



# FLAIR Information Warehouse

with in

MRE-  
Managed  
Reporting  
Environment



# What is the Information Warehouse?

---




**A collection of data including:**

- ⦿ **Investment Data**
- ⦿ **FLAIR Central Accounting Data**
- ⦿ **FLAIR Payroll Data**
- ⦿ **FLAIR Departmental Master File and Subsidiary File Data**
- ⦿ **Title File Data**
- ⦿ **Purchasing Card Charge Information and Person File Data**

# Why was the Warehouse Developed?



---

-  Growing need recognized by the Department of Banking and Finance (now Department of Financial Services)
-  The Department's continuing search for new ways to provide more useful information, faster, and at a lower cost
-  Changes in the technology and cost made it possible

# How is this Information Valuable to YOU?



---

- ☺ **Non-Programmers can write and run their own reports quickly!**
- ☺ **The results (printed or viewed), are immediately available.**
- ☺ **The results of a request can be pulled (downloaded) into a spreadsheet, or document formats for further analysis.**

# Operational System

## *Without the Information Warehouse*

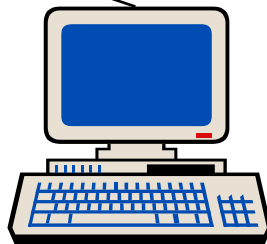
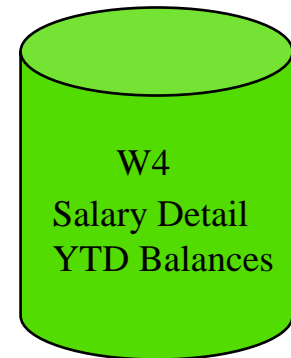
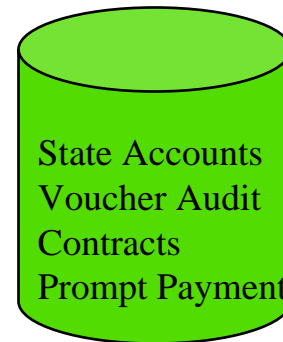
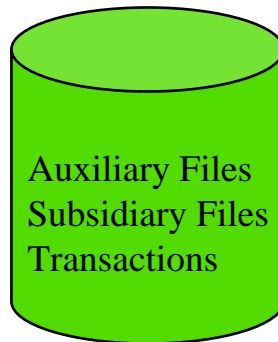
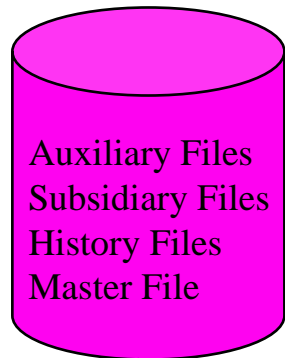
**Departmental FLAIR**

