

**Oracle® Fusion Applications Project Management, Project
Performance Reporting Guide**

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Oracle® Fusion Applications Project Management, Project Performance Reporting Guide

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Author: Sreya Dutta

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Preface

This Preface introduces the guides, online help, and other information sources available to help you more effectively use Oracle Fusion Applications.

Oracle Fusion Applications Help

You can access Oracle Fusion Applications Help for the current page, section, activity, or task by clicking the help icon. The following figure depicts the help icon.



With a local installation of help, you can add custom help files to replace or supplement the provided content. Help content patches are regularly made available to ensure you have access to the latest information. Patching does not affect your custom content.

Oracle Fusion Applications Guides

Oracle Fusion Applications guides are a structured collection of the help topics, examples, and FAQs from the help system packaged for easy download and offline reference, and sequenced to facilitate learning. You can access the guides from the **Guides** menu in the global area at the top of Oracle Fusion Applications Help pages.

Note

The **Guides** menu also provides access to the business process models on which Oracle Fusion Applications is based.

Guides are designed for specific audiences:

- **User Guides** address the tasks in one or more business processes. They are intended for users who perform these tasks, and managers looking for an overview of the business processes. They are organized by the business process activities and tasks.
- **Implementation Guides** address the tasks required to set up an offering, or selected features of an offering. They are intended for implementors. They are organized to follow the task list sequence of the offerings, as displayed within the Setup and Maintenance work area provided by Oracle Fusion Functional Setup Manager.
- **Concept Guides** explain the key concepts and decisions for a specific area of functionality. They are intended for decision makers, such as chief financial officers, financial analysts, and implementation consultants. They are organized by the logical flow of features and functions.

- **Security Reference Manuals** describe the predefined data that is included in the security reference implementation for one offering. They are intended for implementors, security administrators, and auditors. They are organized by role.

To supplement these guides, which cover specific business processes and offerings, the following guides address common areas:

Other Information Sources

My Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Use the My Oracle Support Knowledge Browser to find documents for a product area. You can search for release-specific information, such as patches, alerts, white papers, and troubleshooting tips. Other services include health checks, guided lifecycle advice, and direct contact with industry experts through the My Oracle Support Community.

Oracle Enterprise Repository for Oracle Fusion Applications

Oracle Enterprise Repository for Oracle Fusion Applications provides visibility into service-oriented architecture assets to help you manage the lifecycle of your software from planning through implementation, testing, production, and changes. In Oracle Fusion Applications, you can use the Oracle Enterprise Repository for Oracle Fusion Applications for:

- Technical information about integrating with other applications, including services, operations, composites, events, and integration tables. The classification scheme shows the scenarios in which you use the assets, and includes diagrams, schematics, and links to other technical documentation.
- Publishing other technical information such as reusable components, policies, architecture diagrams, and topology diagrams.

The Oracle Fusion Applications information is provided as a solution pack that you can upload to your own deployment of Oracle Enterprise Repository for Oracle Fusion Applications. You can document and govern integration interface assets provided by Oracle with other assets in your environment in a common repository.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/us/corporate/accessibility/index.html>.

Comments and Suggestions

Your comments are important to us. We encourage you to send us feedback about Oracle Fusion Applications Help and guides. Please send your suggestions to oracle_fusion_applications_help_ww@oracle.com. You can use the **Send Feedback to Oracle** link in the footer of Oracle Fusion Applications Help.

Configure Performance Reporting for Projects

Tolerance Percentage: Explained

Tolerance percentages are used to compare the previous key performance indicator (KPI) value to the current value to arrive at the performance trend.

Trend indicators are calculated based on the percentage increase or decrease in a KPI value and the tolerance percentage on the KPI definition.

Example of Tolerance Percentage

When you create a KPI, you must enter a tolerance percentage that is used in determining the trend indicator to display for a KPI. The percentage change in KPI value is calculated using the following formula:

$$\text{Percentage Change in KPI Value} = \frac{\text{absolute value of (Current Value - Previous Value)} * 100}{\text{Previous Value}}$$

The following example illustrates how tolerance percentage is used to calculate the trend indicator to display.

KPI	Tolerance Percentage and Trend Indicator Setting	Current Period KPI Value and Status Indicator	Previous Period KPI Value and Status Indicator	Percentage Change	Trend Indicator Based on Previous Period
PTD Actual Invoice Amount	5 percent Up is Favorable	\$3500 Critical	\$4800 Warning	27 percent	Down, Unfavorable
PTD Actual Spent Labor Effort Percentage	5 Up is Favorable	75 On Track	71 On Track	5.6 percent	Up, Favorable
PTD Actual Margin Percentage	2 percent Up is Favorable	28.5 percent Warning	30.2 percent On Track	5.6 percent	Down, Unfavorable

Summarized Financial Plan Types: Explained

Summarized financial plan types are financial plan types whose previous and current approved versions (for forecasts) or original and current baseline versions (for budgets) are used in summarization of project performance data.

Particular financial plan types are included in summarization by default, while you must manually select others.

Default Financial Plan Types

Approved forecast and baseline budget versions of the following financial plan types are automatically included in summarization of project performance data:

- Approved Revenue Budget
- Approved Cost Budget
- Primary Revenue Forecast
- Primary Cost Forecast

Important

A budget or forecast financial plan type may support both cost and revenue in one version.

User-Selected Financial Plan Types

Apart from the default financial plan types, you can include up to four others in summarization of project performance data.

