

Chapter 5

Interface Application Design

CPAIS must interface with the Foundation Financial Information System (FFIS), the GSA STAR Billing System and the Federal Real Property Profile, and the Forest Service INFRA System. The role of the interfaces is to exchange data in a prescribed data format, edit and validate the data, and pass the data to and from the CPAIS environment. CPAIS will support both inbound and outbound interfaces. This section of the CPAIS Detailed Design Document describes these interfaces and provides detailed technical design specifications for each.

5.1 FOUNDATION FINANCIAL INFORMATION SYSTEM

As a subsidiary ledger, CPAIS will interface with FFIS on a monthly basis through a two-way interface. The following conceptual overview describes the sequence of events and relationship between CPAIS and FFIS.

The FFIS to CPAIS interface program will send USDA owned-property accounting transactions from the FFIS to CPAIS.

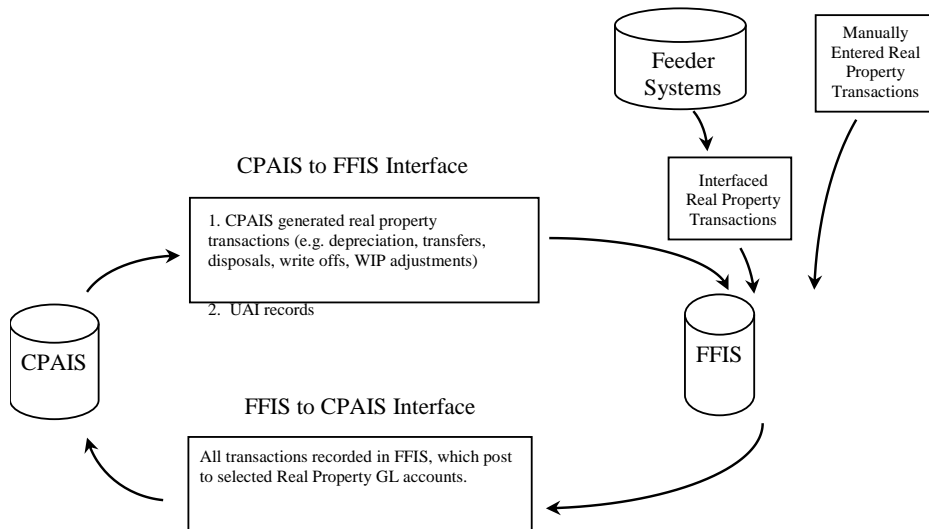
The CPAIS to FFIS interface program will send real property transactions from CPAIS to FFIS, such as UAI creation, balance sheet transfers (work-in-progress adjustments), transfers to or from other Federal agencies, depreciation expense, and the disposition of assets.

The following is a high-level summary of interactions between CPAIS and FFIS:

- ◆ A shell record is established in CPAIS.
- ◆ A Unique Asset Identifier (UAI) is sent to FFIS to update the UAIT.
- ◆ The project (PROJ) table in FFIS is updated with the UAI record. The PROJ table is used to link the UAI to the Job Code.
- ◆ The FFIS to CPAIS interface selects the financial transactions based on real property general ledger accounts, derives the UAI, and sends the journal information to CPAIS.
- ◆ Once the asset is placed in service, the CPAIS to FFIS interface sends CPAIS-generated Work-In-Progress (WIP) adjustments to FFIS.

- ◆ The CPAIS to FFIS interface sends subsequent transactions to FFIS (i.e., adjustments, depreciation, disposals) for the life of the asset.

Figure 5-1 FFIS Interface Conceptual Flow



5.1.1 CPAIS to FFIS Interface

CPAIS will interface with FFIS on a nightly basis to send Unique Asset Identifier (UAI) transactions and on a monthly basis for depreciation, disposals, transfers and other financial transactions.

Detailed information on this interface is provided in the following document:

*U.S. Department of Agriculture
Corporate Property Automated Information System to Corporate Financial System*

(CPAIS – FFIS) Interface Detailed Design

August 29, 2003

Final – Version 1.0

5.1.2 FFIS to CPAIS Interface

The FFIS to CPAIS interface program executes monthly to transmit Journal information pertaining to real property and executes once for each agency’s production application.

In addition to journal data, information in this file is obtained from online tables to ensure CPAIS has the information required for update and reporting purposes. This interface process also uses a standard FFIS Utility, UTCIAO, to add the header and trailer records to the interface file.

Detailed information on this interface is provided in the following:

*U.S. Department of Agriculture
Corporate Financial System to Corporate Property Automated Information System
(FFIS – CPAIS) Interface Detailed Design
January 30, 2004
Revised Final – Version 2.0*

5.1.3 FFIS Enhancements

For FFIS to be able to receive and accept transactions from CPAIS, some enhancements to FFIS had to be made. The following is a high-level summary of these enhancements:

- ◆ Modifications to the Project Table (PROJ) screen that allow the user to record the UAI and GL Post Type for a real property asset.
- ◆ A new GL Post Type Table (GLPT) that stores GL Post Types and a new table, Unique Asset Identifier Table (UAIT), that stores UAI data. FFIS will edit the UAI and GL Post Type data entered on the PROJ table screen against UAIT and GLPT.
- ◆ Additional edits to the Accounting Entries Definition Table (ACED) to validate the GL Post Types against GLPT.
- ◆ To systematically derive different posting models by using the General Ledger (GL) Post Type, all agencies must use FFIS Job Number as an accounting element for real property related financial transactions.
- ◆ A field length of 30 positions is sufficient to contain all Unique Asset Identifier (UAI) values for all USDA agencies.
- ◆ The new FFIS Unique Asset Identifier Table (UAIT) is updated through the CPAIS to FFIS interface and is common to all agency applications.

