

PIC-NG - User Acceptance Test Plan



PIC-NG - User Acceptance Test Plan

U.S. Department of Housing and Urban Development

Document Number: N/A
Contract Number: N/A

Objectives

Purpose

User Acceptance Testing (UAT), also known as beta or end-user testing, is defined as testing the software by the user or client to determine whether it can be accepted or not. This is the final testing performed once the functional, system and regression testing are completed.

The main purpose of this testing is to validate the software against the business requirements or scenarios. This validation is carried out by the end-users who are familiar with the business requirements or scenarios.

As the user acceptance test is the last testing that is carried out before the software goes live, obviously this is the last chance for the customer to test the software and measure if it is fit for the purpose.

Scope

User Acceptance Testing will cover business requirements and scenarios defined as in scope.

In Scope

Functionality of the PIC-NG application to support the Moving to Work (MTW) Expansion Program and the PIC-NG Inventory Management, more specifically building and units information that public housing authorities are required to submit to the PIC-NG system.

Points of Contact

The primary point of contact for information and troubleshooting purposes is Wendalyn Hovendick, HUD.

Name	Email	Organization	Role
Robert Dalzell	Robert.D.Dalzell@hud.gov	HUD	UAT Coordinator
Wendalyn Hovendick	Wendalyn.M.Hovendick@hud.gov	HUD	UAT Coordinator
Guy Jenkins	Guy.E.Jenkins@hud.gov	HUD - SWAT IT	IT Support
Eric Krapf	Eric.Krapf@hud.gov	HUD - SWAT IT	IT Support
Uzzal Khan	Uzzal.Khan@hud.gov	HUD - SWAT IT	IT Support
Shyni Dennis	shyni.dennis@hud.gov	HUD - SWAT IT	IT Support

References

Applicable references are:

- [IMS/PIC Modernization Architecture and System Design Document](#)
- [IMS/PIC Modernization Operations and Maintenance Manual](#)

Assumptions and Constraints

To be determined.

Entry Criteria

Vendor Access to Demo Environment

If you work for a vendor and you don't have an account with Secure Systems, then you can register for an ID using this link: [Secure Systems Registration - Independent User Registration](#). After the registration process, you will have an ID that is six characters and starts with the letter I. Send an email to PICNG_REAC@hud.gov with that ID and the PHA you are working with and we'll finish your registration by assigning roles to your user account.

If you work for a PHA directly, your registration page is here instead: [Secure Systems Registration - PHA Coordinator and User Registration](#).

UAT Environment

The testing will be conducted in the DEMO environment. This provides a controlled environment in which tests can be repeated if necessary. Proper user roles and actions will be granted to the User IDs in the DEMO environment. Passwords will be provided for all the User IDs. The SWAT IT team will provide the test procedures; however, actual users will perform all of the testing.

UAT Test Plan

Using the PIC-NG Portal:

<https://hudapps.hud.gov/picngdemo/web/home> for HIDs.

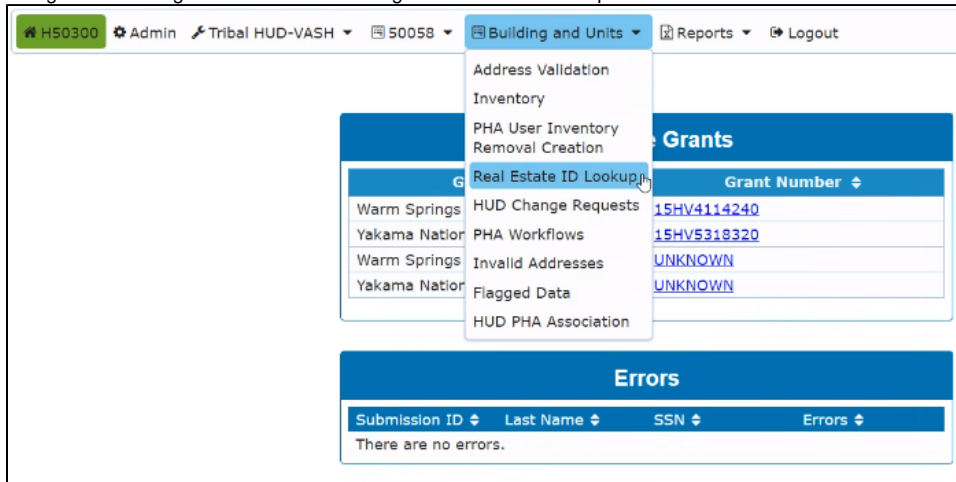
MIDs & IIDs will need to access this URL first https://hudapps.hud.gov/HUD_Systems.

