

# CA Clarity™ PPM

## Business Objects Universe Developer Guide

Release 13.2.00



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# Chapter 1: Getting Started

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This section contains the following topics:

[About the CA Clarity Business Objects Universe](#) (see page 7)

## About the CA Clarity Business Objects Universe

The CA Clarity Business Objects (BO) Universe for CA Clarity objects allows you to create and customize reports without having to have data model knowledge to report. You can run a query to display information from the following universes:

- [Investment Financials](#) (see page 31)
- Investment Financials v13
- [Investments](#) (see page 9)
- [Resource](#) (see page 51)
- [Timesheet](#) (see page 65)

Each BO Universe uses the InfoView web interface of Business Objects for front-end reporting. You can use InfoView to generate your own reports using any of the universes as the semantic layer. In addition, you can use the interface to modify an existing report.

Each BO Universe uses the CA Clarity database as the back-end database. All universes connect to the CA Clarity database through a connection object.

**Note:** BO Universes follow CA Clarity security. If a user does not have access rights to specific information, the information is not available to the user.

## Business Objects Universe Attributes

Business Objects Universe includes the following attributes:

- **Object:** Represents a collection of attributes and operations about a particular CA Clarity functional area.
- **Class:** Represents a logical grouping of objects within a universe that represent a category of objects or indicates the category of objects.
- **Condition:** Represents a condition of predefined "where" clauses. You can insert a condition into a "SELECT" statement.

## CA Clarity Reports Overview

Consider the following information for the CA Clarity reports:

- You can run any Web Intelligence or Crystal Report from CA Clarity.
- You can add parameters to each report and map them to a CA Clarity report definition.
- You can create universe objects that support security for CA Clarity.
- You can view which user ran a report so the appropriate localized data displays.

## Launch a Business Objects Universe

**Follow these steps:**

1. Open InfoView Home, and click My Inbox.
2. Click New, and then click Web Intelligence Document.
3. Click the Universe you want to launch.

See the appropriate Business Objects documentation for more information about Business Objects.



# Chapter 2: Investments Universe

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This section contains the following topics:

[About the Investments Universe](#) (see page 9)

[Investments Class](#) (see page 9)

[Dates Class](#) (see page 23)

[Measures Class](#) (see page 25)

[OBS Class](#) (see page 29)

[Report Labels Class](#) (see page 30)

## About the Investments Universe

The BO Universe for investments allows you to create both Web Intelligence documents and Crystal Reports. You can use this universe to manage your investments, such as running reports on the following:

- availability of a project
- allocated hours of a project
- actual hours of a project

You can report data for a project by daily, weekly, or monthly periods.

When you create a custom class under projects, the custom class has all the capabilities of the project. Within the Investments universe, you can report on the custom classes as investments within this universe.

## Investments Class

You can use the following attributes to query investments:

### **ID**

Displays the unique identifier.

### **Name**

Displays the name for the investment.

**Detail Object:** Internal Project ID

### **Description**

Displays the description.

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

**Manager**

Displays the name of the resource responsible for managing the project.

**Detail Object:** Internal Project Manager ID

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Goal**

Displays the goal for the investment that aligns it with the main corporate strategy. This metric is used in portfolio analysis when you use comparable goal criteria across all portfolio investments.

**Values:** Cost Avoidance, Cost Reduction, Grow the Business, Infrastructure Improvement, and Maintain the Business

**Detail Object:** Internal Goal Code

**Status Comments**

Displays any comments about the status of an investment.

**Status Indicator**

Indicates the project status.

**Stoplight values:**

- Green. The project is on track.
- Yellow. A minor variance exists in the overall status of the projects.
- Red. A significant variance exists in the overall status of the project.

**Detail Object:** Internal Status Enum

**Status**

Displays the status of the investment.

**Values:** Approved, Rejected, and Unapproved

**Detail Object:** Internal Task Status Enum

**Progress**

Displays the completion progress of an investment.

**Values:** Completed, Not Started, and Started

**Detail Object:** Internal Progress Enum

**Entity**

Displays the entity that belongs to an investment.

**Detail Object:** Internal Entity ID

**Track Mode**

Displays the tracking method used to enter time for this investment, including the following:

- Clarity. Staff members enter time against their assigned tasks using time sheets.
- None. Nonlabor resources, such as expenses, materials, and equipment track actuals through transaction vouchers, or through a desktop scheduler, such as Open Workbench and Microsoft Project.
- Other. Indicates that actuals are imported from a third-party program.

**Detail Object:** Internal Track Mode Enum

**Active (Yes/No)**

Displays if the investment is active.

**Open for TE (Yes/No)**

Displays if the investment is open for time entry.

**Is Template (Yes/No)**

Displays if the investment is derived from a template.

**Risk**

Displays if an investment is at risk.

**Detail Objects:** Risk - Flexibility, Risk - Funding, Risk - Human interface, Risk - Implementation, Risk - Interdependency, Risk - Objectives, Risk - Organizational Culture, Risk - Resource Availability, Risk - Sponsorship, Risk - Supportability, and Risk - Technical

**Created Date**

Displays the creation date of the investment.

**Created By**

Displays the name of resource that created the investment.

**Detail Object:** Created By Internal ID

**Last Updated Date**

Displays the date when this item was last updated and saved.

**Last Updated By**

Displays the name of the resource who last updated and saved the item.

**Detail Object:** Last Updated By Internal ID

## Team Staff

Use the following attributes to query team staff:

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Assigned Resource ID

**Role**

Displays the role of the resource on the investment.

**Detail Object:** Internal Project Role ID

**Is Role (Yes/No)**

Indicates if the project is derived from a role.

**Booking Status**

Displays the resource booking status for the investment.

**Display Values:** Hard, Soft, and Mixed

**Detail Object:** Internal Booking Status Enum

**Request Status**

Displays if at least one change request is logged against the investment.

**Detail Object:** Internal Request Status Enum

**Open for TE (Yes/No)**

Displays if the investment is open for time entry.

**Requirement Name**

Displays the name of the requirement.

**Resume Keywords**

Displays any resume keywords that were attached to the profiles of the resource.

**Capitalization%**

Displays the capitalization percentage value for team members.

**Unfilled Requirement (Yes/No)**

Indicates whether this investment included any unfilled requirements.

**Allocation Start Date**

Displays the allocated start date for the investment.

**Allocation Finish Date**

Displays the allocated finish date for the investment.

**Hard Allocation Start Date**

Displays the investment allocated hard start date.

**Hard Allocation Finish Date**

Displays the investment allocated hard finish date.

**Allocation Baseline Start Date**

Displays the investment baseline allocated start date.

**Allocation Baseline Finish Date**

Displays the investment baseline allocated finish date.

## WBS Class

You can use the following attributes to query work breakdown structure (WBS):

**Task ID**

Displays the unique identifier associated with this task.

**Task Name**

Displays the name of the task.

**Detail Object:** Internal Task ID

**WBS Phase Name**

Displays the work breakdown structure (WBS) phase name of a task.

**Detail Objects:** Internal Phase ID, Phase ID, Phase Status, Phase Sequence Number, Is Key Phase (Yes/No), Phase Start Date, Phase Finish Date, Phase Duration, Phase Baseline Start Date, Phase Baseline Finish Date, Phase Baseline Duration, and Phase Percent Complete

**WBS Activity Name**

Displays the work breakdown structure (WBS) activity name of a task.

**Detail Objects:** Internal Activity ID, Activity ID, Activity Status, Activity Sequence Number, Is Key Activity (Yes/No), Activity Start Date, Activity Finish Date, Activity Duration, Activity Baseline Start Date, Activity Baseline Finish Date, Activity Baseline Duration, and Activity Percent Complete

**Status**

Displays the status of the task.

**Values:** Approved, Rejected, and Unapproved

**Detail Object:** Internal Task Status Enum

**WBS Level**

Displays the level of the work breakdown structure (WBS).

**WBS Record Type**

Displays the work breakdown structure (WBS) record type.

**WBS Sequence Number**

Displays the sequence number of the work breakdown structure (WBS).