Tip

You can include a financial plan type before it is used on a project for creating a version.

You can replace a user-selected financial plan type until project performance data is summarized for reporting. After that, you can only disable the financial plan type to exclude it from further summarization.

Performance Trend Indicators: Explained

Project performance trend indicators show whether project performance is favorable or unfavorable.

When you sort rows in a table by the trend indicator, the order is based on the sort order specified on the trend indicator definition. You can change the default sort order. For example, you can specify that KPIs or projects with an unfavorable trend appear at the top of the list.

The following are the attributes in the trend indicator setup.

Name

Displays the predefined trend indicator name that can be viewed when you move the cursor over the trend indicator image. The following are the predefined trend indicator names:

- Up, favorable

- Up, unfavorable
- Down, favorable
- Down, unfavorable
- Unchanged

Description

Describes what the trend indicator signifies when it appears against a project or a KPI.

Modifying Sort Order

The sort order of a trend indicator is a number between 1 and 5. If the sort order of a trend indicator is set to 1, the KPI or project appears at the top of the list. Similarly, if the sort order of a trend indicator is set to 5, the KPI or project appears at the bottom of the list. For example, if you want the KPIs or projects that have an unfavorable trend to appear at the top of the table, you can change the sort order of the **Up, unfavorable** and **Down, unfavorable** trend indicators to 1 and 2.

Image Preview

Displays a preview of the image that appears for each trend indicator.

FAQs for Configure Performance Reporting for Projects

Can I specify the budgets and forecasts to include in summarization?

Certain financial plan types are included in summarization by default, while you must manually select others. Approved forecast and baseline budget versions of the following financial plan types are automatically included in summarization of project performance data:

- Approved Revenue Budget
- Approved Cost Budget
- Primary Revenue Forecast
- Primary Cost Forecast

Apart from the default financial plan types, you can include up to four others in summarization of project performance data.

Can I replace a financial plan type that is enabled for summarization on a project?

Yes. You can replace or disable any user-selected financial plan type before project performance data is summarized for reporting.

Can I select the regions to appear on Project Performance Reporting dashboard pages?

Yes. Using the Personalization option you can select the **Edit Current Page** option in the **Personalization** list to show or hide regions. You can also modify the arrangement of the region layouts using the **Change Layout** option.

Can I select the columns to appear in the Project Performance Reporting dashboard tables?

Yes. The View menu in the region gives you options to add or remove columns in a region.

Update Project Performance Data and Generate KPIs

Performance Data Summarization: How It Is Calculated

Summarization is a systematic organization of information for purposes of project analysis and tracking. You use summarized data to analyze the health of projects and drill down to the causes of any deviation from set thresholds. You can complete the following tasks using summarized data:

- Analyzing project performance data
- Reviewing project performance
- Analyzing KPI categories and KPIs
- Tracking project progress
- Viewing revenue and invoice summaries

After you run summarization, the KPI related information is rendered out of date with respect to the latest summarized information. Therefore, it is important that you generate KPI values once the summarization process is completed. You can avoid generating KPI values manually, by enabling automatic generation of KPI values in the summarization options.

Settings That Affect Performance Data Summarization

You summarize data for a project unit or a business unit. You can also summarize performance data for a range of projects or projects owned by a project manager. Besides this, you must specify the following parameters each time you want to run the summarization process manually:

- Select the appropriate summarization method:
 - Incremental, for general purpose summarization.
 - Bulk, for summarizing large amounts of data all at once.
 - Delete and resummearize, for correcting summary data when the source system data is changed outside the regular transaction flow.

- Resource breakdown structure, for migrating all summary data from one resource breakdown structure version to the next. If you select this option you must also specify the resource breakdown structure header.
- Specify whether to summarize budget and forecast, commitment, actual cost, revenue and invoice, and client extension transactions.

How Performance Data Summarization Is Calculated

Performance data summarization collects data from various sources and assigns amounts to relevant tasks and resources in the project. After data is summarized, you can view how much is being spent on, incurred by, or received by a task or resource. Also, data is grouped according to periods so that it can be tracked across different time lines.

You can run the summarization process for different situations, such as:

- Your data is out of date and you want to update it.
- Your data is corrupt and you want to delete the existing data and resummarize.
- You have a large volume of data that is not yet summarized and want to summarize the entire bulk of data in one run.

After you select the parameters for summarization and submit a request, the application performs the following steps to generate the data that you view in the application:

- Scope summarization by determining the list of projects, contracts, and batches of transaction data for which to run summarization.
- Extract data to be summarized from data sources, group it by periods, and ensure the data is prepared for resource mapping.
- Populate summary data into designated tables before resource breakdown structure mapping.
- Populate business unit, project unit, and other lookup information.
- Populate performance reporting dimension data including time, task breakdown structure, and resource breakdown structure.
- Look up resource breakdown structure mappings, scenario dimension members, period IDs, and prepare data for Essbase load.
- Load data into Essbase and merge data into summary tables.

You can track the progress of summarization on the process monitor. If the process fails to complete, it continues from the point of failure when you resubmit it.

KPI Components: How They Work Together

A key performance indicator (KPI) enables you to define thresholds of possible values for a performance measure for any project in a project unit. During KPI

definition, you associate a performance status indicator with each threshold level. When you generate KPI values, the application compares the value against the thresholds defined for the KPI. If the value falls within any of the defined threshold levels, then the application associates the status indicator of that threshold with the performance measure. The following are the KPI components we will discuss:

- Performance Measure
- Performance Status Indicator
- Threshold Level
- Trend Indicator
- Tolerance Percentage
- Project Performance Data
- Project Unit

Performance Measure

Oracle Fusion Project Performance Reporting provides both fundamental and derived measures that present an objective insight into the performance of the project. In addition, you can create custom measures to meet the unique needs of your organization. Use any delivered or custom performance measure to create a KPI.