Note: Detailed Test Plan Steps available here : [User Acceptance Test Plan Options & Additional Information for Vendors/PHAs](#)

User Acceptance Test steps for Vendor MTW JSON Submissions

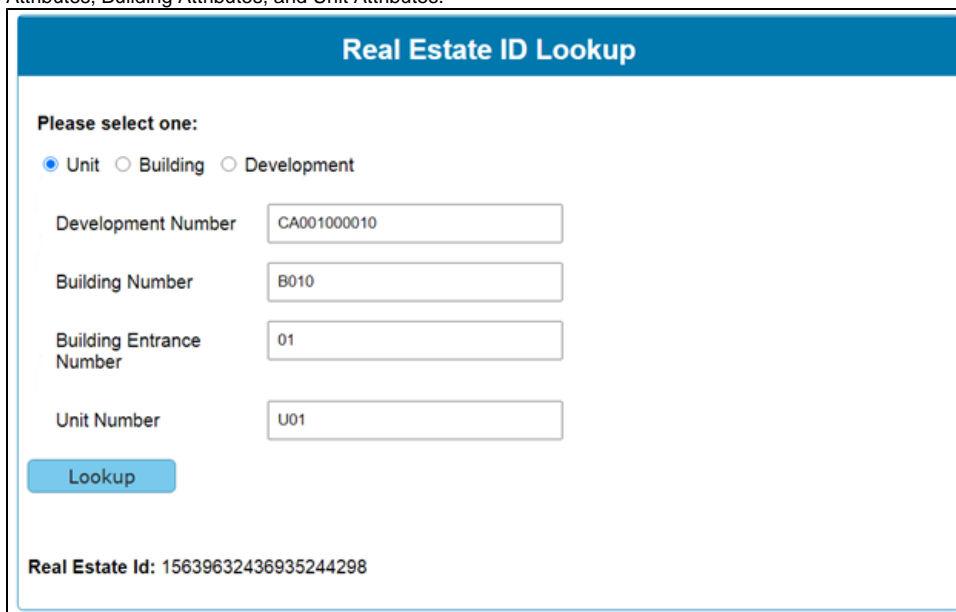
The following are the steps to submit a MTW JSON submission:

1. Login to the PIC-NG portal (<https://hudapps.hud.gov/picngdemo/web/home>) after gaining Vendors Access.
2. Navigate to Building and Units then selecting Real Estate ID Lookup.



The screenshot shows the PIC-NG portal interface. At the top, there is a navigation bar with the user ID 'H50300', 'Admin', 'Tribal HUD-VASH', '50058', and a dropdown menu for 'Building and Units'. The 'Building and Units' dropdown is open, showing options: Address Validation, Inventory, PHA User Inventory Removal Creation, Real Estate ID Lookup (highlighted), HUD Change Requests, PHA Workflows, Invalid Addresses, Flagged Data, and HUD PHA Association. In the background, there is a 'Grants' table with a 'Grant Number' column and a list of entries: 15HV4114240, 15HV5318320, UNKNOWN, and UNKNOWN. Below the grants table is an 'Errors' section with a table header: Submission ID, Last Name, SSN, Errors. The error message states: 'There are no errors.'

3. Obtain the Real Estate ID by entering the Development Number, Building Number, Building Number Entrance, and Unit Number using the Building & Unit Lookup Feature. You can find the test data in the UAT test plan.xlsx excel spreadsheet under Tabs Development Attributes, Building Attributes, and Unit Attributes.



The screenshot shows the 'Real Estate ID Lookup' form. At the top, there is a blue header with the title 'Real Estate ID Lookup'. Below the header, there is a section titled 'Please select one:' with three radio buttons: 'Unit' (selected), 'Building', and 'Development'. Below this, there are four input fields: 'Development Number' with the value 'CA001000010', 'Building Number' with the value 'B010', 'Building Entrance Number' with the value '01', and 'Unit Number' with the value 'U01'. A blue 'Lookup' button is located below the input fields. At the bottom of the form, the result is displayed: 'Real Estate Id: 15639632436935244298'.

