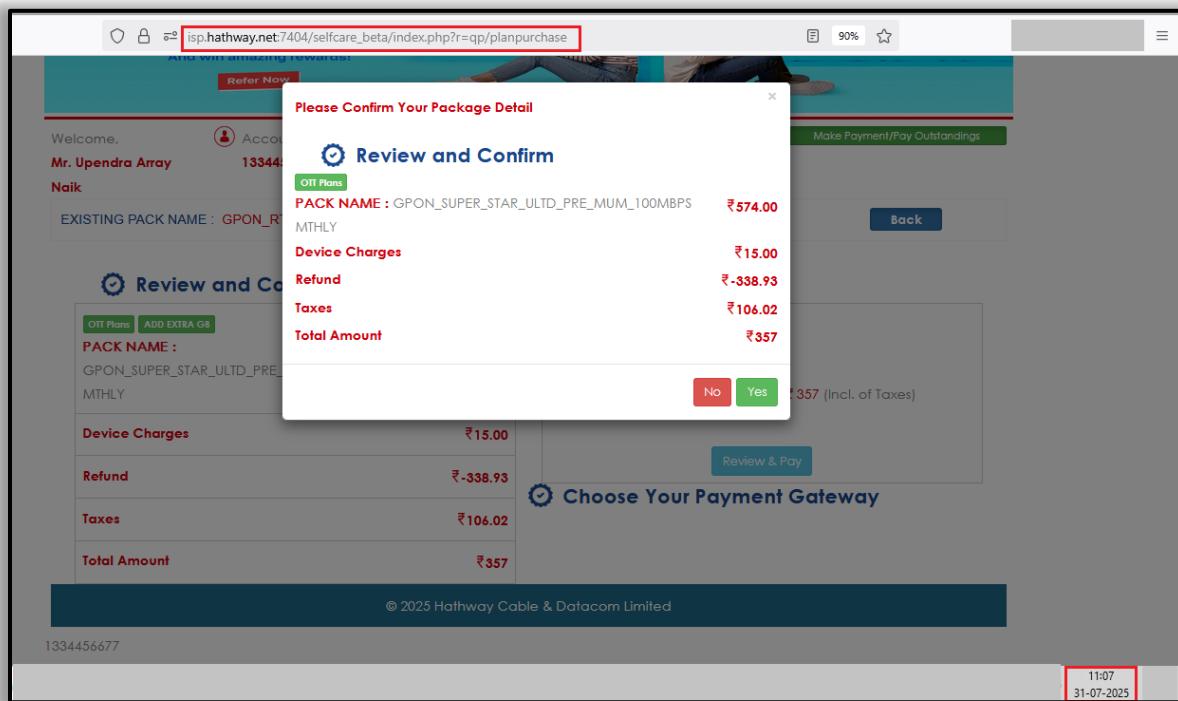
## Proof of Concept:

10	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Session Timeout Misconfiguration</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	<p>The application does not terminate user sessions after a reasonable period of inactivity. This increases the risk of session hijacking or misuse if a user leaves their session open on a shared or compromised device. Inactive sessions left open can be hijacked by attackers.</p>	
CVE /CWE	CWE-613	
Control Objective	Ensure that sessions automatically expire after a reasonable period of inactivity to minimize the risk of hijacking or unauthorized use.	
Control Name	Session Timeout and Inactive Session Expiration	
Audit Requirement	Review session management configurations in the application and web server.	
Recommendation	Configure the application to expire sessions after 15–30 minutes of inactivity. Prompt users to log in again after session expiration.	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

The screenshot shows the Hathway self-care beta index page. At the top, there is a banner for 'Spread the JOY' with the text: 'Refer your Neighbour or a Friend to Hathway Broadband. And win amazing rewards!' Below the banner, the user's details are displayed: Welcome, Mr. Upendra Array, Account No: 1334456677, Mobile No: XXXXXX9390, Email ID: raXXXXXXXXX37439@gmail.com. There is also a 'Logout' link and a 'Make Payment/Pay Outstandings' button. A message at the bottom states: 'EXISTING PACK NAME : GPON\_RTN\_HERO\_ULTD\_MUM\_PRE\_40MBPS 1M (Expires on 20-08-2025)'. On the left, a 'Select plan' dropdown menu is open, showing 'Annual' and 'Semi Annual' options. On the right, a 'Plan List' table is shown with one row: PLAN ₹ 549, VALIDITY Monthly, DATA Unlimited GB@100MBPS, and a 'Buy' button. The timestamp in the bottom right corner is 09:52 31-07-2025.