The details of the design and components of the FFIS Enhancement for CPAIS Processing are provided in the following document:

*U.S. Department of Agriculture
Corporate Financial System (FFIS) Enhancements for Corporate Property Automated
Information System (CPAIS) Processing
Detailed Design
August 29, 2003
Final - Version 1.0*

5.2 SYSTEM TRACKING AND ADMINISTERING REAL-PROPERTY INTERFACE

This section describes the design of the interface between the GSA System for Tracking and Administering Real property (STAR) and CPAIS. This interface will update CPAIS on a monthly basis with the rental bills for GSA Assignments. CPAIS users will be able to view monthly bills. The system will identify and reconcile discrepancies between GSA rent bills and the amounts owed based on lease agreement information. Users can display this information for review or print a report. Users will be able to report and resolve billing discrepancies as they currently do. CPAIS will be populated with basic property information about the GSA Assignments during data conversion.

5.2.1 Processing

GSA provides a mechanism for review of rent bills via the Foundation Information for Real Property Management (FIRM) file on floppy diskettes. FIRM is an automated real property asset management system developed in 1986. It has been provided at no cost to federal agencies. GSA has determined that it is in the best interest of the Government to discontinue its support of the FIRM product at the end of Fiscal Year 2003. The FIRM rent file is an extract from the system that is provided to the agencies of the Government that have real property assignments from GSA. The CPAIS database will be populated with initial/static data about the properties from this system during data conversion.

The recurring monthly rent bill for agencies and bureaus of the USDA are published on the GSA website (<https://www.pbs-billing.gsa.gov/ROW/>). To populate CPAIS database with each agency's or bureau's rent bill data, the bill files will be downloaded from the site manually. These files will be saved in a comma-delimited format file. The files will be used to update the CPAIS Table II_GSA_RENT_BILL.

Responsibilities of the Parties (from MOU)

GSA PBS agrees to:

- ◆ Provide by the 15th of each month a CD with the USDA monthly data in the STAR database. The data will be provided in the FIRM STAR rent file format and contain both monthly bills and adjustments
- ◆ By the end of this fiscal year (FY 2004), provide an automated means of downloaded the USDA monthly data in the STAR database. The data will be available for download from STAR by the 15th of each month. The data will be provided in the FIRM STAR rent file format and contain both monthly bills and adjustments.

USDA agrees to:

- ◆ Receive and process the USDA monthly data from STAR. The USDA monthly data will include all billings and adjustment data for the month. Both billing and adjustments will be loaded into the CPAIS database the 30th day of the month.
- ◆ By the end of this fiscal year (FY 2004), develop a process to automatically download the USDA monthly data from STAR. The downloaded data will be loaded into the CPAIS database as described in the previous bullet.

Once the files have been downloaded, at a specified time of the day/night, a script/procedure will be automatically triggered to upload the data into the CPAIS database. This trigger will be activated by designation of date and time or by a sensor detecting that all web files have been downloaded. The procedure will count the number of records received and uploaded for each agency. These counts will be used to verify that all records that have been received are accounted for. The automated trigger will activate an Oracle utility that imports the comma-delimited files, uploads the data and populates appropriate tables in the CPAIS environment. In order to ensure an error free transition, the uploading of data will take place in two stages.

A staging environment will be developed to receive the initial load. This staging area is a temporary instance of the database. The data from download files are loaded in this database and appropriate checks and reconciliation is performed. Once completeness of the transition and quality of data has been established, the data from the staging area is loaded in the production instance of the database.

Additional Oracle procedure(s) will be developed to ensure that for each rent record:

- ◆ There exists a valid property record
- ◆ The property is a GSA Assigned/Leased property
- ◆ A proper and valid GL account has been established
- ◆ A reconciliation function is performed.

A report will be generated to show any deviations and discrepancies that are found. This report is generated for each agency and emailed to a designated user automatically. A confirmation email will be sent to all agencies whose records have been successfully downloaded and included in CPAIS. This email will indicate the number of records received.

The reconciliation function determines that the amount of rent from the bill matches the amount of rent owed for that month based on information from Lease and Occupancy agreements. A report to show discrepancies between CPAIS records and rent records, if such discrepancies are found, will be generated.

The downloaded files are to be maintained for future audit and traceability. The name of the archive file is to include the date of the download and Agency code. The adjustment and Re-bill records from GSA will be treated in the same manner as the main records.

CPAIS will provide the facility for the bills to be viewed on screen as well as printed. Additionally, the reconciliation function of the users will be able to display the bill amount received from GSA for each property and the amount of rent for that month calculated based on the occupancy agreement.

Table 5-1 shows the record format and data elements for the GSA FIRM rent File, Rent-On-Web file and the mapping of the GSA elements to the CPAIS table elements (Table II_GSA_RENT_BILL).

Table 5-1. RENT File (FIRM RENT)/CPAIS

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Annual Rate	tbiltran.a_rate	Annual Rate	Annual Rate	ANNUAL_RATE
Billing Agency Code	Tbiltran.c_bill_ab_code	Agency/Bureau Code which gets billed	Billed Agency_Bureau code	AGENCY_BUREAU_CODE
Billing Period	tbiltran.q_bill_period	Month & Year of the Billing Period	Billing effective date	EFFECTIVE_DATE
Billing Record Type	tbiltran.c_rectype	Record type shows different categories of Rent	Charge Type (Charge Type Description)	CHARGE_TYPE (CHARGE_TYPE_DESC does not exist in RENT)
Building City	tbldg.t_bldg_cty	The City field identifies the city in which the building is located.	City Name	CITY_NAME
Building State	tbldg.c_sta	The State field identifies the state where the building is located	State	STATE
Building Street	tbldg.t_addr1	The Address field identifies the street location of the building. Address 1 to record line one of the address	Street Address 1	BUILDING_ADDRESS
Building Street 2	tbldg.t_addr2	The Address field identifies the street location of the building. Address 2 to record the second line of the address	Street Address 2	BUILDING_ADDRESS2

