

## **Information Warehouse Accounting Data**

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### **Overview**

The Information Access Data Warehouse currently contains accounting data tables which include source system general ledger transactions and many of the on-line chart of accounts tables. In addition, the warehouse includes budgetary, expenditure, and revenue data summarized at the appropriation, allotment, expenditure, and revenue budget levels. It includes federal aid and project data, as well as, open items.

### **Objectives**

After completing this topic, you will be able to:

- ! Define the accounting data available in the Information Warehouse.
- ! Define when source system extracts are loaded into the warehouse and how table records date stamped.

### **Key Points**

This topic addresses the following key points:

- ! Information Warehouse tables/views
- ! Information Warehouse data elements

## **Warehouse Accounting Data**

- !** **Budgetary data**
- !** **Chart of accounts**
- !** **General accounting**
- !** **Ledger data**
- !** **Open items**
- !** **Federal aid & projects**

## Warehouse Accounting Data

### *Information Warehouse tables and data views*

The Data Warehouse accounting data includes GFS source system general ledger transactions, chart of accounts, federal aid, project, open purchase order, open requisition, and open receivable data. The warehouse also includes budgetary, expenditure, and revenue data summarized at the appropriation, allotment, expenditure, and revenue budget level

**Budgetary Data** - the Budgetary Data tables contain summarized budget, expenditure, and revenue data. These tables also define programmatic coding such as program, budget activity, and management activity.

**Chart of Accounts** - Chart of Accounts tables define accounting code block elements and hierarchies.

**General Accounting** - Currently there is just one General Accounting table - the Balance Sheet Balance table.

**Ledger Data** - the Ledger tables contain source system general ledger document (transaction) records. The Ledger Data table group includes:

- ! Expenditures
- ! Revenue Transactions
- ! Balance Sheet Transactions
- ! Encumbrance Transactions

**Open Items** - the Open items tables include open purchase orders, requisitions and receivables.

**Federal Aid & Projects** - these tables contain data about transactions processed against grants and projects.

## Warehouse Accounting Data

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### ***Budgetary Data***

MAPS budgetary transactions are summarized in the Expense Budget, Allotment, Appropriation and Revenue Budget tables. An example of a typical Expense Budget table from MAPS is shown on the opposite page. It contains current budget, encumbered, expended and available amounts. The Budgetary tables in the Data Warehouse contain similar information at the expense budget, allotment, appropriation and revenue budget levels.

An **appropriation** account in MAPS is used to record resources which have been appropriated by the legislature and to record dedicated receipts that the legislature has authorized an agency to spend. The appropriation account controls the total amount of an agency's expenditures and provides a summary of the sources and uses of funds.

Agencies must set up **allotment** accounts for all budget items upon which the law sets specific conditions for spending within an appropriation. Allotment accounts may also be set up for agency management purposes.

Before appropriation account funds can be encumbered or expended, **expense budgets** must be entered to create an allotment amount. The sum of the expense budget amounts within an allotment account becomes the control total for the allotment account. Expense budgets are entered at the object class level.

**Revenue budgets** are accounts used to budget for and record all dedicated and non-dedicated revenues earned for a given fiscal year.

## **Budgetary Data**

**X      Expense Budget**

**X      Allotment**

**X      Appropriation**

**X      Revenue Budget**

## Warehouse Accounting Data

### ***Expense Budget table***

The Expense Budget table includes all of the elements found on the Expense Budget table in the source system. The table contains expenditure and budgetary data summarized at the lowest level of budgetary detail (Object Class).

### ***Allotment table***

The Allotment table contains budget and expenditure data that has been summarized at the allotment level. The allotment table also contains program codes such as Management Activity, Budget Activity, Program, Statewide Program, and Kind Code. The allotment table is the only budget table where these program codes appear.

### ***Appropriation table***

The Appropriation table contains budget and expenditure data that has been summarized at the appropriation level. The Appropriation table also contains other appropriation level data that cannot be found on other budget tables. These elements include Anticipated and Actual transfers, Balance Forward, and Section/Sequence.