The screenshot shows the Hathway self-care beta index page. At the top, there is a banner for 'Switch to Autopay!' with the text: 'Pay smart. Stay connected.' and icons for monthly payments, setup, renewals, and modification. Below the banner, the user's details are displayed: Welcome, Mr. Upendra Array, Account No: 1334456677, Mobile No: XXXXXX9390, Email ID: raXXXXXXXXX37439@gmail.com. There is also a 'Logout' link and a 'Make Payment/Pay Outstandings' button. A message at the bottom states: 'EXISTING PACK NAME : GPON\_RTN\_HERO\_ULTD\_MUM\_PRE\_40MBPS 1M (Expires on 20-08-2025)'. On the left, a 'Select plan' dropdown menu is open, showing 'Annual' and 'Semi Annual' options. On the right, a 'Plan List' table is shown with one row: PLAN ₹ 549, VALIDITY Monthly, DATA Unlimited GB@100MBPS, and a 'Buy' button. The timestamp in the bottom right corner is 11:07 31-07-2025.



11	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Concurrent Session</b>	
Severity	Medium	
Status	OPEN	
Vulnerability point /Impact	Concurrent session vulnerabilities occur when an application allows multiple simultaneous sessions for a single user. This can lead to various security issues, including unauthorized access to sensitive information, as an attacker could exploit an active session while the legitimate user is logged in.	
CVE /CWE	CWE-384	
Control Objective	Ensure that the application effectively manages concurrent sessions	
Control Name	Concurrent Session Control	
Audit Requirement	Verify that the application restricts the number of concurrent sessions per user.	
Recommendation	To mitigate the risks associated with concurrent sessions, organizations should implement strict session management policies. One effective approach is to limit the number of concurrent sessions per user, allowing only a single active session at any time. If a new session is initiated, the previous session should be invalidated.	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

The image displays two identical screenshots of a web browser window, likely from a Firefox extension, showing a user's account details and a list of internet plans.

**User Information:**

- Account No: 1334456677
- Mobile No: XXXXX0141
- Email ID: raXXXXXX3743@gmail.com

**Existing Pack Name:** GPON RTN HERO ULTD MUM PRE\_40MBPS 1M (Expires on 20-08-2025)

**Plan List:**

PLAN	VALIDITY	DATA
₹ 549	Monthly	Unlimited GB@100MBPS

[View details](#) [Buy](#)

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12	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation		<b>Missing Content Security Policy (CSP) Header</b>
Severity		Low
Status		OPEN
Vulnerability point /Impact		Without a properly configured CSP header, the application is vulnerable to Cross-Site Scripting (XSS) and other code injection attacks
CVE /CWE		CWE-346: Origin Validation Error; CWE-693: Protection Mechanism Failure
Control Objective		Ensure that the application enforces a Content Security Policy to mitigate code injection attacks.
Control Name		Content Security Policy (CSP)
Audit Requirement		1. CSP Policy Review: Check if a CSP header is implemented and properly configured for security. 2. Code Review: Ensure the application only allows trusted sources for scripts, styles, and other content. 3. Monitoring and Logging: Monitor violations of the CSP and analyze reports to detect potential attacks.
Recommendation		Implement below security headers with their best practices <b>Content-Security-Policy (CSP)</b> Controls resources the browser is allowed to load for a given page, mitigating XSS and other code injection attacks. <b>Content-Security-Policy:</b> default-src 'self'; script-src 'self'
Reference		OWASP Mobile Top 10, SANS25
New or Repeat Observation		New

## Proof of Concept:

The screenshot shows a network traffic capture interface with two main sections: Request and Response.

