

Clarity PPM 16.4.0 – Chatbot Knowledge Document

#Version Overview

Release Date: November 10, 2025

End of Support: November 30, 2028

Clarity PPM v16.4.0 is a strategic on-premise release from Broadcom focused on improving enterprise planning, financial transparency, resource optimization, roadmap intelligence, reporting reliability, usability, and accessibility.


In this document each module starts with # and all under that have information related to that module.

#Changes in Process modules: For clarity Admin and Users both

1. **Action Items Comments:** Previously, users could perform decision actions on Action Items, but could not provide contextual comments unless configured separately in a process step. This limited communication and traceability in approval workflows.

In Clarity 16.4.0, Action Items have been enhanced to allow users to add comments directly within Clarity. A new Require Comment configuration has been introduced, enabling administrators to make comments mandatory for specific decision actions, such as

Reject. When a comment is required, the Add Comment dialog appears automatically, and the Save button remains disabled until a comment is entered. This enhancement improves decision tracking, audit transparency, and process compliance.

Users can also add optional comments for open or pending items, edit or delete their own comments, and view all comments in the View History  Decisions section.

a. **Upgrade Impact:**

After you upgrade, the following changes take effect:

- All existing Action Items will continue to work as before, and no user comments are lost.
- The new Require Comment configuration is not automatically applied to existing processes. Administrators must explicitly enable this option for selected decisions if required.
- Existing processes with Action Items in progress will not be disrupted. Users can continue to act on those Action Items without being forced to add comments unless the process definition is updated.

- To apply the new comment requirement, administrators can either:
 - Use Save As to create a new version of an existing process and configure the Require Comment option, or
 - Cancel active process instances, set the process to Draft mode, and modify the Decisions and Actions section directly.
- Once a process definition with a comment requirement is deployed, all new Action Items created from that process will enforce the comment rule as configured.
- Comments stored in existing Action Items (from both Classic and Clarity) remain visible and editable according to their current state and ownership.
- No migration scripts are required, and there is no impact on historical process data.

#Introducing the Queries Workspace (Beta)-For clarity Administrators:

Clarity now includes the Queries capability in the Administration workspace. This feature allows administrators to create simple queries to view data within the Transactional Schema.

Upgrade Impact: After you upgrade to this release, you can grant the Administrators - Queries - Navigate right to administrators to enable them to create and manage queries in the Administration workspace.

#Usability improvements-For clarity users

1. View and Manage Hierarchical Data for Master and Sub-Object Instances in

Investments: In previous releases, users had to navigate between separate pages to view or manage sub-object data related to investments. In Clarity 16.4.0, you can now view and manage hierarchical data for master-object and sub-object instances on a single page. This capability streamlines data management and enhances visibility across related records. This enhancement is available for Projects, Ideas, Custom Investments, and Team Investments.

- a. **Upgrade Impact:** After you upgrade, you can view and manage master-object and sub-object data together on a single page for Projects, Ideas, Custom Investments, and Team Investments. No additional configuration is required if the feature toggle is already enabled.

#Enhancements to Financials: for clarity admin and users both

1. New Fields in Investments: Many new variance attributes is introduced for investment object.
2. New Fields in Budget/Cost Plan added:
 - %Spend
 - Actual Profit
 - Forecast % of Cost
 - Forecast Profit
 - Forecast Remanning
 - Planned to Forecast Variance

- Profit
3. View Multicurrency Transactions in Actual and Posted Transactions: In previous releases, Actual and Posted Transactions in Clarity displayed financial data only in the Home or Investment currency. In Clarity 16.4.0, you can now view and analyze transactions across multiple currencies directly in the Posted Transactions and Actual Transactions grids. This enhancement provides accurate financial visibility with automatic currency conversion and improved reporting consistency.

Upgrade Impact: After upgrade changes will auto-reflect and no other impacts.

4. Renaming of the Update Financial Plan Actuals and Forecast job: In Clarity 16.4.0, the job previously called “Update Financial Plan Actuals and Forecast” has been renamed to Post WIP Actuals to Financial Plans.

#Introducing the New Rally Calculation Method Attribute: for admin and users both

In previous releases, Frictionless Cost Accounting (FCA) calculations in Clarity relied solely on Rally story points to determine team productivity and cost distribution.

In Clarity 16.4.0, a new Rally Calculation Method attribute introduces flexibility by allowing teams to choose between Points or Count when calculating FCA metrics. This enhancement better aligns with various Agile practices and improves the accuracy of cost and productivity analysis.

