



501 GL336
General Ledger Maintenance

Instructor Led Training



Welcome to Cardinal Training

This training provides participants with the skills and information necessary to use Cardinal and is not intended to replace existing Commonwealth and/or agency policies.

This course, and the supplemental resources listed below, are located on the Cardinal website (www.cardinalproject.virginia.gov) under Learning.

Cardinal Reports Catalogs are located on the Cardinal website under Resources:

- Instructor led and web based training course materials
- Job aids on topics across all functional areas
- Variety of simulations
- Glossary of frequently used terms

The Cardinal screenshots included in this training course show system pages and processes that some users may not have access to due to security roles and/or how specific responsibilities relate to the overall transaction or process being discussed.

For a list of available roles and descriptions, see the Statewide Cardinal Security Handbook on the Cardinal website in the Security section under Resources.



Course Objectives

After completing this course, you will be able to:

- Recognize key General Ledger maintenance concepts
- Understand the overall General Ledger maintenance process
- Explain how General Ledger maintenance integrates with other Cardinal modules and interfaces with external systems
- Add or update Chart of Accounts values, and their associated attributes
- Create and update SpeedTypes and SpeedCharts
- Understand tree structures



Course Objectives (continued)

- Understand combination edits
- Understand budget structures
- Define allocations and allocation groups
- Configure the journal entry template



Agenda

1

General Ledger Maintenance Overview

2

ChartField Maintenance

3

General Ledger Setup



Lesson 1: Introduction

1

General Ledger Maintenance Overview

This lesson covers the following topics:

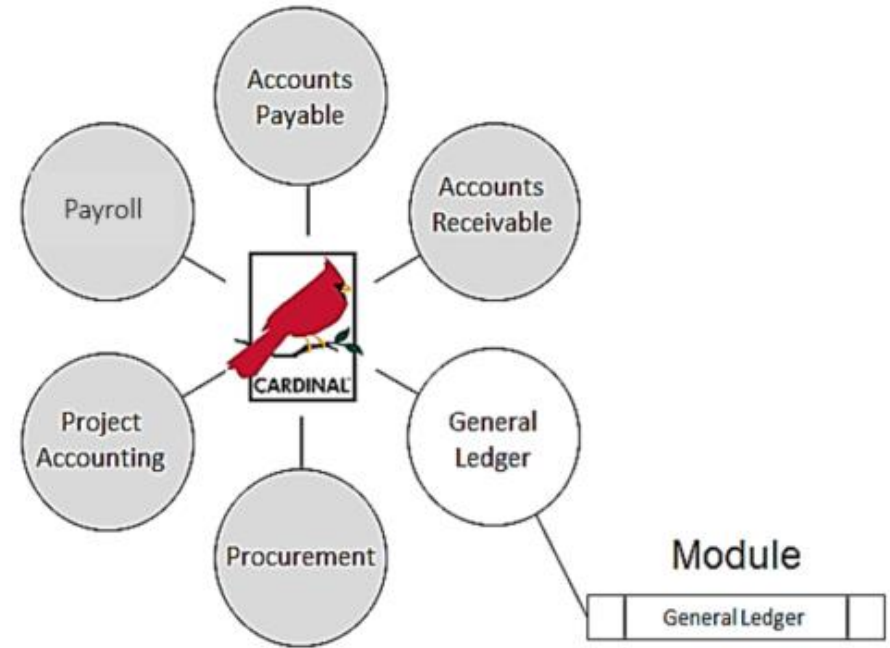
- General Ledger Overview
- Key Concepts
- General Ledger Process
- Integration and Interfaces



General Ledger Overview

The General Ledger functional area is composed of one module which establishes the financial accounts used to:

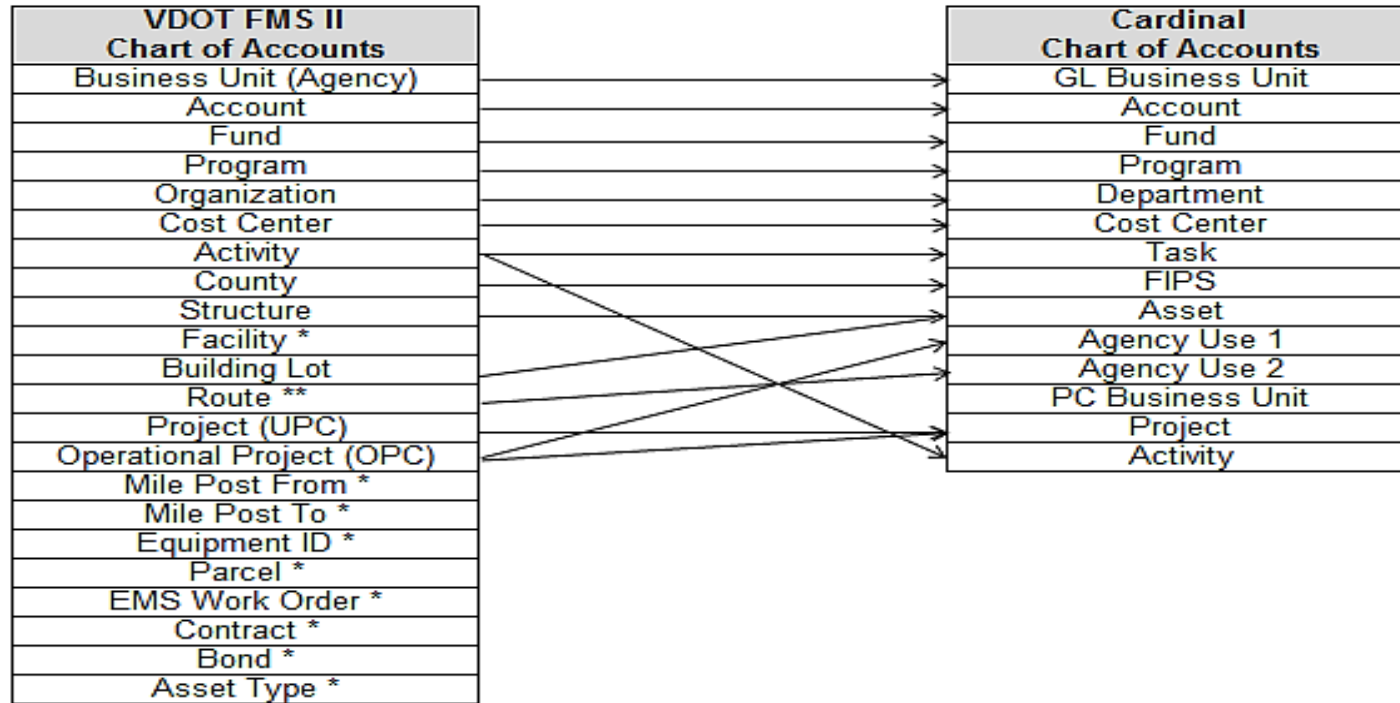
- Accumulate the results of transaction processing
- Create budgets
- Generate financial statements
- Provide source financial data for reports





Key Concepts

- The Chart of Accounts (COA) structure and values, maintained in General Ledger, aid in the recording and reporting of accounting information.
- Each COA element is called a ChartField.
- This is a crosswalk between Chart of Accounts for VDOT's former accounting system (FMS II) and Cardinal.



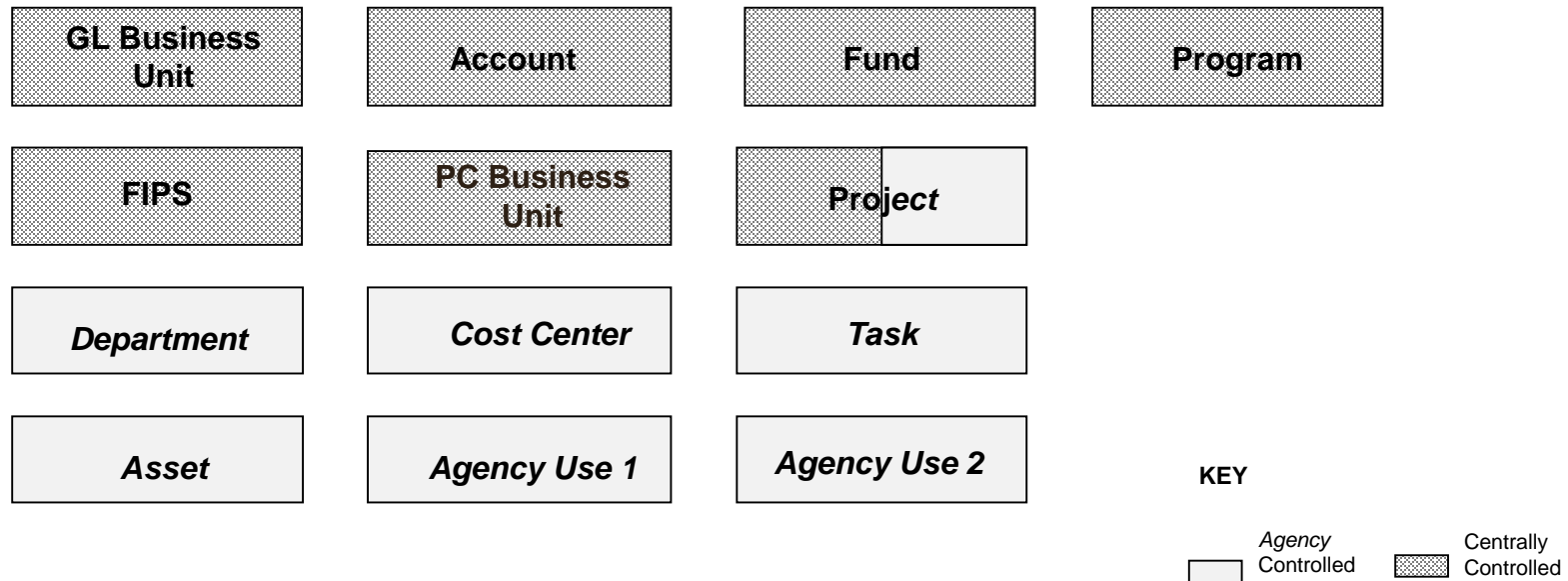
* The Cardinal Chart of Accounts structure does not capture these fields.

** Route is only recorded during storm/disaster events.



Key Concepts (continued)

- Centrally controlled COA Elements are maintained by the Department of Accounts (DOA).
- Agencies are responsible for maintaining Agency Controlled COA Elements.



- The Project ChartField is agency controlled except for Capital Outlay and Commonwealth-wide initiatives.
- The PC Business Unit is a required ChartField when using the Project ChartField on a transaction.



Key Concepts (continued)

- **Trees** are used to group ChartFields for various purposes, such as reporting, budgeting, etc.
- Tree structures are maintained in the General Ledger module by Cardinal Post Production Support (PPS).
- Various types of reports use reporting trees to roll up values to desired data levels. Trees are validated when COA values are created or modified, using tree audit functionality. The tree audit process compares the value table with the associated tree and identifies missing values.
- Maintaining tree structures is required for both Cardinal Financials and Cardinal Human Capital Management (HCM) applications. Cardinal's Payroll Functional Area is located in the HCM application.



Key Concepts (continued)

- A **SpeedType** is a code that auto-populates specified ChartFields on an accounting distribution line. SpeedTypes can be used in General Ledger, Payroll Time and Attendance, Expenses, Accounts Receivable Direct Journals, and Commitment Control Budget Journal entries.
- **SpeedCharts** provide similar functionality for Accounts Payable and Purchasing except that multiple accounting distributions can be configured for an individual SpeedChart.
- **SpeedTypes** are maintained in the General Ledger module and **SpeedCharts** are maintained in the Accounts Payable module.
- **Commitment Control** is used in Cardinal to track and control expenditures against budgets and revenues against estimates.



General Ledger Process

Two of the main processes in General Ledger are:

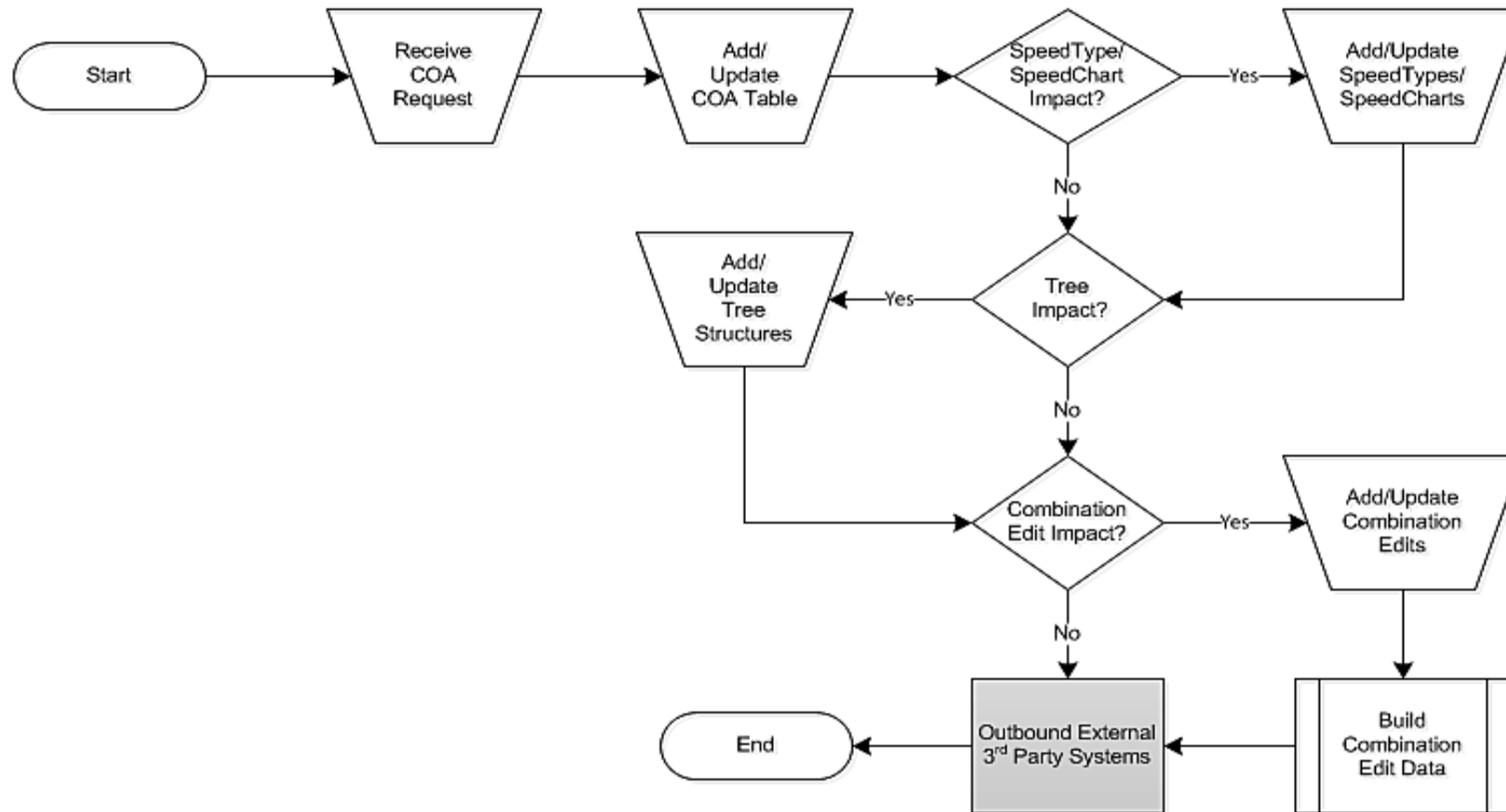
- Cardinal Setup and ChartFields
- Perform Allocation

The Cardinal Setup and ChartFields process and the Perform Allocation process establish some of the key data used to support General Ledger processing in Cardinal.



Cardinal Setup and ChartFields

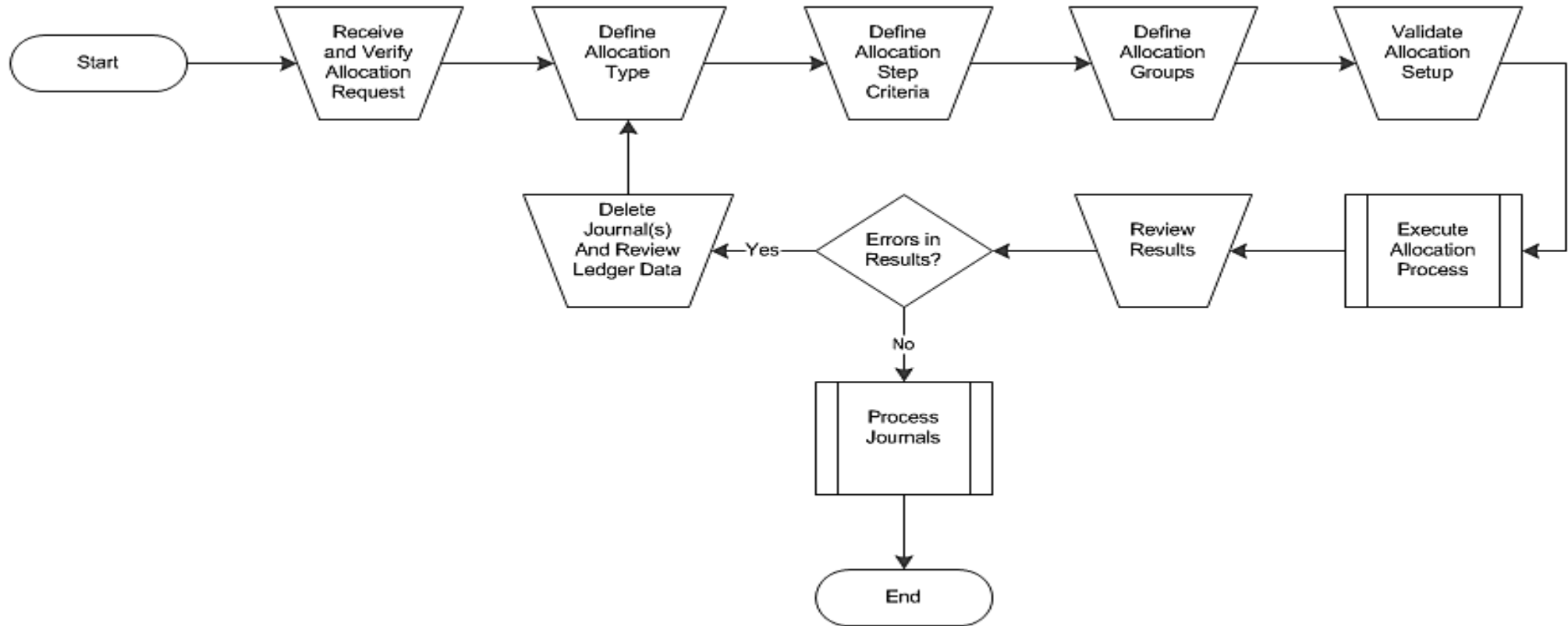
During the Cardinal Setup and ChartFields process, fields that store the Chart of Accounts (COA) and provide Cardinal with the basic structure for transactional and budget data are added, updated, and maintained.





Perform Allocation

During the Allocation process, journal transactions, ledger balances, or statistical quantities within a business unit or across business units are distributed so the appropriate entities (i.e., departments, divisions, cost centers) recognize a reasonable share of the amounts (i.e., overhead).

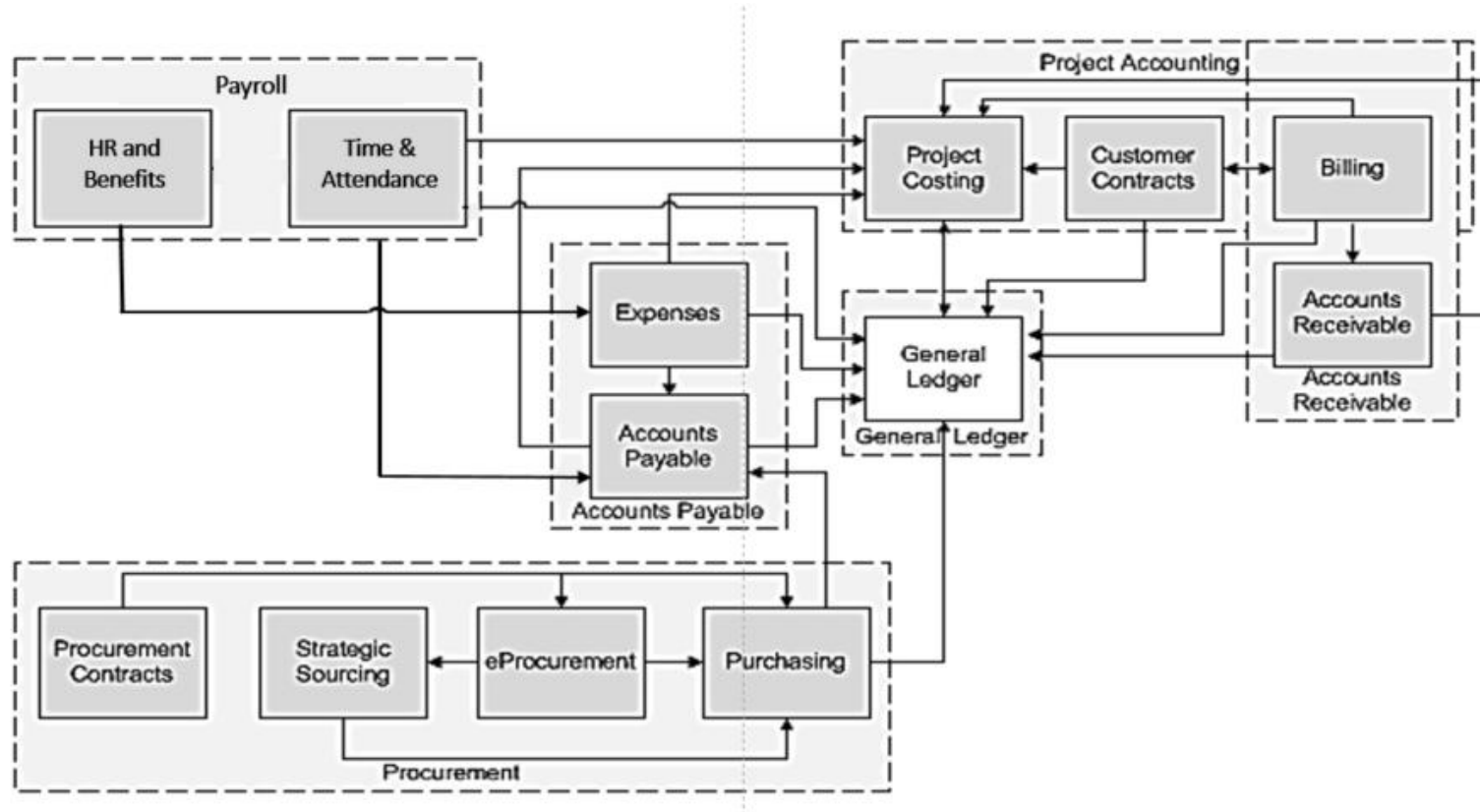




Integration with Commitment Control

Each Cardinal module feeds financial data to General Ledger. Various modules use Commitment Control, which resides in General Ledger, for budget check.

When a document passes budget check, it is marked with a **Valid** status and processing continues. If there are errors, further processing is suspended until the error is corrected.

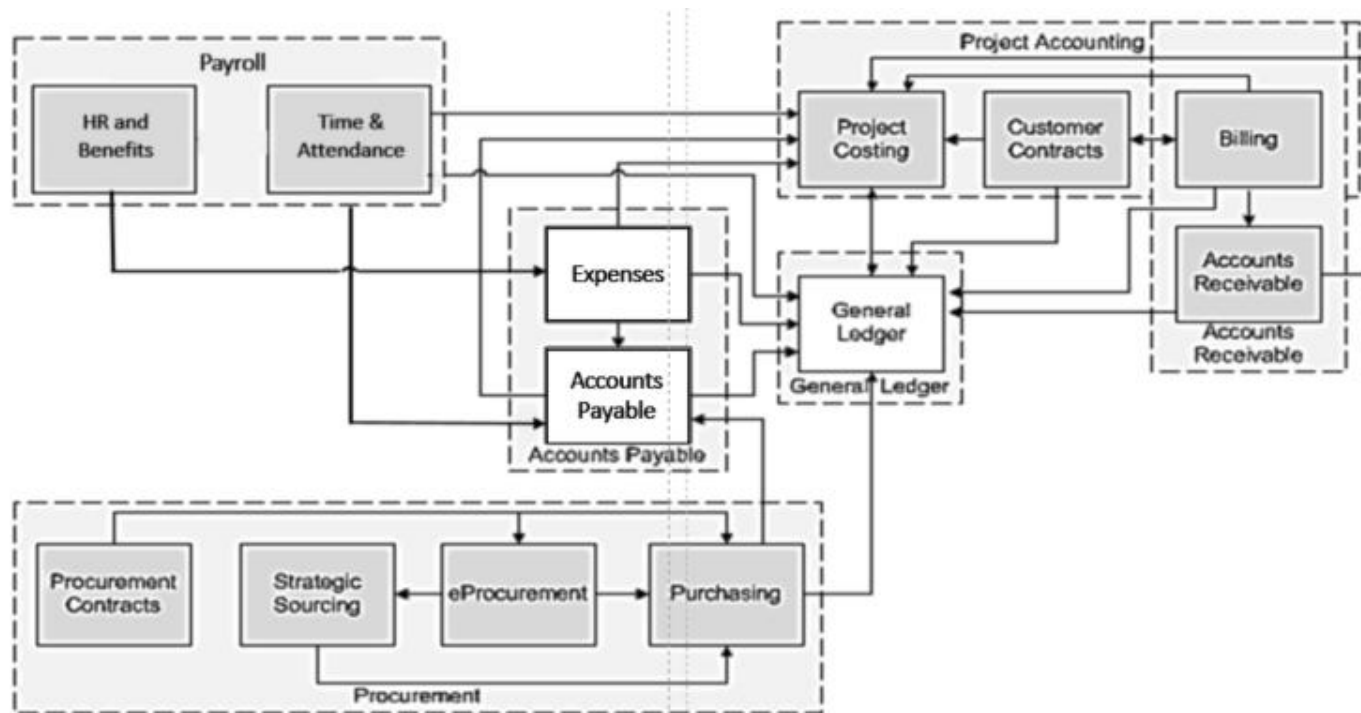




Integration with Accounts Payable and Expenses

General Ledger maintenance integrates with Accounts Payable in many different ways, including the following:

- Accounts Payable and Expense transactions are edit checked using General Ledger combination edits and budget checked against Commitment Control.
- The Accounts Payable and Expenses modules create accounting entries that are journal generated to General Ledger for posting to the appropriate ledgers.

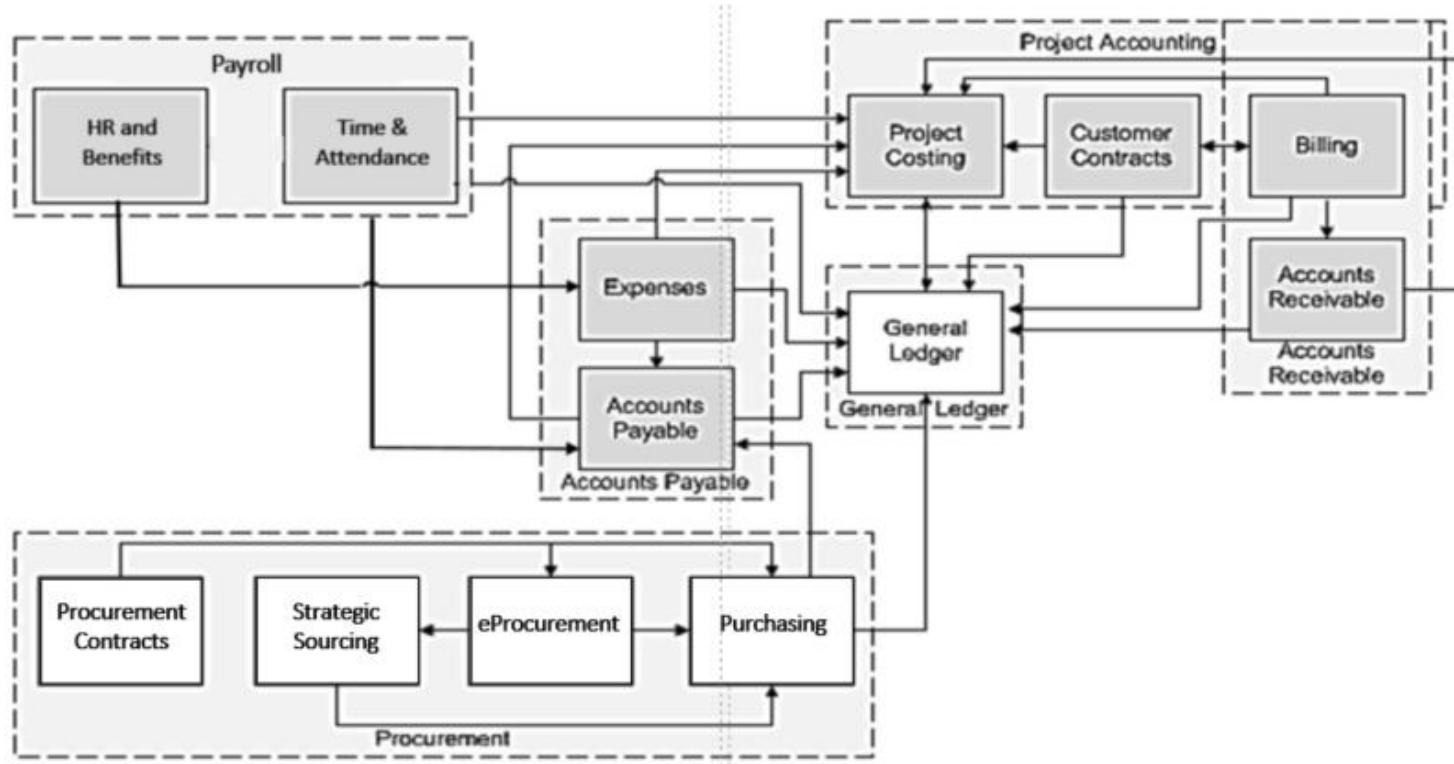




Integration with Purchasing

General Ledger maintenance integrates with Purchasing in many different ways, including the following:

- Inventory requisitions are edit checked using General Ledger combination edits and are budget checked against Commitment Control. This budget check only validates budget combinations, but does not reserve the budget. Inventory requisitions are journal generated to General Ledger for posting to the appropriate ledgers.