- Navigate to 50058 and select Submit JSON.

The screenshot shows the top navigation bar with the following items: H50300, Admin, Tribal HUD-VASH, 50058 (selected), Building and Units, Reports, and Logout. A dropdown menu is open under '50058', showing 'Upload File', 'Submit JSON' (highlighted with a mouse cursor), and 'Submission Status'. Below the navigation is a blue header for 'Real Estate ID Lookup'. The main content area contains the following form elements:

Please select one:
 Unit Building Development

Development Number:

Building Number:

Building Entrance Number:

Unit Number:

Lookup

- For this submission use the "AT1-New Admission.txt" JSON file included with this test package. Update the JSON to use the Real Estate ID from Step 2 and validate/submit the JSON file.

50058 JSON Submission Demo

Submission ID is 1000186.

Please paste the JSON below:

```
{
  "header": {
    "formVersionDate": "",
    "submissionType": "50058",
    "vendorDefinedData": "",

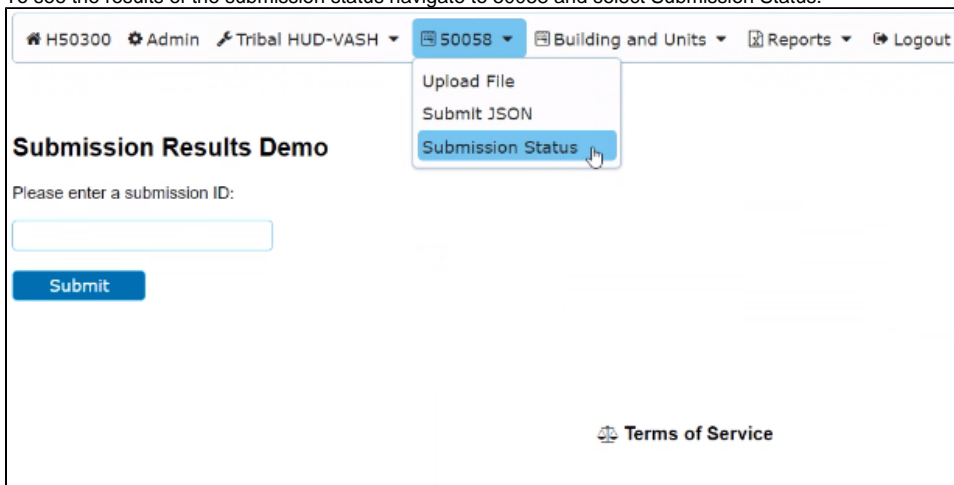
```

Validate **Submit**

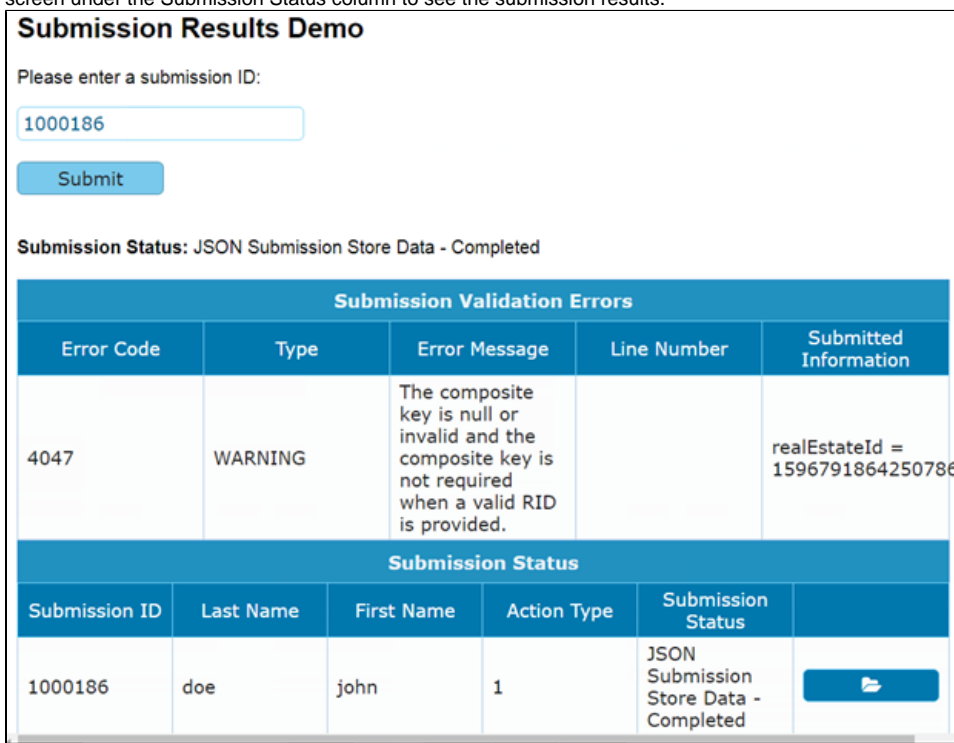
File Submission Status: JSON Submission Store Data - Completed

