CGI Advantage® 4

Internal Costing User Guide

Table of Contents

Business Area Overview

The Internal Costing functionality of CGI Advantage is built to track various types of costs, which may eventually be charged to accounting distributions. Many of the Internal Costing scenarios are related to Cost Accounting (e.g. the costs may be charged to various construction programs), but there is no requirement to use Cost Accounting chart of accounts with Internal Costing.

The following scenarios are examples where Internal Costing would be used:

- An employee works on maintenance task orders. The employee's time should be charged to those task orders at a fixed rate based on hours worked. The employee's billing rate is not the same as her payroll costs, which should remain undisturbed as expenditures to her home accounting distribution.

- A piece of equipment is used on various construction projects. The equipment was purchased by an equipment group (with its own home accounting distribution). All maintenance costs and depreciation are also charged to the equipment group. When the equipment is used for projects, the benefiting projects are charged a cost based on units of usage (hours, days, etc.) and the equipment group is credited revenue for the same amount.

- A lab performs testing of materials samples. Tests performed by the lab are charged to various accounting distributions. For some types of testing, the lab books revenue and for other testing no revenue is posted.

Internal Costing provides a means for these costs to be charged directly to user specified accounting distributions. Users specify usage; the system then calculates the associated costs and generates the appropriate accounting entries. This information is collected through the Internal Costing Usage Transaction that updates the Internal Costing Journal as later input to the Internal Costing system process that generates transactions to record any accounting impacts of the usage.

The accounting generated by the Internal Costing system process may eventually be billed as part of normal Cost Accounting Reimbursement. Returning to the example of billed equipment, the Internal Costing system process will generate revenue for the equipment owner and charge the project that used the equipment. The construction project that was charged for equipment use, can then bill those usage costs along with other costs posted to the project for reimbursement from one or more funding sources for that project. The *Cost Accounting User Guide* should be consulted for details on this type of reimbursement.

In some cases, usage may be recorded for reporting purposes only; costing is not a required step in the process. One example of this would be the use of Internal Costing to record statistical units of measure that will be analyzed for Activity Based Costing. In this scenario, statistical units would be posted as usage entries that have a zero-dollar rate.

Common Terminology

This section contains an alphabetical list of terms that are common in Internal Costing and a definition for each one.

› Cost Allocation Plan

This term refers to the use of Internal Costing to calculate overhead based on task order and task chart-of-accounts.

› Equipment Usage

Recording the usage of equipment (for example, Using a tow truck).

› Fixed Rates

A fixed rate is one that is constant throughout and not dependent upon usage (e.g., monthly rate for insurance). This rate can only be used for Equipment.

› Internal Vendor

The Internal Vendor is considered the seller or provider and may be selected for those items that should generate revenue entries to the owner accounting distribution (e.g. equipment or a lab) for the amount of usage.

› Intra/Inter Costing Transactions

Inter and intra transactions are determined by comparing the chart of account codes specified on the Internal Vendor Accounting Data reference page between the buyer and seller Lines. If the codes match, then the transaction is considered an Intra-costing transaction. If different, then the transaction is considered Inter-costing.

› Labor Usage

Recording hours worked by employees to specific accounting distributions. The associated labor cost can then be calculated using standard rate. That cost may be different than the actual costs incurred as part of payroll processing.

› Materials Testing

The costs associated with testing materials in a lab can be submitted through the Internal Costing to appropriately charge the entity(s) requesting the test with a possible reimbursement to the entity performing the test.

› Standard Rates

A standard rate is one applied to equipment based upon usage (e.g., cost per mile for usage).

› Usage Class

Usage Class is the connection to setup on the various Internal Cost Rates made on the Internal Costing Transaction in order for later system processing.

› Usage Group

The term Usage Group is a broad classification of internal usage types pre-defined Labor, Mileage, Equipment (ID Required), Equipment (ID Optional) Materials Testing, Interfaced Labor, Retroactive, Adjustment, Interfaced Mileage/Other, and Interfaced Equipment/Material.

› Usage Type

The Usage Type is a sub division of Usage Groups. Usage Type is a configurable list and can be configured by making changes directly into the CVL_USG_TYP database table.

Transaction Information

There is only one transaction type directly associated with internal costing, the Internal Costing Usage Transaction. However, the Internal Costing system process will generate transactions in the Charge Transaction Type. This Transaction Type is discussed in detail in the Cost Accounting User Guide.

ICT Transaction Type

The Internal Costing Usage Transaction (ICT) records the units of work performed for costing. Units of work can be of any type, but are generally described in terms of the Usage Groups: Labor, Mileage, Equipment Use (with or without an Equipment ID), Materials Testing, Interfaced Labor, Retroactive, Adjustment, Interfaced Mileage/Other, and Interfaced Equipment/Material. The data that is captured by this transaction type is stored on the Internal Costing Journal inquiry page. The records from this inquiry page are used as the input to the Internal Costing Process.

This transaction type has two levels of structures:

Transaction Header (1)

Accounting (1 - n)

The transaction type has a limit on when a modification or cancellation can be recorded only if the Internal Cost Process Date and the Internal Cost Charge Generation Date are not populated on the Internal Cost Journal created by a transaction instance. In the event a modification or cancellation is needed but not possibly on the original transaction instance, a new transaction must be created. If originally recorded in error or too much was recorded, only a negative accounting line is required. If too little was recorded or usage was originally missed, then positive accounting lines are required. If the incorrect chart of account distribution was used, one negative line to the original distribution and one positive line to the correct distribution is required.

If the error was found and a modification or cancellation processed, records from the journal will be updated or deleted accordingly.

ICT Delivered Transaction Codes

The ICT Transaction Type has the following Transaction Codes. Others can be set up as needed.

Transaction Name	Transaction Code	Intended Use
Internal Costing Usage Transaction	ICT	This transaction records usage performed of labor, equipment, and materials testing, which can be used to generate accounting entries or just for statistical reporting.