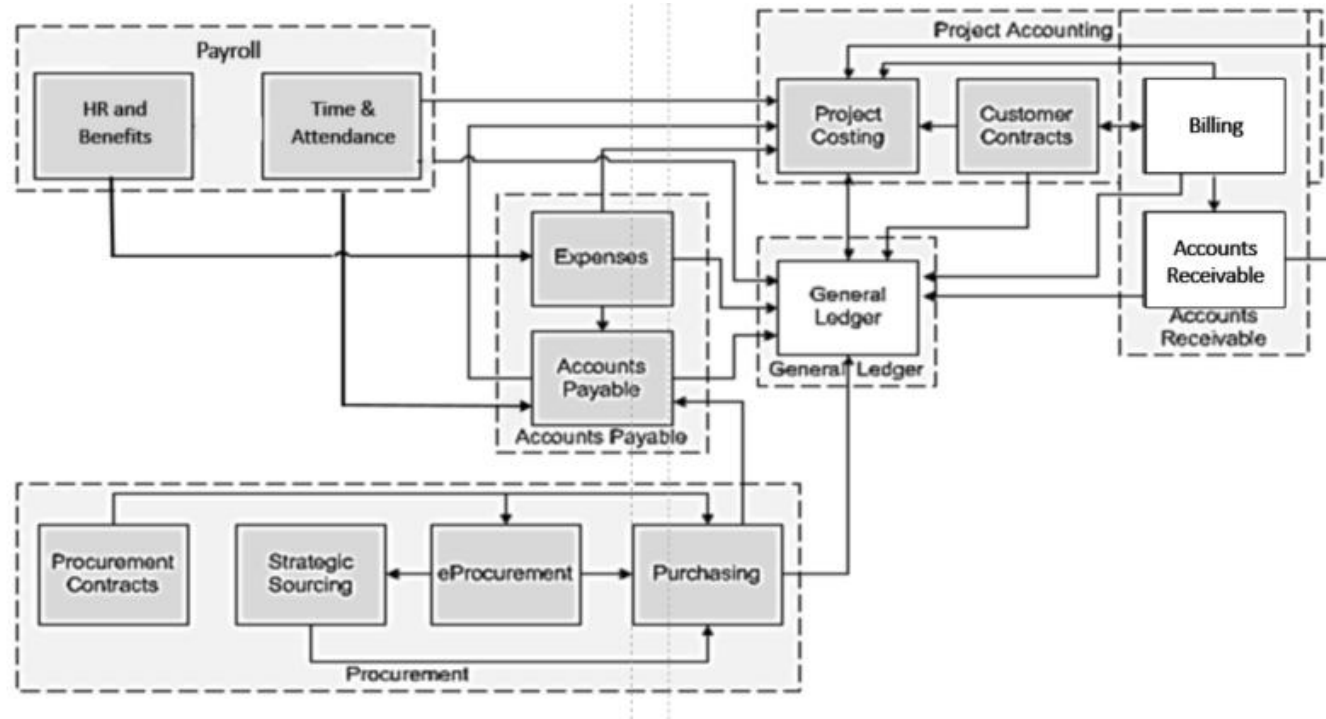




Integration with Accounts Receivable and Billing

General Ledger maintenance integrates with Accounts Receivable and Billing in many different ways, including the following:

- Accounts Receivable and Billing transactions are edit checked using General Ledger combination edits and budget checked against Commitment Control.
- The Accounts Receivable and Billing modules create accounting entries that are journal generated to General Ledger for posting to the appropriate ledgers.

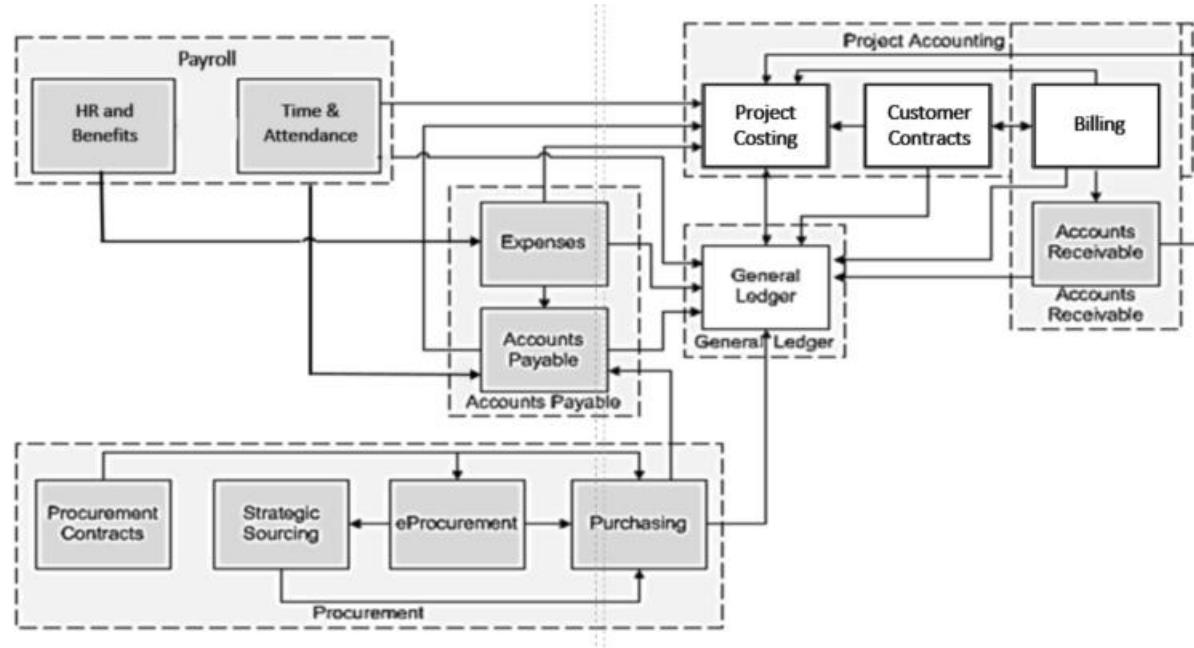




Integration with Project Costing & Customer Contracts

General Ledger maintenance integrates with Project Costing and Customer Contracts in many different ways, including the following:

- Project split transactions are edit checked using General Ledger combination edits and budget checked against Commitment Control. Customer Contract transactions are edit checked using General Ledger combination edits and budget checked against Commitment Control.
- Project Costing revenue billing is edit and budget checked in General Ledger. Project Costing and Customer Contract transactions are journal generated and sent to General Ledger for posting to the appropriate ledgers.
- Project budget journal entries and General Ledger project adjusting entries are sent to Project Costing and Customer Contracts.

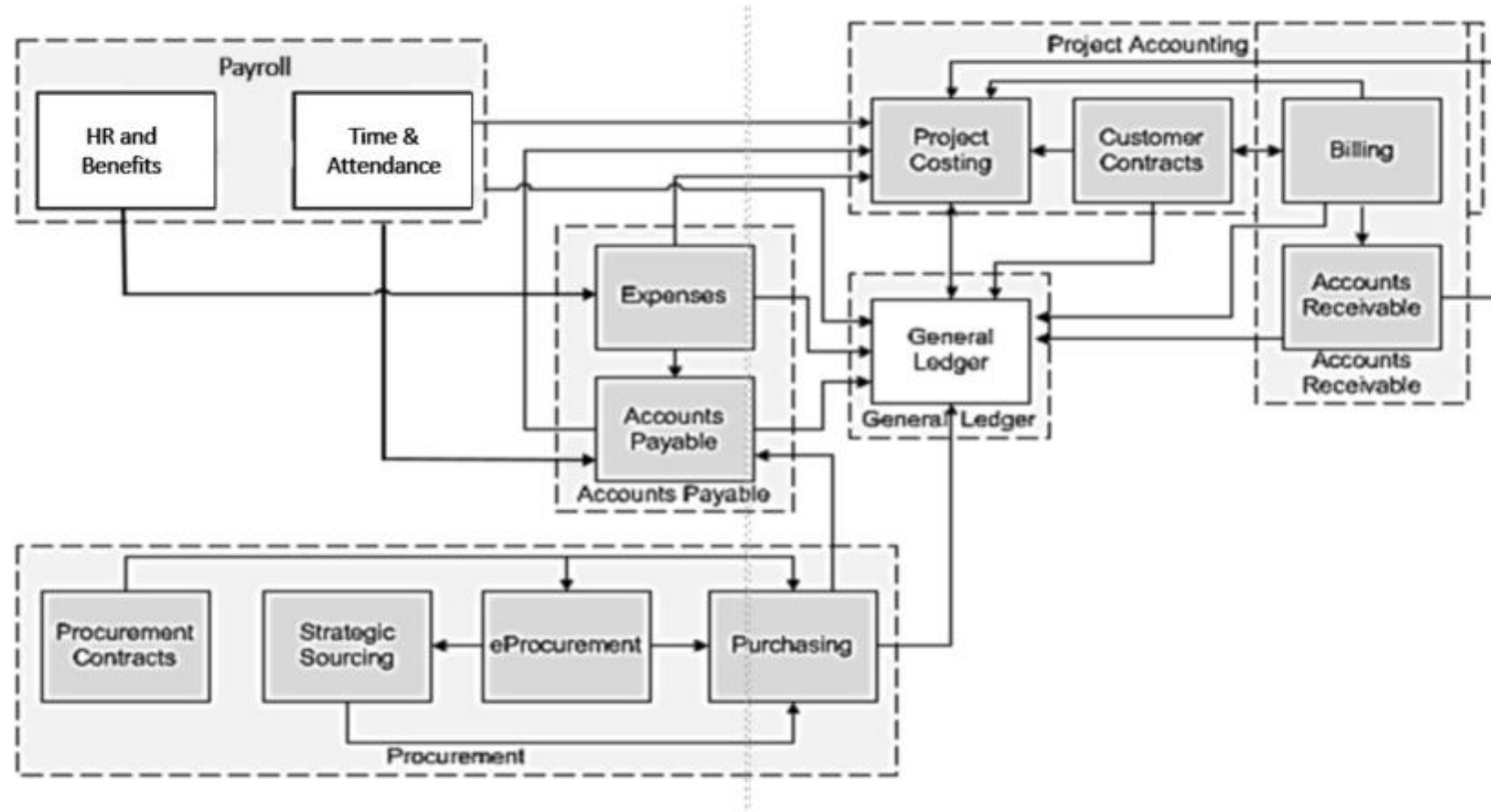




Integration with Payroll

General Ledger maintenance integrates with Payroll in many different ways, including the following:

- Payroll transactions are edit checked using General Ledger combination edits and budget combinations.
- Payroll transactions are journal generated and sent to General Ledger for posting to the appropriate ledgers after being budget checked.

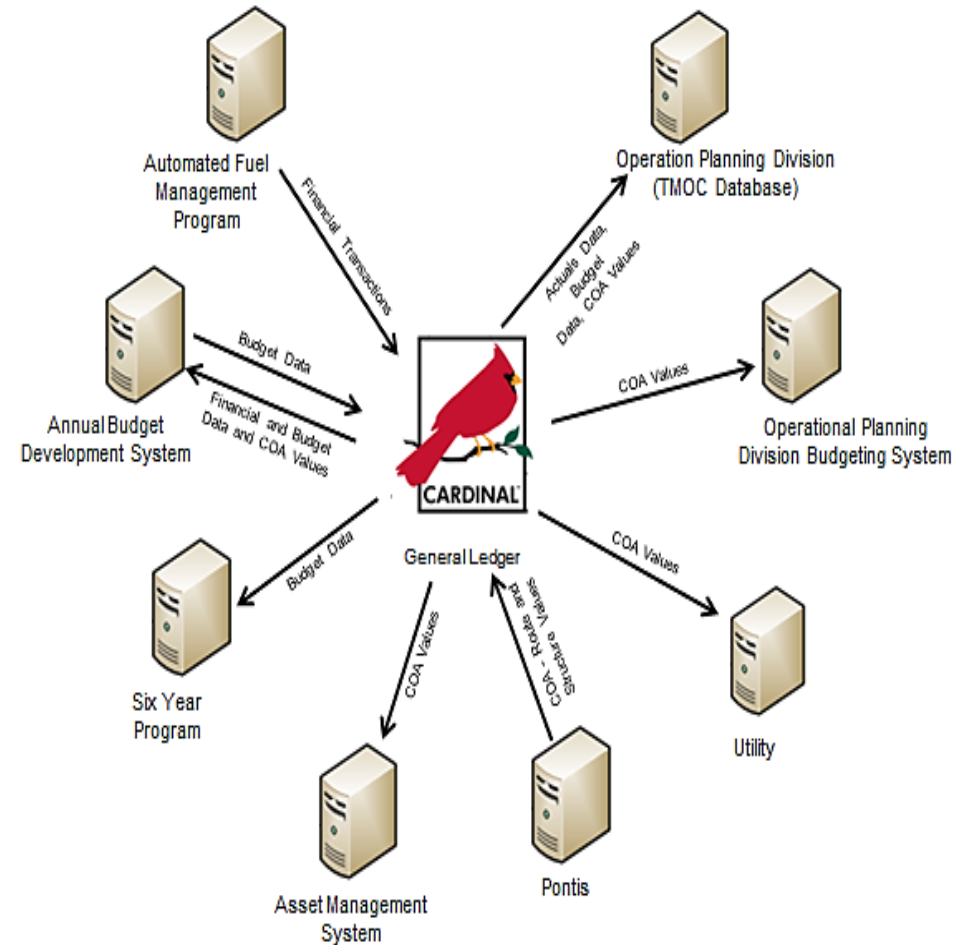




Interfaces with TMOC, OPDBS, Utility, Pontis, and ABDS

General Ledger maintenance also interfaces daily with several external systems:

- Operational Planning Division - Transportation Maintenance and Operations Committee (TMOC) database: Cardinal sends COA values to the Operational Planning Division database called TMOC.
- Operational Planning Division Budgeting System (OPDBS) - Cardinal sends COA values to OPDBS.
- Utility - Cardinal sends COA values to Utility.
- Pontis - Cardinal receives structure values from Pontis, an FHWA (Federal Highway Administration) software application used to manage highway bridges and other structures.
- Annual Budget Development System (ABDS) - Creates a budget at the beginning of each budgeting cycle. This budget is extracted and loaded into Cardinal as budget journals. Cardinal sends ABDS financial data, budget data, and COA values.



Click on image to enlarge



Lesson 1: Summary

1

General Ledger Maintenance Overview

In this lesson, you learned:

- Chart of Accounts Values and Attributes
- SpeedTypes and SpeedCharts
- Reporting Trees
- Combination Edits



Lesson 2: Introduction

2

ChartField Maintenance

This lesson covers the following topics:

- General Ledger Overview
- Key Concepts
- General Ledger Process
- Integration and Interfaces



Maintaining Chart of Accounts Values and Attributes

In this lesson, we will discuss each step in the Cardinal Setup and ChartFields process.

This topic focuses on maintaining COA values.

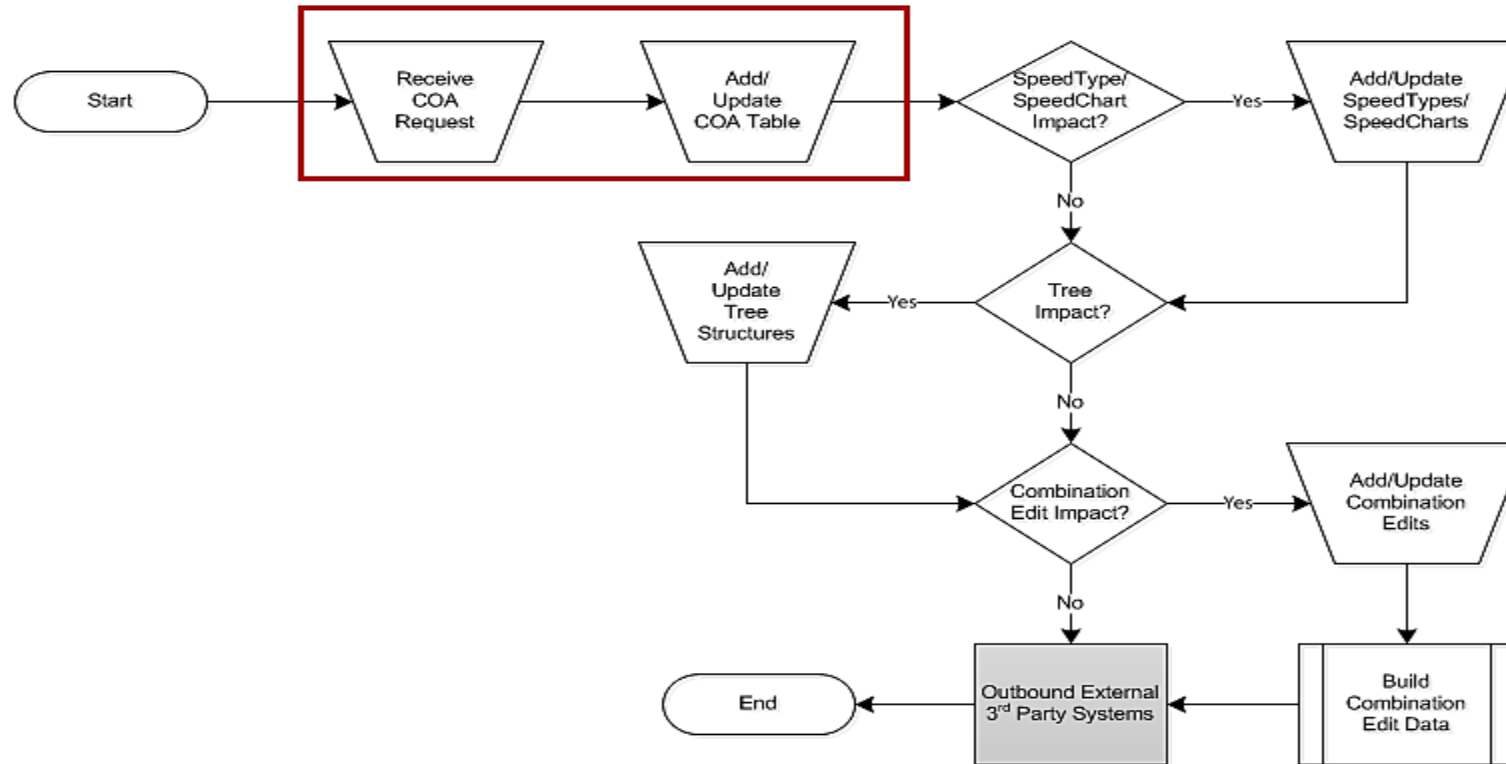




Chart of Accounts Values and Attributes

A ChartField is an element within the Chart of Accounts. It represents one category of data (e.g., Business Unit, Department, Account, etc.), with various values that further define a transaction. A combination of ChartFields defines an accounting distribution used on a transaction.

ChartField values can be identified either as specific values or as a range of values using trees.

ChartFields are added and maintained by SetID and associated with a Business Unit.

Attributes are characteristics, or features, of a ChartField that allow further classifying or defining of a ChartField. For example:

- The Department ChartField may have an attribute to identify its location (Western Region, Northern Region, Tidewater Region, Southern Region, Central Region).
- A Cost Center may have an attribute that determines whether it is Human Resources or Buildings & Grounds.

Each ChartField can have its own attributes for maximum efficiency and flexibility in recording, reporting, and analyzing its intended category of data.



Adding a ChartField Value

To add a new **Department** ChartField value for the agency:

- Navigate to the **ChartField Values** page using the following path:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values

- Click the link for the type of ChartField value being added. In this example **Department** is selected.

The screenshot shows a web interface titled "ChartField Values". Below the title is a list of options: Account, Fund, Program, Department, Cost Center, Task, FIPS, Asset, Agency Use 1, Agency Use 2, Project, Book Code, Adjustment Type, Scenario, and Statistics Code. The "Department" option is highlighted with a red rectangular box.



Adding a ChartField Value (continued)

- Click the **Add a New Value** tab. Enter a **SetID**, which is the Business Unit for the agency.
- Next, enter the ChartField value being used to create the **Department** field.
- Click the **Add** button.

The screenshot shows the CARDINAL software interface. At the top left is the CARDINAL logo. To its right is a search bar with a dropdown menu set to 'All' and a search button. Further right are links for 'Advanced Search' and 'Last Search Results'. Below this is a navigation breadcrumb: 'Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values'. The main content area is titled 'Department'. It features two tabs: 'Find an Existing Value' and 'Add a New Value', with the latter being selected and highlighted with a red box. Below the tabs are two input fields: 'SetID' with the value '50100' and a search icon, and 'Department' with the value '30000' and a search icon. Both input fields are highlighted with a red box. Below these fields is an 'Add' button, also highlighted with a red box. At the bottom left of the main content area, there are links for 'Find an Existing Value' and 'Add a New Value'.



Adding a ChartField Value (continued)

The type of ChartField value added will determine what information will be required to enter to create the value:

- The **Effective Date** defaults to the current date. **For Department values, the initial Effective Date should be updated to 01/01/1901. For Project values, the initial Effective Date will default to 01/01/1901 and should not be changed.** For other agency ChartField values, the current date can be used.
- The **Status** defaults to **Active**.
- For a new Department, enter values in the **Description and Short Description**
- If the **Budgetary Only** checkbox is selected, the **ChartField** value will not be available for recording actual transactional entries.
- After entering all required information for the value, click the **Save** button.



Adding a ChartField Value (continued)

Cardinal All Search >> Advanced Search Last Search Results

Favorites Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values

Department

SetID 50100 Department 30000

Effective Date Find | View All First 1 of 1 Last

*Effective Date	01/01/1901	Attributes	Long Description
*Status	Active	<input type="checkbox"/> Budgetary Only	
*Description	Human Resources		
*Short Description	HR		
Manager ID		Manager Name	

Save Notify Add Update/Display Include History Correct History



Updating a ChartField Value

To update **Department 30000** for an agency:

- Begin by navigating to the **ChartField Values** page using the following path:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values

- Click **Department**.
- On the **Find an Existing Value** tab, enter the **SetID** (an agency Business Unit) and search criteria. In this example, enter the **Department** value, which is **30000**.
- Click the **Search** button.



Updating a ChartField Value (continued)

The fields displayed are determined by the type of ChartField being updating.

- Click the **Add a new row (+)** button to add a new effective dated row for this value.
- The **Effective Date** for the new row defaults to the current date.
- To inactivate a ChartField value, select **Inactive** from the **Status** drop-down menu.

Once updates are completed, click the **Save** button.

Cardinal

All Search >> Advanced Search

Favorites Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values

Department

SetID 50100 Department 30000

Effective Date Find | View All First 1 of 2 Last

*Effective Date 02/23/2017

*Status Inactive

*Description Human Resources

*Short Description HR

Manager ID

Manager Name

Attributes Long Description + -

Budgetary Only

Save Notify Add Update/Display Include History Correct History



ChartField History

Cardinal uses the **Effective Date** and **Status** fields to maintain a complete history of ChartField additions and changes. To view the history for the ChartField value, click the arrows to move from one record to another.

For the **Department** ChartField, the **Effective Date** is automatically assigned a default value of **01/01/1901**.

The screenshot shows the Cardinal software interface for managing ChartField values. The breadcrumb trail is: Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values. The current view is for Department 30000, SetID 50100. The interface displays a list of ChartField values with the following details:

Effective Date	Status	Description	Short Description	Manager ID	Manager Name
02/23/2017	Inactive	Human Resources	HR		
01/01/1901	Active	Human Resources	HR		

Navigation controls include a search bar, a 'Find' button, and a record selector showing 'View 1', 'First', '1-2 of 2', and 'Last'. The 'Effective Date' and 'Status' fields for each record are highlighted with red boxes. At the bottom, there are buttons for 'Save', 'Notify', 'Add', 'Update/Display', 'Include History', and 'Correct History'.



Creating a ChartField Attribute and Attaching to a ChartField

Generic ChartField attributes are optional features that support such things as reporting and payment processing.

- Use the **ChartField Attribute** page to create ChartField attributes.
- Use the **ChartField Attribute Value Configuration** page to delete an attribute value. After attaching an attribute value to a ChartField value, it cannot be deleted using the **ChartField Attribute** page.

Attributes share the effective dating of the ChartField values to which they are attached.

Project ChartField attributes are automatically assigned a default effective date of **01/01/1901**.



Creating Generic ChartField Attributes

Navigate to the **ChartField Attributes** page using the following path:

Main Menu > Set Up Financial/Supply Chain > Common Definitions > Design ChartFields > Configure > Attributes > ChartField Attributes

- Click the **Add a New Value** tab.
- Enter the agency's business unit in the **SetID** field.
- Enter the ChartField type in the **Field Name** field.
- Enter a name in the **ChartField Attribute** field to uniquely identify the attribute.
- Click the **Add** button.

In this example, **REGION** is being added as an attribute to the **DEPTI** ChartField value.

The screenshot shows the 'Chartfield Attributes' page. At the top, there are two tabs: 'Find an Existing Value' and 'Add a New Value'. The 'Add a New Value' tab is highlighted with a red border. Below the tabs, there are three input fields: 'SetID' with the value '50100', 'Field Name' with the value 'DEPTID', and 'ChartField Attribute' with the value 'REGION'. Each field has a search icon to its right. Below the input fields, there is a yellow 'Add' button with a red border. At the bottom of the page, there are two links: 'Find an Existing Value' and 'Add a New Value'.



Creating a Generic ChartField Attribute (continued)

- On the **ChartField Attribute** page, enter a description for the attribute.
- Select the **Allow Multiple Values per Attr** checkbox if wanting to allow multiple values of the same attribute to be attached to a ChartField value. If this checkbox is not selected, only one attribute value can be attached to a ChartField value for a given attribute.
- Define values in the **ChartField Attribute Values** grid. Use the **+** button to add attribute values. In this example, **Western, Northern, and Central Regions** are being added as new ChartField attribute values.
- When all information is entered, click the **Save** button.

ChartField Attribute

SetID 50100 Field Name DEPTID Attribute REGION

Description Region

Allow Multiple Values per Attr

ChartField Attribute Values Personalize | Find | View All | | First 1-3 of 3 Last

*ChartField Attribute Value	Description		
WESTERN	Western Region	<input type="text"/>	<input type="text"/>
NORTHERN	Northern Region	<input type="text"/>	<input type="text"/>
CENTRAL	Central Region	<input type="text"/>	<input type="text"/>

Save Notify Add Update/Display



Attaching a ChartField Attribute to a ChartField

After defining the ChartField attribute, attach it to a ChartField value.

Navigate to the **ChartField Values** page using the following path:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values

Click the link for the ChartField type that the attribute is being added for, in this example, **Department**.