### ***Revenue Budget table***

The Revenue Budget table includes all of the elements found on the Revenue Budget table in the source system. The table contains revenue and budgetary data summarized at the revenue source code level.

## Chart of Accounts

- X **Fund**
- X **Agency**
- X **Organization**
- X **Sub-organization**
- X **Summary Organization**
- X **Object**
- X **Object Class**
- X **Sub-object**
- X **Revenue Source**
- X **Sub-revenue Source**
- X **Activity**
- X **Balance Sheet Account**

## Warehouse Accounting Data

### ***Chart of Accounts tables***

Chart of Accounts tables define accounting code block elements and hierarchies in the MAPS accounting system. The Chart of Accounts tables define the various codes which, when taken together, form a budgetary account. Chart of Accounts tables include:

***Fund*** - defines values for all funds used in the state of Minnesota.

***Agency*** - defines valid agency codes.

***Organization*** - Each agency is divided into subordinate units called organizations. All documents processed in MAPS must have an organization code. This table defines valid organization values and assigns organization/agency relationships.

***Sub-organization*** - A further breakdown of the organization structure.

***Summary Organization*** - This table summarizes an agencies organization structure. It defines every organization code within an agency and identifies the other organization codes that are related to it. For each lower level organization code, it defines its' ancestor organization, and its' allotment, appropriation, expense budget and revenue budget organization codes. Thus, it allows you to select data based on any branch of your agencies' organizational structure.

## Chart of Accounts

- X **Fund**
- X **Agency**
- X **Organization**
- X **Sub-organization**
- X **Summary Organization**
- X **Object**
- X **Object Class**
- X **Sub-object**
- X **Revenue Source**
- X **Sub-revenue Source**
- X **Activity**
- X **Balance Sheet Account**

## Warehouse Accounting Data

**Object** - Defines types of objects that appear on spending transactions. Object is the lowest level of detail that appears on an expenditure report.

**Object Class** - object code is the starting point for a classification hierarchy that puts similar objects of expenditure together in progressively larger groups. Object class is the next highest group and is the level used in expense budgets. Most expense reports will be based on object class.

**Sub-object** - each object code may be divided into several sub-objects. Sub-object is keyed by fiscal year, agency, object, and sub-object.

**Revenue Source** - defines types of revenue sources that appear on revenue budget and revenue documents.

**Sub-revenue** - each revenue source code may be divided into several sub-revenue source codes. Sub-revenue is keyed by fiscal year, agency, revenue source, and sub-revenue source code.

**Activity** - Activity codes can be used to track expenses for budgeting and reporting purposes across agency and fund lines.

**Balance Sheet Account** - defines valid balance sheet accounts for a fund. Balance sheet accounts are those accounts that appear on a balance sheet, such as: cash, accounts receivable, accounts payable, fund balance. The Balance Sheet Account Number in MAPS defines the balance sheet accounts.

## **General Accounting**

**X      Balance Sheet Balance**

## **Ledger Data**

**X      Expenditures**

**X      Revenue**

**X      Balance Sheet Trans**

**X      Encumbrance Trans**

**X      Budget Trans**

## Warehouse Accounting Data

### ***General Accounting***

The General Accounting tables include any tables that relate to general accounting. At this time, the only general accounting table is the Balance Sheet Balance table.

***Balance Sheet Balance*** - the Balance Sheet balance table contains balance sheet account balances for individual funds. Reporting date must be selected when using this table.

### ***Ledger Data***

The Ledger Data tables are a breakdown of the transaction detail included on the general ledger. The transactions are separated into four tables:

***Expenditures*** - contains all general ledger transactions coded with account types 22 ( Expenditures/Expenses) and 23 (Expenditures). Nearly all general ledger transactions in the expenditures group are coded with account type 22 and most powerusers need not be concerned with differences between these account types. However, some account type 23 (expenditures) are written to the source system general ledger when the transaction has both an object code and a balance sheet account number, instead of just an object code. Loan principle payments is an example when users may code both an object code and a balance account number resulting in an Account type 23.