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Building Zip	tbldg.t_bldg_zip	This field identifies the zip code for the building location	Zip code	ZIP_CODE
CBR No	tbiltran.i_agmt	The Client Billing Record Number field uniquely identifies a CBR.	CBR Number	CBR#
Congressman/Senator Name	tbiltran.n_congress	Name of the Congressman /Senator	Congressman_Senator	CONGRESSMAN
Document Reference Number	tbiltran.t_doc_no	Bill Number	Bill Number	BILL_NUMBER
Exemption/Exception Code	tbiltran.c_ex_ex	Exemption/Exception Code	Exemp_Excep Code	EXCEPTION_CODE
Facility Code (third and fourth character)	tbiltran.c_facility	This field is a 2-character identifier for the facility tied to the location code where the requirement is satisfied.	Facility code	FACILITY_CODE
Loc Code (third to sixth character)	tbldg.c_loc	The Location Code field uniquely identifies the location of the owned or leased building	Building Sequence Number	BUILDING_NUMBER
Location Name	tbldg.n_bldg	The name to which a building or item is commonly referred to	Building Name	BUILDING_NAME
Monthly Charge	tbiltran.a_bill	Monthly Charge	Monthly Charge	MONTHLY_CHARGE
Occupancy Right	tbiltran.c_occup_rt	Occupancy Right code identifies whether the building is owned or leased	Occupancy Right code	OCCUPANCY_RIGHT_CODE

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Occupying Agency/Bureau Code	tbiltran.c_ab_code	The Agency/Bureau Code is a 4-character code used for the Agency/Bureau Name which is occupying the building.	Actual Agency_Bureau code	BILLED_AGENCY_BUREAU_CODE
Occupying Agency/Bureau Name	tbiltran.n_ab_name	The Agency/Bureau Name is the shortened name of the Agency/Bureau which is occupying the building	Agency_Bureau Name	AGENCY_BUREAU_NAME
PBS Assign Number	tagmt.i_pbs_no	The PBS Assign No. field is used to identify the Client Billing Record for Public Building Services	Assignment Key	ASSIGNMENT_KEY
Record Type	'0'	Adjustment record type is 0		
Region	tbiltran.c_region	The Region field identifies the GSA region of a building	Region	REGION
Station Symbol	tbiltran.c_station_symbol	This field is an account number that is used by Treasury.	Account Code	SIBAC_BOAC_CODE???
Total 'TTO' space type Building Personnel	Sum (tbldgsp.q_personnel)	This is a Calculated field which sums up the personnel in a client space assignment for Total Office	Office Personnel	PERSONNEL_COUNT
Unit Quantity	tbiltran.a_quantity	SQFT for which the client is getting billed.	SQFT	RENTABLE_SQFT_SPACE

Table 5-2 depicts the mapping of GSA Adjustment/Re-Bill elements to CPAIS adjustment table elements (II_ROA_ADJUSTMENTS).

Table 5-2. Re-bill/Adjustment Records

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Record Type	'2'	Rebill record type is 2		
Region	tbiltran.c_region	The Region field identifies the GSA region of a building		
Building State	tbldg.c_sta	The State field identifies the state where the building is located		
Loc Code (third to sixth character)	tbldg.c_loc	The Location Code field uniquely identifies the location of the owned or leased building		
Billing Agency Code	Tbiltran.c_bill_ab_code	Agency/Bureau Code which gets billed		
Station Symbol	tbiltran.c_station_symbol	This field is an account number that is used by Treasury.		
Exemption/Exception Code	tbiltran.c_ex_ex	Exemption/Exception Code		
Occupying Agency/Bureau Code	tbiltran.c_ab_code	The Agency/Bureau Code is a 4 character code used for the Agency/Bureau Name which is occupying the building		
PBS Assign Number	tagmt.i_pbs_no	The PBS Assign No. field is used to identify the Client Billing Record for Public Building Services		

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Facility Code (third and fourth character)	tbiltran.c_facility	This field is a 2-character identifier for the facility tied to the location code where the requirement is satisfied.		
Building City	tbldg.t_bldg_cty	The field identifies the city in which the building is located.		
Occupancy Right	tbiltran.c_occup_rt	Occupancy Right code identifies whether the building is owned or leased		
CBR No	tbiltran.i_agmt	The Client Billing Record Number field uniquely identifies a CBR.		CBR
Occupying Agency/Bureau Name	tbiltran.n_ab_name	The Agency/Bureau Name is the shortened name of the Agency or Bureau.		
Document Reference Number	tbiltran.t_doc_no	Bill Number		BILL_NUMBER
MSA	tbldg.c_msa	Standard Metropolitan Statistical Area Code		
County/City Code (third to sixth character)	tbldg.c_cnty_city	The field identifies the county/city in which the building is located		
Adjustment Comments	tbiladj.t_adj_reas	This field is used to record any additional information about miscellaneous bill/adjustment, lump sum/accrual		ADJUSTMENT_REMARKS
Adjustment Originator's First Name	tbiladj.n_adj_fst	First Name of the Originator		ADJUSTMENT_APPROVAL