The screenshot shows a web interface titled "ChartField Values". Below the title, there is a list of ChartField types. The types listed are: Account, Fund, Program, Department, Cost Center, Task, FIPS, Asset, Agency Use 1, Agency Use 2, Project, Book Code, Adjustment Type, Scenario, and Statistics Code. The "Account" type is highlighted with a grey background, and the "Department" type is highlighted with a red border.



Attaching a ChartField Attribute to a ChartField (continued)

In this example, we are adding **REGION** (the attribute) and **NORTHERN** (the attribute value) to the **DEPTID** ChartField value

- Search for the ChartField value using the **Find an Existing Value** tab.
- Enter the agency business unit in the **SetID** field. Enter the **Department ID** in the **Department** field.
- Click the **Search** button.

The screenshot shows the 'Department' search page in the CARDINAL system. The breadcrumb trail is: Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values. The page title is 'Department'. Below the title, there is a search instruction: 'Enter any information you have and click Search. Leave fields blank for a list of all values.' There are two tabs: 'Find an Existing Value' (highlighted with a red box) and 'Add a New Value'. Below the tabs is a 'Search Criteria' section with a dropdown arrow. The search criteria are: 'SetID = 50100' (with a search icon), 'Department begins with 30000' (with a search icon and a clear 'x' button), and 'Description begins with'. There are three checkboxes: 'Include History', 'Correct History', and 'Case Sensitive'. Below these is a text input for 'Limit the number of results to (up to 300): 300'. At the bottom, there are four buttons: 'Search' (highlighted with a red box), 'Clear', 'Basic Search', and 'Save Search Criteria'.



Attaching a ChartField Attribute to a ChartField (continued)

- Click the plus (+) button to add a new effective dated row.
- Cardinal automatically assigns today's date as the **Effective Date**.
- On the **Department** page, click the **Attributes** link.

The screenshot shows the Cardinal software interface for the Department page. The breadcrumb trail is: Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > ChartField Values. The page title is "Department". The SetID is 50100 and the Department is 30000. The "Effective Date" field is highlighted with a red box and contains the date 02/24/2017. The "Status" field is set to "Active". The "Description" field contains "Human Resources". The "Short Description" field contains "HR". The "Manager ID" field is empty. The "Manager Name" field is empty. The "Attributes" link is highlighted with a red box. The "Budgetary Only" checkbox is unchecked. The "Long Description" field has expand/collapse buttons (+/-). The "Effective Date" field has a calendar icon. The "Manager ID" field has a search icon. The page includes a search bar at the top with "All" and "Search" options, and an "Advanced Search" button. The bottom of the page has buttons for "Save", "Notify", "Add", "Update/Display", "Include History", and "Correct History".



Attaching a ChartField Attribute to a ChartField (continued)

- Use this page to select one or more of the ChartField attribute and attribute value combinations that apply to a specific ChartField value.
- Click the magnifying glass next to the **ChartField Attribute** field and select the **REGION** attribute.
- Click the magnifying glass next to the **ChartField Attribute Value** and select the relevant attribute value. In this example, **NORTHERN** was selected.
- Then click the **OK** button.
- The **Department** page is displayed. Click the **Save** button on the **Department** page.

ChartField Attributes

Help

ChartField Attribute Values

Personalize | Find | View All | First 1 of 1 Last

SetID	ChartField Value	Effective Date	Field Name	*ChartField Attribute	ChartField Attribute Value	Attribute Value Description
50100	30000	02/24/2017	DEPTID	REGION	NORTHERN	Northern Region

OK Cancel



Lesson 2: Adding ChartField Values Hands-On Practice

Now you have an opportunity to practice the lessons learned today in a training environment.

Your instructor will provide direction on how to log in and complete the exercise.

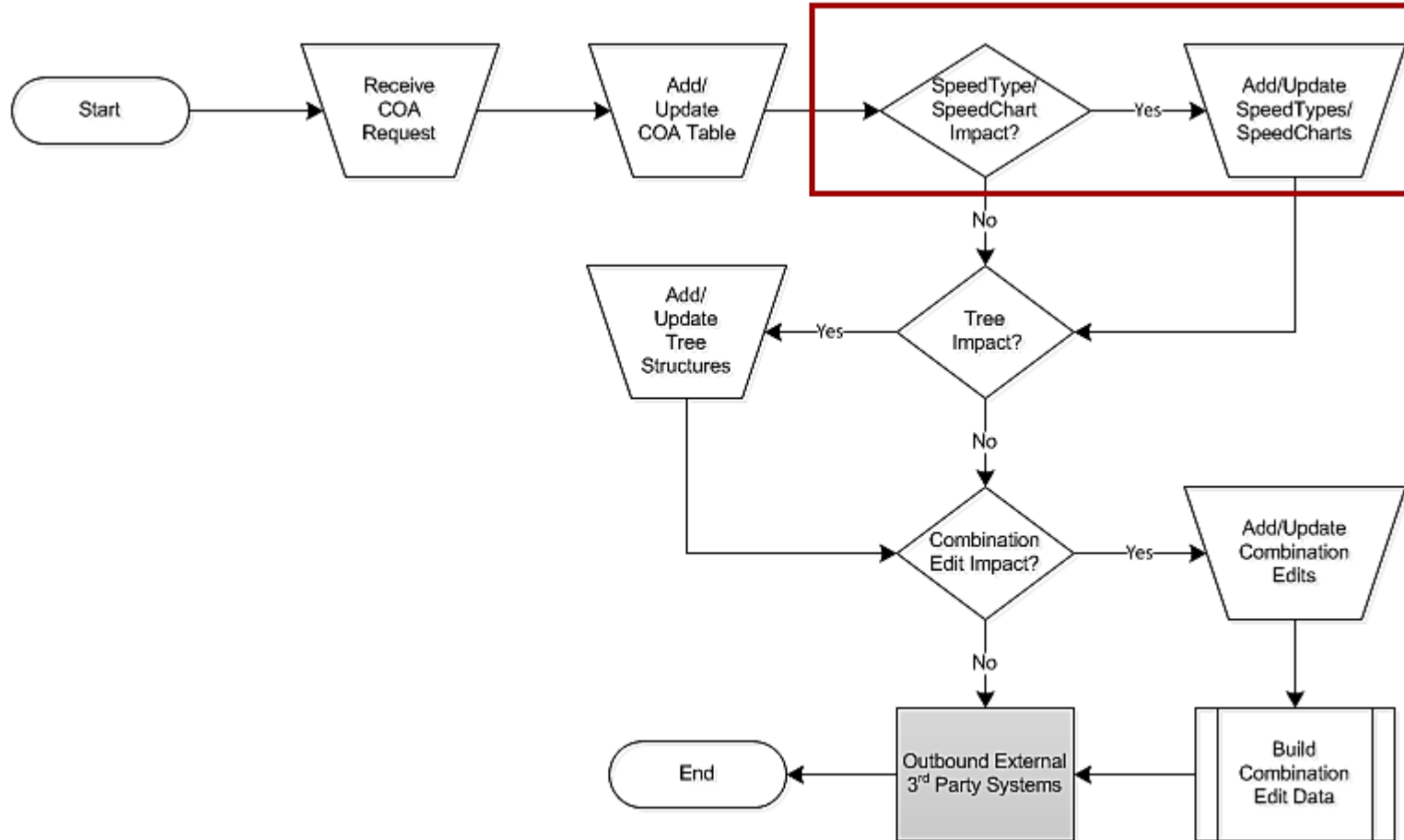
If you have any questions, please ask your instructor.





Maintaining SpeedTypes and SpeedCharts

The next topic in ChartField set up and maintenance relates to maintaining SpeedTypes and SpeedCharts.





SpeedTypes and SpeedCharts

A SpeedType/SpeedChart is a predefined value that can be entered to auto-populate ChartField values on the accounting distribution line (such as fund, program, and department).

They allow the ability to define codes for frequently used ChartField combinations. When a SpeedType is entered, users still have the ability to add or modify additional COA values on the associated distribution line.

SpeedTypes can be used in Payroll Time and Attendance, Expense transactions, General Ledger journal entries, Accounts Receivable direct journals, and Commitment Control budget journal entries.

SpeedCharts provide similar functionality for Accounts Payable and Purchasing, except that multiple accounting distributions can be configured for an individual SpeedChart.

Note If a SpeedType is created, there is a need to create a corresponding SpeedChart as well, and vice versa.



Creating a SpeedType

In the following example we will create a SpeedType for **Department 10003**, **Fund 01000**, and **Program 737002**:

- Navigate to the **SpeedType** page using the following path:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > SpeedTypes

- Click the **Add a New Value** tab.

SpeedTypes

Enter any information you have and click Search. Leave fields blank for a list of all values.

Find an Existing Value **Add a New Value**

▼ Search Criteria

SetID = 50100

SpeedType Key begins with

User ID begins with

Primary Permission List begins with

Type of SpeedType = One User

Case Sensitive

Limit the number of results to (up to 300): 300

Search Clear Basic Search Save Search Criteria



Creating a SpeedType (continued)

- Enter the **Business Unit** in the **SetID** field.
- The **SpeedType Key** will be the value entered on transactions to identify the SpeedType. In the example below, **94100** was entered as the **SpeedType Key**.
- If entered as a **User ID** or **Primary Permission List**, only the specified user(s) will have access to the SpeedType. Leave these fields blank so that the SpeedType is universally accessible within the business unit.
- Click the **Add** button.

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > SpeedTypes

SpeedTypes

Find an Existing Value | Add a New Value

SetID 50100
SpeedType Key 94100
User ID
Primary Permission List

Add

Find an Existing Value | Add a New Value



Creating a SpeedType (continued)

The **SpeedType** page displays.

- Enter a **Description**.
- Enter **Fund 01000**, **Program 737002**, and **Department 10003**
- Check the **Publish Data** checkbox – this ensures the SpeedType is sent to the Human Capital Management (HCM) application.
- Click the **Save** button.

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > SpeedTypes

SpeedType

SetID 50100
SpeedType Key 94100
Type of SpeedType Universal (All Users)
Description Internal Audit

Publish Data

Account		
Fund	01000	General Fund
Program	737002	Disbursements Review
Department	10003	Administrative Services
Cost Center		
Task		
FIPS		
Asset		
Agency Use 1		
Agency Use 2		
PC Business Unit		
Project		
Activity		
Source Type		
Category		

Save Notify Refresh Add Update/Display



Creating a SpeedType (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Define Values > SpeedTypes

SpeedType

SetID 50100 Publish Data
SpeedType Key 94100
Type of SpeedType Universal (All Users)
Description Internal Audit

Account	<input type="text"/>	<input type="text"/>
Fund	01000	General Fund
Program	737002	Disbursements Review
Department	10003	Administrative Services
Cost Center	<input type="text"/>	<input type="text"/>
Task	<input type="text"/>	<input type="text"/>
FIPS	<input type="text"/>	<input type="text"/>
Asset	<input type="text"/>	<input type="text"/>
Agency Use 1	<input type="text"/>	<input type="text"/>
Agency Use 2	<input type="text"/>	<input type="text"/>
PC Business Unit	<input type="text"/>	<input type="text"/>
Project	<input type="text"/>	<input type="text"/>
Activity	<input type="text"/>	<input type="text"/>
Source Type	<input type="text"/>	<input type="text"/>
Category	<input type="text"/>	<input type="text"/>
Subcategory	<input type="text"/>	<input type="text"/>



Creating a SpeedChart

Now that we have created the SpeedType we will create a corresponding SpeedChart

- Navigate to the SpeedChart page using the following path:
Main Menu > Set Up Financials/Supply Chain > Product Related > Procurement Options > Management > SpeedChart.
- Click the **Add a New Value** tab.
- Enter the **Business Unit** in the **SetID** field. The **SpeedChart Key** used should match the corresponding **SpeedType Key** for consistency. Leave the **User ID** and **Primary Permission List** fields blank.
- The **Effective Date** defaults to the current date, but this can be changed to an earlier date.
- Click the **Add** button.

SpeedChart

Find an Existing Value | Add a New Value

SetID 50100

SpeedChart Key 94100

User ID

Primary Permission List

Effective Date 02/23/2017

Add

Find an Existing Value | Add a New Value



Creating a SpeedChart (continued)

On the **SpeedChart** page:

- **Total Percent** indicates the total of the proration percentages selected for the SpeedChart lines.
- Enter a **Description** for the SpeedChart.
- The **Status** field defaults to **Active**. Once the SpeedChart is saved, it cannot be deleted. The **Status** can be updated to **Inactive** if the SpeedChart is no longer needed.
- Select **Universal** as the **Security Option** so all users can access the **SpeedChart**. The **One User** option allows access to a single user. The **One Permission** option allows access to users who are on a specific Permission List.
- In the **Definition** section, there are two distribution options. The **Enter Percentages** option distributes cost by a percentage of the total amount. When selecting this option, enter a proration percent for each SpeedChart line. The **Enter Weights** option distributes cost by item unit of measurement weight. When selecting this option, enter a proration weight value for each SpeedChart line. Select a unit of measurement (**UOM**) for distributing cost by weight.
- In the **Speed Charts** section, select **Program 737002**, **Fund 01000**, and **Department 10003**.
- Click the **Save** button.



Creating a SpeedChart (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Set Up Financials/Supply Chain > Product Related > Procurement Options > Management > SpeedChart

SpeedChart

SetID 50100 SpeedChart 94100 Eff Date 02/23/2017 *Status Active

Description Internal Audit Total Percent 100.00

Security Option
 Universal (All Users)
 One User
 One Permission

Definition
 Enter Percentages
 Enter Weights
UOM

Description

Speed Charts Personalize | Find | View All | First 1 of 1 Last

Chartfields	Percent	Weight	GL Unit	Account	Fund	Program	Department	Cost Center	Task	FIPS	Asset	Agent
1	100.00	0.00000			01000	737002	10003					

Save Notify Add Update/Display Include History Correct History



Updating a SpeedChart

To update a SpeedChart, enter the same **SetID** and **SpeedChart Key** with a new **Effective Date**.

There may be a need to update a SpeedChart to:

- Change the status (e.g., inactivate)
- Update the Description
- Change ChartField value(s)

Navigate to the **SpeedChart** page using the following path:

Main Menu > Set Up Financials/Supply Chain > Product Related > Procurement Options > Management > SpeedChart



Updating a SpeedChart (continued)

- Click the **Add a New Value** tab.
- Enter the **Business Unit** in the **SetID** field. The **SpeedChart Key** used should match the existing **SpeedChart Key**. Leave the **User ID** and **Primary Permission List** fields blank.
- The **Effective Date** defaults to the current date but can be changed.
- Click the **Add** button.

Favorites ▾ | Main Menu ▾ > Set Up Financials/Supply Chain ▾ > Product Related ▾ > Procurement Options ▾ > Management ▾ > SpeedChart

SpeedChart

Find an Existing Value | **Add a New Value**

SetID 🔍

SpeedChart Key

User ID 🔍

Primary Permission List 🔍

Effective Date 📅

Add

Find an Existing Value | Add a New Value



Updating a SpeedChart (continued)

- On the **SpeedChart** page, make updates and click the **Save** button.

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Set Up Financials/Supply Chain > Product Related > Procurement Options > Management > SpeedChart

SpeedChart

SetID 50100 SpeedChart 94100 Eff Date 02/23/2017 *Status Active

Description Internal Audit Total Percent 100.00

Security Option

Universal (All Users)
 One User
 One Permission

Definition

Enter Percentages
 Enter Weights

UOM

Description

Speed Charts Personalize | Find | View All | First 1 of 1 Last

Chartfields	Percent	Weight	GL Unit	Account	Fund	Program	Department	Cost Center	Task	FIPS	Asset	Agen
1	100.00	0.00000			01000	737002	10003					

Save **Notify** **Add** **Update/Display** **Include History** **Correct History**



Lesson 2: Adding SpeedTypes and SpeedCharts

Hands-On Practice

Now you have an opportunity to practice the lessons learned today in a training environment.

Your instructor will provide direction on how to log in and complete the exercise.

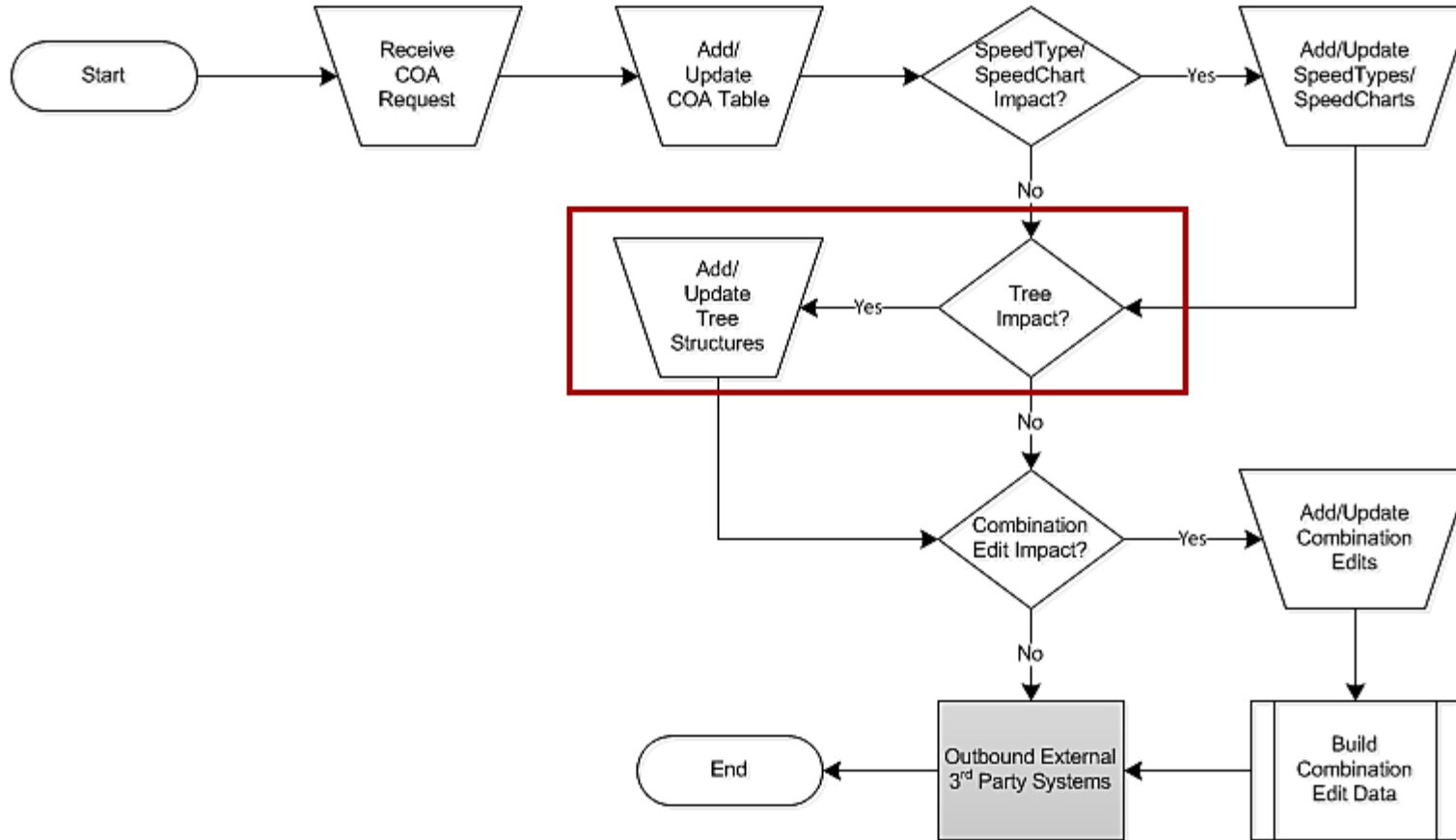
If you have any questions, please ask your instructor.





Maintaining Tree Structures

The next topic covers tree structures.



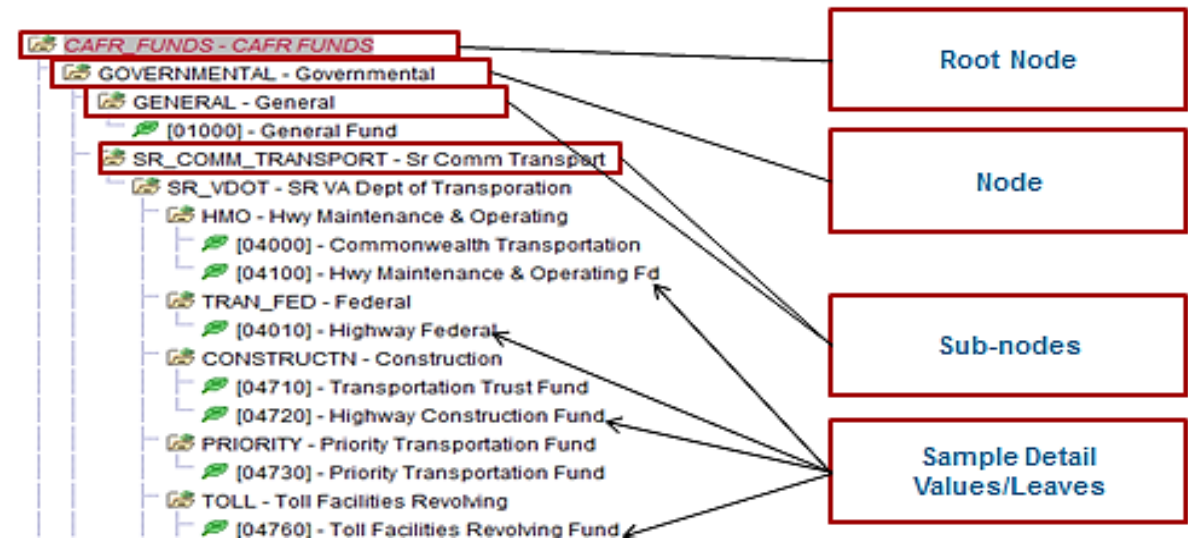


Understanding Tree Types and Hierarchy

A tree is the graphical hierarchy in Cardinal that displays the relationship between all accounting units (for example, departments, reporting groups, account numbers) and determines rollup hierarchies. Trees use rollups to sum values based on hierarchies.

Trees are built from the highest level of the hierarchy (root node) to the lowest level of the hierarchy (leaves). Every tree is based upon a structure. The structure defines the links between a tree and the underlying tables to which it refers.

All updates to tree structures in Cardinal are maintained by PPS. The users can view trees in Cardinal in order to identify any needed updates.





Understanding Tree Types and Hierarchy (continued)

Every tree is based upon a structure. The structure defines the links between a tree and the underlying data tables to which it refers. There are two main kinds of tree structures.

Detail tree structures:

- Summer tree
- Winter tree
- Spring tree

Summary tree structures:

- Summary trees are not currently used in Cardinal.

All updates to tree structures are performed by PPS.

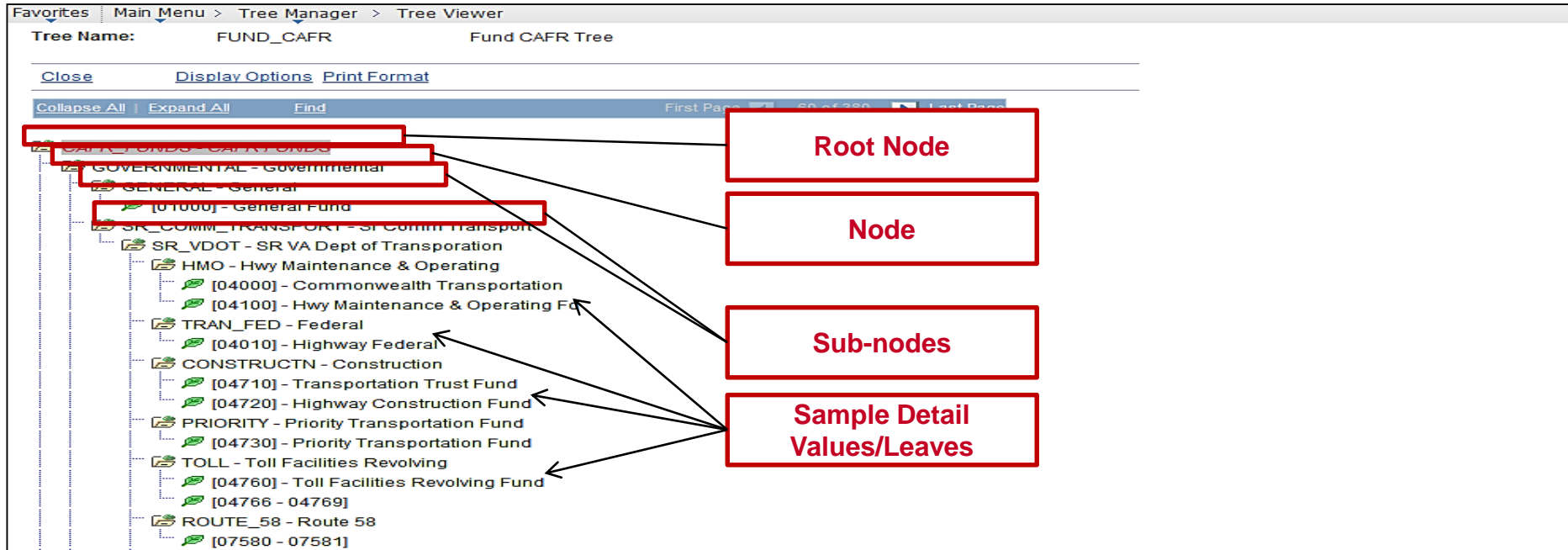


Summer Trees

A Summer tree is a detail tree in which the lowest level consists of detail values which are represented by leaves.

The next level above the detail values is made up of tree nodes that group together the detail values, using the **PSTREENODE** table.

Each subsequent level of the tree defines a higher grouping of the tree nodes.

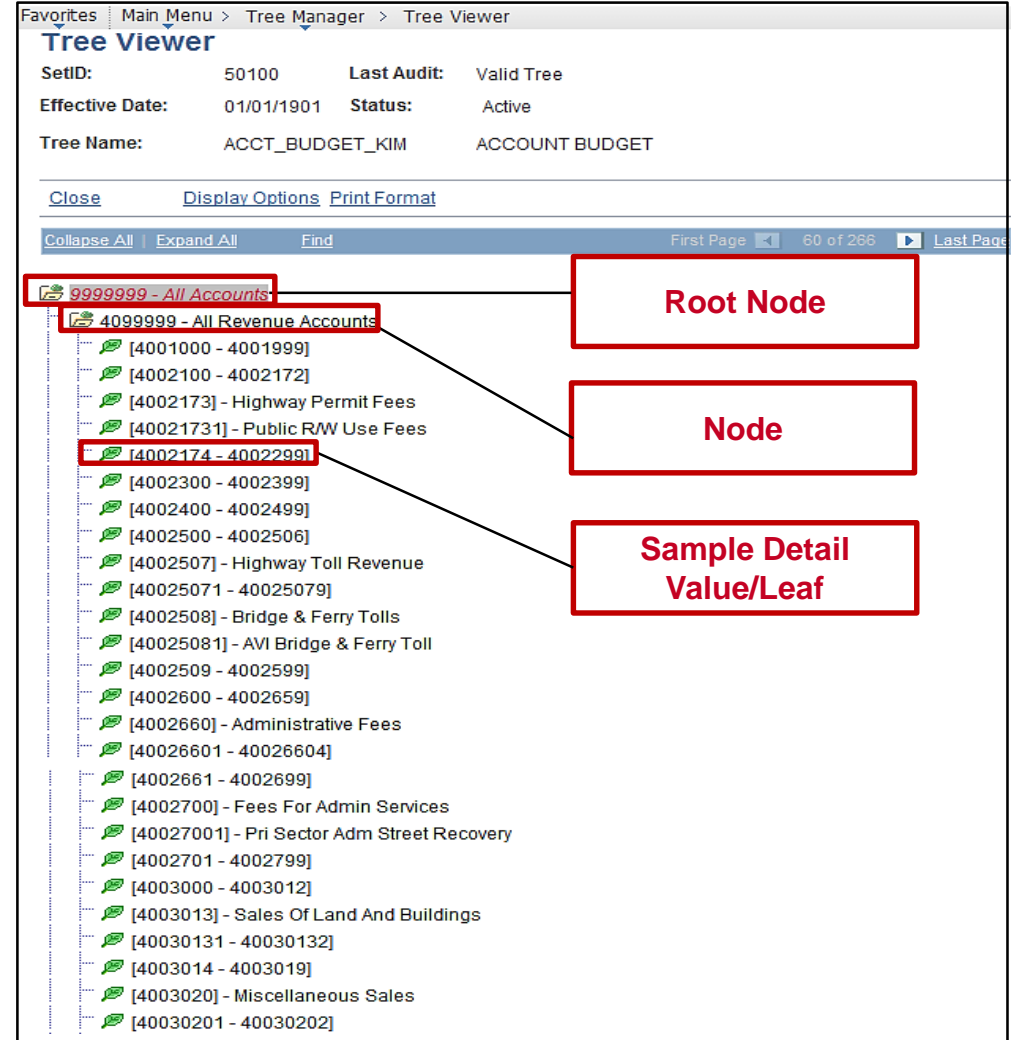




Spring Trees

A spring tree is a hybrid between a node-only winter tree and a summer tree.