Header

The Header tab contains many common Header fields as described in the Header topic in the *Transactions User Guide*. In addition to those fields, the following unique fields are displayed:

Field Name	Description
Equipment/Employee Home Department	The required identification of a department that will be used to edit the Equipment and Employee ID values entered on accounting lines. This field may default or have to be entered based on system configurations.
Total Labor Units	The calculated sum of accounting lines for fields of Total of Regular Labor/Usage Units and Overtime Labor Units.
Total Equipment Units	The calculated sum of accounting lines for the field of Total of Regular Labor/Usage Units.
Total Materials Testing Units	The calculated sum of accounting lines for the field of Total of Regular Labor/Usage Units.
Total Mileage	The calculated sum of accounting lines for the field Total of Regular Labor/Usage Units.
Check Total Labor Units Check Total Equipment Units Check Total Materials Testing Units Check Total Mileage	To assist with data entry, a check total field exists for each of the four major Usage Types. The transaction will compare what is calculated for each across the accounting lines and the associated check total to issue an error if the two do not match. These check totals are optional unless setup on the Transaction Control reference page has them required.

Accounting

The Accounting tab contains many common Accounting fields as described in the Accounting topic in the *Transactions User Guide*. In addition to those fields, the following unique fields are displayed in alphabetical order:

Field Name	Description
Employee Benefits Multiplier Type	When labor is recorded there can be the added costs of benefits associated with that labor. An Internal Cost Rate can have from 0 to 5 different benefits multipliers. This field controls which of those will

Field Name	Description
	apply: *Blank (none), Benefits Multiplier 1, Benefits Multiplier 2, Apply All Multipliers.*
Employee Class	This classification is required when the Usage Type is *Labor* or *Mileage* in order to locate an Internal Costing Rate record along with the Usage Class Department and Fiscal Year. The field defaults from a pre-defined Employee ID when entered.
Employee ID Full Name First Name Middle Name Last Name Name Suffix	The identification of an employee is required if the Usage Type is *Labor* or *Mileage Usage Group* and optional otherwise. Internal Costing configuration can require the ID be defined on the Employee Information reference page or allow the entry of an ID not defined on that reference page. When defined on the Employee Information reference page, the Usage From and To dates must fall within the Effective Start and End dates of the employee record. Name information will infer if the employee is setup, else it is required in addition to the Employee ID.
Equipment Class	This classification is required when the Usage Type is *Equipment* in order to locate an Internal Costing Rate record along with the Rate Category, Usage Class Department and Fiscal Year. The field defaults from a pre-defined Equipment ID when entered.
Equipment ID Equipment Description	The piece of equipment must be identified if the Usage Group is *Equipment (ID Required)*. If the Usage Group is *Equipment (ID Optional)* then the identification is optional. As part of the validation against the Equipment ID reference page, Effective Start and End Dates of the equipment record should encompass the Usage From and Usage To dates.
Materials Testing Class	This classification is required when the Usage Type is *Materials Testing* in order to locate an Internal Costing Rate record along with the Materials Testing Department and Fiscal Year. The field defaults from a pre-defined Materials Testing Program when entered.
Materials Testing Department	As materials testing has a separate department (seller) used to identify the Materials Testing Program from the Equipment / Employee Home Department on the header.
Materials Testing Program	When material testing is done, this Materials Testing Program defines where that testing was done.

Field Name	Description
Overtime Labor Units	When recording labor usage, the amount of overtime units is also require, and zero is permitted when there is no overtime.
Overtime Multiplier Code	When there is overtime recorded, there must be a rate for that overtime, which is defined on the Internal Costing Overtime Multipliers reference page.
Rate Category	A classification of the type of rate with values of *Fixed* and *Variable*. Only with equipment can a fixed rate be defined. Labor, equipment, and materials testing all support the variable rate.
Regular Labor / Usage Units	A field to capture the 'amount' of usage (mileage, materials testing usage, an employee's labor units, or equipment usage units. The value entered in this field cannot be zero. This field is later used to calculate the cost during the Internal Cost job.
Timesheet Reference Information (TIMEI)	When information from Advantage Human Resource Management is used to create Internal Costing Transactions, this set of fields ties the two together.
Unit of Measure	The measurement method for the usage as defined on the Unit of Measure reference page that is shared by the Procurement function and others.
Usage Class	The inferred value from the Materials Testing Class, Employee Class, or Equipment Class that connects to the Internal Costing Rate information.
Usage Class Department	At the accounting line this department field is protected and inferred from the Equipment / Employee Home Department from the header. The value is used by the Internal Costing system process to look up Internal Costing Rates.
Usage From Usage To	The required start and end dates of the usage, which may default to the current Application Date given Internal Costing configuration.
Usage Group	The inferred value from the Usage Type selected, which is used to control data entry rules. In most cases fields unrelated to a Usage Type are prohibited. *Usage Group Labor*

Field Name	Description
	• Required: Employee ID, Employee Class, First Name, Last Name, Full Name, Rate Category, Regular Labor/Usage Units.
	• Optional: Middle Name (optional), Overtime Labor Units (optional)
	• Conditionally Required, Overtime Multiplier Code
	Usage Group Mileage
	• Required: Employee ID, Employee Class, Rate Category, First Name, Last Name, Full Name
	• Optional: Middle Name (optional)
	Usage Group Equipment (ID Required)
	• Required: Equipment ID, Equipment Class, Equipment Description, Rate Category
	Usage Group Materials Testing
	• Required: Materials Testing Class, Rate Category
	• Conditionally Required: Materials Testing Department, Materials Testing Program
	Usage Group Equipment (ID Optional)
	• Required:, Equipment Class, Equipment, Description, Rate Category
	• Optional: Equipment ID
	Usage Group Interfaced Payroll
	• Required: Employee ID, Employee Class, First Name, Last Name, Full Name, Variation Code, Flag 1, Part-Time/Full-Time, Pay Period Pay Period Year
	• Optional: Line Amount
	Usage Group Interfaced Equipment
	• Required: Equipment Class, Equipment Description, and Equipment/Employee Home Department on Header
	Note: the Equipment Description requirement has a separate error code so that the requirement for Equipment Description can be turned off when the Equipment ID is not coded.