Field name	Table.field	Description	Rent on web download record layout	CPAIS table element name
Originator's Last Name	tbiladj.n_adj_lst	Last Name of the Originator		ADJUSTMENT_APPR OVAL
Originator's Phone Number	tbiladj.t_adj_ph	Phone number of the Originator		
Audit No	tbiladj.i_aud	Control / Audit Number		
Rebill Flag	tbiltran.f_rebill	Flag which identifies whether the record is a Rebill or not		
Monthly Charge	tbiltran.a_bill	Monthly Charge		MONTHLY_AMOUNT
Monthly amount				RATE_PER_YEAR
Rate per year				UNITS
Units				CHARGE_TYPE
Charge Type				ADJUSTMENT_STAT US
Adjustment status				UOM
Uom				YEAR_MONTH
Year month				DESCRIPTION1
Description1				DESCRIPTION2
Description2				ADJUSTMENT_TYPE
Adjustment type				ADJUSTMENT_AMO UNT

5.3 FEDERAL REAL PROPERTY PROFILE INTERFACE

The Federal Real Property Profile (FRPP), formerly named the Worldwide Inventory, is a relational database managed by the General Services Administration to track and report on all Federal owned and leased real property. USDA must provide real property data to FRPP annually in the *Annual Report of Real Property Owned by or Leased to the United States*.

This report is currently being produced manually and sent to GSA. However, CPAIS is required to generate an electronic version of the report to be transmitted to GSA. CPAIS will also generate a report for each agency and the USDA.

This document describes the design details for the electronic interface between CPAIS and GSA.

5.3.1 Submission to GSA

USDA must submit real property information annually as follows:

- ◆ On real property inventory on the last day of each fiscal year.
- ◆ Within 45 days after the fiscal year ends

USDA must prepare the Annual Real Property Inventory information prescribed in § 102–84.50 as of the last day of each fiscal year. This information is due to the General Services Administration, Office of Government-wide Policy, Office of Real Property (MP), no later than November 15 of each year. USDA's real property inventory information is to be e-mailed to the General Services Administration (GSA).

CPAIS will generate a consolidated USDA GSA FRPP for the *Annual Report of Real Property Owned by or Leased to the United States*. A scheduler script will initiate generation of the report in an electronic file in the XML format and transmit it to GSA electronically. The report will be generated at a pre-determined time and date corresponding to the due date of the report. GSA has specified the layout of, and the data elements that will be included in the report. GSA loads the USDA data into its FRPP system. This is an annual full refresh of USDA data, and GSA will replace the previous year's FRPP data with the current year submission. The generated XML file can be transmitted to GSA in one of the following ways:

- ◆ CPAIS will generate an email to assetmanagement@gsa.gov at GSA. The subject of the email should include the name of the agency along with USDA. (This is the recommended submission method).
- ◆ CPAIS may initiate an FTP session and transmit the file to the GSA via the FTP protocol to an FTP server (this will require establishment of agreement with GSA)

and development of mechanisms to ensure proper, accurate, and complete transmission of the file – not recommended)

- ◆ CPAIS may update the Worldwide Inventory Internet Application at <http://worldwide.gsa.gov>. (This will require additional programming - not recommended)

5.3.2 Processing the Data for Preparation of XML file

CPAIS will generate a report with the GSA FRPP required data elements with its output in the GSA XML template format. The output file will be stored in a directory for transmission, re-submission, if necessary, and quality assurance and audit purposes. Generation of XML report is available as part of the Oracle application suite which is used in the development of CPAIS. The output will also be printable in a report layout as shown in the reports section of this chapter.

The scheduler script will initiate a pre-developed procedure to generate an email and attach the XML file for transmission to the designated GSA email address (assetmanagement@gsa.gov). The email will be sent at the time and date that the report is due to GSA.

5.3.3 Instructions for Generating the XML File

The FRPP report must contain an installation record and at least one additional record per installation.

- ◆ Installation, record type 10 – Mandatory record containing information related to the installation including: property type, address and agency bureau code.
- ◆ Land, record type 20 – Record containing information related to the land including: usage code, urban acres, rural acres and acquisition cost.
- ◆ Buildings, record type 30 – Summary record containing information related to the buildings in an installation including: number of buildings, square footage, and acquisition cost.
- ◆ Other Structures and facilities, record type 40 – Record containing information related to any other structures and/or facilities that are part of an installation that are not described in one of the records listed above. Contains information including: installation number, usage code, and acquisition cost.
- ◆ Lease, record type 50 – Record containing information regarding commercial leases including: installation number, number of leases, effective date, expiration date, renewal option years and annual rental amount. Only one record type 50 is created per leased installation.

Detailed Preprocessing Edits for GSA XML submissions are provided for additional review, validation, and programming guide. The following Processing Edits were re-edited from the version dated 8/18/2002 for further clarity.

5.3.4 Preprocessing Edits for GSA FRPP

Below is a list of edits for each block found on the FRPP and a brief description of the action to be taken. Blocks in **bold** are mandatory on electronic form.

Section I—Installation Data

Block number and element name	Field type/length	Action
6 – Property Type	Char (1)	Only “G”, “L”, or “T” are acceptable codes. Otherwise, generate an error message.
7 – Transaction Code	Char (1)	Only “A”, “C”, “D” or “I” are acceptable transaction codes. Otherwise, generate an error message
8 – Agency Bureau Code	Char (4)	Validate code by using a lookup table of valid Agency Bureau Codes. Table either exists in the GSA Database or provided by GSA. Otherwise, generate an error message.
9 – Geographic Location Code	Char (9)	State Code 1-2 Alphanumeric. Validate code by using a lookup table of all valid State Codes or “99”. Table either exists in the GSA Database or provided by GSA. Otherwise, generate an error message. City or Town 3-6 Numeric. Validate code by using a lookup table of all valid City/Town Codes or “9999”. Table either exists in the GSA Database or provided by GSA. Otherwise, generate an error message. County 7-9 Numeric. Validate code by using a lookup table of all valid County Codes or “999”. Table either exists in the GSA Database or provided by GSA. Otherwise, generate an error message. When the values for City, Town, and County are unknown, place all 9’s.
10 – Installation Number	Char (7)	Positions 1-5:Alphanumeric (A-Z, a-z, 0-9) Positions 6-7: Numeric only Agencies complete at their discretion.Must be unique with an Agency/Bureau. Otherwise, generate an error message. New installation numbers are generated by the Agencies. Agencies are responsible for the uniqueness of the number. There can be a gap in sub-installation (aka Site) numbers. Also, first installation must be a 00.
11 – Record Type	Numeric (2)	Always “10”. A “10” record must appear for each installation number.
12 – Installation Name	Char (30)	Agencies complete at their discretion. For Adds, must not be blank. Otherwise, generate an error message
13 – Installation Address	Char (30)	Agencies complete at their discretion. For Adds, must not be blank. Otherwise, generate an error message