**Is Key (Yes/No)**

Indicates this project as a key project.

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Duration Days**

Displays the duration days of the project.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

**Baseline Duration Days**

Displays the baseline duration days of the investment.

**Percent Complete**

Displays the completion percentage of the investment or project.

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Cost Type**

Displays the cost type (capital cost or operating cost) for the task in the WBS.

**Category**

Displays the classification of the investment.

## Assignments Class

You can use the following attributes to query assignments:

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Assigned Resource ID

**Resource ID**

Displays the identification of the resource.

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

## Issues Class

You can use the following attributes to query issues:

**Description**

Defines a description for the issue.

**Issue Assigned To**

Displays the resource that was assigned this issue.

**Detail Object:** Internal Issue Assigned To ID

**Category**

Displays the category to which the issue is assigned.

**Display Values:** Flexibility, Funding, Human Interface, Implementation, Interdependencies, Objectives, Organizational Culture, Resource Availability, Sponsorship, Success Risk, Supportability, and Technical

**Detail Object:** Internal Issue Category Code

**Issue Priority**

Displays the priority of an issue.

**Values:** Low, Medium, and High

**Detail Object:** Internal Issue Priority Code

**Issue Status**

Displays the status of an issue.

**Values:** Open, Work in Progress, Closed, and Resolved

**Detail Object:** Internal Issue Status Code

**Issue Target Resolution Date**

Displays the date this issue was targeted to be resolved.

**Issue Resolution**

Displays the resolution of the issue.

**Issue Resolved Date**

Displays the date the issue was resolved.

**Issue Resolved By**

Displays the identification of the resource that resolved the issue.

**Detail Object:** Internal Issue Resolved By ID

**Date Created**

Displays the creation date of an issue.

**Updated By**

Displays the name of the resource who last updated and saved the issue.

**Detail Object:** Internal Issue Last Updated By ID

**Date Last Updated**

Displays the date when the issue was last updated and saved.



## Risks Class

You can use the following attributes to query risks:

**Risk ID**

Displays the unique identifier assigned to the risk for tracking.

**Risk Name**

Displays the name of the risk.

**Detail Object:** Internal Risk ID

**Risk Description**

Displays a description of the risk.

**Risk Symptoms**

Displays the symptoms identifying the risk.

**Risk Assigned To**

Displays the resource that was assigned this risk.

**Detail Object:** Internal Risk Assigned To ID

**Risk Category**

Displays the category to which the risk belongs.

**Values:** Flexibility, Funding, Human Interface, Implementation, Interdependencies, Objectives, Organizational Culture, Resource, Availability, Supportability, and Technical

**Detail Object:** Internal Risk Category Code

**Risk Impact**

Displays the effect of the particular risk on the project, determined by performance, supportability, cost, and schedule. The impact helps to calculate the risk exposure.

**Values:** Low, Medium, and High

**Detail Object:** Internal Risk Impact Enum

**Risk Impact Date**

Displays the date when the repercussions from the risk impacted the project.

**Impact Description**

Displays a description of the result the risk had on the project.

**Assumptions**

Displays the assumptions that determined the risk.

**Priority**

Displays the priority of a risk.

**Values:** Low, Medium, and High

**Detail Object:** Internal Risk Priority Code

**Risk Status**

Displays the status of a risk.

**Values:** Open, Work in Progress, Resolved, and Closed

**Detail Object:** Internal Risk Status Code

**Risk Probability**

Displays the probability that the risk occurs. The risk probability is used to calculate the risk exposure.

**Display Values:** Low, Medium, and High

**Detail Object:** Internal Risk Probability Enum

**Risk Response Type**

Displays the desired response type for the risk.

**Values:** Watch, Accept, Transfer, and Mitigate

**Detail Object:** Internal Risk Response Type Code

**Target Resolution Date**

Displays the target date of resolving the risk.

**Risk Resolution**

Displays the resolution of the risk.

**Risk Resolved Date**

Displays the date the risk was resolved.

**Risk Resolved By**

Displays the identification of the resource that resolved the risk.

**Detail Object:** Internal Risk Resolved By ID

**Date Created**

Displays the date of creating the risk.

**Risk Last Updated By**

Displays the name of the resource who last updated and saved this risk.

**Detail Object:** Internal Risk Last Updated By ID

**Date Last Updated**

Displays the date when the risk was last updated and saved.

## Change Requests Class

Use the following attributes to query change requests:

**CR ID**

Displays the identification of the change request.

**CR Name**

Displays the name of the change request.

**Detail Object:** Internal Change Requests ID

**CR Description**

Displays a description of the change request.

**CR Owner**

Displays the owner of the change request.

**Detail Object:** Internal CR Owner ID

**CR Category**

Displays the category to which this change request was assigned.

**Values:** Flexibility, Funding, Human Interface, Implementation, Interdependencies, Objectives, Organizational Culture, Resource Availability, Sponsorship, Supportability, and Technical

**Detail Object:** Internal CR Category Code

**CR Priority**

Displays the priority of the change request.

**Values:** Low, Medium, and High

**Detail Object:** Internal CR Priority Code

**CR Status**

Displays the status of the change request.

**Values:** Open, Work in Progress, Resolved, and Closed

**Detail Object:** Internal CR Status Code

**CR Benefits**

Displays the benefits of the change request.

**CR Impact on Baseline**

Displays the effect of the particular change request on the project baseline.

**CR Impact on Other Projects**

Displays the effect of the change request on other projects.

**CR Assessor**

Displays the assessor of the change request.

**Detail Object:** Internal CR Assessor ID

**CR Date Assessed**

Displays the actual date of assessing the change request.

**CR Approved By**

Displays the resource that approved the change request.

**Detail Object:** Internal CR Approved By ID

**CR Approved Date**

Displays the date of approving the change request.

**CR Expected Close Date**

Displays the expected close date of the change request.

**CR Next Review Date**

Displays the next review date of the change request.

**CR Closed Date**

Displays the actual close date of the change request.

**CR Created Date**

Displays the date of creating the change request.

**CR Last Updated By**

Displays the name of the resource last updating and saving the change request.

**Detail Object:** Internal CR Last Updated By ID

**CR Last Updated Date**

Displays the date when the change request was last updated and saved.

**CR Change in Cost (Currency)**

Displays the changes in the change request cost.

**CR Change in Schedule (Days)**

Displays the changes in the change request schedule.

**CR Change in Resources (Count)**

Displays the changes in the resources of the change request.

## Financial Information Class

You can use the following attributes to query financial information:

**Total Cost of Capital**

Displays the annual finance rate used to calculate the total cost of capital of an investment.

**Currency Code**

Displays the defined currency code.

**Calculate NPV Data (Yes/No)**

Indicates if the Net-Present Value (NPV) date followed the investment date.

**Planned Benefit Start**

Displays the date when the planned benefits of the investment started.

**Planned Benefit Finish**

Displays the date when the planned benefits of the investment completed.

**Planned Benefit**

Displays the planned benefits of the investment.

**Planned Cost Start**

Displays the planned cost start date of an investment.

**Planned Cost Finish**

Displays the planned cost finish date of an investment.

**Planned Cost**

Displays the planned cost of an investment.

**Planned IRR**

Displays the planned internal rate of return for the investment.

**Planned MIRR**

Displays the planned modified internal rate of return (MIRR) for the investment.

**Planned ROI**

Displays the planned ROI (Return on Investment) of this investment.

**Planned NPV**

Displays the planned NPV (Net Present Value) of the investment.

**Planned Breakeven**

Displays the date and amount to indicate the period and value at which the project becomes profitable.

**Planned Payback Period**

Displays the date of the investment planned payback period.

**Budget Cost Start**

Displays the budgeted cost start date of an investment.

**Budget Cost Finish**

Displays the budgeted cost finish date of an investment.

**Budget Cost**

Displays the budgeted cost of an investment.

**Budget Revenue Start**

Displays the budgeted revenue start date of an investment.

**Budget Revenue Finish**

Displays the budgeted revenue finish date of an investment.

