



***AEPS CERTIFICATIONS ZONE
USER MANUAL
FOR BANKS V 1.0
(NPCI/CERT/AEPS)***

Document History

[illegible]

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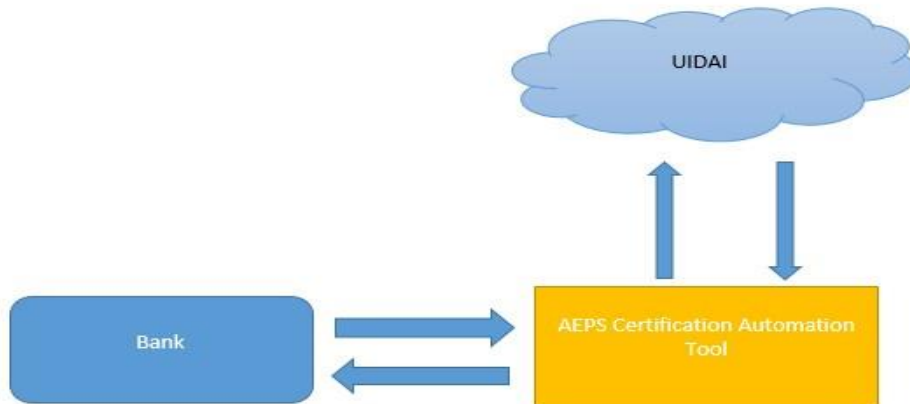
2. Architecture

2.1 Architecture: -

For the bank pursuing Acquirer certification, the AEPS certifications zone will act both as NPCI network and Issuer and forward the request to UIDAI for authentication. Similarly the AEPS certifications zone will act both as NPCI network and Acquirer for the bank pursuing ISSUER certification for its EFT switch. During configuration phase, these simulation modules are activated and linked to a certification slot which represents a particular certification.

Message types supported by AEPS Certification Automation tool are as follows:

- XML
- ISO



2.2 Salient Features

- ✓ Self-execution of test cases by member banks without any manual support from NPCI for comfort and UAT rounds of certification
- ✓ Banks can perform Network, ONUS, OFFUS, Demographic ISO & all XML transaction types
- ✓ Certifications zone is available round the clock for certification i.e., 24*7*365 days ✓ It ensures effective transaction validation and explicit messaging for each type of error.
- ✓ Dashboard to view the status of daily status
- ✓ Safe & Secure as it is using SSL validation via HTTPS protocol TLS and it is hosted on NPCI Net
- ✓ Supports simultaneous testing of scopes like On-Us, Off-Us and XML for single user by activating one transaction at a time.
- ✓ Access to the system based on unique login credential.
- ✓ Option to view the transaction logs from the UI, enabling versatile searching options
- ✓ Explicit messaging and guidance during transaction validation.
- ✓ Option available to download Review report and UAT script.
- ✓ Downloadable option for raw files, NTSL file for reconciliation purpose.

2.3 Connection to AEPS certifications zone

The architecture of AEPS Certifications zone necessitates the following two type of connections for the bank to establish.

- ✓ Direct connection from member bank switch to AEPS certification zone tool application server on four digit port.
- ✓ Posting XML requests directly onto the certification zone web server url on the port 443.

2.3.1 Scopes and Channels available in Certifications Zone

- On-Us ISO 2.5
- Off-Us Acquirer ISO 2.5
- Off-Us Issuer ISO 2.5
- Cash Deposit ISO 2.5
- Demography ISO 2.5
- Auth XML 2.5
- EKYC XML 2.5
- OTP XML 2.5
- Tokenization XML 1.0
- Demography XML 2.5
- Two Factor Authentication 2.5

2.3.1.1 Bank's switch connection to AEPS certifications zone

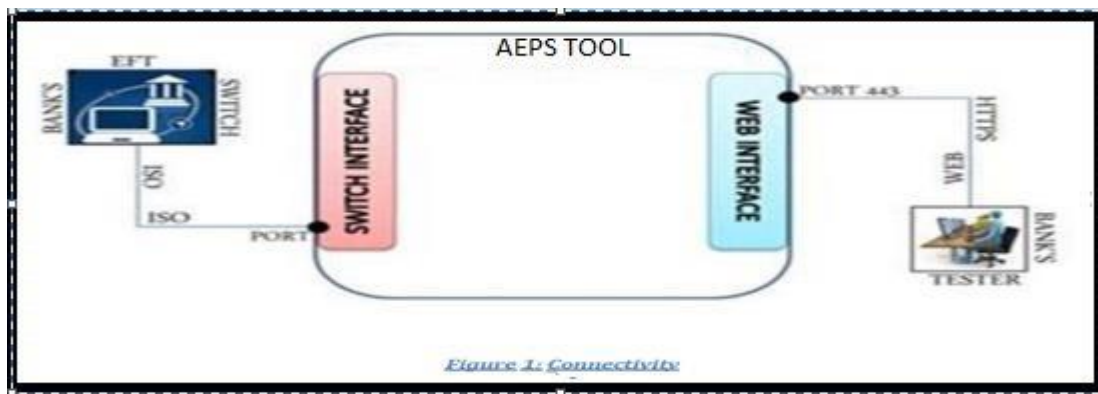
In order to certify banks host switch, a bank needs to establish a connection between its EFT switch and AEPS certifications zone.