Block number and element name	Field type/length	Action
17 – ZIP Code	Numeric (9)	For US and US Territories records: 1-5 Numeric only but not 00000 or 99999 and 6-9 Suffix, either Numeric or blank. For non-US records, Zip 1-9 must be numeric or blank. Otherwise, generate an error message.
18 – Congressional District(s)	Numeric (20)	For US records: Two digit code, could enter up to 10 Congressional Districts. Left justified. Each two-position code must be numeric or blank. Each two-position field must be unique. For At Large States, must be 00 or blank only For Non-voting territories, must be 98 or blank only For Non-represented territories, must be 99 or blank only For non-US records must be blank. Otherwise, generate an error message.
19 – Estimated Current Value	Numeric (7)	If Property Type is “T,” then must be 0 or blank. Otherwise, generate an error message. Blank is an acceptable value; treat as zero.
20 – Highest and Best Use	Char (1)	Only “A” – “H” or blank. Otherwise, generate an error message. Blank is an acceptable value.
21 – Excess Indicator	Char (1)	Either “E” or blank. Otherwise, generate an error message.
22 – Historical Indicator	Char (1)	Either “H” or blank. If “H” validate for “00” in installation number suffix. Otherwise, generate an error message.
23 – Utilization Data A – Last Survey Date	Char (4)	Format must be MMYT or blank. Otherwise, generate an error message. Blank is an acceptable value.
B – Baseline	Char (1)	Only “Y”, “N” or blank are acceptable values. Otherwise, generate an error message. Blank is an acceptable value.
C – Deferral value	Char (1)	Only “Y”, “N” or blank are acceptable values. Otherwise, generate an error message. Blank is an acceptable value.
D – Next Survey Date	Char (4)	Must be valid format/content of MMYT or Blank. Otherwise, generate an error message.
E – Change in Mission	Char (1)	Must be valid format/content of MMYT or Blank. Otherwise, generate an error message.
F – Anticipated Excess Date	Char (4)	If Excess Indicator is “E” then validate MMYT, else blank. Otherwise generate an error message
G – GSA Assistance Needed	Char (1)	Only “Y”, “N” or blank are acceptable values. Otherwise, generate an error message. Blank is an acceptable value.

Section II—Land Data

Block number and element name	Field type/length	Action
<p>Use multiple records for reporting 3 or more land usages.</p> <p>An installation can have 1 or more relationships with GEOLOC codes.</p> <p>An installation can have 1 or more relationships with Agencies.</p> <p>An installation can have 1 or more relationships with Property Types. Therefore, Property Type, Agency Code, GEOLOC Code, and Installation number defines a unique installation.</p>		<p>For electronic submissions there will always be an installation record.</p> <p>Legitimate combinations:</p> <p>Blocks <u>6</u> <u>8</u> <u>9</u> <u>10</u></p> <p>1 1 1 1</p> <p>1 2 1 1</p> <p>1 2 2 1</p> <p>1 2 2 2</p> <p>1 3 4 3</p>
Property Type	Char (1)	Same as Section I.
24 – Transaction Code	Char (1)	<p>Only “A”, “C”, “D” or “I” are acceptable transaction codes. Otherwise, generate an error message.</p> <p>New element and not likely to get any. Ergo, will highlight fact if an “I” is submitted. Blank is not an acceptable value.</p> <p>Agency Bureau Code Char (4) Same as Section I.</p> <p>Geographic Location Code Char (9) Same as Section</p> <p>Installation Number Char (7) Same as Section I.</p>
25 – Record Type	Numeric (2)	Always “20”.
26 – Usage Code	Numeric (2)	Validate GSA Land Usage Code using list provided in FRPP Instruction Guide. Otherwise, generate an error message.
27 – Acquisition Code	Numeric (1)	If Property Type is not “G”, must be blank, If Property Type is “G” if US, must be a 1, 2, or 3 only, else if not US, must be 2 or 3 only. Otherwise, generate an error message. Blank is not an acceptable value. Code 2 implies US land only.
28a – Date(s) Acquired (From)	Numeric (4)	If Owned, validate YYYY (1776 to current year). If not Owned, must be blank. Otherwise, generate an error message.
28b – Date(s) Acquired (To)	Numeric (4)	If Owned, validate YYYY (1776 to current

Block number and element name	Field type/length	Action
		year and => Block 28a). If not Owned, must be blank. Otherwise, generate an error message.
29 – Urban Acres	Numeric (8)	Must be numeric or blank. Otherwise, generate an error message.
30 – Rural Acres	Numeric (10)	Must be numeric or blank. Otherwise, generate an error message.
Block 29 and 30		Both cannot be blank/zeroes.
31 – Acquisition Cost	Numeric (7)	Must be numeric or blank. If Property Type is “T” or “L,” or if Block 27 = 1, then blank <u>or zeroes</u> only. Otherwise, generate an error message.
32 – Estimated Cost Indicator	Char (1)	Only “E” or blank. If Property Type is a “T” or “L,” then must be blank. Otherwise, generate an error message.
33 – Negligible Cost Indicator	Char (1)	Only “N” or blank. If Property Type is “T” or “L,” then must be Blank. If Acquisition Cost > 0, then must be blank. Else must be “N”. Otherwise, generate an error message.

