

PERCEPTION[®]

Accounting

Project Interface Setup

A Training Tutorial

This training tutorial outlines the basic features for interfacing the *PERCEPTION* system with financial and accounting systems.


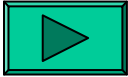
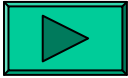
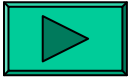
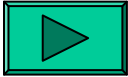
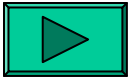
It is a supplement to the user manual entitled “*PERCEPTION Accounting Functions & Interface Manual*,” which provides more details for the user.

Before using this tutorial, the user should first view the preliminary training tutorial, “Getting Started With *PERCEPTION*.”


Other related training tutorials for accounting functions are the following:

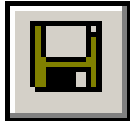
- 1. *PERCEPTION* Accounting – Managing Customer Billings**
- 2. *PERCEPTION* Accounting – Managing Time Charges**
- 3. *PERCEPTION* Accounting – Managing Vendor Invoices**
- 4. *PERCEPTION* Accounting Interface Setup**


Training Directory

-  **Continue**
-  **Starting a New Project**
-  **Project Type Definition**
-  **Project G/L Accounts**
-  **SWBS G/L Setup Option**
-  **Copying Projects**

Special Note:

To add new records in any worksheet, click on the *Add* button  on the toolbar or the down-arrow on your keyboard.

To save data entered into any worksheet, click on the *Save* button  on the toolbar.

To delete records from any worksheet, highlight those records (rows) to be deleted, then click on the *Delete* button  on the toolbar.

Starting A New Project

When starting a new project, the following needs to be defined:

- 1. Contract ID (number & description)**
- 2. Project ID (ship number & description)**
- 3. Project-Specific G/L Accounts**
- 4. Project SWBS (ID & description)**
- 5. Project PWBS (optional ID of zones, units & assemblies, etc.)**
- 6. Project CLINs for ship repair projects**
- 7. Project work orders budgeted and scheduled and referencing WBS**
- 8. Project material requisitions & purchase orders referencing WBS**

Refer to the user manual entitled “Getting Started With *PERCEPTION*” for instructions on how to enter new contracts and projects.

Or, refer to the tutorial, “Starting A New Project.”

What needs to be done, so that project cost transactions in *PERCEPTION* can be utilized directly by the accounting systems, the project cost data must reference the G/L accounts used in the accounting systems.

G/L Account Transactions

PERCEPTION generates a variety of transactions that can be exported to accounting systems.

These transactions apply to both sides the general ledger:

- Assets & Liabilities (Balance Sheet)
- Income & Expenses (Operating Statement)

The following outlines these transactions and the *PERCEPTION* functions that generate them.

<i>Limited Accrual Basis Accounting</i>	Balance Sheet		Operating Statement	
	Asset	Liability	Income	Expense
PERCEPTION Transactions	Debit	Credit	Credit	Debits
Posted Vendor Invoices - Non-Stock	-	A/P Liability Clearing		Project Material Expense
Returned Material - Non-Stock	-	A/P Liability Clearing Debit		Project Material Expense Credit
Posted Vendor Invoices - Stock	Stock Asset	A/P Liability Clearing		
Returned Material (after invoice)- Stock	Stock Asset Credit	A/P Liability Clearing Debit		
Posted Stock Issues	Stock Asset Credit			Project Stock Expense
Stock Adjustments (Qty & Cost)	Stock Asset Credit (value loss)			Stock Adjustment Expense Credit
Posted Vendor Invoice Freight Expense		A/P Liability Clearing		Freight Expense
Posted Vendor Invoice Local Sales Tax		A/P Liability Clearing		Local Sales Tax Expense
Posted Vendor Invoice State/Provincial Sales Tax		A/P Liability Clearing		State/Provincial Sales Tax Exp.
Posted Vendor Invoice Federal Sales Tax		A/P Liability Clearing		Federal Sales Tax Expense
Posted Vendor Invoice Canadian GST		A/P Liability Clearing GST Clearing Debit		
Posted Time Charges For G/L		Payroll Liability Clearing		Project Labor Expense
Posted Time Charges Not For G/L (optional)	Employee Time Charges Transactions			
Posted Customer Invoices	A/R Clearing Account		Project Income Account	
Posted Customer Invoice Local Sales Tax	A/R Clearing Account	Local Sales Tax Liability		
Posted Customer Invoice State/Provincial Sales Tax	A/R Clearing Account	State/Provincial Sales Tax Liability		
Posted Customer Invoice Federal Sales Tax	A/R Clearing Account	Federal Sales Tax Liability		
Purchase Orders (Optional)	Non-Posted Purchase Order Account			
Note 1: Projects include both billable, maintenance & overhead				
Note 2: Overhead expenses are typically broken down by accounts				
Note 3: Project Income Account may be an Income Deposit Account. This allows the income to be allocated to the project on some formula basis of project progress.				