To learn more: <https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using/Getting-Started-with-Clarity-Administration/Clarity-Connections---Rally-Integrations/setting-up-the-clarity-rally-integration/frictionless-cost-accounting/frictionless-cost-accounting-calculations.html>

Upgrade Impact:

After you upgrade: If both Frictionless Cost Accounting Mapping and Rally Team for Frictionless Cost Accounting attributes are configured in a Team Investment, Clarity automatically sets the Rally Calculation Method to Points during upgrade.

If these attributes are not configured, the Rally Calculation Method is set to Null by default.

#General Enhancements

1. Include Notification Data in Health Report: For clarity Admin

Previously, the system health report provided administrators with details on background job performance, service status, and configuration checks, but did not include visibility into

Clarity notification delivery status. This limited administrators' ability to monitor email and in-app notification activity from a single diagnostic report.

In Clarity 16.4.0, the Health Report has been enhanced to include notification-related data, giving administrators a comprehensive view of notification events, counts, and system-level details related to notification services. This addition helps administrators proactively identify and resolve notification-related issues, ensuring smoother communication between Clarity and end users.

Upgrade Impact: This enhancement is automatically available after upgrade. No configuration changes or setup are required.

2. **OBS Filter Enhancement: For clarity Admin** and users both

Previously, when filtering based on Organizational Breakdown Structure (OBS) attributes, users could only apply the Is Empty and Is Equal To operators. This limited flexibility when performing advanced filtering, particularly in scenarios requiring exclusion logic or visibility into non-null OBS associations. In Clarity 16.4.0, the OBS filtering capability has been enhanced to support two additional operators—Is Not Empty and Is Not Equal To. These operators are available across both Clarity and Reporting, enabling users to create more refined filters for OBS-based data and to improve reporting accuracy and usability.

3. **Enhancements to Business Rules: For clarity Admin**

Business rules in Clarity have been updated to include the following enhancements.

- You can now configure up to 50 business rules per object, up to a maximum of 250 per blueprint.
- The business rule name can now be up to 256 characters, up from 80 in previous releases.
- The Source Object attribute has been renamed to Target Object.
- To learn more, see Working with Business Rules.

Upgrade Impact: After you upgrade, these enhancements are available in your Clarity environment.

#Enhancements to Report Designer: for clarity admin

1. Usability Enhancements for Charts and Widgets:

- a. **Introducing the Ability to Switch Charts:** The Report Designer now includes a powerful Chart Type Switcher that lets users seamlessly switch between chart types (such as Line, Bar, Column, Pie, etc.) while preserving the chart's current data configurations and styling settings. This capability enables an intuitive user experience that lets designers experiment with multiple visualization styles to best represent their data without having to redo the chart setup each time.

Some key points to remember are:

If you change other chart configurations when switching chart types, only the latest chart configurations will be retained after switching.

The Chart Type Switcher does not provide undo/redo functionality; it only retains the latest chart configuration when switching between chart types.

- b. **Widget Sizing and Adjustment Improvements:** Designers can configure widgets more granularly to better fine-tune report content on the canvas due to new widget sizing and adjustment improvements.

Null Attribute will Display as None : Clarity will display the Null value as None within attribute groups. In previous releases, Clarity displayed "blank" for Null values.

Introducing the Starred Attribute: The new Starred Attribute feature lets users mark and easily identify key columns in the Report Designer grid. Starred columns can be quickly located, helping users focus on the most important or frequently referenced data points.

- c. **Hide Borders for Widgets:** A new styling option has been introduced in the Report Designer, allowing users to toggle the visibility of borders around each widget. The 'Show Border' toggle is now available under the 'Style' tab for every widget in the Report Designer. By default, Show Border is set to True, meaning widget borders are visible. Users can switch this toggle to False to hide the border, creating a cleaner, less visually segmented report layout.
- d. **Enhanced Axis Customization:** The Report Designer now offers improved customization for chart axes with new toggle options for both the X and Y axes:
- e. **Show Title:** Enable or disable the display of axis titles to clarify the data dimension represented.
- f. **Show Labels:** Control the visibility of axis labels that annotate individual data points or categories.
- g. **Show Gridlines:** Toggle gridlines on or off to enhance or simplify the background reference lines along the axes.

These settings provide granular control over chart presentation, enabling users to tailor the visual clarity and aesthetics of their reports.

To learn more, <https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using/working-with-reporting/working-with-report-designer.html>

Upgrade Impact: This enhancement is automatically available upon upgrade. Report Designers can begin leveraging these capabilities immediately in the Report Designer canvas.