A spring tree uses a detail value table for the nodes as well as the leaves.



The screenshot shows the 'Tree Viewer' interface. At the top, it displays 'Tree Viewer' and navigation options like 'Close', 'Display Options', and 'Print Format'. Below this, there are fields for 'SetID: 50100', 'Effective Date: 01/01/1901', 'Last Audit: Valid Tree', 'Status: Active', and 'Tree Name: ACCT_BUDGET_KIM ACCOUNT BUDGET'. A toolbar includes 'Collapse All', 'Expand All', 'Find', and pagination controls ('First Page', '80 of 266', 'Last Page').

The main area displays a tree structure with the following nodes:

- 9999999 - All Accounts (Root Node)
- 4099999 - All Revenue Accounts (Node)
 - [4001000 - 4001999]
 - [4002100 - 4002172]
 - [4002173] - Highway Permit Fees
 - [40021731] - Public RW Use Fees
 - [4002174 - 4002299] (Sample Detail Value/Leaf)
 - [4002300 - 4002399]
 - [4002400 - 4002499]
 - [4002500 - 4002506]
 - [4002507] - Highway Toll Revenue
 - [40025071 - 40025079]
 - [4002508] - Bridge & Ferry Tolls
 - [40025081] - AVI Bridge & Ferry Toll
 - [4002509 - 4002599]
 - [4002600 - 4002659]
 - [4002660] - Administrative Fees
 - [40026601 - 40026604]
 - [4002661 - 4002699]
 - [4002700] - Fees For Admin Services
 - [40027001] - Pri Sector Adm Street Recovery
 - [4002701 - 4002799]
 - [4003000 - 4003012]
 - [4003013] - Sales Of Land And Buildings
 - [40030131 - 40030132]
 - [4003014 - 4003019]
 - [4003020] - Miscellaneous Sales
 - [40030201 - 40030202]



Creating or Editing a Tree Structure

Creating and/or editing tree structures is performed by PPS.

When a tree structure is defined, specify the pages and record definitions that the Cardinal Tree Manager uses to store data about the parts of a tree.

When adding a new node, level, or detail value to a tree, Cardinal Tree Manager uses this information to determine the component (pages) to capture the relevant application data.



Creating or Editing a Tree Structure (continued)

To access the **Tree Structure Properties** page, navigate using the following path:

Main Menu > Tree Manager > Tree Structure

- Search for an existing tree structure or create a new one.

The screenshot shows the CARDINAL web application interface. At the top left is the CARDINAL logo. To its right is a search bar with a dropdown menu set to 'All' and a search button with a double arrow icon. Below the logo is a breadcrumb navigation path: Favorites > Main Menu > Tree Manager > Tree Structure. The main heading is 'Tree Structure'. Below the heading is a text prompt: 'Enter any information you have and click Search. Leave fields blank for a list of all values.' There are two buttons: 'Find an Existing Tree Structure' and 'Create New Tree Structure'. Below these is a 'Search Criteria' section with a dropdown arrow. The search criteria are: 'Search by: Tree Structure ID' (dropdown), 'begins with ACCOUNT' (text input), and 'Limit the number of results to (up to 300): 300' (text input). There is a 'Search' button and a link for 'Advanced Search'. At the bottom of the form are two links: 'Find an Existing Tree Structure' and 'Create New Tree Structure'.



Creating or Editing a Tree Structure (continued)

The **Tree Structure Properties** page appears.

The screenshot shows the 'CARDINAL' application interface. At the top left is the logo. To its right is a search bar with a dropdown menu set to 'All' and a search input field. Below this is a breadcrumb trail: 'Favorites > Main Menu > Tree Manager > Tree Structure'. A tabbed interface has four tabs: 'Structure' (selected), 'Levels', 'Nodes', and 'Details'. The main content area is titled 'Tree Structure Properties' and contains the following fields:

- Structure ID:** ACCOUNT
- *Description:** Account Trees (with a close button 'x')
- *Type:** Detail (with a dropdown arrow)

There are two panels for configuration:

- Additional Key Field:** Contains four radio buttons: 'SetId Indirection' (selected), 'Business Unit', 'User Defined', and 'None'.
- Navigation Options:** Contains two checkboxes: 'Node Multi-Navigation' and 'Detail Multi-Navigation', both of which are unchecked.

At the bottom, there are several buttons: 'Save', 'Return to Search', 'Notify', 'Add', and 'Update/Display'. A footer at the very bottom shows the breadcrumb trail: 'Structure | Levels | Nodes | Details'.



Creating or Editing a Tree Structure (continued)

Click on the **Levels** tab.

When creating a new level in a tree, Cardinal Tree Manager displays the specified page in the **Page Name** field on the **Tree Levels** page and stores the application entered using the record definition in the **Record Name** field. The default values for these fields come from the standard **Tree Manager** page.

When using standard pages, do not need to enter anything in the **Menu Name** or **Menu Bar Name** fields. However, if wanting to store level information using something other than **TREE_LEVEL_TBL**, then create a page and component that use that new record definition. Ensure that the component has been defined on a menu somewhere in the system and specify all of this information on this page.

The screenshot shows the 'CARDINAL' application window with the 'Tree Manager' > 'Tree Structure' path. The 'Levels' tab is active. The 'Tree Levels' section contains the following fields:

- Structure ID: ACCOUNT
- Record Name: TREE_LEVEL_TBL
- Page Name: TREE_LEVEL
- Component Name: (empty)
- Menu Name: (empty)
- Menu Bar Name: (empty)
- Menu Item Name: (empty)

At the bottom, there are buttons for 'Save', 'Return to Search', 'Notify', 'Add', and 'Update/Display'. The breadcrumb 'Structure | Levels | Nodes | Details' is visible at the bottom left.



Creating or Editing a Tree Structure (continued)

Click on the **Nodes** tab.

On the **Tree Nodes** page, enter a value in the **Record Name**, **Field Name**, and **Page Name** fields to use for entering and storing information about tree nodes.

The screenshot shows the CARDINAL web application interface. At the top left is the CARDINAL logo. To its right is a search bar with a dropdown menu set to 'All' and a search input field. Below the search bar is a navigation breadcrumb: 'Favorites > Main Menu > Tree Manager > Tree Structure'. Underneath is a tabbed interface with four tabs: 'Structure', 'Levels', 'Nodes' (which is selected), and 'Details'. The main content area is titled 'Tree Nodes' and contains several form fields: 'Structure ID:' with the value 'ACCOUNT'; '*Record Name:' with a text input containing 'TREE_NODE_TBL' and a search icon; '*Field Name:' with a text input containing 'TREE_NODE' and a search icon; '*Page Name:' with a text input containing 'TREE_NODE' and a search icon; 'Component Name:', 'Menu Name:', 'Menu Bar Name:', and 'Menu Item Name:' each with an empty text input field. At the bottom of the form are five buttons: 'Save', 'Return to Search', 'Notify', 'Add', and 'Update/Display'. Below the buttons is a breadcrumb: 'Structure | Levels | Nodes | Details'.

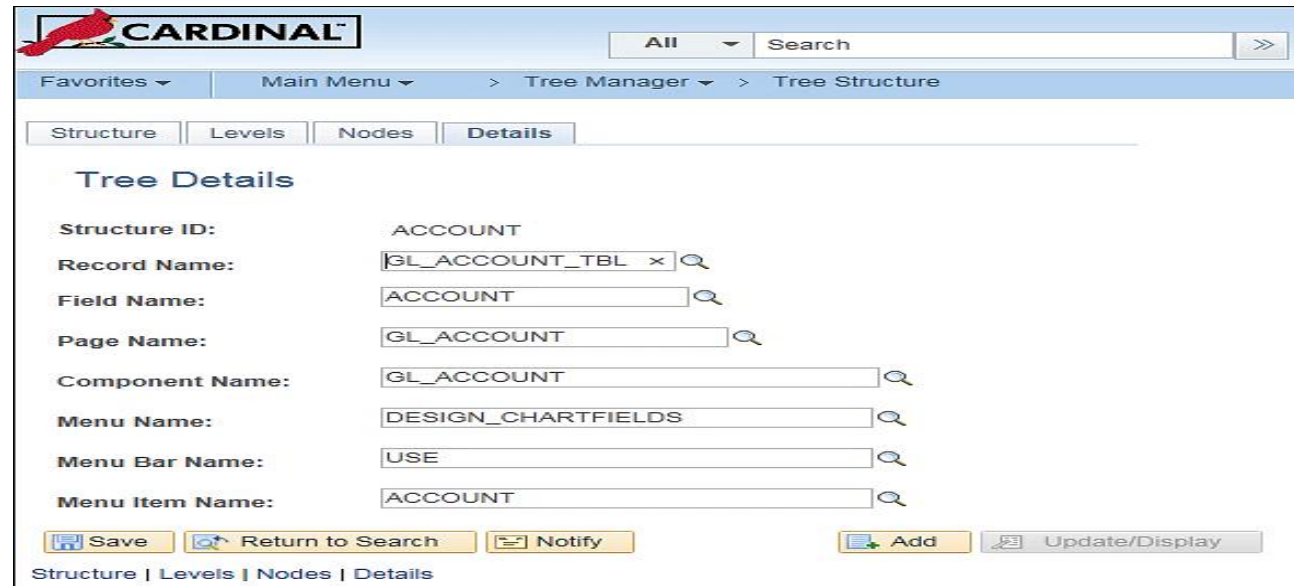


Creating or Editing a Tree Structure (continued)

Click on the **Details** tab.

The **Tree Details** page is used to define the application data and component used to maintain the detail values for a tree. This page is completed only for spring and summer trees.

Enter the name of the page, component, record name, and key field name that will be used when adding or updating the application data for a detail value. For example, if each detail value represents a department, use a page, component, and menu path that enables the ability to create and update department information.



The screenshot shows the 'CARDINAL' application interface. At the top, there is a search bar with 'All' and 'Search' options. Below the search bar is a breadcrumb trail: 'Favorites > Main Menu > Tree Manager > Tree Structure'. The main content area has four tabs: 'Structure', 'Levels', 'Nodes', and 'Details', with 'Details' being the active tab. The 'Tree Details' form contains the following fields:

- Structure ID: ACCOUNT
- Record Name: GL_ACCOUNT_TBL
- Field Name: ACCOUNT
- Page Name: GL_ACCOUNT
- Component Name: GL_ACCOUNT
- Menu Name: DESIGN_CHARTFIELDS
- Menu Bar Name: USE
- Menu Item Name: ACCOUNT

At the bottom of the form, there are buttons for 'Save', 'Return to Search', 'Notify', 'Add', and 'Update/Display'. A breadcrumb trail at the very bottom reads 'Structure | Levels | Nodes | Details'.



Creating a New Tree

To create a new tree:

- Navigate to: **Main Menu > Tree Manager > Tree Manager**.
- Click on the **Create New Tree** tab, name a new tree and click the **Add** button.
- On the **Tree Definition and Properties** page, name the tree to create.
- Choose a tree **Structure ID**. The **Structure ID** defines the field or ChartField upon which the tree is based. The user can define structures using the **Tree Structure Properties** page shown earlier in this topic.
- Fill in all remaining information.
- **Category** is a user-defined way of organizing trees so that they are easier to find when using the tree search pages. Most trees are **Default** or **Commitment Control**.
- Select a method for enforcing levels. Choose between **Strictly Enforced** or **Loosely Enforced** to enforce levels.
- When the **All Detail Values in this Tree** checkbox is selected, all values in the detail value table are included in the tree.
- Select the **Allow Duplicate Detail Values** radio button if the user wants to skip the audit that checks for duplicate detail values in the tree. When selected, the user can have the same detail value appear under different parent nodes. This option is not available for use with winter trees.
- Enter the Business Unit in the **SetID** field.
- Click the **OK** button.



Creating a New Tree (continued)

CARDINAL All Search >>

Favorites Main Menu > Tree Manager > Tree Manager

Tree Definition and Properties

*Tree Name: TESTING

*Structure ID: FUND_DTL 🔍

*Effective Date: 02/08/2017 📅 Status: Active ▼

*Description: Testing

*Category: DEFAULT 🔍

*Use of Levels: Strictly Enforced ▼ Performance Options

*SetID: 50100 🔍

Audits	
<input checked="" type="checkbox"/>	All Detail Values in this Tree
<input type="checkbox"/>	Allow Duplicate Detail Values

Item Counts	
Node Count:	0
Leaf Count:	0
Level Count:	0
Branch Count:	0

OK Return to Search



Creating a New Tree (continued)

Clicking the **OK** button displays the **Enter Root Node for Tree** page. On this page, add levels as needed, and define a root node for the tree.

Add levels by clicking the **Add Level** button and choosing the appropriate level. Click the **Save** button.

The screenshot shows the 'Enter Root Node for Tree' page in the CARDINAL system. The page title is 'Enter Root Node for Tree' and the tree name is 'ACCOUNT'. The page is divided into two steps: 'Step 1: Set Up Tree Levels' and 'Step 2: Define Root Node'. In Step 1, there is a table for 'Tree Levels' with columns 'Level Name', 'All Values', and 'Description'. An 'Add Level' button is visible below the table. In Step 2, there is a text input field for '*Root Node:' and 'OK' and 'Cancel' buttons. A modal window titled 'Look Up Level Name' is open, showing search results for level names. The search criteria is 'Level Name' begins with. The search results table lists level names and descriptions.

Level Name	Description
LEVEL 3	LEVEL_3
LEVEL0	LEVEL_0
LEVEL1	Level 1
LEVEL2	Level 2
LEVEL_0	LEVEL_0
LEVEL_1	LEVEL_1
LEVEL_2	LEVEL_2
LEVEL_3	LEVEL_3
LEVEL_4	LEVEL_4
LEVEL_5	LEVEL_5
LEVEL_6	LEVEL_6
LEVEL_7	LEVEL_7



Creating a New Tree (continued)

Insert the tree nodes that define the hierarchy of the tree by clicking on the magnifying glass next to the **Root Node** field and by selecting the appropriate value.

Click the **OK** button to finish completing the page.

The screenshot shows the CARDINAL Tree Manager interface. The main window is titled "Enter Root Node for Tree" and has "Tree Name: TESTING". It is divided into two steps: "Step 1: Set Up Tree Levels" and "Step 2: Define Root Node". In Step 1, there is a table for "Tree Levels" with one row: "LEVEL_1" with "All Values" checked and "Description" as "LEVEL_1". An "Add Level" button is below the table. In Step 2, there is a "*Root Node:" field with a magnifying glass icon. A "Look Up Root Node" dialog box is open over the main window. It has a search field with "Tree Node" selected and "begins with" as the search criteria. Below the search field are "Look Up" and "Cancel" buttons, and a link to "Advanced Lookup". The dialog box displays "Search Results" for 452 items, showing the first 300. The results are in a table with columns "Tree Node" and "Description".

Tree Node	Description
04460	Fund 04460 Assoc CSC
4099999	All Revenue
5011000	Personal Services
5012000	Contractual Svcs
5013000	Supplies and Materials
5014000	Transfer Payments
5015000	Continuous Charges
5021000	Property and Improvmnt
5022000	Equipment
5023000	Plant and Improvement
5030	Land and Resource Management
5031000	Obligations
5140	Environmental Monitor/Evaluatn
6020	Grnd Transportatn Plan & Rsrch
6030	Hwy Sys Acquisitn & Constructn
6040	Hwy Sys Maintenance & Operatns
6050	Grnd Transportatn Sys Safe Svc
6060	Commonwealth Toll Facilities
6070	Fin Asst-Locality Grnd Trnsprt
6120	Non-toll Supp Trnsprt Debt Svc
6990	Administrative & Support Svcs



Maintaining Trees

The activities in maintaining trees include:

- Adding, updating, and deleting rollup values
- Adding, updating, and deleting detail values
- Adding, updating, and viewing a range of detail values
- Copying and deleting trees

Tree maintenance is performed using the **Tree Maintenance** page. To display this page navigate to:

Main Menu > Tree Manager > Tree Utilities > Copy/Delete Tree



Maintaining Trees (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Tree Manager > Tree Utilities > Copy/Delete Tree

Tree Maintenance | Tree Structure Maintenance

Tree Maintenance

Tree Definitions Personalize | Find | View 100 | First 1-20 of 607 Last

Select	Key Type	User Key	Tree Name	Effective Date	Valid Tree
<input checked="" type="checkbox"/>	SetId	50100	ACCNT ALLOWUNALLOW	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ACCOUNT_BUDGET	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ACCOUNT_OVERALL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITYEQUIPALLOC	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_ALL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_BUDGET	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_BUDG_RPRT	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_CE	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ALL_PURCH_ITEMS	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	AP964_BU_EXCPTN	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BUS_UNIT	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_PETTY_CASH	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_AR	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_EXTRT_EXCP	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_INTFC	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_INTFC_GL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	COST_CENTER_COMBO	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	COST_CENTER_EDITS	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	CSC_NVISION	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	12700	DEPT NVISION	01/01/1901	Valid Tree

Perform Audits Copy Delete View

Notify

Tree Maintenance | Tree Structure Maintenance



Maintaining Trees (continued)

The **Tree Maintenance** page is used to perform tree audits.

A Tree audit is a process that compares the value table with the associated tree and identifies missing values.

To perform a tree audit, the **All Detail Values in this Tree** checkbox must be selected on the **Tree Definition and Properties** page.

The **Copy** button on this page can be used to copy the tree and will speed up the tree creation process.

The **Delete** button can be used to delete a tree.



Maintaining Trees (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Tree Manager > Tree Utilities > Copy/Delete Tree

Tree Maintenance | Tree Structure Maintenance

Tree Maintenance

Select	Key Type	User Key	Tree Name	Effective Date	Valid Tree
<input type="checkbox"/>	SetId	50100	ACCNT ALLOWUNALLOW	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ACCOUNT_BUDGET	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ACCOUNT_OVERALL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITYEQUIPALLOC	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_ALL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_BUDGET	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_BUDG_RPRT	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	ACTIVITY_CE	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	ALL_PURCH_ITEMS	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	AP964_BU_EXCPTN	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BUS_UNIT	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_PETTY_CASH	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_AR	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_EXTRT_EXCP	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_INTFC	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	BU_TREE_INTFC_GL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	COST_CENTER_COMBO	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	COST_CENTER_EDITS	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	CSC_NVISION	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	12700	DEPT NVISION	01/01/1901	Valid Tree

Perform Audits Copy Delete View

Notify

Tree Maintenance | Tree Structure Maintenance



Auditing a Tree

When using the **Perform Audits** button from the **Tree Maintenance** page, trees that contain errors remain in **Draft** format and an error message pops up. The message displays information that allows the user to obtain more detail on the reasons for the error.

The screenshot shows the CARDINAL web application interface. At the top, there is a search bar with 'All' selected and a search input field. Below the search bar is a breadcrumb trail: Favorites > Main Menu > Tree Manager > Tree Utilities > Copy/Delete Tree. The main content area is titled 'Tree Maintenance' and contains a table of 'Tree Definitions'. The table has columns for 'Select', 'Key Type', 'User Key', 'Tree Name', 'Effective Date', and 'Valid Tree'. The 'TESTING' tree is selected and marked as a 'Draft Tree'. Below the table are buttons for 'Perform Audits', 'Copy', 'Delete', and 'View'. An error message dialog box is open, displaying the message: '5031000 has no specified range. (25,11). The specified leaf-node does not contain a range value specification.' with an 'OK' button.

Select	Key Type	User Key	Tree Name	Effective Date	Valid Tree
<input type="checkbox"/>	SetId	99900	PROJECT_REPORTING	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	RGL304_GENERAL	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	RGL304_HIGHWAY	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	RGL648_FIPS_HOUSE	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	STATE	RGL648_FIPS_SENATE	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	TASK_ALLOCATIONS	01/01/1901	Valid Tree
<input type="checkbox"/>	SetId	50100	TASK_EQUIP_ALLOC	01/01/1901	Valid Tree
<input checked="" type="checkbox"/>	SetId	50100	TESTING	02/08/2017	Draft Tree

Message

5031000 has no specified range. (25,11)

The specified leaf-node does not contain a range value specification.

OK



Auditing Trees: Tree Auditor Page

To view the error(s) for the tree(s) audited, navigate to the **Tree Auditor** page through the following path:

Main Menu > Tree Manager > Tree Auditor

Click the **Add a New Value** tab, enter a **Run Control ID** and click the **Add** button.

The screenshot shows the 'Tree Auditor' page within the 'CARDINAL' system. At the top left is the 'CARDINAL' logo. To its right is a search bar with a dropdown menu set to 'All' and a search button with a double arrow. Further right is an 'Advanced Search' link. Below this is a breadcrumb trail: 'Favorites > Main Menu > Tree Manager > Tree Auditor'. The main heading is 'Audit Tree'. Below the heading are two tabs: 'Find an Existing Value' and 'Add a New Value'. The 'Add a New Value' tab is active. Underneath the tabs is a text input field labeled 'Run Control ID'. Below the input field is an orange 'Add' button. At the bottom of the page, there are two links: 'Find an Existing Value' and 'Add a New Value'.



Auditing Trees: Tree Auditor Page (continued)

This opens the **Tree Auditor** page. To run the Tree Auditor, use the following steps.

- To audit a single tree, select the **Single Tree** radio button in the **Audit Scope** box. Then click the magnifying glass next to the **Tree Name** field and select the desired tree to audit.
- To audit multiple trees, select the **Multiple Trees** radio button in the **Audit Scope** box.
- Select relevant date. Available options are:
 - **Effective Date of Tree** - Select an effective date to run the audit on a single instance of the tree.
 - **As of Current Date** - Select to audit trees that have the most recent effective date. If **Single Tree** is selected in the **Audit Scope** box and select a specific tree, only the instance of the tree with the most recent effective date is audited. If **Multiple Trees** option is selected in the **Audit Scope** box, all trees whose effective dates are current are audited. This option is only available for the Tree Audits utility.
 - **As of Specific Date** - Select to enter a specific date. If the **Single Tree** option is selected in the **Audit Scope** box and select a specific tree, only the instance of the tree whose effective date matches the specified date is audited. If **Multiple Trees** option is selected in the **Audit Scope** box, all trees whose effective dates match the specified date are audited. This option is only available for the Tree Audits utility.
- **All Trees** - Select to audit all trees. If **Single Tree** option is selected in the **Audit Scope** box and select a specific tree, all instances of this tree are audited, regardless of effective dates. If **Multiple Trees** option is selected in the **Audit Scope** box, all instances of all trees are audited. When **Multiple Trees** are selected, fields in the **Tree Definition** box become unavailable. This option is only available for the Tree Audits utility.
- Click the **Run** button.



Auditing Trees: Tree Auditor Page (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Tree Manager > Tree Auditor

Tree Auditor

Run Control ID Audit_Tree Report Manager Process Monitor **Run**

Audit Scope

Single Tree Multiple Trees

Tree Definition

Tree Name TESTING SetId 50100

Date Selection

Effective Date of Tree 02/08/2017
 As of Current Date
 As of Specific Date 02/08/2017
 All Trees

View Results

Save Notify Add Update/Display



Auditing Trees: Tree Auditor Page (continued)

The **Process Scheduler Request** page opens. Click the **OK** button.

Process Scheduler Request x

[Help](#)

User ID FINUSER05 Run Control ID Audit_Tree

Server Name Run Date 02/08/2017 x [st]

Recurrence Run Time 10:57:31AM Reset to Current Date/Time

Time Zone 🔍

Process List

Select	Description	Process Name	Process Type	*Type	*Format	Distribution
<input checked="" type="checkbox"/>	TREEMAIN	TREEMAIN	Application Engine	Web <input type="text"/>	TXT <input type="text"/>	Distribution

OK Cancel



Auditing Trees: Tree Auditor Page (continued)

The **Tree Auditor** page is displayed.

To access the report regarding audited tree, click the **View Results** link at the bottom of the **Tree Auditor** page.

The **Batch Report** page is displayed.

Click the **Open Report** link in the **Report List** box to open the report regarding the errors in audited tree.

CARDINAL All Search

Favorites Main Menu > Tree Manager > Tree Auditor > Repair Tree Reports

Batch Report

Process Instance: 3933801 Run Control ID: Audit_Tree
User ID: FINUSER05 Run Date/Time: 02/08/17 10:59:33AM

Show Reports Criteria
 Reports with Data All Reports

Report List Personalize | Find | View All | [Print] | [Export] First 1 of 1 Last

Open Report	Report Content	Total Row Count
Open Report	Node has no child nodes or detail values specified	1

Return to Search Notify



Auditing Trees: Analyzing Results

This page helps when analyzing the audit results.

Select a repair program as indicated by the audit results.

In this example, the tree contains one error.

Access the tree directly and correct the error, or use the Repair Tree program to repair the tree.



Auditing Trees: Analyzing Results (continued)

Node has no child nodes or detail values specified ✕

[Help](#)

Reports on nodes on a detail value tree (summer) that has neither child nodes under it, nor detail values. For summer trees, all nodes should either have child node(s) and/or child detail value(s).

Audit Report Find | View All First ◀ 1 of 1 ▶ Last

SetId: 50100 SetCtrnValue: <NONE> Tree Name: TESTING Eff Date: 2017-02-08

Results Personalize | Find | View All | | First ◀ 1 of 1 ▶ Last

Node Name
5031000

OK Cancel



Simulation: Maintaining a Tree Structure

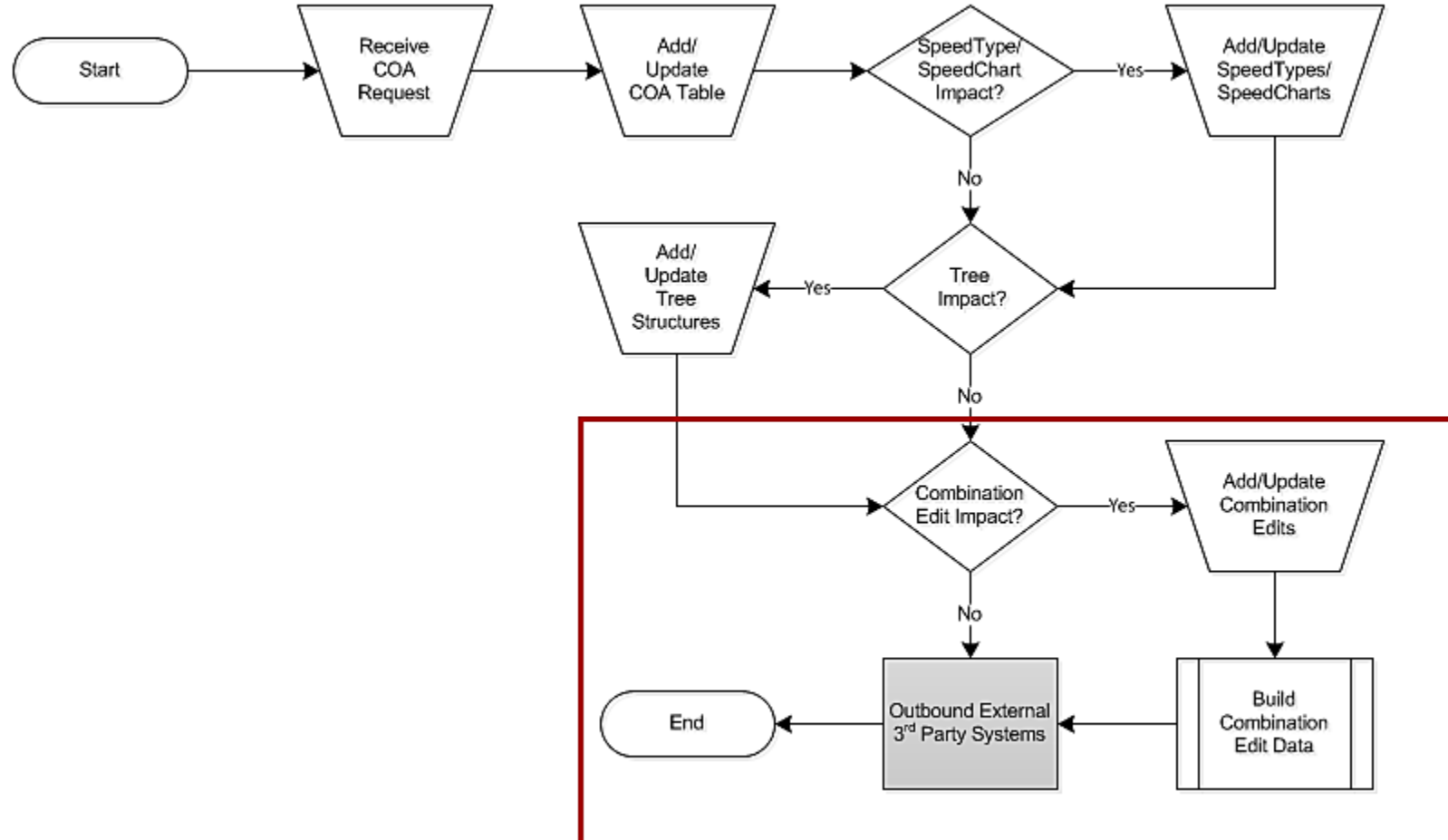
You will now view a simulation that demonstrates how to **Maintain a Tree Structure**.





