

CA Clarity™ PPM

Business Objects Universe Developer Guide

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Chapter 1: Getting Started

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

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

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

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

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

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OBS Type Name

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