

***US Department of Housing and Urban Development
Real Estate Assessment Center (PHI-REAC)***



**SDM Define Phase Deliverable
System Security and Privacy Plan**

for the

**Financial Assessment Subsystem – Public Housing
(FASS PH)**

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SYSTEM SECURITY AND PRIVACY PLAN

*Financial Assessment Subsystem – Public Housing
(FASS-PH) Release 8.1.0.0*

U.S. Department of Housing and Urban Development

August 2005

Revision Sheet

Release No.	Date	Revision Description
Rev. 1.0	06/10/2005	Initial Creation
Rev. 1.1	06/20/2005	Additional Requirement Added into Scope Section.
Rev. 1.2	06/21/2005	Peer Review
Rev. 1.3	06/30/2005	Incorporate IT Manager's Comments



System Security and Privacy Plan Authorization Memorandum

I have carefully assessed the System Security and Privacy Plan for the Financial Assessment Subsystem – Public Housing (FASS-PH). This document has been completed in accordance with the requirements of the HUD System Development Methodology.

MANAGEMENT CERTIFICATION - Please check the appropriate statement.

_____ The document is accepted.

_____ The document is accepted pending the changes noted.

_____ The document is not accepted.

We fully accept the changes as needed improvements and authorize initiation of work to proceed. Based on our authority and judgment, the continued operation of this system is authorized.

Freddie Harrison
FASS-PH IT Manager

DATE

Nick Miele
FASS-PH Business Program Manager

DATE

SYSTEM SECURITY and PRIVACY PLAN

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1.0 GENERAL INFORMATION

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1.1 Purpose

The purpose of the System Security and Privacy Plan is to document security considerations for the Financial Assessment Subsystem – Public Housing (FASS-PH).

1.2 Scope

The scope of the Release 8.1.0.0 is determined by requirements documented in the Release 8.1.0.0 Statement of Work.

These requirements are displayed in a table format. The column header, “#”, indicates the sequential order of the requirements. The column header, “Req. #”, indicates the requirement number noted in Release 8.1.0.0 Statement of Work Document. The column header, “Title” and “Description”, are self-explanatory.

Requirement Table			
#	Req. #	Title	Description
1	2	Line Item G3000-010	First, the DCF/Financial Statement/G3000-010 Type of Audit Report/G3000-060 & 070 will now reflect Fund Type and Opinion of the Fund rather than Program. Auditors should only be entering opinion for funds within the PHA.
2	3	View Prior Fiscal Year Submission Comments	Allow analysts to review prior year submission comments while still reviewing the current FYE submission. This will allow the analyst to review prior submission comments without navigating between multiple submissions.
3	4	Line Item G4200-010 & G4200-050	Modify Line Item 4200-050 to default to “N/A”; if and only if Line Item 4200-010 is selected “No” for Non-Major Programs audited A133, there will be no penalty when this opinion is selected.
4	5	Line Item G1102	New logic will be in place, so that the external user will not be able to enter any amount on Line Item G1102. This new methodology should begin for all 9/30/2005 submissions.
5	6.2	FASS Analyst Column	Modify the FASS Analyst column for the external user inbox only to display the name of the Business Manager or Analyst.
6	6.7	FDS Report	Repair the FDS report page to print correctly from MS Internet Explorer.
7	7.1	Storing Assessment Attachments	Change the storage of permanent file attachments from being part of the UNIX /Windows file system to being stored as Binary Large Objects (BLOB’s) in the database. All file attachments need to be stored and

			retrieved on the REACS database.
8	7.2	HTTPS on port 443 (default)	Remove any instances of http port in ColdFusion templates and replace http port with the relative server.
9	7.7	WASS – Guest Checkbox	WASS will remove the guest checkbox on the Login interface. Have the system automatically recognized a guest user.
10	7.9	Remove Identity Type from the Participant Assessment Table.	Remove identity attribute from the column definition in the assessment table and replace the attribute with a stored procedure to find the sequential primary key value.
11	7.10	LOCCS/HUDCAPS Storing Data.	Remove storing Line of Credit Control System/ HUD Central Accounting Processing System (LOCCS/HUDCAPS) data in permanent tables and pipe the HOCCS/HUDCAPS data directly into the REAC database.
12	8	Alter Financial Review Instructions	On the Review Submission Page under the Financial Statement tab modify, “Government-Wide or General Purpose Financial Statement,” instructions to read, “Government-Wide and or Fund Financial Statement.”