**Budget Revenue**

Displays the budgeted revenue of an investment.

**Budget IRR**

Displays the budgeted internal rate of return for the investment.

**Budget MIRR**

Displays the budgeted modified internal rate of return for this investment.

**Budget ROI**

Displays the budgeted ROI (Return on Investment) of this investment.

**Budget NPV**

Displays the budgeted NPV (Net Present Value) of this investment.

**Budget Breakeven**

Displays the date when the investment budgeted cost equals the budgeted benefit.

**Budget Payback Period**

Displays the date of the investment budgeted payback period.

**Forecast Cost Start**

Displays the forecasted start date of an investment.

**Forecast Cost Finish**

Displays the forecasted cost finish date of an investment.

**Forecast Cost**

Displays the forecasted cost of an investment.

**Forecast Revenue Start**

Displays the forecasted revenue start date of an investment.

**Forecast Revenue Finish**

Displays the forecasted revenue finish date of an investment.

**Forecast Revenue**

Displays the forecasted revenue of an investment.

**Forecast IRR**

Displays the internal rate of return predicted for the investment.

**Forecast MIRR**

Displays the forecasted modified internal rate of return for this investment.

**Forecast ROI**

Displays the forecasted ROI (Return on Investment) of this investment.

**Forecast NPV**

Displays the forecasted NPV (Net Present Value) of this investment.

**Forecast Breakeven**

Displays the date when the investment forecasted cost will equal the forecasted benefit.

**Forecast Payback Period**

Displays the date of the investment forecasted payback period.

## Dates Class

You can use the following attributes to query dates:

**Daily Date**

Displays data on a daily basis.

**Weekly Start Date**

Displays data from a weekly start date.

**Weekly End Date**

Displays data from a weekly end date.

**Monthly Start Date**

Displays data from a weekly start date.

**Monthly End Date**

Displays data from a monthly end date.

**Quarterly Start Date**

Displays data from a quarterly start date.

**Quarterly End Date**

Displays data from a quarterly end date.

**Previous Week (Weekly Dates)**

Displays data from the previous week using weekly dates.

**Previous Month (Daily Dates)**

Displays data from the previous month using daily dates.

**Previous Month (Monthly Dates)**

Displays data from the previous month using monthly dates.

**Previous Quarter (Monthly Dates)**

Displays data from the previous quarter using monthly dates.

**Previous Quarter (Quarterly Dates)**

Displays data from the previous quarter using quarter dates.

**Previous Year (Monthly Dates)**

Displays data from the previous year using monthly dates.

**Current Week (Weekly Dates)**

Displays data from the current week using weekly dates.

**Current Month (Daily Date)**

Displays data from the current month using daily dates.

**Current Month (Monthly Dates)**

Displays data from the current month using monthly dates.

**Current Quarter (Monthly Dates)**

Displays data from the current quarter using monthly dates.



**Current Quarter (Quarterly Dates)**

Displays data from the current quarter using quarterly dates.

**Current Year (Monthly Dates)**

Displays data from the current year using monthly dates.

**Next Week (Weekly Dates)**

Displays data for next week using weekly dates.

**Next Month (Daily Date)**

Displays data for next month using daily dates.

**Next Month (Monthly Dates)**

Displays data for next month using monthly dates.

**Next Quarter (Monthly Dates)**

Displays data for next quarter using monthly dates.

**Next Quarter (Quarterly Dates)**

Displays data for next quarter using quarterly dates.

**Next Year (Monthly Dates)**

Displays data for next year using monthly dates.

## Measures Class

### Labor Class

You can use the following attributes when querying labor:

**Labor Baseline FTEs**

Displays the current baseline value of total work for labor resources as measured in full-time equivalent (FTE).

**Labor Actuals FTEs**

Displays the total number of posted actuals for labor resources as measured in full-time equivalent (FTE).

**Labor ETC FTEs**

Displays the total of estimated to complete (ETC) work for labor resources as measured in full-time equivalent (FTE).

**Labor Allocation FTEs**

Displays the total planned allocation for labor resources as measured in full-time equivalent (FTE).

**Labor Hard Allocation FTEs**

Displays the total hard allocation for labor resources as measured in full-time equivalent (FTE).

**Labor Available FTEs**

Displays the total availability for labor resources as measured in full-time equivalent (FTE).

**Labor Baseline FTE %**

Displays the current baseline value of total work for labor resources as measured in percent availability of a full-time equivalent (FTE).

**Labor Actual FTE %**

Displays the total number of posted actuals for labor resources as measured in percent availability of a full-time equivalent (FTE).

**Labor ETC FTE %**

Displays the total of estimated to complete (ETC) work for labor resources as measured in % Availability of a full-time equivalent (FTE).

**Labor Allocation FTE %**

Displays the total planned allocation for labor resources as measured in percent availability of a full-time equivalent (FTE).

**Labor Hard Allocation FTE %**

Displays the total hard allocation for labor resources as measured in percent availability of a full-time equivalent (FTE).

**Labor Available FTE %**

Displays the total availability for labor resources as measured in percent availability of a full-time equivalent (FTE).

**Labor Baseline Hours**

Displays the current baseline value of total work for labor resources as measured in hours.

**Labor Actual Hours**

Displays the total number of posted actuals for labor resources as measured in hours.

**Labor ETC Hours**

Displays the total of estimated to complete (ETC) work for labor resources as measured in Hours.

**Labor Allocation Hours**

Displays the total planned allocation for labor resources as measured in hours.

**Labor Hard Allocation Hours**

Displays the total hard allocation for labor resources as measured in hours.

**Labor Available Hours**

Displays the total availability for labor resources as measured in hours.

**Labor Baseline Cost**

Displays the current baseline cost (BAC) of total work for labor resources.

**Labor Actual Cost**

Displays the cost of posted actuals for labor resources.

**Labor ETC Cost**

Displays the total cost of estimated to complete (ETC) work for labor resources.

**Labor Allocation Cost**

Displays the total cost of planned allocation for labor resources.

**Labor Hard Allocation Cost**

Displays the total cost of hard allocation for labor resources.

## Equipment Class

You can use the following attributes when querying equipment:

**Equipment Baseline Hours**

Displays the current baseline value of total work for equipment resources as measured in Hours.

**Equipment Actual Hours**

Displays the total number of posted actuals for equipment resources as measured in Hours.

**Equipment ETC Hours**

Displays the total of estimated to complete (ETC) work for equipment resources as measured in Hours.

**Equipment Allocation Hours**

Displays the total planned allocation for equipment resources as measured in Hours.

**Equipment Hard Allocation Hours**

Displays the total hard allocation for equipment resources as measured in Hours.

**Equipment Available Hours**

Displays the total availability for equipment resources as measured in Hours.

**Equipment Baseline Cost**

Displays the current baseline cost (BAC) of total work for equipment resources.

**Equipment Actual Cost**

Displays the cost of posted actuals for equipment resources.

**Equipment ETC Cost**

Displays the total cost of estimated to complete (ETC) work for equipment resources.

**Equipment Allocation Cost**

Displays the total cost of estimated to complete (ETC) work for equipment resources.

**Equipment Hard Allocation Cost**

Displays the total cost of hard allocation for equipment resources.

## Material Class

Use the following attributes when querying material:

**Material Baseline Cost**

Displays the current baseline cost (BAC) of total work for material resources.

**Material Actual Cost**

Displays the cost of posted actuals for material resources.

**Material ETC Cost**

Displays the total cost of estimated to complete (ETC) work for material resources.

**Material Allocation Cost**

Displays the total cost of planned allocation for material resources.

**Material Hard Allocation Cost**

Displays the total cost of hard allocation for material resources.

## Expenses Class

You can use the following attributes when querying expenses:

**Expense Baseline Cost**

Displays the current baseline cost (BAC) of total expenses.

**Expenses Actual Cost**

Displays the cost of posted actuals for expenses.

**Expenses ETC Cost**

Displays the total cost of estimated to complete (ETC) expenses.

**Expenses Allocation Cost**

Displays the total cost of planned allocation for expenses.