During configuration phase and prior to the start of the certification, the NPCI team will share a port number and the NAT IP of the AEPS Certifications zone with banks.

The banks in return need to share the NAT IP of the EFT switch with NPCI team. The NAT IP provided by the bank will be configured in NPCI network and in AEPS certifications zone.

The below figure shows that a bank's EFT switch is connected to the switch interface of the AEPS certifications zone for the exchange of the ISO messages.

Note: The connection will be allowed only with the NAT IP shared by the bank specifically for the AEPS certifications zone.



2.3.2 Web connectivity for accessing AEPS certifications zone

The bank user needs to access AEPS Certifications zone over the web in order to perform testing. This type of connection is specific to the AEPS Certifications zone architecture, and is essential for accessing the AEPS Certifications zone as a simulating tool over the web.

The AEPS certification zone allows user to access over a completely secure medium by using HTTPS TLS protocol. HTTPS URLs begin with "https://" and use **port 443**.

All the data, routed via an SSL encrypted medium with SSL certificate being issued by established and recognized Internet Certification Authority.

3. Browser compatibility

AEPS Certifications zone is compatible with the following browsers:

- Microsoft edge:- Version 44 or above on Windows Platform
- Mozilla Firefox:- Version 70 or above on Windows Platform
- Google Chrome:- Version 70 or above on Windows Platform **Note:**
 - It is recommended to use Google chrome version 70 or above on windows platform and using internet explorer may not yield good results.
 - All the above mentioned browsers have been tested on windows and Linux platforms.

4. Accessing AEPS certifications zone

4.1 Pre-requisites

Member bank can opt for Certification testing (Comfort round/UAT round) or support testing, accordingly testing slot will be provided by NPCI. The bank pursuing certification/support need to share the following details in UT (Universal Template) prior to commencement of the testing:

S.NO	Details to be Provided	New Bank	Existing bank
1	Name of the Bank	✓	✓
2	Bank code	Provided by NPCI	Provided by NPCI
3	Acquirer ID	Provided by NPCI	Provided by NPCI
4	IIN	Provided by NPCI	✓
5	Bank source IP	Bank has to provide NPCI shared NAT IP	✓
6	Port	Provided by NPCI	Provided by NPCI
7	Name of the Switch vendor	✓	✓