File Validation Errors				
Error Code	Type	Error Message	Line Number	Submitted Information
4047	WARNING	The composite key is null or invalid and the composite key is not required when a valid RID is provided.		realEstateId=159679

- To see the results of the submission status navigate to 50058 and select Submission Status.



- Enter the submission ID obtained in Step 3 on the submission status screen and select the folder icon in the lower right portion of the screen under the Submission Status column to see the submission results.



- The 50058 result page will display which the results of the data in the 50058 submission.

50058

Section 1: Agency

Agency Name Housing Authority of the City of SF
 PHA Code CA001
 Program VO

Section 2: Action

Type of action 1
 Effective Date (mm/dd/yyyy) of action: 2017-01-01
 Correction?: N
 Correction Reason:

9.

Date (mm/dd/yyyy) of admission to program: 2017-01-01
 Projected effective date (mm/dd/yyyy) of next reexamination: 2018-01-01
 FSS participation now or in the last year?:
 Special Program: (Vouchers only):
 Other Special Program 1:
 Other Special Program 2:

Section 3: Household

Member Number	Last Name & Sr., Jr., etc.	First Name		
Member #1: Head of Household	Jeter	Derek		
	Date of birth	Sex	Citizenship	
	1980-01-01	M	EC	
	Disability Status	Relation	Race	
	N	H	Black/African American	
Ethnicity	Social Security Number			
2	555222316			

Member Number	Last Name & Sr., Jr., etc.	First Name		
Member #2	Rodriguez	Alex		
	Date of birth	Sex	Citizenship	
	2005-01-01	M	EC	
	Disability Status	Relation	Race	

Ethnicity	Social Security Number
2	555222314

Total number in household: 2
 Family subsidy status under Noncitizens Rule: E
 Eligibility effective date (mm/dd/yyyy) if qualified for continuation of full assistance (3u=C):
 If New head of household, former head of household's SSN:

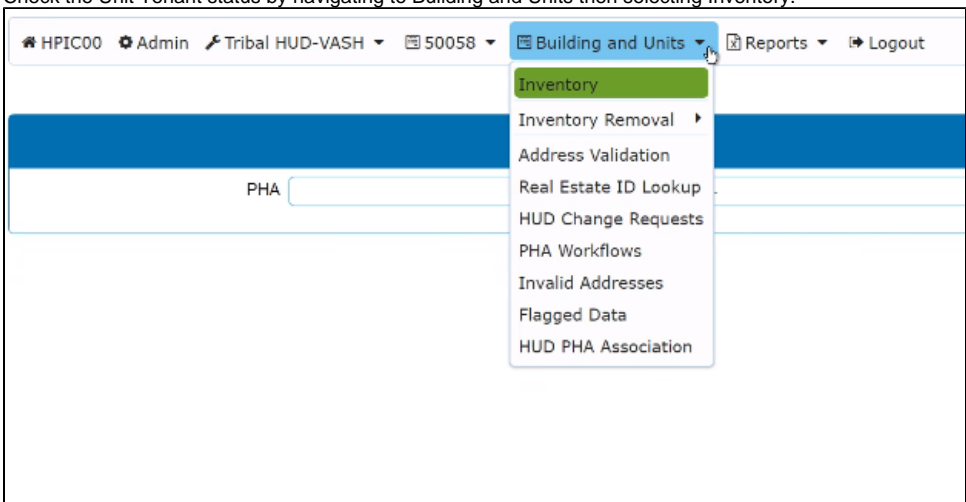
Section 4: Background at Admission

Date (mm/dd/yyyy) entered waiting list: 2016-01-01
 ZIP code before admission: 20024
 Homeless at admission? N
 Does family qualify for admission over the very low-income limit? (Vouchers only) (Y or N): Y
 Continuously assisted under the 1937 Housing Act? (Y or N): Y
 Is there a HUD approved income targeting disregard? (Y or N):