**Central  
Accounting**

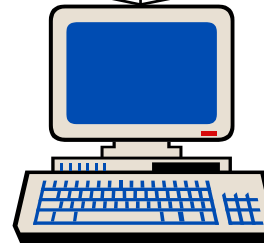
**Payroll**

**Informational  
Data Base**

**Production  
Data Base**

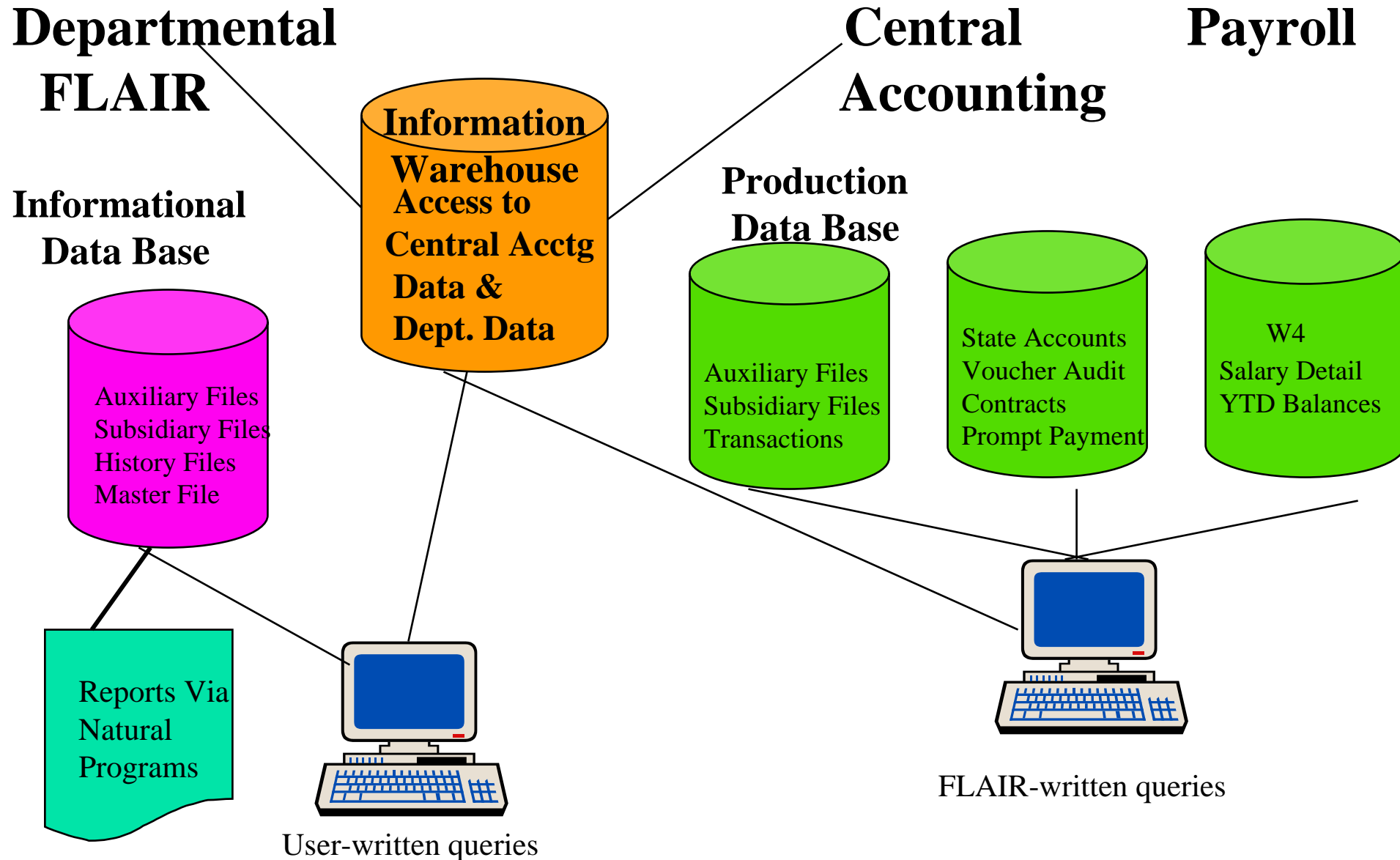


User-written queries



FLAIR-written queries

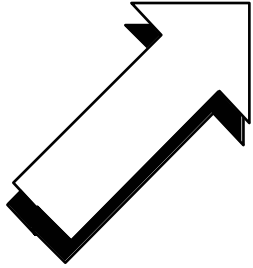
# Operational System - *Including Info. Warehouse*