Field Name	Description
Usage Type	The required indication of what type of usage is being recorded, which connects to a Usage Group.
Overhead Indicator	This field indicates whether Overhead Costing will be done at the Task Order or Task Level. This field and the next six are delivered as hidden and must be made visible with Configure page in order to use the Internal Overhead process.
Variation Code	This field indicates the type of time/usage entered in timesheets such as regular time, overtime, vacation time, etc.
Flag 1	This field indicates if a worker's hiring (hall) status is excluded from the CAP Rate application, If set to *Yes*, it will be NOT be included in the CAP Rate application.
Part-Time/Full-Time	This field indicates the Part-Time or Full-Time designation of the worker.
Pay Period	A field to capture the Pay Period for which time/usage has been reported.
Pay Period Year	A field to capture the Pay Year for which time/usage has been reported.
Line Amount	A field to capture the line amount of usage (Labor, Interfaced Labor, Retroactive, Adjustment, Interfaced Mileage/Other and Interfaced Equip/Mat). It cannot be a negative amount.

Inquiries

The following are the Inquiries for Internal Costing in CGI Advantage. Many different inquiry pages are available to review the allocation of internal costs, with the most likely being the Cost Accounting Journal and Accounting Journal:

Inquiry Name	Page Code	Description
Internal Costing Journal	ICJ	The Internal Costing Journal (ICJ) inquiry page stores labor, equipment, mileage, and materials testing usage information.

Internal Costing Journal

The Internal Costing Journal (ICJ) inquiry page stores labor, equipment, mileage, materials testing usage, interfaced payroll and interfaced equipment information. This inquiry page is updated by the Internal Costing Usage Transaction and the Internal Costing system process.

Once a journal record is selected and processed, the Internal Cost Process Date field is populated by the Internal Cost Update job step (part of the Internal Costing system process). Similarly, when a journal record is processed by the Charge Transaction XML Generation job step (also part of the Internal Costing system process) the Internal Cost Charge Generation Date.

› Field Information

The table below lists only those fields not already mentioned above (the two indications of system processing) and those listed in the Internal Costing Transaction section.

Field Name	Description
Standard Salary	This amount is calculated by multiplying the Regular Labor/Usage Units by the Salary Rate from the Employee Information or Internal Cost Rate. Multiple rates may be used in the calculation when the Usage Dates spanned multiple Employee Information records.
Standard Employee Benefits 1 – 5	These amounts are calculated by multiplying the Standard Salary amount by the applicable Employee Benefits Multiplier rate(s) from Employee Benefits Multiplier or Internal Cost Rate. Multiple rates may be used in the calculation when the Usage Dates spanned multiple records on Employee Benefits Multiplier.
Overtime Salary	This amount is calculated by multiplying the Overtime Labor/Usage Units by the Salary Rate from Employee Information or Internal Cost Rate. Multiple rates may be used in

Field Name	Description
	the calculation when the Usage Dates spanned multiple records on Employee Information. If an Overtime Multiplier Code was specified, then each Salary Rate used in the calculation of Overtime Salary is multiplied by the Overtime Multiplier Rate.
Overtime Employee Benefits 1 - 5	These amounts are calculated by multiplying the Overtime Salary amount by the benefit rates from Internal Cost Rate or Employee Benefits Multiplier. Multiple rates may be used in the calculation when the Usage Dates spanned multiple records on Employee Benefits Multiplier.
Standard Cost	This amount is calculated by one of three ways based on Usage Group: • *Mileage* - Multiplying the Mileage Rate and Regular Labor/Usage Units • *Materials Testing* - Multiplying the Materials Testing Rate and Regular Labor/Usage Units • *Equipment (either variant)* - Multiplying the Equipment Usage Rate from Equipment or Internal Costing Rate and the Regular Labor/Usage Units. Multiple equipment rates may be used in the calculation when the Usage Dates spanned multiple Equipment records.
Fixed Cost	This amount is calculated when the Rate Category is *Fixed* by multiplying Regular Labor/Usage Units by the Equipment Rate from Equipment or Internal Cost Rate. Multiple rates may be used in the calculation when the Usage Dates spanned multiple records on Equipment.
Equipment Surcharge	This amount is calculated by multiplying the Regular Labor/Usage Units with the Equipment Surcharge Rate from Equipment or Internal Cost Rate. Multiple rates may be used in the calculation when the Usage Dates spanned multiple records on Equipment.
Total Costs	This amount is calculated in one of three ways based on Usage Type: • *Labor* – A summation of Standard Salary, Standard Employee Benefits (1 -5), Overtime Salary and Overtime Employee Benefits (1- 5)

Field Name	Description
	• *Equipment (either variant)* – A summation of Standard Cost, Fixed Cost and Equipment Surcharge • *Materials Testing* – Set to equal the Standard Cost amount • *Mileage* – Set to equal the Standard Cost amount
Overhead Fiscal Year	The fiscal year derived from the Usage From Date. The Overhead Fiscal Year can differ from the Fiscal Year for Pay Periods 1 and 26.

Advanced - Setup

Setup for Internal Costing occurs in two different locations with an optional 3rd for the Cost Allocation Plan functionality for overhead. The first is preliminary setup on reference pages considered General Accounting or Financial Administration. The second is a set of reference pages used solely by Internal Costing functionality.

- Preliminary Setup

- Internal Costing Setup

- Cost Allocation Plan Setup

Preliminary Setup

This section of the help includes information on the following reference pages found outside of the Internal Costing area:

- System Options

- Special Accounts

- Internal Vendor Accounting Data

System Options

The System Options (SOPT) reference page has a tab of options just for Internal Costing. All fields are required, even if the type of internal cost referenced will not be used.