**Expenses Hard Allocation Cost**

Displays the total cost of hard allocation for expenses.

## Forecast/ Budget Class

The following are the attributes for querying forecast or budget:

**Forecast Plan Units**

Displays the total number of units for the forecast plan.

**Forecast Plan Cost**

Displays the total cost of the forecast plan.

**Budget Plan Units**

Displays the total number of units for the budget plan.

**Budget Plan Cost**

Displays the total cost of the budget plan.

## OBS Class

You can use the following attributes when querying OBS:

**OBS Path**

Displays the OBS path.

**Detail Object:** Internal OBS Unit ID

**OBS Type Name**

Displays the model for the OBS, such as a geographical office location for a company, organizational chart, project types, and resource pool.

**Level 1 through Level 10 Name**

Displays the structure of the OBS hierarchy.

**Example:** An OBS type based on organization chart could have "Company" as level 1, "Business Unit" as level 2, and "Department" as level 3.

**Project OBS Filter**

Displays the filter used by OBS. Constrains the results based on the OBS.

## Report Labels Class

Use the following attributes to query report labels:

**Label Code**

Displays the label code used for the report label.

**Detail Object: Id**

**Language Code**

Displays the language code used for the report label.

**Translated String**

Displays the translated string used for the report label.

**Description**

Displays a description of the report label.

# Chapter 3: Investment Financials Universe

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This section contains the following topics:

[About the Investment Financials Universe](#) (see page 31)

[Investments Class](#) (see page 31)

[Transaction Headers Class](#) (see page 45)

[Cost Matrix Class](#) (see page 48)

[OBS Class](#) (see page 49)

[Report Labels Class](#) (see page 50)

[Security Conditions Class](#) (see page 50)

## About the Investment Financials Universe

Use the CA PPM Investment Financials universe only for custom reports created in a release prior to CA Clarity v13.0. CA strongly recommends creating new reports using the Universe: CA PPM Investment Financials v13.

## Investments Class

The following are the attributes for querying the investments:

### **Investment ID**

Displays the identification code for an investment.

### **Investment Name**

Displays the name of the investment.

**Detail Object:** Internal Investment ID

### **Description**

Displays the description.

### **Investment Manager**

Displays the name of the investment manager whose data displays in the report.

**Detail Object:** Internal Investment Manager ID

### **Location**

Displays where the investment work is being performed.

**Detail Objects:** Location Code and Internal Location ID

### Entity

Displays the entity the investment belongs to.

**Detail Objects:** Entity Code and Internal Entity ID

### Department

Displays the department to match with the investment.

**Detail Objects:** Department Code and Internal Department ID

### Financial Status

Displays the status that determines how transactions entered against the investment are handled.

#### Values:

- Open. All transactions entered against an investment can be fully processed.
- Hold. New transactions cannot accumulate on the investment, but existing transactions can be processed against the investment.
- Closed. New transactions cannot accumulate and credit memos cannot be issued against an investment. When you mark the investment financial status as "Closed," it no longer is open for financial processing.

**Detail Object:** Internal Financial Status Code

### Affiliated Investment Name

Displays the project name financially tied to the investment.

**Detail Object:** Affiliated Investment ID and Internal Affiliated Investment ID

### Type

Displays the investment type.

### Investment Class

Displays the investment used to group projects or investments for reporting.

**Detail Object:** Internal Investment ID

### Stage

Displays the lifecycle stage at which the investment stands. This metric is used in portfolio analysis when you use comparable stage criteria across all portfolio investments.

**Detail Object:** Internal Stage Code



**Goal**

Displays the goal for the investment that aligns it with the main corporate strategy. This metric is used in portfolio analysis when you use comparable goal criteria across all portfolio investments.

**Values:** Cost Avoidance, Cost Reduction, Grow the Business, Infrastructure Improvement, and Maintain the Business

**Detail Object:** Internal Goal Code

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

**Status Indicator**

Indicates the status an investment.

**Values:** On Track, Marginal, and Critical

**Detail Object:** Internal Status Indicator Enum

**Status Comments**

Displays comments, if any, about the project status.

**Active (Yes/No)**

Displays if the investment is active.

**Is Template (Yes/No)**

Displays if the investment is derived from a template.

**Open for Time Entry (Yes/No)**

Displays if the investment is open for time entry.

**Values:** Yes and No

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Partition**

Displays the partition associated with an attribute.

**Detail Object:** Internal Partition Code

## Investment WBS Class

You can use the objects within the Investment WBS section to query the work breakdown schedule (WBS) of an investment.

Use the following attributes to query the investment WBS:

**Task ID**

Displays the unique identifier associated with this task.

**Task Name**

Displays the name of the task.

**Detail Object:** Internal Task ID

**Status**

Displays the status of the investment.

**Values:** Completed, Started, and Not Started

**Detail Object:** Internal Status Enum

**WBS Level**

Specifies the number level depth in which to list elements of work breakdown structure (WBS). Information is aggregated from the level 2 position down to the specified level. Level 1 is reserved for the WBS root node element and is not included in this report.

**WBS Sequence Number**

Displays the order in which the work breakdown structure (WBS) fields appear on the report.

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

**Is Key (Yes/No)**

Indicates this project as a key project.

**Task Level**

Displays the level of the task.

**Percent Complete**

Displays the percentage of completion for the project.

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Category**

Displays the classification of the investment.

## Financial Information Class

You can use the objects within the Financial Information section to query the financial information of an investment, including its initial investment and its capital cost.

You can use the following attributes to query financial information:

**Initial Investment**

Displays the calculated initial cost investment of an investment.

**Calculate NPV Data (Yes/No)**

Indicates if the Net-Present Value (NPV) date followed the investment date.

**Planned Equals Budget**

Displays when the investment's planned cost equals the planned benefit.

**System's Total Cost of Capital**

Displays the annual finance rate used to calculate the total cost of capital.

**Investment Total Cost of Capital**

Displays the annual finance rate used to calculate the total cost of capital of an investment.

**System's Reinvestment Rate**

Displays the annual reinvestment rate used to calculate the total cost of capital.

**Investment Reinvestment Rate**

Displays the annual reinvestment rate used to calculate the total cost of capital of an investment.

**Planned Cost Start**

Displays the planned cost start date of an investment.

**Planned Cost Finish**

Displays the planned cost finish date of an investment.

**Planned Cost Total**

Displays the planned cost totals of an investment.

**Planned Benefit Start**

Displays the date when the planned benefits of the investment started.

**Planned Benefit Finish**

Displays the date when the planned benefits of the investment completed.

**Planned Benefit Total**

Displays the planned benefit totals of this investment.

**Planned NPV**

Displays the planned NPV (Net Present Value) of the investment.

**Planned ROI**

Displays the planned ROI (Return on Investment) of this investment.

**Planned Breakeven**

Displays the date and amount to indicate the period and value at which the project becomes profitable.

**Planned IRR**

Displays the planned internal rate of return for the investment.

**Planned MIRR**

Displays the planned modified internal rate of return (MIRR) for the investment.

**Planned Payback Period**

Displays the date of the investment planned payback period.

**Budget Cost Start**

Displays the budgeted cost start date of an investment.

**Budget Cost Finish**

Displays the budgeted cost finish date of an investment.

**Budget Cost Total**

Displays the budgeted cost totals of an investment.

**Budget Benefit Start**

Displays the budgeted benefit start date of an investment.

**Budget Benefit Finish**

Displays the budgeted benefit finish date of an investment.

**Budget Benefit Total**

Displays the budgeted benefit totals of an investment.

**Budget NPV**

Displays the budgeted NPV (Net Present Value) of this investment.

**Budget ROI**

Displays the budgeted ROI (Return on Investment) of this investment.

**Budget Breakeven**

Displays the date when the investment budgeted cost equals the budgeted benefit.

**Budget IRR**

Displays the budgeted internal rate of return for the investment.

**Budget MIRR**

Displays the budgeted modified internal rate of return for this investment.

**Budget Payback Period**

Displays the date of the investment budgeted payback period.