Section III—Building Data

For Blocks 6, 8, 9 and 10 an installation can have a one-to-many relationship with Blocks 6, 8, and 10.

Block number and element name	Field type/length	Action
Property Type	Char (1)	Same as Section I.
34 – Transaction Code	Char (1)	Same as Section I. If Block 7 is: A, then Block 34 is A only If Block 7 is C, then Block 34 is A, C, D, I If Block 7 is D, then Sections II, III, IV, and V must be blank If Block 7 is I, need discussion on interim usages Blank is not an acceptable value. Agency Bureau Code , Char (4), Same as Section I. Geographic Location Code , Char (9), Same as Section I. Installation Number , Char (7), Same as Section I.
35 – Record Type	Numeric (2)	Always “30”.
36 – Usage Code	Numeric (2)	Validate GSA Building Usage Code using list provided in FRPP Instruction Guide. Otherwise, generate an error message.
37a – Date Acquired (FROM)	Numeric (4)	Validate YYYY (1776 to current year). If Property Type is “L,” must be blank. Otherwise, generate an error message.
37b – Date Acquired (TO)	Numeric (4)	Validate YYYY (1776 to current year => Block 37a). If Property Type is “L,” must be blank. Otherwise, generate an error message.
38- Number of Buildings	Numeric (5)	Only numeric characters. Otherwise generate an error message.
39 – Gross Square Footage	Numeric (8)	Only numeric. If Usage code is “99,” then must be blank <u>or zeroes</u> . Otherwise, generate an error message.
40 – Acquisition Cost	Numeric (7)	Only numeric or blank. If Property Type is “L” or “T,” then must be blank <u>or zeroes</u> . Otherwise, generate an error message. A leased building is determined by Property Type code.
41 – Estimated Cost Indicator	Char (1)	Either “E” or blank. If Property Type is “L” or “T,” then must be blank. Otherwise, generate an error message
42 – Negligible Cost Indicator	Char (1)	Either “N” or blank. If Property Type is “L” or “T,” then must be blank. If Acquisition Cost > 0, then must be blank. Otherwise, generate an error message. A leased building is determined by Property Type code.

Section IV—Other Structures and Facilities Data

If type “40” is submitted, all data elements are mandatory

Block number and element name	Field type/length	Action
Property Type	Char (1)	Same as Section I.
43 – Transaction Code	Char (1)	<p>Only “A”, “C”, “D” or “I” are acceptable transaction codes. Otherwise, generate an error message.</p> <p>If Block 7 is: A, then Block 43 is A only If Block 7 is C, then Block 43 is A, C, D, I If Block 7 is D, then Sections II, III, IV, and V must be blank. If Block 7 is I, need discussion on Interim usages</p> <p>Agency Bureau Code, Char (4), Same as Section I.</p> <p>Geographic Location Code, Char (9), Same as Section I.</p> <p>Installation Number, Char (7), Same as Section I.</p>
44 – Record Type	Numeric (2)	Always “40”.
45 – Usage Code and Classification	Numeric (2)	Validate Structure and Facilities Usage Code using list provided in FRPP Instruction Guide. Otherwise, generate an error message.
46 – Acquisition Cost	Numeric (7)	Either numeric or blank. If Property Type is “L” or “T” then must be blank or <u>zeroes</u> . Otherwise, generate an error message.
47 – Estimated Cost Indicator	Char (1)	Must be “E” or blank. If Property Type is “L” or “T” then must be blank. Otherwise, generate an error message. Leased structures are determined by Property Type.
48 – Negligible Cost Indicator	Char (1)	Must be “N” or blank. If Property Type is “L” or “T” then must be blank. Otherwise, generate an error message. Total Cost does not appear in the electronic file format.

Section V—Leased Property Data

Block number and element name	Field type/length	Action
Property Type	Char (1)	Only "L" is acceptable code. Otherwise, generate an error message
50 – Transaction Code	Char (1)	Only "A", "C", "D" or "I" are acceptable transaction codes. Otherwise, generate an error message. If Block 7 is: A, then Block 50 is A only If Block 7 is C, then Block 50 is A, C, D, I If Block 7 is D, then Sections II, III, IV, and V must be blank. If Block 7 is I, need discussion on Interim usages Agency Bureau Code , Char (4), Same as Section I. Geographic Location Code , Char (9), Same as Section I. Installation Number , Char (7), Same as Section I.
51 – Record Type	Numeric (2)	Always "50".
52 – Number of Leases Reported	Numeric (4)	Numeric and > 0. Otherwise, generate an error message. Use multiple records for reporting 3 or more land usages. If one lease, then complete the information. If two or more, then they are blank.
53 – Effective Date	Numeric (6)	If <= current year and Block 52 = 1, then must be numeric in MMYYYY format where MM is 01-12 and YYYY is 1776 to current year. If Block 52 not = 1, then blank is OK. Otherwise, generate an error message.
54 – Expiration Date	Numeric (6)	If >= current year and Block 52 = 1, then must be numeric in MMYYYY format where MM is 01-12 and YYYY is > current year. If Block 52 not = 1, then blank is OK. Otherwise, generate an error message.
55 – Renewal Option Years	Numeric (2)	Either numeric or blank. Otherwise, generate an error message. Blocks 53, 54, and 55 - Either all three fields are blank or all three fields contain valid data.
56 – Annual Rental Rate	Numeric (8)	Must be numeric and greater than zero. Otherwise, generate an error message.
57 – Other Structure and Facilities Indicator	Char (1)	Either "S" or blank. Otherwise, generate an error message.

