

eMARS Outbound Interface Template for Vendor Intercept



FINAL

Prepared for
Commonwealth of Kentucky
eMARS Project

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1 Introduction

1.1 Purpose

The purpose of this document is to provide the agencies of the Commonwealth of Kentucky with the information needed to build a query to extract applicable vendor intercept data from the data warehouse application, then load the extracted data into their own database for real-time queries or use as appropriate for their own purposes.

In eMARS, agency authorized users will generally use the WebIntelligence (Web-I) component of Business Objects within the data warehouse application, InfoAdvantage, to write and execute queries to extract appropriate outbound interface files.

1.2 Document Definitions and Conventions

InfoAdvantage

InfoAdvantage is a reporting solution from CGI-AMS that provides a data warehouse for Advantage Financial 3 data, extract-transform-load (ETL) tools to populate the data warehouse from Advantage Financial 3 application, a reporting tool kit based on Business Objects (similar to Crystal Reports) to access the data in the warehouse, and a pre-defined meta layer ("universes") that allow easy access to data in the warehouse.

WebIntelligence (Web-I)

WebIntelligence is the internet-based business intelligence solution from Business Objects. It provides the end users with the capability to perform ad-hoc query, reporting, and analysis of information stored in the InfoAdvantage data warehouses.

Extract-Transform-Load (ETL) Process

The ETL process extracts data from the Advantage Financial 3 system, transforms it and loads it in the data warehouse.

Universes

A universe is a logical group of classes, sub-classes and objects, and is part of the presentation layer of InfoAdvantage. Each business area (e.g. Accounts Receivable and General Accounting) has a universe (or universes – in the case of Accounts Payable and Procurement) associated with it. Universes provide access to information related to the different functional areas of the Advantage Financial 3 operational system.

Classes

Classes are logical groups of related sub-classes and objects. For example, the accounting period class contains information about the accounting period, fiscal period, and date. Classes can have sub-classes which are more granular groups of related objects within a group.

Objects

Objects are molecular elements that correspond to a selection of data in the data warehouse. Objects can refer directly to a column in the data warehouse database or can be built within the universe. Objects are used to build queries and retrieve data for report generation. Within classes and sub-classes, objects are organized in hierarchies.

Prompts

A prompt is a dialog box that asks a user to choose the data to be retrieved and displayed in the report. Each universe contains pre-defined prompts that can be used for queries. Also, InfoAdvantage provides a set of condition objects to define custom prompts for universes (see the list below). For date prompts, the format of the prompt value is **MM/DD/YYYY**.

Condition Object Type (Prompt)	Explanation
Flag	Defines a prompt for the flag being equal to each possible value. In Advantage Financial 3 and InfoAdvantage, possible values for flags/checkboxes in the database are either "1" (i.e. true or yes) or "0" (i.e. false or no). For example, Accounting Period Closed flag would retrieve all Accounting Periods = 1 (whose value means closed), but Accounting Period Not Closed flag would retrieve all Accounting Periods = 0 (whose value means not closed).
Equal to Condition	Defines a prompt equal to the value entered in the prompt. For example, if the user enters 4 for the Accounting Period Prompt , the report will display all of the records with the Accounting Period equal to 4 (i.e. September).
In List	Defines a prompt that display a list for the user to pick the value from. This allows the user to pick, from a list of values, one or more values to populate the prompt. For example, the user is selecting the month prompt, the list of values might list all months, January through December, allowing the user to pick from the list one or more values. A user who selects " May " would return all of the records with the month of May.
As of Date	Defines a prompt for a date for which records will be retrieved with a date less than or equal to the date entered for a prompt. For example, the user enters 01/10/2004 for the As of Date , the system will retrieve the most recent records with a date less than or equal to that date.
From and To	Defines a prompt to retrieve all records with a date between the specified dates. For example, a user enters a From Date of 01/10/2002 and a To Date of 12/31/2005 , the records retrieved will have a date between those two dates.
Name	Defines a prompt that will retrieve all records that are equal to the value entered in the prompt. A wildcard can be used with the text in order to indicate which part of the value is unknown. For example, the user enters a First Name of " San% " in the First Name prompt (% being the wildcard). The system will retrieve all records with a first name like "San" such as Sandy, Sandra, or Sanford.