## Financial Plan Class

### Cost Plan Class

You can use the following attributes to query cost plans:

**Plan Name**

Displays the name of the plan.

**Plan ID**

Displays the unique identification of the plan.

**Plan Revision**

Displays the revision of the plan.

**Description**

Displays information about the cost plan.

**Benefit**

Displays the benefit of the cost plan.

**Period Type**

Displays the period type of the plan.

**Values:** Monthly, Quarterly, and Annually

**Detail Object:** Internal Period Type Code

**Plan Start Period**

Displays the start date of the plan.

**Detail Objects:** Internal Plan Start Period ID and Plan Start Date

**Plan End Period**

Displays the end date of the plan.

**Detail Objects:** Internal Plan End Period ID and Plan End Date

**Cost Plan Type Code**

Displays the cost plan type code of the cost plan.

**Status**

Displays the status when a cost plan or benefit plan is approved.

**Detail Object:** Internal Status Code

**Is Plan Of Record (Yes/No)**

Indicates if the cost plan was derived from a plan of record.

**Last Updated Date**

Displays the date when this item was last updated and saved.

**Last Updated By**

Displays the name of the resource who last updated and saved this item.

**Detail Object:** Internal Last Updated By ID

**Cost Plan Type**

Displays the cost plan type filter.

## Cost Plan Details Class

You can use the following attributes to query cost plan details:

### **Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

### **Cost Type**

Displays the cost type (capital cost or operating cost) for the line item detail.

**Detail Object:** ?

### **GL Account Number**

Displays the general ledger (GL) account number.

**Detail Objects:** Internal GL Account Number ID, Entity, Account Description, Main Account ID, Sub Account ID, Account Class, Account Type, and Overhead (Yes/No)

### **Resource Role**

Displays the name of a resource or role.

**Detail Object:** Internal Resource Role ID

### **Department Name**

Displays the department name.

**Detail Object:** Internal Department ID

### **Resource Class**

Displays the class of the resource.

**Detail Object:** Internal Resource Class ID

### **Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Resource ID

### **Location**

Displays where the investment work is being performed.

**Detail Object:** Internal Location ID

### **Input Type Code**

Displays the input type code for the cost plan.

**Detail Object:** Internal Input Type Code ID

**Transaction Class**

Displays the transaction class for the cost plan.

**Detail Object:** Internal Transaction Class ID

**User Value 1**

Displays the first user value for the plan.

**Detail Object:** Internal User Value 1 ID

**User Value 2**

Displays the second user value for the plan.

**Detail Object:** Internal User Value 2 ID

**Fiscal Period**

Displays the fiscal period for the plan.

**Detail Object:** Internal Fiscal Period ID

**Percentage**

Displays the value of the plan by a percentage.

## Cost Plan Measures Class

You can use the following attributes to query cost plan measures:

**Units**

Displays the aggregate number of units of a cost plan.

**Cost**

Displays the aggregate cost of a cost plan.

## Benefit Plan Class

A benefit plan allows you to calculate ROI or NPV on an investment or service when associating it with a cost plan. A benefit plan can be associated with an unlimited number of cost plans.

You can use the following attributes to query benefit plans:

**Plan Name**

Displays the name of the plan.

**Plan ID**

Displays the unique identification of the plan.

**Plan Revision**

Displays the revision of the plan.



**Description**

Displays the description of the plan.

**Period Type**

Displays the period type of the plan.

**Values:** Monthly, Quarterly, and Annually

**Detail Object:** Internal Period Type Code

**Plan Start Period**

Displays the start date of the plan.

**Detail Objects:** Internal Plan Start Period ID and Plan Start Date

**Plan End Period**

Displays the end date of the plan.

**Detail Objects:** Internal Plan End Period ID and Plan End Date

**Benefit Plan Type Code**

Displays the benefit plan type code for the plan.

**Status**

Displays the status when a cost plan or benefit plan is approved.

**Detail Object:** Internal Status Code

**Last Updated Date**

Displays the date when this item was last updated and saved.

**Last Updated By**

Displays the name of the resource who last updated and saved this item.

**Detail Object:** Internal Last Updated By ID

**Benefit Plan Type**

Displays the benefit plan type filter.

## Benefit Plan Details Class

You can use the following attributes to query benefit plan details:

**Detail**

Displays the details of the benefit plan.

**Fiscal Period**

Displays the fiscal period of the benefit plan.

**Detail Object:** Internal Fiscal Period ID

**Percentage**

Displays the value of the benefit plan by a percentage.

## Benefit Plan Measures Class

You can use the following attributes to query benefit plan measures:

**Benefit**

Displays the aggregate benefit of a benefit plan.

**Actual Benefit**

Displays the actual benefit of a benefit plan.

## Budget Plan Class

A budget plan is created to help track the budget of an existing investment. The structure of a budget plan is the same as a cost plan.

You can use the following attributes to query budget plans:

**Plan Name**

Displays the name of the plan.

**Plan ID**

Displays the unique identification of the plan.

**Plan Revision**

Displays the revision of the plan.

**Description**

Displays a description of the plan.

**Period Type**

Displays the period type of the plan.

**Values:** Monthly, Quarterly, and Annually

**Detail Object:** Internal Period Type Code

**Plan Start Period**

Displays the start date of the plan.

**Detail Objects:** Internal Plan Start Period ID and Plan Start Date

**Plan End Period**

Displays the end date of the plan.

**Detail Objects:** Internal Plan End Period ID and Plan End Date

**Budget Plan Type Code**

Displays the budget plan type code for the budget plan.

**Status**

Displays the status when a cost plan or benefit plan is approved.

**Detail Object:** Internal Status Code

**Is Plan Of Record (Yes/No)**

Indicates if the cost plan was derived from a plan of record.

**Last Updated Date**

Displays the date when this item was last updated and saved.

**Last Updated By**

Displays the name of the resource who last updated and saved this item.

**Detail Object:** Internal Last Updated By ID

**Budget Plan Type**

Displays the budget plan type filter.

## Budget Plan Details Class

You can use the following attributes to query budget plan details:

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Cost Type**

Displays the cost type (capital cost or operating cost) for the line item detail.

**Detail Object:** ?

**GL Account Number**

Displays the general ledger (GL) account number.

**Detail Objects:** Internal GL Account Number ID, Entity, Account Description, Main Account ID, Sub Account ID, Account Class, Account Type, and Overhead (Yes/No)

**Resource Role**

Displays the role of the resource.

**Detail Object:** Internal Resource Role ID

**Department Name**

Displays the name of the department.

**Detail Object:** Internal Department ID

**Resource Class**

Displays the unique class ID for the resource.

**Detail Object:** Internal Resource Class ID

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Resource ID

**Location**

Displays where work for the investment is being performed.

**Detail Object:** Internal Location ID

**Input Type Code**

Displays the Input Type Code for the resource.

**Detail Object:** Internal Input Type Code ID

**Transaction Class**

Displays the user-define value that groups transaction types.

**Detail Object:** Internal Transaction Class ID

**User Value 1**

Displays the first user value for the plan.

**Detail Object:** Internal User Value 1 ID

**User Value 2**

Displays the second user value for the plan.

**Detail Object:** Internal User Value 2 ID

**Fiscal Period**

Displays the fiscal period for the plan.

**Detail Object:** Internal Fiscal Period ID

**Percentage**

Displays the value of the plan by a percentage.

## Budget Plan Measures Class

You can use the following attributes to query the Budget Plan Measures:

**Units**

Displays the aggregate number of units of a budgeted plan.

**Cost**

Displays the aggregate cost of a budgeted plan.

## Transaction Headers Class

You can use the following attributes to query transaction headers:

**Transaction Number**

Displays the unique identifier for the transaction.

**Detail Object:** Transaction ID

**Source**

Displays the source of the transaction.

**Values:** Timesheet, Manual Entry, and XOG

**Status**

Displays the status of the transaction.

**Values:** Unposted, Error, and Posted

**Created By**

Displays the resource that created the object.