Additional Preprocessor notes:

Blocks 6, 8, 9, and 10 create the unique key for Installations.

Blocks 26 and 27 create the unique key for Land.

Block 36 creates the unique key for Buildings.

Block 45 creates the unique key for Other Structures and Facilities.

Only one type 50 record allowed for a given installation.
 The preprocessor allows the user to select any or all edits to execute.

5.3.5 XML Template and data mapping for CPAIS

GSA has provided the XML template as a basis for converting CPAIS Data Source into an XML format. The XML template is an interpretation of the FRPP data format. The naming conventions have been kept as close as possible to the original naming conventions allowing for an easier translation. The filler area has been used as it is in the FRPP format, but as with this tag, must remain empty. All data rules (i.e., field size, allowed characters, etc.) that were applicable to the FRPP are also used in the XML format. These data rules are available on the above mentioned website. Oracle has the capability to create a report that uses XML output in a predefined XML format.

The following tables provide detailed mappings of the XML tags to the data elements that are required for this report (file).

Table 5-3. Installation, Record Type 10

Data element	Description	Mandatory	GSA XML template tag
Property Type	Specification of property type (i.e. building, land)	Y	PropertyType
Transaction Code		Y	TransactionCode
Agency Bureau Code	USDA defined Agency Code	Y	AgencyBureauCode
State or Continent	State or Continent Agency in which located	Y	StateorContinent
County or Country	County or Country the Agency in which located	Y	CountyorCountry
Installation Number	Installation number of the Installation for which the record is being created.	Y	<u>Installationnumber</u>
Record Type	Type of record being created	Y	<u>RecordType</u>
Filler			<u>Filler</u>
Installation Name	Name of installation record which is being created.	Y	<u>InstallationName</u>
Installation Street Address	Street address of the installation the record which is being created.	Y	<u>InstallationStreetAddress</u>
Zip Code	Zip code of the installation for which the record is being created.	Y	<u>ZipCode</u>
Congressional Districts	Congressional District of the installation for which the record is being created .	N	CongressionalDistricts

Data element	Description	Mandatory	GSA XML template tag
Fair (Market) Value	Price for which an asset could be bought or sold in an arms length transaction.	N	<u>EstimatedCurrentValue</u>
Highest and Best Use	Best possible use of a property in order to produce the highest monetary return, promote maximum value, or serve a public or institutional purpose	N	<u>HighestandBestUse</u>
Excess Indicator	Installations declared identified as no longer needed	N	<u>ExcessIndicator</u>
Historical Indicator	Indication of the classification of the installation site as a historical site or heritage property	N	<u>HistoricalIndicator</u>
Last Survey Date	Date last survey occurred	N	<u>LastsurveyDate</u>
Baseline		N	<u>Baseline</u>
Deferral		N	<u>Deferral</u>
Next Survey	Date of next survey	N	<u>NextSurvey</u>
Change in Mission		N	<u>ChangeInMission</u>
Anticipated Excess Date		N	<u>AnticipatedExcessDate</u>
GSA Assistance Needed		N	<u>GSAAssistanceNeeded</u>

Table 5-4. Land, Record Type 20

Data element	Description	Mandatory	GSA XML template tag
Property Type		Y	<u>PropertyType</u>
Transaction Code		Y	<u>TransactionCode</u>
Agency Bureau Code	USDA defined Agency Code	Y	<u>AgencyBureauCode</u>
State or Continent	State or Continent Agency is located in.	Y	<u>StateorContinent</u>
			<u>CityorTown</u>
County or Country	County or Country the Agency is located in.	Y	<u>CountyorCountry</u>
Installation Number	Installation number of the Installation the record is being created for.	Y	<u>InstallationNumber</u>
Record Type	Type of record being created	Y	<u>RecordType</u>

Data element	Description	Mandatory	GSA XML template tag
Usage Code		Y	<u>UsageCode</u>
Acquisition Code	The acquisition cost includes all costs incurred to bring the property to a form and location suitable for its intended use	Y	<u>AcquisitionCode</u>
Date Acquired From		N	<u>DateAcquiredFrom</u>
Date Acquired To		N	<u>DateAcquiredTo</u>
Urban Acres	Amount of Urban Acres for the Installation	Y	<u>UrbanAcres</u>
Rural Acres	Amount of Rural Acres for the Installation	Y	<u>RuralAcres</u>
Acquisition Cost	Acquisition Cost of the Installation	Y	<u>AcquisitionCost</u>
			<u>EstCostIndicator</u>
Negligible Cost Indicator	Indication of total acquisition cost for land less than \$500	Y	<u>NegligibleCostIndicator</u>

Table 5-5. Buildings, Record Type 30

Data element	Description	Mandatory	GSA XML template tag
Property Type	Specification of property type (i.e. building, land)	Y	<u>PropertyType</u>
Transaction Code		Y	<u>TransactionCode</u>
Agency Bureau Code	USDA defined Agency Code	Y	<u>AgencyBureauCode</u>
State or Continent	State or Continent Agency is located in.	Y	<u>StateorContinent CityorTown</u>
County or Country	County or Country the Agency is located in.	Y	<u>CountyorCountry</u>
Installation Number	Installation number of the installation the record is being created for.	Y	<u>InstallationNumber</u>
Record Type	Type of record being created	Y	<u>RecordType</u>
Usage Code		Y	<u>UsageCode</u>
Filler			<u>Filler</u>
Date Acquired From	Date installation was acquired.	N	<u>DateAcquiredFrom</u>
Date Acquired To		N	<u>DateAcquiredTo</u>
Number of Buildings	Number of building on the installation	Y	<u>NumberofBuildings</u>