1.3 System Overview

The FASS-PH is a subsystem of the Real Estate Assessment Center System (REACS). FASS-PH will help enable centralized financial analysis that can be used to identify where HUD should focus its limited resources to improve service delivery and manage its housing programs proactively. To achieve this goal, the following objectives have been identified:

- Gather standard financial data pertaining to each Public Housing Agency (PHA) and Section 8 Entity by combining standard fiscal audit information with reporting and compliance factors as defined by the Single Audit Act;
- Assess the financial condition of all PHAs and Section 8 Entities using a comprehensive protocol;
- Assess financial risk using standard financial data;
- Determine an objective, numerical score for each PHA and Section 8 Entity using standard protocols for financial performance review;
- Enable HUD staff to focus on the most troubled PHAs and Section 8 Entities based on the risk associated with the score;
- Eliminate or address existing material weaknesses identified through IG Audits. This includes mitigating potential risks;
- Support HUD's mission;
- Implement OMB Circular A-123 compliant policies and procedures;
- Support HUD's eGov Strategic Plan;
- Automate paper based forms to support the Government Paperwork Elimination Act (GPEA);
- Provide payback as early in the system lifecycle as possible;
- Provide significant benefits to HUD;
- All new functionality meets the Rehabilitation Act Section 508 requirements.

The following table identifies the general environment for the development of FASS-PH:

System Environment Table	
Environment	System / Organization
System	Real Estate Assessment Center System (REACS)
Subsystem	Financial Assessment Subsystem - Public Housing (FASS-PH)
Responsible Party Description	
Sponsor	Public and Indian Housing – Real Estate Assessment Center (PIH-REAC)
Requirements	Avineon Inc.
Design	Avineon Inc.
Development	Avineon Inc.
System and Integration	Avineon Inc., DCG
Testing	
User Acceptance Testing	To be determined by PIH-REAC Management
Deployment	Avineon Inc., DCG
Maintenance	Avineon Inc., DCG
System Environment, Code, and Category: and Operational Status Description	
PCAS	307820
System Code	P093
System Category	Non-Major
Operational Status	Operational
System Environment	Web Based

The following table identifies and briefly describes the different users of FASS-PH.

User Environment	
Public Housing Agency (PHA)	PHAs and Section 8 Entities use FASS-PH to annually submit unaudited and audited financial data to the REAC for analysis. A PHA may also use the system to request submission extensions and to review the status of its financial submission(s).
Agents	A PHA may delegate the task of submitting financial information to its agent(s). Regardless of who submits its financial information, the PHA is ultimately responsible for the timeliness and accuracy of the submission.
Independent Public Accountant (IPA)	An IPA is responsible for reviewing and verifying audited submission data prior to a PHA's submission to the REAC. Again, the PHA is ultimately responsible for the timeliness and accuracy of the submission.
REAC PHA Financial Assessment Team	The REAC PHA Financial Assessment Team will use FASS-PH to perform its critical business processes, including the assessment of the financial condition of PHAs.
Other HUD Users	All other HUD users will have read-only access to FASS PH in order to review PHA financial data. This includes field office and other HUD headquarters users.

1.4 Project References

- *HUD Handbook 2400.24., Rev. 2, ADP Security Program*
- *Real Estate Assessment Center (REAC) Security Plan - 11/19/99*
- *FASS-PH Feasibility Study – August, 2001*
- *FASS-PH Risk Analysis –August, 2001*

1.5 Acronyms and Abbreviations

The following table defines terms and acronyms used throughout this document.

Term	Definition
ACWP	Actual Cost of Work Performed
APP	Annual Performance Plan
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BRD	Business Requirements Document
CCB	Change Control Board
CCD	Change Control Board
CDR	Critical Design Review
CFDA	Catalog of Federal Domestic Assistance
CI	Configuration Item
CIO	Chief Information Officer
CLIN	Contract Line Item Number
CM	Configuration Management
CMM	Capability Maturity Model
CMMI	Capability Maturity Model Integrated
CMP	Configuration Management Plan
CO	Contracting Office
COR	Contracting Office Representative
COTS	Commercial Off The Shelf
CPI	Cost Performance Index
CR	Change Request
CSCI	Computer Software Configuration Item
CV	Cost Variance
DB	Database
DCF	Data Collection Form
DCG	Development Coordination Group
DMM	Deliverable Management Module
DOA	Date of Award
DR	Design Review
EAC	Estimate At Completion
EIN	Employer Identification Number
ETC	Estimate To Complete
EV	Earned Value

Term	Definition
EVA	Earned Value Analysis
EVM	Earned Value Management
FASS	Financial Assessment Subsystem
FASS-PH	Financial Assessment Subsystem – Public Housing
FCA	Functional Configuration Audit
FDS	Financial Data Schedule
FEDSIM	Federal Systems Integration and Management Center
FOIA	Freedom Of Information Act
FQR	Formal Qualification Review
FRD	Functional Requirements Document
FY	Fiscal Year
FYE	Fiscal Year End
GAAP	Generally Accepted Accounting Principles
GAGAS	Generally Accepted Government Auditing Standards
GAO	Government Accounting Office
GASB	Governmental Accounting Standards Board
GPEA	Government Paperwork Elimination Act
GSA	General Services Administration
GTM	Government Technical Monitor
HA(s)	Housing Authority
HTML	Hypertext Markup Language
HUD	Department of Housing and Urban Development
HUD OIG	HUD Office of Inspector General
HUDCAPS	HUD Central Accounting Processing System
HUDWeb	HUD's Intranet Web Site
ICD	Interface Control Deliverable
IG	Inspector General
IG	Inspector General
IPA	Independent Public Accountant
IPR	In Progress Reviews
ISG	Internet Services Group
IT	Information Technology
IV&V	Independent Verification & Validation
JAD	Joint Application Development
LOCCS	Line of Credit Control System
LPF	Late Presumptive Failure
MF	Multi-Family
NASS	Integrated Assessment Subsystem
NDS	Non-Developmental Software
ODC	Other Direct Costs
OMB	Office of Management and Budget
PASS	Physical Assessment Subsystem
PCA	Physical Configuration Audit
PD&R	Policy Development and Research
PDR	Preliminary Design Review
PH	Public Housing
PHA	Public Housing Agency/Public Housing Authority