# Data Delivery

**Summarized/Aggregated**

**Derived**



Allotment Balance		

Account Daily Balance		

Account Monthly Balance		

Account		

Employee		

Voucher		

Cash Receipts		

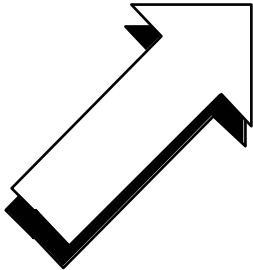
**Normalized**

**Reconciled**

Warrant		

Accounting Trans		

Disbursements		



Centralized Master
--------------------

Departmental Master
---------------------

Employee Master
-----------------

Subsidiary Files
------------------

**Operational**

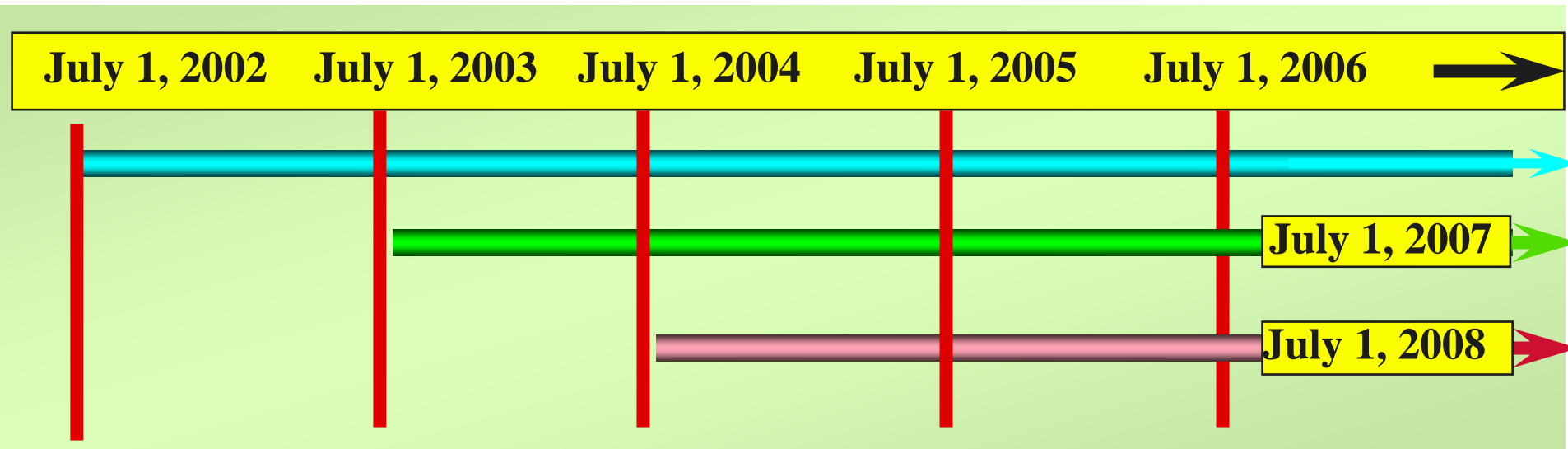
Centralized Vendor History
----------------------------

Departmental History
----------------------

Employee Payment History
--------------------------

Auxiliary Files
-----------------

# Up to 5 Years Of Data\* is Maintained in the FLAIR Information Warehouse



**\*Only certain data is maintained for up to 5 years primarily Central Accounting Data**

**\*\*Departmental Data is maintained for up to 2 years**



---

# Relational Data Base Concepts

# Relational Data Base Concepts



---

- ◆ **Consists of Multiple Tables**
- ◆ **A TABLE is created for each "THING" for which information is needed**

# Relational Data Base Concepts

For Example:

Information is needed about **EMPLOYEES**,  
**DEPARTMENTS**, and **PROJECTS**

Therefore 3 TABLES are created:

EMPLOYEE

DEPARTMENT

PROJECT

services

cial



# Relational Data Base Concepts

---

- **A TABLE consists of 'Columns & Rows'**
- **One column for each element of data**
- **One row for each occurrence**

# Relational Data Base Concepts

*One column for each element of data*

**TABLE: EMPLOYEE**

<b>EMPLOYEE NUMBER</b>	<b>LAST NAME</b>	<b>WORK DEPT</b>	<b>JOB</b>

# Relational Data Base Concepts

*One row for each occurrence*

*Every row in a TABLE has the same columns*

## TABLE: EMPLOYEE

EMPLOYEE NUMBER	LAST NAME	WORK DEPT	JOB
030	Smith	C01	Mgr
250	Lawrence	C21	Clk
270	Perez	E11	Clk