✓ User name and password will be provided by NPCI

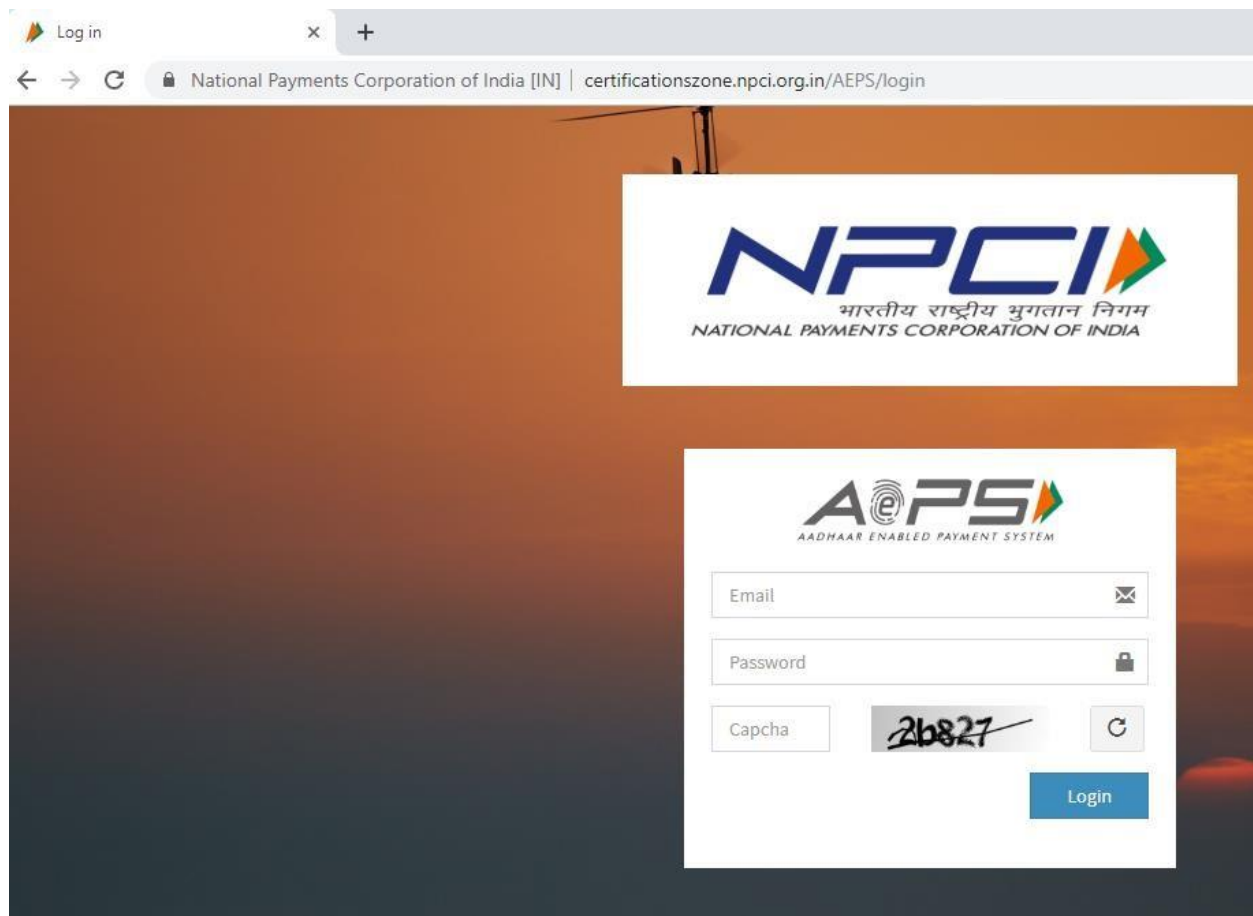
4.2 Turnaround Time (TAT)

Bank has to complete all stages of certification within TAT, defined by NPCI and the TAT for test case execution is given in below table for both Comfort and UAT rounds. Given test slot for current scope of testing will be expired once the TAT has exceeded by the bank, then again bank has to request NPCI certification team for extension of test slot if required with proper justification for exceeding TAT.

Activity/Round of testing	Comfort-TAT (in Days)	UAT-TAT (in Days)
Execution of test cases	15	7

5. Login Page

- After successful onboarding of member bank, NPCI (Admin) will create a bank user and will share the login credentials (User Name and Password) with bank, prior to the start of testing.
- The user should enter the correct 'User Name' Followed by correct 'Password' shared by NPCI earlier.
- Enter valid captcha displayed on screen and finally click on the login button. A successful Login will redirect the user to the HOME page.
- 'Password' is case sensitive

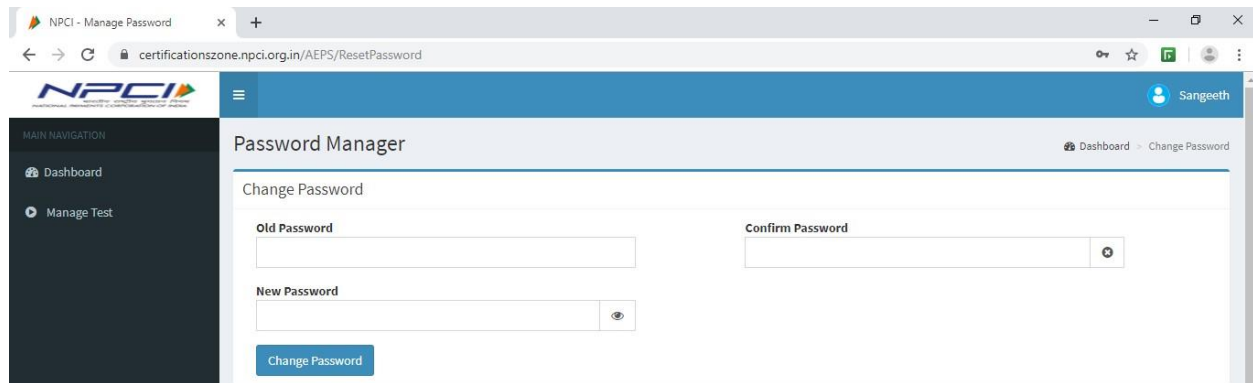


The login page of AEPS certifications zone will have following highlights:

1. NPCI logo and submit button name as – ‘login’
2. HTTPS protocol and Padlock: The address uses ‘https’ which means that communication is encrypted and secured using SSL.
3. Text boxes for Login credentials and NPCI logo
4. Text Captcha