Term	Definition
PHAS	Public Housing Assessment System
PIH	Public and Indian Housing
PIH-REAC	Public Indian Housing - Real Estate Assessment Center
PM	Project Manager
PMC	Project Monitoring and Control
PMP	Project Management Plan
PNR	Problem Notification Report
POC	Points of Contact
PP	Project Plan
PP&O	Project Planning & Oversight
PPQA	Product & Process Quality Assurance
PR	Problem Reports
PRR	Product Readiness Review
QA	Quality Assurance
QAG	Quality Assurance Guidelines
QAP	Quality Assurance Plan
QASS	Quality Assurance Subsystem
RAF	Risk Analysis Form
RASS	Residential Assessment Subsystem
REAC	Real Estate Assessment Center
REACS	Real Estate Assessment Center System
RM	Risk Management
RR	Requirements Review
SAC	PHAS invalidation action code
SCI	Software Configuration Item
SCR	Software Change Request
SDD	Software Design Description
SDF	Software Development File
SDL	Software Development Library
SDM	Software Development Methodology
SDP	System Decision Paper
SDR	Software Design Review
SMP	Software Measurement Plan
SOW	Statement Of Work
SPI	Schedule Performance Index
SQA	Software Quality Assurance
SQL	Standard Query Language
SR	Specification Review
SRS	Software Requirements Specification
SSDD	System/Subsystem Specification
SSR	Software Specification Review
SSS	System/Subsystem Specification
SV	Schedule Variance
SW	Software
TAC	Technical Assistance Center (formerly the Customer Service Center)
TBD	To Be Defined
TOR	Task Order Request

Term	Definition
TOS	Tracking & Ordering System
TRB	Technical Review Board
TRR	Test Readiness Review
UAT	User Acceptance Testing
UDF	Unit Development Folder
UFI	Unique Fee Accountant Identifier
UFRS	Unified Financial Recording Standards
UII	Unique IPA Identifier
WASS	Web Access Security System
WBS	Work Breakdown Structure
WDDX	Web Dynamic Exchange
XML	eXtensible Mark-up Language

1.6 Points of Contact

1.6.1 Information

Contact Name	Organization	Position	Telephone Number
Nick Miele	PIH-REAC	FASS-PH Business Program Manager	202-475-8788
Steve Bolden	PIH-REAC	FASS-PH Assessment Manager for Systems Operations	202-475-8706
Freddie Harrison	PIH-REAC	FASS-PH IT Manager	202-475-8753
Keith Bennett	Avineon	Project Manager	202-475-8903
Joneff Chung	Avineon	FASS-PH Requirements and Testing Lead	202-475-8889
Surafiel Berek	Avineon	FASS-PH Development Lead	202-475-8828
Ashraf Hasan	Avineon	FASS-PH Maintenance Lead	202-475-8898

1.6.2 Coordination

The following organizations must be coordinated with to successfully implement the FASS-PH releases:

Organization	Support Function
PIH-REAC	Business Requirements Support, Project Management
Avineon	Requirements, Design, Development, Testing, Installation, Deployment, Maintenance, Technical Support /Operations, Project Management
DCG	Customer Support/Operations, Development Coordination, Integration Test Coordination, Deployment, and Maintenance
HUD IT	Implementation Coordination
FASS-PH Lab	Business Requirements Support
WASS	Security
NASS	Integration

1.7 Assumptions and Dependencies

The U.S. Department of Housing and Urban Development may grant limited system access to employees, contractors, clients/customers, and program participants who have a need to utilize the Department's automated information resources. Access to the Department's automated data processing (ADP) resources is for official use only. As a condition of receiving access, it is required that the Department's system security policies be made aware of and are abided by. The purpose of these policies is to safeguard the Department's valuable information resources.

