

# Oracle

## Project Portfolio Management Cloud Using Project Performance Reporting

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**Release 12**

This guide also applies to on-premises  
implementations

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# Preface

This preface introduces information sources that can help you use the application.

## Oracle Applications Help

Use the help icon  to access Oracle Applications Help in the application. If you don't see any help icons on your page, click the Show Help icon  in the global header. Not all pages have help icons. You can also access Oracle Applications Help at <https://fusionhelp.oracle.com>.

## Using Applications Help

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## Additional Resources

- **Community:** Use [Oracle Applications Customer Connect](#) to get information from experts at Oracle, the partner community, and other users.
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# 1 Configure Performance Reporting for Projects

## Tolerance Percentage: Explained

Use tolerance percentages to compare the previous key performance indicator (KPI) value with the current value. The application calculates trend indicators based on the percentage increase or decrease in a KPI value and the tolerance percentage in the KPI definition.

### Example of Tolerance Percentage

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

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

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

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	\$3500	\$4800	27 percent	Down, Unfavorable
	Up is Favorable	Critical	Warning		
PTD Actual Spent Labor Effort Percentage	5	75	71	5.6 percent	Up, Favorable
	Up is Favorable	On Track	On Track		
PTD Actual Margin Percentage	2 percent	28.5 percent	30.2 percent	5.6 percent	Down, Unfavorable
	Up is Favorable	Warning	On Track		

## 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

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's 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.

### *Related Topics*

- [Performance Data Summarization: How It's Processed](#)

## Performance Trend Indicators: Explained

Project performance trend indicators show whether project performance is favorable or unfavorable. You can view the following types of trends:

- Up, favorable: Indicates that an increasing KPI value is favorable to the project.
- Up, unfavorable: Indicates that an increasing KPI value is unfavorable to the project.
- Down, favorable: Indicates that a decreasing KPI value is favorable to the project.
- Down, unfavorable: Indicates that a decreasing KPI value is unfavorable to the project.
- Unchanged: Indicates that there is no change to the KPI value.

You can change the default sort order of the trend indicators using the Manage Trend Indicators setup task. You can set up KPIs with the most unfavorable trend to appear on top of the list in the KPI Watchlist on the Project Performance dashboard.

Run the Generate KPI Values process after updating project performance data to see the latest information in the Project Performance dashboard.

 **Tip:** Enable the reporting option in the Manage Project Units page to generate KPI values automatically after updating project performance data.



## KPI Threshold Levels with Different Currencies: Explained

You can set up different threshold ranges for each currency for currency-based KPIs to ensure that the thresholds apply for a particular currency amount.

### Example of Threshold Levels with Different Currencies

The following example describes setting up of different threshold levels for each currency.

Vision Corporation sells and installs human resource software. A standard KPI used for installation projects is Period-to-Date (PTD) Invoice Amount. Projects are executed in different countries having different project and ledger currencies, such as United States dollars (USD), Japanese yen (JPY), and Indian rupees (INR).

The PTD invoice amount for projects with a ledger currency of USD is critical if the value is between 0 and 3,000 USD. The PTD invoice amount for projects with a ledger currency of INR is critical if the value is between 0 and 50,000 INR. The currency thresholds are independent of currency conversion.

## 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 change the financial plan type before project performance data is summarized for reporting.

## Can I choose the regions to appear on Project Performance Reporting dashboard?

Yes. Select the **Edit Current Page** link in the **Personalization** menu 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.

## 2 Update Project Performance Data and Generate KPIs

### Performance Data Summarization: How It's Processed

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:

- Analyze project performance data
- Review project performance
- Analyze KPI categories and KPIs
- Track project progress
- View revenue and invoice summaries

Running summarization renders the KPI related information out of date with respect to the latest summarized information. Therefore, it is important that you generate KPI values after the summarization process completes. 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 as described in the following table:

Summarization Method	Usage
Incremental	General purpose summarization.
Bulk	Summarize large amounts of data at one time.
Delete and resummarize	Correct summary data when the source system data changes outside the regular transaction flow.
Resource breakdown structure	Migrate 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 the following transactions:

- Budget and forecast
- Commitment

- Actual cost
- Revenue and invoice

## How Performance Data Is Summarized


Performance data summarization collects data from various sources and assigns amounts to relevant tasks and resources in the project. After the process summarizes data, you can view how much is being spent on, incurred by, or received by a task or resource. Also, you can track data across different time lines since the process groups according to periods. Run the **Update Project Performance Data** process from the Scheduled Processes page to summarize data.