› Field Information

The table below contains each control listed in alphabetical order.

Field Name	Description
Equipment/Employee Home Department Inference	A control for the inference logic of the Equipment/Employee Home Department field on the Header of the Internal Costing Usage Transaction. Valid values are: • *Infer from Transaction Department* – The same department value used in the creation of the transaction will infer. • *Infer from User's Home Department* – The home department defined for the User ID creating the transaction will infer. • *No Inference* – No department value will infer and one will have to be entered.

Field Name	Description
	This control works in tandem with the Permit Duplicate Equipment / Employee IDs Across Departments control:
	If the Permit Duplicate Equipment / Employee IDs Across Departments is *true*, then the Equipment/Employee Home Department Inference can be any of the three values.
	If the Permit Duplicate Equipment / Employee IDs Across Departments field is *false*, then the Equipment/Employee Home Department Inference must be *No Inference.*
Get Rates from Employee Benefits Multiplier	A control used during the Internal Costing system process, determining which set of Employee Benefit Costs Multipliers is used to calculate Employee Benefit Costs. When set to *true*, the Employee Benefits Multiplier reference page is used. When set to *false*, the Internal Cost Rate reference page is used.
Materials Testing Class Inference Indicator	A control used by the Internal Costing Transaction when an accounting line has the Usage Group of *Materials Testing*. If this control is set to *true*, the Usage Class infers from the Materials Testing Class Inference referenced page using the Materials Testing Department and Materials Testing Program values of that accounting line. If this control is set to *false*, then the Materials Testing Class Inference will not be used.
Mileage Rate	The standard rate for the calculation of mileage expenses by the Internal Costing system process. Of the different options and controls, this one is one likely to change during a year or between years.
Permit Duplicate Equipment/Employee IDs Across Departments	A control that when set to *true* enables Equipment ID and Employee ID setup to use the same ID for multiple departments. When set to false, each ID must be unique, regardless of Department.
	Please see the Equipment/Employee Home Department Inference control for the interaction with this control.
Require Overtime Multiplier	A control used by the Internal Costing Usage Transaction for those accounting lines recording labor usage. When this control is set to *true*, if the Overtime Labor Units field is used an Overtime Multiplier Code must be entered. When set to *false*, the multiplier is optional.
Usage Date Inference	A control used by the Internal Costing Usage Transaction (ICT) to infer dates to the Usage From and Usage To fields. When

Field Name	Description
	this control is set to *true*, if either date field is blank then the current Application Date will infer. If the control is *false,* then neither date will infer and must be manually supplied.
Validate Employee ID on Employee Information	A control used by the Internal Costing Usage Transaction that controls whether or not an Employee ID entered is validated against the Employee Information reference page. When set to *true* the validation is performed. When set to *false*, that validation is not done although the pick for the Employee ID field still looks to the Employee Information page.

Special Accounts

The System Accounts (SPEC) reference page has a tab of options just for Internal Costing displaying all Object and Sub Object codes used in posting labor, mileage, equipment, and material testing costs through transactions generated from the Internal Costing system process. Only those objects matching a type of internal costs that will be used need to be completed.

The Internal Costing Charge Generation process may use Object and Sub-Object values from Special Accounts when building buyer accounting lines. Special Accounts is the last in a sequence of four lookups that is performed when determining the Object and Sub-Object values.

1. For all costs, if the Object fields were entered on the Internal Costing Transaction then those values will be used (actual use is from the Internal Costing Journal updated by the transaction). However, it is common for Object values to be prohibited for the Event Type used on the transaction in order to use consistent object values.

2. If the transaction, then the first lookup is to the Internal Costing Overtime Multipliers reference page for overtime costs.

3. If blank on the two above the next lookup is to the Internal Cost Rate reference page.

› Field Information

The table below contains each control listed in alphabetical order.

Field Name	Description
Standard Salary Object Standard Salary Sub Object	Defaults used for the buyer accounting lines of labor salary costing.

Field Name	Description
Employee Benefits 1 Object Employee Benefits 1 Sub Object	Defaults used for the buyer accounting line generated for Employee Benefits Multiplier 1.
Employee Benefits 2 Object Employee Benefits 2 Sub Object	Defaults used for the buyer accounting line generated for Employee Benefits Multiplier 2.
Employee Benefits 3 Object Employee Benefits 3 Sub Object	Defaults used for the buyer accounting line generated for Employee Benefits Multiplier 3.
Employee Benefits 4 Object Employee Benefits 4 Sub Object	Defaults used for the buyer accounting line generated for Employee Benefits Multiplier 4.
Employee Benefits 5 Object Employee Benefits 5 Sub Object	Defaults used for the buyer accounting line generated for Employee Benefits Multiplier 5.
Overtime Object Overtime Sub Object	Defaults used for the buyer accounting line generated for Overtime Salary.
Mileage Object Mileage Sub Object	Defaults used for the buyer accounting line generated for Mileage.
Materials Testing Rate Object Materials Testing Rate Sub Object	Defaults used for the buyer accounting line generated for Materials Testing.

Field Name	Description
Equipment (ID Required) Usage Object Equipment (ID Required) Usage Sub Object	Defaults used for the buyer accounting line generated where the Usage Group is Equipment (ID Required).
Equipment (ID Optional) Usage Object Equipment (ID Optional) Usage Sub Object	Defaults used for the buyer accounting line generated where the Usage Group is Equipment (ID Optional).

Internal Vendor Accounting Data

When using the Usage Type of *Materials Testing* and posting accounting for that usage, there needs to be a chart of account distribution provided for the seller (owning entity of the testing facility) as the Internal Costing Transaction captures chart of accounts for the buyer. This page is documented in the "Internal Vendor Accounting Data" topic of the *Procurement User Guide.*

Internal Costing Setup

The following pages can be set up to establish Internal Costing. Depending on what types of usage are recorded, not all pages in the first five need to be established. However, the last two are always required. Internal Costing Rate must be defined before defining any of the optional pages where a field for Equipment Class, Employee Class, or Materials Testing Class exists.

