INTEGRATED RESOURCE INFORMATION SYSTEM

PROJECT

FD Interface Design Document Template – XML

Deliverable # 15 Interface Specifications

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VERSION 0.1

SOA Internal Use Only

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1 INTRODUCTION

1.1 FIXED ASSET DISPOSITION (FD) DOCUMENT USAGE

This document is being prepared to assist the interfacing team in developing the FD (Fixed Asset Disposition document) interface file(s) to record the disposition of assets as a part of maintaining an inventory of fixed assets. Assets may be disposed of due to several reasons: certain types of assets may be replaced on a regular basis, the asset may be worn and completed its useful life, or the asset may have been lost, stolen, etc. IRIS enables you to record the disposition of an asset and its components, to record the disposition of individual components, or to dispose a portion of the available units (for components with multiple units).

An asset can be disposed Externally or Internally. In the case of Internal Disposition, IRIS supports a two document model. In the two document model, an FD document records the asset disposition with internal sale event type while an FA document records the acquisition with Internal sale Acquisition/Betterment Event types.

In the case of External Disposition, an FD document records information about the retirement and depreciation of the asset, offsets the revenue from the sale (if the asset is sold), and recognizes any gain or loss. The FD calculates the depreciation until the date of disposition if the asset is depreciating. It also calculates negative depreciation when the asset is depreciated but the disposition date is earlier than the last depreciation date.

When a FA disposition document is processed, here are the main events that occur:

- Upon validate or submit, the document calculates depreciation.
- FA Registry tables are updated with Disposition Date, Disposition Units, Number of units is reduced by the number of disposed units, and Disposition method.   Net Book value and Accumulated Depreciation are correspondingly reduced.
- For nonzero depreciation amounts, a record is inserted to the Depreciation History table.
- In the case of full disposal of an asset, any associated component records that are active on the DEPEC table, FA warranty table, and/or FA Infrastructure maintenance tables are deactivated.
- Records are inserted into the FA accounting Journal and FA component Journal.

The IRIS interface team will be available to assist the department with the analysis of how to map the current files to the new IRIS files, or with any other technical concern that arises during this process. The new IRIS system has standard documents (i.e., transactions) that it processes. The approach is to identify the appropriate document code so that the interface department can prepare a standardized flat file that will map to that document code within IRIS.

2 INTERFACE SPECIFICATIONS

2.1 [INTERFACE NAME – INTERFACE #]

This section should contain a description of the specific interface and any information relative to the interface, such as schedule, volume, etc.

2.2 ASSUMPTIONS

This interface will be developed under the following assumptions:

- List all assumption related to the specific interface…

2.3   ADDITIONAL INFORMATION

This section is for any additional information gathered about the specific interface. This could include the file naming convention, original file layout sample, etc.

2.4   VOLUME

Information on transaction volume to be inserted here

2.5   CUT-OVER

Cut Over information pertaining to the specific interface to be inserted here.

3   FILE SPECIFICATIONS

The following sections describe in detail the specifications of the Fixed Asset Disposition (FD) document inbound interface template. Many fields are not editable on this document. Only those fields used to create and record the disposition postings are editable. All others are completed with the Auto Apply action found on the Header and Component Line which bring information into the document from the Fixed Asset Registry tables.

3.1   FIXED ASSET DISPOSITION (FD) TRANSACTION LAYOUTS

The FD transaction consists of 4 required components. Exhibit 1 is a graphical representation of all components, the action explaining whether its inclusion is required or not, and its description. Exhibit 2 further illustrates the FD document showing that it will have one AMS_DOCUMENT record, one FA_DOC_HDR, one or multiple FA_DOC_COMM records that can have one or multiple FA_DOC_ACTG records associated (up to 99 accounting lines). The remaining sections explain each component that constitutes a complete XML based FD document.

The structure of an interface file with 2 FD documents where one document is associated with 1 accounting record and one document associated with 2 component records and 2 accounting records will be as follows:

Document record #1	Document record #2
Header record	Header record
Component record 1	Component record 1
Accounting record 1	Accounting record 1
	Component record 2
	Accounting record 1

Exhibit 1 FD Transaction Required XML Components

	Action	
	Original entry	Component description
AMS_DOC_XML_IMPORT_FILE	Required	Unique Tag used to identify the beginning and ending of an inbound XML interface file.
AMS_DOCUMENT	Required	Unique Tag used to identify the beginning and ending of a document within an inbound XML interface file.