Performance measures are available in the areas of budgets and forecasts, billing and revenue, costs, effort, margin, capitalization, and more. Following are examples of predefined performance measures:

- EAC Budget Cost (the estimate at completion burdened cost from the current baseline budget)
- ITD Forecast Revenue Variance (the inception-to-date current baseline budget revenue - current approved forecast revenue)
- Prior Period Margin Percentage Variance (the prior period current baseline budget margin percentage - actual margin percentage)

A performance measure is associated with a time dimension. The following time dimensions are available:

- Estimate-at-completion (EAC)
- Inception-to-date (ITD)
- Prior Period
- Period-to-date (PTD)
- Quarter-to-date (QTD)
- Year-to-date (YTD)

A particular performance measure set, such as Budget Cost, can have as many as six performance measures: one for each time dimension.

A performance measure can be expressed as a currency amount, as a percentage, or in time units such as hours when effort is measured. If the KPI is used on

projects that use different currencies, you can enter different thresholds levels for each currency you need.

Performance Status Indicator

Performance status indicators give an immediate picture of the status of a project, such as critical, at risk, and on track. Icons with unique colors and shapes indicate the status and severity of performance. During KPI definition, you first associate status indicators with performance statuses:

- Critical
- Severe
- At risk
- On track
- Ahead

You then associate these statuses with threshold levels. When KPI values are generated for a project, each value is compared to the defined thresholds and the corresponding status indicator for the KPI appears on project performance reports.

A status can identify negative performance so that you can take the appropriate actions to prevent or quickly resolve problems. Conversely, a status can identify positive performance to help you track expected or excellent performance.

Threshold Level

During KPI definition, you define threshold levels to cover all possible values for a KPI. If a KPI value exceeds the range of values defined for the KPI threshold levels, the closest threshold is used to determine the KPI status. For example, if a KPI value falls below the lowest threshold level, the application assigns the status of the lowest threshold level to the KPI.

A status indicator can be associated with more than one threshold level. For example, both underutilization and overutilization of resources can indicate a critical performance status.

Trend Indicator

Performance trend indicators give an immediate picture of improving or worsening KPI value trends on the project. Icons with unique colors and shapes indicate whether an increasing performance trend has a positive or negative impact. For example, an increase in nonbillable costs is considered unfavorable to organizations that are able to bill costs to their clients. In this example, the performance trend indicator will show a negative impact.

Tolerance Percentage

A tolerance percentage is used to compare the previous KPI value to the current value to show if the performance trend is increasing, decreasing, or staying the same. For example, if the tolerance percentage is 10 percent for a KPI, and the difference between the previous KPI value and current value is greater than 10 percent, then the trend is increasing. If the difference is greater than -10 percent, then the trend is decreasing. If the difference is between -10 percent

and 10 percent, then the trend shows no change. A single tolerance percentage value, such as 10 percent in this example, represents both negative and positive tolerances.

Project Performance Data

The application provides programs that extract and update transaction data and maintain project performance data. The process of generating KPI values uses this project performance data. Before you generate new KPI values, check the date that the project performance data was last generated to make sure that the data includes all transactions that may impact project performance results. Then decide if you must update project performance data before you generate KPI values. After you run these programs you will have a true picture of project performance.

When you generate KPI values, the period for which KPI values are being generated is determined by the KPI Period Determination Date. The data during that period is used to generate project performance data that will be populated on the project performance dashboard.

Note

KPIs that are enabled for use in the KPI definition are included when KPI values are generated.

Project Unit

KPIs are created for specific project units. During project unit implementation you specify whether KPIs are tracked for the project unit.

KPI Values: How They Are Generated

Key performance indicator (KPI) values are calculated when you generate KPI values. KPI values must be generated after project data is updated.

Settings That Affect KPI Values

You must specify the following parameters:

Settings	Description
KPI Period Determination Date	Set the date used to derive the project calendar and accounting calendar periods for performance measure calculations when KPI values are generated.
Replace Current KPI Values	Replace the current KPI values with the values that are generated now.
Delete Previous KPI Values	Delete the KPI values that were generated the previous time the generate KPI values process was run.
Number of Days to Retain KPI Values	Retain KPI values for the specified number of days starting from the current date before deleting previous KPI values.

For example, assume KPI values were generated on the following dates:

KPI Period Determination Date	Generation Date
October 29, 2010	November 12, 2010
September 30, 2010	October 15, 2010

If you generate KPI values on November 18, 2010 and select to replace the current KPI values, the KPI values generated on November 12, 2010 are deleted and replaced with KPI values generated on November 18, 2010. You must select to replace the current KPI values for a given period if you want to retain one set of KPI values and review KPI values during the period.

You can also delete KPI values that are not required for reporting. The options, **Delete Previous KPI Values** and **Number of Days to Retain KPI Values**, enable you to delete KPI values that were generated prior to a specific number of days. For example, if today is November 18, and you want to remove all KPI values generated in the previous year, you must select to delete previous KPI values, and set **Number of Days to Retain KPI Values** to 322. All KPI values created since January 1, 2010 are retained and KPI values generated before that period are deleted.