Defining Combination Edits

The final topic in ChartField set up and maintenance relates to defining combination edits.





Combination Editing

ChartField combination editing is a feature in Cardinal that helps to maintain data integrity across all modules. Combinations of ChartField values can be edited to determine such things as:

- Which ChartFields are required on a transaction; for example, Account, Fund, and Department must be defined on every journal line.
- Which ChartFields are not allowed based on values entered in other ChartFields; for example, defining which accounts are valid/invalid with a specific fund or program.

The number of ChartFields in a combination rule should be kept to a minimum.

- Three or fewer ChartFields are recommended for performance reasons.

Only define critical rules.

- The more rules implement, the more time that it takes to edit the transactions and maintain the rules.



Combination Editing Process

Post Production Support (PPS) establishes and maintains combination edits using the following steps:

- Set up a Combination Definition that specifies the ChartFields to edit
- Define the Combination Edit Rules
- Define the Combination Edit Groups
- Attach the Combination Edit Group to a Target Ledger
- Run the Build Combination Edit Process
- Run the Extract Budget Combination Process



Combination Edit Configuration

There are three configuration components for combination edits:

- **Combination Definition** - defines the ChartFields involved in the combination edit. For example, a Combination Definition may require an Account, Fund, and a Department be defined on each journal line.
- **Combination Rule** - defines the ChartField values for the Combination Definition. In our example, the Combination Rule might list the allowable Account, Fund, and Department values so incorrect combinations will not pass combo edits.
- **Combination Group** - links the Combination Rules that are to be applied as a group during the edit process. All rules within a group must have the same Combination Definition.

ChartField combination editing compares the values entered on accounting distributions to the Combination Definitions and Combination Rules that are defined.

In this example, the editing process reviews the Account/Fund/Department code combinations (included in the Combination Definition) that are specified (in the Combination Rule).



Combination Edit Definition

To create a Combination Definition, two or more ChartFields are identified.

The first ChartField that is entered is the anchor ChartField.

The anchor ChartField is the driver of the Combination Edit.

- The Combination Editing process first searches for the anchor ChartField.
- Then it matches the other (non-anchor) ChartFields in the combination.

In the example, **Account** is the anchor ChartField, with **Department** and **Fund** as the other ChartField combinations that are associated with the anchor.

To view the **ChartField Combination Editing Definition** page, navigate to:

Main Menu > Setup Financials/Supply Chain > Common Definitions > Design ChartFields > Combination Editing > Combination Definition

Enter **50100** as the **SetID** and **Search**.

Select **ACCTFNDDPT**.

The screenshot shows the 'Combination Definition' search interface. At the top, there are two buttons: 'Find an Existing Value' and 'Add a New Value'. Below them is a 'Search Criteria' section with a dropdown arrow. A search input field is highlighted with a red box, containing 'SetID = ' in a dropdown, '50100' in the text field, and a search icon. Below the search field, there is a 'Combination Definition' dropdown set to 'begins with', a 'Limit the number of results to (up to 300):' field set to '300', and buttons for 'Search', 'Clear', 'Basic Search', and 'Save Search Criteria'. At the bottom, there are links for 'Find an Existing Value' and 'Add a New Value'.



Combination Edit Definition (continued)

All Search >>
[Advanced Search](#) [Last Search Results](#)

Favorites Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Combination Editing > Combination Definition

ChartField Combination Editing Definition

SetID 50100 Combination Definition ACCTFNDDPT

***Description**

Long Description

Account, Fund, and Department are required on all DOT transactions.

Combination ChartFields Personalize | Find | View All | | First 1-3 of 3 Last

*ChartField	Anchor ChartField		
Account	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save Return to Search Previous in List Next in List Notify Refresh Add Update/Display



Combination Edit Rules

Combination Rules define the combinations of ChartField values that can be used on an accounting distribution.

The Combination Rule can define valid or invalid combinations.

Combination Edit Rules are defined on the **Combination Rule** page. To view this page, navigate to:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Combination Editing > Combination Rule

Click **Search** and select a **Combination Rule**.

Combination Rule

Enter any information you have and click Search. Leave fields blank for a list of all values.

[Find an Existing Value](#) [Add a New Value](#)

▼ Search Criteria

SetID =

Combination Rule begins with

Limit the number of results to (up to 300):

[Search](#) [Clear](#) [Basic Search](#)

[Find an Existing Value](#) | [Add a New Value](#)



Combination Edit Rules (continued)

For example the Combination rule **ACCTFNDDPT** states that Account, Fund, and Department are required on all transactions.

The **Combination Rule** page has two tabs, **Rule Definition** and **ChartField Combinations**.

On the **Rule Definition** tab, the **Effective Date** range determines the time frame for which the rule is valid.

If the **Value Required** checkbox is selected, the rule does not have to specify values or tree nodes.

Favorites ▾ Main Menu ▾ > Set Up Financials/Supply Chain ▾ > Common Definitions ▾ > Design ChartFields ▾ > Combination Editing ▾ > Combination Rule

Rule Definition | ChartField Combinations

SetID 50100 Combination Rule ACCTFNDDPT

*Description VDOT Account/Fund/Department

Long Description Account, Fund, and Department are required on all DOT transactions.

Effective Date From 01/01/1901 Open Effective Date To Effective Date To 01/01/2099

*Combination Definition ACCTFNDDPT Effective Date for Prompting 02/23/2017

Non-Anchor ChartField Option

ChartField	Value Required
Fund	<input checked="" type="checkbox"/>
Department	<input checked="" type="checkbox"/>

Save Return to Search Previous in List Next in List Notify Add Update/Display

Rule Definition | ChartField Combinations



Combination Edit Rules: ChartField Combinations Tab

On the **ChartField Combinations** tab:

The **Anchor ChartFields** section shows the relevant anchors and associated values.

The **Non-Anchor ChartFields** section shows valid values for the other ChartFields associated to the combination edit rule.

The **Selected Detail Values** radio button allows the combination edit rule to be applied to specific allowable values. The **Selected Tree Node** radio button allows the combination edit rule to be applied to all valid values on a tree node.

Rule Definition | **ChartField Combinations**

SetID 50100 Combination Rule ACCTFNDDPT Descr VDOT Account/Fund/Department

Ascending Descending [Sort Anchor](#)

Anchor ChartFields Find | View All First 1 of 1 Last

ChartField Account Tree ACCOUNT_OVERALL Level Seq 1

How Specified

Selected Detail Values

Selected Tree Nodes

Chartfield values / Tree nodes Personalize | Find | View All | [Print](#) | [Refresh](#) First 1 of 1 Last

Node/Value		
ACCOUNTS_CAFR		

Non-Anchor ChartFields Find | View All First 1 of 2 Last

Non-Anchor ChartField Fund Tree Level

How Specified

Selected Detail Values

Selected Tree Nodes

Chartfield values / Tree nodes Personalize | Find | View All | [Print](#) | [Refresh](#) First 1 of 1 Last

Node/Value		
%		

[Save](#) [Return to Search](#) [Previous in List](#) [Next in List](#) [Notify](#) [Add](#) [Update/Display](#)

Rule Definition | ChartField Combinations



Combination Edit Groups

The Combination Edit Group links the Combination Rules that are to be applied as a group during the edit process. All rules within a group must have the same Combination Definition.

The **ChartField Combination Editing Group** page allows associating of combination rules with a combination group definition. Cardinal applies the rules as a group during the edit process.

This page is also used to indicate whether the combination edit is specifying valid or invalid combinations.

To view the **ChartField Combination Editing Group** page, navigate to:

Main Menu > Setup Financials/Supply Chain > Common Definitions > Design ChartFields > Combination Editing > Combination Group.

Click the **Find an Existing Value** tab.

Enter **DEPTREQ** in the **Process Group** field.

Click **Search**.

Combination Group

Enter any information you have and click Search. Leave fields blank for a list of all values.

[Find an Existing Value](#) | [Add a New Value](#)

▼ **Search Criteria**

SetID = 50100

Process Group begins with DEPTREQ

Limit the number of results to (up to 300): 300

Search | Clear | Basic Search | Save Search Criteria

[Find an Existing Value](#) | [Add a New Value](#)



Combination Edit Groups (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Set Up Financials/Supply Chain > Common Definitions > Design ChartFields > Combination Editing > Combination Group

ChartField Combination Editing Group

SetID 50100 Process Group DEPTREQ

*Description VDOT Account/Fund/Department x

Long Description Account, Fund, and Department are required on all DOT transactions. [?]

*Combination Definition ACCTFNDDPT

*Combo Editing Option Combo Data Table User Defined

*Anchor Values Not In Rules Mark Valid

*Combination Group Defines Valid Combinations

Combination Rule Personalize | Find | View All | [?] | [grid] First 1 of 1 Last

*Combination Rule	Description
ACCTFNDDPT	VDOT Account/Fund/Department

Save Return to Search Notify Refresh Add Update/Display



Attach Combination Edit Group to Target Ledger

Once the combination edit group is established, attach it to a Ledger. Attaching the combination edit group to a ledger designates which Combination Editing rules apply to specific transactions.

During the edit process, Cardinal looks to the ledger group on the source transaction to see which rules apply. Typically, combination edit groups are only linked to the ACTUALS Ledger by Business Unit.



Lesson 2: Summary

2

ChartField Maintenance

In this lesson, you learned:

- ChartField maintenance facilitates reporting on all transactions within the financial system.
- Maintenance includes the updating of chart of accounts values and attributes, budget structures, reporting trees, SpeedTypes, SpeedCharts, and combination edits.
- ChartField attributes are optional features that support such things as reporting and payment processing.
- A tree is the graphical hierarchy in Cardinal that displays the relationship between all accounting units (for example, departments, projects, reporting groups, account numbers) and determines roll-up hierarchies. A tree allows for ChartField values to roll up in both reporting and commitment control.
- The use of ChartField Combination Editing helps to maintain data integrity across all modules. It is best to limit the number of ChartFields you are using for combination edit rules.
- There are three components of combination edit configuration: Combination Definitions, Combination Rules, and Combination Groups.
- SpeedTypes can be used in Payroll Time & Attendance, Expenses, General Ledger journal entries, Accounts Receivable direct journals, and Commitment Control Budget journal entries.
- SpeedCharts provide similar functionality for Accounts Payable and Purchasing, except that multiple accounting distributions can be configured for an individual SpeedChart.



Lesson 3: Introduction

3

General Ledger Setup

This lesson covers the following topics

- Understanding Budget Structures
- Defining Allocations
- Amending the Journal Entry Template



Understanding Budget Structures

The budget structure (ledger group) defines the processing rules for each budget ledger.

The Commonwealth of Virginia has Statewide and Agency budget structures used in Cardinal.

Agency budgets are established as the lower level/child budget to the Statewide budget.

For more detailed information about the creation, processing, and correction of budget journals, see the course entitled **501 GL334: Processing Budget Journals** located on the Cardinal website in **Course Materials** under **Learning**.

In this topic, we will focus on understanding budget definitions for different budget structures.



Statewide Budget Structures

Statewide budget structures are established as the parent budget level. They are:

- **Appropriation budget structure** - The appropriation budget structure is the highest level of budgetary control established for the Commonwealth. The Appropriation budget is established at a summary level of the ChartFields, while agency budgets are typically established at a lower level of detail. All appropriations authorized by the General Assembly are controlled by this budget structure and include the executive budget, capital budget, and other special appropriations. This budget structure assures that spending does not exceed the amount authorized by the General Assembly.
- **Allotment budget structure** - The allotment budget structure limits spending level authority. The structure is configured as a child of the appropriation budget so that the total of the allotment budget lines cannot exceed the parent budget. The difference between the appropriation budget and the related allotment budgets is the unallotted amount.
- **Operating Plan budget structure** - The Operating Plan budget structure is used to budget to a lower level than the Appropriation budget structure, and agencies are required to submit their Operating Plan Budget to DPB.
- **Statewide Revenue Estimate** - The Statewide Revenue estimate budget is used to track the recognition and collection of revenues against the Commonwealth's Official Revenue Estimate.



Agency Budgets

Agency budgets are established at a more detailed level than the statewide budgets. Agency annual budget calendars are aligned with the fiscal calendar.

Agency budgets are created and maintained by the agency and may include:

- **Agency Lower Level Budget** (expenditure budget) is a breakdown of the appropriation budget that can be used by agencies to manage or control agency budgets. This budget level is created as a child to the statewide appropriation parent budget.
- **Agency Operational Budget** (expenditure budget) is the detailed agency operating budget structure.
- **Agency Project Budget** (expenditure budget) is a project level budget, and optionally a task level budget.
- **Agency Revenue Estimate Budget** (revenue budget) is used to track the recognition and collection of revenues against a revenue estimate at an agency level.
- **Funding source budget** (expenditure budget) establishes funding sources to allocate to specific projects.
- **Transfer budget** (transfer budget) tracks amounts of ingoing and outgoing transfers against an estimated amount



Budget Definitions

Use the **Budget Definitions** page to view budget definitions. Navigate to this page using the following path:

Main Menu > Commitment Control > Define Control Budgets > Budget Definitions

On the **Find an Existing Value** tab, enter the **Set ID** and **Ledger Group** to view. For example, to access the Appropriation budget structure enter **CC_APPROP**.

Click the **Search** button.

The screenshot shows the 'CARDINAL' web application interface for 'Budget Definitions'. At the top, there is a search bar with a dropdown menu set to 'All' and a search button. Below this is a breadcrumb navigation path: 'Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions'. The main heading is 'Budget Definitions', followed by the instruction: 'Enter any information you have and click Search. Leave fields blank for a list of all values.' There are two tabs: 'Find an Existing Value' (selected) and 'Add a New Value'. Under the 'Search Criteria' section, there are two input fields: 'SetID Value' with a dropdown menu set to '=' and the value '50100', and 'Ledger Group' with a dropdown menu set to '=' and the value 'CC_APPROP'. Below these are two checkboxes: 'Include History' and 'Correct History', both of which are unchecked. A text input field for 'Limit the number of results to (up to 300):' contains the value '300'. At the bottom of the search criteria section, there are buttons for 'Search', 'Clear', 'Basic Search', and 'Save Search Criteria'. At the very bottom of the page, there are links for 'Find an Existing Value' and 'Add a New Value'.



Budget Definitions: Control Budget Options

Some key fields on the **Control Budget Options** tab are explained below.

Tolerance Percent: The percentage variance over budget allowed before the system creates an exception. This value at lower definition levels can be overridden if necessary.

Parent Control Budget: If this budget definition is a child in a hierarchy of budget definitions, select its parent budget definition here. This establishes the connection between the two budget definitions, enabling the system to enforce the relationship.

Ruleset CF: Used to define rules for the budget calendar, budget key ChartFields, and translation trees. RuleSets provide flexibility without creating additional budget structures and ledgers.

Control CF: Used to determine whether or not transactions will be subject to a Budget Structure. For example, for an Agency Operational Budget Structure, Fund may be the Control ChartField.

Associated Expenditure Budget: For a revenue ledger group, select the expenditure ledger group whose limits are increased by revenue budgets in this budget definition (optional). Associated revenue and expenditure budgets can be specified on the **Associated Budgets** page.



Budget Definitions: Control Budget Options (continued)

Control Options define how restrictive budget structures are with respect to transactions. The following options are available:

Control

- Verifies transactions based on valid ChartField combinations and monetary amounts.
- If the ChartField combination does not exist or the budget amount is exceeded, the transaction will generate an error.
- No further processing can be performed until the error is corrected by an authorized agency user or the budget is overridden by an authorized user.

Track with Budget

- Verifies transactions based on valid ChartField combinations and not on monetary amounts.
- Tracks transaction amounts against available budgets and issues warning messages when they exceed budget amounts.
- However, if the budget combination does not exist, the transaction will generate an error.

Track Without Budget

- Tracks transactions even if there is no budget set up.
- All transactions pass without error.



Budget Definitions: Control Budget Options (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions

Control Budget Options Ruleset Chartfield Keys and Translations Expiration Chartfield Budget Period Status Control ChartField Offsets

SetID 50100 Ledger Group CC_APPROP

Effective Date Find | View All First 1 of 1 Last

*Effective Date 07/01/2010 *Status Active

*Description CC Appropriation Definition Status Valid

Budget Type Expense Associated Expenditure Budget

Tolerance Percent Parent Control Budget

Ruleset and Control ChartField

*Ruleset CF Program Tree Name PROGRAM_BUDGET Level Name LEVEL_1

*Control CF Fund Expiration CF Default Ruleset DEFAULT

Commitment Control Options

*Control Option Control *Budget Status Open

Entries Must Balance Enable Funding Source

Enable Statistical Budgeting

Child Budgets Exceed Option

Save Return to Search Notify Add Update/Display Include History Correct History

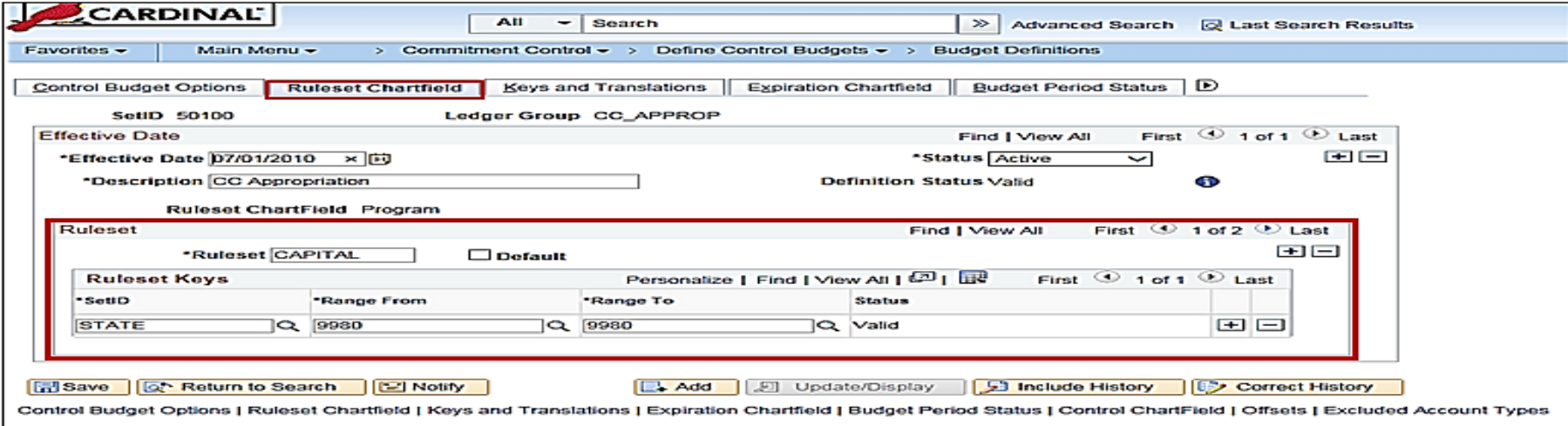
Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types

Budget Definitions: Ruleset ChartField

Ruleset: Rulesets are used when there are different processing rules for a budget definition that are dependent on specific ChartField values. For example, Project is required for the Capital Outlay Program in the Appropriation and Allotment budgets.

Enter the ruleset name. Select **Default** for the ruleset to be used as the default for any ruleset ChartField values that are not specify on this page. If only one ruleset is required for the budget definition, there is no need to enter any values on this page.

Ruleset Keys: Enter the **SetID** for each range of Ruleset ChartField values to which the Ruleset applies.



The screenshot displays the 'Ruleset ChartField' configuration page in the CARDINAL system. The page is titled 'Ruleset ChartField' and is part of the 'Budget Definitions' section. The 'SetID' is 50100 and the 'Ledger Group' is CC_APPROP. The 'Effective Date' is 07/01/2010, and the 'Description' is 'CC Appropriation'. The 'Ruleset' is 'CAPITAL' and is marked as 'Default'. The 'Ruleset Keys' table shows a single entry for 'STATE' with a range from 9980 to 9980 and a status of 'Valid'.

*SetID	*Range From	*Range To	Status
STATE	9980	9980	Valid

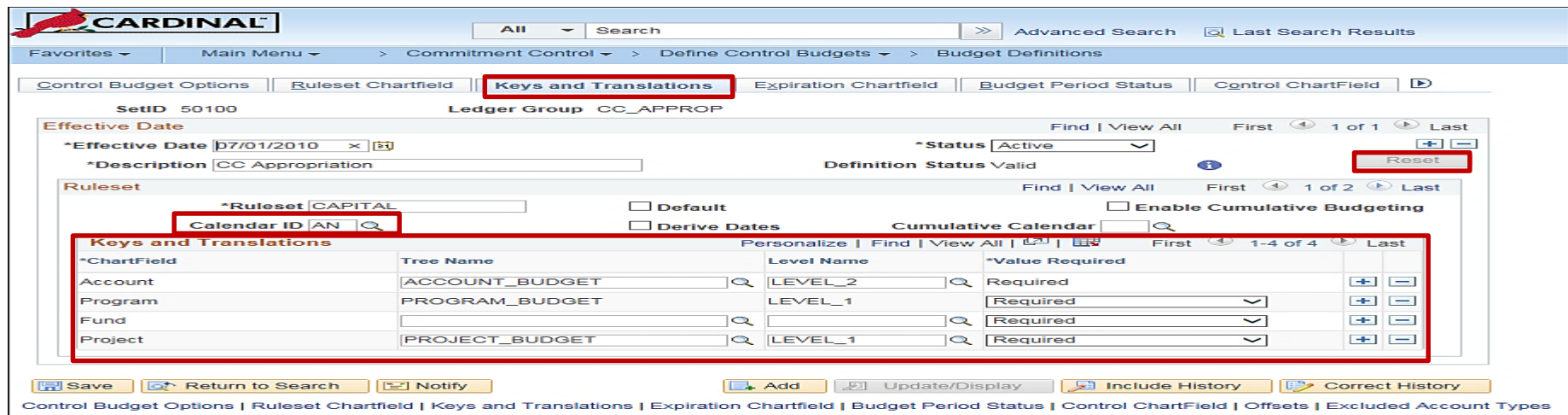


Budget Definitions: Keys and Translations

Reset: Click the **Reset** button, all existing budget key and translation, ruleset, and control ChartField data is overridden on the child budget definition and replaced with data from the specified parent budget definition. If a parent has been changed since establishing the parent and child relationship, the children must be updated as well. Also, click **Reset** if changing the child but wanting to set it back to the definition values of the parent.

Calendar ID: The primary budget period calendar used to specify the budget periods that are valid for the ruleset. If a calendar ID is not specified for the ruleset, the entire budget is viewed as a single period.

ChartField: A row displays for each key ChartField for the ruleset. ChartField values that are valid for budgeting can be limited on the **Control ChartField** page and the **Excluded Account Types** page.



The screenshot shows the 'Keys and Translations' tab in the Cardinal software. The interface includes a search bar at the top, navigation tabs, and a table of ChartField keys. A red box highlights the 'Keys and Translations' section, and another red box highlights the 'Reset' button.

Effective Date: 07/01/2010
*Description: CC Appropriation
*Ruleset: CAPITAL
Calendar ID: AN
*ChartField Table:

*ChartField	Tree Name	Level Name	*Value Required
Account	ACCOUNT_BUDGET	LEVEL_2	Required
Program	PROGRAM_BUDGET	LEVEL_1	Required
Fund			Required
Project	PROJECT_BUDGET	LEVEL_1	Required



Budget Definitions: Keys and Translations (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions

Control Budget Options | Ruleset Chartfield | **Keys and Translations** | Expiration Chartfield | Budget Period Status | Control ChartField

SetID 50100 Ledger Group CC_APPROP

Effective Date Find | View All First 1 of 1 Last
 *Effective Date 07/01/2010 *Status Active
 *Description CC Appropriation Definition Status Valid **Reset**

Ruleset Find | View All First 1 of 2 Last
 *Ruleset CAPITAL Default Enable Cumulative Budgeting
 Calendar ID AN Derive Dates Cumulative Calendar

Keys and Translations Personalize | Find | View All | First 1-4 of 4 Last

*ChartField	Tree Name	Level Name	*Value Required
Account	ACCOUNT_BUDGET	LEVEL_2	Required
Program	PROGRAM_BUDGET	LEVEL_1	Required
Fund			Required
Project	PROJECT_BUDGET	LEVEL_1	Required

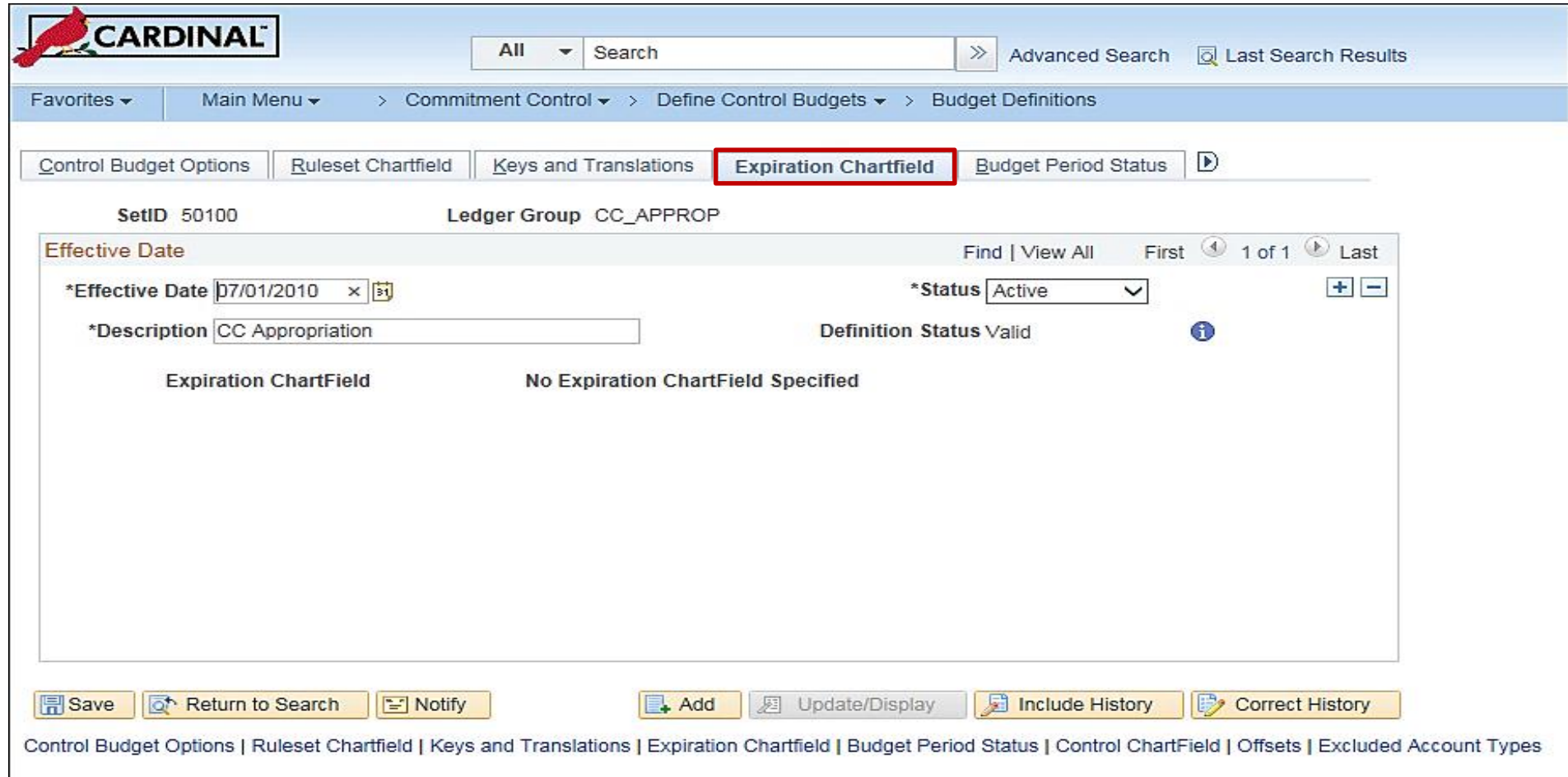
Save Return to Search Notify Add Update/Display Include History Correct History

Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types



Budget Definitions: Expiration ChartField

The **Expiration ChartField** tab is not used in Cardinal. There is no need to enter anything on this page.