FA_DOC_HDR	Required	Unique Tag used to identify the beginning and ending of a header component within a document.
FA_DOC_COMM	Required	Unique Tag used to identify the beginning and ending of a vendor component within a document.
FA_DOC_ACTG	Required	Unique Tag used to identify the beginning and ending of an accounting line within a document.

Exhibit 2 FD Document Components

```
┌──────────────────────┐
│ AMS Document         │
│ AMS_DOCUMENT         │
└──────────────────────┘
          │
          ▼
┌──────────────────────┐
│ Document Header      │
│ FA_DOC_HDR           │
└──────────────────────┘
          │
          ▼
┌──────────────────────┐        ┌──────────────────────┐
│ Commodity Line       │───────▶│ Accounting Line      │
│ FA_DOC_COMM          │        │ FA_DOC_ACTG          │
└──────────────────────┘        └──────────────────────┘
```
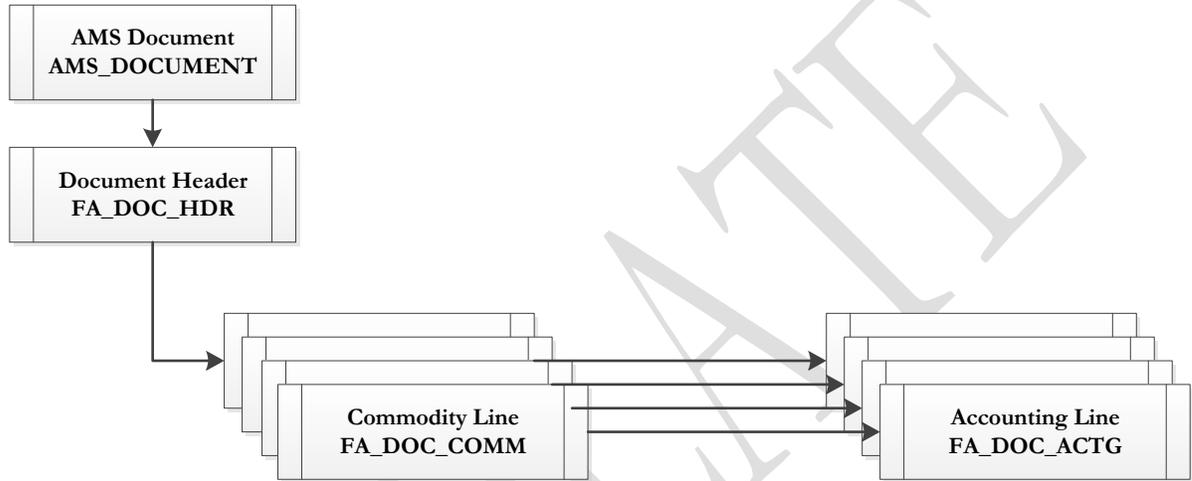
3.1.1   FD DOCUMENT COMPONENT: AMS_DOC_XML_IMPORT_FILE

The following XML tags are a requirement for any XML file being submitted into the IRIS system. See Appendix A for an example of a fully qualified FD XML example:

XML Tag	Description	R/C
AMS_DOC_XML_IMPORT_FILE	Required XML beginning and ending tag for a FD document	R

3.1.2   FD DOCUMENT COMPONENT: AMS_DOCUMENT

The following XML tags are a requirement for any XML file being submitted into the IRIS system. See Appendix A for an example of a fully qualified FD XML example:

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			DOC_CAT	Document Category	The category in which the document is located.	R	VARCHAR2	8	"FA"
			DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	R	VARCHAR2	8	"FA"
			DOC_CD	Document Code	The alpha-numeric code that indicates the type of transaction.	R	VARCHAR2	8	"FD"
			DOC_DEPT_CD	Department Code	The department code assigned to this document.	R	VARCHAR2	4	Must be valid on Department Fiscal Year Controls table.
			DOC_UNIT_CD	Document Unit	The unit code associated with this document, which can be used to facilitate workflow.	R	VARCHAR2	4	Valid Unit Code on the Unit table.
			DOC_ID	Document ID	The unique document number assigned for this transaction.	R	VARCHAR2	20	Leave Blank if AUTO_DOC_NUM set to "true".
			DOC_VERS_NO	Document Version Number	The version number assigned to this document.	R	NUMBER	2	Set to "1".
			AUTO_DOC_NUM	Automatic	Indicates that system will	R	VARCHAR2	5	Set to "true" for system

SOA			IRIS							
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
				Document Numbering	assign a unique Document ID: "true" for system assigned Document ID number or "false" for no system assigned Document ID Number.				assigned Document ID number or "false" for no system assigned Document ID Number.
			DOC_IMPORT_MODE	Document Import Mode	Indicates that the document is being made as an Original Entry "OE".	R	VARCHAR2	3	Set to "OE " for Original Entry

3.1.3 FD DOCUMENT COMPONENT: FA_DOC_HDR

The following XML tags are a requirement for any XML file being submitted into the IRIS system. See Appendix A for an example of a fully qualified FD XML example:

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			DOC_CAT	Document Category	The category in which the document is located.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_CD	Document Code	The alpha-numeric code that indicates the type of transaction.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_DEPT_CD	Department Code	The department code assigned to this document.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_UNIT_CD	Document Unit	The unit code associated with this document, which can be used to facilitate workflow.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_ID	Document ID	The unique document number assigned for this	R	VARCHAR2	20	Same value as in AMS_DOCUMENT

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
					transaction.				
			DOC_VERS_NO	Document Version Number	The version number assigned to this document.	R	NUMBER	2	Same value as in AMS_DOCUMENT
			DOC_DSCR	Document Description	The description associated with the document.	O	VARCHAR2	60	The value in this field should be descriptive about the purpose of this document.
			FA_NO	Fixed Asset Number	The unique code associated with an asset. This is needed to pull in information for the fixed asset item from the Fixed Asset Registry table.	R	VARCHAR2	15	Value must be valid on Fixed Asset Registry table.
			DOC_NM	Document Name	Name for the document.	O	VARCHAR2	60	The value in this field should be descriptive about details of the fixed asset.
			DOC_REC_DT_DC	Record Date	The record date manually entered on the document header. If not manually entered, the date becomes the one when the document was submitted successfully.	O	DATE	10	If left blank, the system will default it to the current date. If provided, the format of this date is "YYYY-MM-DD". Example: "2004-10-30".
			DOC_BFY	Budget FY	When on the header of a document, this is the default budget fiscal year that will be pushed to all accounting lines.	CR	NUMBER	4	If left blank, the system will populate it with the Fiscal Year of the Record Date on associated document. If provided, must be valid on the Fiscal Year table and follow the format "YYYY".
			DOC_FY_DC	Fiscal Year	The fiscal year associated with this document.	CR	NUMBER	10	If left blank, the system will populate it with the current Fiscal Year of the Record Date on associated document. If provided, must be valid on the Fiscal Year table and follow the format "YYYY".
			DOC_PER_DC	Period	When on the header of a document, this is the default accounting period that is pushed to all accounting lines. If not manually entered, the field remains	CR	NUMBER	3	If left blank, the system will populate it with the current Fiscal Period of the Record Date on associated document.