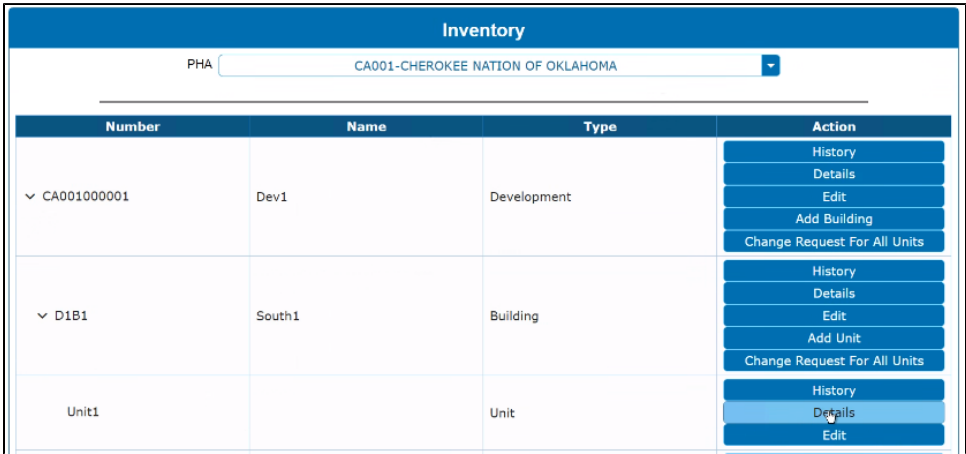
Section 5: Unit to be Occupied on Effective Date of Action

Unit Address
 Number and street 550 12th street

10. Check the Unit Tenant status by navigating to Building and Units then selecting Inventory.



11. Select your PHA from the dropdown on the Inventory page and expand the Development Number, then expand the Building number then select the Details button for the Unit.



12. This will display the Unit Tenant Status.

50058

Section 1: Agency

Agency Name	Carbon County Housing Authority
PHA Code	PA067
Program	P

Section 2: Action

Type of action	1
Effective Date (mm/dd/yyyy) of action:	2019-02-05
Correction?:	N
Correction Reason:	

Accessible Designation:	<input type="text" value="Standard"/>
Unit Status Type:	<input type="text" value="Initial Approval Completed"/>
Street:	<input type="text" value="550 12th street SW"/>
City:	<input type="text" value="Washington"/>
State:	<input type="text" value="DC"/>
Zip Code:	<input type="text" value="20024"/>
Zip Code +4:	<input type="text" value="6121"/>
Unit Designation:	<input type="text" value="General Occupancy"/>
Unit Tenant Status:	<input type="text" value="Occupied"/>
Unit Tenant Status Subcategory:	<input type="text" value="Assisted tenant"/>

13. Use the "AT6-New Admission.txt" JSON file with Action Type "6" which changes the Unit Tenant Status to "Vacant" and submit the JSON submission using Step 5.

14. Verify that the Unit Tenant Status on the Inventory page on the Unit Details page is now "Vacant".

Accessible Designation:	Standard
Unit Status Type:	Initial Approval Completed
Street:	550 12th street SW
City:	Washington
State:	DC
Zip Code:	20024
Zip Code +4:	6121
Unit Designation:	General Occupancy
Unit Tenant Status:	Vacant
Unit Tenant Status Subcategory:	Vacant
ACC Indicator:	Y
Operating Fund Indicator:	Y
Capital Fund Indicator:	Y

User Acceptance Test Cases and Scenarios

The following are test scenarios for user acceptance testing of an Minimum Viable Product (MVP) 1 for the 50058 Module. The scenarios can be found in the "UAT test plan.xlsx" excel file.

The User Acceptance Test scenarios have been broken into sections based on the program type of the submission on the HUD-50058-MTW form.