The screenshot displays the Cardinal web application interface. At the top left is the Cardinal logo. A search bar contains the text "All" and "Search". Navigation tabs include "Favorites", "Main Menu", "Commitment Control", "Define Control Budgets", and "Budget Definitions". A secondary set of tabs includes "Control Budget Options", "Ruleset Chartfield", "Keys and Translations", "Expiration Chartfield" (highlighted with a red box), and "Budget Period Status".

Below the tabs, the page shows "SetID 50100" and "Ledger Group CC_APPROP". A table with one row is visible, with columns for "Effective Date" and "Status". The "Effective Date" is "07/01/2010" and the "Status" is "Active". The "Description" is "CC Appropriation". The "Definition Status" is "Valid".

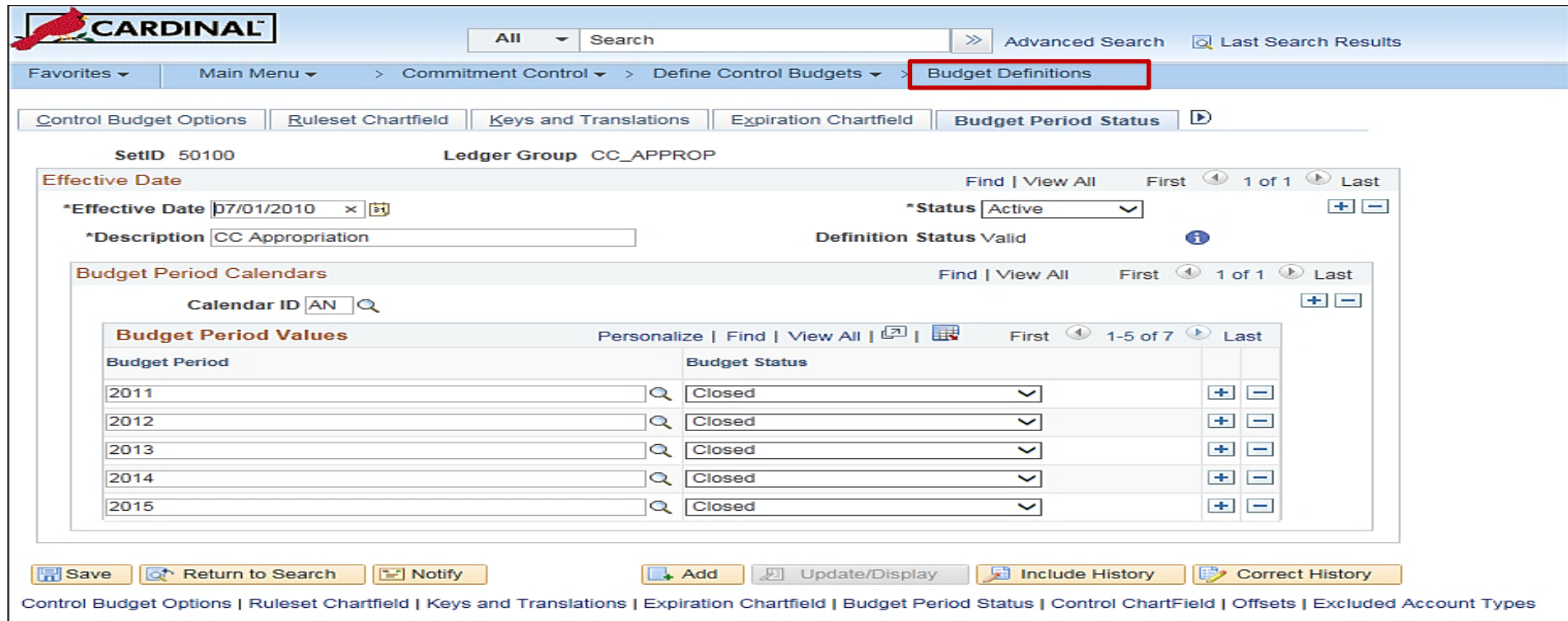
At the bottom of the page, there are several action buttons: "Save", "Return to Search", "Notify", "Add", "Update/Display", "Include History", and "Correct History". A footer bar contains a list of navigation links: "Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types".



Budget Definitions: Budget Period Status

Calendar ID: Select the budget period calendar encompassing the budget periods for which a manual budget status is set.

Budget Status: Indicates whether the budget period is open or closed. Set the budget status manually on the **Control Options** page, the **Budget Period Status** page, the **Control ChartField** page, or the **Budget Attributes** page.



The screenshot displays the 'Budget Period Status' configuration page in the Cardinal software. The breadcrumb trail is: Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions. The page shows configuration for SetID 50100 and Ledger Group CC_APPROP. The 'Effective Date' is 07/01/2010, and the 'Description' is 'CC Appropriation'. The 'Status' is set to 'Active'. Below, the 'Budget Period Values' table lists years 2011 through 2015, all with a 'Closed' status. The 'Calendar ID' is set to 'AN'.

Budget Period	Budget Status
2011	Closed
2012	Closed
2013	Closed
2014	Closed
2015	Closed



Budget Definitions: Control ChartField

Enter ChartField values to specify values for budget checking (if deselected the **All Control Values** checkbox), and to override the default tolerance, status, or other attributes for a specific ChartField value, whether or not selected **All Control Values**.

The options selected here override the defaults defined on the **Control Budget Options** page. There is an ability to override these values if needed for specific business unit or budget combinations in the Budget Attributes component.



Budget Definitions: Control ChartField (continued)

CARDINAL Home | Worklist | Add to Favorites | Sign out

All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions

Keys and Translations | Expiration Chartfield | Budget Period Status | **Control ChartField** | Offsets | Excluded Account Types

New Window | Help | Personalize Page

SetID 50100 Ledger Group CC_APPROP

Effective Date Find | View All | First

*Effective Date 07/01/2010 x [31] *Status Active [v] [+ -]

*Description CC Appropriation Definition Status Valid [i]

Control ChartField Fund All Control Values Bypass Blank Values

SetIDs for ChartField Find | View All | First

*SetID [] [] [+]

ChartField Values Personalize | Find | View All | [] [] First 1

Control Values [] []

*Range From	*Range To	Control Option	Status	Dflt Tol.	Tolerance %	Begin Date	End Date	*Derive Dates	Cumulative Cal	FS Required	Dflt Entry Event
[] []	[] []	Control [v]	Open [v]	<input checked="" type="checkbox"/>		[] []	[] []	Default [v]	[] []	<input type="checkbox"/>	[] []

Save Return to Search Notify Add Update/Display Include History

Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types



Budget Definitions: Offsets

The **Offsets** tab is not used in Cardinal. Do not enter anything on this page.

The screenshot displays the Cardinal software interface for Budget Definitions. The breadcrumb trail is: Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions. The 'Offsets' tab is highlighted with a red box. The page shows details for SetID 50100 and Ledger Group CC_APPROP. The 'Effective Date' is 07/01/2010 and the 'Status' is Active. The description is 'CC Appropriation'. The page indicates 'Definition Status Valid' and 'No Offsets Required'. At the bottom, there are buttons for Save, Return to Search, Notify, Add, Update/Display, Include History, and Correct History. A navigation bar at the very bottom lists: Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types.



Budget Definitions: Excluded Account Types and Excluded Accounts

SetIDs for Excluded Account Types

- **SetID:** Select a SetID to exclude **all** accounts for an account type for budget processing.
- **Excluded Account Types:** Select the account types exclude from budget processing against this Commitment Control ledger group.
- **Exceptions:** Click this link to access the **Exclude Account Type Exceptions** page including ranges of account values that would otherwise be excluded from budget checking.

SetIDs for Excluded Accounts

- **SetID:** Select a SetID to exclude just some accounts from among the included account types from budget processing.
- **Excluded Accounts:** Specify the ranges of account values for a particular SetID in the **From Account** and **To Account** fields that are to be excluded from budget checking.



Budget Definitions: Excluded Account Types and Excluded Accounts (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Commitment Control > Define Control Budgets > Budget Definitions

Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | **Excluded Account Types**

SetID 50100 Ledger Group CC_APPROP

Effective Date Find | View All First 1 of 1 Last
*Effective Date 07/01/2010 *Status Active
*Description CC Appropriation Definition Status Valid

SetIDs for Excluded Account Types Find | View All First 1 of 1 Last
*SetID STATE

Excluded Account Types Personalize | Find | View All | First 1-5 of 5 Last

*Account Type	Description	Exceptions
A	Asset	Exceptions
L	Liability	Exceptions
Q	Equity	Exceptions
R	Revenue	Exceptions
T	Transfers	Exceptions

SetIDs for Excluded Accounts Find | View All First 1 of 1 Last
*SetID STATE

Excluded Accounts Personalize | Find | View All | First 1-2 of 2 Last

*From Account	Description	*To Account	Description
518110	Fd Balance Adjustmnt-Pr Yr Dec	539280	Adv Refunding-Pymt Escrow Agt
59TEDF	TE System Default Account	59TEDF	TE System Default Account

Save Return to Search Notify Add Update/Display Include History Correct History

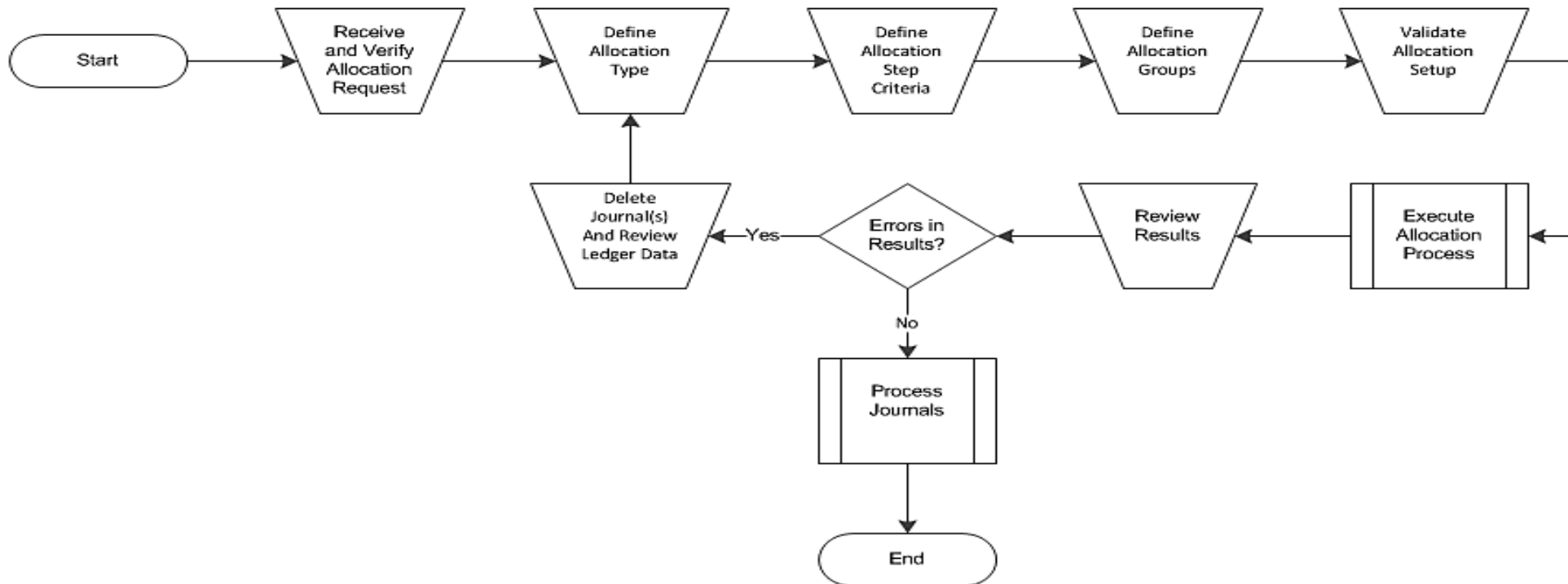
Control Budget Options | Ruleset Chartfield | Keys and Translations | Expiration Chartfield | Budget Period Status | Control ChartField | Offsets | Excluded Account Types



Allocation Process

During the Allocation process, journal transactions, ledger balances, or statistical quantities within a business unit or across business units are distributed so the appropriate entities (i.e., departments, divisions, cost centers) recognize a reasonable share of the amounts (i.e., overhead).

In this topic, we will focus on each step of the Allocation process.





Defining Allocations

Most businesses have some expenses or assets that are held or accumulated by one entity, but must be shared by more than one business unit, department, or other entity.

Typically, the user allocates these balances and statistical quantities across the entities within the organization so that they recognize an appropriate share of the amounts.

Using the Cardinal Allocation process, the user can define multiple allocation steps or step-down allocations when amounts must be applied according to a hierarchy and in a precise order.

Step-down allocations are used to determine not only how much general and administrative expense to charge to each business unit and department, but also what portion of that expense to attribute to individual projects or products.



Prerequisites

When the user defines an allocation, first determine the desired end result.

For example, the cost of renting an office building might be shared among the departments that are housed in that building. If rent is paid as a single amount and is initially charged to one department, there is an ability to allocate the expense to each department in proportion to its share of office space, personnel head count, or any other fixed percentage or statistical criteria.

After determining the purpose of the allocation, gain a working knowledge of the records or tables that are involved and identify which ChartFields are affected.



Allocation Concepts

Basic elements of allocation include:

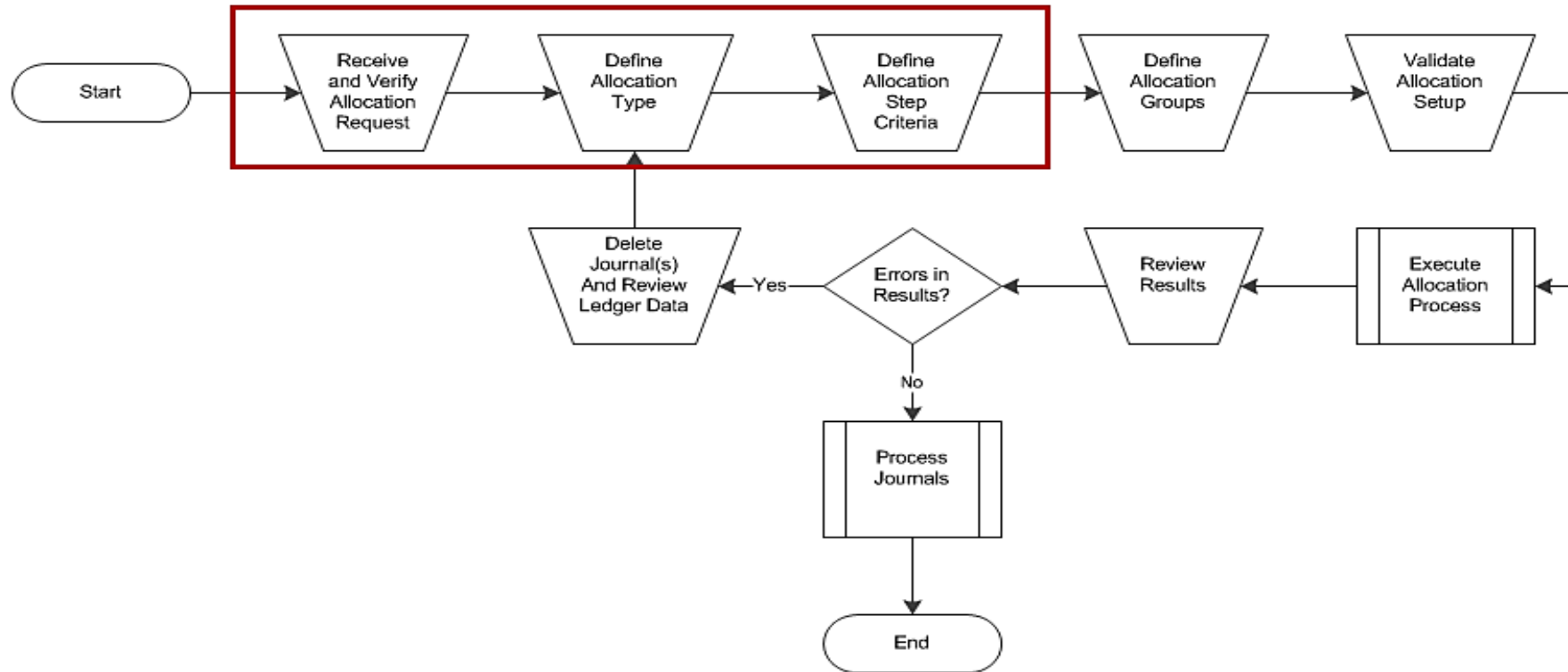
- **Allocation type** - This is the calculation method for the pool and basis and describes how the basis is used to distribute the pool amounts to the target.
- **Pool** - The amount or amounts to be allocated. This amount can originate from a ledger or table, or can specify a fixed amount. If it comes from a ledger, allocations use the ledger definition to determine its table name and other characteristics (such as calendar, multibook, and base currency). If the pool record is a table, specify the table name.
- **Basis** - Determines how and in what proportion the pool amounts are distributed to the various targets.
- **Target:** This is the destination where the amounts are allocated.
- **Offset** - Entries that balance the targets. These entries reflect the clearing of pool amounts as they are transferred to the targets or amounts that offset the target.
- **Amount fields** - Determine the mapping of the amount fields between the pool, basis, and target records.



Defining an Allocation Type and Step

Define an allocation step before starting the Allocation process and use any account type, i.e., asset, liability, revenue, expense, or equity, in an allocation step.

Use the **Define Allocation Step** page to define an allocation step.





Define Allocation Step

Navigate to the **Define Allocation Step** page using the following path:

Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Define Allocation Step

Enter any information you have and click Search. Leave fields blank for a list of all values.

Find an Existing Value | Add a New Value

▼ Search Criteria

SetID = 50100 x

Allocation Step begins with

Include History

Limit the number of results to (up to 300): 300

Search Clear Basic Search Save Search Criteria

Find an Existing Value | Add a New Value



Defining an Allocation Type

To define the allocation type, on the **Type** tab:

- Enter an effective date.
- Select a status.
- Enter a description.
- Select an allocation type in the **Allocation Type** field.

The screenshot displays the 'Define Allocation Step' interface in the CARDINAL system. The 'Type' tab is selected and highlighted with a red box. The form contains the following fields:

- Effective Date:** 03/01/2012
- Status:** Active
- Description:** VRS Retirement 3
- Allocation Type:** Prorata with Record Basis
- Extension opcode:** Add
- Transaction Code:** GENERAL

The interface also shows a search bar, navigation tabs (Pool, Basis, Target, Offset, Output Options, Round Options, Batch Records, Amount Fields), and a list of records (1 of 4).



Defining an Allocation Type (continued)

The **Allocation Type** field selects a calculation option to determine the pool amounts that are going to the targets from one of the following allocation types:

- **Copy** - Copies pool amounts to the target or offset with possible percentage changes.
- **Spread Evenly** - Divides pool amounts equally by the specified basis fields to derive the target amounts. For example, this type can be used to divide the pool equally in thirds among department IDs 0100, 0200, and 0300.
- **Allocate on Fixed Basis** - Allocates on a fixed basis and percentage of pro rata allocation. It is based on the fixed allocation percentage specified in the % field in the **Value/Node** scroll area on the **Basis** page.
- **Prorata with Record Basis** - Divides the pool amount among the targets based on amounts that are stored in the basis record.
- **Arithmetic Operation** - Defines the allocation calculation as a mathematical operation between the pool and basis.



Defining an Allocation Type (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields

SetID 50100 Step VRS_RETIR3

Effective Date Find | View All First 1 of 4 Last

*Effective Date 03/01/2012 Status Active

*Description Arithmetic Operation

*Allocation Type **Prorata with Record Basis**

Transaction Code GENERAL Cardinal Transaction Code

Extension opcode Add

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Type: Example Spread Evenly

For example, assume that a user wants to allocate office expense that is originally debited against the office supplies account 640000 to four departments (Departments 14000, 28000, 36000, and 43000) in equal amounts. The pool is the sum of the amounts that are in the ledger rows for that ChartField combination.

The pool is divided among the ChartField values that are specified as the target according to the basis. As the target accounts are debited, Cardinal generates an offset to balance them.

Note: The user would exclude an offset when the ledger being allocated is not balanced. Cardinal ledgers are balanced except for Commitment Control budget ledgers.

Pool: \$15,000 (Rent Expense)

Basis: Department 14000 (25%)

Department 28000 (25%)

Department 36000 (25%)

Department 43000 (25%)

Target: Rent Account (640000 Account)

Offset: Rent Account, Fund 04100, Department (Pool), Cost Center (Pool)



Defining an Allocation Pool

After the Allocation Type has been defined, specify the pool on the **Pool** tab:

- If specifying the pool record for General Ledger, select a table value in the **Pool Record Type** field (such as **JRNL_LN**, or **Any Table**) or select the Ledger table (in the **Table** field).
- If defining the pool record for Project Costing, select **Any Table** and enter the table name. **Note:** If specifying the value **Any Table** in the **Pool Record Type** field, add any additional fields that might be required to the **ALC_GL_P_TAO** table.
- In order to pool a specific amount, select **Fixed Amount**. While the pool amount is typically based on amounts from the ledger, choose to base it on any fixed amount, such as equipment cost of 40000.00 USD allocated across departments. Specify the fixed amount on the **Amounts Field** page.



Defining an Allocation Pool (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type **Pool** Basis Target Offset Output Options Round Options Batch Records Amount Fields

SetID 50100 Step VRS_RETIR3

Effective Date Find | View All First 1 of 4 Last

Effective Date 03/01/2012 Status Inactive Description VRS Retirement 3

Pool Record

*Pool Record Type Any Table Table JRNL_LN

Time Span *Pool factor 100.0000

Zero Pool Amount Option Select Next Pool

Pool Fields Find | View All First 1 of 5 Last

*Field Name Account

How Specified

Selected Detail Values Selected Tree Nodes Range of Values

Specify Values/Range of Values/Tree Nodes Find | View All | First 1 of 1 Last

Value	To
5011650	

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Pool (continued)

Enter a percentage to apply to the pool amount in the **Pool Factor** field. This option provides the flexibility to allocate a percentage of the pool amount.

Select a time span to specify a period that is relative to the current period, i.e., the fiscal year and accounting period that are to be used to retrieve pool records. Enter a single or multiple period time span to determine the accounting periods that are used for the pool.

In the **Zero Pool Amount Option**, select an option to tell Cardinal how to proceed when the amount of the pool record retrieved is zero.

- **Calculate This Pool** - Proceed to calculate the amount when the pool is zero.
- **Select Next Pool** - Skip the zero amount pool record and select the next pool record for processing.
- **Stop Processing** - Issue an error message to indicate a zero amount pool record is selected, and stop the allocation step due to this error.
- **Calc No Rows as Zero** (calculate no rows as zero) - If no pool rows are selected based on the time span and selection criteria that is specified in the Pool fields, the Allocation process processes these rows as zero pool amounts. For rows that exist in the database, Cardinal processes these rows the same as **Calculate This Pool**. When using this option, any selection criteria field used for the pool must be explicitly defined. For example, if on the **Target/Offset** tabs one of the fields has a source defined as group by pool and basis, then this field must also be defined in the pool.



Defining an Allocation Pool (continued)

Use the **Pool Fields** grid to specify the field name that the Allocation process uses to select specific pool rows from the pool record.

Use the **Field Name** field to enter the field name that the Allocation process uses to select specific rows from the pool record. If the pool record type is a ledger group, then the pool record name is the ledger record name defined in the ledger template for the ledger group. The **Field Name** prompt table lists all fields that are in the pool record.

In the **How Specified** section:

- Use the **Selected Detail Values** radio button to activate the first **Specify Values/Range of Values/Tree Nodes** edit box so individual pool field values can be listed, such as specific departments or accounts.
- Use the **Selected Tree Nodes** option to activate the tree information fields, where specifying a tree from which to select nodes.
- Use the **Range of Values** option to activate the **Specify Values/Range of Values/Tree Nodes** edit box, where you enter beginning and ending pool field values are created. If the **Value** field is left blank, Cardinal selects all pool field values that are less than or equal to the **To** field value. The **To** field cannot be blank because the blank value is always the smallest value. Multiple ranges of values can be inserted.



Defining an Allocation Basis: Copy

Use the **Basis** page to determine the basis of the allocation or how to allocate the pool amount to the target. This selection depends on the type of allocation selected on the **Type** page.

If the **Copy** allocation type is select, the **Basis** page as shown on the screenshot below will not be displayed.

The screenshot displays the 'Define Allocation Step' page in the Cardinal software. The interface includes a header with the 'CARDINAL' logo, a search bar, and navigation tabs. The main content area shows the following details:

- SetID: 50100
- Step: GRP1EQPACT
- Effective Date: 09/01/2013
- Status: Active
- *Description: Group 1 Equipment - Activity
- *Allocation Type: Copy (highlighted with a red box)
- Extension opcode: Add
- Transaction Code: GENERAL

At the bottom of the page, there are buttons for 'Save', 'Return to Search', 'Notify', 'Add', 'Update/Display', and 'Include History'. The navigation tabs at the bottom are: Type | Pool | Target | Offset | Output Options | Batch Records | Amount Fields.



Defining an Allocation Basis: Spread Evenly

If **Spread Evenly** is the selected allocation type, the pool amount is divided evenly across the basis field values that are specified in the basis. No basis rows are required to exist in the basis record that is specified.

A value must be specified in the **Basis Record Type** field so that Cardinal can provide a prompt table listing for the **Field Name** field in the **Basis Fields** group box.

In the **How Specified** group box, use **Selected Detail Values**, **Selected Tree Nodes**, or **Range of Values** fields to specify field values. More than one field name may be specified; Cardinal divides the pool amount evenly across all basis field value combinations.

The screenshot shows the 'Define Allocation Step' form in the Cardinal software. The form is titled 'SetID 50100' and 'Step RETIREMNT1'. The 'Allocation Type' dropdown menu is highlighted with a red box and is set to 'Spread Evenly'. Other fields include 'Effective Date' (02/14/2017), 'Status' (Active), '*Description' (Retirement 1), and 'Transaction Code' (GENERAL). The form also includes a search bar, navigation buttons, and a list of tabs at the bottom.



Defining an Allocation Basis: Spread Evenly (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type Pool **Basis** Target Offset Output Options Round Options Batch Records Amount Fields

SetID 50100 Step RETIREMNT1

Effective Date Find | View All First 1 of 12 Last

Effective Date 02/14/2017 Status Active Description Retirement 1

Basis Record

Basis Record Type Any Table Table JRNL_LN

Time Span *Basis factor 100.0000

Zero Basis Stop Processing

Basis Fields Find | View All First 1 of 1 Last

*Field Name Account

How Specified

Selected Detail Values Selected Tree Nodes Range of Values

Specify Values/Range of Values/Tree Nodes Find | View All | First 1 of 1 Last

Value	To	%
5011230		

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | **Basis** | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Basis: Allocate on Fixed Basis

The **Allocate on Fixed Basis** allocation type is a variation of prorata allocation, where the percentage of the prorata is fixed. As with **Spread Evenly**, no basis rows are required to exist in the basis record that is specified. The basis record type, must be specified so that the system can provide a prompt table listing on the basis field name.

Only the **Selected Detail Values** field to specify basis field values, and you can specify more than one value, can be specified in the **Field Name** field.

Also, specify the fixed % (percent) for each field value in the **Specify Value/Range of Values/Tree Nodes** edit box. The total of the percentage for one field does not have to add up to 100 percent, but Cardinal uses the percentages to calculate the actual percent-to-total for each value.

For example, if 10% is specified for DeptID 0100 and 40% for DeptID 0200, Cardinal allocates 10% of the pool amount to DeptID 0100 and 40% to DeptID 0200.