**Request:**

```

POST /selfcare_beta/index.php?r=qp/planpurchase HTTP/1.1
Host: isp.hathway.net:7404
Cookie: PHPSESSID=dkJsuQZEDwAAAAZh0z1DB; JSESSIONID=dbJUz1D8rInAT0Uhpan40dhH9cBconchHykof5Lopx0Yf3h1404C32834
User-Agent: Mozilla/5.0 Windows NT 10.0; Win64; x64; rv:141.0 Gecko/20100101 Firefox/141.0
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, br
Content-Type: application/x-www-form-urlencoded
Content-Length: 239
Origin: https://isp.hathway.net:7404
Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/planpurchase
Upgrade-Insecure-Requests: 1
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin
Sec-Fetch-User: ?1
Priority: u0,i
Te: trailers
Connection: keep-alive

```

**Response:**

```

HTTP/1.1 200 OK
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Date: Tue, 29 Jul 2025 06:17:41 GMT
Pragma: no-cache
Content-Length: 13888
Content-Type: text/html
Expires: Thu, 19 Nov 1991 08:52:00 GMT
Strict-Transport-Security: max-age=31536000 ; includeSubDomains
X-Content-Type-Options: nosniff
X-XSS-Protection: 1; mode=block
Vary: Accept-Encoding
X-Frame-Options: SAMEORIGIN

```

The response body contains the HTML content of the page, which includes a title, meta tags for viewport and charset, and links to external CSS files.

13	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation		<b>Outdated jQuery and Bootstrap Version</b>
Severity		Low
Status		OPEN
Vulnerability point /Impact		Use of outdated versions of jQuery and Bootstrap may lead to vulnerabilities such as Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF), or other security flaws, as known vulnerabilities in older versions are often exploited by attackers.
CVE /CWE		CWE-94
Control Objective		Ensure that the latest, secure versions of jQuery and Bootstrap are used in the application.
Control Name		Software Component Updates
Audit Requirement		Library Version Review: Audit the application to identify any outdated versions of jQuery and Bootstrap.
Recommendation		Update jQuery and Bootstrap to their latest secure versions, and continuously monitor for new updates and vulnerabilities in third-party libraries.
Reference		OWASP Mobile Top 10, SANS25
New or Repeat Observation		New

## Proof of Concept:

Request

```

1 GET /selfcare_beta/js/bootstrap.min.js HTTP/1.1
2 Host: isp.hathway.net:7404
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
4 Accept: /*
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=gp/plampurchase
8 Sec-Fetch-Dest: script
9 Sec-Fetch-Mode: no-cors
10 Sec-Fetch-Site: same-origin
11 Priority: uca
12 Pragma: no-cache
13 Cache-Control: no-cache
14 Te: trailers
15 Connection: keep-alive
16
17