The system user identification (USERID) and password issued are to be used solely in connection with the performance of responsibilities in support of the HUD mission and may not be used for personal or private gain. The user will be responsible for the confidentiality of the assigned information and accountable for all activity with a USERID. Further, it is agreed upon that this confidential USERID/password pair will not be provided to another user upon leaving the employment of the Department. Additional rules of the system follow:

- (a) Log-off the system when leaving the system/workstation area;
- (b) Refrain from leaving written passwords in the workstation area;
- (c) Avoid creating a personal password that can be easily associated with you;
- (d) Avoid posting printouts of sensitive output data on bulletin boards;
- (e) Avoid leaving system output reports unattended or unsecured;

2.0 SECURITY CONSIDERATIONS

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2.1 Information Sensitivity

2.1.1 Applicable Laws

- Privacy Act, 1974, P.L. 93-579, 5 U.S. Code 552a
- OMB Circular A-123–Directive on Internal Control Systems
- OMB Circular A-127–Directive on Financial Management of Government Resources
- OMB Circular A-133–Audits of States, Local Governments, and Non-Profit Organizations. Revised June 24, 1997
- Computer Security Act of 1987
- “Uniform Financial Reporting Standards for HUD Programs; Final Rule,” 24 CFR Part 5, et. al., 9/1/1998.
- “Public Housing Assessment System Final Rule,” 24 CFR Parts 901 and 902, 9/1/1998.
- “Public Housing Assessment System (PHAS) Amendments to the PHAS; Proposed Rule,” 25 CFR Part 902, 6/22/1999.
- HUD Handbook 2400.24–ADP Security Program
- HUD Handbook 2400.15, 2/18/1992.

2.1.2 Need for Protective Measures

All of the data within the REACS must be carefully protected from unauthorized, unanticipated, or unintentional modification. The need to protect the integrity of the data, however, must be balanced against the equally compelling need of accessibility to the data on a timely basis.

2.1.3 Sensitivity

The data contained in, and processed by, the REACS and AFS Database is sensitive in nature, scoring a high or moderate sensitivity assessment in the categories of confidentiality, integrity, and/or availability.

2.1.4 Security Risk

- **Physical and Environmental Protection**
The Computer Services Security Officer (CSSO) maintains the physical security of onsite and offsite computer facilities; and the offsite backup facility; the Regional ADP Security Officers (RADPSO) and the Field ADP Security Officer perform the same function in the field. These

officers enforce the use of locks, guards, and badges, and similar administrative measures to control access to computers and related equipment. Safeguards were implemented to protect the facilities housing the computers, related equipment, and their contents from damage by accident, fire, and environmental hazards.

The hardware used to develop, test, and operate REACS is in a secure area under control of the Computer Services Group of the Office of Information Technology (IT). Access to REACS and AFS is protected by user identification codes and passwords, linked to user profiles that restrict access to necessary functions.

REAC Headquarters is located in the Portal's office building. REAC's Headquarters can only be accessed by employees with a security access card; guests must be signed in by a HUD employee and escorted to and from destinations within the building. A security access card is also necessary to access the building and the elevators during non-business hours.

A contract security guard service is on duty from 6:30 p.m. in the evening to 7:00 a.m. the next morning, Monday through Friday and all day Saturday, Sunday, and holidays. The security guard is stationed in the north lobby and periodically makes rounds through the building.

Each elevator in the Portal's building is equipped with a telephone, located to the right of the doors, in case of an emergency. When the handle on the telephone is depressed, it automatically rings at a central monitoring center operated by the building management.

- **Production Controls**

Before the release of each module, detailed operational instructions are provided in the form of an operations manual. The operations manual will identify all operations and their input, output, application backup and recovery procedures and schedules, and other required resources.

- **Business Resumption (Contingency Planning)/Incident Response**

In the case of system disruption, the system owner identifies priorities and functions of system services and assigns these key responsibilities to personnel. Logging and recovery mechanisms prevent lost or damaged data. The system maintains transaction starts, terminations, and commits. These checkpoint mechanisms indicate that all committed transactions up to the checkpoint are recorded and their updates are permanently entered into the database. Checkpoints are supported by Sybase, the Database Management System (DBMS) used by REACS.

Backup and contingency plans are included in the HUD ADP Business Resumption Plan (BRP). REACS data files, source code, and load modules are copied nightly and off loaded to an off-site location. This procedure provides the ability to restart operations at an alternative site in case of a catastrophe. The HUD SDM Documentation Standards require that the BRP be periodically tested by simulated disruptions.

- **Audit and Variance Detection**

The Systems Administrator will review the audit trails on a regular basis. An independent review of records and activities to detect departures from established policies, rules, and procedures will be conducted.

- **Application Software Maintenance Controls**

REACS software is maintained and backed up in a controlled environment. Strict version control and user certification procedures ensure the integrity of the software. REAC software and all related documents must be stored in PVCS Version Manager. REAC has established a working Configuration Control Board (CCB), which meets weekly to review all changes, updates, and additions to each subsystem and investigates how these actions may affect other subsystems within REAC.

2.2 System Security Measures

2.2.1 Control Measures

- **Assignment of Security Responsibility – In place**

Security responsibility for REACS application, operation, and access is assigned to the REAC Security Officer and REAC IT. Security responsibility for the machine on which REACS resides is assigned to HUD IT Computer Services Group (CSG).