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
					blank until the document is submitted successfully. At this point it is set to the current accounting period.				
			FA_DSCR	Fixed Asset Description	The description associated with the fixed asset.	O	VARCHAR2	60	This will be inferred from the Fixed Asset Number. However, a new description can be added.
			EVNT_TYP_ID	Event Type	Event Type determines the journal postings and business rules for a particular transaction.	R	VARCHAR2	4	Leave blank. This will default.
			EXTD_DOC_DSCR	Extended Document Description	A free-form text field that will hold a large volume of information to be associated.	O	VARCHAR2	1500	The value in this field should contain further details about the fixed asset and the purpose of this document.
			DSP_DT	Disposition Date	The date this asset was disposed.	R	DATE	10	Acceptable format is: "YYYY-MM-DD". Example: "2004-10-30".
			DSP_METH	Disposition Method	The method of disposition. Used to determine whether the gain or loss on a sales posts to an expense object or revenue source established on the System Special Accounts (SPEC) table.	R	VARCHAR2	4	Value must be valid on the Acquisition / Disposition Method (FADM) table.
			SEL_PRICE	Selling Price	The selling price is allocated to each accounting line based on net book value.	O	DECIMAL	14,2	
			DSP_AUTH	Disposition Authority	Descriptive text that represents the disposition authorization.	O	VARCHAR2	60	

3.1.4 FD DOCUMENT COMPONENT: FA_DOC_COMM

The following XML tags are a requirement for any XML file being submitted into the IRIS system. See Appendix A for an example of a fully qualified FD XML example

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			DOC_CAT	Document Category	The category in which the document is located.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_CD	Document Code	The alpha-numeric code that indicates the type of transaction.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_DEPT_CD	Department Code	The department code assigned to this document.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_UNIT_CD	Document Unit	The unit code associated with this document, which can be used to facilitate workflow.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_ID	Document ID	The unique document number assigned for this transaction.	R	VARCHAR2	20	Same value as in AMS_DOCUMENT
			DOC_VERS_NO	Document Version Number	The version number assigned to this document.	R	NUMBER	2	Same value as in AMS_DOCUMENT
			COMP_NO	Component Number	The unique number associated with the specific Component of the related Fixed Asset.	O	VARCHAR2	4	
			AST_DSCR1	Description 1	The system description associated with the asset.	O	VARCHAR2	60	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			AST_DSCR2	Description 2	The system description associated with the asset.	O	VARCHAR2	60	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			AST_DSCR3	Description 3	The system description associated with the asset.	O	VARCHAR2	60	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			AST_DSCR4	Description 4	The system description associated with the asset.	O	VARCHAR2	60	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			AST_DSCR5	Description 5	The system description associated with the asset.	O	VARCHAR2	60	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			COMP_EXTD_DSCR	Extended Description	The extended description associated with this asset component.	O	VARCHAR2	1500	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			CMPX_BLDG	Complex/ Building	The Building/Complex field is used to store additional information related to the physical location of this asset component.	O	VARCHAR2	1500	Will be inferred from FA document once Auto Apply action is selected on Header. Can be changed to a new value.
			DSP_DT	Disposition Date	The date this asset was disposed.	R	DATE	10	Acceptable format is: "YYYY-MM-DD". Example: "2004-10-30".
			DSP_METH	Disposition Method	The method of disposition. Used to determine whether the gain or loss on a sales posts to an expense object	R	VARCHAR2	4	Value must be valid on the Acquisition / Disposition Method (FADM) table.

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
					or revenue source established on the System Special Accounts (SPEC) table.				
			DSP_UNIT	Disposed Units	The number of units disposed	R	DECIMAL	15,5	Example: "1.00000"
			SEL_PRICE	Selling Price	The selling price is allocated to each accounting line based on net book value.	O	DECIMAL	14,2	
			DEPR_AM	Depreciation Amount	The Depreciation Amount allocated to this accounting line.	O	DECIMAL	14,2	If straight line method of depreciation, the amount is calculated upon document validate or submit. If depreciation method is manual, must be entered manually.
			DSP_AUTH	Disposition Authority	Descriptive text that represents the disposition authorization.	O	VARCHAR2	60	
			NEW_STAT_UNITS	New Statistical Units	Provides the ability to modify the Statistical Units associated with the asset component upon successful document submission.	O	DECIMAL	25,3	Enter the number of units that is being **kept**, not disposed. For full disposition of the asset component, enter a value of zero.

3.1.5   FD DOCUMENT COMPONENT: FA_DOC_ACTG

The following XML tags are a requirement for any XML file being submitted into the IRIS system. See Appendix A for an example of a fully qualified FD XML example. All information at the accounting line level is protected and will be brought in from the Fixed Asset Registry Accounting Line table or from the Disposition document Header.