1.3 Assumptions

- Any additions or changes to the Advantage Financial 3 Intercept Activity table are extracted based on the last extract, then transformed and **inserted** (ETL) to the InfoAdvantage Intercept Activity sub-class upon executing the eMARS ETL's.
- A given intercept on the Intercept Activity sub-class could potentially have multiple records in the data warehouse based on the number of updates of the intercept record in the Advantage Financial 3. Those records in InfoAdvantage will be identified by the As of Date field (object) which represents the system date/time stamp on which a corresponding record was updated in Advantage Financial.

- Agencies will be responsible for writing an extract query through InfoAdvantage WebIntelligence (Web-I) to extract respective intercept data from the data warehouse that they will then load to their own database for real-time queries or use as appropriate for their own purposes. If the agency is not capable of writing their own extract query, the eMARS Data Warehouse reporting team will assist them in this endeavor.
- In eMARS, InfoAdvantage User ID's will be assigned to security groups based on allowable department codes. This means, only authorized records will be retrieved upon executing a query.
- Prompts for the **Intercept Date** and **From-To Intercept Date** are defined in the InfoAdvantage Accounts Payable universe to retrieve intercepted records for a specific date or a date between the specified dates. The Intercept Date on the Intercept Activity table in Advantage Financial 3 is set to the Application Control Date upon inserting a record into this table.

2 Extract Approach

2.1 Current MARS Process

During the MARS Nightly Cycle, intercept activities generated from the Automated Disbursement and Check Writer processes for several claiming agencies are loaded into designated sequential files (FINA.AFN1.SEQ.VOFF*) on the mainframe. Next business day, claiming agencies upload intercepted data from the respective sequential files into their applications.

2.2 New eMARS Process

In eMARS, intercept activities generated from the Automated Disbursement and Check Writer processes will be loaded from the Advantage Financial 3 application into the data warehouse application, InfoAdvantage, during the Nightly Cycle. Next business day, claiming agencies can obtain their related intercept information from the InfoAdvantage application.

The following provides a high-level description of the eMARS processes that intercepted payments will go through before intercept information becomes available for query or upload by respective claiming agencies:

- During the day/nightly cycle, activities related to requested vendor intercepts and intercepted Automated Disbursement and Check Writer payments will be posted to the Advantage Financial 3 Intercept Request and Intercept Activity tables, respectively.
- Upon running the ETL jobs during the nightly cycle, updates to the Advantage Financial 3 Intercept Request and Intercept Activity tables will be uploaded to the InfoAdvantage Intercept Request class and Intercept Activity sub-class within the Accounts Payable Universe.
- Agency authorized users will logon to the Advantage Financial 3 application in order to access the InfoAdvantage reports through the Web-I component of Business Objects. They will follow the instructions provided in the *InfoAdvantage Extract Query* section to extract vendor intercept information. Only records for authorized department codes (based on users' security groups) will be retrieved.
- Agencies can save retrieved data on a local machine or file server by using one of the following file formats: Adobe Portable Document Format (.pdf), Microsoft Excel format (.xls) or Comma Separated Values format (.csv).

2.2.1 Frequency

During the eMARS Nightly Cycle, vendor intercept related transactions will be posted from the Advantage Financial 3 operational database to the InfoAdvantage Accounts Payable Universe.

2.2.2 Departments

The following departments currently upload the vendor intercept information into their applications from the MARS designated datasets.