- **Personnel Security – In place**

Personnel must be granted authorization to access REACS and AFS as dictated by the standard HUD clearance procedures for employees and contractors. Personnel accessing REACS and AFS require a user ID and password and are limited to processing and data pertaining to their specific duties. Only personnel authorized to grant access to the application and those empowered to concur with transactions or modify security tables are subject to full background investigations. This process is done through the HUD Office of Human Resource (OHR) Personnel Security Branch.

- **Interconnections with other systems - In place**

It is absolutely essential that interconnections with other systems safeguards be in place. Impostor terminals may be attached to communication lines and used to input fraudulent transactions, alter on-line data files, or otherwise manipulate application processing. Also, unauthorized terminals may be used to gain access to dial-up facilities and introduce fraudulent transactions or adjustments.

System passwords are verified to be acceptable prior to authorization of interconnection. LAN passwords in conjunction with a sign-on procedure are required to use any of the REACS subsystems.

Secured encryption and authentication algorithms currently exist for internet data transmissions. The same protocol, HTTPS, will be adopted for the uploading and downloading processes via the HUDWeb site created for the transmission of REAC data.

2.2.2 Security Awareness and Training

The Computer Security Act of 1987 requires each user to be trained in ADP security fundamentals. All users accessing sensitive data are required to complete the ADP security training. Required ADP Security training can be satisfied with online review of the security user

guide available via HUDweb. Completion of this course fulfills the required training and permits the user to be issued a User ID and password.

The REAC provides periodic training in computer security awareness and accepted computer security practice for all employees and contractors who develop, manage, operate, or use computer systems. The objectives of the training are:

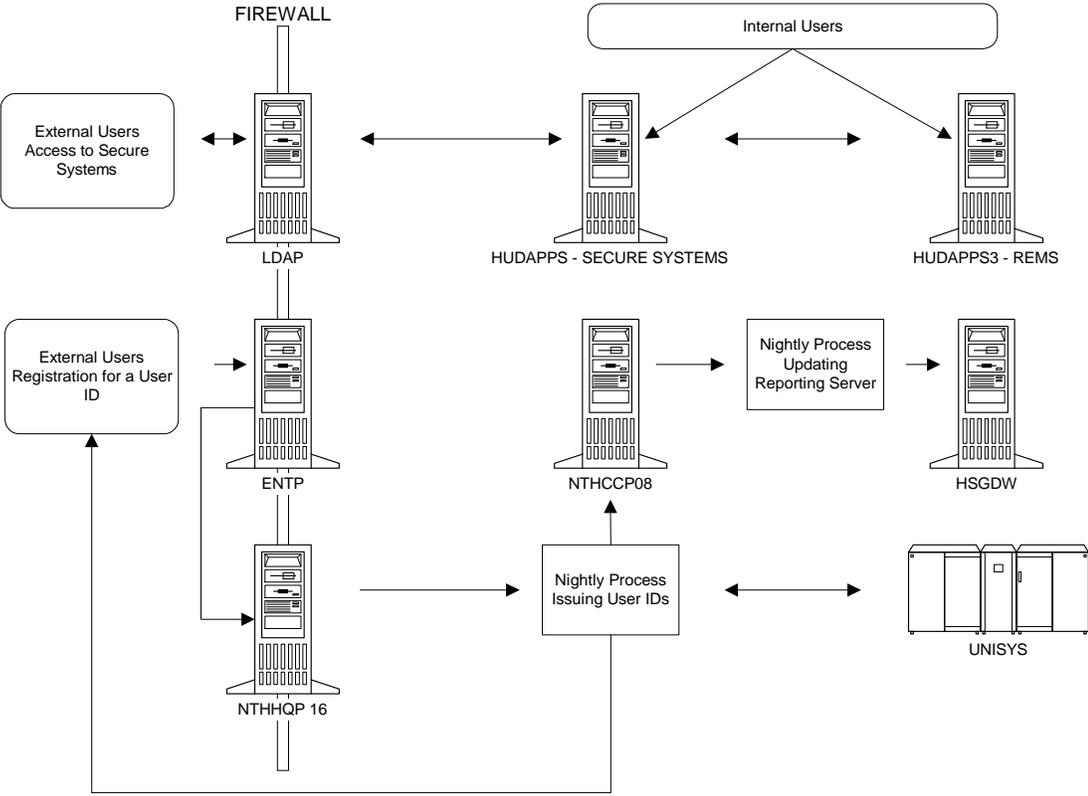
- To ensure employee awareness of threats to and vulnerabilities of computer systems
- To promote the use of improved security practices

2.2.3 System Security

Security Specifications–In Place

The Web Access Security System (WASS), which is comprised of Secure Connection and Secure Systems, is the application that controls system security for HUD Internet and Intranet applications. WASS – Secure Connection is utilized by HUD’s business partners to register for a user ID and access the HUD systems environment via the Internet. Once a business partner successfully registers for a user ID, he/she can establish an encrypted connection to the HUD systems environment via a Netscape Enterprise Server.