2. **Introducing the New Widget Type – Line Chart:** Previously, Report Designers could visualize trends using bar, column, and other available chart types, but there was no direct way to represent continuous change or time-based progressions. In Clarity 16.4.0, a new **Line Chart** widget has been introduced to the Report Designer, enabling designers to visualize trends, patterns, and comparisons over time with greater clarity and control. The Line Chart provides an intuitive way to visualize how metrics evolve, helping users identify growth trends, seasonal patterns, anomalies, and relative performance across multiple datasets.

3. Enhancements to Line, Bar, and Column Charts

The Line, Bar, and Column charts have been enhanced to provide the following functionality:

1. **Configure Line Style and Thickness for Line Charts:** You can now configure the line style and thickness for Line Chart widgets in Report Designer to achieve better visual distinction and readability across multiple data series. You can also customize line style (solid, dashed, dotted, etc.) for each data series.
2. **Use Breakdown Dimensions:** Breakdown dimensions are fields used to further split or categorize chart data beyond the primary axis or category field. Suppose you want to compare resource allocation across several projects, broken down by location. By configuring "Location" as a breakdown dimension, you can see, for each project (main category), how allocations vary across offices or teams, without needing separate charts for each location. This enables deeper analysis at a glance and streamlines reporting workflows. Breakdown dimensions are now available for Line, Bar, and Column Charts.
3. **Line Charts:** Show multiple trend lines (e.g., revenue by product) within a single chart, each representing a subgroup.
4. **Bar Charts:** Display grouped or stacked bars for each main category, separated by breakdown.
5. **Column Charts:** Offer a similar grouping benefit, making side-by-side or stacked comparisons more effective.
6. **Support for Negative Values:** Negative values are automatically displayed for line/bar/column chart dimensions in Clarity.

Upgrade Impact: This enhancement is available automatically upon upgrade. Report Designers can begin leveraging these capabilities immediately in the Report Designer canvas.

4. **Configure Conditional Formatting on Tables:** Conditional formatting brings dynamic data-driven visual styling to tables in Clarity reports. Users can define rules to

automatically apply colors, text effects, and formatting attributes to table cells or whole rows, making key insights stand out for fast analysis.

5. **Introducing System Reports:** Clarity 16.4.0 introduces a suite of new out-of-the-box (OOTB) reports within the Report Designer, shipping these directly as system-level reports for the new Reporting workspace.
6. **Copy System Reports and Remap Data Providers:** You can now copy out-of-the-box system reports and remap data providers. This enables customers to create personalized copies of system reports without modifying the original system versions, preserving upgradeability and system integrity. This capability is crucial since Clarity-delivered system reports are delivered as examples and templates that may receive ongoing enhancements. You can now utilize, customize, and extend reports freely without upgrade conflicts.

Few more are, for details check Broadcom official document:

7. Exporting Reports
8. Manage Table Column Controls from the Hamburger Menu
9. Manage Styling Controls in Tables
10. Add Link Action on Name and ID Columns in Table Widgets
11. Introducing the Repeat Total Row in View Options
12. Rename Columns and Per-Period Metric Fields in Tables
13. Introducing the Show Per-Period Metrics Column in Table Row Orientation
14. Manage Saved Filters and Filter Chip Counter Enhancements
15. Report-Level Filter Relocation in Report Designer and Viewer
16. Per-Period Metric Settings Across Report, Tab, and Widget Levels

#Exporting Data Providers-For Admin

You can now export selected Data Providers along with their metadata into a structured ZIP archive for import into another Clarity environment. It supports migrating Data Provider configurations while streamlining deployment workflows.

#Enhancements to Resource Management

1. **View License Type and Last Login Details in Resources and Users Grids:** For clarity admin

In previous releases, administrators had limited visibility into user license types and login activity directly within the Clarity grids.

In Clarity 16.4.0, two new attributes — License Type and Last Login — are now available in the Resources and Users grids. These enhancements enable administrators to monitor user access levels and login patterns more effectively, improving oversight and license management.

Upgrade Impact: After the upgrade, run the Populate Users User License Type job to populate the License Type attribute on Resources based on the user's access rights and security group memberships.

2. Manage Resource Availability Calendars: -For admin and users both

Clarity now includes a Calendar module for resources, enabling administrators and resource managers to view and manage resource calendars directly within the new user experience. This enhancement eliminates the need to navigate back to Classic PPM for calendar management, streamlining workflows, and improving visibility into resource availability.

Upgrade Impact: After you upgrade to this release, remember the following points: Add the Calendar module to Resource blueprints.

The Standard Resource blueprint automatically includes the Calendar module.