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 unsummarized data, and want to summarize the entire bulk of data in one run.

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

- Scope the summarization by determining the list of projects, contracts, and batches of transaction data for which to run summarization.

 **Note:** When you summarize a project associated with a contract having multiple projects, the application summarizes all the projects associated with the contract.

- Extract data to summarize from data sources, group it by periods, and prepare the data 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 loading into Oracle Essbase.
- Load data into Oracle Essbase and merge data into the 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 from 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.

### Related Topics

- What's a KPI period determination date?

## KPI Values: How They're 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.


 **Note:** Don't delete previous KPI values when you're generating KPI values for the first time in a period, or 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

Use the **Generate KPI Values** process to generate KPI values. 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.

### Related Topics

- [What's a KPI period determination date?](#)

## KPI Trends: How They're 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.

### KPI Values Generated on January 15, 2011

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

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	\$3500	\$4800	Down, Unfavorable

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
	Up is Favorable	Critical	Warning	
Actual Billable Cost Percentage	2	91	91	Unchanged
	Up is Favorable	On Track	On Track	
PTD Actual Margin Percentage	2	28.5	30.2	Down, Unfavorable
	Up is Favorable	Warning	On Track	

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.

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.

### Related Topics

- [Performance Trend Indicators: Explained](#)
- [Tolerance Percentage: Explained](#)

## 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

Vision 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

KPI Period Determination Date	Generation Date	Period Name for Generation Date	KPI Name	Is KPI Value Current?	Current Period	Prior Period	Prior Quarter
		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:

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

 **Note:** Summarized revenue and invoice transaction amounts appear in the revenue and invoice work area. However, these transactions don't 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?

Project managers can use the action to update project performance data and generate KPI values from the Project Performance Dashboard. Alternatively, they can run both processes for projects they manage from the Scheduled Processes

page. To update performance data for all projects in a project owning organization or business unit, the project administrator must run the Update Project Performance Data process.

Project administrators must run the Update Project Performance Data process for all projects in a project unit or business unit from the Scheduled Processes page.

 **Tip:** Enable the option to generate KPI values automatically after updating project performance data.


## Why can't I review project performance?

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



# 3 Analyze Project Performance

## Drawing Insight on Project Health and Progress

 **Watch:** This video shows you how to use the Project Management Dashboard to monitor the overall health, progress, and status of your project finances so you can take action to resolve issues.

## Performance Status for Tasks and Resources: How It's 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

Threshold Level	Threshold Range From	Threshold Range To	Status Indicator
5	12.00%	99%	Critical

## Example of System Implementation Task

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

Task	Subtask	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%

Resource	Resource	Resource	Resource	ITD Nonbillable Cost	ITD Billable Cost	ITD Total Cost	ITD Nonbillable Cost as a Percentage of Total Cost
			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.

 **Note:** 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 time card has an error, is pending, or is missing for a project.

## 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.

### *Related Topics*

- [Performance Trend Indicators: Explained](#)

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

Inactive KPIs, disabled KPIs, or KPIs for which future references are deleted continue to appear until you regenerate KPI values. Determine if a KPI is enabled or active in the **Reporting** tab of the project definition.

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

Inactive KPIs, disabled KPIs, or KPIs for which future references are deleted continue to appear until you regenerate KPI values. Determine if a KPI is enabled or active in the **Reporting** tab of the project definition.

## 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?

The KPI values don't reflect the latest summarized data. You can view the last time each process was submitted in the **Important Dates** window.

You can update project performance and generate KPI values independently to satisfy your business needs. For example, you may update project performance frequently to ensure you have the latest information available. You may also generate KPIs periodically after confirming that all transactions are entered and processed to ensure the KPIs are complete, consistent, and comparable over time.

 **Tip:** You can enable a setting in the project unit options to generate KPI values automatically after updating the project performance data.

### 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**

Category or collection 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.