- Department of Revenue
- Unemployment Insurance
- Department of Community Based Services (DCS)

3 Vendor Intercept Specification

3.1 InfoAdvantage Universes

- Accounts Payable (Business Function Universe)

3.2 InfoAdvantage Classes

- Payment Detail (Accounts Payable Universe)
- Disbursement History (Accounts Payable Universe)
- Intercept Request (IR) (Accounts Payable Universe)

3.3 InfoAdvantage Sub-Classes

- Intercept Activity (Payment Detail Class)
- Debt Entity (Payment Detail Class)
- Paid Check (Disbursement History Class)
- Check Reconciliation (Disbursement History Class)
- IR Vendor/Customer (Intercept Request Class)

3.4 InfoAdvantage Extract Query

Authorized users will create an extract query in InfoAdvantage Web-I as follows:

- Open the Accounts Payable universe.
- Drill-down into the Payment Detail class.
- Drill-down into the Intercept Activity sub-class
- Drag applicable Intercept Activity objects listed in the table below under the **Object Name** column, and drop them under the **Result Objects** panel.
- Drag either the *Intercept Date Prompt* OR the *From-To Intercept Date Prompt*, and drop it under the **Query Filters** panel.
- Drill-down into the Dept Entity sub-class
- Drag applicable Debt Entity objects listed in the table below under the **Object Name** column, and drop them under the **Result Objects** panel.
- Drill-down into the Intercept Request (IR) class.
- Drill-down into the IR Vendor/Customer sub-class
- Drag applicable IR Vendor/Customer objects listed in the table below under the **Object Name** column, and drop them under the **Result Objects** panel.
- Drill-down into the Disbursement History class.
- Drill-down into the Check Reconciliation sub-class
- Drag applicable Check Reconciliation objects listed in the table below under the **Object Name** column, and drop them under the **Result Objects** panel.
- If the Vendor/Customer Code and Legal Name are blank in the Check Reconciliation sub-class, then drill-down into the Paid Check sub-class (i.e. associated checks have been cleared).
- Drag applicable Paid Check objects listed in the table below under the **Object Name** column, and drop them under the **Result Objects** panel.

- When the query is executed, the user will be prompted to enter an Intercept Date or range for Intercept Dates based on the selected prompt. The date must be entered using the format MM/DD/YYYY.

3.5 Vendor Intercept Fields

The following table provides a crosswalk between the MARS Advantage 2 fields on the datasets FINA.AFN1.SEQ.VOFF* and the eMARS InfoAdvantage Intercept fields (i.e. objects) along with the data source (i.e. classes or sub-classes).

It should be noted that some Advantage 2 fields correspond to more than one field in eMARS InfoAdvantage (e.g. CLAIM-REASON) and that the eMARS InfoAdvantage includes additional fields that did not exist on the Advantage 2 datasets FINA.AFN1.SEQ.VOFF*.

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
AGENCY	Alphanumeric	3	Claim Department	Intercept Activity	Alphanumeric	4	The value refers to a document department code of either referenced receivable document for an internal debt record, or provided on the Receivable Document Department Code for an external debt record. The value of this field will be similar to the one on the Receivable Document Department Code.
CLAIM-REASON	Alphanumeric	3	Debt Entity	Debt Entity	Alphanumeric	4	The unique identification of the entity for which the debt was owed.
CLAIM-REASON	Alphanumeric	3	Debt Type	Debt Entity	Alphanumeric	4	The unique identification code of the type of debt for which the debt was owed.
VENDOR-TIN	Alphanumeric	9	Vendor/Customer TIN	IR Vendor/Customer	Alphanumeric	9	The federal taxpayer identification number of the person who owed money or the company which owed money.
VENDOR-NAME	Alphanumeric	30	Legal Name	Paid Check	Alphanumeric	60	The legal name of the person whose payment was intercepted or the