```

Response

```

1 HTTP/1.1 200 OK
2 Date: Tue, 28 Jul 2025 06:44:44 GMT
3 Content-Length: 31819
4 Content-Type: text/javascript
5 Last-Modified: Sun, 05 May 2024 16:03:34 GMT
6
7 */
8 * Bootstrap v3.2.0 (http://getbootstrap.com)
9 * Copyright 2011-2014 Twitter, Inc.
10 * Licensed under MIT (https://github.com/twbs/bootstrap/blob/master/LICENSE)
11 *
12 */
13 if("undefined"==typeof jQuery)throw new Error("Bootstrap's JavaScript requires jQuery");
14 +function(a){
15     "use strict";
16     function b(){
17         var a=document.createElement("bootstrap"),b=
18             WebkitTransition:"webkitTransitionEnd",MsTransition:"transitionend",
19             OTransition:"oTransitionEnd otransitionend",transition:"transitionend"
20         ;
21         for(var c in b)if(void 0!==a.style[c])return(
22             end:b[c]
23         );
24     }
25     return b
26 }
27 a.fn.emulateTransitionEnd=function(b){
28     var c=1,d=this;
29     d.one("bsTransitionEnd",function(){
30         c-->0
31     })
32 }
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14	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>Cookie Attribute Missing</b>	
Severity	Low	
Status	OPEN	
Vulnerability point /Impact	Cookies without the Secure attribute can be transmitted over insecure connections (HTTP). This increases the risk of session hijacking or interception by attackers using man-in-the-middle (MITM) attacks, compromising the confidentiality of session data.	
CVE /CWE	CWE-614 (Sensitive Cookie in HTTPS Session Without Secure Attribute)	
Control Objective	Ensure cookies are only transmitted over secure (HTTPS) connections by enforcing the Secure attribute in cookie settings, preventing exposure to interception during transmission.	
Control Name	Cookie Security Control	
Audit Requirement	Regularly review and audit web applications to ensure all sensitive cookies (e.g., session, authentication cookies) are flagged with the Secure attribute. Ensure HTTP connections are properly redirected to HTTPS to enforce secure transmission.	
Recommendation	<ol style="list-style-type: none"> <li>1. It is recommended to set the HttpOnly flag for cookies to prevent client-side scripts from accessing sensitive session data, thereby mitigating the risk of cross-site scripting (XSS) attacks.</li> <li>2. SameSite=Lax for general use. This restricts cookies from being sent with cross-site requests except for top-level navigations. SameSite=Strict for sensitive operations that should only occur in a first-party context. SameSite=Secure if the cookie must be sent in cross-site contexts (like third-party APIs or embedded content) and only over HTTPS.</li> </ol>	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

Name	Value	Domain	Path	Expires / Max-Age	Size	HttpOnly	Secure	SameSite	Last Accessed
JSESSIONID	ddJUzjDBrmATOUhpan40dbH9cD6onchHyko1f5Lopx0Yryf3h4042328...	isp.hathway.n...	/	Session	72	true	false		Tue, 29 Jul 2025 08:57:24 G...
PHPSESSID	dkJsuQvZEdwAAAZhUzjDB	isp.hathway.n...	/selfcare_be...	Session	31	false	false		Tue, 29 Jul 2025 08:57:24 G...

15	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js">https://isp.hathway.net:7404/selfcare_beta/js/qp/plan_purchase.js</a>
Vulnerability title / Observation	<b>Internal IP Address Disclosure</b>	
Severity	Low	
Status	OPEN	
Vulnerability point /Impact	Exposure of internal IP addresses can provide attackers with network details for further attacks (e.g., reconnaissance).	
CVE /CWE	CWE-200: Information Exposure; CWE-201: Exposure of Sensitive Information Through Sent Data	
Control Objective	Ensure that internal network details are not exposed to unauthorized users.	
Control Name	Information Exposure Prevention	
Audit Requirement	Identify instances where internal IP addresses are exposed in headers, responses, or error messages.	
Recommendation	Mask or remove internal IP addresses from all external-facing outputs and logs.	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

Request

```

1 GET /selfcare_beta/js/gp/plan_purchase.js HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=dcJuwv2ZdwAAAAZhUziDB; JSESSIONID=dbUUsIDB1lnat0Uhpan40dbH9cB6cnchhjykolfSLopsOTrYf3h1404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: /*
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=gp/planpurchase
9 Sec-Fetch-Dest: script
10 Sec-Fetch-Mode: no-cors
11 Sec-Fetch-Site: same-origin
12 Te: trailers
13 Connection: keep-alive
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Response

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```

The response body contains a JavaScript code snippet that includes a confirmation dialog. A red box highlights the URL and the confirmation dialog code.