The screenshot shows the 'Define Allocation Step' form in the Cardinal software. The breadcrumb navigation at the top reads: Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step. The form has several tabs: Type, Pool, Basis, Target, Offset, Output Options, Round Options, Batch Records, and Amount Fields. The current form is for SetID 50100 and Step RETIREMNT1. The 'Effective Date' is 02/14/2017, and the 'Status' is Active. The '*Description' is Retirement 1. The '*Allocation Type' is 'Allocate on Fixed Basis', which is highlighted with a red box. The 'Extension opcode' is Add. The 'Transaction Code' is GENERAL. At the bottom, there are buttons for Save, Return to Search, Previous in List, Next in List, Notify, Add, Update/Display, and Include History.



Defining an Allocation Basis: Allocate on Fixed Basis (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type Pool Basis Target Offset Output Options Round Options Batch Records Amount Fields

SetID 50100 Step RETIREMNT1

Effective Date Find | View All First 1 of 13 Last

Effective Date 02/14/2017 Status Active Description Retirement 1

Basis Record

Basis Record Type Any Table Table JRNL_LN

Time Span *Basis factor 100.0000

Zero Basis Stop Processing

Basis Fields Find | View All First 1 of 1 Last

*Field Name Account

How Specified

Selected Detail Values Selected Tree Nodes Range of Values

Specify Values/Range of Values/Tree Nodes Find | View All | First 1 of 1 Last

Value	To	%
5011230		

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Basis: Other Allocation Types

There are other allocation types that can be selected on the **Type** page, such as:

- **Prorata with Record Basis** - Specify basis fields in the same way that you do the pool. Basis rows are selected from the basis record, and their amounts are used to calculate a percent-to-total to distribute the pool amount to each target.
- **Arithmetic Operation** - Like Prorata with Record Basis, basis rows are selected from the basis record, and you specify basis in the same way that you do the pool. Target amounts are calculated by performing the mathematical operation between each pool and basis amount.



Defining an Allocation Target

Use the **Target** page to define the destination for the allocation or the target record (journal or any table) and target field values.

CARDINAL Home

All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type Pool Basis **Target** Offset Output Options Round Options Batch Records Amount Fields

SetID 50100 Step VRS_RETIR3

Effective Date Find | View All First 1 of 4 Last

Effective Date 03/01/2012 Status Inactive Description VRS Retirement 3

Target Record

Target Record Type Journal Records Target Ledger ACTUALS

Time Span PER

Basis Span Opt Combine Periods for Basis Target Span Opt Divide Target Across Periods

Specify Field Values Personalize | Find | View All | First 1-10 of 17 Last

*Field Name	*Source	Field Mapping	Value / Mask
Account	Value		5011650
Activity	Basis		
Analysis Type	Value		GLJ
Agency Use 2	Basis		
PC Business Unit	Basis		
Cost Center	Basis		
Program	Basis		
Agency Use 1	Basis		
FIPS	Basis		
Currency Code	Value		USD

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | **Target** | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Target (continued)

Choose a **Target Record Type** and the relevant **Time Span**. If a multiperiod time span is used for the basis and target, a basis span option can be chosen in the **Basis Span Opt** field.

If the target record is journals, the target record name is actually the journal line record name that is defined on the ledger template for the ledger group. The **Field Name** prompt table lists all fields that are in the target record.



Defining an Allocation Target (continued)

The **Source** field identifies the location of the target field values for each field name that are available for the Allocation process. This provides a convenient way to populate the target field values, particularly if the values are from the pool or basis records. They do not need to be reentered here, just prompt for the appropriate option.

If the source is from **Pool**, **Basis**, or **Group by**, you can specify **Field Mapping** field for those occasions when the field name for the pool or basis record differs from the field name that is in the target record. For example, this could occur if the **Product** field value for the target record must come from the **Project** field value of the pool record.

If a fixed value is specified in the **Source** field, use the **Value/Mask** field for character or date-type fields. A fixed date, can be entered in one of the following formats: mmddyy, mm/dd/yy, or mm/dd/yyyy.



Defining an Allocation Target (continued)

Favorites ▾ Main Menu ▾ > Allocations ▾ > Define and Perform Allocations ▾ > Define Allocation Step

Type Pool Basis Target Offset Output Options Round Options Batch Records Amount Fields

SetID 50100 Step RETIREMNT1

Effective Date 02/14/2017 Status Active Description Retirement 1

Find | View All First 1 of 13 Last

Effective Date 02/14/2017 Status Active Description Retirement 1

Target Record

Target Record Type Journal Records Target Ledger ACTUALS

Time Span PER

Basis Span Opt Combine Periods for Basis Target Span Opt Divide Target Across Periods

Specify Field Values Personalize | Find | View All | First 1-10 of 17 Last

*Field Name	*Source	Field Mapping	Value / Mask		
Account	Value		5011110	+	-
Activity	Pool			+	-
Analysis Type	Value		GLJ	+	-
Agency Use 2	Pool			+	-
PC Business Unit	Pool			+	-
Cost Center	Pool			+	-
Program	Pool			+	-
Agency Use 1	Pool			+	-
FIPS	Pool			+	-
Currency Code	Value		USD	+	-



Defining an Allocation Offset

Use the **Offset** page to define the offset entry that will balance the target. Offset entries usually reflect the clearing of pool amounts as they are transferred to targets. However, if the target record is not a balanced ledger, such as a budget ledger, then usually no offset exists.

The screenshot shows the 'Define Allocation Step' page in the CARDINAL system. The 'Offset' tab is selected and highlighted with a red box. The page displays the following information:

- SetID:** 50100
- Step:** HEALTH_IN1
- Effective Date:** 07/01/2016
- Status:** Active
- Description:** Health Insurance 1

The 'Offset Record' section shows:

- Offset Record Type:** Journal Records (highlighted with a red box)
- Offset Ledger:** ACTUALS (highlighted with a red box)

The 'Specify Field Values' table is as follows:

*Field Name	*Source	Field Mapping	Value / Mask	
Account	Value		5011150	+ -
Cost Center	Value		11070040	+ -
Program	Value		60400501	+ -
Currency Code	Value		USD	+ -
Department	Pool			+ -
Fund	Value		04100	+ -
Journal Line Description	Value		HEALTH_INS1	+ -

At the bottom, there are navigation buttons: Save, Return to Search, Previous in List, Next in List, Notify, Add, Update/Display, and Include History.



Defining an Allocation Offset (continued)

Select **Journal Records** or **Any Table** in the **Offset Record Type** field and specify the offset field values.

Use the **Source** field to identify the location of values for the offset entry used by the Allocation process. The offset fields can be directed to the pool record or a particular target table, but the purpose of the offset is always to prevent double counting.



Selecting Output Options

Use the **Output Options** page to define journal options if the target or offset record is **Journals**.

If the target or offset is a journal that is located on the **Allocations Target** or **Allocations Offset** pages, the journal options must be defined.



Selecting Output Options: Journal Options

Use the **Journal ID Mask** field to specify a prefix for naming allocation journals. A 10-character alphanumeric ID identifies journals. Cardinal automatically appends the prefix that you specify to the journal IDs.

For example, specifying the Journal ID Mask as **ALLOC**, the allocation journal IDs might be **ALLOC00001**, **ALLOC00002**, and so on. Alternatively, the value **NEXT** causes Cardinal to assign the next available journal ID number automatically.

Reserve a unique mask value for allocations to ensure that no other process creates the same journal ID.

Also enter the **Journal Date Code** and **Source**. Unless otherwise specified, the journal source moves by default to **ALO** (allocations).



Selecting Output Options: Journal Options (continued)

CARDINAL Home

All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type Pool Basis Target Offset **Output Options** Round Options Batch Records Amount Fields

SetID 50100 Step VRS_RETIR3

Effective Date Find | View All First 1 of 4 Last

Effective Date 03/01/2012 Status Inactive Description VRS Retirement 3

Journal Options

Journal ID Mask Reference Number

Journal Date Code

Journal Source

Reversal: Do Not Generate Reversal Bypass VAT Processing Commitment Control

Post Journal(s) Edit Journal(s) Budget Check Journal(s)

When No Journals are Created

Currency Conversion

Rate Type Currency Effective Date Code

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Selecting Output Options: Journal Options (continued)

Use the **Post Journal(s)** option to post the journals. If this option is selected, Cardinal automatically selects the **Edit Journal(s)** and **Budget Check Journal(s)** options. Deselect the **Budget Check Journal(s)** option if the Budget Processor will be run later to update the commitment control ledgers.

Use the **Edit Journal(s)** checkbox to edit the journals that the Cardinal Allocation process creates so that they do not have to be edited later in a separate process. Select this option when to edit journals without posting them. Select this option in a multiple-step Allocation process, where the pool amount for the next step comes from the target of the previous step. If journals are not posted, then the ledger is not updated. The next multiple step then draws erroneous data from the ledger. If this option is selected, the Allocation process calls the Journal Edit process (**GL_JEDIT**) first to edit the journals.



Selecting Output Options: Journal Options (continued)

If the journals fail in the Journal Edit process, Cardinal does not post them to the ledger and the Allocation process issues this error message: “Allocation step ... is complete with journal created but not posted.”

Journals can fail the Journal Edit process for many reasons, including invalid ChartFields, balancing by ChartField, or ChartField combination edit. After determining the cause of the problem, the allocation step definition, may have to be changed to avoid it.

Use the **Budget Check Journal(s)** checkbox to run the Budget Processor to budget check journals for the commitment control ledgers. This option is available only if the commitment control option is enabled. If selecting this option, Cardinal automatically selects **Edit Journal(s)**. Journals must be edited before budget checking them.



Selecting Rounding and Distribution of Odd Cents Options

Use the **Round Options** page to define the method for rounding the allocation amount and distributing odd cents. This option is valid only for the **Allocate on Fixed Basis**, **Prorata with Record Basis**, and **Spread Evenly** allocation types.

The screenshot displays the CARDINAL software interface for configuring allocation steps. The breadcrumb trail is: Favorites > Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step. The current page is 'Round Options', which is highlighted with a red box. The configuration is for SetID 50100 and Step VRS_RETIR3. The 'Effective Date' is 03/01/2012, 'Status' is Inactive, and 'Description' is VRS Retirement 3. Two dropdown menus are highlighted with a red box: '*Round Options' is set to 'Normal' and 'Distribute Odd Cents' is set to 'Largest Target'. Below this is a 'Specify Field Values' section with a table for field names and values. At the bottom, there are buttons for Save, Return to Search, Previous in List, Next in List, Notify, Add, Update/Display, and Include History. A navigation bar at the very bottom lists: Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields.

SetID 50100 Step VRS_RETIR3

Effective Date 03/01/2012 Status Inactive Description VRS Retirement 3

*Round Options Normal

Distribute Odd Cents Largest Target

*Field Name	Field Value

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Selecting Rounding and Distribution of Odd Cents Options (continued)

Use the **Round Options** field to specify the method to use to round the allocation amount. Select from these values:

- **Normal:** The default value - This method rounds the allocated amount based on the decimal precision of the currency control value. For example, 104.495 rounds to 104.50 USD.
- **Round Down** - This method rounds the allocated amount down to the nearest decimal based on the decimal precision of the currency control value. For example, 104.495 rounds to 104.49 USD.
- **Round Up** - This method rounds the allocated amount up to the nearest decimal based on the decimal precision of the currency control value. For example, both 104.495 and 104.494 round to 104.50 USD.
- **Truncate** - This method truncates the allocated amount after the decimal precision of the currency control value. For example, 104.495 and 104.494 truncate to 104.49 USD.

Use the **Distribute Odd Cents** field to designate where to distribute odd cents. Because allocation processing is set-based rather than row-by-row to improve performance, this option is required for allocation types of prorata, spread evenly, and fixed basis.

For these allocation types, the process balances the target and offset amounts to the allocated pool amount. That is, the process attempts to allocate 100 percent of the pool amount to the target and offset amounts, sometimes resulting in odd cents.



Specifying Batch Records

Use the **Batch Records** page to specify the batch temporary tables used in the Allocation process.

The **Calculation Log Record** field specifies to create a calculation log for a complete audit trail for debugging.

The **Temporary Table** box specifies the temporary table for the pool data, basis data, target detail data, etc.

CARDINAL All Search Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

Type Pool Basis Target Offset Output Options Round Options **Batch Records** Amount Fields

SetID 50100 Step RETIREMNT1

Effective Date Find | View All First 1 of 13 Last

Effective Date 02/14/2017 Status Active Description Retirement 1

Calculation Log Record ALLOC_CALC_LOG

Temporary Tables

Pool	V_ALC_GLP_TAO	Default
Basis	V_ALC_GLB_TAO	Basis Summary V_ALCGLBS_TAO
Target Detail	ALC_GL_T_TAO	Target Summary ALC_GL_TS_TAO
Offset Detail	ALC_GL_O_TAO	Offset Summary ALC_GL_OS_TAO
Target Balance	ALC_GL_TB_TAO	
Calculation Log	ALC_CLOG_TAO	

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | **Batch Records** | Amount Fields



Defining Amount Fields

Use the **Amount Fields** page to define the fields in the chosen pool record that store the pool amounts, the fields in the chosen basis record that store the basis amounts, and the fields used for the calculated amounts in the chosen target and offset records.

Many sets of amount fields can be specified to perform allocations. For example, Project Costing can allocate on both resource amount and resource quantity fields in the same allocations. Pool resource amounts can be allocated by using the basis resource amount percentage-to-total ratio and the pool resource quantity by using the basis resource quantity percentage-to-total ratio. It is also possible to allocate both the pool resource amount and resource quantity using the basis resource amount percentage-to-total ratio. This page gives provides the flexibility in defining how the amounts are distributed from the fields in the pool record to the fields in the target and offset record.



Defining Amount Fields (continued)

CARDINAL Home | Worklist | Add to Favorites

All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Step

New Window | Help | Personalize

Type Pool Basis Target Offset Output Options Round Options Batch Records **Amount Fields**

SetID 50100 Step RETIREMNT1

Effective Date Find | View All First 1 of 13 Last

Effective Date 02/14/2017 Status Active Description Retirement 1

Allocation Amount Field Mappings Find | View All First 1 of 1 Last

Field Name	Pool	Basis	Target	Offset
Amount	Monetary Amount		Foreign Amount	Foreign Amount
Base Amount	Foreign Amount		Monetary Amount	Monetary Amount
Log Amount	Allocations Pool Amount	Alloc Basis Amt	Alloc Target/Offset Amount	
Log Base Amount	Allocations Pool PBA Amount		Alloc Target/Offset PBA Amt	
Log Basis Total Amount		Alloc Basis Total		

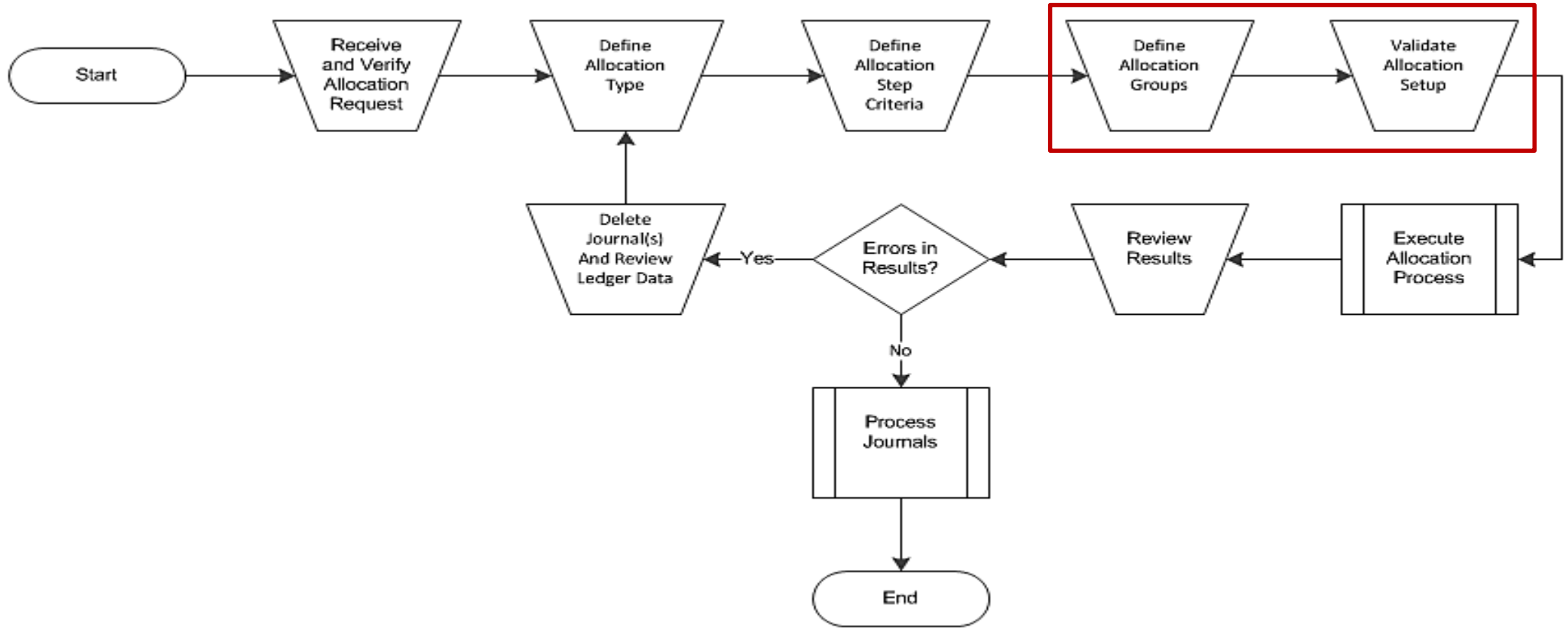
Save Return to Search Previous in List Next in List Notify Add Update/Display Include History

Type | Pool | Basis | Target | Offset | Output Options | Round Options | Batch Records | Amount Fields



Defining an Allocation Group and Validating Allocation Setup

The next step in the Allocation process is Define Allocation Group and Validate Allocation Setup.





Defining an Allocation Group and Validating Allocation Setup (continued)

Multiple allocation steps can be defined for step-down allocations across ChartFields. The target for each step can become the next step's pool or basis. Define an allocation group for these steps and then process the allocation on the group. If a step in the sequence fails, the **Continue** option determines if processing continues for the next step.

The allocation group is effective-dated, allowing tracking of the historical basis of the financial data that results from allocation processing. Even if there is only one step in an allocation, an allocation group must be defined.

To define an allocation group, use the **Allocation Group** page. Navigate to this page through the following path:

Main Menu > Allocations > Define and Perform Allocations > Define Allocation Group



Defining an Allocation Group and Validating Allocation Setup (continued)

Use the icons in the upper right corner of the page to copy, rename, or delete the allocation group.

Use the **Step** field to enter the name of the process step that determines the various allocation processing options (in addition to the pool, basis, target, and offset ChartFields). Define each allocation step in a series of pages. A step must be defined before it can be selected in the allocation process group sequence. After defining it, a step can be used, in any number of allocations.

The sequence determines the order in which the Cardinal Allocation process performs the steps. The correct sequence, must be entered, because the target of each step becomes the pool for the next step, or the basis if the journals are posted.

Use the **Continue** checkbox to indicate that Cardinal should continue processing even if the allocation step fails.





Defining an Allocation Group and Validating Allocation Setup (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Define Allocation Group

Allocation Group

SetID 50100 Group EQUIP_GRP1  

Effective date Find | View All First 1 of 1 Last

*Effective Date 01/01/1901 Status Active

Description Equipment Allocation Group 1

Comments

Steps

Personalize | Find | View All | First 1-2 of 2 Last

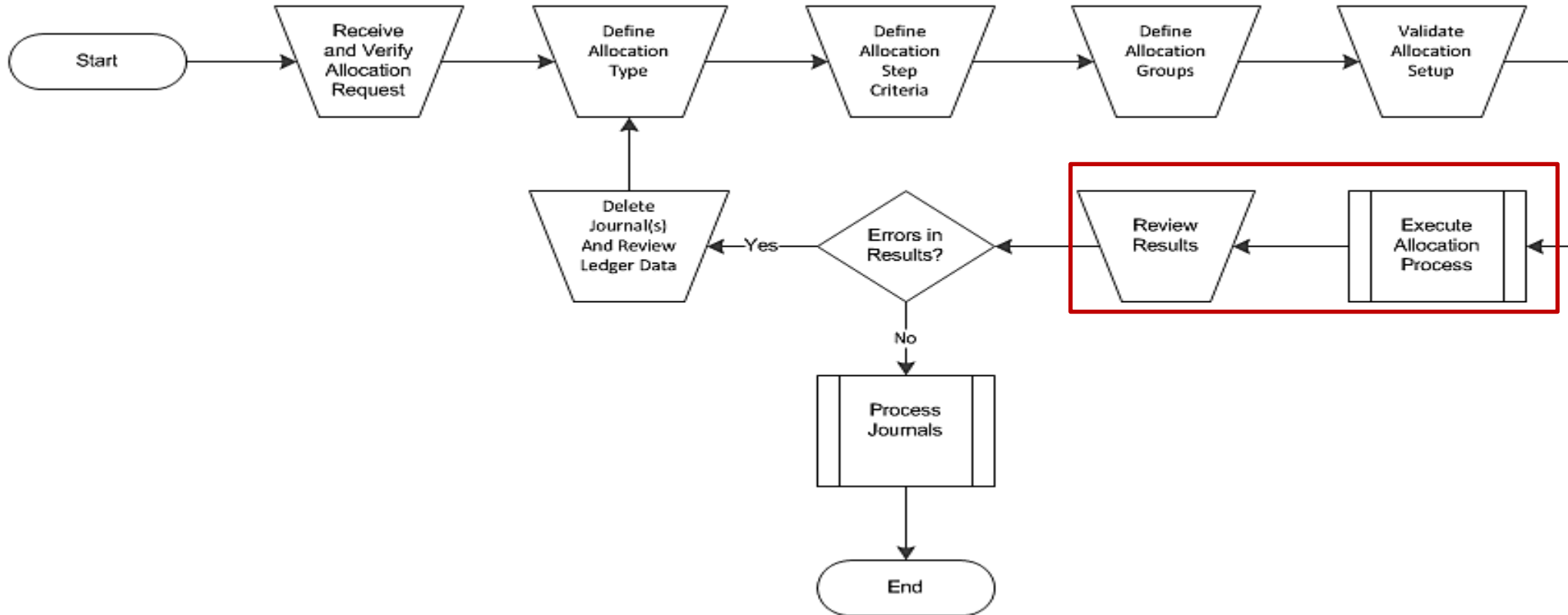
Step	Description	Continue
GRP1EQPACT Update/Create	Group 1 Equipment - Activity	<input checked="" type="checkbox"/>
GRP1EQPTSK Update/Create	Group 1 Equipment - Task	<input type="checkbox"/>

Save Return to Search Previous in List Next in List Notify Add Update/Display Include History



Executing Allocation Process and Reviewing Results

The next step in the Allocation process is Execute Allocation Process and Review Results.





Executing Allocation Process

Allocation steps and allocation groups must be deferred before a request can be processed. The request parameters must be indicated and process group allocations to be processed. Next, identify the process group to be processed. There is an option to generate an Allocation Calculation Log report, which creates a report showing the allocation calculations that the specified process step performed within a process instance. Also it is possible to test the allocation process by creating a calculation log without outputting journals to the appropriate ledgers.

To do this, access the **Allocation Request** page and add a Run Control ID. Navigate to this page through the following path:

Main Menu > Allocations > Define and Perform Allocations > Request Allocation

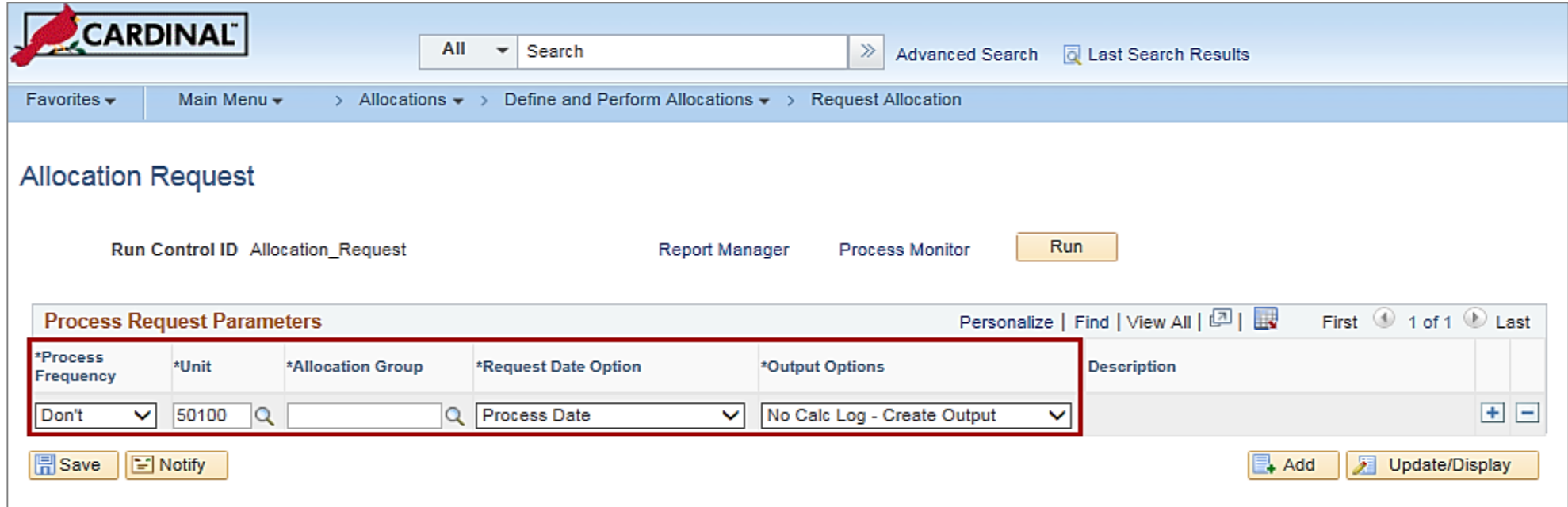


Executing Allocation Process (continued)

Use the **Allocation Request** page to enter the request parameters. These parameters are used to define the processing rules and data to be included when the process is run.

Use the **Process Frequency** field to determine the frequency of the process.

- **Once** - Select to process the current request the next time that the allocation processing is executed.
- **Don't** - Once executed, the process changes frequency to this value.
- **Always** - Select to process each time that the allocation process is executed.



The screenshot shows the 'Allocation Request' page in the CARDINAL software. The page title is 'Allocation Request'. Below the title, there are several tabs: 'Run Control ID Allocation_Request', 'Report Manager', 'Process Monitor', and a 'Run' button. The main content area is titled 'Process Request Parameters' and contains a table with the following columns: '*Process Frequency', '*Unit', '*Allocation Group', '*Request Date Option', '*Output Options', and 'Description'. The table has one row with the following values: 'Don't' (selected in a dropdown), '50100', an empty field, 'Process Date' (selected in a dropdown), 'No Calc Log - Create Output' (selected in a dropdown), and an empty description. Below the table, there are buttons for 'Save', 'Notify', 'Add', and 'Update/Display'. The 'Run' button is also visible above the table.

*Process Frequency	*Unit	*Allocation Group	*Request Date Option	*Output Options	Description
Don't	50100		Process Date	No Calc Log - Create Output	



Executing Allocation Process (continued)

Use the **Allocation Group** field to specify the name of the allocation process group that was created in a previous activity.

Enter the desired information into the **Output Options** field:

- **Create Calc Log - No Output** (create calculation log - no output) - Serves as a dry run by creating a calculation log but no journals and ledger entries.
- **Create Calc Log and Output** (create calculation log and output) - Creates a calculation log and generates journals and ledger entries.
- **No Calc Log - Create Output** (no calculation log - create output) - Creates journals and ledger entries, but no calculation log. This is the system default value.

Note: Calculation logs are cleared using SQL scripts.

When parameters are set, click the **Run** button.

When errors occur and processing aborts, restart processing at the step that failed by selecting **Start Step**. This option appears only if an error occurred during processing.



Executing Allocation Process (continued)

Clicking the **Run** button takes you to the **Process Scheduler Request** page.

Use the **Process Scheduler Request** page to enter or update parameters, such as server name and process output format.

The **Server Name** is already populated and should not be changed.

When the parameters have been updated, click the **OK** button.



The screenshot shows a dialog box titled "Process Scheduler Request" with a close button (X) in the top right corner. The dialog contains the following elements:

- User ID:** FINUSER05
- Run Control ID:** Allocation_Request
- Server Name:** A dropdown menu.
- Run Date:** 02/08/2017, with a clear (X) button and a help (?) button.
- Recurrence:** A dropdown menu.
- Run Time:** 1:47:35PM, with a "Reset to Current Date/Time" button.
- Time Zone:** A text input field with a search icon.
- Process List:** A table with columns: Select, Description, Process Name, Process Type, *Type, *Format, and Distribution.