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			DOC_CAT	Document Category	The category in which the document is located.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT

SOA			IRIS						
Field	Type	Size	Field	Caption	Description	R/C	Type	Len	Comments/Rules
			DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_CD	Document Code	The alpha-numeric code that indicates the type of transaction.	R	VARCHAR2	8	Same value as in AMS_DOCUMENT
			DOC_DEPT_CD	Department Code	The department code assigned to this document.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_UNIT_CD	Document Unit	The unit code associated with this document, which can be used to facilitate workflow.	R	VARCHAR2	4	Same value as in AMS_DOCUMENT
			DOC_ID	Document ID	The unique document number assigned for this transaction.	R	VARCHAR2	20	Same value as in AMS_DOCUMENT
			DOC_VERS_NO	Document Version Number	The version number assigned to this document.	R	NUMBER	2	Same value as in AMS_DOCUMENT

3.2 TRAILER RECORD

For this interface file, the following data needs to be processed, calculated and stored in the IRIS database record table for reconciliation purposes. The trailer record must be included at the end of each XML file or else the documents will not be imported and processed in IRIS.

DB Field	Name	Description	Type	Len	Comments
RECORD_TYPE	Record Type	This record identifies the file record as the trailer record.	VARCHAR2	3	"TRL"
FILE_NAME	File Name	The text name of the file.	VARCHAR2	32	This file name must match the file name of the physical file.
RCD_CNT	Record Count	The numeric count of all documents within this file.	NUMBER	10	The count of all documents, denoted with an AMS_DOCUMENT tag, within this file. This includes a count of all documents, plus one for the trailer record itself.
SUM_ACCT1	Summary Amount 1	Summary total of dollar line amounts.	DECIMAL	16,2	There are three possible methods for calculating this amount, depending on the type of document that is being interfaced.

Method	Description
DRAMT	For JV document types, SUM_ACCT1 must equal the total of all DR_AM amounts in the file
POSAMT	For non-JV document types that require that debits equal credits, e.g., GAE1 or CH8, SUM_ACCT1 must equal the total of all positive LN_AM amounts.
LNAMT	For all other documents, SUM_ACCT1 must equal the total of all LN_AM amounts.

The method code is used on the R_INT_RECON_CONTROL table to identify the method for each individual interface. See the Input File Specifications for a matrix showing which method must be used for each document code.

Below is an example of how the trailer record at the end of an inbound XML file (to IRIS) should be formed. The text enclosed by '<' and '>' symbols are known as "tags" (e.g. <TRAILER_RECORD> and </TRAILER_RECORD> are known as the opening and closing trailer record tags, respectively). The highlighted text is where agencies will fill in information specific to that run of the interface.

```
.....
</AMS_DOCUMENT>              ← closing tag of the last AMS document in the XML file
<TRAILER_RECORD>
   <RECORD_TYPE>TRL</RECORD_TYPE>
   <FILE_NAME>IRISFIN.DOAAKPAY.BLB.20131211-13-20-52.xml</FILE_NAME>
   <RCD_CNT>73</RCD_CNT>
   <SUM_ACCT1>158589435</SUM_ACCT1>
</TRAILER_RECORD>
</AMS_DOC_XML_IMPORT_FILE>
```

The non-highlighted text must appear **exactly** as shown above for all interfaces. Be sure to place the run-specific values <u>between</u> the tags, as shown above. The trailer record should be located after the <u>last</u> closing AMS Document tag in the file, and before the closing XML tag (last line in the example above). If the trailer is not formatted correctly, the interface reconciliation program will not be able to process the XML file.

4 TECHNICAL SPECIFICATIONS

The following document provides all technical specifications for all inbound interfaces.

INT_Technical_Specif
ications_20140220.dc

5 APPENDICES

5.1 APPENDIX A – FD XML SAMPLE

The following file contains a sample for a Fixed Asset Disposition (FD) document.

FD_XML_sample.xml

5.2 APPENDIX B – GENERAL XML SPECIFICATIONS FOR IRIS

The following file contains general information about the creation of XML files for IRIS:

General_XML_Specs_
for_IRIS_20131013.c