Request

```

1 GET /selfcare_beta/js/gp/plan_purchase.js HTTP/1.1
2 Host: isp.hathway.net:7404
3 Cookie: PHPSESSID=dcJuwv2ZdwAAAAZhUziDB; JSESSIONID=dbUUsIDB1lnat0Uhpan40dbH9cB6cnchhjykolfSLopsOTrYf3h1404232834
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:141.0) Gecko/20100101 Firefox/141.0
5 Accept: /*
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Referer: https://isp.hathway.net:7404/selfcare_beta/index.php?r=gp/planpurchase
9 Sec-Fetch-Dest: script
10 Sec-Fetch-Mode: no-cors
11 Sec-Fetch-Site: same-origin
12 Te: trailers
13 Connection: keep-alive
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```

Response

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```

The response body contains a JavaScript code snippet that includes a confirmation dialog. A red box highlights the URL and the confirmation dialog code.

16	Affected URL /IP	<a href="https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails">https://202.88.130.105:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation		<b>Application is accessible over IP Address</b>
Severity		Low
Status		OPEN
Vulnerability point /Impact		Applications accessible via IP addresses are more exposed to potential attacks, including DDoS (Distributed Denial of Service) and other forms of network-based attacks. Domain names often provide a more professional and user-friendly experience, which can be important for customer-facing applications. Direct IP access might bypass some security measures typically enforced by domain-based access controls.
CVE /CWE		CWE-284
Control Objective		Ensure that application access is properly controlled through domain-based security policies and that SSL/TLS encryption is enforced.
Control Name		Domain Name and Access Control Management
Audit Requirement		Audit server and firewall configurations to verify that IP-based access is restricted, and traffic is forced through domain names. Conduct penetration tests to ensure SSL/TLS is enforced for all connections, whether accessed via IP or domain.
Recommendation		Configure your server to deny direct access over IP addresses and require access via the domain name. Ensure that SSL certificates are configured to apply to all access methods, including IP addresses, and redirect traffic from IP addresses to the domain.
Reference		OWASP Web Security Top 10, SANS25
New or Repeat Observation		New

## Proof of Concept:

Logout

**Switch to Autopay!**  
Pay smart. Stay connected.

Worry-free monthly payments   Hassle-free setup with your UPI  
On-time renewals always   Modify or cancel anytime

Activate AutoPay Now

Welcome, Mr. Upendra Ulhas   Account No: 1334456677   Mobile No: XXXXXX9390   Email ID: raXXXXXX37439@gmail.com   Make Payment/Pay Outstandings

Naik

**Review and Confirm**

Change Pay Term   Offer Plan   Change Bandwidth   OTT Plans  
ADD EXTRA GB

PACK NAME : GPON\_RTN\_HERO\_ULTD\_MUM\_PRE\_40MBPS\_1M   ₹424.00  
Expires on 20-08-2025

Device Charges   ₹15.00

**Quick Pay**

No pack for renewal

Total Subscription Amount: ₹519 (Incl. of Taxes)

**Choose Your Payment Gateway**

17	Affected URL /IP	<a href="https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails">https://isp.hathway.net:7404/selfcare_beta/index.php?r=qp/enterdetails</a>
Vulnerability title / Observation	<b>TLS 1.1 &amp; Weak Ciphers</b>	
Severity	Low	
Status	OPEN	
Vulnerability point /Impact	<p>Weak ciphers (e.g., RC4, DES, or ciphers with small key lengths) can be easily broken, leading to the compromise of sensitive data during transmission.</p> <p>Attackers can force the use of weaker TLS protocols (e.g., TLS 1.0 or TLS 1.1) and ciphers, allowing them to exploit known vulnerabilities such as padding oracle attacks, downgrade attacks (e.g., POODLE), or BEAST attacks.</p>	
CVE /CWE	CWE-327	
Control Objective	Ensure the use of strong cryptographic ciphers to secure data in transit.	
Control Name	Secure Cryptographic Practices	
Audit Requirement	Vulnerability Assessment: Identify systems using CBC mode for encryption.	
Recommendation	<p>Use authenticated encryption modes (like GCM or ChaCha20) instead of CBC to mitigate risks.</p> <p>Disable older versions of TLS (e.g., TLS 1.0 and TLS 1.1) and enforce the use of TLS 1.2 and TLS 1.3, which offer enhanced security features and are less susceptible to attacks.</p>	
Reference	OWASP Web Security Top 10, SANS25	
New or Repeat Observation	New	

## Proof of Concept:

```

Start 2025-07-29 07:06:11      → 202.88.130.105:7404 (isp.hathway.net) ←
rDNS (202.88.130.105):  isp.hathway.net.
Service detected:          HTTP

Testing protocols via sockets except NPN+ALPN

SSLv2    not offered (OK)
SSLv3    not offered (OK)
TLS 1    not offered
TLS 1.1 offered (deprecated)
TLS 1.2 offered (OK)
TLS 1.3 offered (OK): final
NPN/SPDY not offered
ALPN/HTTP2 not offered

Testing cipher categories

NULL ciphers (no encryption)           not offered (OK)
Anonymous NULL Ciphers (no authentication) not offered (OK)
Export ciphers (w/o ADH+NULL)          not offered (OK)
LOW: 64 Bit + DES, RC[2,4], MD5 (w/o export) not offered (OK)
Triple DES Ciphers / IDEA            not offered
Obsoleted CBC ciphers (AES, ARIA etc.) offered
Strong encryption (AEAD ciphers) with no FS offered (OK)
Forward Secrecy strong encryption (AEAD ciphers) offered (OK)

```

<u>Testing server's cipher preferences</u>					
Hexcode	Cipher Suite Name (OpenSSL)	KeyExch.	Encryption	Bits	Cipher Suite Name (IANA/RFC)
<u>SSLv2</u>					
-					
<u>SSLv3</u>					
-					
<u>TLSv1</u>					
-					
<u>TLSv1.1 (no server order, thus listed by strength)</u>					
xc014	ECDHE-RSA-AES256-SHA	ECDH 256	AES	256	TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
x39	DHE-RSA-AES256-SHA	DH 1024	AES	256	TLS_DHE_RSA_WITH_AES_256_CBC_SHA
x35	AES256-SHA	RSA	AES	256	TLS_RSA_WITH_AES_256_CBC_SHA
xc013	ECDHE-RSA-AES128-SHA	ECDH 256	AES	128	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
x33	DHE-RSA-AES128-SHA	DH 1024	AES	128	TLS_DHE_RSA_WITH_AES_128_CBC_SHA
x2f	AES128-SHA	RSA	AES	128	TLS_RSA_WITH_AES_128_CBC_SHA
<u>TLSv1.2 (no server order, thus listed by strength)</u>					
xc030	ECDHE-RSA-AES256-GCM-SHA384	ECDH 256	AESGCM	256	TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
xc028	ECDHE-RSA-AES256-SHA384	ECDH 256	AES	256	TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
xc014	ECDHE-RSA-AES256-SHA	ECDH 256	AES	256	TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
x9f	DHE-RSA-AES256-GCM-SHA384	DH 1024	AESGCM	256	TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
x6b	DHE-RSA-AES256-SHA256	DH 1024	AES	256	TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
x39	DHE-RSA-AES256-SHA	DH 1024	AES	256	TLS_DHE_RSA_WITH_AES_256_CBC_SHA
x9d	AES256-GCM-SHA384	RSA	AESGCM	256	TLS_RSA_WITH_AES_256_GCM_SHA384
x3d	AES256-SHA256	RSA	AES	256	TLS_RSA_WITH_AES_256_CBC_SHA256
x35	AES256-SHA	RSA	AES	256	TLS_RSA_WITH_AES_256_CBC_SHA
xc02f	ECDHE-RSA-AES128-GCM-SHA256	ECDH 256	AESGCM	128	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
xc027	ECDHE-RSA-AES128-SHA256	ECDH 256	AES	128	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
xc013	ECDHE-RSA-AES128-SHA	ECDH 256	AES	128	TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
x9e	DHE-RSA-AES128-GCM-SHA256	DH 1024	AESGCM	128	TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
x67	DHE-RSA-AES128-SHA256	DH 1024	AES	128	TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
x33	DHE-RSA-AES128-SHA	DH 1024	AES	128	TLS_DHE_RSA_WITH_AES_128_CBC_SHA
x9c	AES128-GCM-SHA256	RSA	AESGCM	128	TLS_RSA_WITH_AES_128_GCM_SHA256
x3c	AES128-SHA256	RSA	AES	128	TLS_RSA_WITH_AES_128_CBC_SHA256
x2f	AES128-SHA	RSA	AES	128	TLS_RSA_WITH_AES_128_CBC_SHA
<u>TLSv1.3 (no server order, thus listed by strength)</u>					
x1302	TLS_AES_256_GCM_SHA384	ECDH 256	AESGCM	256	TLS_AES_256_GCM_SHA384
x1301	TLS_AES_128_GCM_SHA256	ECDH 256	AESGCM	128	TLS_AES_128_GCM_SHA256