WASS - Secure Systems is accessed by HUD’s business partners via Secure Connection. HUD staff access Secure Systems via HUDweb, HUD’s Intranet, by logging into the HUD network. Secure Systems enables users to access HUD Internet and Intranet applications and administer security rights. Upon logging into the HUD systems environment, the Secure Systems main page displays with links to the systems to which the user has access. If a user has the authority to administer system security, he/she will be provided with links to the Secure Systems security administration pages. These pages enable the user to administer system security in the context of system maintenance, user id maintenance, business partner maintenance, multifamily housing property assignments, Public Housing Authority (PHA) assignments, assistance contract assignments, and password changes. The following diagram illustrates the architecture for WASS.



Interfaces

FASS-PH also interfaces with the HUD Enterprise Real Estate Management System (HEREMS) database. The HEREMS database contains multifamily owner and property information that is used to validate the user's identity and their association with the owning entity and property(s). The REMS (Real Estate Management System) application will reference information collected by FASS-PH regarding annual financial statement submissions, and assessment information. This information will be available via the REMS application for use by Multifamily Project Managers.

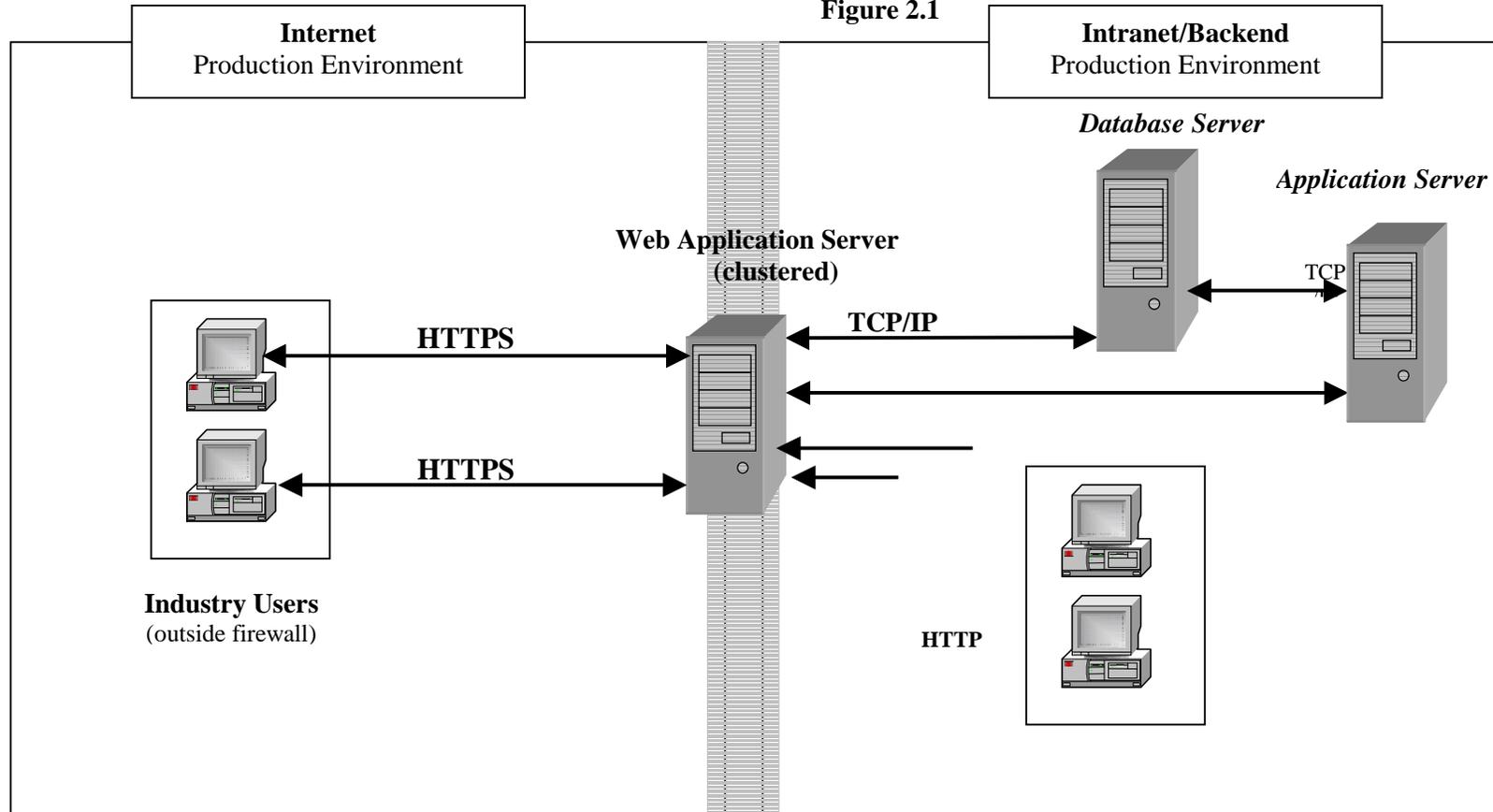
System security for HUD Internet and Intranet applications are controlled by WASS. WASS enables industry business partner access to HUD Internet applications. WASS is an application that centralizes system maintenance, user profile and role assignments, and property assignment maintenance for the purposes of system security. Maintaining user profiles, role assignments, and property assignments in WASS is necessary for both business partners and HUD users to access FASS-PH and perform business functions.