6. Home Page

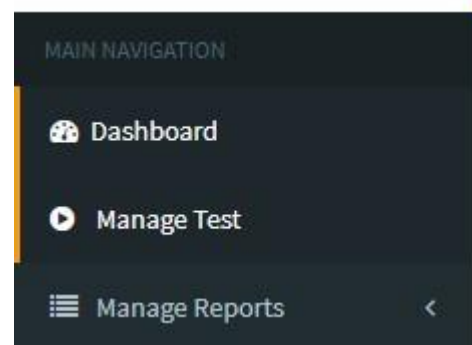
After successful validation of the Login credentials, the system navigates the user to the ‘Home’ page. Immediately after first login bank will be forced to change the login password received from NPCI and the password should consist of at least one capital letter and one number and minimum 8 characters in length.



Note: Bank will not get any mail notification for password change and please be noted that mail ID in username exclusively for login purpose, no alerts will be sent to that mail.

Home page displays the following tabs for the Bank User and the following options are available.

- Dashboard
- Manage Test
- Manage Reports



6.1 Dashboard

This Field consists of bank information like Name, Bank source IP, NBIN, Port etc and transaction count, with which bank tester is able to know the basic information about bank, testing status, downloadable latest AEPS specification, reference test case sheets and Notifications sent by NPCI. Hamburger icon at the left corner as highlighted is available for banks to toggle the main menu.

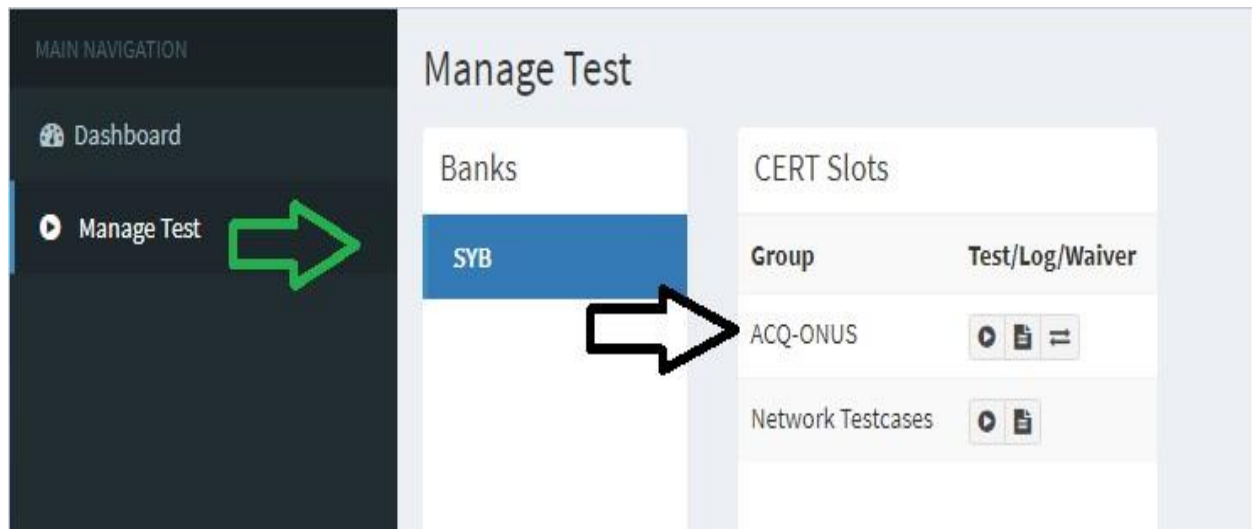


Note: Bank has to check the Dashboard for all notifications by **NPCI** to pre-inform banks about scheduled maintenance down time. After scheduled activity bank has to start the node.

6.2 Manage Test

This field consists of bank test slot, as shown below bank can execute and see the transaction logs. If bank wants to request any waiver then select that particular case in the waiver shown in the below screen shot

Banks → CERT Slots → Group → Test, Log and waiver

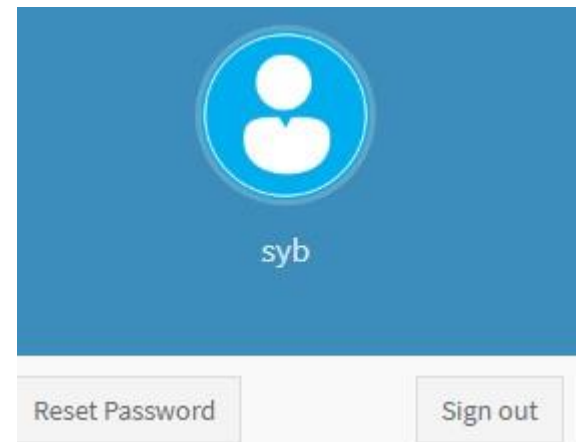


6.3 Manage Reports

In manage reports tab bank will be allowed to download various reports. In comfort round of testing bank will be provided with review report only but in UAT Round, there are 3 different reports available for bank to download i.e., Review report, Settlement report, UAT script .