- Employee Benefits Multipliers

- Internal Costing Overtime Multipliers

- Employee Information

- Materials Testing Class Inference

- Equipment

- Internal Cost Rate

- Internal Costing Parameters

Employee Benefits Multiplier

The Employee Benefits Multiplier (EMPBM) reference page is used to define the Employee Benefit Multiplier rates for a combination of Usage Class, Department, Effective From and Effective to dates. This page is only be used if rates are to be effective-dated. If rates are not dated, but are established by Fiscal Year for an Employee Class, then the rates should be defined on the Internal Cost Rate (INCR) reference

page. The Internal Costing system process reads one of the two reference pages based on the Get Rates from Employee Benefits Multiplier indication on the System Options reference page.

Outdated records are purged from this page by the Internal Costing system process. The purge process only deletes records that have an Effective To date and that Effective To date is less (earlier) than the date derived based on the value in the Number of Days Old for Purging input parameter.

› Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
Department	Although a common fields, this instance supports a special wildcard value of *ALL* to indicate the rate applies to all departments not specifically defined on a separate record.
Effective To Effective From	The first of the two dates is always required with the second date being optional for when the end of the multiplier is not yet known. Date ranges assigned must be sequential: gaps between the Effective To of one record and the Effective From of the next record are not allowed.
Employee Benefits Multiplier 1 Employee Benefits Multiplier 2 Employee Benefits Multiplier 3 Employee Benefits Multiplier 4 Employee Benefits Multiplier 5	During the Internal Costing system process, salary costs (e.g. Standard Salary, Overtime, etc.) are optionally multiplied by an Employee Benefits Multiplier.
Usage Class	The definition of a particular type of labor usage as defined on the Internal Costing Rate reference page.
Usage Type	The inferred Usage Type for the selected Usage class as defined on the Internal Costing Rate reference page.

Internal Costing Overtime Multipliers

The Internal Costing Overtime Multipliers (ICOM) reference page is used to establish overtime multiplier codes and associated overtime rates for labor costing purposes to a combination of Fiscal Year, Department, Usage Type, and Rate Category.

> Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
Department	Although a common fields, this instance supports a special wildcard value of *ALL* to indicate the rate applies to all departments not specifically defined on a separate record.
Overtime Multiplier Code	The unique identifier of an overtime multiplier rate.
Overtime Multiplier Name	The descriptive name of the overtime multiplier rate for descriptive and reporting purposes.
Overtime Multiplier Rate	The multiplier rate specified with up to four decimal places. For example, a value of 2.0000 would double the overtime rate.
Overtime Object Overtime Sub Object Overtime Department Object	Default values populated on the generated transactions of the Internal Costing system process when the Internal Costing Transaction did n0t specify a value (that is, override these defaults). Please see the section for the Special Accounts reference page for more information on the order of inferences.

Employee Information

The Employee Information (EMPID) reference page is optionally used to define salary rates for a combination of Employee ID and Department with Effective From and To dates. Salary rates may optionally be defined by Employee ID on EMPID, but if EMPID is not used, then the salary rates defined by Employee Class on the Internal Cost Rate reference page will be used instead.

Outdated records are purged from this page by the Internal Costing system process. The purge process only deletes records that have an Effective To date and that Effective To date is less (earlier) than the date derived based on the value in the Number of Days Old for Purging input parameter.

> Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
Chart of Account Fields	A complete set of chart of accounts is presented to serve as overrides of the Internal vendor Accounting Data distribution for seller accounting lines generated by the Internal Costing system process. There are no partial overrides so all fields necessary must be completed if this feature is used.
Effective From Effective To	The first of the two dates is always required with the second date being optional for when the end of the salary rate is not yet known. Date ranges assigned must be sequential: gaps between the Effective To of one record and the Effective From of the next record are not allowed.
Employee Class	The definition of a particular classification of employees as defined on the Internal Costing Rate reference page.
Employee ID	The unique identification ID assigned to an employee for internal costing purposes. This does not necessarily have to be the actual employee ID used in payroll or Advantage security purposes.
First Name Middle Name Last Name Name Suffix	First and Last Name are required descriptive details on an employee.
Salary Rate	The salary rate specified with up to four decimal places. For example, a value of 100.0000 would be 100% of salary costs. If set to 0.0000 then the salary rate from the Employee Class on the Internal Costing Rate reference page will be used.

Materials Testing Class Inference

The Materials Testing Class Inference (MATIN) reference page facilitates the inference of Materials Testing Class on the Internal Costing Usage Transaction when left blank the Materials Testing Class Inference Indicator on the System Options reference page is *true*.

› Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order.

Field Name	Description
Activity	A required activity as defined for the Materials Testing Department on the Activity chart of account reference page.
Materials Testing Class	The definition of a particular classification of materials testing as defined on the Internal Costing Rate reference page.
Materials Testing Department Materials Testing Program	The combination of these two values will identify a record established on the Program chart of account reference page.

Equipment

The Equipment (EQID) reference page defines each piece of equipment used for internal costing. Outdated records are purged from this page by the Internal Costing system process. The purge process only deletes records that have an Effective To date and that Effective To date is less (earlier) than the date derived based on the value in the Number of Days Old for Purging input parameter.

› Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
Department Unit	Of the two organizational chart of accounts, Department is required and Unit is optional
Description	An optional description for the equipment for reference and reporting purposes.
Effective To Effective From	Unlike the earlier reference pages, the date fields for equipment are optional. Date ranges assigned must be sequential: gaps between the Effective To of one record and the Effective From of the next record are not allowed.
Equipment Class	The definition of a particular classification of equipment as defined on the Internal Costing Rate reference page.