Important

Do not delete previous KPI values in the following cases:

- When you are generating KPI values for the first time in a period.
- If you want to see trending information for the KPIs over the life of the project.

When you generate KPI values, you can select to receive a notification by e-mail by enabling workflow notifications, once KPI values are generated.

How KPI Values Are Generated

KPI values are calculated based on the value of the performance measure associated with the project. When you generate KPI values, the KPI period determination date is compared to the current date to determine the period. KPI values are generated for the period based on the options in the key performance indicator definition. Only one set of key performance indicators is kept for a single KPI period determination date.

For example, KPI values are generated for a KPI period determination date of August 24 at 8:15 a.m. for Projects A and B. Then KPI values are generated for a KPI period determination date of August 24 at 10:45 a.m. just for Project B. The KPI values for Project B generated at 8:15 a.m. are deleted, but KPIs belonging to Project A are retained.

Note

To keep historical information, use a unique KPI period determination date.

KPI Trends: How They Are Calculated

Trend indicators show whether the trend of a key performance indicator (KPI) is favorable or unfavorable for a project. When you define KPIs you specify a value for tolerance percentage. The tolerance percentage is taken into account while calculating trend indicators for a KPI.

Note

KPI trends may not be useful if KPI values are generated often. The reason is, if the tolerance percentage is 10 percent and KPI values are generated every day, the values decrease by 1 percent each day. In this scenario, no change is observed in the trend as the decrease is well within the tolerance. However, if you generate KPI values at the start and end of the month, a significant change is observed in the trend.

Settings That Affect KPI Trends

The trend indicator that appears for a KPI is based on the defaults set in the performance trend indicator setup. The different trend indicators available are:

- Up, favorable: The project performance trend is increasing in value and is desirable.
- Up, unfavorable: The project performance trend is increasing in value and is undesirable.
- Down, favorable: The project performance trend is decreasing in value and is desirable.
- Down, unfavorable: The project performance trend is decreasing in value and is undesirable.
- Unchanged: The project performance trend is unchanged.

You can change the sort order of the trend indicators based on how you want to sequence KPIs in a table based on the performance of KPIs in a project.

How KPI Trends Are Calculated

Trend Indicators are calculated based on the percentage increase or decrease in a KPI value, while taking into consideration the tolerance percentage specified while creating the KPI. The following example illustrates how trend indicators are calculated for a KPI.

Consider a scenario where KPI values are generated for the first time on January 15, 2011, and again on February 15 and April 15. KPI trends are calculated when there are at least two values that exist for a KPI.

Note

All values in the following tables are percentages unless specified otherwise.

KPI Values Generated on January 15, 2011

KPI	Tolerance Percentage and Trend Indicator Setting	Current KPI Value and Status Indicator	Previous KPI Value and Status Indicator	Trend Indicator
PTD Actual Spent Labor Effort Percentage	5 Up is Favorable	70 On Track	-	-
PTD Actual Spent Equipment Effort Percentage	5 Up is Unfavorable	30 On Track	-	-
PTD Actual Invoice Amount	5 Up is Favorable	\$5000 Warning	-	-
Actual Billable Cost Percentage	2 Up is Favorable	90 On Track	-	-
PTD Actual Margin Percentage	2 Up is Favorable	30 On Track	-	-

After generating KPI values on January 15, 2011, the most critical KPI is PTD Actual Invoice Amount. The overall project health status is Warning, because the most critical KPI, PTD Actual Invoice Amount, has a status of Warning.

KPI Values Generated on February 15, 2011

KPI	Tolerance Percentage and Trend Indicator Setting	Current Period KPI Value and Status Indicator	Previous Period KPI Value and Status Indicator	Trend Indicator based on Previous Period
PTD Actual Spent Labor Effort Percentage	5 Up is Favorable	71 On Track	70 On Track	Unchanged
PTD Actual Spent Equipment Effort Percentage	5 Up is Unfavorable	29 On Track	30 On Track	Unchanged
PTD Actual Invoice Amount	5 Up is Favorable	\$4800 Warning	\$5000 Warning	Unchanged
Actual Billable Cost Percentage	2 Up is Favorable	91 On Track	90 On Track	Unchanged
PTD Actual Margin Percentage	2 Up is Favorable	30.2 On Track	30 On Track	Unchanged

This table shows how the trend indicator is calculated based on the previous period. Although the KPI values for the current period are different from the previous period, the difference in the values is not significant enough to change the trend indicator, based on the tolerance percentage defined for each KPI. For

example, the PTD Actual Spent Labor Effort Percentage is 71 percent, compared to the previous period KPI value of 70 percent. If the current period KPI value is more than 73.5 percent, which is more than 5 percent higher than the previous period, then the trend indicator is Up, Favorable. If the current period KPI value is less than 66.5 percent, which is more than 5 percent lower than the previous period, then the trend indicator is Down, Unfavorable.

The overall project health status is Warning, based on the most critical of all KPI statuses. After generating KPI values on February 15, 2011, the most critical KPI is PTD Actual Invoice Amount.