Project Type Definition

PERCEPTION accommodates various types of projects:

1. Billable contracts
2. Overhead projects
3. “Stock” projects

Billable contracts/projects include various kinds (new construction, ship repair, other commercial services, etc.)

Overhead projects include plant maintenance, facilities upgrades, etc.



“Stock” projects are reserved for the sole purpose of requisitioning and purchasing replenishment of stock material.

Each type of project processes G/L account transactions in different ways.

***PERCEPTION* requires that every project be identified by Project Type.**

The Project Type is defined in the *Project Options* tab window.

To open the *Project Options* window,

1. Click on Projects button  on the toolbar
2. Retrieve the project into the *Project Worksheet*.
3. Highlight the project in the worksheet.
4. Click on the *Drill-Down* button  on the toolbar.
5. Select *DETAIL* to open the Project Details tab window.

Project Details Information for the Production Environment

Details | Material Status | Overall Status | Indexes | Variances | Notes | Baseline | Options

Project Type: Overhead

Perception Default WBS: SWBS

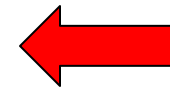
SWBS Group Scheme: 3 Character Accounts

GL Expense Account Defaults: Use Project Accounting Setup

Estimating: Base Year: 2001, Rate Year: 2001

% Cost of Money: 0.00%

Schedule Options: MS Project Project Database



6. Click on the *Options* tab

7. Select the **Project Type appropriate for the project.**

With the Project Type properly identified, the next task is to define all of the G/L accounts that will apply to the project.

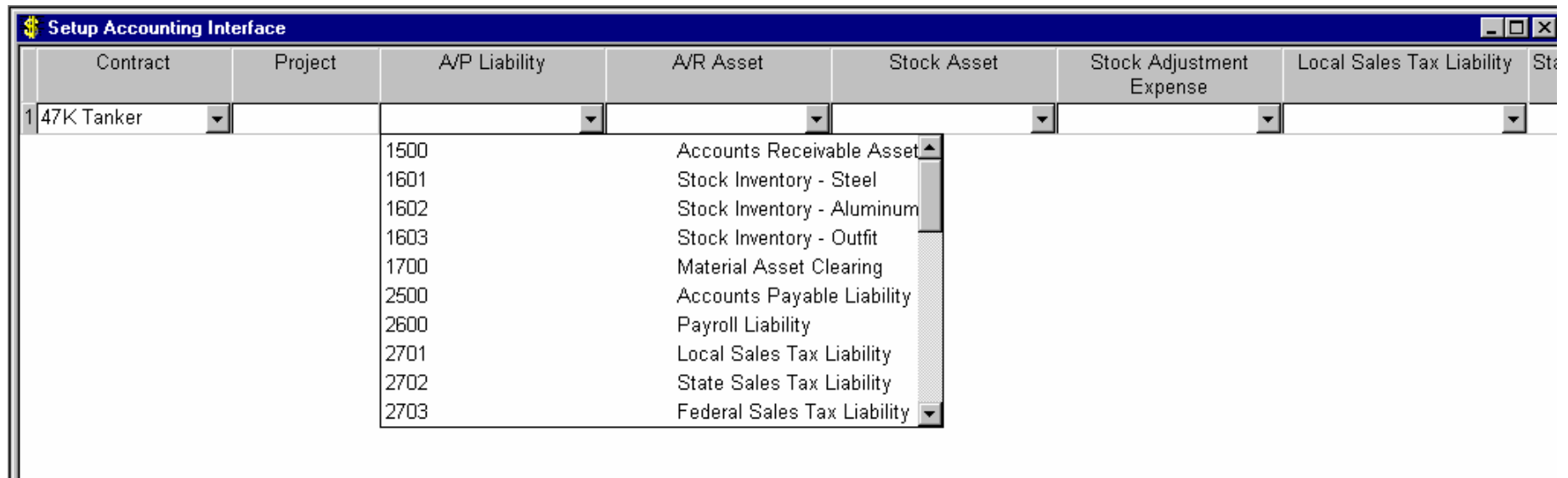
Project G/L Accounts

PERCEPTION manages a master list of General Ledger Accounts (*Environment/Accounting/General Ledger Accounts*).