**Detail Object:** Internal Created By ID

## Transaction Lines Class

You can use the following attributes to query transaction lines:

**Investment Department**

Displays the department of the investment.

**Detail Object:** Investment Department ID

**Investment Location**

Displays the location of the investment.

**Detail Object:** Investment Location ID

**Investment Name**

Displays the name of the investment.

**Detail Object:** Investment ID

**Resource Department Name**

Displays the department name of the resource.

**Detail Object:** Resource Department ID

**Resource Location Name**

Displays the location name of the resource.

**Detail Object:** Resource Location ID

**Investment Class**

Displays the investment class used to group projects or investments for reporting.

**Detail Object:** Investment class ID

**Entity Name**

Displays the name of the entity associated with the transaction.

**Detail Object:** Entity ID

**Department Name**

Displays the name of the department.

**Detail Object:** Department ID

**Location Name**

Displays the location name.

**Detail Object:** Location ID

**User Value 1**

Displays the user-defined lookup that customers can use to add their own values.

**Detail Object:** Lov1 ID

**User Value 2**

Displays the user-defined lookup that customers can use to add their own values.

**Detail Object:** Lov2 ID

**Transaction Class**

Displays the transaction class used to group projects or investments for reporting.

**Detail Object:** Transaction Class ID

**Input Type Code**

Displays the Input Type Code for this resource.

**Detail Object:** Input Type Code ID

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with a transaction.

**Detail Object:** Charge Code ID

**Task Name**

Displays the name of the task.

**Detail Object:** Task ID

**Transaction ID**

Displays the unique identifier assigned to the transaction.

**Timesheet Entry ID**

Displays the unique entry identifier assigned to the transaction.

**Transaction Date**

Displays the date of the transaction.

**Transaction Type**

Displays the type of transaction.

**Quantity**

Displays the quantity in units of the work performed for the task.

**Description**

Displays a description of the transaction.

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Resource ID

**Role Name**

Displays the role for the resource.

**Detail Object:** Role ID

**External Source Number**

Displays the user-defined number used to associate the transaction line from an external system.

**External System Ref**

Displays the user-defined reference ID used to associate the transaction line from an external system.

**External Source ID**

Displays the user-defined ID used to associate the transaction line from an external system.

**Resource Class ID**

Displays the internal ID of the resource class.

**Transaction Header ID**

Displays the internal ID of the transaction.

**Error Code**

Displays the internal ID for the error related to the transaction line.

**Status**

Displays the status of the transaction.

**Values:** Unposted, Error, and Posted

**Revision**

Displays the timesheet revision when adjusted and reposted.

**Adjusted Line ID**

Displays the internal identifier for the immediate parent of the line being adjusted.

**Original Line ID**

Displays the internal identifier of the original line that was adjusted.

**Investment Type**

Displays the type of investment.

## Cost Matrix Class

You can use the following attributes to query a cost matrix:

**ID**

Displays the identification associated with this cost matrix.



**From Date**

Displays the beginning of the effective date range for this row. Any transaction processed within the range is applied the rates/costs from this matrix.

**To Date**

Displays the end of the effective date range for this row.

**Actual Cost**

Displays the sum of all actuals posted for the investment.

**Rate**

Displays the rate associated with the record.

**Role Name**

Displays the name of the role associated with the cost matrix.

**Detail Object:** Role ID

**Location Name**

Displays the name of the location associated with the cost matrix.

**Detail Object:** Location ID

**Created By**

Displays the resource that created the object.

**Detail Object:** Internal Created By ID

## OBS Class

You can use the following attributes to query OBS:

**OBS Path**

Displays the OBS path.

**Detail Object:** Internal OBS Unit ID

**OBS Type Name**

Displays the model for the OBS, such as a geographical office location for a company, organizational chart, project types, and resource pool.

**Level 1 through Level 10 Name**

Displays the structure of the OBS hierarchy.

**Example:** An OBS type based on organization chart could have "Company" as level 1, "Business Unit" as level 2, and "Department" as level 3.

**Investment OBS Filter**

Displays the filter used by OBS.

## Report Labels Class

Use the following attributes to query report labels:

**Label Code**

Displays the label code used for the report label.

**Detail Object: Id**

**Language Code**

Displays the language code used for the report label.

**Translated String**

Displays the translated string used for the report label.

**Description**

Displays a description of the report label.

## Security Conditions Class

You can use the following attribute to query investment security conditions:

**Project View Rights**

Displays the project view rights filter.

# Chapter 4: Resource Universe

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This section contains the following topics:

[About the Resource Universe](#) (see page 51)

[Resources Class](#) (see page 51)

[Dates Class](#) (see page 59)

[Measures Class](#) (see page 61)

[OBS Class](#) (see page 63)

[Report Labels Class](#) (see page 63)

## About the Resource Universe

The BO Universe for resources allows you to create both Web Intelligence documents and Crystal Reports. You can use this universe to help you manage your resources, such as running reports on the following:

- availability of a resource
- allocated hours of a resource
- actual hours of a resource

You can report data for a resource by daily, weekly, or monthly periods.

## Resources Class

You can use the following attributes to query resources:

### **Resource ID**

Displays the unique identifier for the resource.

**Detail Object:** Internal Resource ID

### **Resource Name**

Displays the name of the resource.

**Detail Objects:** First Name, Middle Name, and Last Name

### **Manager Name**

Displays the unique identifier for the resource.

**Detail Object:** Internal Manager ID

### **Active (Yes/No)**

Displays if the investment is active.

**Is Open For Time Entry (Yes/No)**

Displays whether this resource is open for time entry (TE).

**Is Role (Yes/No)**

Indicates if the project is derived from a role.

**Resource Type**

Displays the type of resource.

**Detail Object:**

Internal Resource Type Enum

**Employment Type**

Displays the resource employment type.

**Detail Object:** Internal Employment Type ID

**Created By**

Displays the resource that created the object.

**Detail Object:** Internal Created By ID

**Created Date**

Displays the date the resource was created.

**Last Updated By**

Displays the name of the resource who last updated and saved this item.

**Detail Object:** Internal Last Updated By ID

**Last Updated Date**

Displays the date when this item was last updated and saved.

**Email Address**

Displays the resource e-mail address.

**Date Of Hire**

Displays the resource hire date.

**Date Of Termination**

Displays the resource termination date.

**Entity**

Displays the entity that belongs to a resource.

**Detail Object:** Internal Entity Code

**Input Type**

Displays the Input Type for the resource.

**Detail Objects:** Internal Input Type ID and Input Type Code

**Category**

Displays the classification of the resource.

**Track Mode**

Displays the tracking method used to enter time for this investment, including the following:

- Clarity. Staff members enter time against their assigned tasks using time sheets.
- None. Nonlabor resources, such as expenses, materials, and equipment track actuals through transaction vouchers, or through a desktop scheduler, such as Open Workbench and Microsoft Project.
- Other. Indicates that actuals are imported from a third-party program.

**Detail Object:** Internal Track Mode Enum

**Primary Role**

Displays the primary role of the resource.

**Detail Object:** Internal Primary Role ID

## Contact Information Class

You can use the following attributes to query resource contact information:

**Job Title**

Displays the job title of the resource.

**Street 1 through Street 3**

Displays the residence street addresses for the resource.

**City**

Displays the residence city for the resource.

**State**

Displays the residence state for the resource.

**Postal Code**

Displays the residence postal code for the resource.

**Country**

Displays the country of the resource.

**Detail Object:** Internal Country ID

**Home Phone Number**

Displays the home phone number of the resource.

**Work Phone Number**

Displays the work phone number of the resource.

**Mobile Phone Number**

Displays the cell phone number of the resource.

**Fax**

Displays the fax number of the resource.

**Pager**

Displays the pager number of the resource.

**URL**

Displays the URL of the resource.

## Financial Class

You can use the following attributes to query financials for a resource:

**Location**

Displays where the investment work is being performed.

**Detail Object:** Internal Location ID

**Department**

Displays the department that is used to match the investment.

**Detail Object:** Internal Department Code

**Resource Class**

Displays the class code or class ID used for a resource.