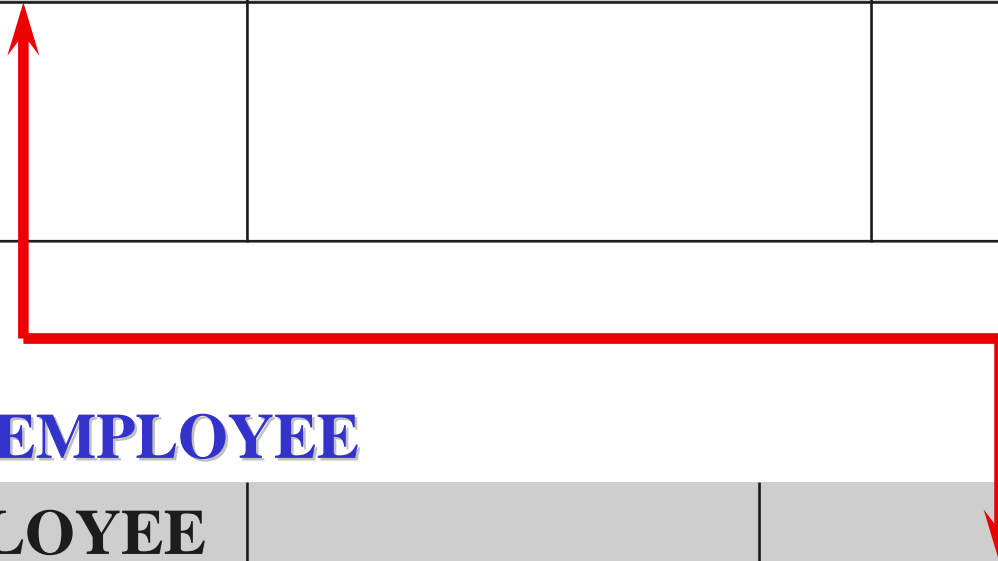
# Relational Data Base Tables Are 'Related'

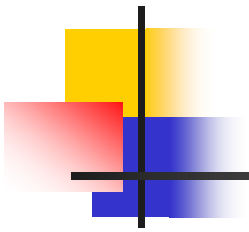
**TABLE: DEPT**

<b>WORK DEPT</b>	<b>DEPT NAME</b>	<b>DEPT LOCATION</b>

**TABLE: EMPLOYEE**

<b>EMPLOYEE NUMBER</b>	<b>LAST NAME</b>	<b>WORK DEPT</b>	<b>JOB</b>





---

Related TABLES may be  
'**Joined**' to create a **NEW**  
**TABLE** that includes columns  
from each of the original  
tables.

# TABLE: DEPT

WORK DEPT	DEPT NAME	DEPT LOCATION

## **TABLE: DEPT**

<b>WORK DEPT</b>	<b>DEPT NAME</b>	<b>DEPT LOCATION</b>

## **TABLE: EMPLOYEE**

<b>EMPLOYEE NUMBER</b>	<b>LAST NAME</b>	<b>WORK DEPT</b>	<b>JOB</b>

## **TABLE: DEPT**

<b>WORK DEPT</b>	<b>DEPT NAME</b>	<b>DEPT LOCATION</b>

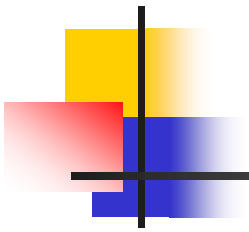
## **TABLE: EMPLOYEE**

<b>EMPLOYEE NUMBER</b>	<b>LAST NAME</b>	<b>WORK DEPT</b>	<b>JOB</b>

## **NEW TABLE: EMPLOYEE DEPT**

<b>EMPLOYEE NUMBER</b>	<b>LAST NAME</b>	<b>JOB</b>	<b>WORK DEPT</b>	<b>DEPT NAME</b>	<b>DEPT LOCATION</b>

# Data From the Chief Financial Officer's Central Accounting System

- 
- **Central Balance File**
    - ▲ State Accounts Screens
  - **Central Transaction File**
    - ▲ Detail Transaction Screens
    - ▲ Vendor History Screens
    - ▲ Voucher Audit Screens
  - **Warrant Information**
    - ▲ Issue Date
    - ▲ Paid Date
    - ▲ Etc...
  - **More...**



# Data From Departmental Accounting System

---

- Departmental Title File
- Account Description File
- Departmental Master File
- Departmental Transaction History File
- Departmental Subsidiary Files
- Departmental Property File
- Departmental Allotment Balances
- More