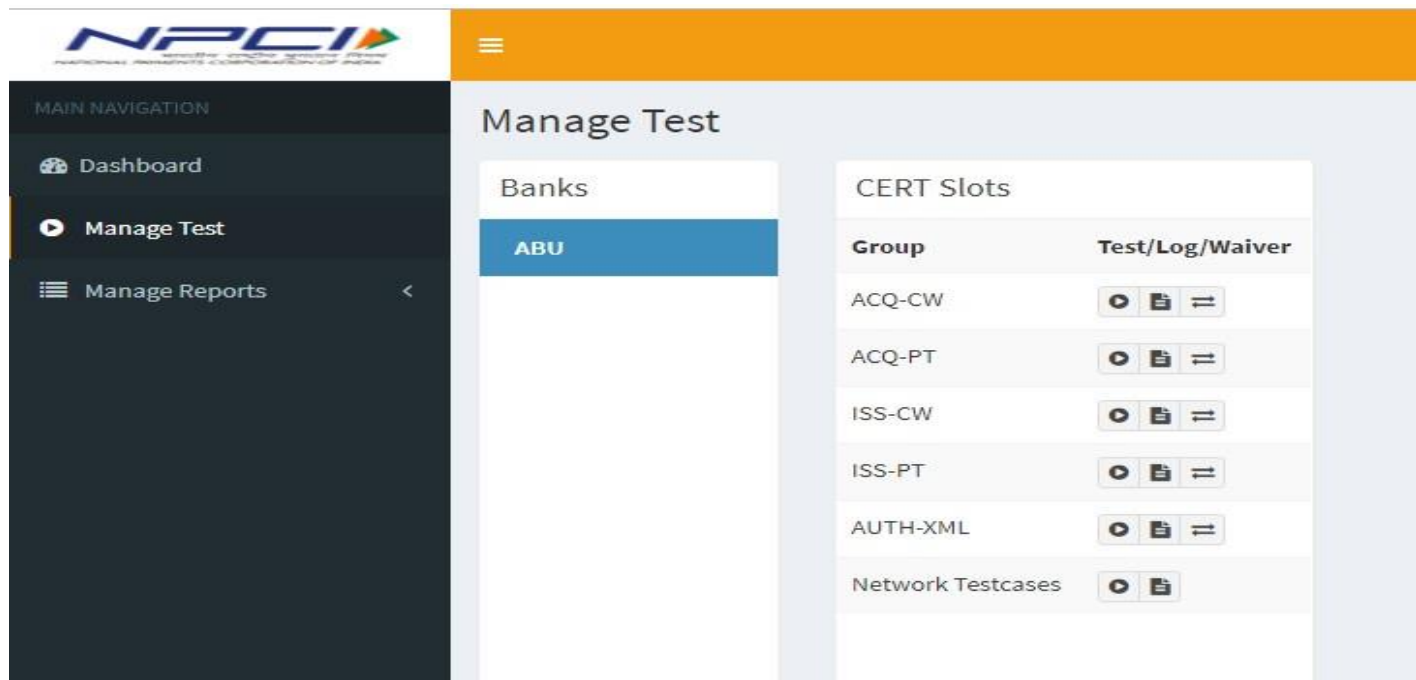
6.4 Logout

The user can exit from current session using the '**Sign out**' button on the top right hand corner near '**User Profile**'. Note: Multiple sessions were not allowed with the same user credentials, i.e., only one user is allowed to access the certifications zone with the credentials provided by NPCI