Field Name	Description
Equipment ID	The unique identification ID assigned to a piece of equipment for internal costing purposes. This does not necessarily have to be the actual fixed asset tag or the Fixed Asset Number. Please see the section on the System Options reference page for settings that control Equipment ID entry.
Equipment Rate - Fixed	The basic rate used with the Equipment ID when calculating costs when the rate category is *Fixed* on the Internal Costing Transaction. When set to 0 the rate for the Equipment Class will be used as defined on the Internal Costing Rate reference page.
Equipment Rate - Standard	The basic rate used with the Equipment ID when calculating costs when the rate category is *Standard* on the Internal Costing Transaction. When set to 0 the rate for the Equipment Class will be used as defined on the Internal Costing Rate reference page.
Fixed Rate Surcharge	The surcharge rate used with the Equipment ID when calculating costs when the rate category is *Fixed* on the Internal Costing Transaction. When set to 0 the rate for the Equipment Class will be used as defined on the Internal Costing Rate reference page.
In Service Date	An optional date to record the earliest date charges can be recorded to the equipment ID.
Standard Rate Surcharge	The surcharge rate used with the Equipment ID when calculating costs when the rate category is *Standard* on the Internal Costing Transaction. When set to 0 the rate for the Equipment Class will be used as defined on the Internal Costing Rate reference page.
Unit of Measure	The measurement method for the usage as defined on the Unit of Measure reference page that is shared by the Procurement function and others.

Internal Cost Rate

The Internal Cost Rate (INCR) reference page allows you to set up the rates for charging labor, equipment, or materials testing usage, which can later be used for costing purposes. Each rate is defined by Fiscal Year, Department and the corresponding Usage Class. On this reference page the wildcard of ALL is also allowed for the Department field to define a rule that applies to all other departments without a rule specific to that department.

> › Field Information

The table below contains those fields that are not self-evident listed in groups with the first being those that apply to all types of costs, then labor, then equipment, then materials testing.

Field Name	Description
Usage Class	The system populates this field with the value from one of the following fields according to the Usage Type: Equipment Class, Employee Class, or Materials Testing Class.
Usage Type	Although not a key to an Internal Costing Rate record, this required field defines the type of record, which is turn governs what fields are required and which are optional by inferring Usage Group. Usage Type is a configurable list maintained offline in the CVL_USG_TYP database table.
Rate Category	A classification of the type of rate with values of *Fixed* and *Variable*. Only with equipment can a fixed rate be defined. Labor, equipment, and materials testing all support the variable rate.
Usage Group Description	The inferred name of the Usage Group inferred from the selected Usage Type.
Unit of Measure	The measurement method for the usage as defined on the Unit of Measure reference page that is shared by the Procurement function and others.
Internal Vendor Account Internal Vendor Name	For those internal costs where a second organizational entity is involved where costs are being reimbursed as expenditure credits or revenues, this identification of a record on the Internal Vendor Accounting Data reference page is required to retrieve the necessary chart of accounts.
Usage Class Object Usage Class Sub Object Usage Class Department Object	Default values populated on the generated transactions of the Internal Costing system process when the Internal Costing Transaction did not specify a value (that is, override these defaults). Please see the section for the Special Accounts reference page for more information on the order of inferences.
Employee Class	Each internal cost with the Usage Type of *Labor* requires this field to identify the record and populate the Usage Class.

Field Name	Description
Salary Rate	A required rate when the Usage Type is *Labor* used for calculating labor costs. This rate will be used if the Employee Information record for an Internal Costing Journal record has a Salary Rate of 0.0000, at all other times the Employee Information rate will be used.
Overtime Object Overtime Sub Object Overtime Department Object	Default values populated on the generated transactions of the Internal Costing system process when the Internal Costing Transaction did not specify a value (that is, override these defaults). Please see the section for the Special Accounts reference page for more information on the order of inferences.
Default Value for Employee Benefits Multiplier Type	The value selected for this control will infer to the Internal Costing Transaction to control what, if any, benefit multipliers will be used when generating transactions by the Internal Costing System Process.
Employee Benefits Multiplier 1 – 5 Benefits Multiplier 1 – 5 Object Benefits Multiplier 1 – 5 Sub Object Benefits Multiplier 1 – 5 Department Object Benefits Multiplier 1 – 5 Standard/Overtime Benefits Multiplier 1 – 5 Inter/Intra-COA	When not defining benefit multiplier rates to effective dates on the Employee Benefits Multiplier reference page, this set of fields are used in the same manner as described in the section Employee Benefits Multiplier reference page. Please see the section on the System Options reference page that describes the system setting that determines the source of multiplier information. Irrespective of where the multipliers come from, the object chart of account defaults here are used when the Internal Costing Transaction did not specify a value (that is, override these defaults). Please see the section for the Special Accounts reference page for more information on the order of inferences.
Equipment Class	Each internal cost with the Usage Type of *Equipment (ID Required)* or *Equipment (ID Not Required)* requires this field to identify the record and populate the Usage Class.
Equipment Usage Rate	A required rate when the Usage Type is *Equipment (ID Required)* or *Equipment (ID Not Required)* used for calculating equipment usage costs. This rate will be used if the Equipment record for an Internal Costing Journal record has an Equipment Rate - Standard of 0.0000, at all other times the Equipment rate will be used.