# Data From FLAIR Payroll

---

- **Employee Name**
- **Payroll Deduction Codes**
- **Salary Detail Information**
- **W4 Information**
- **Payroll Warrant Information**
- **More**



# MRE- Managed Reporting Environment

---

*for the*

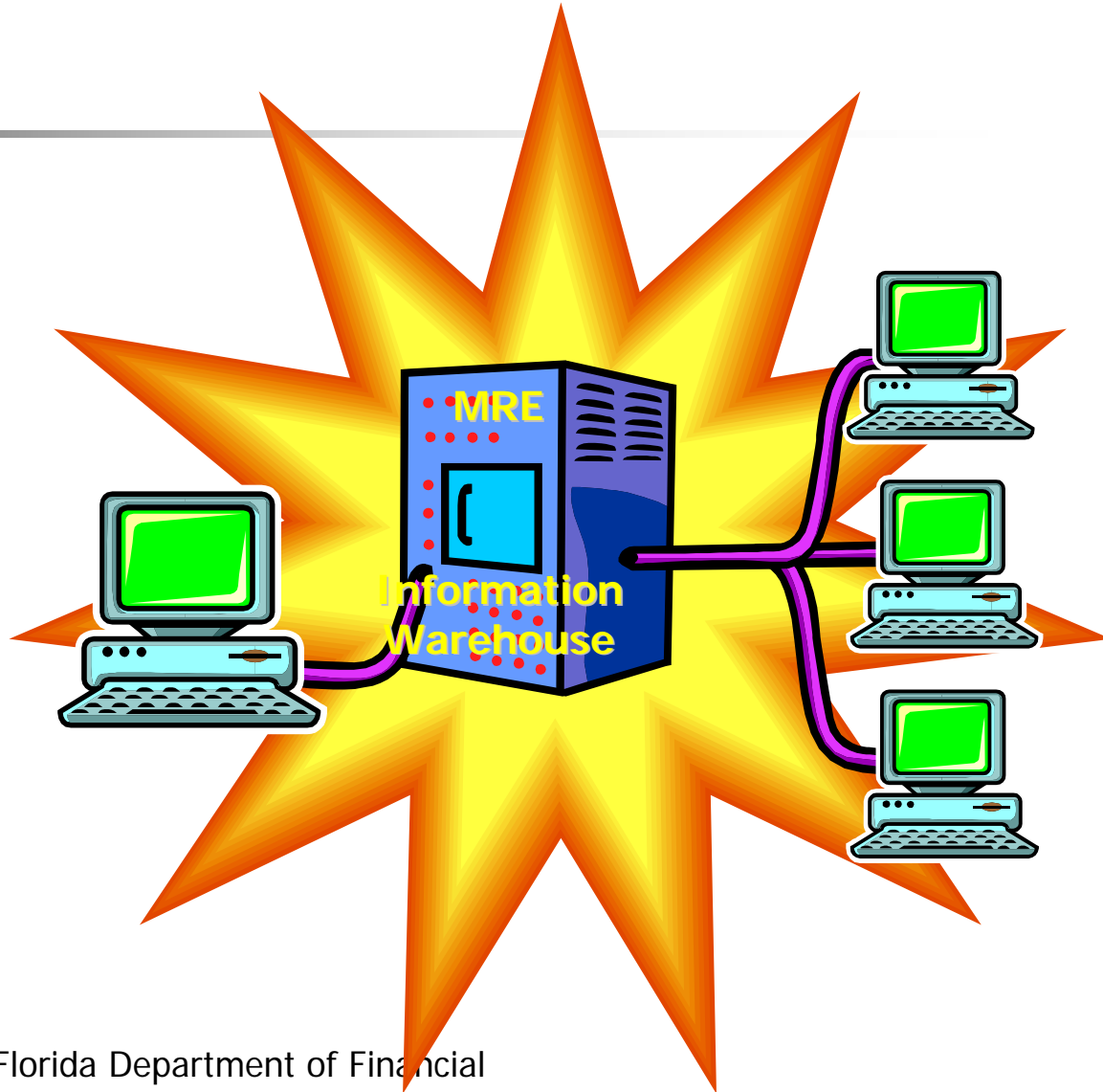
**FLAIR**

**Information Warehouse**

*Introducing: WebFOCUS*

<https://flair.dbf.state.fl.us>

To access  
MRE and the  
Information  
Warehouse  
Log on to the  
Website





# What is MRE?

---

- \* **Managed Reporting Environment**
- \* **Software used to create FLAIR Information Warehouse queries**
- \* **IW report data is easily saved to an Excel spreadsheet**
- \* **Accessed from the CFO's website**
- \* **Users must be issued a license**