KPI Values Generated on April 15, 2011

KPI	Tolerance Percentage and Trend Indicator Setting	Current Quarter KPI Value and Status Indicator	Previous Quarter KPI Value and Status Indicator	Trend Indicator Based on Previous Quarter
PTD Actual Spent Labor Effort Percentage	5 Up is Favorable	75 On Track	71 On Track	Up, Favorable
PTD Actual Spent Equipment Effort Percentage	5 Up is Unfavorable	25 On Track	29 On Track	Down, Favorable
PTD Actual Invoice Amount	5 Up is Favorable	\$3500 Critical	\$4800 Warning	Down, Unfavorable
Actual Billable Cost Percentage	2 Up is Favorable	91 On Track	91 On Track	Unchanged
PTD Actual Margin Percentage	2 Up is Favorable	28.5 Warning	30.2 On Track	Down, Unfavorable

This table shows how the trend indicator is calculated based on the previous quarter. The current KPI values are compared to the latest generation date of KPIs for the previous quarter.

Note

It is possible that the previous period trend and the previous quarter trend are calculated based on KPI values from the same generation date. This occurs when the previous period generation date is the same as the latest generation date in the previous quarter.

The first three KPI values changed enough since the previous quarter to change the trend calculator. For example, the current quarter value of PTD Actual Invoice Amount is \$3,500, which exceeds the threshold tolerance of 5 percent from the previous quarter KPI value of \$4,800. Therefore the KPI is in a Critical status, and the trend indicator is Down, Unfavorable. If the current quarter value is greater than \$5,040, which is more than 5 percent higher than the previous quarter, then the trend indicator is Up, Favorable.

A project manager might review the KPI values, statuses, and trends shown in this table and determine that a transaction was not billed, because the KPIs that are based on revenue and invoice amounts have both dropped.

The overall project health is critical because of the status of the PTD Actual Invoice Amount.

Calculating Current, Prior Period, and Prior Quarter KPI Values: Examples

A key performance indicator (KPI), if enabled for use, can be defined against one of two calendars: accounting calendar or project accounting calendar.

To generate KPI values, you enter a KPI period determination date for the application to determine the accounting calendar period and project accounting calendar period. This example shows you how current period, prior period, and prior quarter KPI values are calculated.

Scenario

InFusion Corporation designs and implements heavy engineering projects for government and private customers. The Finance department is interested in measuring revenue and margin on the accounting calendar, and budget to actual variance of labor effort on the project accounting calendar. The KPIs defined for this purpose are Period-to-Date (PTD) Revenue Variance Percentage on the accounting calendar and PTD Labor Effort Variance Percentage on the project accounting calendar.

The following table shows the accounting calendar used by InFusion Corporation:

Period Name	Period Start Date	Period End Date	Quarter Name	Quarter Start Date	Quarter End Date
Jun-09	1-Jun-09	30-Jun-09	Q2	1-Apr-09	30-Jun-09
Jul-09	1-Jul-09	31-Jul-09	Q3	1-Jul-09	30-Sep-09
Aug-09	1-Aug-09	31-Aug-09	Q3	1-Jul-09	30-Sep-09
Sep-09	1-Sep-09	30-Sep-09	Q3	1-Jul-09	30-Sep-09
Oct-09	1-Oct-09	31-Oct-09	Q4	1-Oct-09	31-Dec-09
Nov-09	1-Nov-09	30-Nov-09	Q4	1-Oct-09	31-Dec-09

The following table shows the project accounting calendar used by InFusion Corporation:

Period Name	Period Start Date	Period End Date	Quarter Name	Quarter Start Date	Quarter End Date
W1-Apr-09	4-Apr-09	10-Apr-09	Q2	4-April-09	3-Jul-09
W1-Sep-09	2-Sep-09	9-Sep-09	Q3	4-Jul-09	3-Oct-09
W2-Sep-09	10-Sep-09	17-Sep-09	Q3	4-Jul-09	3-Oct-09
W3-Sep-09	18-Sep-09	25-Sep-09	Q3	4-Jul-09	3-Oct-09
W4-Sep-09	26-Sep-09	3-Oct-09	Q3	4-Jul-09	3-Oct-09
W1-Oct-09	4-Oct-09	10-Oct-09	Q4	4-Oct-09	3-Jan-10
W2-Oct-09	11-Oct-09	18-Oct-09	Q4	4-Oct-09	3-Jan-10

W3-Oct-09	19-Oct-09	26-Oct-09	Q4	4-Oct-09	3-Jan-10
W4-Oct-09	27-Oct-09	3-Nov-09	Q4	4-Oct-09	3-Jan-10

Assume the KPI period determination date is October 2, 2009. In the calendar shown, October 2, 2009, occurs in the period OCT-09 on the accounting calendar, but in the W4-SEP-09 period on the project accounting calendar.

The following scenario describes how the current period, prior period, and prior quarter KPI values are calculated based on different KPI period determination dates.

KPI Values Generated on October 3, 2009

The first generation of KPI values occurs on October 3, 2009. On the KPI watchlist, the key performance indicator PTD Labor Effort Variance Percentage shows the current period as W4-Sep-09, prior period as W3-Sep-09, and prior quarter as Q2. The key performance indicator PTD Revenue Variance Percentage shows the current period as Oct-09, prior period as Sep-09, and prior quarter as Q2.