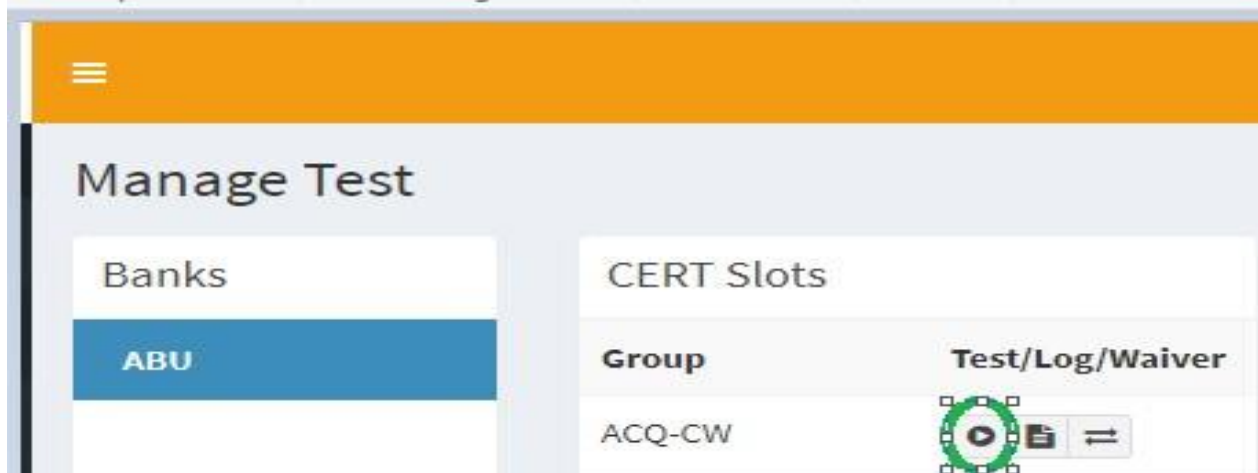


7. Using AEPS certifications zone for certification

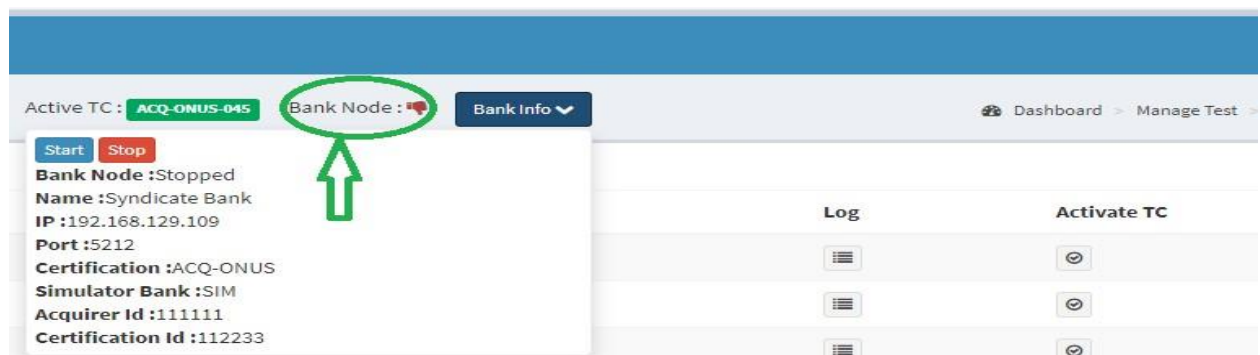
Bank can select desired services from the cert slots.



Select to the 'play' icon to go to test cases.

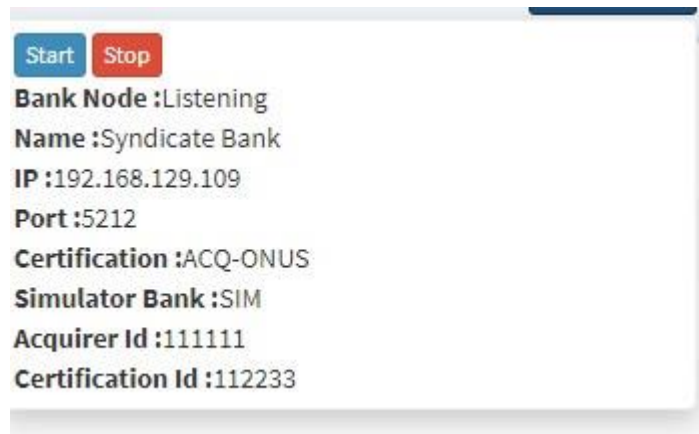


When clicked on particular slot, the user can see the below screen. Here the user can see slot information in Bank Info button as shown in below screen.



To start the test case, the user has to make the bank node up. By default, the bank node will be down as shown in above screen with down thumb impression. To set the node up go to the Bank info button and click start button as shown in above screen.

Right screen shows the bank node is Listening



Once the node made listen, then bank has to do telnet from their source server and has to send sign on then node will be up and bank can commence testing



The user can start testing test cases by selecting Activate TC button against each test case. Before commencement of testing, the user need to configure the given Acquirer ID, IIN, Port IP and bank code.

As bank can perform any scope of certification, Bank need to initiate the transaction and the tool will route the transaction to UIDAI for authentication. Finally tool will display the request and response of the bank.

Once the test case is completed, the status will be changed.