Test Scenario	Excel Tab	Testing Traceability
Public Housing 50058	Prog P	PIC-7399 - Authorization / Identify PHAs PIC-7415 - Flexibility Tracking PIC-7425 - Front-End User Interface (Limited) PIC-9732 - Other 50058 PIC-4761 - Epic story to link all the 50058 business related questions PIC-208 - receive form PIC-9732 - Other 50058 PIC-7975 - 50058 Section 1 - Does the unit exist? PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules PIC-7413 - Associate Public Housing tenants and units PIC-7411 - Add PH edit checks per MTW business rules

<p>Tenant-Based Assistance 50058</p>	<p>Prog T</p>	<p>PIC-7399 - Authorization / Identify PHAs</p> <p>PIC-7415 - Flexibility Tracking</p> <p>PIC-7425 - Front-End User Interface (Limited)</p> <p>PIC-9732 - Other 50058</p> <p>PIC-4761 - Epic story to link all the 50058 business related questions</p> <p>PIC-208 - receive form</p> <p>PIC-9732 - Other 50058</p> <p>PIC-7975 - 50058 Section 1 - Does the unit exist?</p> <p>PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules</p> <p>PIC-7413 - Associate Public Housing tenants and units</p> <p>PIC-7411 - Add PH edit checks per MTW business rules</p>
<p>Project-Based Assistance 50058</p>	<p>Prog PR</p>	<p>PIC-7399 - Authorization / Identify PHAs</p> <p>PIC-7415 - Flexibility Tracking</p> <p>PIC-7425 - Front-End User Interface (Limited)</p> <p>PIC-9732 - Other 50058</p> <p>PIC-4761 - Epic story to link all the 50058 business related questions</p> <p>PIC-208 - receive form</p> <p>PIC-9732 - Other 50058</p> <p>PIC-7975 - 50058 Section 1 - Does the unit exist?</p> <p>PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules</p> <p>PIC-7413 - Associate Public Housing tenants and units</p> <p>PIC-7411 - Add PH edit checks per MTW business rules</p>
<p>Homeownership 50058</p>	<p>Prog H</p>	<p>PIC-7399 - Authorization / Identify PHAs</p> <p>PIC-7415 - Flexibility Tracking</p> <p>PIC-7425 - Front-End User Interface (Limited)</p> <p>PIC-9732 - Other 50058</p> <p>PIC-4761 - Epic story to link all the 50058 business related questions</p> <p>PIC-208 - receive form</p> <p>PIC-9732 - Other 50058</p> <p>PIC-7975 - 50058 Section 1 - Does the unit exist?</p> <p>PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules</p> <p>PIC-7413 - Associate Public Housing tenants and units</p> <p>PIC-7411 - Add PH edit checks per MTW business rules</p>

Local, Non-Traditional Property-Based Vouchers 50058	Prog LP	PIC-7399 - Authorization / Identify PHAs PIC-7415 - Flexibility Tracking PIC-7425 - Front-End User Interface (Limited) PIC-9732 - Other 50058 PIC-4761 - Epic story to link all the 50058 business related questions PIC-208 - receive form PIC-9732 - Other 50058 PIC-7975 - 50058 Section 1 - Does the unit exist? PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules PIC-7413 - Associate Public Housing tenants and units PIC-7411 - Add PH edit checks per MTW business rules
Local, Non-Traditional Tenant-Based 50058	Prog LN	PIC-7399 - Authorization / Identify PHAs PIC-7415 - Flexibility Tracking PIC-7425 - Front-End User Interface (Limited) PIC-9732 - Other 50058 PIC-4761 - Epic story to link all the 50058 business related questions PIC-208 - receive form PIC-9732 - Other 50058 PIC-7975 - 50058 Section 1 - Does the unit exist? PIC-7420 - Add edit checks that apply to HCV and PH per MTW business rules PIC-7413 - Associate Public Housing tenants and units PIC-7411 - Add PH edit checks per MTW business rules
Family Self-Sufficiency (FSS)/MTW Self-Sufficiency Addendum	FSS_MTW SS	PIC-7410 - Add HCV edit checks per MTW business rules

TEST VERIFICATION

The Table below provides the verification process of the submissions in current DEMO environment

Verification steps after the scenarios are executed
<ol style="list-style-type: none"> Once user acceptance testing has been completed, the test user will provide the test PHA code/s used in the test scenarios to the SWAT IT team by sending them to PICNG_REAC@hud.gov. The SWAT Team will run the tenant report for each PHA code and provide the tenant reports for tenants in the test user. If any issues or bugs are identified during testing, please see section Test Termination/Results for instructions.