```

Testing vulnerabilities

Heartbleed (CVE-2014-0160)           not vulnerable (OK), no heartbeat extension
CCS (CVE-2014-0224)                  not vulnerable (OK)
Ticketbleed (CVE-2016-9244), experimental. not vulnerable (OK), no session ticket extension
ROBOT                                not vulnerable (OK)
Secure Renegotiation (RFC 5746)        supported (OK)
Secure Client-Initiated Renegotiation
CRIME, TLS (CVE-2012-4929)            not vulnerable (OK)
BREACH (CVE-2013-3587)                potentially NOT ok, "gzip" HTTP compression detected. - only supplied "/selfcare_beta/index.php?r=qp/enterdetails" tested
Can be ignored for static pages or if no secrets in the page

POODLE, SSL (CVE-2014-3566)          not vulnerable (OK), no SSLv3 support
TLS_FALLBACK_SCSV (RFC 7507)         Check failed, unexpected result , run testssl -Z --debug=1 and look at /tmp/testssl.95f1qx/*tls_fallback_scsv.txt
SWEET32 (CVE-2016-2183, CVE-2016-6329) not vulnerable (OK)
FREAK (CVE-2015-0204)                 not vulnerable (OK)
DROWN (CVE-2016-0800, CVE-2016-0703)  make sure you don't use this certificate elsewhere with SSLv2 enabled services, see
                                         https://search.censys.io/search?resource=hosts&virtual_hosts=INCLUDEq=C4B90C7330D6E042E8339BB0371802AF9A0A9BD8752C5AACFCFB3D

LOGJAM (CVE-2015-4000), experimental
VULNERABLE (NOT OK): common prime: RFC2409/Oakley Group 2 (1024 bits),
but no DH EXPORT ciphers

BEAST (CVE-2011-3389)                not vulnerable (OK), no SSL3 or TLS1
LUCKY13 (CVE-2013-0169), experimental VULNERABLE, uses cipher block chaining (CBC) ciphers with TLS. Check patches
Winshock (CVE-2014-6321), experimental not vulnerable (OK)
RC4 (CVE-2013-2566, CVE-2015-2808)   no RC4 ciphers detected (OK)

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## Appendices

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This analysis is based on the Grey Box assessment and with the newly identified flaws, known threats and best practices as of the date of this report.

The findings in the Detailed Observation section of this report align with the risks outlined in the OWASP Top 10, providing a standardized framework for understanding the vulnerabilities identified during the testing process. By referencing OWASP, we aim to ensure that industry best practices are followed and that the identified vulnerabilities are addressed effectively. This will help prioritize remediation efforts and improve the overall security posture of the application.

Squaretek recommends that the modifications suggested in this document be performed to ensure the overall security of critical IT infrastructure components. Also, a Grey Box assessment is highly recommended to identify all vulnerabilities present in the system.

Please note that as technologies and risks change over time, the weaknesses in the operation of the systems described in this report need to be addressed. This will help in reducing exposure to these vulnerabilities and taking the necessary actions.