# MRE- Managed Reporting Environment



---

➤ **Domain Administrator** – Used to “Manage” Domains (Domain Builder)

➤ **Domains:**

✓ **Standard Reports** – Queries Developed by Administrators, Available to Others

✓ **My Reports** – Reports (Queries) Saved in my Personal Library

# MRE- Managed Reporting Environment



---

- ✓ **Shared Reports –**  
Reports (Queries) Saved to a “Shared” Library  
Available to Users within a Domain
- ✓ **Reporting Objects –**  
Set up by Domain Builder  
Used for creating IW Queries  
Pre-defined Elements

# MRE- Managed Reporting Environment



---

## ➤ Report Caster –

✓ Available to Users within a Domain.  
Can schedule queries to run daily, monthly, etc. Report output can be sent via email to other users.

✓ Requires additional security set-up

➤ Logoff

➤ Help

# MRE- Managed Reporting Environment



---

## Reporting Objects

- **Created by the Domain Administrator in MRE**
- **Identify an Information Warehouse Table**
- **May define limits to the data retrieved from the Information Warehouse**
- **Used to write queries (reports)**

Field Name	Alias	Format	Segment
ACCOUNT_CD	ACCOUNT_CD	A29	ALLPYMT
AGENCY_DOC_NBR	AGENCY_DOC_NBR	A7	ALLPYMT
APPR_YR	APPR_YR	A2	ALLPYMT
APRV_AUDITOR_DT	APRV_AUDITOR_DT	YYMD	ALLPYMT
APRV_AUDITOR_ID	APRV_AUDITOR_ID	A6	ALLPYMT
AUDITOR_ID	AUDITOR_ID	A6	ALLPYMT
BE_CD	BE_CD	A8	ALLPYMT
BF_APPR_YR	BF_APPR_YR	A2	ALLPYMT
BF_CAT	BF_CAT	A6	ALLPYMT
BF_CFI	BF_CFI	A1	ALLPYMT
BF_OBJ	BF_OBJ	A6	ALLPYMT
CAT	CAT	A6	ALLPYMT
CFI	CFI	A1	ALLPYMT
CMPT_RCD_DT	CMPT_RCD_DT	YYMD	ALLPYMT
CONTRACT_NBR	CONTRACT_NBR	A5	ALLPYMT
DB_CD	DB_CD	A1	ALLPYMT
DISTRICT	DISTRICT	A2	ALLPYMT
DOC_FY_END	DOC_FY_END	P7	ALLPYMT
DOC_NBR	DOC_NBR	A9	ALLPYMT
DOC_TYPE	DOC_TYPE	A1	ALLPYMT
FID	FID	A6	ALLPYMT
FY_END	FY_END	P7	ALLPYMT
GF_CD	GF_CD	A2	ALLPYMT
IBI	IBI	A2	ALLPYMT
INVOICE_AMT	INVOICE_AMT	P15.2	ALLPYMT
INVOICE_APRV_DT	INVOICE_APRV_DT	YYMD	ALLPYMT
INVOICE_NBR	INVOICE_NBR	A9	ALLPYMT
INVOICE_STATUS	INVOICE_STATUS	A1	ALLPYMT
IW_DT	IW_DT	YYMD	ALLPYMT
JT_HEADER_AMT	JT_HEADER_AMT	P15.2	ALLPYMT
L1_CD	L1_CD	A2	ALLPYMT
OBJ	OBJ	A6	ALLPYMT
OLO	OLO	A6	ALLPYMT
OLO_L1	OLO_L1	A2	ALLPYMT
OLO_L2	OLO_L2	A2	ALLPYMT
OLO_L3	OLO_L3	A2	ALLPYMT

- This is the ALLPYMT Table, viewed from MRE
- Data in the Information Warehouse is stored in Tables
- In MRE, Reporting Objects are set up to access a particular table

Warning: Applet Window



# L1\_CD vs OLO

---

***L1\_CD should be used in the “where” statement for Central Accounting tables***

***OLO should be used in the “where” statement for Departmental tables***

# Building a Report (Query) in MRE



---

Locate the desired **Reporting Object** (table)

**Retrieve** the **Report Assistant** by 'right clicking' on the reporting object

The Report Assistant helps the user answer the following questions.....