***Revenue*** - includes all account type 31 (revenue) transactions. It may include CRs, PVs and REs.

***Balance Sheet Transactions*** - contains general ledger transactions coded with account types 01 (Assets), 02 (Liabilities), 03 (Fund Balance) and 11 (Assets Offset to Expenses).

***Encumbrance*** - includes general ledger transactions with account types 20 (Pre-encumbrances) and 21 (Encumbrances).

## Warehouse Accounting Data

***Budget Transactions*** - contains all budget ledger & allotment ledger transactions. (Account types: 03, 41, 42, 43, 49, 51)

### **MAPS Accounting System Account Types**

01	Assets
02	Liabilities
03	Fund Balance
11	Assets Offset to Expenses
20	Pre-encumbrances
21	Encumbrances
22	Expenditures/Expenses
23	Expenditures
24	Expenses
31	Revenue
32	Revenue Collected (Memo)
41	Budgeted Obligations
42	Appropriations
43	Allotments
44	Unissued Bonds
45	Reverted Amounts
46	Estimated Receipts
47	Beginning Cash Balance
49	Anticipated Transfers
51	Estimated Revenue
61	Base Obligation Plan
62	Modified Obligation Plan
71	Base Revenue Plan
72	Modified Collection Plan
73	Base Collection Plan
74	Modified Collection Plan
80	Federal Aid Charge
81	Fed Aid Budget - Fed Funds
82	Fed Aid Budget - State Funds
83	Fed Aid Budget - Bond Funds
84	Fed Aid Budget - Other Funds
85	Project Charge
86	Project Budget - Fed Funds
87	Project Budget - State Funds

## Warehouse Accounting Data

88	Project Budget - Bond Funds
89	Project Budget - Other Funds
92	Job Full Cost Memo

### *Account Types*

To understand Account Types, you must first understand why they are needed in MAPS. Each record written to the general ledger is automatically assigned an account type by the accounting system. Transactions in the General Ledger are tracked by account type (31, 22, 21) as well as accounting transaction code (CR, PV, RE, etc). In MAPS, it is possible to have several types of accounting transactions (CR, RE, PV) that use the same account type code (31-Revenue). In order to see all Revenue transactions, you must select on account type 31 rather than CR or RE. Also, one accounting transaction type (CR, PV) could be found on three different ledger tables: Expenditures, Revenue and Balance Sheet Transactions. Consequently, we recommend you select on account type code when using the ledger data tables.

### *Document Types*

Typically, expenditures are created by a payment voucher (PV) document (transaction). The type of payment voucher is further defined by the document type. Document types for payment vouchers are:

- 1 Payments to outside vendors
- 2 Intragovernmental payments within the same fund (intrafund)
- 3 Intragovernmental payments between funds (interfund)
- 4 Reimbursements
- 6 Intrafund payments where a receivable is referenced (both intrafund and interfund payments).

**To Find Revenue Transactions:**

**Revenue table**

**Account Type 31**

**Balance Sheet transactions Table**

**Account Type 01**

**Balance Sheet Account Code AA01**

## Warehouse Accounting Data

### ***Cash Receipts Reporting***

Cash receipt reporting from the warehouse can vary from one agency to the next depending on the types of cash receipts an agency receives.

The Revenue table can be used for cash receipts reporting by agencies that do NOT use the accounting system Advanced Receivables module. Although cash receipts and revenues mean two different things, they usually occur at the same time for agencies that do not use Advanced Receivables, and so the revenue entry is suitable for cash receipts.

When a receivable transaction (RE) is entered into the accounting system a revenue entry is made in the accounting system general ledger:

Accounts Receivable	\$\$\$
Revenue	\$\$\$

Later, when the cash is received the entry is typically:

Cash	\$\$\$
Accounts Receivable	\$\$\$

For these types of entries the entry to Cash should be used for cash receipts reporting rather than the entry to Revenue. The entry to cash is a balance sheet entry with an account type of 01; users should also select on Bank Account Code "AA01".