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
				Or Check Reconciliation			name of the company.
VENDOR-CODE	Alphanumeric	11	Vendor Customer Code	Paid Check Or Check Reconciliation	Alphanumeric	20	The vendor code of the person whose payment was intercepted or the vendor code of the company.
CLAIM-REFERENCE	Alphanumeric	40	Receivable Doc ID	Intercept Activity	Alphanumeric	20	The value refers to a Receivable Document (RE) ID for an internal debt record or a unique identifier provided by claim agency for an external debt record.
RECEIVABLE-AGENCY	Alphanumeric	3	Receivable Doc Dept Code	Intercept Activity	Alphanumeric	4	The value refers to either a document department code of a referenced receivable document for an internal debt record, or a unique identifier for an external debt record. The value of this field will be similar to the one on Claim Department Code.
RECEIVABLE-NUMBER	Alphanumeric	11	Receivable Doc ID	Intercept Activity	Alphanumeric	20	The value refers to a Receivable Document (RE) ID for an internal debt record or a unique identifier provided by claim agency for an external debt record.
INTERCEPT-DATE-ALL	Alphanumeric (ccyyymmdd)	8	Intercept Date	Intercept Activity	Date	10	The Intercepted Date is the date the intercept was taken. The format of this field is "mm/dd/yyyy".

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
BANK-ACCOUNT-CODE	Alphanumeric	2	Disbursement Bank Account Code	Intercept Activity	Alphanumeric	4	The bank account code on the disbursement document against which the intercept was applied.
CHECK-CODE	Alphanumeric	2	Disbursement Doc Code	Intercept Activity	Alphanumeric	8	The document code of the disbursement document against which the intercept was applied.
PAYMENT-NUMBER	Alphanumeric	11	Disbursement Check Number	Intercept Activity	Alphanumeric	15	The disbursement check number on the disbursement document against which the intercept was applied.
OFFSET-AMOUNT-R	Numeric 9(12)v9(2)	14,2	Intercept Amount	Intercept Activity	Decimal	14,2	The intercepted amount for a TIN. The intercept amount can be a result of a receivable debt or external debt. The format of this field is "99999999999.99".
<i>The following objects will be available in eMARS for agencies that choose to use them.</i>							
			Intercept Last Name	Intercept Activity	Alphanumeric	30	The last name of the person whose payment was intercepted or the name of the company.
			Vendor/Customer TIN Type	IR Vendor/Customer	Alphanumeric	1	The taxpayer identification type. Valid types are: "1" for "EIN", and "2" for "SSN/ITIN/ATIN".
			Disbursement Doc Dept Code	Intercept Activity	Alphanumeric	4	The document department code of the disbursement document against

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
							which the intercept was applied.
			Disbursement Doc ID	Intercept Activity	Alphanumeric	20	The document number of the disbursement document against which the intercept was applied.
			Disbursement Doc Vendor Line No	Intercept Activity	Number	10	The document number of the disbursement document against which the intercept was applied.
			Intercept Transfer Doc Code	Intercept Activity	Alphanumeric	8	The document code of the referenced intercept transfer document. This field is updated after successfully processing the associated intercept document.
			Intercept Transfer Doc Dept Code	Intercept Activity	Alphanumeric	4	The document department code of the referenced intercept transfer document. This field is updated after successfully processing the associated intercept document.
			Intercept Transfer Doc ID	Intercept Activity	Alphanumeric	20	The document number of the referenced intercept transfer document. This field is updated after successfully processing the associated intercept document.
			GAX Doc Code	Intercept Activity	Alphanumeric	8	If applicable, the document code of the referenced GAIP intercept payment document to transfer the funds to an external entity.

MARS Advantage 2			eMARS InfoAdvantage				
Field Name	Data Type	Data Size	Object Name	Sub-Class Name	Data Type	Data Size	Field Description
			GAX Doc Dept Code	Intercept Activity	Alphanumeric	4	If applicable, the document department code of the referenced GAIP intercept payment document to transfer the funds to an external entity.
			GAX Document ID	Intercept Activity	Alphanumeric	20	If applicable, the document number of the referenced GAIP intercept payment document to transfer the funds to an external entity.
			Receivable Doc Code	Intercept Activity	Alphanumeric	8	The value refers to either a Receivable Document (RE) code of a referenced receivable document for an internal debt record or "N/A" for an external debt record.
			Intercept Fee Amount	Intercept Activity	Decimal	14,2	The fee amount charged to a TIN for the processing of the intercept. The format of this field is "999999999999.99". KY plans to leave it \$0.