Select	Description	Process Name	Process Type	*Type	*Format	Distribution
<input checked="" type="checkbox"/>	PS/FS Allocations	FS_ALLC	Application Engine	Web	TXT	Distribution

At the bottom of the dialog are "OK" and "Cancel" buttons.



Executing Allocation Process (continued)

Clicking the **OK** button displays the **Allocation Request** page. A **Process Instance** number appears. This number helps identify the process that has been run when status is checked.

Clicking the **Process Monitor** link displays the **Process List** page, where the status of submitted process requests can be reviewed.

If the run status is not yet complete, click the **Refresh** button. The status for the process instance should be **Success**.



Executing Allocation Process (continued)

CARDINAL All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Define and Perform Allocations > Request Allocation > Process Monitor

Process List

View Process Request For

User ID Type Last Days Refresh

Server Name Instance to

Run Status Distribution Status Save On Refresh

Process List Personalize | Find | View All | First 1-2 of 2 Last

Select	Instance	Seq.	Process Type	Process Name	User	Run Date/Time	Run Status	Distribution Status	Details
<input type="checkbox"/>	3933802		Application Engine	FS_ALLC	FINUSER05	02/08/2017 1:47:35PM EST	Warning	Posting	Details
<input type="checkbox"/>	3933801		Application Engine	TREEMAIT	FINUSER05	02/08/2017 10:57:31AM EST	Success	Posted	Details

Go back to Allocation Request

Save Notify



Reviewing Results

Now that the process request has been completed , the next step is to review the Allocation Calculation Log report.

Navigate to this page through the following path:

Main Menu > Allocations > Reports > Allocation Calculation Logs


Then search for the run control ID.

This displays the **Allocation Calculation Logs Report** page. This page enables specifying parameters to print a report showing details of the allocation calculation.

Use the **Allocation Step** field to specify the name of the process step to be calculated in the Allocation Calculation Log report.



Reviewing Results (continued)

All >> [Advanced Search](#) [Last Search Results](#)

[Favorites](#) > [Main Menu](#) > [Allocations](#) > [Reports](#) > [Allocation Calculation Logs](#)

Allocation Calculation Logs Report

Run Control ID Allocation_Calculation_Log Report Manager Process Monitor

Language

Report Request Parameters

SetID

Allocation Step

Begin Process Instance

End Process Instance

Display Full Numeric Field

ChartField Selection Personalize | Find | |

Sequence	ChartField Name	Include CF	Value
<input type="text"/>		<input type="checkbox"/>	<input type="text"/> <input type="button" value="Q"/>



Reviewing Results (continued)

Use the **Begin Process Instance** field to specify the process instance number of the process for which log report is to be created.

View the calculation log from the process group with a single step that was created. The same value will appear automatically in the **End Process Instance** field when you click in the field.

Click the **Refresh** button.

This expands the **ChartField Selection** grid.

Select the **Include CF** checkbox to specify the **ChartField Names** that you want to appear in the report.

Click the **Run** button after all selections have been made.



Reviewing Results (continued)

Allocation Calculation Logs Report

Run Control ID Allocation_Request Report Manager Process Monitor **Run**

Language English

Report Request Parameters

SetID 50100

Allocation Step GROUP_LIF1

Begin Process Instance 3933802

End Process Instance 3933802

Display Full Numeric Field

Refresh

ChartField Selection Personalize | Find | First 1-25 of 25 Last

Sequence	ChartField Name	Include CF	Value
1	Account	<input type="checkbox"/>	
2	Fund	<input type="checkbox"/>	
3	Program	<input type="checkbox"/>	
4	Department	<input type="checkbox"/>	
5	Cost Center	<input type="checkbox"/>	
6	Task	<input type="checkbox"/>	
7	FIPS	<input type="checkbox"/>	
8	Asset	<input type="checkbox"/>	
9	Agency Use 1	<input type="checkbox"/>	
10	Agency Use 2	<input type="checkbox"/>	
11	PC Business Unit	<input type="checkbox"/>	
12	Project	<input type="checkbox"/>	
13	Activity	<input type="checkbox"/>	

<http://fn92trnweb.cov.virginia.gov/psp/fn92trn/EMPLOYEE/ERP/c/>



Reviewing Results (continued)

Clicking the **Run** button displays the **Process Scheduler Request** page. Click the **OK** button to go back to the **Allocation Calculation Logs Report** page. Note the new **Process Instance** number.

Click the **Process Monitor** link.



Reviewing Results (continued)

CARDINAL™ All Search >> Advanced Search Last Search Results

Favorites Main Menu > Allocations > Reports > Allocation Calculation Logs

Allocation Calculation Logs Report

Run Control ID Allocation_Request
Language English

Report Manager Process Monitor **Run**
Process Instance:3933811

Report Request Parameters

SetID 50100
Allocation Step GROUP_LIF1
Begin Process Instance 3933802
End Process Instance 3933802
 Display Full Numeric Field

Refresh

ChartField Selection

Personalize Find 1-25 of 25 First Last

Sequence	ChartField Name	Include CF	Value
1	Account	<input checked="" type="checkbox"/>	
2	Fund	<input checked="" type="checkbox"/>	
3	Program	<input checked="" type="checkbox"/>	
4	Agency Use 1	<input checked="" type="checkbox"/>	
	Source Type	<input type="checkbox"/>	
	Category	<input type="checkbox"/>	
	FIPS	<input type="checkbox"/>	



Reviewing Results (continued)

Note that the **Run Status** is **Success** and the **Distribution Status** is **Posted** for the process instance.

Now the Allocation Calculation Log can be viewed. Click the **Go back to Allocation Calculation Log** link.



Reviewing Results (continued)

CARDINAL™ All Search >> Advanced Search Last Search Results

Favorites > Main Menu > Allocations > Reports > Allocation Calculation Logs > Process Monitor

Process List

View Process Request For

User ID: JOHN.ASTOR | Type: [] | Last: [] | 1 Days | Refresh

Server: [] | Name: [] | Instance: [] to []

Run Status: [] | Distribution Status: [] | Save On Refresh

Process List Personalize | Find | View All | First 1 of 1 Last

Select	Instance	Seq.	Process Type	Process Name	User	Run Date/Time	Run Status	Distribution Status	Details
<input type="checkbox"/>	3933811		SQR Report	GLS6002	JOHN.ASTOR	02/14/2017 2:40:32PM EST	Success	Posted	Details

[Go back to Allocation Calculation Log](#)

Save Notify



Reviewing Results (continued)

On the **Allocation Calculation Logs Report** page, click the **Report Manager** link. **Note:** Users with Reporter role will be able to access this link.

Click the **Administration** tab on the **Report Manager** page. Click the **Allocation Calculation Log Rep** link.

The screenshot displays the 'Allocation Calculation Logs Report' interface. At the top, there is a search bar with 'All' selected and a search input field. Below the search bar is a navigation breadcrumb: 'Favorites > Main Menu > Allocations > Reports > Allocation Calculation Logs'. The main heading is 'Allocation Calculation Logs Report'. Below this, there are controls for 'Run Control ID' (set to 'Allocation_Request') and 'Language' (set to 'English'). A red box highlights the 'Report Manager' link, with 'Process Monitor' and a 'Run' button also visible. The 'Report Request Parameters' section includes fields for 'SetID' (50100), 'Allocation Step' (GROUP_LIF1), 'Begin Process Instance', and 'End Process Instance', each with a search icon. There is also a checkbox for 'Display Full Numeric Field' and a 'Refresh' button. The 'ChartField Selection' table is shown below, with columns for 'Sequence', 'ChartField Name', 'Include CF', and 'Value'. The table contains four rows: 1 Account, 2 Fund, 3 Program, and 4 Agency Use 1, all with 'Include CF' checked.

Sequence	ChartField Name	Include CF	Value
1	Account	<input checked="" type="checkbox"/>	
2	Fund	<input checked="" type="checkbox"/>	
3	Program	<input checked="" type="checkbox"/>	
4	Agency Use 1	<input checked="" type="checkbox"/>	



Reviewing Results (continued)

Select the link of the report name that you would like to view. A new window will open and sign in may be requested to view the report.

Report Detail ✕ Help

Report

Report ID	23168671	Process Instance	3933803	Message Log
Name	GLS6002	Process Type	SQR Report	

Run Status Success

Allocation Calculation Log Rep

Distribution Details

Distribution Node	fn92trn	Expiration Date	<input type="text" value="03/10/2017"/>
-------------------	---------	-----------------	---

File List

Name	File Size (bytes)	Datetime Created
SQR_GLS6002_3933803.log	2,088	02/08/2017 2:04:27.048016PM EST
gls6002_3933803.out	32	02/08/2017 2:04:27.048016PM EST

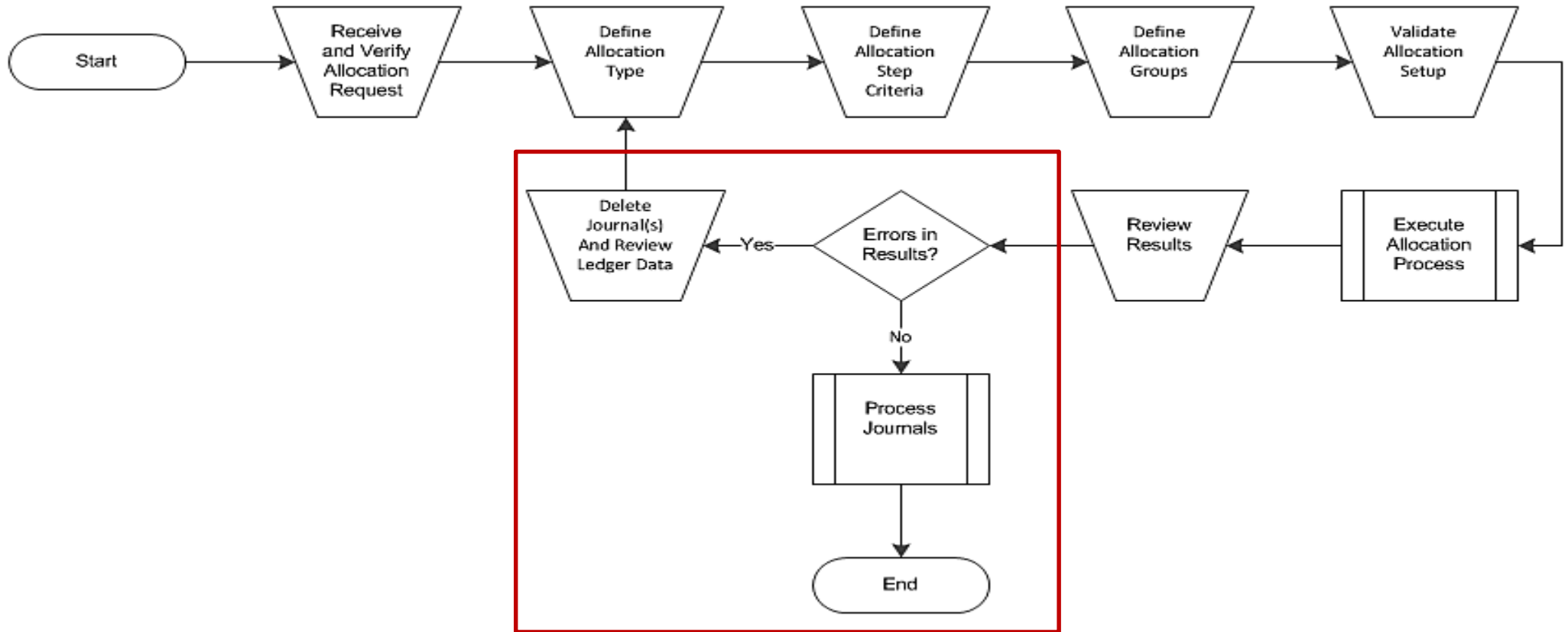
Distribute To

Distribution ID Type	*Distribution ID
User	FINUSER05



Process Journals/Delete Journals

The last steps in the Allocation process are Process Journals and Delete Journal(s) and Review Data.





Process Journals

The journals that are created from the allocation steps that executed successfully, per the Allocation Calculation Log and Allocation Calculation Logs Report, must be submitted for approval once they pass edit and budget checks. After the allocation journals are approved, they can be posted to the ledger.

Allocations typically run at the end of the month after all possible current activity for the month has posted. The allocation journals are posted prior to the accounting period closing.



Delete Journals

For allocations that failed the Execute Allocation process, there are two options:

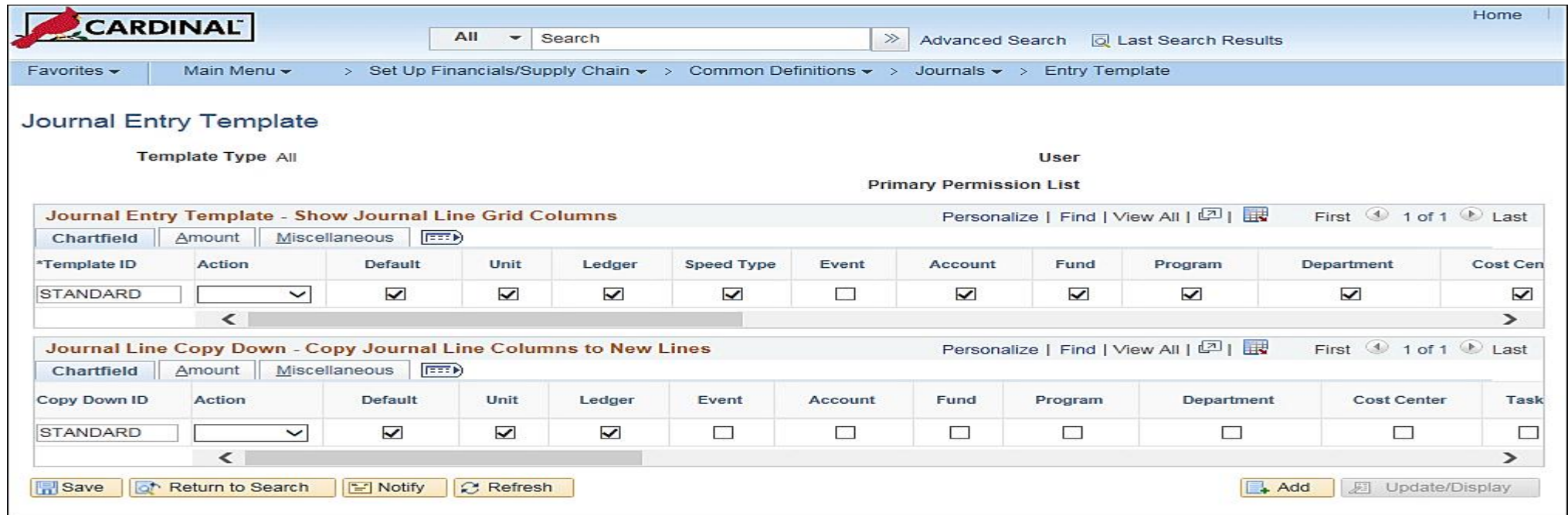
- The Journal Processor needs to delete the journals that were created.
- Errors in the allocation step can be identified and corrected. Then the General Ledger System Processor needs to run the allocation process again.

Configuring the Journal Entry Template

Journal entry templates assist with creating a journal by limiting the fields displayed to only those used by the agency. Journal entry templates are used to define and maintain the fields that are displayed on the **Journal Entry Template** page grid.

Access this page by the following path:

Main Menu > Set Up Financials/Supply Chain > Common Definitions > Journals > Entry Template



Journal Entry Template

Template Type All User Primary Permission List

Journal Entry Template - Show Journal Line Grid Columns												Personalize	Find	View All	First	1 of 1	Last			
Chartfield	Amount	Miscellaneous																		
*Template ID	Action	Default	Unit	Ledger	Speed Type	Event	Account	Fund	Program	Department	Cost Cen									
STANDARD		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									

Journal Line Copy Down - Copy Journal Line Columns to New Lines												Personalize	Find	View All	First	1 of 1	Last			
Chartfield	Amount	Miscellaneous																		
Copy Down ID	Action	Default	Unit	Ledger	Event	Account	Fund	Program	Department	Cost Center	Task									
STANDARD		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									

Save Return to Search Notify Refresh Add Update/Display



Configuring the Journal Entry Template (continued)

The **Standard** Journal Entry template can be configured to control which ChartFields appear in the journal entry transactions.

The **Journal Entry Template** page contains specific ChartField elements needed for the journal entry. Selecting the appropriate checkbox on this page identifies which fields are displayed on the journal entry page.

End users will not be able to change the journal entry template, but will be able to copy down information from one journal line to another in order to speed up journal entry.

This functionality can be accessed from the journal **Lines** tab by clicking on the **Template List** link.



Lesson 3: Summary

3

General Ledger Setup

In this lesson, you learned:

- The budget structure (ledger group) defines the processing rules for each budget ledger. The Commonwealth of Virginia has Statewide and Agency budget structures used in Cardinal.
- The Cardinal budget structure uses parent/child budget relationships to link the various budget structures as appropriate. The control option of each different budget structure is set depending on the purpose of the budget. Agency budgets are established as the child budget level to the statewide budget.
- During the Allocation process, journal transactions, ledger balances, or statistical quantities within a business unit or across business units are distributed so the appropriate entities (i.e., departments, divisions, cost centers) recognize a reasonable share of the amounts (i.e., overhead).
- Journal entry templates assist with creating a journal by limiting the fields displayed to only those used by the agency. Journal entry templates define and maintain the fields that are displayed on the Journal Entry page grid.
- Configure the Standard Journal Entry template can be configured to control which ChartFields appear in the journal entry transactions. End users will not be able to change the journal entry template, but will be able to copy down information from one journal line to another in order to speed up journal entry.



Course Summary

GL336

General Ledger Maintenance

In this course, you learned:

- Recognize key General Ledger maintenance concepts
- Understand the overall General Ledger maintenance process
- Explain how General Ledger maintenance integrates with other Cardinal modules and interfaces with external systems
- Add or update Chart of Accounts values, and their associated attributes
- Create and update SpeedTypes and SpeedCharts
- Understand tree structures
- Understand combination edits
- Understand budget structures
- Define allocations and allocation groups
- Configure the journal entry template



Course Evaluation

Congratulations! You successfully completed the **501 GL336: General Ledger Maintenance** course.

Your instructor will provide instructions on how to access the evaluation survey for this course.





Appendix

- Key Terms
- Diagrams and Screenshots
- Flowchart Key



Key Terms

Budget Ledger: Defines the type of budget (i.e. expenditure or revenue) and the type of transaction (i.e. budget, encumbrance, expense, or collected revenue) that will be recorded in the ledger.

Budget Structure: Defines the processing rules for each budget ledger.

Combination Edits: Defines rules about which ChartField values are required in combination for accounting entries that are posted in Cardinal.

SpeedTypes and SpeedCharts: Populate pre-defined ChartFields on journal entries. A SpeedType consists of a pre-determined Chart of Accounts (COA) value string (such as fund, program, department), which populates the accounting distribution line when entered on a transaction. A SpeedType allows you to define codes for frequently used ChartField combinations. When a SpeedType is entered, you can add additional COA values on the associated distribution line. In Cardinal, SpeedType values are created for project and cost center combinations. SpeedTypes are used in General Ledger, Expenses, Payroll Time & Labor, Accounts Receivable Direct Journals, and Commitment Control Budget Journal entries. SpeedCharts provide similar functionality for Accounts Payable and Purchasing except that multiple accounting distributions can be configured for an individual SpeedChart.



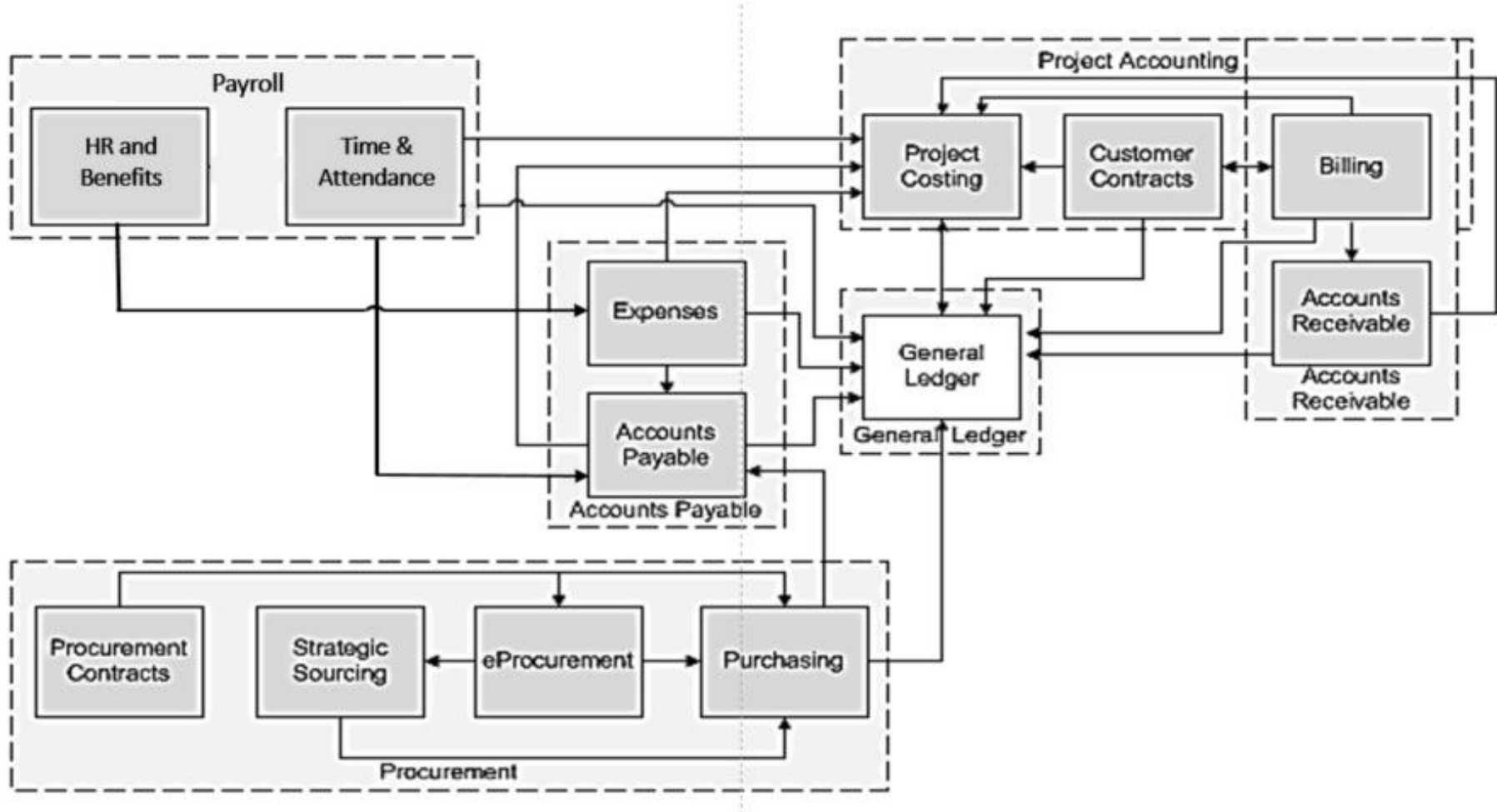
Key Terms (continued)

Tree: A tree is used to set up hierarchical structures in Cardinal. Trees can depict the relationships of the business entities in a hierarchical structure or represent a group of summarization rules (roll ups) for a particular ChartField.

Tree Structure: Defines the groupings and hierarchical relationships between ChartField values in the same database table.

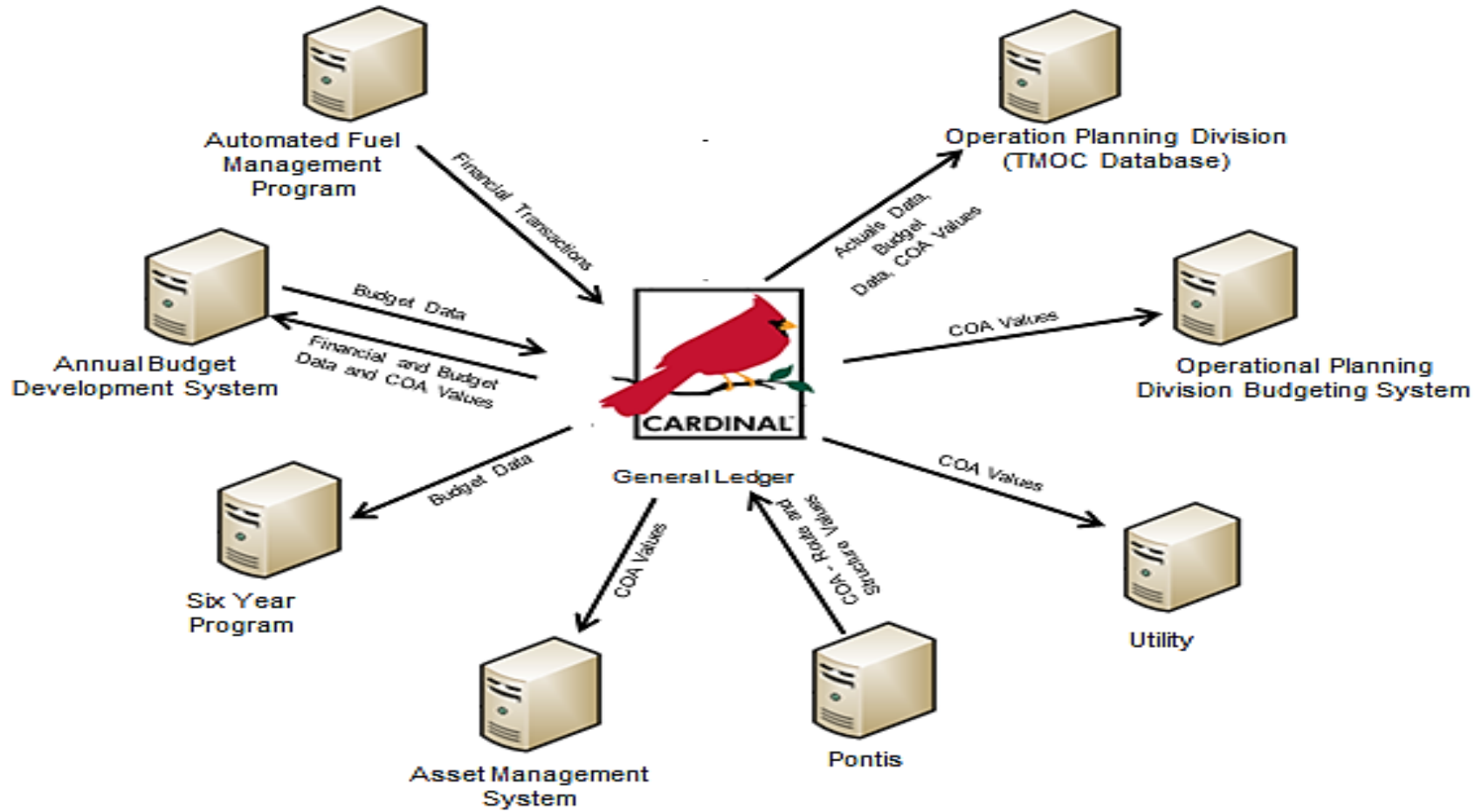


Integration







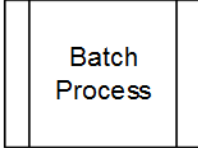
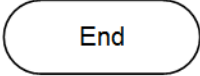
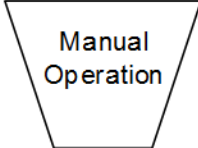
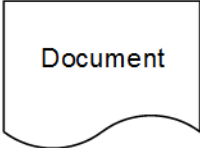
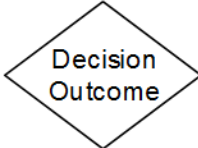
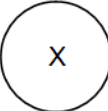
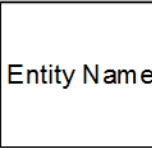
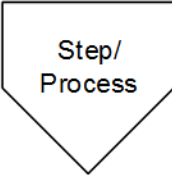
Interfaces



Click on image to return



Flowchart Key

	Depicts a process step or interface.		Indicates point at which the process begins. Does not represent any activity.
	Specifies a batch process.		Indicates point at which the process ends. Does not represent any activity.
	Depicts a process step that is preformed manually.		Depicts a document of any kind, either electronic or hard copy.
	Defines the possible outcomes of a decision or analysis that took place in a step immediately preceding.		Indicates an on-page or intra process connector. Used to avoid complex overlapping connector lines or to continue a process on a subsequent page.
	Represents an entity (person, organization, etc.).		Connects steps between business processes.