The Base Calendar field is available on the Resource object for non-expense Resources and Roles (but not for Teams, Expense Resources, or Expense Roles).

Existing calendar data is immediately accessible through the new Calendar module.

3. Introducing the New Resource Property Fields: -For admin

Clarity now includes new fields that let you edit users' financial properties and resource calendars without having to navigate to Classic PPM like Department and Transaction Class.

4. View Investment Allocations Using Resource Summary Mode: For admin and users both

The Resource Summary mode is now available in the Staff module within the Hierarchies workspace. This mode enables quick identification of staffing levels across skill sets and departments, helping you make informed decisions on resource allocation. You can set thresholds to easily identify areas where staffing levels are below or above optimal, enabling timely adjustments to maintain operational efficiency. Using the Resource Summary mode in Hierarchies allows you to view and manage resource distribution across multiple child investments, business units, or value streams in a single consolidated location. The font size of the numbers in the Resource Summary Mode histogram cells has been increased in this release to improve readability.

5. Create Complex Filters Using Filter Groups: For admin and users both

Clarity has introduced the capability to create filter groups on several key tabs: Allocations by Investment, Allocations by Resources, Assignments by Investments, and Assignments by Resource. This advanced filtering feature allows users to easily define complex filter conditions by logically grouping filters. Consider a scenario where you want to identify investments associated with a particular department that have business agreements or an end date within the next month. You can use filter groups to build layered, complex filtering criteria. Each group can contain multiple filter conditions connected by "AND" (all) or "OR" (any) logic, and multiple groups

themselves can also be combined with either "AND" or "OR" at the top level. This flexibility allows users to apply nuanced filters that combine multiple attributes with different logical operators.

6. Introducing New Calculated Attributes-For admin and users both: Clarity now includes three new calculated attributes to enhance resource performance analysis and variance tracking. These attributes provide additional insights into resource utilization, enabling you to better evaluate allocation planning and actual usage trends. E.g. Allocation to Actuals Variance , Remaining Availability % , Allocation to Actuals Variance %

Enhancements to Roadmaps

1. Manage Planned Revenue and Actual Revenue in Roadmaps

In Clarity 16.4.0, new Benefit and Revenue fields have been added to enhance financial visibility and enable comprehensive top-down financial planning. These new attributes capture both planned and budget variations and include calculated values such as Profit and Net Benefit, providing a holistic view of investment performance within Roadmaps.

New Financial Attributes in Roadmaps: You can now use the following new attributes to capture and analyze benefit and revenue data across planned and budgeted scenarios:

Budget Benefit

Budget Actual Revenue

Budget Actual Benefit

Budget Revenue

Planned Revenue

Planned Actual Revenue

Planned Actual Benefit

Budget Profit

Budget Net Benefit

Budget Actual Profit

Budget Actual Net Benefit

Budget to Forecast Profit

Budget to Forecast Net Benefit

Planned Profit

Planned Net Benefit

Planned Actual Profit

Planned Actual Net Benefit

Planned to Forecast Profit

Planned to Forecast Net Benefit

These new attributes expand the roadmap's financial framework, allowing organizations to better assess profitability, revenue performance, and benefit realization across all investments.

2. Synchronization Updates:

The Sync Linked Items window now supports synchronization of base attributes for the new Benefit and Revenue fields from linked investments in Classic PPM.

Once synced, Clarity automatically calculates variances for Roadmap items based on these attributes, ensuring financial data remains consistent and up to date.

Data Warehouse Integration: All newly introduced fields are included in the Clarity Data Warehouse and can be accessed through the relevant data providers for extended reporting and analytics.

Some of the key points to remember are:

Profit and Net Benefit fields are calculated automatically within the Roadmap item after the base attributes are synced.

Do not configure them for separate synchronization from investments.

Each new field includes a detailed description on the Attributes page in Clarity Administration, clearly defining its purpose and usage.

To learn more, see Top-Down Planning with Roadmaps in the product documentation.

Upgrade Impact: After you upgrade, configure the new attributes in Roadmaps to enable benefit and revenue tracking across planned, budgeted, and forecasted scenarios.

Enhancements to Vaia

1. **Define AI Agents:** In Clarity 16.4.0, the new **AI Agents** feature in Vaia introduces intelligent assistants that interact with users and data directly within Clarity. AI Agents operate at the Workspace or Object level, delivering contextual insights, conversational support, and automated responses through the AI Chat Panel.