# Building a Report (Query) in MRE

---

**What data fields do I want to appear in my report?**

*The Report Assistant allows me to click on the fields I want to display in my report*

# Building a Report (Query) in MRE



---

**In what order do I want the report?**

**What sub - totals do I want to see?**

*The report assistant allows me to choose sort options and other options by clicking on the appropriate buttons*

# Building a Report (Query) in MRE



---

**Are there certain values I want to see?**

**Do I want to supply these when I run the request?**

*The Report Assistant allows me to create “where statements” defining the data to be retrieved and flexibility in retrieving the data*



# Edit Options within MRE

---

## *Edit Column Headings (Titles)*

-  **Change Field Names**
-  **Make Titles More Descriptive**

## *Edit Formats*

-  **Insert Commas**
-  **Negative Dollar Amounts**
-  **Dollar Sign**
-  **Shorten or Lengthen field**



The format of a field may also be changed

View Options

Field Options

- Field Name
- TRNS\_TP\_CD
- TRN\_AMT
- TRN\_CD
- TRN\_TXT1
- TRN\_TXT2
- USER\_NBR
- VENDOR\_ADDR1
- VENDOR\_ADDR2
- VENDOR\_ADDR3
- VENDOR\_ID
- VENDOR\_NM1
- VENDOR\_NM2
- VOUCHER\_DT
- VOUCHER\_REASON
- VOUCHER\_STATUS
- VOUCHER\_TOTAL
- VOUCHER\_TYPE
- WARRANT\_DT
- WARRANT\_NBR
- WARRANT\_TYPE

**Change format**

Format Types:      Length:      Decimal:

1 - 33      0 - 31

Alphanumeric

Floating Point

Integer

Decimal

Packed

Date

15      2

Edit Options:

- Comma Inclusion -- C
- Zero suppression -- S
- Bracket negatives -- B
- Credit negative -- R
- Leading zeros -- L
- Floating Dollar -- M
- Non-floating Dollar -- N
- Scientific Notation -- E