However, each project managed on the *PERCEPTION* database must identify its own set of G/L accounts for income and expenses from this master list.

To set up the G/L account assignments for a project, click on Environment/Accounting/Project Accounting System Setup.

This opens the *Setup Accounting Interface Worksheet* for the project:



Contract	Project	A/P Liability	A/R Asset	Stock Asset	Stock Adjustment Expense	Local Sales Tax Liability	Sta
1 47K Tanker							
		1500	Accounts Receivable Asset				
		1601	Stock Inventory - Steel				
		1602	Stock Inventory - Aluminum				
		1603	Stock Inventory - Outfit				
		1700	Material Asset Clearing				
		2500	Accounts Payable Liability				
		2600	Payroll Liability				
		2701	Local Sales Tax Liability				
		2702	State Sales Tax Liability				
		2703	Federal Sales Tax Liability				

Setup Accounting Interface Worksheet

The following outline defines each of the various G/L accounts that may be identified for each project:

Balance Sheet G/L Accounts

1. **A/P Liability**
2. **A/R Asset**
3. **Stock Asset**
4. **Stock Adjustments (See
*Library/Company
Parameters/Accounting* tab window)**
5. **Local Sales Tax Liability (currently
not used by *PERCEPTION*)**
6. **State/Provincial Sales Tax Liability**
7. **Federal Sales Tax Liability (currently
not used by *PERCEPTION*)**

Operating Sheet G/L Accounts

1. **Project Income**
2. **Labor Expense**
3. **Stock Expense**
4. **Direct Purchase Expense**
5. **Freight Expense**
6. **Local Sales Tax Expense**
7. **State Sales Tax Expense**
8. **Federal Sales Tax Expense**
9. **Purchase Order Account
(non-posting)**

Double click on the project worksheet record that lists the project G/L accounts to view these accounts in a formal display:

Setup Accounting Interface for the Accounting Environment

Contract

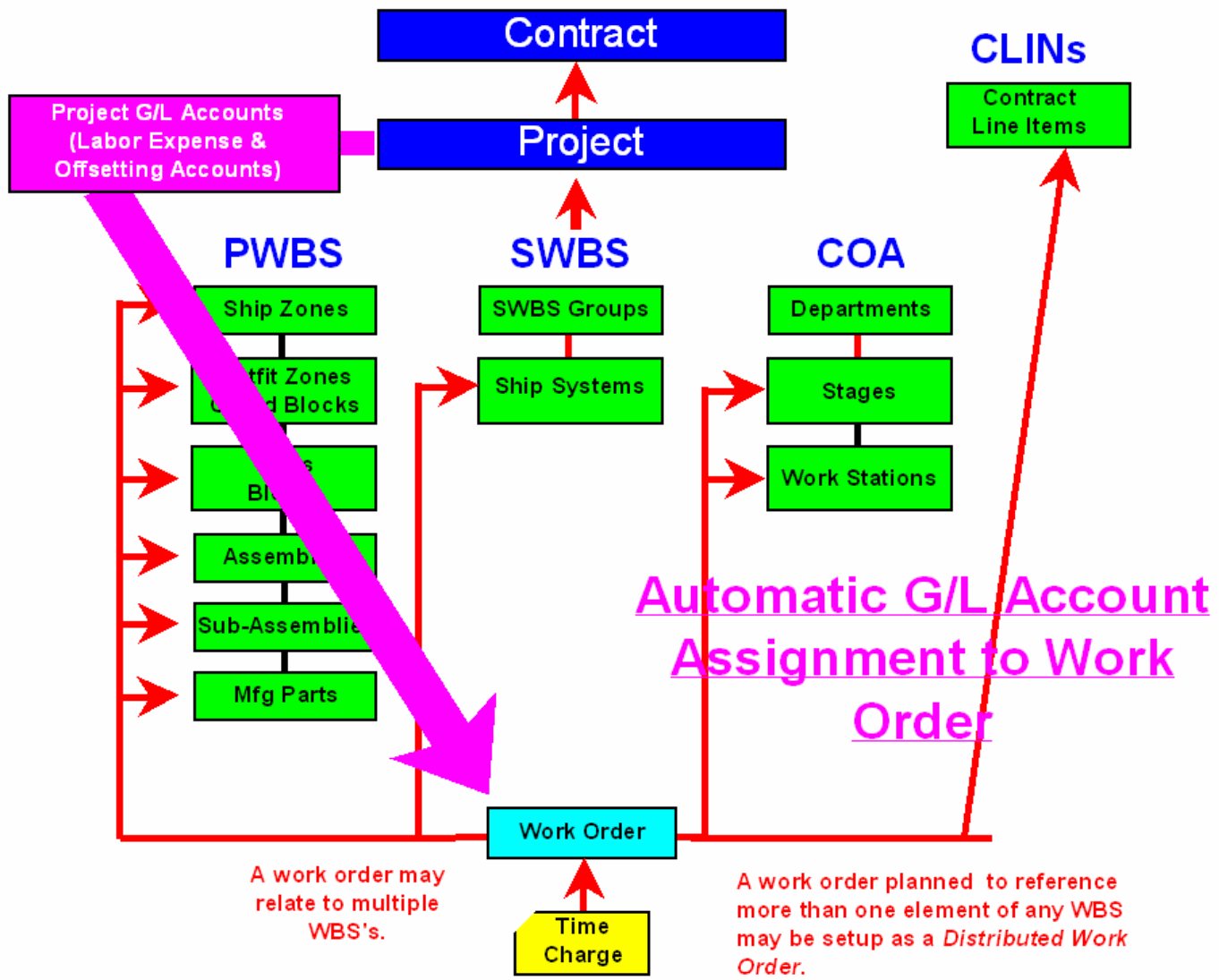
Project

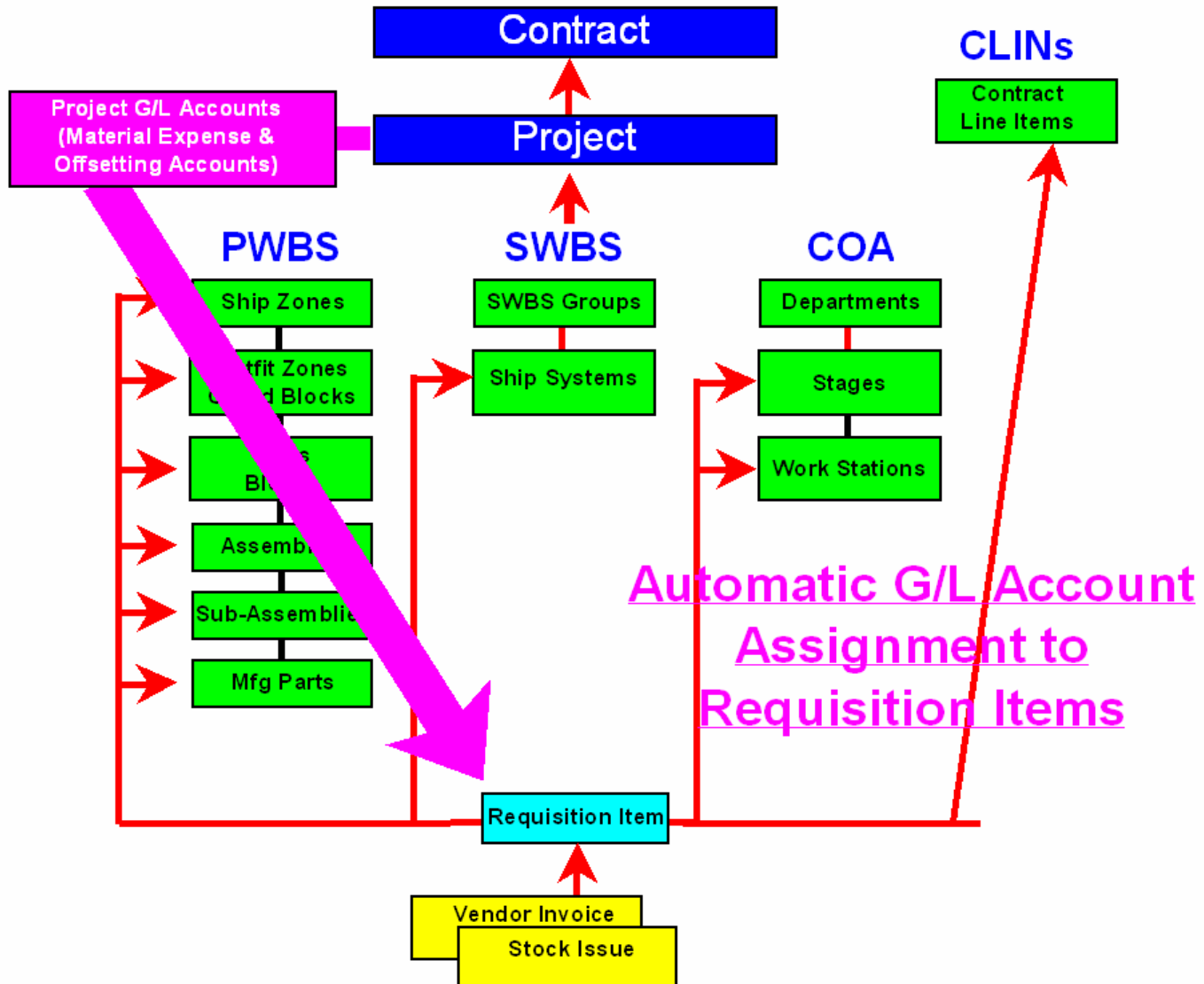
Transfer Type	Transaction	Debits	Credits
Vendor Invoices	Purchase of Stock Items	Stock Asset <input type="text" value="1601"/>	A/P Liability <input type="text" value="2500"/>
		Freight Expense <input type="text" value="3700"/>	
		Local Sales Tax Expense <input type="text" value="2603"/>	
	Purchase of Non-Stock Items	Direct Material Expense <input type="text" value="3201"/>	A/P Liability <input type="text" value="2500"/>
		Freight Expense <input type="text" value="3700"/>	
		Local Sales Tax Expense <input type="text" value="2603"/>	
Customer Invoices	Customer Bill	A/R Asset <input type="text" value="1500"/>	Project Income <input type="text" value="3001"/>
			State Sales Tax Liability <input type="text"/>
Stock Material Withdraw Transactions	Stock Material Withdraws	Stock Expense <input type="text" value="3201"/>	Stock Asset <input type="text" value="1601"/>