Sample Tenant Reports

Household Report

	A	B	C	D	E	F	G	H
1	PHA_CD	HSHLD_ID	MINIMUMRENT	ENHANCEDVOUCHERMINIMUMRENT	TTP	MOSTRECENTTTP	ISHARDSHIPEXEMPTION	UNITFLATR
2	AL165	10000070	50		0	75	0 N	
3	AL165	10000169	50		0	351	0 N	
4	AL165	10000289	50		0	618	0 N	

Member Report

	A	B	C	D	E	F	G	H	I	J
1	PHA_CD	HSHLD_ID	PRSN_ID	SSN	FIRSTNAME	LASTNAME	ISDISABLED	COMMUNITYCODE	ALIENNUMBER	YEARSOFSCH
2	AL165	10000070	10000141	HN775QGJMXVGS	DACMR	OPMZH	zrvil	N	4	
3	AL165	10000169	10000240	YY4QWQFS6W	OOVDLX	vrmzskvgU	N	4		
4	AL165	10000169	10000268	E3IWVWG48	HMVPGZQ	zbmsrC	N	4		

TEST EXECUTION

Test Schedule

All the tests must be completed, and results reported back to HUD, no later than November 02, 2020. Daily conference calls will be held at 3:00 p.m. Eastern time (call-in numbers will be provided via e-mail).

Task	Planned Target Start Date	Planned Target End Date	Group Responsible
UAT Test Plan	09/29/2020	10/21/2020	SWAT IT
UAT Test Plan Submit to HUD	10/21/2020	10/23/2020	SWAT IT
UAT Environmental setup	10/21/2020	10/23/2020	SWAT IT
UAT Testing Round 1	10/26/2020	11/06/2020	HUD

Test Progression

The individual tests can be run in any order, but unless there is some reason for not doing so, it is recommended that they be performed in the order they are listed in this document to ensure orderly test progression and to ensure no tests are missed. After completion of the listed test scenarios, free-form user testing is encouraged.

Test Criteria

Tests will be considered successful if expected results of the scenarios are met. If any test scenario fails, we like testers to determine whether the overall capability has a significant flaw, the capability is adequately functional, or there is a satisfactory workaround for the failure.

Based on the overall findings of your testing, indicate whether you feel the PIC-NG is ready for release to production. Provide comments and feedback on the User Comment Form Attached.

Test Control

Users are responsible for performing all data entry for validating the results of each test scenarios. The system will be tested by using manual input of data, site navigation, and examination of content and messaging.

Test Termination/Results

Upon completion of the testing, all output generated as a result of the testing, the annotated test procedures used by the users conducting the tests, and the user test comment forms will be collected and returned to PIH for analysis. Send e-mails to: PICNG_REAC@hud.gov

Please provide your testing results to HUD by sending them to PICNG_REAC@hud.gov or (Few business member and few IT member emails)

When a bug or issue is identified, please provide the following information:

- Scenario ID(s)
- Description of the bug or issue encounter
- Steps to recreate the problem (if needed)
- Provide the JSON file(s) used (if applicable)

Business user will add the suggested change or bug to the JIRA Board to be prioritize based on their need. Bug or story identified as show stopper will be suggested to work on as the logged in JIRA. All other bug and suggestion will be placed on backlog for future MVP.

Exploratory Testing Results Instructions

We are flexible on the format of the exploratory testing results. Please provide your testing results to HUD by sending them to PICNG_REAC@hud.gov.

High Level Testing Approach

Any issues that are reported during UAT will be handled using the [Test Progress Process](#) documented in the [PIC-NG Test Plan](#).

Available Building and Unit Data

Building and Unit data has been populated in the demo environment for each PHA. Each development number start with the 5 digit PHA Code.

In the example the PHA Code is EX999.

3008	3000
Org Code	Development Number
EX999	EX999000004
EX999	EX999000102
EX999	EX999000103

To look up the real estate ID for a unit, you need to exercise the appropriate Building and Unit Web Service.

The combination of the Development Number, Building Number, Unit Number OR the Unit's Real Estate ID must be provided in the 50058 submission for public housing.