Key Enhancements

- **AI Agent Configuration:**

Administrators can now create and manage AI Agents from

Administration → Vaia → AI Agents

- **AI Chat Panel:** Users can now interact with AI Agents directly in supported Clarity pages via the **AI Chat Panel**

Upgrade Impact:

After you upgrade, administrators can create and configure AI Agents, and users can interact with them through the AI Chat Panel in supported Clarity workspaces/pages.

2. Brand Your AI

In previous releases, Clarity's AI capabilities used a standard system icon and name that could not be customized. In Clarity 16.4.0, a new **Branding** tab in the **Vaia** tile within Clarity Administration allows organizations to personalize how their AI capability is presented. This enhancement helps create a cohesive, branded experience across Clarity by allowing administrators to set a custom name and logo for AI features.

3. Enhanced LLM Controls

In previous releases, administrators had limited control over the behavior of Large Language Models (LLMs) configured in Clarity.

In Clarity 16.4.0, new configuration options in the **AI Model** grid allow administrators to fine-tune model output through enhanced **Max Tokens** and **Temperature** settings. This improvement provides greater flexibility in controlling response length, creativity, and predictability across AI-driven features.

4. Updates to the Enable AI Tab: In Clarity 16.4.0, the **Enable AI**

tab has been enhanced to improve clarity and consistency with other administrative grids. These updates make it easier for administrators to identify and access AI configurations.

To learn more, see <https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia--ai-/configure-vaia-using-the-enable-ai-page.html>

Upgrade Impact:

None. All changes are applied automatically after upgrade.

5. API Enhancements

Filtering Support for `_internalId` in `actualTransactions` API

The **actualTransactions** API now supports filtering on the **_internalId** field. This enhancement allows users to retrieve specific transaction records by their Internal IDs.

To learn more, see [REST APIhttps://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia-ai/configure-vaia-using-the-enable-ai-page.html#Enhancements](https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia-ai/configure-vaia-using-the-enable-ai-page.html#Enhancements).

Upgrade Impact:

After you upgrade, you can use the **_internalId** field in filters to retrieve specific transaction records based on their internal IDs.

#Accessibility Improvements

Here are the accessibility improvements in this release:

1. Accessibility Remediation:

This release addresses multiple issues reported by customers and findings from the May 2024 (Clarity 16.2.2) accessibility audit. Updates were made to ensure compliance with various WCAG success criteria, enhancing accessibility for all users.

2. Increased Compliance for User Adoption:

Accessibility improvements drive adoption by meeting organizations' demands for compliance with accessibility standards, ensuring users have appropriate tools to view and access company-specific information.

Supported Accessibility Combinations

Operating System	Browser	Screen Reader
Windows	Chrome, Firefox, and Edge	JAWS and NVDA
MacOS	Safari, Chrome	VoiceOver

The screen reader support is limited to the combination above. However, visual and keyboard navigation requirements are also supported for both Mac and Windows users.

To learn more, see [Accessibility – 16. https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia-ai/configure-vaia-using-the-enable-ai-page.html#4.0RemediationDetails](https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia-ai/configure-vaia-using-the-enable-ai-page.html#4.0RemediationDetails).

#Clarity OData Service 4.0 Certification

As part of this release, Clarity is certifying the support for **Clarity OData Service**

version 4.0.0 on Oracle. OData Service provides standardized OData access to the Clarity Data Warehouse, enabling customers to connect external BI tools such as Microsoft Power BI and Tableau.

This update focuses on aligning the OData Service runtime with the latest platform requirements, validating its behavior across supported environments, strengthening security, and providing configuration updates inside Clarity.

For detailed steps and examples, see [OData Tenanhttps://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia--ai-/configure-vaia-using-the-enable-ai-page.html](https://techdocs.broadcom.com/us/en/ca-enterprise-software/business-management/clarity-project-and-portfolio-management-ppm-on-premise/16-4-0/using-clarity-vaia--ai-/configure-vaia-using-the-enable-ai-page.html) Configuration (On-Premise Only).

#Known Issues or Defect

1. DE178522: The 'Base Calendar' Field Is Missing in Rule Actions for Selection in the Resource Blueprint

Summary: The 'Base Calendar' attribute of the Resource object is missing from the blueprint rule 'Actions' builder. Administrators can see this attribute in the Condition builder for filtering criteria, but they cannot hide it on the Properties page because it does not appear as a selectable field in the 'Actions' builder.

Expected Results: The 'Base Calendar' attribute should appear in the 'Actions' builder to create a rule to 'Hide Attributes'.

Actual Results: The 'Base Calendar' attribute does not appear in the 'Actions' builder for selection.

Workaround: None.