**Detail Objects:** Resource Class Code and Internal Resource Class ID

**Transaction Class**

Displays the class code or class ID used for a transaction.

**Detail Objects:** Transaction Class Code and Internal Transaction Class ID

**Employee Country**

Displays the country code used for a resource.

**Detail Object:** Internal Employee Country Code

## Investments Class

You can use the following attributes to query resources for investments:

**Investment ID**

Displays the identification code for an investment.

**Investment Name**

Displays the name of the investment.

**Detail Object:** Internal Investment ID

**Investment Description**

Displays a description of the investment.

**Investment Company Name**

Displays a company name for the investment.

**Detail Object:** Internal Company ID

**Investment Manager**

Displays the name of the investment manager whose data displays in the report.

**Detail Object:** Internal Investment Manager ID

**Start Date**

Displays the actual start day of an investment.

**Finish Date**

Displays the actual finish day of an investment.

**Baseline Start Date**

Displays the baseline start date of an investment.

**Baseline Finish Date**

Displays the baseline finish date of an investment.

**Partition**

Displays the partition associated with an attribute.

**Detail Object:** Internal Partition Code

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Goal**

Displays the goal for the investment that aligns it with the main corporate strategy.

**Detail Object:** Internal Goal Code

**Investment Entity**

Displays the investment entity that belongs to a resource.

**Detail Object:** Internal Investment Entity Code

**Active (Yes/No)**

Displays if the investment is active.

**Open for TE (Yes/No)**

Displays if the investment is open for time entry.

## Investment Team Class

You can use the following attributes to query an investment team:

**Investment Role**

Displays the role of the investment.

**Detail Object:** Internal Investment Role ID

**Allocation Status**

Displays the request status for a resource.

**Detail Object:** Internal Allocation Status Enum

**Allocation Open For TE (Yes/No)**

Indicates whether the allocation is open for time entry (TE).

**Allocation Booking**

Displays the allocation booking of an Investment.

**Detail Object:** Internal Allocation Booking Enum

**Allocation Start Date**

Displays the allocated start date for the investment.

**Allocation Finish Date**

Displays the allocated finish date for the investment.



**Allocation Hard Start Date**

Displays the allocated hard start date for the investment.

**Allocation Hard Finish Date**

Displays the allocated hard finish date for the investment.

**Capitalization%**

Displays the capitalization percentage value for team members.

## Investment WBS Class

You can use the following attributes to query the investment WBS:

**Task ID**

Displays the unique identifier associated with this task.

**Task Name**

Displays the name of the task.

**Detail Object:** Internal Task ID

**WBS Phase Name**

Displays the WBS phase name of a task.

**Detail Objects:** Internal Phase ID, Phase ID, Phase Status, Phase Sequence Number, Key Phase (Yes/No), Phase Start Date, Phase Finish Date, Phase Duration Days, Phase Baseline Start Date, Phase Baseline Finish Date, Phase Baseline Duration Days, and Phase % Complete

**WBS Activity Name**

Displays the work breakdown structure (WBS) activity name of a task.

**Detail Objects:** Internal Activity ID, Activity ID, Activity Status, Activity Sequence Number, Key Activity (Yes/No), Activity Start Date, Activity Finish Date, Activity Duration Days, Activity Baseline Start Date, Activity Baseline Finish Date, Activity Baseline Duration Days, and Activity % Complete

**Task Status**

Displays the status of the task.

**Values:** Not Started, Started, and Completed

**Detail Object:** Internal Task Status Enum

**Task Start Date**

Displays the actual start date of the task.

**Task Finish Date**

Displays the actual finish date of the task.

**Task Duration Days**

Displays the duration days of the task.

**Task Baseline Start Date**

Displays the baseline start date of the task.

**Task Baseline Finish Date**

Displays the baseline finish date of the task.

**Task Baseline Duration Days**

Displays the baseline duration days of the task.

**Key Task (Yes/No)**

Indicates this task as a key task.

**Task Level**

Displays the level of the task.

**Task Sequence Number**

Displays the sequence number of the task.

**Task % Complete**

Displays the percentage complete calculation of a task.

**Task Charge Code**

Displays task charge codes, which can represent any kind of breakdown of work associated with a resource.

**Detail Object:** Internal Task Charge Code ID

**Task Category**

Displays the category to which this task was assigned.

**Task Cost Type**

Displays the cost type for the task (capital cost or operating cost).

**Detail Object:** Internal Task Cost Type Code

## Task Assignments Class

You can use the following attributes to query resource task assignments:

**Assignment Start Date**

Displays the actual date a task started.

**Assignment Finish Date**

Displays the actual date a task finished.

**Assignment Baseline Start Date**

Displays the baseline date a task started.

**Assignment Baseline Finish Date**

Displays the baseline date a task finished.

## Resource Skills Class

Use the following attributes to query resource skills:

**Skill ID**

Displays the unique reference ID for the skill.

**Skill Name**

Displays the name of the skill.

**Detail Object:** Internal Skill ID

**Skill Description**

Displays a description of the skill.

**Skill Path**

Displays the skill path.

**Is Active (Yes/No)**

Indicates if this account is active and available for assigning to cost plans.

**Proficiency Level**

Displays the proficiency level of a resource.

**Values:** Beginner, Expert, and Advanced

**Detail Object:** Internal Proficiency Level ID

**Interest Level**

Displays the interest level of a resource.

**Values:** Low, Medium, and High

**Detail Object:** Internal Interest Level ID

## Dates Class

You can use the following attributes to query dates:

**Daily Date**

Displays data on a daily basis.

**Weekly Start Date**

Displays data from a weekly start date.

**Weekly End Date**

Displays data from a weekly end date.

**Monthly Start Date**

Displays data from a weekly start date.

**Monthly End Date**

Displays data from a monthly end date.

**Quarterly Start Date**

Displays data from a quarterly start date.

**Quarterly End Date**

Displays data from a quarterly end date.

**Previous Week (Weekly Dates)**

Displays data from the previous week using weekly dates.

**Previous Month (Daily Dates)**

Displays data from the previous month using daily dates.

**Previous Month (Monthly Dates)**

Displays data from the previous month using monthly dates.

**Previous Quarter (Monthly Dates)**

Displays data from the previous quarter using monthly dates.

**Previous Quarter (Quarterly Dates)**

Displays data from the previous quarter using quarter dates.

**Previous Year (Monthly Dates)**

Displays data from the previous year using monthly dates.

**Current Week (Weekly Dates)**

Displays data from the current week using weekly dates.

**Current Month (Daily Date)**

Displays data from the current month using daily dates.

**Current Month (Monthly Dates)**

Displays data from the current month using monthly dates.

**Current Quarter (Monthly Dates)**

Displays data from the current quarter using monthly dates.

**Current Quarter (Quarterly Dates)**

Displays data from the current quarter using quarterly dates.

**Current Year (Monthly Dates)**

Displays data from the current year using monthly dates.

**Next Week (Weekly Dates)**

Displays data for next week using weekly dates.

**Next Month (Daily Date)**

Displays data for next month using daily dates.

**Next Month (Monthly Dates)**

Displays data for next month using monthly dates.

**Next Quarter (Monthly Dates)**

Displays data for next quarter using monthly dates.

**Next Quarter (Quarterly Dates)**

Displays data for next quarter using quarterly dates.

**Next Year (Monthly Dates)**

Displays data for next year using monthly dates.

## Measures Class

You can use the following attributes to query measures:

**Available FTEs**

Displays the total availability for resources as measured in full-time equivalent (FTE).

**Allocation FTEs**

Displays the total planned allocation for resources as measured in full-time equivalent (FTE).

**Hard Allocation FTEs**

Displays the total hard allocation for resources as measured in full-time equivalent (FTE).

**Actual FTEs**

Displays the total number of posted actuals for resources as measured in FTEs.

**ETC FTEs**

Displays the total of estimated to complete work for resources as measured in FTEs.

**Baseline FTEs**

Displays the current baseline value of total work for resources as measured in FTEs.

**Available FTE %**

Displays the percentage of total availability for FTE.