KPI Period Determination Date	Generation Date	Period Name for Generation Date	KPI Name	Is KPI Value Current?	Current Period	Prior Period	Prior Quarter
3-Oct-09	October 3	W4-Sep-09	PTD Labor Effort Variance Percentage	Yes	W4-Sep-09	W3-Sep-09	Q2
		Oct-09	PTD Revenue Variance Percentage	Yes	Oct-09	Sep-09	Q2

KPI Values Generated on October 4, 2009

KPI values are generated again on October 4, with a KPI period determination date of September 25, 2009. Even though the KPI period determination date is prior to the previous generation date, the KPI values generated on October 4 for September 25, 2009 are marked as current. The current period, prior period, and prior quarter KPI values are calculated as follows:

KPI Period Determination Date	Generation Date	Period Name for Generation Date	KPI Name	Is KPI Value Current?	Current Period	Prior Period	Prior Quarter
3-Oct-09	October 3	W4-Sep-09	PTD Labor Effort Variance Percentage	No	W4-Sep-09	W3-Sep-09	Q2
		Oct-09	PTD Revenue Variance Percentage	No	Oct-09	Sep-09	Q2

25-Sep-09	October 4	W3-Sep-09	PTD Labor Effort Variance Percentage	Yes	W3-Sep-09	W2-Sep-09	Q2
		Sep-09	PTD Revenue Variance Percentage	Yes	Sep-09	Aug-09	Q2

KPI Values Generated on October 10, 2009

KPI values are again generated on October 10, 2009 with a KPI period determination date of October 10, 2009. These KPI values are now used for the current period, prior period, and prior quarter.

KPI Period Determination Date	Generation Date	Period Name for Generation Date	KPI Name	Is KPI Value Current?	Current Period	Prior Period	Prior Quarter
3-Oct-09	October 3	W4-Sep-09	PTD Labor Effort Variance Percentage	No	W4-Sep-09	W3-Sep-09	Q2
		Oct-09	PTD Revenue Variance Percentage	No	Oct-09	Sep-09	Q2
25-Sep-09	October 4	W3-Sep-09	PTD Labor Effort Variance Percentage	No	W3-Sep-09	W2-Sep-09	Q2
		Sep-09	PTD Revenue Variance Percentage	No	Sep-09	Aug-09	Q2
10-Oct-09	October 10	W1-Oct-09	PTD Labor Effort Variance Percentage	Yes	W1-Oct-09	W4-Sep-09	Q3
		Oct-09	PTD Revenue Variance Percentage	Yes	Oct-09	Sep-09	Q3

FAQs for Update Project Performance Data and Generate KPIs

What's a key performance indicator?

The result of a business measure, for example product sales or operational costs, evaluated against a target for that measure. You use KPIs to assess the performance of the strategic objectives and initiatives that are part of your

organizational strategy. When you define KPIs you should ensure they have these characteristics:

- Have measurable objectives that may vary over time.
- Can be evaluated using targets to determine performance status.
- Can be compared over time for trending purposes.

What's the difference between key performance indicator and KPI category?

Key performance indicators (KPIs) measure how well an organization or individual performs an operational, tactical, or strategic activity that is critical for the current and future success of the organization. Examples are: Period-to-Date (PTD) Actual Spent Labor Effort Percentage, PTD Actual Spent Equipment Effort Percentage, and PTD Actual Margin Percentage.

A KPI category is a group of KPIs that belong to a specific performance area. Examples are: cost, profitability, financial, and schedule.

From the examples above, PTD Actual Margin Percentage must be in the KPI category of profitability.

What actions trigger performance data summarization?

The following actions trigger performance data summarization:

- Run the Update Project Performance Data process for a project from the Project Performance Dashboard or Projects Overview area.
- Run or schedule the Update Project Performance Data process from the process scheduler.
- Enable the reporting option on the project unit to summarize project data before generating key performance indicators.
- Create revenue and invoice transactions.

Important

Summarized revenue and invoice transaction amounts appear in the revenue and invoice work area; however, these transactions do not appear in summarized data on the Project Performance Dashboard until the transactions are summarized using the Update Project Performance Data process.

How can I update project performance data and generate KPI values?

The project manager must run summarization for the selected project using the **Actions** menu in the **Project List** region on the **Project Performance Reporting** dashboard. The project manager must use the **Important Dates** or the **Data**

Updates window to update project performance data if the data is not current or if there are unprocessed transactions.

To update performance data for all projects in a project unit, the projects application administrator must run the Update Project Performance Data process. After you update project performance data you must generate key performance indicator (KPI) values again. If you have not chosen to generate KPI values automatically after updating project performance data, you should generate KPI values manually.

You must generate KPI values manually when you enable a new KPI for use and want to view it in the KPI watchlist. You may update data manually if you need to look at the data less frequently, such as, at the end of a period.

Why can't I review project performance?

You cannot review project performance unless you update project performance data.

Analyze Project Performance

Performance Status for Tasks and Resources: How It Is Calculated

The application calculates performance status for individual tasks and resources for percentage-based key performance indicator (KPI) values.

Settings That Affect Performance Status for Tasks and Resources

When you enable the **Track by Task** and **Track by Resource** options on the project definition, a status indicator appears for the task and resource on project performance reports when the individual KPI value is not on track. Enabling this option helps you easily identify the troubled tasks and resources in a hierarchical task and resource structure in a project.

Note

You can track performance by task and resource only for KPI values that are expressed as a percentage.

How Performance Status for Tasks and Resources Are Calculated

Performance status is individually calculated for all levels of the task and resource hierarchy based on the KPI threshold definition. KPI threshold values are defined when KPIs are created. Based on the threshold values defined, the status for tasks and resources are calculated for the KPI values that are based on a percentage. This example shows how the status of tasks and resources are calculated. For example, assume that the KPI named ITD Nonbillable Cost as a Percentage of Total Cost has the following threshold definition.