The example test data can be found on the UAT Test Plan excel spreadsheet on tabs Development Attributes, Development Attributes, and Unit Attributes.


REFERENCE INFORMATION

Submission Screens

Vendors can access the PIC-NG Portal to do the following:

50058 JSON Submission

You can use the 50058 JSON Submission page to validate or submit your JSON.


PIC-NG Portal

[HPIC00](#)
[Admin](#)
[Tribal HUD-VASH](#)
[50058](#)
[Building and Units](#)
[Reports](#)
[Logout](#)

50058 JSON Submission Demo

Please paste the JSON below:

```

null, "proratedAncientment": null, "additionalSupportForFamily": null, "ownerIncentive": null, "iss":
{"reportCategory": null, "isParticipant": null, "ssEffectiveDate": null, "administeringPha": null, "employmentStatus": null, "employmentBeginDate":
null, "isHealthBenefit": null, "isRetirementBenefit": null, "isOtherBenefit": null, "yearsOfSchool": null, "isTanfAssistance": null, "isGeneralAssista
nce": null, "isFoodStamps": null, "isMedicaid": null, "isEarnedIncomeTaxCredit": null, "childrenReceivingChildcareServices": null, "contractStartDa
te": null, "contractEndDate": null, "contractExtensionDate": null, "membersWithIndividualPlan": null, "isSelectionPreference": null, "currentAccou
ntMonthlyCredit": null, "currentAccountBalance": null, "accountAmountDisbursed": null, "isContractParticipationComplete": null, "requestForLea
seApprovalDate": null, "familyServices": {"educationTraining": {"need": null, "needMet": null, "serviceProvider": null}, "ged":
{"need": null, "needMet": null, "serviceProvider": null}, "highSchool": {"need": null, "needMet": null, "serviceProvider": null}, "postSecondary":
{"need": null, "needMet": null, "serviceProvider": null}, "jobTraining": {"need": null, "needMet": null, "serviceProvider": null}, "jobSearch":
{"need": null, "needMet": null, "serviceProvider": null}, "jobRetention": {"need": null, "needMet": null, "serviceProvider": null}, "transportation":

```

[Terms of Service](#)

50058 File Upload

You can use the 50058 File Upload page to validate or submit your JSON.

The screenshot shows the PIC-NG Portal interface. At the top left is a logo for the American Indian Housing Program. The top right corner displays "PIC-NG Portal". Below the logo is a navigation bar with links: HPIC00, Admin, Tribal HUD-VASH, 50058, Building and Units, Reports, and Logout. The main content area is titled "50058 File Upload Demo" and contains the text "Upload or validate a 50058 ascii file:". There are two radio buttons: "Validate" (selected) and "Upload". Below this is a "Choose File" button and the filename "CE_AT1_valid.asc". At the bottom center, there is a link for "Terms of Service".

Submission Status Page

You can look up a submission by entered the submission on the Submission Status.

The screenshot shows the PIC-NG Portal interface. At the top left is a logo for the American Indian Housing Program. The top right corner displays "PIC-NG Portal". Below the logo is a navigation bar with links: HPIC00, Admin, Tribal HUD-VASH, 50058, Building and Units, Reports, and Logout. The main content area is titled "Submission Results Demo" and contains the text "Please enter a submission ID:". Below this is a text input field and a blue "Submit" button. At the bottom center, there is a link for "Terms of Service".

Cron Job Schedule

Auto EOP Cron Job - this job looks to see if there is any overlapping for a tenant and ends the overlapping with a End of Participation (EOP) (action type 6).

This job is scheduled to runs everyone morning at 6:00 am Eastern.

Port Out Cron Job - this job looks to see if there is any overlapping for a tenant and ends the overlapping with a auto port out (action type 5).

This job is scheduled to run everyone morning at 6:30 am Eastern.

User Acceptance Testing Risks

- PII information should not be submitted to this environment.

Supplemental Files

The following files will be included with this document that will support the User Acceptance Testing.

Name	Description
UAT test plan.xlsx	This excel file contains all test scenarios separated by tab and a copy of the test data provided in the demo environment for reference.
AT1-New Admission.txt	This is the test submission JSON file for a new submission.
AT6-EOP.txt	This is the test submission JSON file for a End Of Participation submission.