FASS-PH consists of an Internet and an Intranet component. Industry business partners use the Internet component of FASS-PH to submit AFS data and administrative requests to REAC. REAC staff and other HUD users utilize the Intranet component of FASS-PH to view the AFS data and its associated assessment. Figure 2.1 is a graphical representation of the system environment.

Access Control Tables

FASS-PH utilizes Role Profiles, Action Codes and User Roles within the database table structure to enforce the security requirements and restrict access to the data to only authorized users. The mfs_role_profile table (see figure 2.2) defines the role in terms of one or more system actions. The mfs_action table (see figure 2.3) is a reference table of system actions that are used to define user rights to Secure Systems data and functionality. The mfs_role table (see figure 2.4) is a functional position that is used to categorize system users.

Figure 2.1



Application Server

Database Server

Web Application Server (clustered)

Computer Model: Compaq 5000
CPU: 2 at 200 MHz
RAM: 256 MB
Hard Disk: 9 GB
OS: Windows NT 4.0
Ports: Inside of firewall

Computer Model: Dell 8450
CPU: 8 at 700 MHz
RAM: 4 GB
Hard Disk: 250 GB
Database: Sybase ver. 11.9.2
OS: Windows 2000
Ports: Inside of firewall

Computer Model: Sun Enterprise 3000
CPU: 6 at 250 MHz
RAM: 2 GB
Hard Disk: 4.2 GB
Software: Netscape Enterprise Server 3.6.2 and Cold Fusion® Version 4.51
OS: Solaris 5.6
Ports: Inside and outside of the firewall

Figure 2.2

EXTERNAL mfs_role_profile

fk_action_code	fk_system_id	fk_role_code	last_update_date
AUC	FASSUB	CPC	Oct 31 2000 12:00AM
VPS	FASSUB	CPC	Feb 20 2001 12:00AM
EXT	FASSUB	SUB	Jan 29 2000 12:00AM
RES	FASSUB	SUB	Jan 29 2000 12:00AM
STB	FASSUB	SUB	Jan 29 2000 12:00AM
SUB	FASSUB	SUB	Nov 15 1998 12:00AM
VPS	FASSUB	SUB	Jan 29 2000 12:00AM
WAV	FASSUB	SUB	Jan 29 2000 12:00AM

INTERNAL mfs_role_profile

fk_action_code	fk_system_id	fk_role_code	last_update_date
RDO	FASS	BCA	Apr 11 2001 12:00AM
RDO	FASS	BEN	Feb 15 1999 12:00AM
RDO	FASS	BPM	Feb 15 1999 12:00AM
RDO	FASS	CA	Apr 11 2001 12:00AM
HCR	FASS	CTR	Jan 29 2000 12:00AM
HCS	FASS	CTR	Jan 29 2000 12:00AM
HCW	FASS	CTR	Jan 29 2000 12:00AM
RD1	FASS	CTR	Oct 28 1999 12:00AM
RDO	FASS	EA	Feb 15 1999 12:00AM
RDO	FASS	EAN	Feb 15 1999 12:00AM
RDO	FASS	ECC	Feb 15 1999 12:00AM
RDO	FASS	EHA	Oct 9 2000 4:46AM
RDO	FASS	EHQ	Feb 15 1999 12:00AM
RDO	FASS	ELA	Oct 9 2000 4:46AM
RDO	FASS	EM	Feb 15 1999 12:00AM
RDO	FASS	ETL	Oct 9 2000 4:46AM
RDO	FASS	HQV	Jul 12 2000 12:00AM
RDO	FASS	MFD	Feb 15 1999 12:00AM
RDO	FASS	PA	Feb 15 1999 12:00AM
RDO	FASS	PM	Feb 15 1999 12:00AM
HCR	FASS	RFM	May 5 2000 12:00AM
HCS	FASS	RFM	May 5 2000 12:00AM
HCW	FASS	RFM	May 5 2000 12:00AM
ODL	FASS	RFM	May 5 2000 12:00AM
ODR	FASS	RFM	May 5 2000 12:00AM
RD1	FASS	RFM	May 5 2000 12:00AM
RSB	FASS	RFM	May 5 2000 12:00AM
RSP	FASS	RFM	May 5 2000 12:00AM
RWV	FASS	RFM	May 5 2000 12:00AM
RXT	FASS	RFM	May 5 2000 12:00AM