Data element	Description	Mandatory	GSA XML template tag
Gross Square Footage			<u>GrossSquareFootage</u>
Filler			<u>SecondFiller</u>
Acquisition Cost	The acquisition cost includes all costs incurred to bring the property to a form and location suitable for its intended use	Y	<u>AcquisitionCost</u>
Filler			<u>EstCostIndicator</u>
Negligible Cost Indicator	Indication of total acquisition cost for land less than \$500	Y	<u>NegligibleCostIndicator</u>

Table 5-6. Other Structures, Record Type 40

Data element	Description	Mandatory	GSA XML template tag
Property Type	Specification of property type (i.e. building, land)	Y	<u>PropertyType</u>
Transaction Code		Y	<u>TransactionCode</u>
Agency/Bureau Code	GSA defined agency/bureau code	Y	<u>AgencyBureauCode</u>
State or Continent	State or Continent where the agency/bureau is located.	Y	<u>StateorContinent</u>
City or Town	City or town in which the property is located		<u>CityorTown</u>
County or Country	County or Country where the agency/bureau is located.	Y	<u>CountyorCountry</u>
Installation Number	Installation number of the Installation for which the record is being created.	Y	<u>InstallationNumber</u>
Record Type	Type of record being created	Y	<u>RecordType</u>
Usage Code		Y	<u>UsageCode</u>
Filler			<u>Filler</u>
Acquisition Cost	The acquisition cost includes all costs incurred to bring the property to a form and location suitable for its intended use.	Y	<u>AcquisitionCost</u>
Filler			<u>EstCostIndicator</u>
Negligible Cost Indicator	Indication of total acquisition cost for land less than \$500	Y	<u>NegligibleCostIndicator</u>

Table 5-7. Leased Property, Record Type 50

Data element	Description	Mandatory	GSA XML template tag
Property Type	Specification of property type (i.e. building, land)	Y	<u>PropertyType</u>
Transaction Code		Y	<u>TransactionCode</u>
Agency Bureau Code	USDA defined Agency Code	Y	<u>AgencyBureauCode</u>
State or Continent	State or Continent Agency is located in.	Y	<u>StateorContinent CityorTown</u>
County or Country	County or Country the Agency is located in.	Y	<u>CountyorCountry</u>
Installation Number	Installation number of the installation the record is being created for.	Y	<u>InstallationNumber</u>
Record Type	Record type being created.	Y	<u>RecordType</u>
Filler			<u>Filler</u>
Number of Leases Reported	Number of Leases for the installation	Y	<u>NumberofLeasesReported</u>
Effective Date	Effective date of the leases for the installation	Y	<u>EffectiveDate</u>
Expiration Date	Expiration date of the leases for the installation	Y	<u>ExpirationDate</u>
Renewal Option Years	Number of renewal option years.	Y	<u>RenewalOptionYears</u>
Annual Rental Amount	Dollar amount of the total annual rent.	Y	<u>AnnualRentalRate</u>
Other Structures and Facilities Indicator		Y	<u>OtherStructuresandFacilitie sIndicator</u>

5.4 INFRA INTERFACE

To be included

5.5 REPORTS

Sample CPAIS FRPP Report

December 31, 2003		CPAIS FRPP Report				Page 1				
For Official Use Only										
Section 1 Installation/Site										
Geographic Location Code										
Property Type	Trans Code	Agency Bureau Code	State or Continent	City or Town	County or Country	Installation Number	Report Year			
Record Type	Installation Name		Installation Street Address							
10										
City or Town		County or Country		State or Continent						
Zip Code	Congressional District (s)		Est. Current Value (In Thous)	Highest and Best Use		Excess Indicator				
Utilization Data										
Historical Indicator	Last Survey Date mo/yr	Baseline	Deferral	Next Survey Date	Change in Mission	Anticipated Excess Date Needed	GSA Assist			
Latitude and Longitude Data										
Trans Code	Record Type	Latitude Degree	Latitude Minute	Latitude Second	Latitude Direction	Longitude Degree	Longitude Minute	Longitude Second	Longitude Direction	
11										
Section II Land										
Trans Code	Record Type	Usage Code	Acquisition Code	Date Acquired From	Date Acquired To	Urban Acres	Rural Acres	Acq Cost (in Thous)	Est. Cost Indicator	Negligible Cost Indicator
20										

Section III Buildings

Installation

Trans Code	Record Type	Usage Code	Date Acquired From	Date Acquired To	Number of Buildings	Gross Square Footage	Acq. Cost (in Thous)	Est. Cost Indicator	Negligible Cost Indicator
	30								

Buildings

Trans Code	Record Type	Usage Code	Date Acquired From	Date Acquired To	Building ID Number	Square Footage	Acq. Cost (in Thous)	Est. Cost Indicator	Negligible Cost Indicator
	35								

Section IV Other Structures and Facilities

Trans Code	Record Type	Usage Code	Acquisition Cost (in thou.)	Est. Cost Indicator	Negligible cost indicator
	40				

Section V Complete for Lease Property Only

Trans Code	Record Type	Number of leases Reported	Effective Date	Expiration Date	Renewal Option Years	Annual Rental Rate	Other Structures and Facilities Indicators
	50						

Section VI Occupant

Installation

Trans Code	Record Type	Occupant Agency	Bureau Code	Occupant Square Footage
	31			

Buildings

Trans Code	Record Type	Building ID	Occupant Agency	Bureau Code	Occupant Square Footage
	36				