One problem with using the Balance Sheet Transaction table for cash receipts reporting is Intragovernmental payments where both the buyer and seller accounts are in the same fund. The problem in this situation is that there is no entry to cash:

Expenditures	\$\$\$
Revenue	\$\$\$

## Warehouse Accounting Data

Therefore, if your agency uses Advanced Receivables and receives intragovernmental payments, you will need both the Revenues and the Balance Sheet Transaction tables for cash receipts reports.

### Open Items

- !      **Open PO Header**
- !      **Open PO Line**
- !      **Open RQ Header**
- !      **Open RQ Line**
- !      **Open RE Header**
- !      **Open RE Line**

## Warehouse Accounting Data

### ***Open Items***

The Open Items tables contain open purchase order, requisition and receivables data. These tables should be used to create ad hoc reports and not to duplicate the standard monthly reports available on InfoPac. Information in the Open Item tables is replaced daily. Open Items tables include:

***Open PO Header*** - contains summary information for purchase order headers organized by vendor code.

***Open PO Line*** - includes details of all outstanding purchase order lines.

***Open RQ Header*** - contains summary information about open requisitions.

***Open RQ Line*** - includes details about open requisition lines.

***Open RE Header*** - contains summary information for all outstanding receivables.

***Open Re Line*** - includes details about open receivable lines.

## **Federal Aid & Projects**

- ! Federal Aid**
- ! Federal Aid Budget Line**
- ! Project**
- ! Project Budget Line**
- ! Sub-project Description**

## Warehouse Accounting Data

### ***Federal Aid***

The Federal Aid tables contain summary and detail data about federal grants. The Reporting Month Number field must be selected when using these tables. There are two Federal Aid tables:

***Federal Aid*** - contains financial and descriptive information about grants. Amount fields include pre-encumbered, federal aid charges, encumbered, expended, expensed and available balance. This is a copy of the GFS Agency federal Aid table (AGFA).

***Federal Aid Budget Line*** - includes similar information by grant budget line. This is a copy of the GFS Federal Aid Budget Line Inquiry (FBLT).

### ***Project***

The Reporting Month Number field must be selected when using the Project tables. There are two Project tables:

***Project*** - contains financial and descriptive information about projects organized by agency and project number. This is a copy of the GFS Agency Project table (AGPR).

***Project Budget Line*** - includes project line data. This is a copy of the GFS Project Budget Line table (PRBL).

***Sub-project Description*** - contains sub-project descriptions.

## **Date Fields**

**Acceptance date**

**Date of Record**

**Reporting Date**

**Reporting Month Number**

## Warehouse Accounting Data

### ***Dates In the Warehouse***

Accounting data in the warehouse relies on and is controlled by a number of date fields. It is important to distinguish what each of these dates define and to use them appropriately.

***Acceptance date*** - date a document is written to the source system general ledger. This field appears on accounting ledger tables (i.e. Expenditures, Revenues, Balance Sheet Trans).

***Date of Record*** - transaction date that appears on GFS documents. This field appears on accounting ledger tables.

***Reporting Date*** - Date Stamp which records the last processing date that files were extracted from the source. This field is created in the data warehouse to provide accurate dates for month end processing. Reporting dates are included on the Ledger Data, Budget Data, Open Items, Federal Aid and Projects tables.

***Reporting Month Number*** - defines the month for which records are extracted from the source system. Tables that have a reporting month number field contain sets records for each month in a fiscal year. For example, if you use reporting Month Number 199601, you will get all records extracted on the last business day of January 1996. If you did not specify a reporting month number, on tables containing this field, you will get duplicate lines for every month available on the table. The Reporting Month Number appears on the Expense Budget, Revenue Budget, Appropriation, Allotment, Federal Aid, Federal Aid Budget line, Project and Project Budget Line tables.

## Warehouse Accounting Data

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