**Allocation FTE %**

Displays the percentage of total planned allocation for FTE.

**Hard Allocation FTE %**

Displays the percentage of total hard allocation for FTE.

**Actual FTE %**

Displays the percentage of total posted actuals for FTE.

**ETC FTE %**

Displays the percentage of total estimated-to-complete work for FTEs.

**Baseline FTE %**

Displays the current baseline value of total work as measured in percentage availability of an FTE.

**Available Hours**

Displays total available hours for resources.

**Allocation Hours**

Displays total planned allocation for resources as measured in hours.

**Hard Allocation Hours**

Displays total hard allocation for resources as measured in hours.

**Actual Hours**

Displays the total number of posted actuals for resources as measured in hours.

**ETC Hours**

Displays the total estimated-to-complete hours for resources.

**Allocation Cost**

Displays the total cost of planned allocation for resources.

**Hard Allocation Cost**

Displays the total cost of hard allocation for resources.

**Actual Cost**

Displays the total cost of posted actuals for resources.

**ETC Cost**

Displays the total cost of estimated-to-complete work for resources.

**Baseline Cost**

Displays the current baseline cost of total work for resources.

## OBS Class

You can use the following attributes to query OBS:

**OBS Path**

Displays the OBS path.

**Detail Object:** Internal OBS Unit ID

**OBS Type Name**

Displays the model for the OBS, such as a geographical office location for a company, organizational chart, project types, and resource pool.

**Level 1 through Level 10 Name**

Displays the structure of the OBS hierarchy.

**Example:** An OBS type based on organization chart could have "Company" as level 1, "Business Unit" as level 2, and "Department" as level 3.

**Resource OBS Filter**

Displays the filter used by OBS.

## Report Labels Class

Use the following attributes to query report labels:

**Label Code**

Displays the label code used for the report label.

**Detail Object:** Id

**Language Code**

Displays the language code used for the report label.

**Translated String**

Displays the translated string used for the report label.

**Description**

Displays a description of the report label.



# Chapter 5: Timesheet Universe

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This section contains the following topics:

[About the Timesheet Universe](#) (see page 65)

[Timesheet Periods Class](#) (see page 65)

[Timesheets Class](#) (see page 66)

[Resources Class](#) (see page 68)

[Measures Class](#) (see page 69)

[Missing Timesheets Class](#) (see page 70)

[OBS Class](#) (see page 70)

[Report Labels Class](#) (see page 71)

## About the Timesheet Universe

The BO Universe for timesheets allows users to create both Web Intelligence documents and Crystal reports. You can use this universe to help you with time management, such as running reports to calculate the following:

- time entry hours
- baseline information
- estimate time to complete (ETC) a project
- actual hours associated with a timesheet

## Timesheet Periods Class

You can use the following attributes to query time sheet periods:

### **Timesheet Period Status**

Displays the status of the time sheet period.

### **Time Period Start Date**

Displays the start date of the time period.

**Detail Object:** Internal Time Period ID

### **Time Period End Date**

Displays the end date of the time period.

## Timesheets Class

You can use the following attributes to query time sheets:

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Resource ID

**Timesheet Start Date**

Displays the start date of the time sheet period.

**Timesheet End Date**

Displays the end date of the time sheet period.

**Timesheet Status**

Displays the status of the time sheet period.

**Detail Object:** Internal Timesheet Status Enum

**Approved By**

Displays the resource that approved this time sheet.

**Detail Object:** Internal Approved By ID

**Submitted By**

Displays the resource that submitted this time sheet.

**Detail Object:** Internal Submitted By ID

**Adjustment**

Displays any adjustments made to this time sheet.

**Timesheet Notes (Concatenated)**

Displays any concatenated notes added to this time sheet.

**Timesheet Notes**

Displays any notes added to this time sheet.

**Timesheet Notes Category**

Displays the category to which a time sheet note was assigned.

## Timesheet Entries Class

You can use the following attributes to query time sheet entries:

**Entry Type**

Displays the entry type.

**Date Worked**

Displays the date a resource worked.

**Project/Investment**

Displays the project or investment code that a resource worked on.

**Detail Object:** Internal Project/Investment ID

**Description**

Displays a description of the time sheet entry.

**Charge Code**

Displays charge codes, which can represent any breakdown of work associated with an investment.

**Detail Object:** Internal Charge Code ID

**Input Type Code**

Displays the Input Type Code for this resource, which was used for billing purposes.

**Detail Object:** Internal Type Code ID

**Time Entry Notes (Concatenated)**

Displays any concatenated notes added to this time entry.

**Time Entry Notes**

Displays any notes added to this time entry.

**Time Entry Notes Category**

Displays the category to which a time entry note was assigned.

## Investments Class

You can use the following attributes to query investments:

**Investment ID**

Displays the identification code for an investment.

**Investment Name**

Displays the name of the investment.

**Detail Object:** Internal Investment ID

**Investment Description**

Displays a description of the investment.

**Is Active Investment (Yes/No)**

Displays whether this investment is active.

### **Investment Manager**

Displays the name of the investment manager whose data displays in the report.

**Detail Object:** Internal Investment Manager ID

### **Investment Start Date**

Displays the start date of the investment.

### **Investment Finish Date**

Displays the finish date of the investment.

## Tasks Class

You can use the following attributes to query tasks:

### **Task ID**

Displays the unique identifier associated with this task.

### **Task Name**

Displays the name of the task.

**Detail Object:** Internal Task ID

### **Task Status**

Displays the status of the task.

**Values:** Not Started, Started, and Completed

**Detail Object:** Internal Task Status Enum

### **Task Start Date**

Displays the actual start date of the task.

### **Task Finish Date**

Displays the actual finish date of the task.

### **Task % Complete**

Displays the percentage complete calculation of a task.

## Resources Class

You can use the following attributes to query resources:

### **Resource ID**

Displays the identification of the resource.

**Resource Name**

Displays the name of the resource.

**Detail Objects:** Internal Resource ID, Resource First Name, Resource Middle Name, and Resource Last Name

**Resource Manager**

Displays the name of the manager for this resource.

**Detail Object:** Internal Resource Manager ID

**Resource Type**

Displays the type of resource.

**Detail Object:**

Internal Resource Type Enum

**Primary Role**

Displays the primary role of the resource.

**Detail Object:** Internal Primary Role ID

**Employment Type**

Displays the resource employment type.

**Detail Object:** Internal Employment Type ID

**Email Address**

Displays the resource e-mail address.

**Is Active Resource (Yes/No)**

Displays if the resource is active.

**Hire Date**

Displays the hire date of the resource.

**Termination Date**

Displays the termination date of the resource.

## Measures Class

You can use the following attributes to query time sheet measures:

**Time Entry Hours**

Displays the amount of time entry hours for a time sheet.

**Assignment ETC Hours**

Displays the amount of assigned ETC hours for a time sheet.

**Assignment Actual Hours**

Displays the amount of actual ETC hours for a time sheet.

## Missing Timesheets Class

You can use the following attributes to query missing time sheets:

**Period End Date**

Displays the end date of the resource.

**Period Start Date**

Displays the start date of the resource.

**Resource Name**

Displays the full name of the resource.

**Detail Object:** Internal Resource ID

## OBS Class

You can use the following attributes to query OBS:

**OBS Path**

Displays the OBS path.

**Detail Object:** Internal OBS Unit ID

**OBS Type Name**

Displays the model for the OBS, such as a geographical office location for a company, organizational chart, project types, and resource pool.

**Level 1 through Level 10 Name**

Displays the structure of the OBS hierarchy.

**Example:** An OBS type based on organization chart could have "Company" as level 1, "Business Unit" as level 2, and "Department" as level 3.

**Resource OBS Filter**

Displays the filter used by OBS.

## Report Labels Class

Use the following attributes to query report labels:

**Label Code**

Displays the label code used for the report label.

**Detail Object: Id**

**Language Code**

Displays the language code used for the report label.

**Translated String**

Displays the translated string used for the report label.

**Description**

Displays a description of the report label.