The user is required to define all of these G/L accounts for the project. However, some accounts may be duplicated in the field entries if the user prefers to lump costs under a more limited number of G/L accounts.

The user may develop G/L accounts in whatever way best suits an individual business requirement.

By default, the system will automatically assign this selection of G/L accounts to the various project cost transactions generated by the system.





SWBS G/L Account Setup Option



For overhead projects that often use multiple G/L accounts for labor and material expenses, individual work orders and requisition items have the feature that allow the user to manually over-ride the automated G/L expense account defined for the project. This process is often somewhat tedious for users.

The SWBS G/L Account Setup Option allows the project SWBS accounts to define these various G/L expense accounts.

As long as the work orders and requisition items reference the correct SWBS accounts, the correct G/L expense accounts will be assigned to them automatically.

However, since the SWBS G/L accounts only include the expense account categories, the Project G/L Accounts are still required by the system to identify the offsetting Balance Sheet accounts for these expenses.

To set up the G/L account assignments using the SWBS G/L Account Setup Option,

1. Click on the *Projects*  button on the toolbar to open the *Projects Worksheet*.
2. Retrieve the project, then
3. Click on the *Drill-Down*  button on the toolbar.
4. Select SWBS Accounts.

Using this option, each SWBS account used in the project must be assigned to its proper G/L expense accounts as selected from the drop-down on the SWBS account record.