TC ID	PCode	RC	TCStatus	Log	Activate TC
2.1	100000	00	✗		
2.2	100000	00	!		
2.3	100000	00	✓		Activate TC
2.4	100000	00	✓		
2.5	100000	00	!		
2.6	100000	00	✓		
2.7	100000	00	✗		

RRN Search

Enter RRN

Latest Log

Bank Name : RRN : 002217000035 Status : AcqId : 200008

The user can also see the log for that test case after testing is completed by using log button

After clicking the log button, bank can see the status of the transaction whether pass or fail. If fail, the reason for fail will be shown elaborately, so that bank can do development changes if necessary to modify that error and to fire the same test case again.

Sample view as below.

Bank Name: Syndicate Bank		Status: Success	Group : ACQ-ONUS	Test Case Id : 2.3	Channel : ✕
ORG					
Id Syndicate Bank Request			Sim Response		
0	0200		0210		
2	607580299999999999		607580299999999999		
3	100000		100000		
7	0121125604		0121125604		
11	000181		000181		
12	182604		182604		
13	0121		0121		
18	6012		6012		
22	019		019		
25	05		05		
32	200008		200008		
37	002118000181		002118000181		
39			00		
41	register		register		
42	SYB000001047602		SYB000001047602		
43	JAKKUR BANGALORE KAIN		JAKKUR BANGALORE KAIN		
62			001032b85f7744069141be9a30b5a276ef747700307201000418hG5FcD9YcDJXpJAyAZ		
111	*****				
123	mc*****				
124	*****				
126	001 ,009 ,nnnyFMRnn				
	005 ,001 ,P				

The user can also search transaction using RRN. The user can see the last transaction log under latest log.

RRN Search		Latest Log	
<input type="text" value="002217000035"/>	<input type="button" value="Q"/>	Bank Name :	RRN : 002217000035
		Status :	AcqId : 200008

The status icons i.e., tick, cross, and exclamation across the test case implies that the transaction is executed successfully (as expected), error (not as expected) and yet to execute respectively.

Test Cases & Beneficiary Information

TC ID	PCode	RC	TCStatus	Log	Activate TC
2.1	100000	00	✗		
2.2	100000	00	!		
2.3	100000	00	✓		

Below screen shows the failure request, response and status.

ORG	
Supraja Test Bank Request	
Sim Response	
0 0200	0210
2 3582000XX23	3582000538649993223
3 100000	100000
7 0123110139	0123110139
11 000252	000252
12 163139	163139
13 XXXXXX	0123
18 6012	6012
22 019	019
25 05	05
32 562731	562731
37 002316000252	002316000252
39	30
41 register	register
42 SUPMSO1300E2L0S	SUPMSO1300E2L0S
43 SONU KUMAR SONU KUMARVIGURGAON HRIN	SONU KUMAR SONU KUMARVIGURGAON HRIN
111*****	*****
113	YGmWN0VSYVb5bTRJwEJm5qvJ1yVj
114	YGmWN0VSYVb5bTRJwEJm5qvJ1yVj
115	YGmWN0VSYVb5bTRJwEJm5qvJ1yVj
116	YGmWN0VSYVb5bTRJwEJm5qvJ1yVj

8. Manage Reports

This module is accessed by Bank Tester where the user can download the following reports.

1. Review Reports
2. Settlement Reports.
3. UAT Scripts

8.1 Review Reports

The below screen shows the banks list and their certification slots where the user can select the bank and can download the Review report for both comfort and UAT rounds. Bank has to download the review report and send it to NPCI for screening and to get access with further process.