Field Name	Description
Equipment Surcharge Rate	A required rate when the Usage Type is *Equipment (ID Required)* or *Equipment (ID Not Required)* used for calculating equipment usage costs. This rate will be used if the Equipment record for an Internal Costing Journal record has an Equipment Surcharge Rate of 0.0000, at all other times the Equipment rate will be used.
Equipment Surcharge Buyer Internal Vendor Account.	When the chart of accounts recording equipment surcharges should not be the same as the chart of accounts used on the Internal Costing Transaction, this field is used to identify a record on the Internal Vendor Accounting Data reference page to obtain the different chart of accounts. Please note this feature is only allowed at the Equipment Class level and is not available at the Equipment ID.
Equipment Surcharge Buyer Object Equipment Surcharge Buyer Sub Object Equipment Surcharge Buyer Department Object	When recording surcharge costs to the buyer, this set of optional object fields can be used to override those supplied from the Internal Vendor Accounting Data record identified for the buyer.
Equipment Surcharge Seller Revenue Equipment Surcharge Seller Sub Revenue Equipment Surcharge Seller Department Revenue	When recording surcharge revenue to the seller, this set of optional revenue fields can be used to override those supplied from the Internal Vendor Accounting Data record identified for the seller.
Equipment Surcharge Seller Object Equipment Surcharge Seller Sub Object Equipment Surcharge Seller Department Object	When recording surcharge reimbursement to the seller, this set of optional object fields can be used to override those supplied from the Internal Vendor Accounting Data record identified for the seller.
Materials Testing Class	Each internal cost with the Usage Type of *Materials Testing* requires this field to identify the record and populate the Usage Class.

Field Name	Description
Materials Testing Rate	A required rate when the Usage Type is *Materials Testing* used for calculating costs.

Internal Costing Parameters

The Internal Costing Parameters (ICP) reference page is used to supply a set of input parameters into the Internal Costing system process for selection and output. Separate records can be created with each instance of the system process or updates can be made to existing parameter records that are reused.

› Field Information

The table below contains a list the fields in groups with the first being those that apply to selection then output.

Field Name	Description
Parameter ID	The system assigns a unique ID to each record added.
Usage From Usage To	Two optional selection criteria that are used to select a date range of Internal Costing Journal records by using the fields on the journal by the same names.
Selection Department	An optional selection parameter to select a set of records from the Internal Costing Journal based on Department. Please note that is not the Internal Costing Transaction Department.
Selection Fiscal Year Selection Accounting Period Selection Budget Fiscal Year	Three optional selection criteria that are used to select a range of Internal Costing Journal records using one or more of those date criteria supplied on the Internal Costing Transaction. Please note that if Accounting Period is used Fiscal Year should also be supplied, else the system will take the current fiscal year and subtract 1 to default the Selection Fiscal Year.
Summary Type	One of two valid values must be specified: • *Detailed* will result in one output buyer accounting line for each selected Internal Costing Journal record. If seller lines are to be generated, a single seller line will also be created to match each buyer line. • *Summarized* will result in the summarization of all Internal Costing Journal records that have identical combinations

Field Name	Description
	of chart of account elements into one output accounting line. Seller lines will also be summarized.
Transaction Code Transaction Department Transaction Unit Transaction Prefix	Four output parameters used to create the transactions in the Charge Transaction Type for internal costs; of the four, the Code and Department fields are required. A matching Automatic Transaction Numbering reference page record must exist to match the Code, Department and Prefix (note **** does not have to be entered as a prefix here).
Buyer Event Type	When the Default Event Type for the output Transaction Code entered, as seen on the Transaction Control reference page, is not the desired event type for buyer accounting lines, this field supplies an alternative event type. Seller accounting line event types will come from Internal Vendor Accounting Data records.
Output Fiscal Year Output Accounting Period Output Budget Fiscal Year	When the defaulting values for the date the transactions are generated are not desired, these parameters are used to supply alternative values.

Cost Allocation Plan Setup

As an alternative to recording labor overhead with Cost Allocation, there is functionality to do that calculation through the Internal Costing process based on usage of Task Order and/or Task with the possible use of Program Class, Section, and Sub Task. The Usage Types of *Labor*, *Interfaced Labor*, *Adjustment*, and *Retroactive* are the only ones read by this process. After setup on the following pages listed below, Internal Costing Usage Transactions (ICT) are processed to update the Internal Costing Journal (ICJ), then the Internal Overhead Process is run, and finally the Internal Costing chain is run to create Charge (CH) transactions to record the overhead.

As the Internal Overhead Process is based on settings at Task or Task Order (see the Overhead Indicator on Department – DEPT) as well as settings on the Overhead Rate and Overhead Variation Code pages, it is critical that assurances are put into place that ensure the process is able to locate the information necessary to perform calculations. Having the Overhead Fiscal Year on the Internal Costing Usage Transaction (ICT) is the primary trigger that differentiates ICJ records for overhead from those for internal costs. It is suggested that a cloned ICT transaction is used or a cloned Internal Costing event type (IC01) is used to enforce correct transaction data entry to the journal for processing. If using a cloned event type, the requirement for Task and/or Task Order can be accomplished. If using a transaction code, those two can be required along with Overhead Fiscal Year, Variation Code, and Part-Time / Full-Time indication as well as restrict to just those four Usage Types. This can be done with one or more Configurable Rule (BORULE) records.

Of particular note, there is a field called Flag 1, as delivered, that can be made visible on the ICT and ICJ (as is the case will all fields associated with Cost Allocation Plan functionality) that can be used to record information to the ICJ for reporting purposes only and it will cause that journal record to be skipped by the Internal Overhead Process.

The following pages can be set up to establish a cost allocation plan in order to calculate overhead with Internal Costing.

- Department

- Task Order

- Task

- Overhead Variation Code

- Overhead Rate

- Internal Overhead Process Parameters

Department

Whether or not overhead is calculated with the Cost Allocation Plan functionality of Internal Costing starts with setup for a department. The Overhead Indicator field is that trigger. Although delivered as hidden and with the default value of *Not Applicable,* should the field be changed to visible and set to either *Task Order* or Task, then the feature is 'on' dependent on the subsequent setup on those COA reference pages.

Task Order

Overhead calculation with the Cost Allocation Plan functionality of Internal Costing continues with setup for task orders. The following fields are delivered as hidden with the defaults and need to be made visible.