Threshold Level	Threshold Range From	Threshold Range To	Status Indicator
1	-99.00%	-12.00%	Critical
2	-11.99%	-5.00%	At Risk
3	-4.99%	4.99%	On Track
4	5.00%	11.9%	At Risk
5	12.00%	99%	Critical

Example of System Implementation Task

In the example, we have a System Implementation task containing six subtasks.

Task	Task	ITD Nonbillable Cost	ITD Billable Cost	ITD Total Cost	ITD Nonbillable Cost as a Percentage of Total Cost
System Implementation		20,000	105,000	125,000	16.00%
	Planning	0	21,000	21,000	0%
	Definition	6,000	51,000	57,000	10.53%
	Build	15,000	33,000	48,000	31.25%
	Test	0	0	0	0%
	Release	0	0	0	0%
	Support	0	0	0	0%

The ITD Nonbillable Cost as a Percentage of Total Cost KPI value for the Definition task is 10.53% (6,000/57,000). Based on the threshold levels defined for this KPI, the Definition task shows the At Risk status indicator.

Example of a Consulting Resource Breakdown Structure

In another example, the Consulting resource breakdown structure contains a Labor resource. Labor is a parent to the Project Manager resource, which is a parent to resources Max Martin, Robert Altima, and Fred Jones. The ITD Nonbillable Cost as a Percentage of Total Cost KPI value for Labor is 12.97% (15,700.00/121,015.00). The ITD Nonbillable Cost as a Percentage of Total Cost KPI value for Fred Jones is 0%. Because the KPI value for each row in the hierarchical structure is calculated separately, Labor has a status indicator of Critical and Fred Jones does not have a status indicator.

Resource	Resource	Resource	Resource	ITD Nonbillable Cost	ITD Billable Cost	ITD Total Cost	ITD Nonbillable Cost as a Percentage of Total Cost
Consulting				19,776	105,315	125,091	15.81%
	Labor			15,700	105,315	121,015	12.97%
		Project Manager		15,700	50,000	65,700	23.90%
			Max Martin	2,800	14,000	16,800	16.67%
			Robert Altima	8,400	0	8,400	100.00%
			Fred Jones	0	36,000	36,000	0%

If you track tasks and resources for a project, each task and resource with a KPI value that is not on track is designated as an exception. The KPI value for

the project does not impact the exception designation for individual tasks and resources. For example, if a task has a Critical status indicator based on the KPI value and threshold definition, it is designated as an exception even if the project has an On Track status indicator.

Important

Task and resource performance status is based on the latest summarized data, which may not be the same as the summarized data used to generate the latest KPI values.

FAQs for Analyze Project Performance

Why did the overall health indicator not appear for the project?

The overall health indicator is visible after the overall health is calculated. The overall health is calculated for a project if key performance indicators (KPIs) are associated to the project and are enabled, and KPI values and summarized performance data are generated for the project.

Why is the overall health for the project at risk when most of the KPI statuses are on track?

The key performance indicator (KPI) with the most severe status determines the overall health of the project. For example, if three out of four KPIs on a project are on track, and one is at risk, then the overall health of the project is at risk.

You can also customize the overall health calculation during implementation.

Can a time card be reported as missing and also be included as an unprocessed transaction?

No, both these situations cannot coexist. Time cards that have not been entered are considered missing. A time card is an unprocessed transaction after it is entered into the application and before it is included in the Update Project Performance Data process.

How can I evaluate project performance if KPIs are not tracked?

You must use the **Review Project Performance** page to perform more detailed financial performance analysis for a project than is possible on the **Project Performance Dashboard**. You can review amounts at the task or resource level, and drill down to individual expenditure items.

What happens if KPIs are not tracked?

You can view your projects in the project list and evaluate the financial performance of your projects. All project comparison graphs are available except for the KPI analysis graph. However, you cannot generate KPI values and

analyze KPI categories and hence the overall project health status indicator is not available. The KPI watchlist and notes are also unavailable.

Why can't I view the KPI category analysis?

You cannot view the key performance indicator (KPI) category analysis due to the following reasons:

- The project unit does not track KPIs.
- No KPIs are associated with the project.
- KPI values are not generated.

FAQs for Review Project Comparison Graphs

Which currency is used on a project comparison graph?

The ledger currency is used if all projects in the project list have the same ledger currency. However, if the projects in the project list are represented in more than one ledger currency, the user-preferred currency is used to bring all projects into the same currency.

Why can't I see all the KPIs for my project on the project comparison graph?

KPI values that are generated for the project appear on the KPI analysis project comparison graphs. The remaining KPIs are excluded.

When does a project appear in the Time Card Exceptions graph?

A project is included in the Time Card Exceptions graph due to any of these reasons: the project belongs to a project unit that tracks time, one or more of the team members track time, and one or more of the team members has a time card that is in error, pending, or missing.

What's the difference between time card exceptions that are missing, pending, or in error on the Time Card Exceptions graph?

Time transactions that are in error were received from the transaction source but failed the posting process.

Pending time transactions were received from the transaction source but have not completed the posting process.

Time transactions are missing if an expenditure item for a team member does not exist for the transaction source, document, and time period specified in the reporting options for the project unit.

How many periods can be viewed on the Percent Complete Analysis graph?

The Percent Complete Analysis graph displays data for the last 90 days with a maximum of 13 periods.

FAQs for Review KPI Watchlist Analysis

What happens if I use period-to-date amount-based measures for large projects?

Period-to-date amount-based measures use the same threshold values for all phases of the project. This may result in a spike in the key performance indicator (KPI) values if the amounts used to calculate the KPI values vary widely throughout the project. To avoid this problem, consider using different sets of threshold values for amount-based KPIs defined in small and large projects.