Cost	Baseline Budget	Material Cost	Baseline Start	Baseline Finish	Budget Qty	GL Invoice Acct	GL Labor Acct	GL Stores Acct	Manua
1.00		0.00	00/00/0000	00/00/0000	0				

- None
- 1500 Accounts Receivable
- 1601 Stock Inventory - Steel
- 1602 Stock Inventory - Aluminum
- 1603 Stock Inventory - Outfit
- 1604 Stock Adjustments
- 1701 Paid Deductible Federal Sales Tax

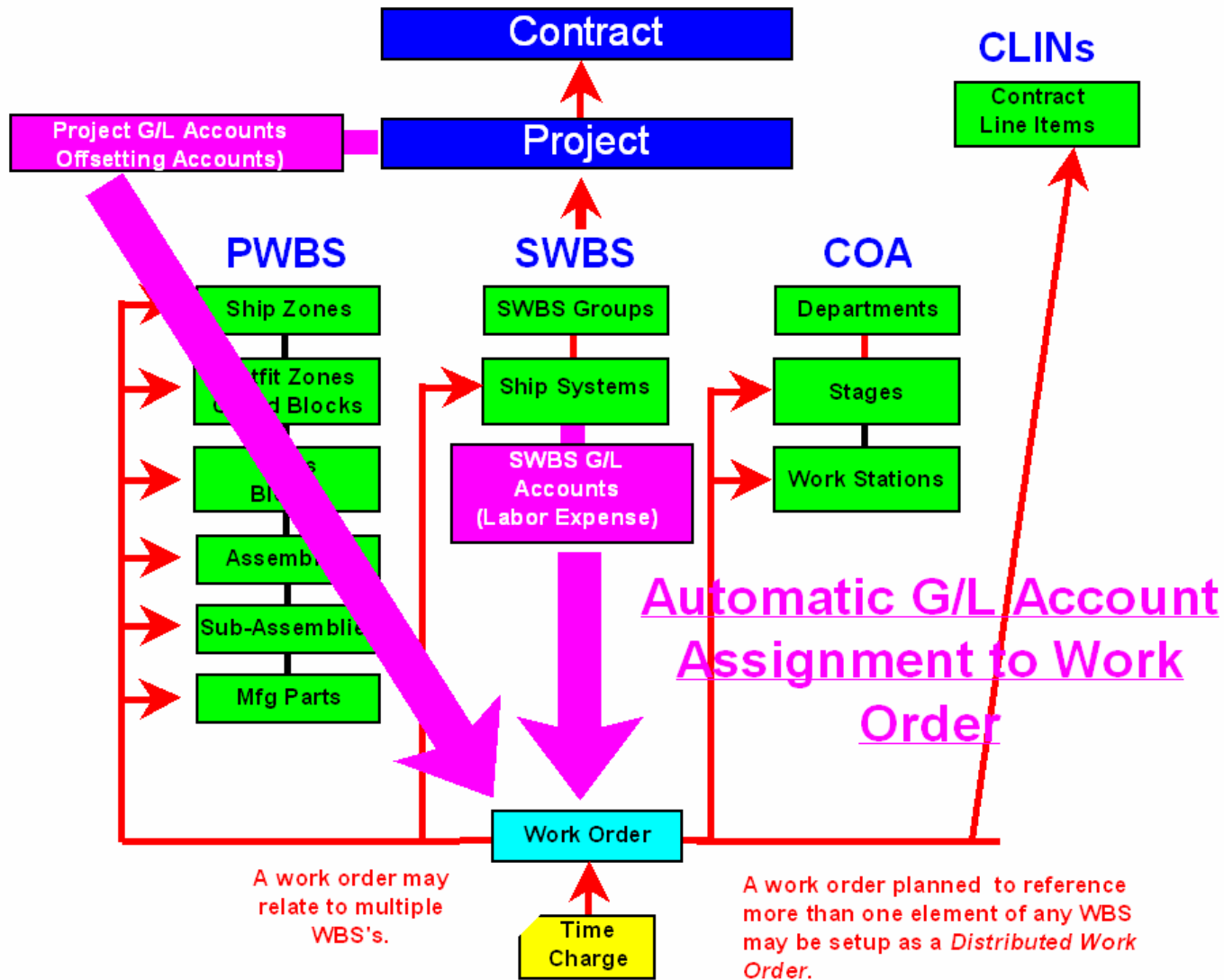
SWBS Account G/L Account Assignment

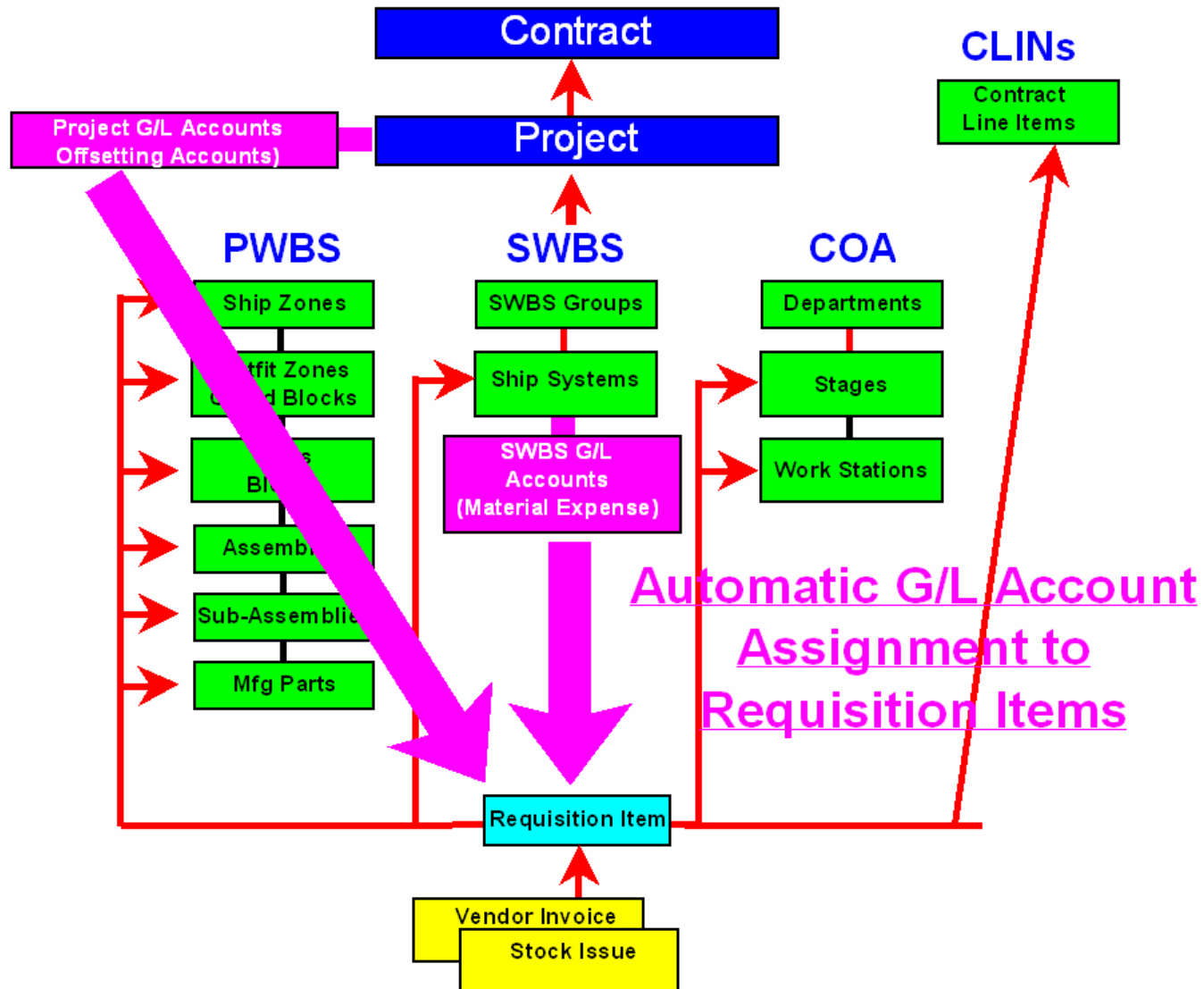
The SWBS account record has three (3) G/L expense accounts available for the user to define:

- 1. G/L Direct Material Expense Account**
- 2. G/L Stock Expense Account**
- 3. G/L Labor Expense Account**

By default, the system automatically assigns to requisitions and work orders the G/L accounts that have been defined for the SWBS accounts.

The offsetting G/L Balance Sheet accounts are provided to the requisition items and work orders from the Project G/L Accounts defined earlier.





If the Project G/L Accounts and SWBS G/L accounts have not been fully defined, the transactions that use them and that are exported to the accounting systems will have blank G/L account number references.

These transactions are likely to be rejected by the accounting systems.

***PERCEPTION* provides a variety of reports that identify transactions that have not had G/L accounts defined.**

Copying Projects

When projects are defined on the database using the contract and/or project wizard that copies new contracts/projects from pre-existing ones, the copy process provides for a default option to copy all G/L account definitions.

Where G/L accounts must change for new projects, the user will need to modify the results accordingly.