Field Name	Description
CAP Rate Indicator	A required field with values of *None, Rate Set 1, Rate Set 2, Rate Set 3,* and *Rate Set 4.* The choice of *None* will ensure the Overhead Calculation Process to skip the task order and the other values will result in selection and then application with the selected rate from the Overhead Rate page.
Direct / Indirect	This CVL field is read and updated to Internal Costing Journal records created for a Task Order.

Task

Overhead calculation with the Cost Allocation Plan functionality of Internal Costing continues with setup for tasks. The following fields are delivered as hidden with the defaults and need to be made visible.

Field Name	Description
CAP Rate Indicator	A required field with values of *None, Rate Set 1, Rate Set 2, Rate Set 3,* and *Rate Set 4.* The choice of *None* will ensure the Overhead Calculation Process to skip the task and the other values will result in selection and then application with the selected rate from the Overhead Rate page.
Direct / Indirect	This CVL field is read and updated to Internal Costing Journal records created for a Task.

Overhead Variation Code

Setup on this Overhead Variation Code (OVARC) page will define a variation code for one or more of the variation code types to a combination of task order, task and sub task for overhead calculation.

› Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
Variation Code Type	A required field that defines the variation to *Straight Time, Overtime,* or *Other.* The latter being the type for which the overhead rates will not be defined.

Overhead Rate

Setup on this Overhead Rate (OHRT) page stores the various rates used by the Overhead Costing batch process. Rates are defined yearly and not to a shorter timeframe. If rates change within a year, all costs under the old rate should be recorded before changing the rate, which will impact all future allocations. Beyond a fiscal year, rates have to be defined to a specific department. Options exist to define different rates by Program Class or Section. When not necessary, the wildcard of *ALL* should be entered. These two additional COA can be used as a 'cost center'. Once a valid code for either optional COA is specified, the wildcard of *ALL* is not allowed in that COA for a fiscal year and department combination. Furthermore, both optional COA cannot have actual codes specified for the same fiscal year and department.

Rates for all five rates are not necessary for each department, however, they must be defined if loaded to the Internal Costing Journal with the Internal Costing Transaction. The five types of rates are: Compensated Time Off, Fringe, Central Services, Department Administration, and Department Specified.

> › Field Information

The table below contains those fields that are not self-evident and not defined on a previous section listed in alphabetical order:

Field Name	Description
CAP Rate Set	For those Task Orders or Tasks using the overhead feature, one of four values must be selected to associate the COA code with a set of rates defined on the Overhead Rate page. Rate Set 1 is generally considered the set with one or more 'full' rates for the five types of rates. Rate Sets 2, 3, and 4 are sets that contain a 'modified' set of rates.
CAP Rate Version	This field is an optional descriptive attribute used commonly to tie the rate to a centrally published version of defined rates.
Department Specified	Used for rates outside of the other four specific types: Compensated Time Off, Fringe, Central Services, and Department Administration.
Variation Code Type	A required field that defines the variation to *Straight Time, Overtime,* or *Other.* The latter being the type for which the overhead rates will not be defined.

Internal Overhead Process Parameters

The Internal Overhead Process Parameters (IOPP) page is required setup for each run of the Internal Overhead batch process, supplying selection parameters for Internal Costing Journal records: Department, Overhead Fiscal Year, and Accounting Period. The Parameter ID defined is input as a batch parameter to connect the selection criteria to the process. The remaining field, Recalculate Overhead, is an indication of previously processed journal records should have overhead recalculated because of configuration changes.

Advanced - Batch Processing

Please refer to the "Batch Jobs" topic for a list of all batch jobs and the "Chain Jobs" topic for a list of all chain jobs for the Internal Costing area. For detailed information on the jobs (such as when to run, input, output, and process parameters) refer to the associated run sheet in the *CGI Advantage Cost Accounting Run Sheets* guide.

Batch Jobs

The Internal Costing area includes the following batch job. For detailed information on the job, refer to the associated run sheet in the *CGI Advantage Cost Accounting Run Sheets* guide.

Job Name	Description	Batch Catalog Section
Internal Overhead Process	The Internal Overhead Process calculates overhead costs based on labor costs recorded on the Internal Costing Journal (ICJ) and rates established on the Overhead Rate (OHRT) page. Those costs are then updated on the same ICJ records for the Internal Costing Chain to process.	Cost Accounting

Chain Jobs

The Internal Costing area includes the following chain job. For detailed information on the job, refer to the associated run sheet in the *CGI Advantage Cost Accounting Run Sheets* guide.

Job Name	Description	Batch Catalog Section
Internal Costing Chain	The Internal Costing Chain includes two main processes: one that calculates internal costs and another that creates charge transactions.	Cost Accounting

Advanced - Reports

Reports can be created from CGI Advantage Financial or they can be created from CGI infoAdvantage or CGI Advantage Insight, if installed at your site. Refer to one of the following topics for more information.

- CGI Advantage Financial Reports

- CGI infoAdvantage

- CGI Advantage Insight

CGI Advantage Financial Reports

The Internal Costing chain job creates the following reports. For more information on the reports, refer to the Internal Costing run sheet in the *CGI Advantage Cost Accounting Run Sheets* guide.

- Internal Cost Update Exception Report

- Internal Cost Update Statistics Report

- CH Transaction XML Generator Report

- CH Transaction XML Generator Exception Report

- CH Exception report with the CH transaction ID and Error Messages

CGI infoAdvantage

For sites that have implemented infoAdvantage, please refer to the below for the universe and report information specific to this functional area.

- Universes - Please refer to the *CGI_infoAdvantage_4_Financial_Universes_Guide* for more information on the universe that exists for this functional area.

- Reports - The sample reports and templates can be found under the CGI Resource Library link: https://sdc.cgi.com/aal/

CGI Advantage Insight

For sites that have implemented Insight, please refer to the below for the semantic model information specific to this functional area.

- Semantic Model - Please refer to the *CGI_Advantage_Insight_4_Semantic_Model_Guide* for more information on the model that exists for this functional area.