fk_action_code	fk_system_id	fk_role_code	last_update_date
UD1	FASS	RFM	Feb 9 2001 12:00AM
UPD	FASS	RFM	May 5 2000 12:00AM
HCR	FASS	RFN	May 5 2000 12:00AM
HCS	FASS	RFN	May 5 2000 12:00AM
HCW	FASS	RFN	May 5 2000 12:00AM
ODL	FASS	RFN	May 5 2000 12:00AM
ODR	FASS	RFN	May 5 2000 12:00AM
RD1	FASS	RFN	May 5 2000 12:00AM
RSB	FASS	RFN	May 8 2000 12:00AM
RWV	FASS	RFN	May 5 2000 12:00AM
RXT	FASS	RFN	May 5 2000 12:00AM
UD2	FASS	RFN	Feb 9 2001 12:00AM
UPD	FASS	RFN	May 5 2000 12:00AM
HCR	FASS	RFS	May 5 2000 12:00AM
HCS	FASS	RFS	May 5 2000 12:00AM
HCW	FASS	RFS	May 5 2000 12:00AM
ODL	FASS	RFS	May 5 2000 12:00AM
ODR	FASS	RFS	May 5 2000 12:00AM
RD1	FASS	RFS	May 5 2000 12:00AM
RSB	FASS	RFS	May 8 2000 12:00AM
RWV	FASS	RFS	May 5 2000 12:00AM
RXT	FASS	RFS	May 5 2000 12:00AM
UD2	FASS	RFS	Feb 9 2001 12:00AM
UPD	FASS	RFS	May 5 2000 12:00AM
HCR	FASS	RFW	May 5 2000 12:00AM
HCS	FASS	RFW	May 5 2000 12:00AM
HCW	FASS	RFW	May 5 2000 12:00AM
ODL	FASS	RFW	May 5 2000 12:00AM
ODR	FASS	RFW	May 5 2000 12:00AM
RD1	FASS	RFW	May 5 2000 12:00AM
RSB	FASS	RFW	May 8 2000 12:00AM
RWV	FASS	RFW	May 5 2000 12:00AM
RXT	FASS	RFW	May 5 2000 12:00AM
UD2	FASS	RFW	Feb 9 2001 12:00AM
UPD	FASS	RFW	May 5 2000 12:00AM
RDO	FASS	SCA	Apr 11 2001 12:00AM
RDO	FASS	SPM	Feb 15 1999 12:00AM
RDO	FASS	TTQ	Feb 15 1999 12:00AM
RDO	FASS	TVQ	Feb 15 1999 12:00AM

Figure 2.3

EXTERNAL mfs_action

action_code	fk_system_id	action description	action_internet_ flag	action status
ADM	FASSUB	Administration	N	A
AUC	FASSUB	Auditor Certification	Y	A
COR	FASSUB	Coordinator	Y	A
EXT	FASSUB	Extension Request Submission	Y	A
RES	FASSUB	Resubmission Request Submission	Y	A
STB	FASSUB	Review Request Status	Y	A
SUB	FASSUB	Submit an AFS	Y	A
VPS	FASSUB	View Previous Year AFS Data Subm	Y	A
WAV	FASSUB	Waiver Request Submission	Y	A

INTERNAL mfs_action

action_code	fk_system_id	action description	action_internet_ flag	action status
ADM	FASS	Administration	N	A
ECR	FASS	Enforcement Center Referral Processing	N	A
HCR	FASS	Record Hard Copy AFS Receipt	N	A
HCS	FASS	Reject Hard Copy Statement	N	A
HCW	FASS	Record Hard Copy Waiver Receipt	N	A
ODL	FASS	Process Overdue Letters	N	A
ODR	FASS	Process Overdue Referrals	N	A
RD1	FASS	Read-Only (FASS-MF)	N	A
RDO	FASS	Read Only	N	A
RSB	FASS	Approve Resubmission	N	A
RSP	FASS	Process Resubmission Request	N	A
RWV	FASS	Review Waiver Request	N	A
RXT	FASS	Review Extension Request	N	A
UD1	FASS	QA Review for Managers	N	A
UD2	FASS	QA Review for Analysts	N	A
UPD	FASS	Update	N	A

Figure 2.4

EXTERNAL mfs_role

role_code	role_description	primary_system_id	hud_org_id	ca_rfp_code
CPC	CPA Certifier	FASSUB	NULL	N
SUB	AFS Submitter	FASSUB	NULL	N

INTERNAL mfs_role

role_code	role_description	primary_system_id	hud_org_id	ca_rfp_code
CTR	FASS-MF LAB Contractor	FASS	REAC	N
RFM	REAC Financial Manager for MF Projects	FASS	REAC	N
RFN	FASS-MF Analyst for NE Region	FASS	REAC	N
RFS	FASS-MF Analyst for South Region	FASS	REAC	N
RFW	FASS-MF Analyst for West Region	FASS	REAC	N