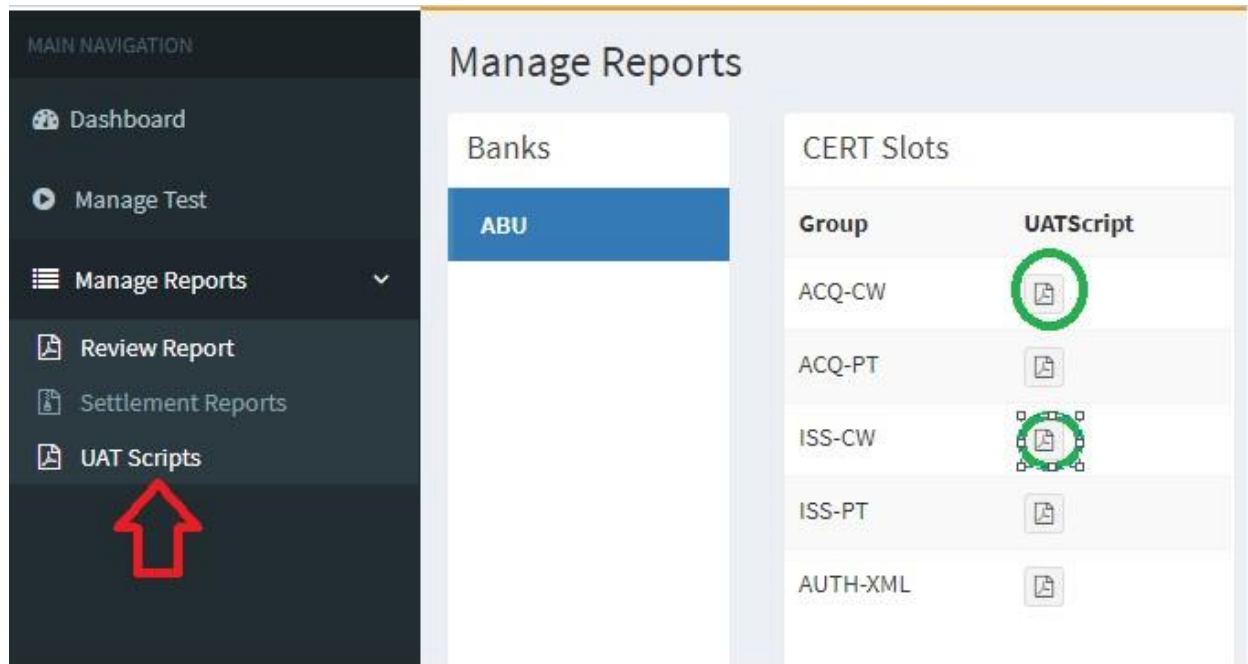
8.2 Settlement Reports

This feature is extensively given to banks in UAT round of testing. The adjacent screen shows the settlement reports where the user can directly download the raw and NTSL reports used for banks **day 1** reconciliation purpose.



8.3 UAT scripts

Once after the testing is completed and if the review of test cases executed as per test case sheet and scope of certification if found pass then bank has to download this UAT script and send it back to NPCI with proper bank seal and authorized signature.



9. Feedback

NPCI has made every effort to include all relevant information in this document. However, it is possible that some specific information you are looking for is not available herewith. If you would like such information to be included in a subsequent version of this book, write to <sirteam@npci.org.in> with the subject line as “AEPS certifications zone User Manual-Feedback”.

10. Points worth noting

- Bank needs to ensure whitelisting of both GUI and switch connectivity at bank end before commencement of testing
- Advised to use Google chrome browser with version above 70 to access certifications zone tool
- If the given URL is not being accessed, bank has to crosscheck the URL accessing with URL given by NPCI and try doing telnet to the NPCI destination IP with designated port and has to provide a screenshot to NPCI for further assistance.
- Email ID given in user name (during login) is exclusively for login purpose, no alerts will be sent (to member banks) to those email ID's
- Banks to Cross check the scope of testing and slot given in Certifications zone
- With the given login credentials, only one user from bank testing team can login to certifications zone, multiple login with single user credentials is restricted
- Apart from test case No 2.1 and 3.1 all the test cases need to be performed using VID token.

- If the transaction initiated by bank is not getting logged in certifications zone tool, bank has to check the basic details like DE#2, DE#3, DE#32 , DE#126 and de#127, in 200 request leg.
- Bank has to strictly follow latest AEPS specification downloadable from dashboard, if the bank is not following the latest spec, then deviation in DE's that were there in transaction will be highlighted in red colour for not comply with new specification
- Notifications of scheduled activities will be communicated to member banks on an ongoing basis in the dashboard.
- Bank coming for support or certification is refrained from initiating bulk transactions
- Transactions with wrong details in DE#2, DE#3, DE#32 ,DE#126 and DE#127 will not be parsed and logged in certifications zone tool
- If bank is acting as Issuer the transactions will not route to UIDAI
- Banks need any further technical assistance or for giving feedback regarding certifications zone tool, can write to sirteam@npci.org.in

S.no	Possible Issues	Check to be done at bank end
1	Not able to access URL	1. IP & PORT whitelisting confirmation from bank network team whether whitelisted at bank end or not 2. Telnet to NPCI destination IP with respective Port and take a screenshot 3. still getting issue Contact NPCI team with screenshot taken and whitelist confirmation from bank end
2	Not able to connect Switch after accessing URL	1. IP & PORT whitelisting confirmation from bank network team whether whitelisted at bank end or not 2. Telnet to NPCI destination IP with respective Port and take a screenshot 3. still getting issue Contact NPCI team with screenshot taken and whitelisting confirmation from bank end
3	Transaction is not getting logged in Tool	Check for Primary data elements getting populated as per latest specification or not DE#2 DE#3 DE#32 DE#42 DE#126 all tags DE#127 all tags
4	If transaction is getting logged and tool is throwing error	Check the error description and do changes accordingly, make sure to follow latest specification