OK

Cancel

Warning: Applet Window

Warning: Applet Window

Warning: Applet window

Sum

Field Options

Next >>

# Creating a Standard Report



---

***Standard Reports are available to anyone within the Domain***

***Only Domain Administrators can create Standard Reports, but anyone in the Domain can run a Standard Report***

# Creating a Standard Report



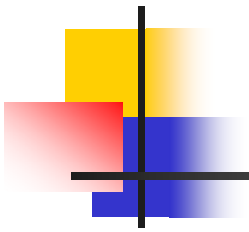
---

***Standard Reports are created under  
Domain Builder***

***Standard Reports use the Report  
Assistant***

***Standard Reports do not use  
Reporting Objects***

# Using Parameters in an MRE Query



---

*Parameterizing a request makes it more flexible*

*A parameter is a value supplied when a query is run*



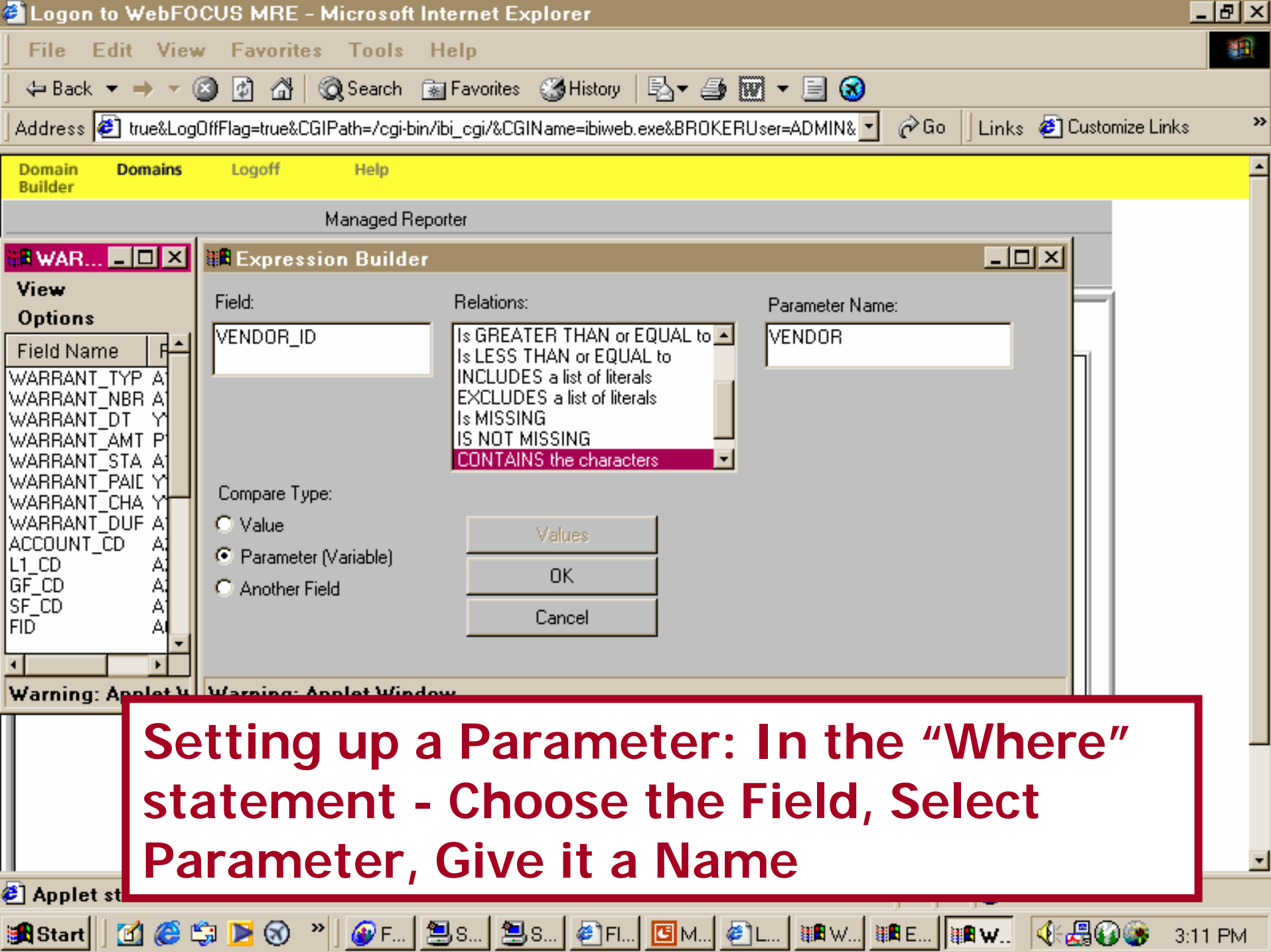
# Using Parameters in a MRE Query

---

**A parameter may be indicated  
when first creating a query**

**or**

**An existing query may be altered  
to include a parameterized field**



**WAR...**

**View Options**

Field Name	
WARRANT_TYP	A
WARRANT_NBR	A
WARRANT_DT	Y
WARRANT_AMT	P
WARRANT_STA	A
WARRANT_PAIC	Y
WARRANT_CHA	Y
WARRANT_DUF	A
ACCOUNT_CD	A
L1_CD	A
GF_CD	A
SF_CD	A
FID	A

**Expression Builder**

Field:

Relations:

Parameter Name:

Compare Type:

Value

Parameter (Variable)

Another Field

**Setting up a Parameter: In the "Where" statement - Choose the Field, Select Parameter, Give it a Name**



# Printing the MRE Report Output

---

**The output option selected, when creating the query, affects how the report displays and prints**

**Use the print function within the browser to request a print**

**Ease of printing can vary from printer to printer**