Why did a performance measure that compares the current and prior approved forecast show an unfavorable result when there is only one approved forecast?

If you generate key performance indicator (KPI) values when no previous approved forecast exists, a zero value is used to generate KPI values. Therefore, the trend appears unfavorable because the difference between the current and prior forecast is the same as the current forecast. The results will be accurate once a new forecast is approved, project performance data is summarized, and KPI values are generated.

Can I change the default sort order of KPIs listed in the KPI watchlist?

Yes. You can change the default sort order in the KPI watchlist by modifying the sort order of performance status indicators. By default, KPIs are sorted based on the current period status, with the least favorable status appearing at the top of the list, and the most favorable status appearing at the bottom of the list. If there is no current period status, the KPIs are sorted by name.

Why are the KPIs visible on the Analyze KPI Categories page after I disabled them?

Key performance indicators (KPIs) appear on the **Analyze KPI Categories** page if they are active for the project unit and enabled for the project. Disabled KPIs, KPIs past their end date, and KPIs for which future references are deleted continue to appear until you generate KPI values.

Important

If you generate KPI values for a date that is prior to the KPI end date, the KPI continues to appear in the KPI watchlist. For example, if you delete future

references to a KPI from August 24, and generate KPI values as of August 20, the KPI will appear on the **Analyze KPI Categories** page. You can view the KPI end date and determine if the KPI is enabled for the project in the Reporting tab of the project definition.

Why can't I see my KPI in regions on the Analyze KPI Categories page?

Key performance indicators (KPIs) appear on the **Analyze KPI Categories** page if they are active for the project unit and enabled for the project. Disabled KPIs, KPIs past their end date, and KPIs for which future references are deleted continue to appear until you generate KPI values.

FAQs for Review KPI Historical Trending

What happens if a KPI value exceeds the threshold limits defined for the KPI?

An up or down arrow appears in the **Exceeds Threshold** column of the **KPI History** table, and the closest threshold is used to determine the key performance indicators (KPIs) status. If KPI values fall outside the threshold ranges, consider extending the upper and lower threshold ranges.

Why did the trend indicator show a downward trend when KPI performance is improving?

While defining key performance indicators (KPIs), you can determine if a positive increase between the current and previous KPI value is a favorable or unfavorable trend. Therefore, an upward trend may not necessarily indicate that KPI performance is improving.

For example, for a KPI based on a non-billable percentage of total costs, a low value for non-billable costs is preferred. Hence, a downward trend is favorable.

FAQs for Review Project Financial Performance

Why does the Financial Performance region show only the cost budget and forecast amounts?

When the cost and revenue budgets are contained in different budget versions, the effort amount represented in project performance reporting is only for the cost budget. The same principle applies to cost and revenue forecasts. When the cost and revenue forecasts are contained in different forecast versions, the effort amount represented in project performance reporting is only for the cost forecast.

Which budget and forecast are the numbers in the Financial Performance region based on?

The Financial Performance region displays summarized financial data. The summarization process always includes the original and current baseline

budget, and current and previous forecasts for the financial plan types that are designated as approved cost or revenue budgets and forecasts.

Additionally, any other financial plan types enabled for use on the project on the Summarization tab, and KPIs based on custom measures, are included when the summarization process is run.

Why can't I see all the revenue for my project on the Financial Performance region?

The revenue amount in the Financial Performance region includes only external and interproject contracts. It does not include any intercompany revenue associated with the project.

FAQs for Perform Task and Resource Level Analysis

What happens if I update project performance without generating KPI values?

Information about tasks and resources are out of date with respect to the latest generated key performance indicator (KPI) values. The KPIs speedometer displays KPI values from the previous time KPI values were generated.

Additionally, the overall project health status indicators are not updated since the previous time KPI values were generated. For example, if you generate KPI values at the end of August, and summarize data in the first week of September, the status displayed is as of the end of August and not the first week of September. To view the status of the first week of September, you must generate KPI values again.

To know if you are viewing the updated information in a project you must use the **Important Dates** window.

What's the relationship between task structure and resource structure?

The task and resource structure regions share a master-detail relationship. The **Analyze KPI** page allows you to select which structure appears in the master and detail regions. Depending on your selection the detail structure region automatically displays the other structure. For example, if you select the task structure to appear in the master region, the detail region displays the resource structure. Selecting a row in the **Task Structure** region displays the assigned resource for that task in the **Resource Structure** region.

Glossary

financial plan type

Categories or collections of either project budgets or project forecasts.

KPI

Abbreviation for key performance indicator. Key performance indicators (KPIs) measure how well an organization or individual project meets an operational, tactical, or strategic objective that is critical for the current and future success of the organization. Examples are: Period-to-Date (PTD) Actual Spent Labor Effort Percentage, PTD Actual Spent Equipment Effort Percentage, and PTD Actual Margin Percentage.

KPI category

A group of key performance indicators that belong to a specific performance area. Examples are: cost, profitability, financial, and schedule.

KPI period determination date

Date used to determine the accounting calendar and project accounting calendar periods for performance measure calculations during key performance indicator (KPI) value generation.

scenario dimension members

A scenario dimension is used to differentiate actual cost, current budget, original budget, prior forecast, current forecast, and variances between different plan types within summarization.

summarization

The summarization or update project performance data process extracts data related to actual cost, commitment, budget, forecast, revenue, and invoice transactions and prepares the data for reporting purposes.